



APEX Tool Group(ATG) is one of the world's leading manufacturers of professional hand and power tools, providing professional products and first-class services for aerospace manufacturing, automotive assembly lines, electronic production lines, vehincle maintenance, construction and other industries.

We have over 30 well-known brands, most of which are industry or category leaders, such as SATA®, GEARWRENCH®, Cleco®, Weller®, Crescent®, Wiss®, Lufkin® and APEX.

Globally, our tools represent quality, innovation and value and are committed to solving difficulties for our customes with a long time of the Group's brands renowned for their efficiency and innovation.

20+

Factory S

+0008

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R&D Center

4



Cover Countries
120

ATG operates in more than 30 countries and regions around the world with over 20 factories in North America, South America, Europe, Australia, Asia and other region and more than 8,000 employees, 4 R&D centers in the United States, Germany, France and China, its businesses covering 120 countries around the world. ATG works closly with distributors, retailers and KA customers across the globe to ensure that our end-users have tools to solve real problems. Our unique category management provides our customers with terminal data, customer research and market feedback that helps with inventory flow, product display and promotion decisions. At the same time, ATG's global footstep enjoys a better advantage in service than any regional enterprise so as to meet different needs of customers.

# **APEX Tool Group**



# **Apex Memorabilia**



\_Wiss® Factory put into production



Nicholson® file set was invented



Lufkin® invented the retractable measuring tape



The Nicholson® exhibited in the 1893 Chicago World Expo



Wiss® adopted the drop forging method for production

1848



Apex® Company was established



Crescent® alloy wrench launched in the market



overseas



1908 Crescent® adjustable strap-wrench

1914



Weller® welding gun patented



1920

KD® became the designated

tool for the production of Ford T Model Car

1950 Dotco® provided tools for the space station



1965 GEARWRENCH® Taiwan Factory put into operation



1992 SATA® Shanghai Factory put into operation

1987

a world-class brand position of wrench

Allen® socket head cap screw



Bain Capital acquired APEX Group



SATA Shandong Factory put into production

## **GEARWRENCH**

# 2002

Jacobs® multi-functional

roller chuck launched in

the market

- SATA® become the largest tool brand in China by market share
- Over 100,000,000 GearWrench® wrenches sold







Ratchet wrench brand GEARWRENCH® was established

- Nicholson® 's 150th anniversary
- Designed a drive tool for the MorTorg® super Helix
- Crescent® established Pivot Pro™ pliers brand
- KD® Tools joined GearWrenche® family



SATA acquired Shanghai Yicheng Automotive Technology Co., Ltd.



2017 Cleco® introduced the NeoTek tools

• Crescent APEX® Dual-brand socket bit launched in the market APEX



## 2019

SATA Automotive Technology (Shanghai) Co., Ltd. was established

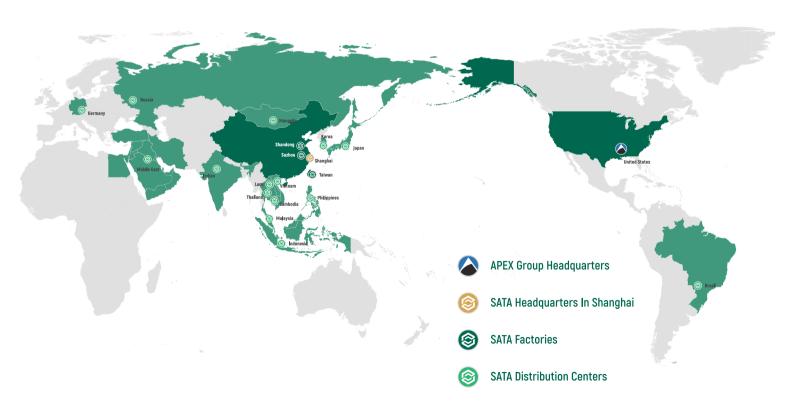




**SATA** is a wholly-owned subsidiary of US-based Apex Tool Group set up to meet the demand of medium-end & high-end tools Internationally.

SATA mainly engages in medium-end & high end hand tools, auto equipment and personal protective equipment, which are widely used in energy construction, rail transit, machinery manufacturing, electronics, automobile repair and professional personnel training and many other industries.

SATA provides a full range of integrated solutions for International markets, including hand tools, power tools, auto equipment and personal protective equipment.



# **SATA Champion Store**



SATA Champion Store Set-Up



SATA Auto Equipment Consultation One-Stop Solution



Store Management



Staff Training



After-Sales Guarantee

We sincerely invite you to join us! SATA Incentive Program for SATA full-series auto equipment



# SATA full-series auto equipment include:

- 1 Pneumatic Tire Spreader 5 3D Four-Wheel Aligner

  - 6 Tool Storage
- 3 Wheel Balancer

2 Tire Changer

- 7 Scissor Lift for Aligner
- 4 Screw Air Compressor 8 Piston Air Compressor
- 9 Modular Hose Reel
- 10 Vertical Tire Inflator
- 11 Automatic Tire Inflator
- 12 Porta Power Kit
- 13 Horizontal Hydraulic Jack
- 14 Ultrathin Scissor Lift
- Pose Lift with Electric Control Box
- 16 Digital Tire Inflating Gun
- 17 Waste Oil Collector
- 18 2-Ton Pickup Crane
- 19 20-Ton Press
- 20 Gearbox Bracket



**SATA Auto Equipment** 





# **Lifetime Warranty**

### **Lifetime Warranty**

All SATA products may be repaired free of charge or replaced in the event of functional problems arising during normal service, except those with the "Non-lifetime warranty" or "Warranty period" specifically indicated on the package or on the sample data and in the circumstances described in Part II below, "Non-free repair or replacement range". Please refer to the information on the package for the warranty terms.

This commitment is unlimited in time.

### Non-free repair or replacement range

Non-SATA **SEATA** branded products.

Wear beyond the service life of tools.

Products with the "Non-lifetime warranty" or "Warranty period" marked on the product package or on the catalog.

The product cannot be used due to abnormal operation. Abnormal operation includes man-made damage, operation without following precautions, operation exceeding tool application, etc.

The user has machined the product, or replaced the accessories by himself, or accessories have been lost or incomplete.

Products are subjected to rust, plating peeling, surface scratches or plastic handle damage after use that does not affect the product function.

Product packaging materials (such as cartons, shelves, plastic cases, paper cards, etc.) were damaged during use.

#### How to repair or replace products

For products within the scope of repairing free of charge or replacement, users can repair them for free or replace them after filling in the product warranty card at the nearest designated sales point of any SATA\* product without any voucher.

It is stipulated that free product replacement shall come after free product repair in view of the above-mentioned term of repair & replacement in case of any spare parts or products out of stock, SATA will send them by post to the designated sales point.

For products that are not subjected to repair free of charge, the designated sales point will provide paid service for parts replacement.

### **Service Consulting**

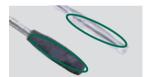
If you have any question about warranty terms for SATA' products, or if you are not satisfied with the service provided by designated sales shop, please contact SATA Tool (Shanghai) Co., Ltd.: SATAMarcom\_Asia@ApexToolGroup.com.

### Power of Interpretation -

These Terms shall be interpreted by SATA Tools (Shanghai) Co., Ltd.

# A

# Use tools correctly The following picture shows the improper use of the tool:



Significant indentation or plating removal on the handle of a ratchet wrench indicates that the handle has been knocked improperly with a hammer or used with an extended handle (long socket). Larger ratcheting wrenches should be adopted to increase torque.

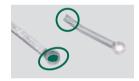


The square hole of the socket has obvious damage and skidding, or the wall of the socket has obvious cracks, indicating that it has been used on the pneumatic tools. Pneumatic series sockets shall be selected for pneumatic operation, the appearance of which is generally black.



The screwdriver handle is cracked or the chunk is twisted, indicating that it has been struck or used as a pry bar.

Pry bar tools shall be selected for prying operation.



The combination wrench is bent or broken, indicating that it has been struck or used as a pry bar. Pry bar tools shall be selected for prying operation.

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# **Master Tool Set**

2-5	Combined Tool Set	THE COLUMN
6-15	Tool Holder Set	
12-13	Mobile Repair Tool Set	
10-17	Basic Repair Tool Set	

# **Master Tool Set**

09510 150Pc. 1/4"×3/8"×1/2" Dr. Mechanics Tool Set

09013 88Pc. 1/4"×1/2" Dr. Socket Set





- 10Pc. 1/4\* Dr. 6Pt Socket (4,5,6,7,8,9,10,11,12,13mm)
- •10Pc. 1/4 Dr. 6Pt Socket (5/32",3/16",7/32",1/4",9/32",5/16",11/32",3/8",7/16",1/2")
- 6PC. 1/4 Dr.6Pt. Deep Socket (4,5,6,7,8,9mm)
- 1PC. 1/4 Dr. Quick Release Ratchet 5"
- 2Pc. 14 Dr. Extension Bar (2",4")
- 1PC. 1/4 Dr. Universal Joint
- 1PC. 1/4 Dr. Spiner Handle
- 1PC. 1/4 Dr. Bit Adaptor 14Fx/4Hexagon
- •7PC. 1/4 Hex Shank Bits 25mm Length, Tamper-Proof Torx (TT10,TT15,TT20,TT25,TT27,TT30,TT40)
- •11PC. 3/8 Dr. 6PL Socke (9,10,11,12,13,14,15,16,17,18,19mm)

- 11PC. 3/8 Dr. 6PL Socke (9,10,11,21,31,41,51,6,17,18,19mm)
   9PC. 3/8\* Dr. 6Pt. Socket (3/8\*7/16\*,1/2\*,9/16\*,5/8\*,111/16\*,3/4\*,13/16\*,7/8\*)
   6PC. 3/8\* Dr. 6PL. Deep Socket (10,11,12,13,14,15mm)
   8Pc. 3/8\* Dr. Torn Socket (E8,E10,E11,E12,E14,E16,E18,E20)
   2Pc. 3/8r Dr. Spark Plug Socket (16,21mm)
   3Pc. 3/8\* Dr. Bit Socket, Socket (4,5.56,5MM)
   6Pc. 3/8\* Dr. Bit Socket Pillilis (#1,#2,#3)x2pc
   6PC. 3/8 Dr. Bit Socket Hexagon (3,4,56,8,10mm)
   3Pc. 3/8 Dr. Bit Socket Tonx (T20,T30,T40)
   4Pc. 3/8\* Dr. Bit Socket Mexagon (3,4,56,8,10mm)
   3Pc. 3/8\* Dr. Bit Socket Form Length, Tamper-Proof Torx (TT45,TT50,TT55,TT60)
- 1PC. 3/8 Dr. Quick Release Ratchet 8" 2Pc. 3/8 Dr. Locking Extension Bar (3",6")
- 1PC. 3/8 Dr. Universal Joint
- 6Pc. 1/2 Dr. 6Pt. Deep Socket (10,12,13,14,17,19mm)
- 8Pc. V/2 Dr.12PL Socket (20,21,22,24,27,30,32,34mm)
- 4Pc. 1/2 Dr. 12Pt Socke [15/16",1",1-1/16",1-1/4"]
- •1PC. 1/2 Dr. Quick Release Ratchet 10"
- 2Pc. 1/2 Dr. Extension Bar (5",10")
- 1PC. 1/2 Dr. Universal Joint
- 12Pc. Combination Wrench (8,9,10,11,12,13,14,15,16,17,18,19mm)
- 3Pc. BOx End Ratcheting Wrench (8x10,12x13,17x19mm)
- 9Pc. Long Arm Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 2Pc. Go-Through Screwdriver, Sotted (6x150,8x200mm)
- 1PC. Go-Through Screwdriver, Pillipis #2x150mm

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- 6Pc. 1/4 Dr. 6Pt. Deep Socket [8,9,10,11,12,13mm] 3Pc. 1/4 Dr. Bit Socket, Slotted [4,5.5,6.5mm]
- 4PC. 1/4 Dr. Bit Socket, Pillis (#1,#2)x2pc
- 4PC. 1/4 Dr. Bit Socket, Pillis μπ,πε/χε/μ
   4Pc. 1/4\* Dr. Bit Socket, Hexagon (3,4,5,6mm)
   6Pc. 1/4 Dr. Bit Socket, Torx [18,110,715,720,725,730]
   1Pc. 1/4 Dr. Quick Release Ratchet 5\*
   2Pc. 1/4\* Dr. Sliding T-Handle 4\*
   1Pc. 1/4\* Dr. Ellisinged Boile

- 1Pc. 1/4 Dr. Universal Joint
- 1Pc. 1/4 Dr. Spinner Handle
- 17Pc. 1/2" Dr. 6Pt. Socket (10,11,12,13,14,15,16,17,18,19,20,21,22,24,27,30,32mm)
- 6Pc. 1/2" Dr. 6Pt. Deep Socket (14,15,16,17,18,19mm)
- 2Pc. 1/2\* Dr. Spark Plug Socket (16,21mm) 1Pc. 1/2\* Dr. Quick Release Ratchet 10"

- 2Pc. 1/2"Dr. Extension Bar (5",10")
- 1PC. 1/2\* Dr. Universal Joint
- •1Pc. 3/8\* Dr. 3-Way Socket Adaptor
- •1Pc. 1/2\* Dr. Bit Adaptor 1/2"Fx5/16 Hexagon
- 3Pc. 5/16" Hex Shank Bits, 30mm Length, Slotted (8,10,12mm)
- 4Pc. 5/16" Hex Shank Bits, 30mm Length, Pillips (#3,#4)x2pc
- 4Pc. 5/16" Hex Shank Bits, 30mm Length, Hexagon (8,10,12,14mm)
- 4Pc. 5/16" Hex Shank Bits, 30mm Length, Torx (T40,T45,T50,T55)

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09013	_	3	19.7













































# 09014 124Pc. 1/4"×3/8"×1/2" Dr. Mechanics Tool Set

# 09403 80Pc. 1/4" & 1/2"Dr. Socket Wrench Set







•10Pc. 1/4" Dr. 6Pt. Socket (5/32",3/16",7/32",1/4",9/32",5/16",11/32",3/8",7/16",1/2")

- 3Pc. 1/4" Dr. 6Pt. Deep Socket (8,10,12mm)
- 1Pc. 1/4" Dr. Quick Release Ratchet 5"
- 1Pc. 1/4" Dr. Extension Bar 2'
- 1Pc. 1/4" Dr. Universal Joint
- 1Pc. 1/4" Dr. Spinner Handle
- 1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- •7Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torx® (TT10,TT15,TT20,TT25,TT27,TT30,TT40)
- 11Pc. 3/8" Dr. 6Pt. Socket (9,10,11,12,13,14,15,16,17,18,19mm)
- 9Pc. 3/8" Dr. 6Pt. Socket (3/8",7/16",1/2",9/16",5/8",11/16",3/4",13/16",7/8")
- 7Pc. 3/8" Dr. 6Pt. Deep Socket (13,14,15,16,17,18,19mm)
- 2Pc. 3/8" Dr. Bit Socket, Slotted (5.5,6.5mm)
- 4Pc. 3/8" Dr. Bit Socket, Phillips (#1,#2)x2pc
- 4Pc. 3/8" Dr. Bit Socket, Hexagon (3,4,5,6mm)
- 3Pc. 3/8" Dr. Bit Socket, Torx® (T20,T30,T40)
- 4Pc. 3/8" Dr. Bit Socket, 50mm Length, Tamper-Proof Torx® (TT45,TT50,TT55,TT60)
- •1Pc. 3/8" Dr. Quick Release Ratchet 8"
- 2Pc, 3/8" Dr. Extension Bar (3".6")
- 1Pc. 3/8" Dr. Universal Joint
- 1Pc. 3/8" Dr. Socket Adaptor 3/8"Fx1/4"M
- 1Pc 3/8" Dr 3-Way Socker Adaptor
- 8Pc. 1/2" Dr. 6Pt. Socket [20,21,22,24,27,30,32,34mm] 4Pc. 1/2" Dr. 6Pt. Socket [15/16",1",1-1/16",1-1/4"]
- 1Pc. 1/2" Dr. Quick Release Ratchet 10 • 2Pc. 1/2" Dr. Extension Bar (5",10")
- 1Pc. 1/2" Dr. Universal Joint
- •1Pc. 1/2" Dr. Socket Adaptor 1/2"Fx3/8"M
- 1Pc. 1/2" Dr. 3-Way Socket Adaptor
- 12Pc. Combination Wrench (8,9,10,11,12,13,14,15,16,17,18,19mm)
- 1Pc. Adjustable Wrench 10"
- 2Pc. Go-Through Screwdriver, Slotted (6x150,8x200mm)







- •1Pc. 1/2" Dr. 6Pt. Socket 10mm
- •1Pc. 1/2" Dr. 6Pt. Socket 12mm
- •1Pc. 1/2" Dr. 6Pt. Socket 13mm
- •1Pc. 1/2" Dr. 6Pt. Socket 14mm
- •1Pc. 1/2" Dr. 6Pt. Socket 15mm •1Pc. 1/2" Dr. 6Pt. Socket 17mm
- •1Pc. 1/2" Dr. 6Pt. Socket 19mm
- •1Pc. 1/2" Dr. 6Pt. Socket 21mm
- •1Pc. 1/2" Dr. 6Pt. Socket 22mm
- •1Pc. 1/2" Dr. 6Pt. Socket 24mm
- •1Pc. 1/2" Dr. 6Pt. Socket 27mm
- •1Pc. 1/2" Dr. 6Pt. Socket 30mm
- •1Pc. 1/2" Dr. 6Pt. Socket 32mm
- •1Pc. 1/2" Dr. Spark Plug Socket 16mm
- •1Pc. 1/2" Dr. Spark Plug Socket 21mm
- •1Pc. 1/2" Dr. Extension Bar 5"
- •1Pc. 1/2" Dr. Extension Bar 10" •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- 1Pc. 3/8" Dr. 3-Way Socket Adaptor 3/8"Fx1/2"M 1Pc. Combination Wrench 12mm
- •1Pc. 1/2" Dr. Universal Joint
- •1Pc. 1/4" Dr. 6Pt. Socket 4mm
- •1Pc. 1/4" Dr. 6Pt. Socket 5mm
- •1Pc. 1/4" Dr. 6Pt. Socket 6mm
- •1Pc. 1/4" Dr. 6Pt. Socket 7mm
- •1Pc. 1/4" Dr. 6Pt. Socket 8mm •1Pc. 1/4" Dr. 6Pt. Socket 9mm
- •1Pc. 1/4" Dr. 6Pt. Socket 10mm
- •1Pc. 1/4" Dr. 6Pt. Socket 11mm
- •1Pc, 1/4" Dr, 6Pt, Socket 12mm
- •1Pc. 1/4" Dr. 6Pt. Deep Socket 8mm
- •1Pc. 1/4" Dr. 6Pt. Deep Socket 10mm
- •1Pc. 1/4" Dr. 6Pt. Deep Socket 12mm
- •1Pc. 1/4" Dr. 6Pt. Deep Socket 13mm
- •1Pc. 1/4" Dr. Extension Bar 4" •1Pc. 1/4" Dr. Flexible Extension Bar 6"
- •1Pc. 1/4" Dr. Quick Release Ratchet 5'
- •1Pc. 1/4" Dr. Sliding T-Handle 4"
- •1Pc. 1/4" Dr. Spinner Handle
- •1Pc. 1/4" Dr. Universal Joint
- •1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- •1Pc. 1/4" Shank 25mm Bits, Slotted 4mm

- 1Pc. 1/4" Shank 25mm Bits, Slotted 5.5mm
- •1Pc. 1/4" Shank 25mm Bits, Slotted 6.5mm
- 1Pc. 1/4" Shank 25mm Bits, Hex 3mm
- 1Pc. 1/4" Shank 25mm Bits, Hex 4mm
- 1Pc. 1/4" Shank 25mm Bits, Hex 5mm • 1Pc. 1/4" Shank 25mm Bits, Hex 6mm
- •1Pc. 1/4" Shank 25mm Bits, Torx T10
- 1Pc. 1/4" Shank 25mm Bits, Torx T15
- 1Pc. 1/4" Shank 25mm Bits, Torx T20
- •1Pc. 1/4" Shank 25mm Bits, Torx T25
- •1Pc. 1/4" Shank 25mm Bits, Torx T27
- 1Pc. 1/4" Shank 25mm Bits, Torx T30
- 1Pc. 1/4" Shank 25mm Bits, Torx T40
- •1Pc. 1/4" Shank 25mm Bits, Phillips #1
- •1Pc. 1/4" Shank 25mm Bits, Phillips #2
- 1Pc. 1/4" Shank 25mm Bits, Phillips #3 • 1Pc. Combination Wrench 8mm
- 1Pc. Combination Wrench 10mm
- 1Pc. Combination Wrench 13mm
- 1Pc. Combination Wrench 14mm
- 1Pc. Combination Wrench 15mm
- 1Pc. Combination Wrench 17mm
- 1Pc. Combination Wrench 19mm
- 1Pc. Long Arm Hex Key 1.5mm
- •1Pc. Long Arm Hex Key 2mm
- •1Pc. Long Arm Hex Key 2.5mm
- •1Pc. Long Arm Hex Key 3mm
- 1Pc. Long Arm Hex Key 4mm
- •1Pc. Long Arm Hex Key 5mm
- •1Pc. Long Arm Hex Key 6mm
- 1Pc. Screwdriver.Slotted 5x75mm
- 1Pc. Screwdriver, Slotted 6x150mm • 1Pc. Screwdriver, Phillips #1x75mm
- 1Pc. Screwdriver, Phillips #2x150mm
- 1Pc. Groove Joint Pliers 10"
- 1Pc. Combination Pliers 7" • 1Pc. Hickory Engineers Hammer 500g
- •1Pc. Diagonal Pliers 6"

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# 09404 101Pc. 1/4" & 1/2"Dr. Socket Wrench Set



- •1Pc. 1/2" Dr. 6Pt. Socket 8mm
- •1Pc. 1/2" Dr. 6Pt. Socket 9mm
- 1Pc. 1/2" Dr. 6Pt. Socket 10mm
- 1Pc. 1/2" Dr. 6Pt. Socket 11mm
- 1Pc, 1/2" Dr. 6Pt, Socket 12mm
- 1Pc. 1/2" Dr. 6Pt. Socket 13mm
- 1Pc. 1/2" Dr. 6Pt. Socket 14mm
- 1Pc. 1/2" Dr. 6Pt. Socket 15mm
- 1Pc. 1/2" Dr. 6Pt. Socket 16mm
- 1Pc. 1/2" Dr. 6Pt. Socket 17mm
- 1Pc. 1/2" Dr. 6Pt. Socket 18mm
- 1Pc. 1/2" Dr. 6Pt. Socket 19mm
- 1Pc. 1/2" Dr. 6Pt. Socket 20mm
- 1Pc. 1/2" Dr. 6Pt. Socket 21mm
- •1Pc. 1/2" Dr. 6Pt. Socket 22mm
- 1Pc. 1/2" Dr. 6Pt. Socket 23mm
- 1Pc. 1/2" Dr. 6Pt. Socket 24mm
- 1Pc. 1/2" Dr. 6Pt. Socket 27mm
- 1Pc. 1/2" Dr. 6Pt. Socket 30mm
- 1Pc. 1/2" Dr. 6Pt. Socket 32mm •1Pc. 1/2" Dr. Spark Plug Socket 16mm
- 1Pc. 1/2" Dr. Spark Plug Socket 21mm
- •1Pc. 1/2" Dr. Extension Bar 10"
- •1Pc. 1/2" Dr. Locking Extension Bar 5"
- 1Pc. 1/2" Dr. Quick Release Ratchet 10"
- •1Pc. 1/2" Dr. Sliding T-Handle 10"
- 1Pc. 1/2" Dr. Universal Joint
- •1Pc. 1/4" Dr. 6Pt. Socket 3.5mm
- 1Pc. 1/4" Dr. 6Pt. Socket 4mm
- •1Pc. 1/4" Dr. 6Pt. Socket 4.5mm • 1Pc. 1/4" Dr. 6Pt. Socket 5mm
- 1Pc. 1/4" Dr. 6Pt. Socket 5.5mm
- 1Pc. 1/4" Dr. 6Pt. Socket 6mm
- 1Pc. 1/4" Dr. 6Pt. Socket 7mm
- 1Pc. 1/4" Dr. 6Pt. Socket 8mm
- 1Pc. 1/4" Dr. 6Pt. Socket 9mm
- 1Pc. 1/4" Dr. 6Pt. Socket 10mm
- 1Pc. 1/4" Dr. 6Pt. Socket 11mm
- 1Pc. 1/4" Dr. 6Pt. Socket 12mm
- 1Pc. 1/4" Dr. Universal Joint
- 1Pc. 1/4" Dr. Sliding T-Handle 4"
- 1Pc. 1/4" Dr. Quick Release Ratchet 5"
- 1Pc. 1/4" Dr. Flexible Extension Bar 6"
- 1Pc. 1/4" Dr. Extension Bar 4
- 1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- 1Pc. 1/4" Dr. Spinner Handle

No.

09404

- 1Pc. 1/4" Shank 25mm Bits, Slotted 4mm
- 1Pc. 1/4" Shank 25mm Bits, Slotted 5.5mm • 1Pc. 1/4" Shank 25mm Bits, Slotted 6.5mm
- 1Pc. 1/4" Shank 25mm Bits, Phillips #0
- •1Pc. 1/4" Shank 25mm Bits, Phillips #1

- •1Pc, 1/4" Shank 25mm Bits, Phillips #2
- •1Pc. 1/4" Shank 25mm Bits, Phillips #3
- •1Pc. 1/4" Shank 25mm Bits, Torx T10
- •1Pc. 1/4" Shank 25mm Bits, Torx T15
- •1Pc, 1/4" Shank 25mm Bits, Torx T20
- •1Pc. 1/4" Shank 25mm Bits, Torx T25
- •1Pc. 1/4" Shank 25mm Bits, Torx T27
- 1Pc. 1/4" Shank 25mm Bits, Torx T30
- •1Pc. 1/4" Shank 25mm Bits, Torx T40 •1Pc. 1/4" Shank 25mm Bits, Hex 2mm
- •1Pc. 1/4" Shank 25mm Bits, Hex 3mm
- •1Pc. 1/4" Shank 25mm Bits, Hex 4mm
- •1Pc. 1/4" Shank 25mm Bits, Hex 5mm
- •1Pc. 1/4" Shank 25mm Bits, Hex 6mm
- 1Pc. Combination Wrench 8mm
- 1Pc. Combination Wrench 10mm
- 1Pc. Combination Wrench 11mm
- 1Pc. Combination Wrench 12mm
- 1Pc. Combination Wrench 13mm
- 1Pc. Combination Wrench 14mm
- 1Pc. Combination Wrench 15mm
- 1Pc. Combination Wrench 17mm
- 1Pc. Combination Wrench 19mm
- •1Pc. Combination Wrench 22mm
- •1Pc. Flare Nut Wrench 8x10mm
- •1Pc. Flare Nut Wrench 10x12mm
- •1Pc. Flare Nut Wrench 13x14mm
- 1Pc. Flare Nut Wrench 16x17mm
- •1Pc. Screwdriver, Slotted 5x75mm
- •1Pc. Screwdriver, Slotted 6x150mm
- •1Pc. Screwdriver,Phillips #1x75mm
- 1Pc. Screwdriver.Phillips #2x150mm
- 1Pc. Groove Joint Pliers 10'
- •1Pc. Combination Pliers 7
- •1Pc. Hickory Engineers Hammer 500g
- •1Pc. Diagonal Pliers 6"
- •1Pc. Long Nose Pliers 6"
- 1Pc. Adjustable Wrench 8'
- •1Pc. Magnetic Pickup Tool 380mm
- •1Pc. Long Arm Hex Key 1.5mm
- •1Pc. Long Arm Hex Key 2mm
- •1Pc. Long Arm Hex Key 2.5mm
- •1Pc. Long Arm Hex Key 3mm
- •1Pc. Long Arm Hex Key 4mm •1Pc. Long Arm Hex Key 5mm
- •1Pc. Long Arm Hex Key 6mm
- •1Pc. Long Arm Hex Key 8mm •1Pc. Long Arm Hex Key 10mm
- 1Pc. Cold Chisel 15mm • 1Pc. Centre Punch 4x120mm

(M)

12.6



58Pc. Mechanics Tool Set

09516



- •14Pc 10MM series hexagon socket set (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19MM)
- 1Pc 10MM series special quick release ratchet wrench
- 1Pc 10MM series universal joint
- 9Pc hex key set (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10MM)
- 12Pc full polish combination wrench set (Metric) (8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19MM)
- 1Pc full polish combination ratcheting wrench 17MM
- 1Pc adjustable wrench 10"
- 2Pc combination ratcheting wrench (13, 14MM)
- 3Pc slotted screwdriver set (6 x 38MM, 3.2 x 75MM, 5 x 100MM)
- 4Pc Phillips screwdriver set [#2 x 38MM, #0 x 75MM, #1 x 100MM, #2 x 150MM]
- 1Pc combination pliers 8'
- •1Pc long nose pliers 6"
- •1Pc external snap ring pliers 5", straight tips
- •1Pc internal snap ring Pliers 5", straight tips
- •1Pc Kairui series steel tape measure 3 M x 16MM
- •1-set 23-piece feeler gauge (Metric) (0.02MM-1MM)
- •1Pc straight steel ruler 300MM •1Pc FRP ball peen hammer 1 lb
- •1Pc magnetic pickup tool 380MM
- 1Pc 8-point snap-off knife with plastic handle 18 x 100MM

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No.		$\Theta$	8	ā
0951	6	_	?	13.8

















09517 76Pc. 1/4"×1/2" Dr. Mechanics Tool Set

09519 76Pc. 1/4" & 1/2"Dr. Socket Wrench Set

























- •12Pc. 1/4" Dr. 6Pt. Socket (4,4.5,5,5.5,6,7,8,9,10,11,12,13mm)
- 1Pc. 1/4" Dr. Quick Release Ratchet 5"
- 1Pc. 1/4" Dr. Spinner Handle • 1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (4,5.5,6.5mm)
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#2,#3)
- 6Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (2,2.5,3,4,5,6mm)
- 6Pc. 1/4" Hex Shank Bits, 25mm Length, Torx® [T10,T15,T20,T25,T27,T30]
- 9Pc. 1/2" Dr. 6Pt. Socket (10,12,13,14,15,16,17,19,22mm)
- 1Pc. 1/2" Dr. Universal Joint 1Pc. 1/2" Dr. Quick Release Ratchet 10" •1Pc. 1/2" Dr. Extension Bar 5"
- 1Pc. Adjustable Wrench 10"
- 7Pc. Combination Wrench (11,12,13,14,15,17,19mm)
- 9Pc. Long Arm Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 2Pc. Screwdriver, Slotted (6x38,6x100mm)
   2Pc. Screwdriver, Phillips (#2x38,#2x100mm)
- 1Pc. Combination Pliers 7'
- •1Pc. Long Nose Pliers 6"
- 1Pc. Groove Joint Pliers 10"
- 1Pc. Locking Pliers 10", Straight Jaw
- •1Pc. Hickory Ball Pein Hammer 1Lb.
- •1Pc. Mini Hacksaw 6"
- 1Pc. Wood Handle Copper Brush
- 1Pc. Plastic Snap-off Knife, 8-Point, 18x100mm
- 1Pc. Tape Measure 5mx19mm
- 14Pc. Feeler Gauges Set 0.05-1.00mm

• 2Pc. 1/4", 1/2"	Dr.	Quick-Release	Ratchets

- •7Pc. 1/4" Dr. 6pt. Metric Sockets 8, 9, 10, 11, 12, 13, 14 mm
- •18Pc. 1/4" Dr. Bit Sockets

Slotted 4, 5.5, 6.5 mm

Phillips #1, #2

Pozidriv #1, #2

Torx® T8, T10, T15,T20, T25, T30, T40

Hex 3, 4, 5, 6 mm

- •12Pc. 1/2" Dr. 6pt. Metric Sockets 8, 10, 12, 13, 14, 17, 19, 22, 24, 27, 30, 32 mm
- 9Pc. Combination Wrenches 8, 10, 11, 12, 13, 14, 17, 19, 22 mm
- •15Pc. 5/16" Shank 30L Bits

Slotted 8, 10, 12 mm

Phillips #3, #4 Pozidriv #3, #4

Torx® T40, T45, T50, T55

Hex 8, 10, 12, 14 mm

- 2Pc. 1/2" Dr. Spark Plug Sockets 16, 21 mm
- 11Pc. Accessories

1/4" Dr. T-Handle

1/4" Dr. Flex Extension

1/4" Dr. Wobble Extension Bars 2", 4"

1/2" Dr. Wobble Extension Bars 5", 10"

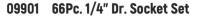
1/4", 1/2" Dr. Universal Joints

1/4" Dr. Spinner Handle

1/2" Dr. T-Handle

5/16" Shank x 1/2" Dr. Bit Adapter

No.	#	*	ā
09519	0	3	20.6





- •14Pc. 1/4" Dr. 6pt Socket (3.5,4,4.5,5,5.5,6,7,8,9,10,11,12,13,14MM)
- •12Pc. 1/4" Dr. 6pt Long Socket [4.4.5.5.5.5.6.7.8.9.10.11.12.13MM]
- 23Pc. 1/4" Dr. Bits Socket Slotted (4,5.5,6.5MM) Phillip (#1,#2,#3) Pozi [#1.#2.#3]
- Torx (T-8,T-10,T-15,T-20,T-25,T-27,T-30,T-40) Hex (3,4,5,6,7,8MM)

L×W×H(mm)

375×185×45

• 8Pc. 1/4" Dr. 25MM Bits , Slotted (3,4,5,6MM) Phillip (#0,#1,#2,#3)

No.

09901

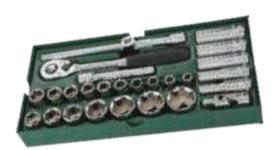
•1Pc. 1/4" Dr. Spinner Handle

- •1Pc. 1/4" Dr. Quick Release Ratchet 5"
- •1Pc. 1/4" Dr. Extension Bar 2"
- 1Pc. 1/4" Dr. Extension Bar 4"
  - •1Pc. 1/4" Dr. Sliding T-Handle 4"
  - 1Pc. 1/4" Dr. Universal Joint
- •1Pc. 1/4" Dr. Flexible Extension Bar 6"
- •1Pc. 1/4" Dr. Magnetic Quick Change Bit Holder
- •1Pc, 1/4" Dr. Bit Holder
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- · Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

#	8	<b>a</b>
	4	8.8

▲ Warranty terms of tool set comply with the individual product.

# 09903 27Pc. 1/2" Dr. Socket Set

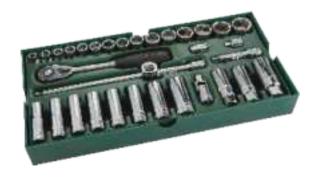


- •17Pc. 1/2" Dr. 6pt Socket (10,11,12,13,14,15,16,17,18,19,21,22,24,27,30,32,34MM)
- 5Pc. 1/2" Dr. 6pt Long Socket (10,13,17,19,22MM) 1Pc. 1/2" Dr. Quick Release Ratchet 10"
- 1Pc, 1/2" Dr. Extension Bar 10"
- •1Pc. 1/2" Dr. Universal Joint
- •1Pc. 1/2" Dr. Locking Extension Bar 5"
- •1Pc. 1/2" Dr. 3-Way Socket Adaptor 1/2"Fx3/8"M
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	#	¥	ā
09903	375×185×45	-	4	18

▲ Warranty terms of tool set comply with the individual product.

# 09902 33Pc. 3/8" Dr. Socket Set



- •15Pc.3/8" Dr. 6pt Socket (8.9.10.11.12.13.14.15.16.17.18.19.21.22.24MM)
- 8Pc. 3/8" Dr. 6pt Long Socket (10,11,12,13,14,15,17,19MM)
- 3Pc.3/8" Dr. 3/8" Dr. Spark Plug Socket(16,18,21MM)
- •1Pc. 3/8" Dr. Quick Release Ratchet 8"
- •1Pc. 3/8" Dr. Extension Bar 10"
- •1Pc. 3/8" Dr. Socket Adaptor 3/8"Fx1/4"M
- •1Pc. 3/8" Dr. Universal Joint
- •1Pc. 3/8" Dr. Bit Adaptor 3/8"Fx1/4"Hexagon
- •1Pc. 3/8" Dr. Locking Extension Bar 3"
- •1Pc. 3/8" Dr. 3-Way Socket Adaptor 3/8"Fx1/2"M
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	#	¥	ā
09902	375×185×45	-	4	12.7







































































# 09904 10Pc. Open End & Combination Wrench Set



- 43206 Combination Ratcheting Wrench 13mm
- 43207 Combination Ratcheting Wrench 14mm
- 41201 Open End Wrench 6x7mm
- 41202 Open End Wrench 8x10mm
- 41203 Open End Wrench 10x12mm
- 41204 Open End Wrench 11x13mm
- 41205 Open End Wrench 12x14mm
- 41210 Open End Wrench 22x24mm
- 41212 Open End Wrench 24x27mm
- 41213 Open End Wrench 30x32mm
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	#	8	ā
09904	375×185×45	-	4	10.1

▲ Warranty terms of tool set comply with the individual product.

# 09906 30Pc. Combination Wrench & Hex Key Set



- 40203 Combination Wrench 8mm
- 40204 Combination Wrench 9mm
- 40205 Combination Wrench 10mm
- 40206 Combination Wrench 11mm
- 40207 Combination Wrench 12mm
- 40208 Combination Wrench 13mm • 40209 Combination Wrench 14mm
- 40210 Combination Wrench 15mm
- 40211 Combination Wrench 16mm • 40212 Combination Wrench 17mm
- 40213 Combination Wrench 18mm
- 40214 Combination Wrench 19mm
- 09101 9Pc. Extra Long Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 09702 9Pc. Long Arm Tamper-Proof Torx® Key Set (T10,T15,T20,T25,T27,T30,T40,T45,T50)
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	#	¥	ā
09906	375×185×45	-	4	9.9

▲ Warranty terms of tool set comply with the individual product.

# 09905 10Pc. Metric Offset Box Wrench Tray Set



- 42213 Box End Wrench 6x7mm
- 42201 Box End Wrench 8x10mm • 42202 Box End Wrench 10x12mm
- 42203 Box End Wrench 11x13mm
- 42204 Box End Wrench 12x14mm
- 42205 Box End Wrench 14x17mm
- 42206 Box End Wrench 17x19mm
- 42207 Box End Wrench 19x21mm • 42208 Box End Wrench 21x23mm
- 42211 Box End Wrench 24x27mm
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	$\Theta$	8	ā
09905	375×185×45	-	4	9.4

▲ Warranty terms of tool set comply with the individual product.

## 09907 8Pc. Metric Combination Wrench Tray Set



- 40233 Combination Wrench 5.5mm
- 40201 Combination Wrench 6mm
- 40202 Combination Wrench 7mm
- 40215 Combination Wrench 20mm • 40216 Combination Wrench 21mm
- 40217 Combination Wrench 22mm
- 40218 Combination Wrench 23mm
- 40219 Combination Wrench 24mm
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	#	¥	ā
09907	375×185×45	-	4	8.7





- •43220 Combination Ratcheting Wrench 5.5mm •43212 Combination Ratcheting Wrench 19mm
- 43221 Combination Ratcheting Wrench 6mm 43222 Combination Ratcheting Wrench 7mm
- 43201 Combination Ratcheting Wrench 8mm
- 43202 Combination Ratcheting Wrench 9mm
- 43203 Combination Ratcheting Wrench 10mm
- 43204 Combination Ratcheting Wrench 11mm
- 43205 Combination Ratcheting Wrench 12mm
- 43206 Combination Ratcheting Wrench 13mm
- 43207 Combination Ratcheting Wrench 14mm
- 43208 Combination Ratcheting Wrench 15mm
- 43209 Combination Ratcheting Wrench 16mm
- 43210 Combination Ratcheting Wrench 17mm
- 43211 Combination Ratcheting Wrench 18mm

- 46654 1/4" Dr. Quick Release Adaptor for 10mm Ratcheting Wrench
- 46655 3/8" Dr. Quick Release Adaptor for 13mm Ratcheting Wrench
- 46656 1/2" Dr. Quick Release Adaptor for 19mm Ratcheting Wrench
- 46657 Bit Adaptor for 10mm Ratcheting Wrench
- Designed for tool management in workshop, fit
- to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- · Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	$\Theta$	8	ā
09908	375×185×45	-	4	9.2

▲ Warranty terms of tool set comply with the individual product.

## 09910A 8Pc. Files Set



- Flat Second Cut File 8"
- Half Round Second Cut File 8"
- Square Second Cut File 8"
- Round Second Cut File 8"
- Three Square Second Cut File 8"
- Diamond Flat Needle File 3x140mm
- Diamond Flat Needle File 3x140mm
- Diamond Pointed Round Needle File 3x140mm

No.	L×W×H(mm)	#	8	ā
09910A	187×377×33	1	4	1.9

▲ Warranty terms of tool set comply with the individual product.

# 09909A 5Pc. Clamping Set



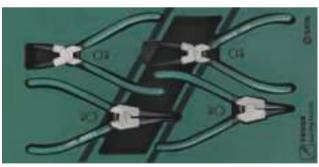


- Long Nose Pliers 6"
- · Locking Pliers 6", Long Nose
- · Locking Pliers 7", Curved Jaw
- Dipping Handle Adjustable Wrench 8"
- Dipping Handle Adjustable Wrench 10"

No.	L×W×H(mm)	#	**	<u></u>
09909A	187×377×33	1	4	1.9

▲ Warranty terms of tool set comply with the individual product.

# 09911A 4Pc. Snap Ring Pliers Set



- External Snap Ring Pliers 7", Straight Tips
- External Snap Ring Pliers 7", Curved Tips
- Internal Snap Ring Pliers 7", Straight Tips
   Internal Snap Ring Pliers 7", Curved Tips

No.	L×W×H(mm)	$\Theta$	8	<u></u>	
09911A	187×377×33	1	4	0.9	















































# 09912A 4Pc. Pliers Set





- · Long Nose Pliers 6"
- Diagonal Pliers 6"
- Flush Cutting Pliers 6"



No. L×W×H(mm)  $\Box$ 8 M 187×377×33 1.3 09912A

▲ Warranty terms of tool set comply with the individual product.

# 09914 36Pc. 3/8" × 1/2" Dr. 6 Point Metric Impact Socket **Tray Set**



- •16Pc. 1/2" Dr. Impact Socket (10,11,12,13,14,15,16,17,18,19,21,22,24,27,30,32mm)
- •13Pc. 3/8" Dr. Impact Socket (7, 8, 9, 10,11,12,13,14,15,16,17,18,19mm)
- 1Pc. 3/8" Dr. Impact Socket (7, 6, 8, 10,11,12,13)
   1Pc. 3/8" Dr. Impact Extention Bar 75mm
   1Pc. Impact Socket Adaptor 3/8" x 1/4" [MxF]
- •1Pc. Impact Socket Adaptor 3/8" x 1/2" [MxF]
- •1Pc, 1/2" Dr. Impact Extention Bar 150mm
- •1Pc. Impact Socket Adaptor 1/2" x 3/8" (MxF) •1Pc. Impact Socket Adaptor 1/2" x 3/4" (MxF)
- •1Pc. Impact Universal Joint 1/2" x 1/2" (MxF)
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	#	¥	ā
09914	375×185×45	-	4	17.4

▲ Warranty terms of tool set comply with the individual product.

## 09913A 9Pc. Screwdriver Set



# 09915 26Pc. 1/2" Dr. 6 Point Metric Socket Tray Set



- Screwdriver, Slotted 3x75mm, 5x100mm, 6x38mm, 6x100mm, 8x150mm
- Screwdriver, Phillips #1x75mm, #2x38mm, #2x100mm, #3x150mm

No.	L×W×H(mm)	#	8	ā
09913A	187×377×33	1	4	0.8

▲ Warranty terms of tool set comply with the individual product.

- 20Pc. 1/2"Dr.6pt Socket (8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,27,30,32mm)
- •5Pc. 1/2"Dr.6pt Long Socket (14,17,19,21,24mm)
- •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- Designed for tool management in workshop, fit to lie in the drawers of SATA tool cart
- Functional tray sets help to quicken pick up and return back tools
- Multiple tray sets available for customer to select for proper usage

No.	L×W×H(mm)	$\Theta$	8	<b>5</b>
09915	375×185×45	-	4	15.4





- •1Set 5 Pc. Punch Set
- •1Set 32 Pc. Feeler Gauge Set
- 1Pc. Hickory Ball Pein Hammer 24oz
- •1Pc. Hickory Soft Face Hammer 35mm

No.	L×W×H(mm)	$\Theta$	8	ā
09932A	375×185×45	-	4	15.5

▲ Warranty terms of tool set comply with the individual product.

# 06001A 15Pc. Basic Tool Set



- Dipping Handle Adjustable Wrench 8"
- •1/4" Dr. Bit Driver
- •10 Pc. 1/4" Hex Shank Bits Bar(Phillips #0, #1, #2, #3, Slotted 3 MM,4 MM,6 MM, Hexagon 4 MM,5 MM,6 MM)
- · Long Nose Pliers 6"
- Tape Measure 3mx16mm
- Plastic Snap-Off Knife, 8-Point, 18x100mm

No.	L×W×H(mm)		8	<b>a</b>
06001A	255×130×56	1	12	0.8

▲ Warranty terms of tool set comply with the individual product.

#### 04110 19Pc. Basic Tool Set



- 1Pc. Combination Pliers 6"
- \* 8Pc. Long Arm Hex Key Wrench (1.5,2,2.5,3,4,5,6,8mm)
   \* 1Pc. Hickory Claw Hammer 0.5Lb.
- •1Pc. Mini Hack Saw 6"
- 2Pc. Screwdriver, Slotted 3x75mm; Screwdriver, Slotted 6x100mm
- 2Pc. Screwdriver, Phillips #0x75mm; Screwdriver, Phillips #2x100mm
- 1Pc. Measuring Tape 3Mx16mm
- 1Pc. Circuit Tester 145mm
- •1Pc. Snap-Off Knife 9x80mm
- •1Pc. Adjustable Wrench, Dipping Handle 8"
- · Special designed for engineers and technicians for multipurpose working
- · Adding the anti-freezing components into bag fabric to avoid split in winter and offering a comfortable touch feeling
- · Adding the reinforced lining to avoid deformation when used

No.	#	¥	<u> </u>
04110	-	6	13.5

▲ Warranty terms of tool set comply with the individual product.

# 06002A 17Pc. Basic Tool Set



- •1/4" Dr. Bit Driver
- Dipping Handle Adjustable Wrench 8"
- •10 Pc. 1/4" Hex Shank Bits Bar[Phillips #0, #1, #2, #3, Slotted 3 MM,4 MM,6 MM, Hexagon 4 MM,5 MM,6 MM)
- Combination Pliers 7"
- Tape Measure 3mx16mm
- Plastic Snap-Off Knife, 8-Point, 18x100mm
- Circuit Tester 145mm
- Fiberglass Short Handle Claw Hammer

No.	L×W×H(mm)	#	8	<u></u>
06002A	258×177×69	1	8	1.4







































































# 06003A 11Pc. Basic Tool Set



- Dipping Handle Adjustable Wrench 8"
- Reversible Screwdriver #2&6x100mm Reversible Screwdriver #1&5x100mm
- Combination Pliers 7'
- · Long Nose Pliers 6"
- Plastic Snap-Off Knife, 8-Point, 18x100mm
- Mini Hacksaw 6"
- Fiberglass Short Handle Claw Hammer
- Tape Measure 3mx16mm
- Circuit Tester 145mm
- PVC Electrical tape

No.	L×W×H(mm)	#	8	ā
06003A	316×241×66	1	8	1.7

▲ Warranty terms of tool set comply with the individual product.

# 06005A 27Pc. Basic Tool Set



- Mini Hacksaw 6"
- · Long Nose Pliers 6"
- PVC Electrical tape
- Combination Pliers 6"
- Circuit Tester 145mm
- 8Pc. Folding Hex Key Set
- Tape Measure 3mx16mm
- Aluminum Flashlight, 2-Cell AA
- Reversible Screwdriver #2&6x38mm
- Diamond Flat Needle File 5x180mm
- Reversible Screwdriver #1&5x100mm
- Dipping Handle Adjustable Wrench 8"
- · Fiberglass Short Handle Claw Hammer
- Plastic Snap-Off Knife, 8-Point, 18x100mm
- •6Pc. Precision Screwdriver Set, Slotted & Phillips Tips

No.	L×W×H(mm)	$\blacksquare$	8	ā
06005A	316×241×66	1	8	2.2

▲ Warranty terms of tool set comply with the individual product.

# 06004A 8Pc. Basic Tool Set



- · Long Nose Pliers 6"
- Combination Pliers 7"
- Circuit Tester 145mm
- Tape Measure 3mx16mm
- Fiberglass Short Handle Claw Hammer
- Dipping Handle Adjustable Wrench 8"
- Reversible Screwdriver #2&6x100mm
   Plastic Snap-Off Knife, 8-Point, 18x100mm
- L×W×H(mm) No. **6** 06004A 316×241×66 1.7

▲ Warranty terms of tool set comply with the individual product.

# 06008 25Pc. Basic Tool Set



- •1Pc. Adjustable Wrench 8"
- 8Pc. Folding Hex Key Set (1.5.2,2.5,3,4,5,6,8mm)
   1Pc. Long Nose Pliers 6"
   1Pc. Combination Pliers 6"

- •1Pc. Screwdriver, Slotted 5x100mm •1Pc. Screwdriver, Phillips #1x100mm
- •1Pc. Circuit Tester 145mm
- •1Pc. PVC Insulated Rubber Tape
- •1Pc. Hickory Claw Hammer 0.5 Lbs •1Pc. Mini Hack Saw 6"
- 2Pc. Mini Saw Blade 6"
- •1Pc. Stainless Steel Scissors
- •1Pc. Snap-Off Knife 8-Point 18x100mm
- •1Pc. Measuring Tape 5Mx19mm
- •1Pc. Fine Pointed Tips Tweezers 125mm
- •1Pc. Plastic Box
- •1Pc. Aluminum Flashlight, 2-Cell AA
- Suitable for repair or maintenance jobs at office and home

No.	#	8	ā
06008	-	4	12.5

#### 06011 11Pc. Driver's Tool Set



- 1Pc. 1/2" Dr. L-Shaped Lug Wrench 1Pc. 1/2" Dr. Double-End Socket 17x19mm
- •1Pc. 1/2" Dr. Double-End Socket 21x23mm
- 1Pc. Adjustable Wrench, Dipping Handle 8"
- 1Pc. Combination Pliers 7"
- •1Pc. Long Nose Pliers 6"
- Pc. Screwdriver, Slotted 6x100mm
   Pc. Screwdriver, Phillips #2x100mm
- 1Pc. Measuring Tape 3x16mm
- 1Pc. Snap-Off Knife
- •1Pc. Aluminum Flashlight, 3-Cell AAA
- Special designed for car drivers to change tire and normal household maintenance
- Adding the anti-freezing components into bag fabric to avoid split in winter and offering a comfortable touch feeling
- Adding the reinforced lining to avoid deformation when used

No.	#	8	ā
06011	-	4	11.6

▲ Warranty terms of tool set comply with the individual product.

## 09551 33Pc. Elevator Repair Tool Set



- •1Pc. Adjustable Wrench, Dipping Handle 10"
- 4Pc. Combination Wrench 10,13,16,18mm 3Pc. Open End Wrench 8x10,12x14,17x19mm
- 1Pc. T Series Go-through Screwdriver, Slotted 8x200mm
   2Pc. T Series Screwdriver, Slotted 5x75mm,6x150mm
   2Pc. T Series Screwdriver, Phillips #1x75mm,#2x150mm

- •1Pc. T Handle Hex key 5mm
- 9Pc. Long Arm Hex key (1.5,2,2.5,3,4,5,6,8,10mm) 1Pc. Japannish Combination Pliers 8"
- 1Pc. Japannish Multipurpose Long Nose Pliers 6" • 1Pc. Japannish Diagonal Pliers 5"
- 1Pc. External Snap Ring Pliers 7", Curved Tips
- •1Pc. Measuring Tape 5Mx19mm
- 1Pc. Steel Ruler 150mm
- •1Pc. Snap-Off Knife 8-Point 18x100mm
- •1Pc. Wood Handle Brush 2"
- 1Pc. Circuit Tester 185mm • 1Pc. Aluminum Flashlight, 3-Cell AAA
- · Applicable for elevator installation, daily maintenance and repair
- · Solid and durable blow mold case provided for elevator tool set, suitable for field construction and property management

No.	#	¥	ā
09551	-	2	10.9

▲ Warranty terms of tool set comply with the individual product.

# 09555 23Pc. Service Technicians Tool Set





- •1Pc. Open End Wrench 8x10mm
- •1Pc. Open End Wrench 12x14mm
- •1Pc. Adjustbale Wrench 8"
  •1Pc. Long Nose Pliers 6"
  •1Pc. Combination Pliers7"
- 9Pc. Long Arm Ball Point Hex Key 1.5,2,2.5,3,4,5,6,8,10mm 1Pc. A Series Screwdriver, Slotted 3.2x75mm
- •1Pc. A Series Screwdriver, Slotted 6x150mm
- 1Pc. A Series Screwdriver, Phillips #0x75mm
- 1Pc. A Series Screwdriver, Phillips #2x150mm
- 1Pc. Snap-Off Knife 8-Point 18x100mm
- •1Pc. Hickory Handle Claw Hammer 0.8 Lbs
- •1Pc. Measuring Tape 5Mx19mm
- 1Pc. Circuit Tester 145mm
- •1Pc. Insulated Rubber Tape
- Special designed for service technicians and household, used for electric appliance installation
- The waterproof tool bag is thickening and durable
- · Reserved space for placing power tool and other spare parts in the tool bag

No.	L×W×H(mm)	#	¥	ā
09555	390×145×270	-	6	14















































# 09556 32Pc. Service Technicians Tool Set

# 70Pc. Tool Chest & Tray Set



























- 1Pc. Mini Digital Multimeter
- 1Pc. Combination Wrench 8mm
- 1Pc. Combination Wrench 10mm • 1Pc. Combination Wrench 12mm
- 1Pc. Combination Wrench 13mm
- 1Pc. Combination Wrench 14mm
- 1Pc. Adjustable Wrench 8"
- •1Pc. Long Nose Pliers 6" • 1Pc. Combination Pliers 7"
- 9Pc. Long Arm Ball Point Hex Key (1.5,2,2.5,3,4,5,6,8,10mm)
- 1Pc. A Series Screwdriver, Slotted 3.2x75mm 1Pc. A Series Screwdriver, Slotted 6x38mm
- •1Pc. A Series Screwdriver, Slotted 6x150mm
- IPC. A Series Screwdriver, Phillips #0x75mm
   IPC. A Series Screwdriver, Phillips #2x38mm1Pc. A Series Screwdriver, Phillips #2x150mm
- •1Pc. Snap-Off Knife 8-Point 18x100mm
- •1Pc. Hickory Claw Hammer 0.8 Lbs
- 1Pc. Measuring Tape 5Mx19mm
- 1Pc. Digital Circuit Tester
- •1Pc. Aluminum Flashlight, 2-Cell AA
- 1Pc. Steel Ruler150mm
- •1Pc. Scissor
- •1Pc. Insulated Rubber Tape
- Special designed for service technicians and household, used for electric appliance installation
- The waterproof tool bag is thickening and durable
- Reserved space for placing power tool and other spare parts in the tool bag

No.	L×W×H(mm)	#	8	ā
09556	370×225×250	-	4	9

▲ Warranty terms of tool set comply with the individual product.

- •1Pc. 5" Cantilever Tool Box
- •1Pc. 1/2" Dr. Quick-Release Ratchet
- •17Pc. 1/2" Dr. Metric Sockets\* (8,9,10,11,12,13,14,17,19,20,21,22,23,24,27,30,32mm)
- 3Pc. 1/2" Dr. Metric Deep Sockets\* (17,19,21mm)
- •11Pc. Combination Wrenches (8,9,10,11,12,13,14,17,19,21,24mm)
- Slotted 5x75mm, 6x150mm; Phillips #1x75mm, #2x150mm
- 4Pc. Acetate Screwdrivers
- •1Pc. Adjustable Wrench 12"
- •1Pc. Long Nose Pliers 6"
- •1Pc. Diagonal Pliers 6"
- •1Pc. Linesman Pliers 7"
- •1Pc. Hickory Ball Pein Hammer 24 oz
- 28Pc. Accessories
- 2Pc. 1/2" Dr. Wobble Extension Bars 5", 10"
   1Pc. 1/2" Dr. Universal Joint
- 1Pc. 1/2 br. oniversal joint 1Pc. 1/2" Dr. Offset Handle 260 mm 8Pc. Metric Foldup Hex Key Set
- •16Pc. Feeler Gauge Set
- \* 95104A-70: 12 Point Metric Standard and Deep Sockets 95104A-70-6: 6 Point Metric Standard and Deep Sockets

No.	$\Theta$	8	ā
95104A70	1	1	13
95104A70-6	1	1	13

# 176 Sets Industrial Production Maintenance Set













- Easy management: Independent position provided for each tool on the EVA tray for easy recycling, counting and 5S management for users.
   Easy use: Intuitive and clear tool arrangement with laser mode adopted for small tool specification for easy identification and selection
   Delicacy and durability: EVA tray made from quality foaming materials and subjected to CNC engraving, and tray surface subjected to drawing, with laser mode adopted for product specification, featuring oil resistance and wear-resisting.

No.	Product Name	#	8	ā
09950	176 Sets Industrial Production Maintenance Set	-	1	25
09951	176Pc. Industrial Production and Repair Mater Tool Set (Including 5-Drawer Roll Cabinet)			

No.	Product Name	No.	Product Name	No.	Product Name
	Layer 1	12406	3/8" Dr. 6Pt. Deep Socket 13mm	22504	3/8" Drive Slotted Bit Socket 4mm
09332	31pc 6.3-Series Power Bit Set	12407	3/8" Dr. 6Pt. Deep Socket 14mm	61004	1/4" Drive Pistol Grip Ratcheting Bit Driver
11302	1/4" Dr. 6Pt. Socket 4mm	12408	3/8" Dr. 6Pt. Deep Socket 15mm	12913	3/8" Dr. Socket Adaptor (3/8" Fx1/4" M)
11304	1/4" Dr. 6Pt. Socket 5mm	12902	3/8" Dr. Quick Release Ratchet 8"	13913	1/2" Dr. Socket Adaptor (1/2" Fx3/8" M)
11306	1/4" Dr. 6Pt. Socket 6mm	12907	1/4" Locking Extension 6"		Layer 2
11307	1/4" Dr. 6Pt. Socket 7mm	12912	3/8" Dr. Universal Joint	40221	Combination Wrench 27mm
11308	1/4" Dr. 6Pt. Socket 8mm	12922	3/8" Flex Extension 8"	40222	Combination Wrench 30mm
11309	1/4" Dr. 6Pt. Socket 9mm	13311	1/2" Dr. 6Pt. Socket 20mm	40223	Combination Wrench 32mm
11310	1/4" Dr. 6Pt. Socket 10mm	13312	1/2" Dr. 6Pt. Socket 21mm	46601	Reversible Ratcheting Wrench 8mm
11311	1/4" Dr. 6Pt. Socket 11mm	13313	1/2" Dr. 6Pt. Socket 22mm	46602	Reversible Ratcheting Wrench 9mm
11312	1/4" Dr. 6Pt. Socket 12mm	13315	1/2" Dr. 6Pt. Socket 24mm	46603	Reversible Ratcheting Wrench 10mm
11313	1/4" Dr. 6Pt. Socket 13mm	13316	1/2" Dr. 6Pt. Socket 27mm	46604	Reversible Ratcheting Wrench 11mm
11401	1/4" Dr. 6Pt. Deep Socket 4mm	13317	1/2" Dr. 6Pt. Socket 30mm	46605	Reversible Ratcheting Wrench 12mm
11402	1/4" Dr. 6Pt. Deep Socket 5mm	13318	1/2" Dr. 6Pt. Socket 32mm	46606	Reversible Ratcheting Wrench 13mm
11403	1/4" Dr. 6Pt. Deep Socket 6mm	13321	1/2" Dr. 6Pt. Socket 34mm	46607	Reversible Ratcheting Wrench 14mm
11404	1/4" Dr. 6Pt. Deep Socket 7mm	13401	1/2" Dr. 6Pt. Deep Socket 10mm	46608	Reversible Ratcheting Wrench 15mm
11405	1/4" Dr. 6Pt. Deep Socket 8mm	13403	1/2" Dr. 6Pt. Deep Socket 12mm	46609	Reversible Ratcheting Wrench 16mm
11406	1/4" Dr. 6Pt. Deep Socket 9mm	13404	1/2" Dr. 6Pt. Deep Socket 13mm	46610	Reversible Ratcheting Wrench 17mm
11902	1/4" Dr. Quick Release Ratchet 5"	13405	1/2" Dr. 6Pt. Deep Socket 14mm	46611	Reversible Ratcheting Wrench 18mm
11904	1/4" Dr. Extension Bar 4"	13408	1/2" Dr. 6Pt. Deep Socket 17mm	46612	Reversible Ratcheting Wrench 19mm
11912	1/4" Dr. Universal Joint	13410	1/2" Dr. 6Pt. Deep Socket 19mm	46613	Reversible Ratcheting Wrench 21mm
12304	3/8" Dr. 6Pt. Socket 9mm	13902	1/2" Dr. Quick Release Ratchet 10"	46614	Reversible Ratcheting Wrench 22mm
12305	3/8" Dr. 6Pt. Socket 10mm	13905	1/2" Dr. Extension Bar 10"	46615	Reversible Ratcheting Wrench 24mm
12306	3/8" Dr. 6Pt. Socket 11mm	13912	1/2" Dr. Universal Joint	46616	Reversible Ratcheting Wrench 25mm
12307	3/8" Dr. 6Pt. Socket 12mm	22201	3/8" Dr. Bit Socket, Hexagon 3mm	46617	Reversible Ratcheting Wrench 20mm
12308	3/8" Dr. 6Pt. Socket 13mm	22202	3/8" Dr. Bit Socket, Hexagon 4mm	47204	Adjustable Wrench 10"
12309	3/8" Dr. 6Pt. Socket 14mm	22203	3/8" Dr. Bit Socket, Hexagon 5mm		Layer 3
12310	3/8" Dr. 6Pt. Socket 15mm	22204	3/8" Dr. Bit Socket, Hexagon 6mm	3903	5pc Mini Hand File 215mm
12311	3/8" Dr. 6Pt. Socket 16mm	22206	3/8" Dr. Bit Socket, Hexagon 8mm	3916	Flat Second Cut File 8"
12312	3/8" Dr. 6Pt. Socket 17mm	22207	3/8" Dr. Bit Socket, Hexagon 3/8"	3936	Half Round Second Cut File 8"
12313	3/8" Dr. 6Pt. Socket 18mm	22301	3/8" Drive Phillips Bit Socket #1	62202	Screwdriver, Slotted 3.2x75mm
12314	3/8" Dr. 6Pt. Socket 19mm	22302	3/8" Drive Phillips Bit Socket #2	62208	Screwdriver, Slotted 5x100mm
12403	3/8" Dr. 6Pt. Deep Socket 10mm	22303	3/8" Drive Phillips Bit Socket #3	62211	Screwdriver, Slotted 6x38mm
12404	3/8" Dr. 6Pt. Deep Socket 11mm	22501	3/8" Drive Slotted Bit Socket 5.5mm	62213	Screwdriver, Slotted 6x150mm
12405	3/8" Dr. 6Pt. Deep Socket 12mm	22502	3/8" Drive Slotted Bit Socket 6.5mm	62217	Screwdriver, Slotted 8x200mm

No.	Product Name
62302	Screwdriver, Phillips #0x75mm
62307	Screwdriver, Phillips #1x75mm
62311	Screwdriver, Phillips #2x38mm
62312	Screwdriver, Phillips #2x100mm
62317	Screwdriver, Phillips #3x200mm
64101	Flexible Megnetic Pickup Tool 400mmx1KG
	Layer 4
62602	Digital Circuit Tester
71103	Locking Pliers, Curved Jaw 10"
72001	External Snap Ring Pliers 7", Straight Tips
72002	External Snap Ring Pliers 7", Curved Tips
72004	Internal Snap Ring Pliers 7*, Straight Tips
72005	Internal Snap Ring Pliers 7*, Curved Tips
72203B	High Leverage Combination Pliers 8"
72301B	High Leverage Diagonal Pliers 6"
72401B	High Leverage Long Nose Pliers 6"
90790	Multipurpose Flashlight
93482	Rubber Grip Snap-Off Knife, 8-Point, 18x100mm
93485	Heavy Duty Zinc Alloy Utility Knife
09101CH	Rainbow-series 9pc Extra Long Ball Point H Key Set
93127	General long-blade scissors
	Layer 5
09161	5pc Punch Set
09405	23pc Metric/SAE Filler Gauge 0.02-1.0mm
91314	Tape Measure 5Mx19mm
91402	Steel Rules 300mm
91511	Digital Caliper 0-150mm
92314	Hickory Ball Pein Hammer 2 Pounds
92613	Tubular Steel Handle Dead Blow Hammer 40mm
93405	Aluminum Hacksaw 12"

































































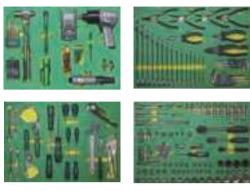








# **Tool Set**



No.	Product Name	L(mm)	W(mm)	#	8	ā
09919	157Pc. Mechanics Tool Set	560	400	-	1	22



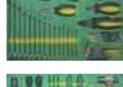




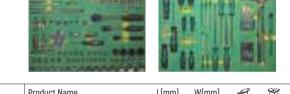


No.	Product Name	L(mm)	W(mm)	$\Theta$	8	M
09920	94Pc. Tire Service Station Tool Set	560	400	-	1	22





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No.	Product Name	L(mm)	W(mm)	$\Theta$	8	M
09921	163Pc. Auto Body Repair Tool Set	560	400	-	1	24





No.	Product Name	L(mm)	W(mm)		8	M
09922	121Pc. Auto Repair Tool Set	560	400	-	1	12

- Affordable tool tray set with common auto repair tools provided one-stop purchasing for auto repair shops
   Healthy, eco-friendly, tasteless and non-toxic EVA foam lining made from BASF raw materials for long service life
   Work efficiency improved with tool tray and SATA tool trolley 09919, 09920 and 09921 suitable for tool trolley 95121, and 09922 for 95121 and 95123
- ▲ Warranty terms of tool set comply with the individual product.

# 09919-157pc Mechanics Tool Set

No.	Product Name	No.	Product Name	No.	Product Name
11902	1/4" Dr. Quick Release Ratchet 5"	12313	3/8" Dr. 6Pt. Socket 18mm	13313	1/2" Dr. 6Pt. Socket 22mm
12902	3/8" Dr. Quick Release Ratchet 8"	97619	Bit Socket for Engine Cover Screws	13315	1/2" Dr. 6Pt. Socket 24mm
13902	1/2" Dr. Quick Release Ratchet 10"	13410	1/2" Dr. 6Pt. Deep Socket 19mm	13316	1/2" Dr. 6Pt. Socket 27mm
13904	1/2" Dr. Extension Bar 5"	13412	1/2" Dr. 6Pt. Deep Socket 21mm	13317	1/2" Dr. 6Pt. Socket 30mm
13905	1/2" Dr. Extension Bar 10"	13408	1/2" Dr. 6Pt. Deep Socket 17mm	13318	1/2" Dr. 6Pt. Socket 32mm
12903	3/8" Dr. Extension Bar 3"	12915	3/8" Dr. Spark Plug Socket 16mm	34310	1/2" Dr. 6Pt. Impact Socket 17mm
12904	3/8" Dr. Extension Bar 6"	12916	3/8" Dr. Spark Plug Socket 21mm	34312	1/2" Dr. 6Pt. Impact Socket 19mm
11903	1/4" Dr. Extension Bar 2"	12408	3/8" Dr. 6Pt. Deep Socket 15mm	34314	1/2" Dr. 6Pt. Impact Socket 21mm
11911	1/4" Dr. Spinner Handle	12406	3/8" Dr. 6Pt. Deep Socket 13mm	34315	1/2" Dr. 6Pt. Impact Socket 22mm
11914	1/4" Bit Joint (1/4" Bit Jack)	12407	3/8" Dr. 6Pt. Deep Socket 14mm	97631	1/2" Bit Socket for Oil Pan Screw M16
11912	1/4" Dr. Universal Joint	11405	1/4" Dr. 6Pt. Deep Socket 8mm	97635	1/2" Bit Socket for Oil Pan Screw H17
12912	3/8" Dr. Universal Joint	11406	1/4" Dr. 6Pt. Deep Socket 9mm	97104	Shock Absorber Removal Socket
13912	1/2" Dr. Universal Joint	11407	1/4" Dr. 6Pt. Deep Socket 10mm	97422	Universal 3-law Oil Filter Wrench 63-102mm
11304	1/4" Dr. 6Pt. Socket 5mm	11409	1/4" Dr. 6Pt. Deep Socket 12mm	40203	Combination Wrench 8mm
11305	1/4" Dr. 6Pt. Socket 5.5mm	22202	3/8" Dr. Bit Socket, Hexagon 4mm	40204	Combination Wrench 9mm
11306	1/4" Dr. 6Pt. Socket 6mm	22203	3/8" Dr. Bit Socket, Hexagon 5mm	40205	Combination Wrench 10mm
11307	1/4" Dr. 6Pt. Socket 7mm	22204	3/8" Dr. Bit Socket, Hexagon 6mm	40206	Combination Wrench 11mm
11308	1/4" Dr. 6Pt. Socket 8mm	22205	3/8" Dr. Bit Socket, Hexagon 7mm	40207	Combination Wrench 12mm
11309	1/4" Dr. 6Pt. Socket 9mm	22206	3/8" Dr. Bit Socket, Hexagon 8mm	40208	Combination Wrench 13mm
11310	1/4" Dr. 6Pt. Socket 10mm	22104	3/8" Dr. Bit Socket, Torx® T25	40209	Combination Wrench 14mm
11311	1/4" Dr. 6Pt. Socket 11mm	22105	3/8" Dr. Bit Socket, Torx® T27	40210	Combination Wrench 15mm
11312	1/4" Dr. 6Pt. Socket 12mm	22106	3/8" Dr. Bit Socket, Torx® T30	40211	Combination Wrench 16mm
12930	3/8" Dr. 3-Way Socket Adaptor (3/8" Fx1/2" M)	22107	3/8" Dr. Bit Socket, Torx® T40	40212	Combination Wrench 17mm
13930	1/2" Dr. 3-Way Socket Adaptor (1/2" Fx3/8" M)	12707	3/8" Dr. Torx@ Socket E11	40213	Combination Wrench 18mm
12913	3/8" Dr. Socket Adaptor (3/8" Fx1/4" M)	12708	3/8" Dr. Torx@ Socket E12	40214	Combination Wrench 19mm
12304	3/8" Dr. 6Pt. Socket 9mm	12709	3/8" Dr. Torx@ Socket E14	40216	Combination Wrench 21mm
12305	3/8" Dr. 6Pt. Socket 10mm	12710	3/8" Dr. Torx@ Socket E16	40217	Combination Wrench 22mm
12306	3/8" Dr. 6Pt. Socket 11mm	12711	3/8" Dr. Torx@ Socket E18	40219	Combination Wrench 24mm
12307	3/8" Dr. 6Pt. Socket 12mm	12712	3/8" Dr. Torx@ Socket E20	70101A	Long Nose Pliers 6"
12308	3/8" Dr. 6Pt. Socket 13mm	13308	1/2" Dr. 6Pt. Socket 17mm	70202A	Diagonal Pliers 6"
12309	3/8" Dr. 6Pt. Socket 14mm	13309	1/2" Dr. 6Pt. Socket 18mm	70303A	Combination Pliers 8"
12310	3/8" Dr. 6Pt. Socket 15mm	13310	1/2" Dr. 6Pt. Socket 19mm	72012	External Snap Ring Pliers, Straight Tips 7*
12311	3/8" Dr. 6Pt. Socket 16mm	13311	1/2" Dr. 6Pt. Socket 20mm	72022	External Snap Ring Pliers, Curved Tips 7"
12312	3/8" Dr. 6Pt. Socket 17mm	13312	1/2" Dr. 6Pt. Socket 21mm	72032	Internal Snap Ring Pliers 7", Straight Tips

No.	Product Name
72042	Internal Snap Ring Pliers 7", Curved Tips
09702	9pc Long Arm Tamper-Proof Torx® Key Set
09107	9pc Long Arm Hex Key Set
61603	Go-Through Screwdriver, Slotted 6x100mm
61703	Go-Through Screwdriver, Phillips #2x100mm
61706	Go-Through Screwdriver, Phillips #3x150mm
62202	Screwdriver, Slotted 3.2x75mm
62207	Screwdriver, Slotted 5x75mm
62302	Screwdriver, Phillips #0x75mm
62307	Screwdriver, Phillips #1x75mm
62211	Screwdriver, Slotted 6x38mm
62311	Screwdriver, Phillips #2x38mm
70812	Heavy Duty Pipe Wrench 8"
47204	Adjustable Wrench 10"
71103	Locking Pliers, Curved Jaw 10"
70512	Slip Joint Pliers 8"
97427	Oil Filter Wrench 55-75mm
97428	Oil Filter Wrench 75-95mm
48200	Flare Nut Wrench 8x10mm
48201	Flare Nut Wrench 9x11mm
48202	Flare Nut Wrench 13x14mm
48204	Flare Nut Wrench 10x12mm
90741A	Aluminum Flashlight 3-Cell AAA
03007	Mini Digital Multimeter with Frequency Test
62503	Automotive Circuit Tester 6V/12V/24V
09161	5pc Punch Set
90784	Cold Chisel 20x200mm
09704	5pc Fine Threaded Extractor Set
01113A	1/2* Professional Strong Dr. Air Impact Wrench
92302	Fiberglass Handle Ball Pein Hammer 1 Pound
02515	Air Tire Buffer





























# 09920-94pc Mechanics Tool Set

No.	Product Name
12902	3/8" Dr. Quick Release Ratchet 8"
13902	1/2" Dr. Quick Release Ratchet 10"
70512	Slip Joint Pliers 8"
12930	3/8" Dr. 3-Way Socket Adaptor (3/8" Fx1/2" M)
13930	1/2" Dr. 3-Way Socket Adaptor (1/2" Fx3/8" M)
13904	1/2" Dr. Extension Bar 5"
13905	1/2" Dr. Extension Bar 10"
12903	3/8" Dr. Extension Bar 3"
12904	3/8" Dr. Extension Bar 6"
13910	1/2" Dr. Sliding T-Handle 10"
13912	1/2" Dr. Universal Joint
12912	3/8" Dr. Universal Joint
71103	Locking Pliers, Curved Jaw 10"
34719	1/2" Dr. Impact Universal Joint
13407	1/2" Dr. 6Pt. Deep Socket 16mm
13408	1/2" Dr. 6Pt. Deep Socket 17mm
13409	1/2" Dr. 6Pt. Deep Socket 18mm
13410	1/2" Dr. 6Pt. Deep Socket 19mm
13411	1/2" Dr. 6Pt. Deep Socket 20mm
13412	1/2" Dr. 6Pt. Deep Socket 21mm
13413	1/2" Dr. 6Pt. Deep Socket 22mm
12303	3/8" Dr. 6Pt. Socket 8mm
12304	3/8" Dr. 6Pt. Socket 9mm
12305	3/8" Dr. 6Pt. Socket 10mm

No.	Product Name
12306	3/8" Dr. 6Pt. Socket 11mm
12307	3/8" Dr. 6Pt. Socket 12mm
12308	3/8" Dr. 6Pt. Socket 13mm
12309	3/8" Dr. 6Pt. Socket 14mm
12311	3/8" Dr. 6Pt. Socket 16mm
34310	1/2" Dr. 6Pt. Impact Socket 17mm
34312	1/2" Dr. 6Pt. Impact Socket 19mm
34314	1/2" Dr. 6Pt. Impact Socket 21mm
34315	1/2" Dr. 6Pt. Impact Socket 22mm
34316	1/2" Dr. 6Pt. Impact Socket 23mm
13303	1/2" Dr. 6Pt. Socket 12mm
13304	1/2" Dr. 6Pt. Socket 13mm
13305	1/2" Dr. 6Pt. Socket 14mm
13306	1/2" Dr. 6Pt. Socket 15mm
13307	1/2" Dr. 6Pt. Socket 16mm
13308	1/2" Dr. 6Pt. Socket 17mm
13309	1/2" Dr. 6Pt. Socket 18mm
13310	1/2" Dr. 6Pt. Socket 19mm
13311	1/2" Dr. 6Pt. Socket 20mm
13312	1/2" Dr. 6Pt. Socket 21mm
13313	1/2" Dr. 6Pt. Socket 22mm
13314	1/2" Dr. 6Pt. Socket 23mm
13315	1/2" Dr. 6Pt. Socket 24mm
13316	1/2" Dr. 6Pt. Socket 27mm

No.	Product Name
47204	Adjustable Wrench 10"
70812	Heavy Duty Pipe Wrench 8"
70813	Heavy Duty Pipe Wrench 10"
40205	Combination Wrench 10mm
40206	Combination Wrench 11mm
40207	Combination Wrench 12mm
40208	Combination Wrench 13mm
40209	Combination Wrench 14mm
40210	Combination Wrench 15mm
40211	Combination Wrench 16mm
40212	Combination Wrench 17mm
40213	Combination Wrench 18mm
40214	Combination Wrench 19mm
40215	Combination Wrench 20mm
40216	Combination Wrench 21mm
40217	Combination Wrench 22mm
40219	Combination Wrench 24mm
40220	Combination Wrench 25mm
42201	Box End Wrench 8x10mm
42203	Box End Wrench 11x13mm
42204	Box End Wrench 12x14mm
42206	Box End Wrench 17x19mm
91314	Tape Measure 5mx19mm
90741A	Aluminum Flashlight 3-Cell AAA

Draduat Name

7	No.	Product Name
1	70101A	Long Nose Pliers 6"
]	70202A	Diagonal Pliers 6"
1	70303A	Combination Pliers 8"
]	72503A	Mini End Cutting Pliers 8"
1	93106	Electricians Scissors 8"
]	97222	Air Blow Gun 250mm
	62202	Screwdriver, Slotted 3.2x75mm
	62302	Screwdriver, Phillips #0x75mm
1	62212	Screwdriver, Slotted 6x100mm
]	62312	Screwdriver, Phillips #2x100mm
	61605	Go-Through Screwdriver, Slotted 6x150mm
	61705	Go-Through Screwdriver, Phillips #2x150mm
	95201	Wood Handle Putty Scraper
	93424A	Zinc Alloy Snap-Off Knife, 13-Point, 9x80mm
	48111	Flat Beam Torque Wrench
	48101	Cross Lug Wrench 16"
]	2515	Air Tire Buffer
	01113A	1/2" Professional Strong Dr. Air Impact Wrench
	92107	Wheel Weight Tool
	12915	3/8" Dr. Spark Plug Socket 16mm
	12916	3/8" Dr. Spark Plug Socket 21mm
	97422	Universal 3-Jaw Oil Filter Wrench 63-102mm
1		

# 09921-163pc Auto Body Repair Tool Set

No.	Product Name	No.
11902	1/4" Dr. Quick Release Ratchet 5"	12313
12902	3/8" Dr. Quick Release Ratchet 8"	97619
13902	1/2" Dr. Quick Release Ratchet 10"	13410
13904	1/2" Dr. Extension Bar 5"	13412
13905	1/2" Dr. Extension Bar 10"	13408
12903	3/8" Dr. Extension Bar 3"	12915
12904	3/8" Dr. Extension Bar 6"	12916
11903	1/4" Dr. Extension Bar 2"	12408
11911	1/4" Dr. Spinner Handle	12406
11914	1/4" Bit Joint (1/4" Bit Jack)	12407
11912	1/4" Dr. Universal Joint	11405
12912	3/8" Dr. Universal Joint	11406
13912	1/2" Dr. Universal Joint	11407
11304	1/4" Dr. 6Pt. Socket 5mm	11409
11305	1/4" Dr. 6Pt. Socket 5.5mm	2220
11306	1/4" Dr. 6Pt. Socket 6mm	2220
11307	1/4" Dr. 6Pt. Socket 7mm	2220
11308	1/4" Dr. 6Pt. Socket 8mm	2220
11309	1/4" Dr. 6Pt. Socket 9mm	2220
11310	1/4" Dr. 6Pt. Socket 10mm	22104
11311	1/4" Dr. 6Pt. Socket 11mm	22105
11312	1/4" Dr. 6Pt. Socket 12mm	22106
12930	3/8" Dr. 3-Way Socket Adaptor (3/8" Fx1/2" M)	22107
13930	1/2" Dr. 3-Way Socket Adaptor (1/2" Fx3/8" M)	12707
12913	3/8" Dr. Socket Adaptor (3/8" Fx1/4" M)	12708
12304	3/8" Dr. 6Pt. Socket 9mm	12709
12305	3/8" Dr. 6Pt. Socket 10mm	12710
12306	3/8" Dr. 6Pt. Socket 11mm	12711
12307	3/8" Dr. 6Pt. Socket 12mm	12712
12308	3/8" Dr. 6Pt. Socket 13mm	13308
12309	3/8" Dr. 6Pt. Socket 14mm	13309
12310	3/8" Dr. 6Pt. Socket 15mm	13310
12311	3/8" Dr. 6Pt. Socket 16mm	13311
12312	3/8" Dr. 6Pt. Socket 17mm	13312

No.	Product Name
12313	3/8" Dr. 6Pt. Socket 18mm
97619	Bit Socket for Engine Cover Screws
13410	1/2" Dr. 6Pt. Deep Socket 19mm
13412	1/2" Dr. 6Pt. Deep Socket 21mm
13408	1/2" Dr. 6Pt. Deep Socket 17mm
12915	3/8" Dr. Spark Plug Socket 16mm
12916	3/8" Dr. Spark Plug Socket 21mm
12408	3/8" Dr. 6Pt. Deep Socket 15mm
12406	3/8" Dr. 6Pt. Deep Socket 13mm
12407	3/8" Dr. 6Pt. Deep Socket 14mm
11405	1/4" Dr. 6Pt. Deep Socket 8mm
11406	1/4" Dr. 6Pt. Deep Socket 9mm
11407	1/4" Dr. 6Pt. Deep Socket 10mm
11409	1/4" Dr. 6Pt. Deep Socket 12mm
22202	3/8" Dr. Bit Socket, Hexagon 4mm
22203	3/8" Dr. Bit Socket, Hexagon 5mm
22204	3/8" Dr. Bit Socket, Hexagon 6mm
22205	3/8" Dr. Bit Socket, Hexagon 7mm
22206	3/8" Dr. Bit Socket, Hexagon 8mm
22104	3/8" Dr. Bit Socket, Torx® T25
22105	3/8" Dr. Bit Socket, Torx® T27
22106	3/8" Dr. Bit Socket, Torx® T30
22107	3/8" Dr. Bit Socket, Torx® T40
12707	3/8" Dr. Torx@ Socket E11
12708	3/8" Dr. Torx@ Socket E12
12709	3/8" Dr. Torx@ Socket E14
12710	3/8" Dr. Torx@ Socket E16
12711	3/8" Dr. Torx@ Socket E18
12712	3/8" Dr. Torx@ Socket E20
13308	1/2" Dr. 6Pt. Socket 17mm
13309	1/2" Dr. 6Pt. Socket 18mm
13310	1/2" Dr. 6Pt. Socket 19mm
13311	1/2" Dr. 6Pt. Socket 20mm
13312	1/2" Dr. 6Pt. Socket 21mm

No.	Product Name
13313	1/2" Dr. 6Pt. Socket 22mm
13315	1/2" Dr. 6Pt. Socket 24mm
13316	1/2" Dr. 6Pt. Socket 27mm
13317	1/2" Dr. 6Pt. Socket 30mm
13318	1/2" Dr. 6Pt. Socket 32mm
34310	1/2" Dr. 6Pt. Impact Socket 17mm
34312	1/2" Dr. 6Pt. Impact Socket 19mm
34314	1/2" Dr. 6Pt. Impact Socket 21mm
34315	1/2" Dr. 6Pt. Impact Socket 22mm
97631	1/2" Bit Socket for Oil Pan Screw M16
97635	1/2" Bit Socket for Oil Pan Screw H17
97104	Shock Absorber Removal Socket
97422	Universal 3-Jaw Oil Filter Wrench 63-102mm
40203	Combination Wrench 8mm
40204	Combination Wrench 9mm
40205	Combination Wrench 10mm
40206	Combination Wrench 11mm
40207	Combination Wrench 12mm
40208	Combination Wrench 13mm
40209	Combination Wrench 14mm
40210	Combination Wrench 15mm
40211	Combination Wrench 16mm
40212	Combination Wrench 17mm
40213	Combination Wrench 18mm
40214	Combination Wrench 19mm
40216	Combination Wrench 21mm
40217	Combination Wrench 22mm
40219	Combination Wrench 24mm
70101A	Long Nose Pliers 6"
70202A	Diagonal Pliers 6"
70303A	Combination Pliers 8"
72012	External Snap Ring Pliers, Straight Tips 7"
72022	External Snap Ring Pliers, Curved Tips 7"
72032	Internal Snap Ring Pliers, Straight Tips 7"

No.	Product Name
72042	Internal Snap Ring Pliers 7", Curved Tips
09702 9pc Long Arm Tamper-Proof Torx® Key Set	
09107	9pc Long Arm Hex Key Set
61603	Go-Through Screwdriver, Slotted 6x100mm
61703	Go-Through Screwdriver, Phillips #2x100mm
61706	Go-Through Screwdriver, Phillips #3x150mm
62202	Screwdriver, Slotted 3.2x75mm
62207	Screwdriver, Slotted 5x75mm
62302	Screwdriver, Phillips #0x75mm
62307	Screwdriver, Phillips #1x75mm
62211	Screwdriver, Slotted 6x38mm
62311	Screwdriver, Phillips #2x38mm
09161	5pc Punch Set
90784	Chisel 20x200mm
09704	5pc Fine Threaded Extractor Set
92302	Fiberglass Handle Ball Pein Hammer 1 Pound
03850	5pc Diamond Needle File Set 5x180mm
03956	Square Second Cut File 8"
03971	Round Second Cut File 6"
03991	Three Square Second Cut File 6"
03931	Half Round Bastard Cut File 6"
92104	Light Duty Shrinking Hammer 320g
92106	Round Point Finishing Hammer 260g
97105	Rigid Scraper
95201	Wood Handle Putty Scraper
92209	Pry Bumping Spoon
92205	Wedge Dolly
92203	Anvil Dolly
92207	Toe Dolly
71401	Locking Pliers 9", U-Shaped Jaw
71302	Locking Pliers 9", Long Nose
71601	Locking Pliers 11", C-Shaped Jaw
71501	Locking Pliers 8", Wide Jaw

# 09922-121pc Auto Body Repair Tool Set

No.	Product Name
11902	1/4" Dr. Quick Release Ratchet 5"
12902	3/8" Dr. Quick Release Ratchet 8"
13902	1/2" Dr. Quick Release Ratchet 10"
13904	1/2" Dr. Extension Bar 5"
13905	1/2" Dr. Extension Bar 10"
12903	3/8" Dr. Extension Bar 3"
12904	3/8" Dr. Extension Bar 6"
11903	1/4" Dr. Extension Bar 2"
11911	1/4" Dr. Spinner Handle
11914	1/4" Bit Joint (1/4" Bit Jack)
11912	1/4" Dr. Universal Joint
12912	3/8" Dr. Universal Joint
13912	1/2" Dr. Universal Joint
11304	1/4" Dr. 6Pt. Socket 5mm
11305	1/4" Dr. 6Pt. Socket 5.5mm
11306	1/4" Dr. 6Pt. Socket 6mm
11307	1/4" Dr. 6Pt. Socket 7mm
11308	1/4" Dr. 6Pt. Socket 8mm
11309	1/4" Dr. 6Pt. Socket 9mm
11310	1/4" Dr. 6Pt. Socket 10mm
11311	1/4" Dr. 6Pt. Socket 11mm
11312	1/4" Dr. 6Pt. Socket 12mm
12930	3/8" Dr. 3-Way Socket Adaptor (3/8" Fx1/2" M)
13930	1/2" Dr. 3-Way Socket Adaptor (1/2" Fx3/8" M)
12913	3/8" Dr. Socket Adaptor (3/8" Fx1/4" M)
12304	3/8" Dr. 6Pt. Socket 9mm
12305	3/8" Dr. 6Pt. Socket 10mm

No.	Product Name
12306	3/8" Dr. 6Pt. Socket 11mm
12307	3/8" Dr. 6Pt. Socket 12mm
12308	3/8" Dr. 6Pt. Socket 13mm
12309	3/8" Dr. 6Pt. Socket 14mm
12310	3/8" Dr. 6Pt. Socket 15mm
12311	3/8" Dr. 6Pt. Socket 16mm
12312	3/8" Dr. 6Pt. Socket 17mm
12313	3/8" Dr. 6Pt. Socket 18mm
97619	Bit Socket for Engine Cover Screws
13410	1/2" Dr. 6Pt. Deep Socket 19mm
13412	1/2" Dr. 6Pt. Deep Socket 21mm
13408	1/2" Dr. 6Pt. Deep Socket 17mm
12915	3/8" Dr. Spark Plug Socket 16mm
12916	3/8" Dr. Spark Plug Socket 21mm
12408	3/8" Dr. 6Pt. Deep Socket 15mm
12406	3/8" Dr. 6Pt. Deep Socket 13mm
12407	3/8" Dr. 6Pt. Deep Socket 14mm
11405	1/4" Dr. 6Pt. Deep Socket 8mm
11406	1/4" Dr. 6Pt. Deep Socket 9mm
11407	1/4" Dr. 6Pt. Deep Socket 10mm
11409	1/4" Dr. 6Pt. Deep Socket 12mm
22202	3/8" Dr. Bit Socket, Hexagon 4mm
22203	3/8" Dr. Bit Socket, Hexagon 5mm
22204	3/8" Dr. Bit Socket, Hexagon 6mm
22205	3/8" Dr. Bit Socket, Hexagon 7mm
22206	3/8" Dr. Bit Socket, Hexagon 8mm
22104	3/8" Dr. Bit Socket, Torx® T25

No.	Product Name
22105	3/8" Dr. Bit Socket, Torx® T27
22106	3/8" Dr. Bit Socket, Torx® T30
22107	3/8" Dr. Bit Socket, Torx® T40
12707	3/8" Dr. Torx@ Socket E11
12708	3/8" Dr. Torx@ Socket E12
12709	3/8" Dr. Torx@ Socket E14
12710	3/8" Dr. Torx@ Socket E16
12711	3/8" Dr. Torx@ Socket E18
12712	3/8" Dr. Torx@ Socket E20
13308	1/2" Dr. 6Pt. Socket 17mm
13309	1/2" Dr. 6Pt. Socket 18mm
13310	1/2" Dr. 6Pt. Socket 19mm
13311	1/2" Dr. 6Pt. Socket 20mm
13312	1/2" Dr. 6Pt. Socket 21mm
13313	1/2" Dr. 6Pt. Socket 22mm
13315	1/2" Dr. 6Pt. Socket 24mm
13316	1/2" Dr. 6Pt. Socket 27mm
13317	1/2" Dr. 6Pt. Socket 30mm
13318	1/2" Dr. 6Pt. Socket 32mm
34310	1/2" Dr. 6Pt. Impact Socket 17mm
34312	1/2" Dr. 6Pt. Impact Socket 19mm
34314	1/2" Dr. 6Pt. Impact Socket 21mm
34315	1/2" Dr. 6Pt. Impact Socket 22mm
97631	1/2" Bit Socket for Oil Pan Screw M16
97635	1/2" Bit Socket for Oil Pan Screw H17
97104	Shock Absorber Removal Socket
97422	Universal 3-Jaw Oil Filter Wrench 63-102mm

No.	Product Name
40203	Combination Wrench 8mm
40204	Combination Wrench 9mm
40205	Combination Wrench 10mm
40206	Combination Wrench 11mm
40207	Combination Wrench 12mm
40208	Combination Wrench 13mm
40209	Combination Wrench 14mm
40210	Combination Wrench 15mm
40211	Combination Wrench 16mm
40212	Combination Wrench 17mm
40213	Combination Wrench 18mm
40214	Combination Wrench 19mm
40216	Combination Wrench 21mm
40217	Combination Wrench 22mm
40219	Combination Wrench 24mm
70101A	Long Nose Pliers 6"
70202A	Diagonal Pliers 6"
70303A	Combination Pliers 8"
72012	External Snap Ring Pliers, Straight Tips 7"
72022	External Snap Ring Pliers, Curved Tips 7"
72032	Internal Snap Ring Pliers 7", Straight Tips
72042	Internal Snap Ring Pliers 7", Curved Tips
09702	9pc Long Arm Tamper-Proof Torx® Key Set
09107	9pc Long Arm Hex Key Set































# **Tool Set**

- · Universal tools available
- Quality SATA two-tone EVA foam lining included in each tool set for improved work efficiency
   Custom SATA EVA tool set recognized by various users with sales volume of more than 100,000 sets so far

No.	Product Name	$\Theta$	¥	M
95207S	171Pc. Mechanics Tool Set	-	1	28
95208S	103Pc. Auto Body Repair Tool Set	-	1	23

▲ Trolley cart is not included in the tool set.

Warranty terms of tool set comply with the individual product.

### 95207S-171pc Mechanics Tool Set

No.	Product Name
01113A	1/2" Air Impact Wrench
09105	9pc Long Arm Ball Point Hex Key Set
09402	16pc Feeler Gauge Set 0.05-1.00mm
11304	1/4" Dr. 6Pt. Socket 5mm
11305	1/4" Dr. 6Pt. Socket 5.5mm
11306	1/4" Dr. 6Pt. Socket 6mm
11307	1/4" Dr. 6Pt. Socket 7mm
11308	1/4" Dr. 6Pt. Socket 8mm
11309	1/4" Dr. 6Pt. Socket 9mm
11310	1/4" Dr. 6Pt. Socket 10mm
11311	1/4" Dr. 6Pt. Socket 11mm
11312	1/4" Dr. 6Pt. Socket 12mm
11313	1/4" Dr. 6Pt. Socket 13mm
11403	1/4" Dr. 6Pt. Deep Socket 6mm
11404	1/4" Dr. 6Pt. Deep Socket 7mm
11407	1/4" Dr. 6Pt. Deep Socket 10mm
11902	1/4" Dr. Quick Release Ratchet 5"
11903	1/4" Dr. Extension Bar 2"
11904	1/4" Dr. Extension Bar 4"
11911	1/4" Dr. Spinner Handle
11912	1/4" Dr. Universal Joint
11922	1/4" Dr. Flexible Extension Bar 6"
12303	3/8" Dr. 6Pt. Socket 8mm
12304	3/8" Dr. 6Pt. Socket 9mm
12305	3/8" Dr. 6Pt. Socket 10mm
12306	3/8" Dr. 6Pt. Socket 11mm
12307	3/8" Dr. 6Pt. Socket 12mm
12308	3/8" Dr. 6Pt. Socket 13mm
12309	3/8" Dr. 6Pt. Socket 14mm
12310	3/8" Dr. 6Pt. Socket 15mm
12311	3/8" Dr. 6Pt. Socket 16mm
12406	3/8" Dr. 6Pt. Deep Socket 13mm
12408	3/8" Dr. 6Pt. Deep Socket 15mm
12409	3/8" Dr. 6Pt. Deep Socket 16mm
12902	3/8" Dr. Quick Release Ratchet 8"
12907	3/8" Dr. Locking Extension Bar
12908	3/8" Dr. Locking Extension Bar
12912	3/8" Dr. Universal Joint
12913	3/8" Dr. Socket Adaptor (3/8" Fx1/4" M)
12915	3/8" Dr. Spark Plug Socket 16mm
12916	3/8" Dr. Spark Plug Socket 21mm
12922	3/8" Dr. Flexible Extension Bar 8"
13301	1/2" Dr. 6Pt. Socket 10mm

M-	Bradust Nama
No. 13305	Product Name
	1/2" Dr. 6Pt. Socket 14mm
13306	1/2" Dr. 6Pt. Socket 15mm
13307	1/2" Dr. 6Pt. Socket 16mm
13308	1/2" Dr. 6Pt. Socket 17mm
13309	1/2" Dr. 6Pt. Socket 18mm
13310	1/2" Dr. 6Pt. Socket 19mm
13312	1/2" Dr. 6Pt. Socket 21mm
13313	1/2" Dr. 6Pt. Socket 22mm
13316	1/2" Dr. 6Pt. Socket 27mm
13408	1/2" Dr. 6Pt. Deep Socket 17mm
13410	1/2" Dr. 6Pt. Deep Socket 19mm
13601	1/2" Dr. 12Pt. Socket 3/8"
13602	1/2" Dr. 12Pt. Socket 11mm
13603	1/2" Dr. 12Pt. Socket 12mm
13604	1/2" Dr. 12Pt. Socket 13mm
13608	1/2" Dr. 12Pt. Socket 17mm
13610	1/2" Dr. 12Pt. Socket 19mm
13611	1/2" Dr. 12Pt. Socket 20mm
13613	1/2" Dr. 12Pt. Socket 22mm
13615	1/2" Dr. 12Pt. Socket 24mm
13617	1/2" Dr. 12Pt. Socket 30mm
13618	1/2" Dr. 12Pt. Socket 32mm
13902	1/2" Dr. Quick Release Ratchet 10"
13904	1/2" Dr. Extension Bar 5"
13905	1/2" Dr. Extension Bar 10"
13910	1/2" Dr. Sliding T-Handle 10"
13912	1/2" Dr. Universal Joint
13913	1/2" Dr. Socket Adaptor ( 1/2" Fx3/8" M)
21203	1/4" Dr. Bit Socket, Hexagon 5mm
21204	1/4" Dr. Bit Socket, Hexagon 6mm
21402	1/4" Dr. Bit Socket, Pozidriv #2
21502	1/4" Dr. Bit Socket, Slotted 5.5mm
22101	3/8" Dr. Bit Socket, Torx® T10
22102	3/8" Dr. Bit Socket, Torx® T15
22103	3/8" Dr. Bit Socket, Torx® T20
22104	3/8" Dr. Bit Socket, Torx® T25
22106	3/8" Dr. Bit Socket, Torx® T30
24202	1/2" Dr. Bit Socket, 50mm Length, Hexagon 5mm
24203	1/2" Dr. Bit Socket, 50mm Length, Hexagon 6mm
24204	1/2" Dr. Bit Socket, 50mm Length, Hexagon 7mm
24205	1/2" Dr. Bit Socket, 50mm Length, Hexagon 8mm
24206	1/2" Dr. Bit Socket, 50mm Length, Hexagon 10mm
25102	1/2" Dr. Bit Socket, 100mm Length, Torx® T25

25103	1/2" Dr. Bit Socket, 100mm Length, Torx® T27
25104	1/2" Dr. Bit Socket, 100mm Length, Torx® T30
25106	1/2" Dr. Bit Socket, 100mm Length, Torx® T45
25202	1/2" Dr. Bit Socket, 100mm Length, Hexagon 5mm
25203	1/2" Dr. Bit Socket, 100mm Length, Hexagon 6mm
25204	1/2" Dr. Bit Socket, 100mm Length, Hexagon 7mm
25205	1/2" Dr. Bit Socket, 100mm Length, Hexagon 8mm
25207	1/2" Dr. Bit Socket, 100mm Length, Hexagon 12mm
25208	1/2" Dr. Bit Socket, 100mm Length, Hexagon 14mm
25802	1/2" Dr. Bit Socket, 100mm Length, Triple Square M6
25803	1/2" Dr. Bit Socket, 100mm Length, Triple Square M8
25804	1/2" Dr. Bit Socket, 100mm Length, Triple Square M10
29422	Japanese Plug-External Thread R1/4*
34310	1/2" Dr. 6Pt. Impact Socket 17mm
34312	1/2" Dr. 6Pt. Impact Socket 19mm
34314	1/2" Dr. 6Pt. Impact Socket 21mm
34315	1/2" Dr. 6Pt. Impact Socket 22mm
40202	Combination Wrench 7mm
40205	Combination Wrench 10mm
40206	Combination Wrench 11mm
40207	Combination Wrench 12mm
40208	Combination Wrench 13mm
40209	Combination Wrench 14mm
40210	Combination Wrench 15mm
40211	Combination Wrench 16mm
40212	Combination Wrench 17mm
40214	Combination Wrench 19mm
40215	Combination Wrench 20mm
40216	Combination Wrench 21mm
40217	Combination Wrench 22mm
40218	Combination Wrench 23mm
40219	Combination Wrench 24mm
40221	Combination Wrench 27mm
41202	Open End Wrench 8x10mm
41203	Open End Wrench 10x12mm
41204	Open End Wrench 11X13mm
41205	Open End Wrench 12x14mm
41206	Open End Wrench 14x17mm
41207	Open End Wrench 17x19mm
41209	Open End Wrench 21x23mm
41210	Open End Wrench 22x24mm
41214	Open End Wrench 16x18mm
42302	Deep Offset Box End Wrench 8x9mm

Product Name

lo.	Product Name
2303	Deep Offset Box End Wrench 10x11mm
2304	Deep Offset Box End Wrench 12x13mm
2305	Deep Offset Box End Wrench 14x15mm
307	Deep Offset Box End Wrench 18x19mm
309	Deep Offset Box End Wrench 20x22mm
2312	Deep Offset Box End Wrench 24x27mm
7703	T-Handle 6Pt. Socket Wrench 10mm
3111	Flat Beam Torque Wrench
1101	Screwdriver, Torx® T10x100mm
1102	Screwdriver, Torx® T15x100mm
103	Screwdriver, Torx® T20x100mm
1104	Screwdriver, Torx® T25x100mm
1105	Screwdriver, Torx® T27x100mm
1106	Screwdriver, Torx® T30x100mm
2211	Screwdriver, Slotted 6x38mm
2202	Screwdriver, Slotted 3.2x75mm
2208	Screwdriver, Slotted 5x100mm
2213	Screwdriver, Slotted 6x150mm
2216	Screwdriver, Slotted 8x150mm
2307	Screwdriver, Phillips #1x75mm
2311	Screwdriver, Phillips #2x38mm
312	Screwdriver, Phillips #2x100mm
2316	Screwdriver, Phillips #3x150mm
101	Flexible Megnetic Pickup Tool 400mmx1.0K0
1512	Slip Joint Pliers 8"
2001	External Snap Ring Pliers 7", Straight Tips
2002	External Snap Ring Pliers 7", Curved Tips
2004	Internal Snap Ring Pliers 7", Straight Tips
2005	Internal Snap Ring Pliers 7", Curved Tips
2313	Hickory Ball Pein Hammer 1.5 Pounds
7221	Air Blow Gun 100mm
7401	End Cap Oil Filter Wrench 65mm, 14-Flute
7403	End Cap Oil Filter Wrench 74mm, 15-Flute
7404	End Cap Oil Filter Wrench 76mm, 14-Flute
7406	End Cap Oil Filter Wrench 90mm, 15-Flute
7407	End Cap Oil Filter Wrench 93mm, 15-Flute
7422	Universal 3-Jaw Oil Filter Wrench 63-102mm
7428	Oil Filter Wrench 75-95mm
101A	Long Nose Pliers 6"
0201A	Diagonal Pliers 5"
0302A	Combination Pliers 7"

## 95208S-103pc Auto Body Repair Tool Set

No.	Product Name
03931	Half Round Bastard Cut File 6"
03939	Half Round Smooth Cut File 6"
03971	Round Second Cut File 6"
03991	Three Square Second Cut File 6"
09105	9pc Long Arm Ball Point Hex Key Set
09408	Auto Clips Removal Pliers
11304	1/4" Dr. 6Pt. Socket 5mm
11305	1/4" Dr. 6Pt. Socket 5.5mm
11306	1/4" Dr. 6Pt. Socket 6mm
11307	1/4" Dr. 6Pt. Socket 7mm
11308	1/4" Dr. 6Pt. Socket 8mm
11309	1/4" Dr. 6Pt. Socket 9mm
11310	1/4" Dr. 6Pt. Socket 10mm
11901	1/4" Dr. Quick Release Ratchet 5"
11903	1/4" Dr. Extension Bar 2"
11904	1/4" Dr. Extension Bar 4"
11910	1/4" Dr. Sliding T-Handle 4"
11911	1/4" Dr. Spinner Handle
11912	1/4" Dr. Universal Joint
13408	1/2" Dr. 6Pt. Deep Socket 17mm
13601	1/2" Dr. 12Pt. Socket 10mm
13602	1/2" Dr. 12Pt. Socket 11mm
13603	1/2" Dr. 12Pt. Socket 12mm
13604	1/2" Dr. 12Pt. Socket 13mm
13608	1/2" Dr. 12Pt. Socket 17mm
13610	1/2" Dr. 12Pt. Socket 19mm

No.	Product Name
13611	1/2" Dr. 12Pt. Socket 20mm
13613	1/2" Dr. 12Pt. Socket 22mm
13615	1/2" Dr. 12Pt. Socket 24mm
13617	1/2" Dr. 12Pt. Socket 30mm
13618	1/2" Dr. 12Pt. Socket 32mm
13619	1/2" Dr. 12Pt. Socket 8mm
13902	1/2" Dr. Quick Release Ratchet 10"
13904	1/2" Dr. Extension Bar 5"
13905	1/2" Dr. Extension Bar 10"
13910	1/2" Dr. Sliding T-Handle 10"
13912	1/2" Universal Joint
21102	1/4" Dr. Bit Socket, Torx® T10
21103	1/4" Dr. Bit Socket, Torx® T15
21104	1/4" Dr. Bit Socket, Torx® T20
21105	1/4" Dr. Bit Socket, Torx® T25
21106	1/4" Dr. Bit Socket, Torx® T30
21107	1/4" Dr. Bit Socket, Torx® T40
21201	1/4" Dr. Bit Socket, Hexagon 3mm
21202	1/4" Dr. Bit Socket, Hexagon 4mm
21203	1/4" Dr. Bit Socket, Hexagon 5mm
21204	1/4" Dr. Bit Socket, Hexagon 6mm
21205	1/4" Dr. Bit Socket, Hexagon 8mm
21301	1/4" Dr. Bit Socket, Phillips #1
21302	1/4" Dr. Bit Socket, Phillips #2
21501	1/4" Dr. Bit Socket, Slotted 4mm
21502	1/4" Dr. Bit Socket, Slotted 5.5mm

No.	Product Name
21503	1/4" Dr. Bit Socket, Slotted 6.5mm
25102	1/2" Dr. Bit Socket, 100mm Length, Torx® T25
25103	1/2" Dr. Bit Socket, 100mm Length, Torx® T25
25104	1/2" Dr. Bit Socket, 100mm Length, Torx® T30
25105	1/2" Dr. Bit Socket, 100mm Length, Torx® T40
25202	1/2" Dr. Bit Socket, 100mm Length, Hexagon 5mm
25203	1/2" Dr. Bit Socket, 100mm Length, Hexagon 6mm
25204	1/2" Dr. Bit Socket, 100mm Length, Hexagon 7mm
25205	1/2" Dr. Bit Socket, 100mm Length, Hexagon 8mm
25207	1/2" Dr. Bit Socket, 100mm Length, Hexagon 12mm
25208	1/2" Dr. Bit Socket, 100mm Length, Hexagon 14mm
41202	Open End Wrench 8x10mm
41203	Open End Wrench 10x12mm
41204	Open End Wrench 11x13mm
41205	Open End Wrench 12x14mm
41206	Open End Wrench 14x17mm
41207	Open End Wrench 17x19mm
41209	Open End Wrench 21x23mm
41210	Open End Wrench 22x24mm
41214	Open End Wrench 16x18mm
47250	Dipping Handle Adjustable Wrench 8"
61101	Screwdriver, Torx® T10x100mm
61102	Screwdriver, Torx® T15x100mm
61103	Screwdriver, Torx® T20x100mm
61104	Screwdriver, Torx® T25x100mm
61105	Screwdriver, Torx® T27x100mm

No.	Product Name
61106	Screwdriver, Torx® T30x100mm
62211	Screwdriver, Slotted 6x38mm
62202	Screwdriver, Slotted 3.2x75mm
62208	Screwdriver, Slotted 5x100mm
62213	Screwdriver, Slotted 6x150mm
61606	Screwdriver, Slotted 8x150mm
62307	Screwdriver, Phillips #1x75mm
62311	Screwdriver, Phillips #2x38mm
62312	Screwdriver, Phillips #2x100mm
61706	Go-Through Screwdriver, Phillips #3x150mm
71107	Quick Release Locking Pliers, Curved Jaw 10"
71301	Locking Pliers 6", Long Nose
71501	Locking Pliers 8", Wide Jaw
71601	Locking Pliers 11", C-Shaped Jaw
92101	Standard Bumping Hammer 320g
92103	Curved Pein Finishing Hammer 305g
92203	Anvil Dolly
92205	Wedge Dolly
92207	Toe Dolly
92313	Hickory Ball Pein Hammer 1.5 Pounds
92551	Pinch Bar18x400mm
92603	Hickory Soft Face Hammer 40mm
93101	Aviation Snips, Left Cut 10"
93102	Aviation Snips, Right Cut 10"
93405	Aluminum Hacksaw 12"

# **Tool Storage**

Industrial Storage Cabinet	19-22
Portable Tool Bag	23-27
Combination Case	28-29
Safety Case	29
Metal Toolbox	30-31
Aluminum Alloy Toolbox	31
Plastic Toolbox	31-32
Metal Tool Trolley	32-37







**Intelligent Rotatory Industrial Storage Cabinet** 

# Rotatory type Industrial storage cabinet





# Ultra-large capacity

# Storing a maximum of 448 specifications of materials



Rotary pallet to maximize space



Precision servo motor for precise control of cargo channel



Drawer design for quick replenishment via drawer handles on both sides



Integrated screen protection



Two specifications available

Note: This product does not contain tools and materials displayed

Note: the material receiving time can be saved by 80%, which is calculated based on the storage cabinets used in SATA production base and only for reference

- · Using one machine to manage 448 types of high-value materials, saving 80% of material receiving time, improving production and work efficiency
- · Industrial innovative design to control pallet rotation via precise rotation sensor
- · Free allocation of cargo channels to accommodate larger items
- Receiving method: IC card, ID card, 2D code and face recognition

#### Storage category

- · Industrial consumables, office supplies and fasteners
- · Hardware tools, abrasives, adhesives, cutting tools and spare parts, etc

Ī	No.	Specification	Height (MM)	Width (MM)	Depth (MM)	Capacity	$\Theta$	8	ā
į	95281	336 cargo channels	1950	1000	800	336 types	-	-	-
(	95282	448 cargo channels	1950	1000	800	448 types	-	-	-

**Tool Storage** 



# Spring type Industrial storage cabinet





# All-weather material Autonomous quick access

Labor-saving, trouble-free and accurate



Anti-dropping drawer-type tray for convenient and fast replenishment



Software shopping cart experience for selecting multiple materials at one time



Flexible deployment of single motor or dual motors to cover various shapes of materials



Cargo channel supporting access of small materials

Note: This product does not contain tools and materials displayed

- Suitable for various materials with wide utilization rate
- Supporting access of multiple materials simultaneously
- Screen: 10-inch touch screen

# Storage category

• PPE, abrasives, jigs, cutting tools, etc

No.	Specification	Height (MM)	Width (MM)	Depth (MM)	Capacity	$\Theta$	¥	ē
95271	60 cargo channels	1950	1130	878	60 types	-	-	-





































































# **Intelligent Weight-Sensing Industrial Storage Cabinet**

# Weight sensing Industrial storage cabinet





# **Automatic** identificationParts received

# Precise counting



High-precision sensor for accurate identification of each small screw



Resin roller adopted at the bottom for smooth door opening and closing



Open access for receiving various materials



Extra-large Windows and 75" reinforced and toughened glass

Note: This product does not contain tools and materials displayed

- Each part box provided with an independent aero-class sensor at the bottom for accurately calculating the number of parts to be received, ensuring correctness of the production process, and helping high-end manufacturing industries under the Made in China 2025 national action program
- Receiving method: IC card, ID card, 2D code scanning and face recognition
- Screen: 10-inch touch screen

### Storage category

- Industrial consumables, standard parts, fasteners and PPE
- Abrasives, cutting supplies, etc

No.	Specification	Height (MM)	Width (MM)	Depth (MM)	Capacity	$\blacksquare$	8	ā
95272	30 cargo channels	1950	1190	800	30 types	-	-	-

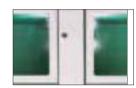
# Industrial storage cabinet



Note: This product does not contain tools and materials displayed

# Shared Borrowing and returning at any time

# Sharing, saving and efficient



Front mechanical locking door for convenient and quick replenishment and maintenance



Built-in LED lighting for easy access of goods

### Intelligent Industrial Grid Storage Cabinet



Small door: 600x427x300



doors: 600x427x300

11 doors



Small door: 600x427x148



doors: 500x90x100

# **Intelligent Industrial Grid Storage Cabinet**

7 doors



Big door: 600x427x90

# 19 doors

Big door: 600x427x300



doors: 500x90x100

- Flexible and capable of cascading with spring cabinet, weighing cabinet, integrated grid cabinet
- · Capable of holding big items and adding weighing module
- · Used with integrated storage cabinets

## Storage category

- Industrial consumables, office supplies and fasteners
- Hardware tools, abrasives, adhesives, cutting tools and spare parts, etc

## Intelligent Industrial Grid Storage Cabinet

No.	Specification	Height MM)	Width (MM)	Depth (MM)	Capacity		8	ā
95251	8 doors	1950	1000	600	8 types	-	-	-
95252	12 doors	1950	1000	600	12 types	-	-	-
95253	20 doors	1950	1000	600	20 types	-	-	-
95254	88 doors	1950	830	500	88 types	-	-	-

- Flexible and capable of being used as the main cabinet and cascading with grid storage cabinet
- · Capable of holding big items and adding weighing module
- Receiving method: IC card, ID card, 2D code scanning and face recognition
- · Screen: 10-inch touch screen

## Storage category

- Industrial consumables, office supplies and fasteners
- · Hardware tools, abrasives, adhesives, cutting tools and spare parts, etc

## Integrated Intelligent Industrial Storage Cabinet

-	-		-					
No.	Specification	Height MM)	Width (MM)	Depth (MM)	Capacity	$\Theta$	¥	ā
95261	7 doors	1950	1000	600	7 types	-	-	-
95262	11 doors	1950	1000	600	11 types	-	-	-
95263	19 doors	1950	1000	600	19 types	-	-	-
95264	82 doors	1950	830	500	82 types	-	-	-













































# **Portable Tool Bag**





• 600D polyester cloth, durable • Thickened lining, wear-resistant, effectively prevent sharp objects from puncturing

No.	Spec.	L×W×H(mm)		8	M
95181	13"	330×215×250	-	10	8.6
95182	16"	380×260×300	-	10	9.8

▲ Excluded from lifetime warranty terms.







- 600D polyester cloth, durable
- Thickened lining, wear-resistant, effectively prevent sharp objects from puncturing

No.	Spec.	L×W×H(mm)	$\Theta$	8	M
95185	16"	400×220×250	-	2	5.8

▲ Excluded from lifetime warranty terms.

# **Portable Tool Bag**



- 900D polyester cloth, durable
   Thickened lining, wear-resistant, effectively prevent sharp objects from puncturing

No.	Spec.	L×W×H(mm)	#	8	M
95183	14"	360×230×300	-	10	11.4
95184	17"	440×330×300	-	10	19.1

▲ Excluded from lifetime warranty terms.

#### **Electricians Tool Bag 16"** 95186



• Specially designed for electricians, multi-layer flip can facilitate the storage and use of tools

No.	Spec.	L×W×H(mm)	$\Theta$	8	ā
95186	16"	420×250×300	-	2	4.7





































# 95187 Open Tote Tool Bag 19"



• Full opening design, very convenient to store large items

No.	Spec.	L×W×H(mm)	#	8	Ā
95187	19"	400×200×290	-	2	4.7

▲ Excluded from lifetime warranty terms.

# 95193 Portable Tool Bag 16"



- 900D polyester cloth ,durable
- Convenient storage of notebook computers and documents

No.	Spec.	L×W×H(mm)	$\Theta$	¥	ā
95193	16"	400×160×300	-	6	6.7

▲ Excluded from lifetime warranty terms.

# 95188 Trolley Tool Bag 17"



• Pull rod design with caster, can store a large number of items, easy to carry

No.	Spec.	L×W×H(mm)	$\blacksquare$	8	ð
95188	17"	430×240×380	-	1	5.4

▲ Excluded from lifetime warranty terms.

# 95198 Tool Backpack 18"



- •1680D polyester cloth ,durable
- Convenient storage of notebook computers and documents

No.	Spec.	L×W×H(mm)	$\Theta$	8	ā
95198	18"	350×200×450	-	6	7.4

































# 95211 4-Pocket Tool Pouch



- 900D polyester fabric ,durable
- Supporting bag mouth, easy to use tools in working environment

N	lo.	L×H(mm)	#	8	ā
9	15211	110×235	-	20	1.8

▲ Excluded from lifetime warranty terms.

# 95213 8-Pocket Tool Pouch



- 900D polyester fabric ,durable
- · Supporting bag mouth, easy to use tools in working environment

No.	L×H(mm)	$\theta$	8	ā
95213	250×320	-	20	11.2

▲ Excluded from lifetime warranty terms.

# 95212 6-Pocket Tool Pouch



- 900D polyester fabric ,durable
- Supporting bag mouth, easy to use tools in working environment

No.	L×H(mm)	#	8	ā
95212	250×280	-	20	8.1

▲ Excluded from lifetime warranty terms.

# 95215 Tool Belt



- 900D polyester fabric ,durable
- $\bullet$  Supporting bag mouth, easy to use tools in working environment

No.	Small Bag(mm)	Waistband(mm)		8	M
95215	190×100	1200×50	-	40	7.6































# **Professional Double-Opening Portable Tool Bag**



- 1680D dual-layer waterproof Oxford fabric for firmness and durability
   Opened on both side for reasonable tool placement and easy access
- Bottom made from engineering plastic against wearing, tapping and humidity
  Note: Toolkit is made from soft material with size subjected to actual products.

No.	Spec.	L×W×H(mm)	#	8	M
95189	14"	350×200×280	-	2	5.5
95190	17"	400×225×335	-	2	6.8

▲ Excluded from lifetime warranty terms.

#### 95195 Professional Portable Tool Bag with Plastic Bottom 20"



- •1680D dual-layer waterproof Oxford fabric for firmness and durability
- · External sidekick for easy access
- · Bottom made from engineering plastic against wearing, tapping and humidity Note: Toolkit is made from soft material with size subjected to actual products.

No.	Spec.	L×W×H(mm)	$\Theta$	8	<u></u>
95195	20"	460×220×380	-	4	9.4

▲ Excluded from lifetime warranty terms.

# **Professional Opening Portable Tool Bag 14"**



- •1680D dual-layer waterproof Oxford fabric for firmness and durability
- Opening design for holding large items and easy access
- · Bottom made from engineering plastic against wearing, tapping and humidity Note: Toolkit is made from soft material with size subjected to actual products.

No.	Spec.	L×W×H(mm)	$\Theta$	*	ð
95191	14"	370×240×280	-	2	5

▲ Excluded from lifetime warranty terms.

# **Professional Portable Tool Bag**



- •1680D dual-layer waterproof Oxford fabric for firmness and durability
- External sidekick for easy access

\*\*Reflective warning strip provided for safety at night

Note: Toolkit is made from soft material with size subjected to actual products.

No.	Spec.	L×W×H(mm)	$\Theta$	8	ā
95196	14"	380×260×300	-	8	11.7
95197	17"	430×300×330	-	5	11.2







# **Professional Portable Tool Bag 16"**

# **Adjustable Partition Box**





- 1680D dual-layer waterproof Oxford fabric for firmness and durability Box design for orderly tool storage
- Bottom made from engineering plastic against wearing, tapping and humidity
   Note: Toolkit is made from soft material with size subjected to actual products.

No.	Spec.	L×W×H(mm)	$\Theta$	8	M
95199	16"	400×230×280	-	2	4

▲ Excluded from lifetime warranty terms.

# **Professional Trolley Tool Bag 17"**





- Pull rod and casters provided to facilitate carriage
- External multi-pocket design for easy access
- Note: Toolkit is made from soft material with size subjected to actual products.

No.	Spec.	L×W×H(mm)	#	8	₩.
95210	17"	400×230×280	-	1	6.2

▲ Excluded from lifetime warranty terms.

- · Handles provided on both sides for convenience
- Hidden buckle for easy stacking and firmness
   Various fittings including partition provided for convenience and free division of storage area

95132A

No.	L×W×H(mm)	8	8	<u></u>
95131A	420×320×134	-	4	12
95132A	420×320×174	-	4	13.3



# **Dampproof Stackable Box**



















95320





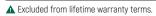


95322



- Box made from new PP material for high strength and impact resistance
   Passed IP65 waterproof test against water vapor and dust in various working conditions
   Special buckle for firmness
   Pull rod with 9" casters for rugged road conditions

No.	Product Name	Spec.	L×W×H(mm)	$\blacksquare$	¥	M
95320	Dampproof Stackable Box 20L	20L	585×410×170	-	1	5
95321	Dampproof Stackable Box 40L	40L	585×410×284	-	1	6.3
95322	Dampproof Trolley Stackable Box 65L	65L	585×484×716	-	2	22.3
95327	Dampproof Trolley Stackable Box	3 Boxes	585×484×842	-	1	21.7







































































# **Safety Case**

\*Standard sponge included



- Solid body made from quality materials with unique structure design, being light and solid
- Lock catch for easy operation and impact resistance
   Quality water-proof vent valve adopted for automatic pressure adjustment, ensuring easy
- opening of the case and keeping it dry inside

   IP67 waterproof test passed for high dampproofness and waterproofness, preventing water vapor and dust from entering it in various complex working conditions
- · Various accessories available, including built-in sponge, partitions and file bags

	1.					
No.	Spec.	External dimension L×W×H(mm)	Internal dimension L×W×H(mm)		¥	<u>@</u>
95301	19"	493×395×185	462×334×170	-	1	3.9
95305	15"	395×299×148	334×237×132	-	1	2.9
95306	16"	413×328×168	381×267×152	-	1	3.2
95307	18"	464×358×208	432×297×193	-	1	3.9
95308	22"	570×418×228	508×356×220	-	1	6.8

▲ Excluded from lifetime warranty terms.

# **Safety Trolley Case**

\*Standard sponge included









No.	Spec.	External dimension L×W×H(mm)	Internal dimension L×W×H(mm)	#	8	ā
95302	23"	587×358×221	525×297×192	1	1	6.1
95303	22"	570×418×285	508×356×254	-	1	7.9
95304	24"	624×498×353	563×437×323	1	1	9
95309	24"	624×498×285	563×437×254	-	1	8.4
95310	31"	802×522×298	741×461×267	-	1	9.9

▲ Excluded from lifetime warranty terms.

# Solid body made from quality materials with unique structure design, featuring light and solid Lock catch featuring easy operation and impact resistance

Various accessories available, including built-in sponge, partitions and file bags

Solid body made from quality materials with unique structure design, featuring light and solid

Quality water-proof vent valve adopted for automatic pressure adjustment, ensuring easy opening of the case and keeping it dry inside

IP67 waterproof test passed for high moistureproof and waterproof, preventing water vapor and dust from entering it in various complex working conditions

Specially strengthened handle and pull rod for bearing greater weight Soft handle for comforty







# 9.6





























# 95101 Tool Box 14"



- Manufactured from heavy gauge sheet steel with powder coated finish
- Strong comfortable handle

No.	L×W×H(mm)	#	8	<u></u>
95101	360×150×115	-	1	2

▲ Excluded from lifetime warranty terms.

# 95102 Tool Box 17"



- Manufactured from heavy gauge sheet steel with powder coated finish
- Strong comfortable handle

No.	L×W×H(mm)	#	8	ā
95102	428×177×184	-	1	4.4

▲ Excluded from lifetime warranty terms.

# 95103A Tool Box 20"



- Manufactured from heavy gauge sheet steel with powder coated finish
- · Strong comfortable handle

			~	
No.	L×W×H(mm)		7	<b>@</b>
95103A	508×218×243	-	1	6.3

▲ Excluded from lifetime warranty terms.

# 95104A 5-Tray Tool Box 17"



- Manufactured from heavy gauge sheet steel with powder coated finish
- · Strong comfortable handle

No.	L×W×H(mm)	#	¥	ā
95104A	430×200×200	-	1	4.7

▲ Excluded from lifetime warranty terms.

# 95115 Tool Box 16"



• Manufactured from heavy gauge sheet steel with powder coated finish

No.	L×W×H(mm)	$\Theta$	8	ā
95115	420×155×120	_	1	23

▲ Excluded from lifetime warranty terms.

# 95116 3-Tray Tool Box 14"



- Tote tray included
- · Manufactured from heavy gauge sheet steel with powder coated finish

No.	L×W×H(mm)	#	8	<u></u>
95116	350×160×165	-	1	2.4































# 95117 3-Tray Tool Box 17"



- Tote tray included for space efficiency
- · Manufactured from heavy gauge sheet steel with powder coated finish

No.	L×W×H(mm)	#	\$	ā
95117	430×200×175	-	1	3.7

▲ Excluded from lifetime warranty terms.

# 03621 Aluminum Trolley Case 24"



- · Load capacity of 20kg to avoid caster damage
- Impact resistance
- Structure force up to 100kg, and surface panel force up to 50kg, with strict impact test passed
- Multipurpose with separators dividing the storage space arbitrarily
- Double lock structure and anti-shock EVA foam lining for safety and airtightness
- New appearance with coffee panel and silver accessories, being fashionable

No.	L×W×H(mm)	#	8	ā
03621	490×420×230	-	1	8.8

▲ Excluded from lifetime warranty terms.

# 95161 Plastic Tool Box 15"



- $\bullet \hbox{ The box is made of reinforced PP material, which features high strength and impact-resistance}\\$
- Its lock and handle are made of ABS engineering plastics, which are solid and durable
- Including laminates for easily creating storage partition
- · Widely used in industrial installation, construction, after-sales maintenance, etc

No.	L×W×H(mm)	#	***************************************	ā
95161	385×202×140	-	6	5.2

▲ Excluded from lifetime warranty terms.

# 95162 Plastic Tool Box 16"



- The box is made of reinforced PP material, which features high strength and impact-resistance
- Its lock and handle are made of ABS engineering plastics, which are solid and durable
- Including laminates for easily creating storage partition
- Widely used in industrial installation, construction, after-sales maintenance, etc

No.	L×W×H(mm)	$\blacksquare$	8	ā
95162	400×225×203	-	6	12.3

▲ Excluded from lifetime warranty terms.

## 95163 Plastic Tool Box 18"



- $\bullet \text{The box is made of reinforced PP material, which features high strength and impact-resistance } \\$
- Its lock and handle are made of ABS engineering plastics, which are solid and durable
- Including laminates for easily creating storage partition
- Widely used in industrial installation, construction, after-sales maintenance, etc

No.	L×W×H(mm)	#	¥	ā
95163	450×243×210	-	6	13.7































# 95164 Plastic Tool Box 21"



- The box is made of reinforced PP material, which features high strength and impact-resistance
- Its lock and handle are made of ABS engineering plastics, which are solid and durable
- Including laminates for easily creating storage partition
- Widely used in industrial installation, construction, after-sales maintenance, etc

No.	L×W×H(mm)	#	8	ā
95164	530×235×220	-	6	16.8

▲ Excluded from lifetime warranty terms.

# 95108A 1-Drawer Service Cart

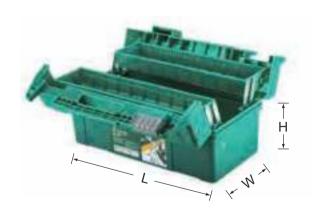


- Compact size for multiple usages
- Top tray for easy tools placement while work-in-progress
- Bottom tray-cater for big size tools which can't fit into drawers
- Drawer load capacity 35kg
- Total load capacity 150kg

No.	L×W×H(mm)	$\Theta$	8	ā
95108A	841×414×827	-	1	26.2

▲ Excluded from lifetime warranty terms.

# 95166 3-Tray Plastic Tool Box 17"



- The box is made of reinforced PP material, which features high strength and impact-resistance
- Its lock and handle are made of ABS engineering plastics, which are solid and durable
- Including laminates for easily creating storage partition
- · Widely used in industrial installation, construction, after-sales maintenance, etc

No.	L×W×H(mm)	$\blacksquare$	8	ð
95166	440×230×250	-	6	15.4

▲ Excluded from lifetime warranty terms.

## 95111 **Sliding Door Service Cart**



- See-through net structure on side panels
- · Shuttle door for easy opening/closing
- Open top tray for easy tools placement
- Drawer load capacity 20kg
   Total load capacity 100kg

No.	L×W×H(mm)	$ \mathcal{B} $	8	<u></u>
95111	631×382×818	-	1	21.7







# 95107A 7-Drawer Coded Lock Roller Cabinet

\*Warranty of coded lock is 12 months









Screwdriver Toolbox with



After unlocking



Trolley handle with PVC cover



Two 5" swivel (with stopper) and two 5" fixed casters with pin rolling bearings

- Rotating side column locking mechanism for long service life
- Internal drawer size: Drawers 1-5: 570\*382\*65mm (L\*W\*H)
- Drawers 6-7: 570\*382\*145mm (L\*W\*H)
- Electronic code lock with password of 4-10 digits
- · High durability roller tracks enable smooth sliding
- · Quality casters running smoothly and steadily, without sliding after braking
- •1.2mm thickness steel body for strength and durability
- Drawer load capacity 35kg
- Total load capacity 240kg





## **5 Drawer Roller Cabinet** 95121





Round socket lock



45mm ball slide for higher load capacity



Strengthened backboard



5" heavy duty casters for durability



Powder coating on grey pockmarked



Cabinet door with integrated hinge



Drawer liners in all drawers (EVA foam)



Thickened bright aluminum alloy handle for elegance

- Five drawers design to meet the needs of auto repair, being cost-effective
- •Internal drawer size: Drawers 1-3: 563\*404\*90mm (L\*W\*H)
- Drawers 4-5: 563\*404\*145mm (L\*W\*H)
- Four clipped corners with strengthened backboard for better strength and durability
- •45mm ball bearing slide and single drawer load capacity 35kg for exceptional load capacity
- •5" heavy duty casters for smooth running and durability
- Thickened bright aluminum alloy handle, being elegant and durable
- •Two-tone powder coating, being elegant and generous
- Powder coating on grey pockmarked surface, avoiding scratch
- Drawer liners in all drawers (EVA foam)
- Total load capacity 200kg

No.	L×W×H(mm)	#	8	ā
95121	770×470×896	_	1	57

▲ Excluded from lifetime warranty terms.

33



# 95207 7- Drawer Roller Cabinet





Round socket lock

95123



Liners in all drawers (EVA foaml



Cabinet door with integrated hinge



5" heavy duty casters for durability



45mm ball slide for higher load capacity



Partition board included inside



Powder coating on grey pockmarked surface, avoiding scratch



Thickened bright aluminum alloy handle for elegance



Drawer liners on all boards (EVA foam)





Four columns of tool trolley with circular arc design for higher impact resistance



Integrated table top with screwdriver slot



Integrated table top with parts tray for storing small items; Integrated handle for comforty



Both sides of the tool trolley provided with storage boxes for convenient storage of can-like workpieces

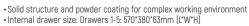


Removable stowage box provided for tool trolley

- Two drawers with tool cabinet, facilitating maintenance, and being cost-effective Internal drawer size: Drawers 1-2: 563\*404\*90mm (L\*W\*H)
- Partition size of each inner panel: 195\*390mm (L\*W)
- Four clipped corners with strengthened backboard for better strength and durability
- •45mm reinforced ball slide and single drawer load capacity 35kg for exceptional load capacity
- •5" heavy duty casters for smooth running and durability
- Thickened bright aluminum alloy handle, being elegant and durable
- Two-tone powder coating, being elegant and generous
- Powder coating on grey pockmarked surface, avoiding scratch
- Drawer liners in all drawers (EVA foam)
- Total load capacity 200kg

No.	L×W×H(mm)	#	8	ā
95123	770×470×896	-	1	43

▲ Excluded from lifetime warranty terms.



- Drawer 6: 570\*380\*135mm (L\*W\*H)
- Drawer 7: 570\*380\*182mm (L\*W\*H)
- Quality slide for smooth drawer movement
- Quality casters for smooth and steady running with no sliding after braking
- Injection molded worktable for higher strength
   Load capacity of single drawer from drawer 1 to drawer 6 of 35kg, and that of drawer 7 of 45kg
- Total load capacity 300kg
- Tool set available: 95207S
- A set of 171 pieces of general repair tools (suitable for 95207 tool trolley)

No.	L×W×H(mm)	#	*	ā
95207	805×490×1000	-	1	83













































# 95208 5-Drawer Roller Cabinet

## 7-Drawer Roller Cabinet 95107









Optional with 70841 heavy duty square steel bench vice 4" (to

be purchased separately)



Mounting hole reserved for bench vice

Stainless steel top for elegance and durability







Both sides of the tool trolley provided with storage boxes for convenient storage of can-like workpieces



Removable stowage box provided for tool trolley



Screwdriver Toolbox with Lock



Trolley handle with PVC cover

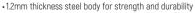


Two 5" swivel (with stopper) and two 5" fixed casters with pin rolling bearings

- Solid structure and powder coating for complex working environment Internal drawer size: Drawers 1-3:  $570^*380^*63mm$  (L\*W\*H)
- Drawer 4: 570\*380\*135mm (L\*W\*H)
- Drawer 5: 570\*380\*182mm (L\*W\*H)
- Worktable made of stainless steel and reinforced with density plate for higher strength
- · Mounting hole for bench vise reserved, being convenient and practical
- Quality slide for smooth drawer movement
- · Quality casters for smooth and steady running with no sliding after braking
- · Injection molded worktable for higher strength
- · Load capacity of single drawer from drawer 1 to drawer 4 of 35kg, and that of drawer 5 of 45kg
- Total load capacity 300kg

No.	L×W×H(mm)	#	8	Ø
95208	1180×480×860	-	1	100

▲ Excluded from lifetime warranty terms.



- Internal drawer size: Drawers 1-5: 570\*382\*65mm (L\*W\*H)
- Drawers 6-7: 570\*382\*142mm (L\*W\*H)
- Two 5" swivel (with stopper) and two 5" fixed casters with pin rolling bearings for high flexibility and load capacity
- · Screwdriver compartment for easy and convenient storage
- PVC handle for comfortable grip
- Single drawer load capacity 35kg
- Total load capacity 240kg

No.	L×W×H(mm)	#	8	ā
95107	679×458×1007	_	1	101



































# 95107G Mutual-lock 6-Draw Tool Cart







- Interlocking design for safer use
- Multifunctional countertop for storing tools and parts
- · High quality cold rolled sheet, 1mm sheet, high strength and durability
- Thickened and shiny aluminum alloy handle, more beautiful and durable

8-Drawer Roller Cabinet

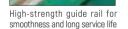
- Dual color spray molding process, beautiful and elegant, durable and easy to clean
- Sponge cushion, all drawers contain EVA pads, making tools difficult to slide
- Reinforced ball slide, with a width of 45mm, can easily and smoothly open and close under the

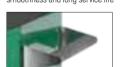
No.	L×W×H(mm)	Rated load of single drawer (kg)	Overall rated load (kg)	$\Theta$	8	Ō
95107G	920×540×1000	35	400	-	1	72

▲ Excluded from lifetime warranty terms.

95109







Trolley handle with PVC cover



Two 5" swivel (with stopper) and two 5" fixed casters with pin rolling bearings

- Suitable for auto repair technicians
- •1.2mm thickness steel body for strength and durability
- Two 5" swivel (with stopper) and two 5" fixed casters with pin rolling bearings for high flexibility and load capacity
- · Cabinet with door lock for storing large tools
- Single drawer load capacity 35kg
- Total load capacity 240kg
- · Quality solid wood operating floor, facilitating tool operation with low noise

No.	L×W×H(mm)	#	8	<u> </u>
95109	1035×457×897	-	1	110.6

▲ Excluded from lifetime warranty terms.



Screwdriver Toolbox with



Top cover supported with air



High-strength guide rail for smoothness and long service



Foldable workbench for easy

12mm thickness steel body for strength and durability



Two 5" swivel (with stopper) and two 5" fixed casters with





▲ Excluded from lifetime warranty terms.



**2-Drawer Utility Cart** 

95118



Bottom tray for storing large



Tool jack for inserting pry bar, torsion wrench and other long tools





































# 95119 4-Drawer Utility Cart





Top cover supported with air spring



1.2mm thickness steel body for strength and durability for effectively preventing collision between the tool trolley, vehicles, machine tools and other equipment



Trolley handle with PVC cover



Two 5" swivel (with stopper) and two 5" fixed casters with pin rolling bearings

# 95222A 3-Tray Multipurpose Tool Cart



No.	L×W×H(mm)	N.W.(kg)		8	M
95222A	40×500×920(include casters and push hand)	17.4	-	1	19.4

▲ Excluded from lifetime warranty terms.

# 95222B 3-Tray Parts Tool Cart



No.	Rated static load(kg)	Rated dynamic load(kg)	L×W×H(mm)	Caster size	N.W. (kg)	$\Theta$	¥	ā
95222B	80	45	750×373×900	3"	11.2	-	1	12.2

▲ Excluded from lifetime warranty terms.

# AE5971 Plastic tool cart+back hanger(with 10pcs hooks)



• Detachable structure, PP material, easy to install and store, equipped with 4 wheels, flexible to move

No.	L×W×H(mm)	N.W.(kg)		T	<u></u>
AE5971	830×434×968	10.3	-	1	11.5

<sup>•</sup> Total load capacity 240 kg

No.	L×W×H(mm)	#	8	ā
95119	877×549×1015	-	1	87

<sup>•</sup> Single drawer load capacity 35 kg

# **Socket & Ratchet**

	Socket Set	39-44
1/4"	1/4" Socket and Accessories	45-49
3/8"	3/8" Socket and Accessories	49-52
1/2"	1/2" Socket and Accessories	53-58
3/4"	3/4" Socket and Accessories	58-59
	Pass-Thru Socket and Accessories	60-61
1/4"	1/4″ Dr. Bit Socket	61-62
10 Earth 3/8"	3/8" Dr. Bit Socket	62-64
ESTR 1/2"	1/2″ Dr. Bit Socket	64-66





# 09521 21Pc. 1/4" Dr. Socket Set

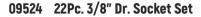




- 11PC, 1/4" Dr. 6Pt, Socket [4,5,6,8,9,10,11,12,13,14mm]
- •1Pc. 1/4" Dr. Quick Release Ratchet 5"
- •1Pc. 1/4 Dr. Extension Bar 2"
- 1Pc. 1/4" Dr. Spinner Handle
- 1Pc. Bit Adaptor 1/4"Fx1/4"Hexagon
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (4,5,6mm)
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#2,#3)

No.	#	8	ā
09521	6	12	17.3

▲ Warranty terms of tool set comply with the individual product.





**Socket & Ratchet** 



- •14Pc. 3/8" Dr. 6Pt. Socket (6,7,8,9,10,11,12,13,14,15,16,17,18,19mm)
- 5Pc. 3/8" Dr. 6Pt. Deep Socket [12,13,14,17,19mm] 1Pc. 3/8" Dr. Spark Plug Socket 16mm 1Pc. 3/8" Dr. Quick Release Ratchet 8"

- •1Pc. 3/8" Dr. Extension Bar 6"

No.	#	8	ā
09524	-	10	18.5

▲ Warranty terms of tool set comply with the individual product.









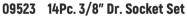














- •12Pc. 3/8" Dr. 6Pt. Socket (8,9,10,11,12,13,14,15,16,17,18,19mm)
- 1Pc. 3/8\* Dr. Quick Release Ratchet 8" 1Pc. 3/8\* Dr. Extension Bar 3"

No.	#	**	Q
09523	4	12	16.4

▲ Warranty terms of tool set comply with the individual product.

# 09525 15Pc. 1/2" Dr. Socket Set





- •13Pc. 1/2 Dr.6Pt. Socket (10,12,13,14,15,16,17,18,19,20,21,22,24mm)
- •1Pc. 1/2\* Dr. Quick Release Ratchet 10" •1Pc. 1/2\* Dr. Extension Bar 5"

No.	#	*	M
09525	2	4	14.8

▲ Warranty terms of tool set comply with the individual product.



































## 13PC. 1/4"&3/8" Series Boltbiter Set 09137



- 2Pc. 1/4" Series Boltbiter Socket (7B,8Bmm)
- 8Pc. 3/8" Series Boltbiter Socket (10B,11B,12B,13B,14B,16B,17B,19Bmm)
- 1Pc. 3/8" DR. Quick Release Ratchet W/Grip 8"
- •1Pc. 3/8" Socket Adaptor, 3/8"FX1/4"M
- •1Pc. 3/8" DR.Extension Bar 6"
- Bi-directional design for removing or tightening damaged fasteners
- Tapered entry enables socket to easily seat on a damaged fastener
- Square drive with hex base for use with impact gun,ratchet, wrench or pliers
- Chrome molybdenum(Cr-Mo) alloy steel for exceptional strength and long lasting durability

No.	#	8	<b>5</b>
NQ137	1	Д	6.2

▲ Warranty terms of tool set comply with the individual product.

# 09001 36Pc. 1/4" Dr. Socket Set



- •14Pc. 1/4" Dr. 6Pt. Socket (3.5,4,4.5,5,5.5,6,7,8,9,10,11,12,13,14)
- 5Pc. 1/4" Dr. 6Pt. Deep Socket (8,10,11,12,13mm)
- •1Pc. 1/4" Dr. Quick Release Ratchet 5"
- 2Pc. 1/4 Dr. Extension Bar (2",4")
- 1Pc. 1/4" Dr. Sliding T-Handle 4"
- •1Pc. 1/4" Dr. Universal Joint
- •1Pc. 1/4" Dr. Flexible Extension Bar 6"
- 1Pc. 1/4" Dr. Spinner Handle
- •1Pc. 1/4 Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- 3Pc. 1/4 Hex Shank Bits, 25mm Length, Slotted (4,5,6mm)
- 2Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips [#1,#3]
- 4Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (3,4,5,6mm)

No.	#	¥	ā
09001	-	12	17.8

▲ Warranty terms of tool set comply with the individual product.

# 09138 23Pc. 1/4"&3/8" Series Boltbiter Set



- 4Pc. 1/4" Series Boltbiter Socket (7A,7B,8A,8Bmm)
- •16Pc. 3/8" Series Boltbiter Socket
- (10A,10B,11A,11B,12A,12B,13A,13B,14A,14B,16A,16B,17A,17B,19A,19Bmm)
- 1Pc. 3/8" DR. Quick Release Ratchet W/Grip 8"
- 1Pc. 3/8" Socket Adaptor, 3/8"FX1/4"M
- •1Pc. 3/8" DR.Extension Bar 6"
- · Bi-directional design for removing or tightening damaged fasteners
- Tapered entry enables socket to easily seat on a damaged fastener
- Square drive with hex base for use with impact gun, ratchet, wrench or pliers
- · Chrome molybdenum(Cr-Mo) alloy steel for exceptional strength and long lasting durability

No.	#	\$	<u></u>
09138	1	4	20.9

A Warranty terms of tool set comply with the individual product.

# 09002 52Pc. 1/4" Dr. Socket Set



- 14Pc. 1/4" Dr. 6Pt Socket (3.5,4,4.5,5,5,6,7,8,9,10,11,12,13,14mm) 4Pc. 1/4" Dr. 6Pt. Deep Socket (8,10,12,13mm) 3Pc. 1/4 Dr. Bit Socket, Slotted (4,5,5,6,5mm)

- 4PC. 1/4" Dr. Bit Socket, Pillips (#1,#2)x2pc • 5Pc. 1/4 Dr. Bit Socket, Hexagon (3,4,5,6,8mm)
- 6Pc. 1/4\* Dr. Bit Socket, Torx® (T10,T15,T20,T25,T30,T40)
- •1PC. 1/4 Dr. Quick Release Ratchet 5"
- 2Pc. 1/4 Dr. Extension Bar [2",4"]
- 1Pc. 1/4" Dr. Sliding T-Handle 4"
- •1Pc. 1/4" Dr. Universal Joint
- •1Pc. 1/4 Dr. Spinner Handle
- •1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon • 3Pc. 1/4 Hex Shank Bits, 25mm Length, Slotted (4,5,6mm)
- 2Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#3)
- 4Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (3,4,5,6mm)

No.	#	8	ā
09002	-	12	18.2

A Warranty terms of tool set comply with the individual product.







# 09004 60Pc. 3/8" Dr. Socket Set





- 2PC. 3/8" Dr. Spark Plug Socket (6,10,11,12,13,14,1 2PC. 3/8" Dr. Spark Plug Socket (16,21mm) 3Pc. 3/8" Dr. Bit Socket, Slotted (5.5,6.5,8mm)
- 5Pc. 3/8" Dr. Bit Socket, Pillips (#1x2pc,#2x2pc,#3x1pc)
- 7Pc. 3/8" Dr. Bit Socket, Hexagon (3,4,5,6,7,8,10mm) 9Pc. 3/8" Dr. Bit Socket, Torx® (T10,T15,T20,T25,T30,T40,T45,T50,T55)
- •1Pc. 3/8" Dr. Quick Release Ratchet 8"
- 2Pc. 3/8" Dr. Extension Bar [3".10"]
- 1Pc. 3/8" Dr. Universal Joint
- •1Pc. 1/2" Dr. 3-Way Socket Adaptor
- •1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- 3Pc. 1/4 Hex Shank Bits, 25mm Length, Slotted (4,5,6mm)
- 2Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#3)
- 4Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (3,4,5,6mm)

No.	#	¥	ā
09004	-	3	14.9

▲ Warranty terms of tool set comply with the individual product.

# 09006 46Pc. 1/2" Dr. Socket Set Metric & SAE



- 20Pc. 1/2" Dr. 6Pt. Socket (8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,24,27,30,32,34mm)
- •11Pc. 1/2" Dr. 6Pt. Socket (3/8",7/16",1/2",9/16",5/8",11/16",3/4",13/16",7/8",15/16",1")
- •7Pc, 1/2" Dr. 6Pt, Deep Socket [10.12.13.14.15.17.19mm]
- •2Pc. 1/2" Dr. Spark Plug Socket (16,21mm)
- •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- 2Pc. 1/2" Dr. Extension Bar (5",10")
- •1Pc. 1/2" Dr. Flexible Handle 10"
- •1Pc. 1/2" Dr. Universal Joint
- •1Pc. 3/8" Dr. 3-Way Socket Adaptor

No.	$\Theta$	8	ā
09006	-	3	21.4

▲ Warranty terms of tool set comply with the individual product.

# 09005 23Pc. 1/2" Dr. Socket Set



- •16Pc. 1/2" Dr. 6Pt Socket (10,11,12,13,14,15,16,17,18,19,22,24,27,30,32,34mm)
- 3Pc. 1/2" Dr. 6Pt. Deep Socket (13,17,19mm)
- •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- •1Pc. 1/2" Dr. Extension Bar 10"
- 1Pc. 1/2" Dr. Universal Joint
- 1Pc. 3/8" Dr. 3-Way Socket Adaptor

No.	#	8	ā
09005	-	4	24.3

▲ Warranty terms of tool set comply with the individual product.

# 09007 60Pc. 1/2" Dr. Socket Set



- •17Pc. 1/2" Dr. 6Pt. Socket [10,11,12,13,14,15,16,17,18,19,20,21,22,24,27,30,32mm]
  •10Pc. 1/2" Dr. 6Pt. Deep Socket [10,11,12,13,14,15,16,17,18,19mm]
  •2Pc. 1/2" Dr. Spark Plug Socket [16,21mm]
  •3Pc. 1/4" Dr. Bit Socket, Slotted [4,5.5,6.5mm]

- 3Pc. 1/4" Dr. Bit Socket Pillipis (#1,#2,#3)
- •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- 2Pc. 1/2" Dr. Extension Bar (5",10")
- •1Pc. 1/2" Dr. Universal Joint •1Pc. 3/8" Dr. 3-Way Socket Adaptor
- •1Pc. 1/4" Dr. Spinner Handle
- •1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Pozidriv (#1,#2,#3)
- •7Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (2,3,4,5,6,7,8mm)
- 8Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torx® (TT8,TT10,TT15,TT20,TT25,TT27,TT30, TT40)

No.		8	<b>5</b>
09007	-	3	18.2

▲ Warranty terms of tool set comply with the individual product.































# 24Pc. 1/2" Dr. Metric Socket Set



- 1Pc. Quick-Release Ratchet 19Pc. Metric Sockets\* [9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,27,30,32mm] 4Pc. Accessories
- Wobble Extension Bars (5",10") Universal Joint T-Handle

- \* 09060: 12pt. Sockets
- 09060-6: 6pt. Sockets

No.	#	8	ā
09060	0	4	18.8
09060-6	0	4	18.8

▲ Warranty terms of tool set comply with the individual product.

# 09088 22Pc. 1/2" Dr. Socket Set, SAE



- •15Pc. 1/2" Dr. 12Pt. Socket (5/16",3/8",7/16",1/2",9/16",5/8",11/16",3/4",13/16",7/8",15/16",1",1-1/16"1-1/8",1-1/4"]
- 1Pc. 1/2" Dr. Quick Release Ratchet 10"
- •1Pc. 1/2" Dr. Speeder Handle
- •1Pc. 1/2" Dr. Flexible Handle 10"
- 2Pc. 1/2" Dr. Extension Bar (5,10")
- 1Pc. 1/2" Dr. Sliding T-Handle
- 1Pc. 1/2" Dr. Universal Joint

No.	$\Theta$	8	ā
09088	-	3	22.9

▲ Warranty terms of tool set comply with the individual product.

# 09061 25Pc 1/2" Dr. 6Pt Socket Set Metric



- •1Pc. Quick-Release Ratchet
- 19Pc. Metric Sockets (9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,27,30,32mm)
- 5Pc. Accessories

Wobble Extension Bars (5",10")

Flex Handle 15" T-Handle Universal Joint

No.	#	8	
09061	0	4	22.5

▲ Warranty terms of tool set comply with the individual product.

# 09099 33Pc. 1/2" Dr. Socket Set



- 1Pc. 4-in-1 QuadBox Ratcheting Wrench 8x10x12x13mm 1Pc. 4-in-1 QuadBox Ratcheting Wrench 16x17x18x19mm 21Pc. 1/2" Dr. 6Pt. Socket [8,9.10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,27,30,32,34mm]
- 5Pc. 1/2" Dr. 12Pt. Socket (10,12,14,17,19mm)
- •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- 2Pc. 1/2" Dr. Extension Bar (5",10")
- 1PC. 1/2" Dr. Universal Joint •1Pc. 3/8" Dr. 3-Way Socket Adaptor

No.	#	8	Ø
09099	-	2	11,4

▲ Warranty terms of tool set comply with the individual product.





# 09015 15Pc. 3/4" Dr. 12Pt. Socket Set

- •10Pc. 3/4" 12pt. Socket (30,32,34,36,38,41,46,50,55,60mm)
- •1Pc. 3/4" Quick-Release Ratchet
- 2Pc. 3/4" Drive Wobble Extensions (4",8")
- 1Pc. 3/4" Drive T-Handle
- 1Pc. 3/4" Universal Joint



▲ Warranty terms of tool set comply with the individual product.

# 09016 26Pc. 3/4"x1" Dr. Socket Set



- •1Pc. 3/4" 12pt. Socket 21 mm •1Pc. 3/4" 12pt. Socket 22 mm
- 1Pc. 3/4" 12pt. Socket 23 mm
- •1Pc. 3/4" 12pt. Socket 24 mm
- •1Pc. 3/4" 12pt. Socket 26 mm
- •1Pc. 3/4" 12pt. Socket 27 mm
- •1Pc, 3/4" 12pt, Socket 28 mm
- •1Pc. 3/4" 12pt. Socket 29 mm
- •1Pc. 3/4" 12pt. Socket 30 mm
- •1Pc. 3/4" 12pt. Socket 31 mm
- •1Pc. 3/4" 12pt. Socket 32 mm
- •1Pc. 3/4" 12pt. Socket 34 mm •1Pc. 3/4" 12pt. Socket 36 mm

- •1Pc. 3/4" 12pt. Socket 38 mm •1Pc. 3/4" 12pt. Socket 41 mm
- •1Pc. 3/4" 12pt. Socket 46 mm •1Pc. 3/4" 12pt. Socket 50 mm
- •1Pc. 1" 12pt. Socket 55 mm •1Pc. 1" 12pt. Socket 60 mm
- 1Pc. 1" 12pt. Socket 65 mm
- •1Pc. 3/4" Drive T-Handle 20"
- •1Pc. 3/4" Drive Strengthening Extensions 8"
- •1Pc. 3/4" Drive Strengthening Extensions 20"
- •1Pc. 3/4" L-Shaped Extensions 6"
- •1Pc. 1" Three-Way Adapter (1" F x 3/4" M )
- •1Pc. 3/4" Quick-Release Ratchets 20"

No.	$\Theta$	8	ā
09016	-	1	23

▲ Warranty terms of tool set comply with the individual product.





# Same capacity

Torsion of thin pass-thru socket same with that of common socket

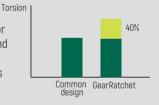
## Multiple functions

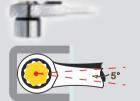
Used together with special adapter for quick conversion to traditional 1/4", 3/8", 1/2" drive head speeder wrench for standard sockets and extension rods

· Pass-thru socket and connecting rod for reaching the depth of the workpiece (deeper than that of traditional socket)

## **SATA Pass-Thru Socket**

Pass-thru socket and connecting rod for reaching the depth of the workpiece, and replacing and breaking the working restriction of the long sleeve regardless screw and bolt length





# • Featuring easy operation

Special gear ratchet drive mechanism for increase torqued with only 5 degrees of rotation angle, suitable for small work space



## Powerful function

Operation height reduced by nearly 50% and width reduced by nearly 20%



43



































## 09131 25Pc. 13mm Drive Pass-Thru Socket Set



- •13Pc, 13mm Drive Pass-Thru Socket (3.5.4.4.5.5.5.5.6.7.8.9.10.11.12.13mm)
- 9Pc. 13mm Drive SAE Pass-Thru Socket (5/32",3/16",7/32",1/4",9/32",5/16",3/8",7/16",1/2")
- 1Pc. 13mm Drive Pass-Thru Ratchet
- 1Pc. 13mm Drive Pass-Thru Extension Bar 3"
- 1Pc. 13mm Drive Pass-Thru Socket Adaptor 1/4" Drive
- Pass-through socket can be used to fasten nut on the long screw while standard socket can not work, extending the working range of socket
- Pass-through ratchet offers smaller drive head dimension and only 5° of tooth movement, fits to operate in tight working space
- Pass-through ratchet can connect standard socket for use through adaptor

No.	#	¥	ā
09131	6	12	9.1

▲ Warranty terms of tool set comply with the individual product.

## 09134 21Pc. 20mm Drive Pass-Thru Socket Set



- •10Pc, 20mm Drive Pass-Thru Socket (10.11.12.13.14.15.16.17.18.19mm)
- 7Pc. 20mm SAE Drive Pass-Thru Socket(3/8",7/16",1/2",9/16",5/8",11/16",3/4")
- 1Pc. 20mm Drive Pass-Thru Ratchet
- •1Pc. 20mm Drive Pass-Thru Extension Bar 3"
- •1Pc. 20mm Drive Pass-Thru Socket Adaptor 1/4" Drive
- •1Pc. 20mm Drive Pass-Thru Socket Adaptor 3/8" Drive
- Pass-through socket can be used to fasten nut on the long screw while standard socket can not work, extending the working range of socket
- Pass-through ratchet offers smaller drive head dimension and only 5° of tooth movement, fits to operate in tight working space
- Pass-through ratchet can connect standard socket for use through adaptor

No.	#	¥	ā
09134	3	12	18.8

▲ Warranty terms of tool set comply with the individual product.

# 09132 30Pc. 13x20mm Drive Pass-Thru Socket Set



- •13Pc. 13mm Drive Pass-Thru Socket (3.5,4,4.5,5,5.5,6,7,8,9,10,11,12,13mm)
- •10Pc. 20mm Drive Pass-Thru Socket (10,11,12,13,14,15,16,17,18,19mm)
- 1Pc. 13mm Drive Pass-Thru Ratchet
- 1Pc. 20mm Drive Pass-Thru Ratchet
- 1Pc. 13mm Drive Pass-Thru Socket Adaptor 1/4" Drive
- •1Pc. 20mm Drive Pass-Thru Socket Adaptor 1/4" Drive
- •1Pc. 20mm Drive Pass-Thru Socket Adaptor 3/8" Drive
- •1Pc. 13mm Drive Pass-Thru Extension Bar 3"
- •1Pc. 20mm Drive Pass-Thru Extension Bar 3"
- · Pass-through socket can be used to fasten nut on the long screw while standard socket can not work, extending the working range of socket
- Pass-through ratchet offers smaller drive head dimension and only 5° of tooth movement, fits to operate in tight working space
- · Pass-through ratchet can connect standard socket for use through adaptor

No.	#	8	ā
09132	4	8	15.1

▲ Warranty terms of tool set comply with the individual product.

# 1/4" Dr. 6Pt. Socket







No.	0	L(mm)	#	8	M
11101	5/32"	24.5	12	-	-
11102	3/16"	24.5	12	-	-
11103	7/32"	24.5	12	-	-
11104	1/4"	24.5	12	-	-
11105	9/32"	24.5	12	-	-
11106	5/16"	24.5	12	-	-
11107	11/32"	24.5	12	-	-
11108	3/8"	24.5	12	-	-
11109	7/16"	24.5	6	-	-
11110	1/2"	24.5	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.







# 1/4" Dr. 6Pt. Deep Socket









No.	$\circ$	L(mm)	#	*	ð
11201	3/16"	49	12	-	-
11202	7/32"	49	12	-	-
11203	1/4"	49	12	-	-
11204	9/32"	49	12	-	-
11205	5/16"	49	12	-	-
11206	11/32"	49	12	-	-
11207	3/8"	49	6	-	-
11208	7/16"	49	6	-	-
11209	1/2"	49	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/4" Dr. 6Pt. Socket







	1	_	'		
No.	○ (mm)	L(mm)	$\Theta$	8	Ō
11301	3.5	24.5	12	-	-
11302	4	24.5	12	-	-
11303	4.5	24.5	12	-	-
11304	5	24.5	12	-	-
11305	5.5	24.5	12	-	-
11306	6	24.5	12	-	-
11307	7	24.5	12	-	-
11308	8	24.5	12	-	-
11309	9	24.5	12	-	-
11310	10	24.5	12	-	-
11311	11	24.5	6	-	-
11312	12	24.5	6	-	-
11313	13	24.5	6	-	-
11314	14	24.5	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.



The locking connecting rod can be used singly or in groups. Each connecting rod is locked to each other to ensure the locking of the socket head in the end





Press the button to lock

Press the button again to unlock







Capable of preventing socket extension or universal joint from dropping, and requiring just one hand for operation, featuring convenient and efficient



Each locking extension rod is provided with a locking/quick release button. Press the locking/quick release button to lock the socket head. Each connecting rod is locked to each other to ensure the locking of the socket head in the end, which can be released by press the button again.



















M

















# 1/4" Dr. 6Pt. Deep Socket







No.	○ (mm)	L(mm)	#	¥	ā
11401	4	49	12	-	-
11402	5	49	12	-	-
11403	6	49	12	-	-
11404	7	49	12	-	-
11405	8	49	12	-	-
11406	9	49	6	-	-
11407	10	49	6	-	-
11408	11	49	6	-	-
11409	12	49	6	-	-
11410	13	49	6	-	-

 $lack \Delta$  These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/4" Dr. Quick Release Ratchet 5"







- Turning with one hand
- Easy and free operation
- · Capable of quick release
- Operation with only one hand

No.	L(mm)	#	8	
11902	147	4	80	

## 1/4" Dr. Quick Release Ratchet 5" 11901







## • Capable of quick release with one hand

No.	L(mm)	$\blacksquare$	贸	<u></u>
11901	143	4	-	-

# 1/4" Dr. Extension Bar





- Unique design for dual function
   Turning function
   Acting as standard extension after being inserted

No.	Spec.	L(mm)	#	8	ā
11903	2"	50	12	-	-
11904	4"	100	12	-	-

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

































# 1/4"Dr. Quick-Release Ratchet(Tear Drop)



- Made of Chrom Vanadium steel
- Convenient single hand direction change switch
- Quick-release capability to easily eject an engaged socket even under slippery conditions

No.	L(mm)	#	8	<u> </u>
11905	143	4	24	4.2

## 11906 1/4"Dr. Quick-Release Ratchet(Tear Drop)



- Made of Chrome Vanadium steel
- Convenient single hand direction change switch
- Quick-release capability to easily eject an engaged socket even under slippery conditions

No.	L(mm)	#	***	ā
11906	143	4	24	4.1

## 11909 1/4" Dr. Quick Release Ratchet 5"



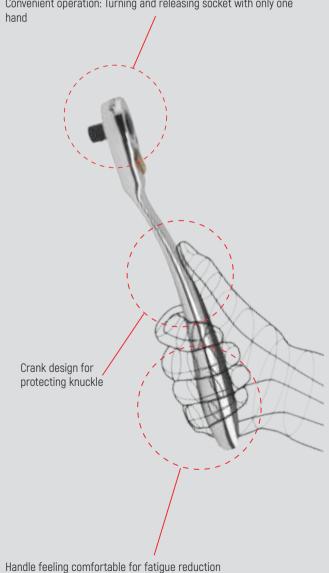
No.	L(mm)	8	8	ō
11909	140	6	-	-

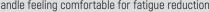




SATA drop-shaped ratchet featuring:

Durability: Special dustproof structure for harsh working conditions Ultra-thin appearance: Suitable for narrow working environment; Convenient operation: Turning and releasing socket with only one







































## 1/4" Dr. Sliding T-Handle 4" 11910





No.	L(mm)	#	8	ā
11910	100	6	-	-

## 11912 1/4" Dr. Universal Joint

1/4"





No.	Male	Female	$\Theta$	8	ā
11912	1/4"	1/4"	12	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

## 1/4" Dr. Offset Quick Release Ratchet 11970



- SATA teardrop shaped rotary head
- Comfortable grip for effective use
- Crank design providing special protection for finger joints during use

No.	L(mm)	#	8	<u></u>
11970	153	4	40	7.5

## 1/4" Dr. Socket Adaptor 1/4"Fx3/8"M 11913







No.	Male	Female	$\Theta$	¥	M
11913	1/4"	3/8"	12	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

## 1/4" Dr. Spinner Handle 11911





# • Handle end to be connected with 6.3mm ratchet

No.	L(mm)	#	贸	ā
11911	150	6	-	-

## 11914 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon







No.	Female	○ (mm)	$\Theta$	8	M
11914	1/4"	1/4"	12	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

































## 1/4" Dr. Flexible Extension Bar 6" 11922







No.	Male	L(mm)		¥	<u></u>
11922	1/4"	150	25	100	8.3

# 3/8" Dr. 6Pt. Socket





No.	0	L(mm)	#	¥	M
12101	1/4"	25	6	-	-
12102	5/16"	25	6	-	-
12103	3/8"	25	6	-	-
12104	7/16"	25	6	-	-
12105	1/2"	25	6	-	-
12106	9/16"	25	6	-	-
12107	5/8"	25	6	-	-
12108	11/16"	25	6	-	-
12109	3/4"	25	6	-	-
12110	13/16"	25	4	-	-
12111	7/8"	25	4	-	-

<sup>▲</sup> These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 3/8" Dr. 6Pt. Deep Socket





No.	0	L(mm)	$\Theta$	8	<b></b>
12201	3/8"	63.5	6	-	-
12202	7/16"	63.5	6	-	-
12203	1/2"	63.5	6	-	-
12204	9/16"	63.5	6	-	-
12205	5/8"	63.5	6	-	-
12206	11/16"	63.5	6	-	-
12207	3/4"	63.5	6	-	-
12208	13/16"	63.5	4	-	-
12209	7/8"	63.5	4	-	-

 $<sup>{\</sup>color{blue} \blacktriangle}$  These sockets should never be used on power drivers, pneumatic impact wrench and/or

# 3/8" Dr. 6Pt. Socket





No.	○ (mm)	L(mm)	#	8	ō
12301	6	25	6	-	-
12302	7	25	6	-	-
12303	8	25	6	-	-
12304	9	25	6	-	-
12305	10	25	6	-	-
12306	11	25	6	-	-
12307	12	25	6	-	-
12308	13	25	6	-	-
12309	14	25	6	-	-
12310	15	25	6	-	-
12311	16	25	6	-	-
12312	17	25	6	-	-
12313	18	25	6	-	-
12314	19	25	6	-	-
12315	20	25	4	-	-
12316	21	25	4	-	-
12317	22	25	4	-	-
12318	24	25	4	-	-

<sup>▲</sup> These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.



































# 3/8" Dr. 6Pt. Deep Socket







4	l
I	L

No.	○ (mm)	L(mm)	$\Theta$	*	ō
12401	8	63.5	6	-	-
12402	9	63.5	6	-	-
12403	10	63.5	6	-	-
12404	11	63.5	6	-	-
12405	12	63.5	6	-	-
12406	13	63.5	6	-	-
12407	14	63.5	6	-	-
12408	15	63.5	6	-	-
12409	16	63.5	6	-	-
12410	17	63.5	6	-	-
12411	18	63.5	6	-	-
12412	19	63.5	6	-	-
12413	20	63.5	4	-	-
12414	21	63.5	4	-	-
12415	22	63.5	4	-	-

 $lack \Delta$  These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 3/8" Dr. Torx® Socket







No.	0	L(mm)	#	8	ā
12701	E4	26	6	-	-
12702	E5	26	6	-	-
12703	E6	26	6	-	-
12704	E7	26	6	-	-
12705	E8	26	6	-	-
12706	E10	26	6	-	-
12707	E11	26	6	-	-
12708	E12	26	6	-	-
12709	E14	26	6	-	-
12710	E16	26	6	-	-
12711	E18	26	6	-	-
12712	E20	26	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

## 3/8" Dr. Quick Release Ratchet 8" 12901

3/8"



• Capable of quick release with one hand

No.	L(mm)	#	8	ā
12901	203	4	-	-

# 12902 3/8" Dr. Quick Release Ratchet 8"







- Turning with one hand Easy and free operation Capable of quick release
- Operation with only one hand

No.	L(mm)	#	***************************************	<u></u>
12902	203	4	60	19

# 3/8" Dr. Extension Bar







- Turning function
   Acting as standard extension after being inserted

No.	L	$\Theta$	8	靣
12903	3"(75mm)	6	72	6.4
12904	6"(150mm)	6	36	6.2
12905	10"(250mm)	6	36	9.5

































# 3/8" Dr. Locking Extension Bar



Unique locking device, preventing socket extension or universal joint from dropping, and requiring just one hand for operation, being convenient and efficient

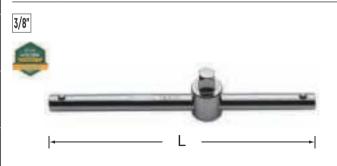
No.	L	#	8	ā
12906	3"(75mm)	6	-	-
12907	6"(150mm)	6	-	-
12908	10"(250mm)	6	-	-

# 12909 3/8" Dr. Flexible Handle 8"



No.	L(mm)	#	¥	ā
12909	213	6	-	-

# 3/8" Dr. Sliding T-Handle 8" 12910



No.	L(mm)	8	¥	ā
12910	165	6	-	-

## 12911 3/8" Dr. Flex-Head Quick Release Ratchet



No.	L(mm)	8	8	ā
12911	275	4	-	-

## 3/8" Dr. Universal Joint 12912



No.	Male	Female	$\Theta$	*	M
12912	3/8"	3/8"	6	-	-

# 3/8" Dr. Socket Adaptor





No.	Female	Male	$\Theta$	*	ā
12913	3/8"	1/4"	6	-	-
12914	3/8"	1/2"	6	-	-

<sup>▲</sup> These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.



























## 12917 3/8" Dr. Bit Adaptor 3/8"Fx1/4"Hexagon



No.	Female	○ (mm)	#	8	ā
12917	3/8"	6.3(1/4")	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders

# 3/8" Dr. Offset Quick Release Ratchet



- SATA teardrop shaped rotary head
- Comfortable grip for effective use
- Crank design providing special protection for finger joints during use

No.	L(mm)	#	8	ā
12970	217	4	32	14.1

## 3/8" Dr. Flexible Extension Bar 8" 12922





No.	L(mm)	Male	$\Theta$	¥	M
12922	150	3/8"	25	100	14.4

## 3/8"Dr. Quick-Release Ratchet (Tear Drop) 12971





- Made of Chrome Vanadium steel
- Convenient single hand direction change switch
- Quick-release capability to easily eject an engaged socket even under slippery conditions

No.	L(mm)	$\Theta$	8	<b>5</b>
12971	200	4	24	7.7

# 3/8" Dr. 3-Way Socket Adaptor



No.	Female	Male	#	8	ā
12930	3/8"	1/2"	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 3/8"Dr. Quick-Release Ratchet(Tear Drop)





- Made of Chrome Vanadium steel
- Convenient single hand direction change switch
- Quick-release capability to easily eject an engaged socket even under slippery conditions

No.	L(mm)	#	8	ō
12972	200	4	24	7.3







































# 1/2" Dr. 6Pt. Socket

# 1/2"





No.	0	L(mm)		8	<b></b>
13101	5/16"	37.8	4	-	-
13102	3/8"	37.8	6	-	-
13103	7/16"	37.8	6	-	-
13104	1/2"	37.8	6	-	-
13105	9/16"	37.8	6	-	-
13106	5/8"	37.8	6	-	-
13107	11/16"	37.8	6	-	-
13108	3/4"	37.8	6	-	-
13109	13/16"	37.8	4	-	-
13110	7/8"	37.8	4	-	-
13111	15/16"	37.8	4	-	-
13112	1"	37.8	4	-	-
13113	1-1/16"	37.8	4	-	-
13114	1-1/8"	37.8	4	-	-
13115	1-1/4"	37.8	2	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. 6Pt. Socket





# 1/2" Dr. 6Pt. Deep Socket







No.	0	L(mm)	#	8	ā
13201	3/8"	77	6	-	-
13202	7/16"	77	6	-	-
13203	1/2"	77	6	-	-
13204	9/16"	77	6	-	-
13205	5/8"	77	6	-	-
13206	11/16"	77	6	-	-
13207	3/4"	77	6	-	-
13208	13/16"	77	4	-	-
13209	7/8"	77	4	-	-
13210	15/16"	77	4	-	-
13211	1"	77	4	-	-
13212	1-1/16"	77	4	-	-
13213	1-1/8"	77	4	-	-
13214	1-1/4"	77	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

	- ( )	.(, )		~	
No.	○ (mm)	L(mm)	#	8	ā
13319	8	38	6	-	-
13320	9	38	6	-	-
13301	10	38	6	-	-
13302	11	38	6	-	-
13303	12	38	6	-	-
13304	13	38	6	-	-
13305	14	38	6	-	-
13306	15	38	6	-	-
13307	16	38	6	-	-
13308	17	38	6	-	-
13309	18	38	6	-	-
13310	19	38	6	-	-
13311	20	38	4	-	-
13312	21	38	4	-	-
13313	22	38	4	-	-
13314	23	38	4	-	-
13315	24	38	4	-	-
13316	27	38	4	-	-
13317	30	38	2	-	-
13318	32	38	2	-	-
13321	34	38	2	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. 6Pt. Deep Socket







No.	○ (mm)	L(mm)	$\Theta$	8	ā
13401	10	77	6	-	-
13402	11	77	6	-	-
13403	12	77	6	-	-
13404	13	77	6	-	-
13405	14	77	6	-	-
13406	15	77	6	-	-
13407	16	77	6	-	-
13408	17	77	6	-	-
13409	18	77	6	-	-
13410	19	77	6	-	-
13411	20	77	4	-	-
13412	21	77	4	-	-
13413	22	77	4	-	-
13414	24	77	4	-	-
13415	27	77	4	-	-
13416	30	77	2	-	-
13417	32	77	2	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders

# 1/2" Dr. 12Pt. Socket



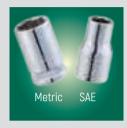




No.	0	L(mm)	$\Theta$	8	ā
13501	5/16"	37.8	6	-	-
13502	3/8"	37.8	6	-	-
13503	7/16"	37.8	6	-	-
13504	1/2"	37.8	6	-	-
13505	9/16"	37.8	6	-	-
13506	5/8"	37.8	6	-	-
13507	11/16"	37.8	6	-	-
13508	3/4"	37.8	6	-	-
13509	13/16"	37.8	4	-	-
13510	7/8"	37.8	4	-	-
13511	15/16"	37.8	4	-	-
13512	1"	37.8	4	-	-
13513	1-1/16"	37.8	4	-	-
13514	1-1/8"	37.8	4	-	-
13515	1-1/4"	37.8	2	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.





SATA metric socket is knurled, whereas the SAE one with dual groove for easy selection.



Box end with SATA drive structure to avoid nut slipping, with point of force moved to the plane of the hexagon nut



SATA socket made of Cr-V and subjected to special process for thinness, higher strength (compared with common socket), and easy operation in narrow space



Certain SATA socket with reduced OD for lightness and easy operation in narrow space

Never use extension bar on the tool or tap it with hammer Check the tool regularly for safety and efficiency, and do not use any worn or cracked tool.

Select tenon and socket dimensions correctly





































































# 1/2" Dr. 12Pt. Socket

1/2"





No.	(mm)	L(mm)	$\Theta$	8	$\overline{\otimes}$
13619	8	38	6	-	-
13620	9	38	6	-	-
13601	10	38	6	-	-
13602	11	38	6	-	-
13603	12	38	6	-	-
13604	13	38	6	-	-
13605	14	38	6	-	-
13606	15	38	6	-	-
13607	16	38	6	-	-
13608	17	38	6	-	-
13609	18	38	6	-	-
13610	19	38	6	-	-
13611	20	38	4	-	-
13612	21	38	4	-	-
13613	22	38	4	-	-
13614	23	38	4	-	-
13615	24	38	4	-	-
13616	27	38	4	-	-
13617	30	38	2	-	-
13618	32	38	2	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. Torx® Socket

1/2"





No.	0	L(mm)		¥	<b>5</b>
13701	E10	38	6	-	-
13702	E12	38	6	-	-
13703	E14	38	6	-	-
13704	E16	38	6	-	-
13705	E18	38	6	-	-
13706	E20	38	4	-	-
13707	E22	38	4	-	-
13708	E24	40	4	-	-

 $\pmb{\triangle}$  These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. 12Pt. Deep Socket

1/2"





No.	○ (mm)	L(mm)	#	8	Ā
13810	10	77	6	84	4.9
13812	12	77	6	84	4.9
13813	13	77	6	84	4.9
13814	14	77	6	84	5.2
13816	16	77	6	84	5.2
13817	17	77	6	84	5.2
13818	18	77	6	84	5.2
13819	19	77	6	84	5.4

 $lack \Delta$  These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 13901 1/2" Dr. Quick Release Ratchet 10"

1/2'





• Capable of quick release with one hand

No.	L(mm)	$\blacksquare$	8	ā
13901	252	4	-	-















































# 13902 1/2" Dr. Quick Release Ratchet 10"







- Turning with one hand
- Easy and free operation
- Capable of quick release
- Operation with only one hand

No.	L(mm)	$\Theta$	贸	ā
13902	255	4	36	22.6

# 1/2" Dr. Flexible Handle





No.	L	#	**	V
13909	10"(250mm)	4	-	-
13911	15"(375mm)	4	-	-
13951	17" (432mm)	4	24	22.9

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. Extension Bar





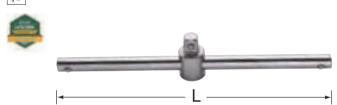
- Turning function
- Acting as standard extension after being inserted

No.	0	L(mm)	#	8	ā
13904	5"	125	4	-	-
13905	10"	250	4	-	-

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

## 13910 1/2" Dr. Quick Release Ratchet 10"





No.	L(mm)	$\Theta$	8	<b>\overline{\over</b>
13910	247	4	_	_

# 1/2" Dr. Locking Extension Bar





 $\bullet$  Unique locking device, preventing socket extension or universal joint from dropping, and requiring just one hand for operation, being convenient and efficient

No.	L	#	¥	<b></b>
13906	3"(75mm)	4	-	-
13907	5"(125mm)	4	-	-
13908	10"(250mm)	4	-	-

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

## 1/2" Dr. Universal Joint 13912







No.	Male	Female	$\Theta$	8	M
13912	1/2"	1/2"	4	-	-

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.







# 13913 1/2" Dr. Socket Adaptor 1/2"Fx3/8"M







No.	Female	Male	$\Theta$	8	$\overline{ \mathfrak{D}}$
13913	1/2"	3/8"	4	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 13930 1/2" Dr. 3-Way Socket Adaptor

1/2"





No.	Female	Male	$\Theta$	8	ā
13930	1/2"	3/8"	4	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 13914 1/2" Dr. Bit Adaptor 1/2"Fx5/16"Hexagon

1/2"





No.	○ (mm)	Female	$\Theta$	8	<u></u>
13914	8(5/16")	1/2"	6	-	-

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 13950 1/2"Dr Adapter (1/2"F X 3/4"M)







• Made of Chrome Vanadium steel

No.	L(mm)	Female	Male	$\Theta$	8	<u>M</u>
13950	35.1	1/2"	3/4"	4	120	15.4

 $<sup>{\</sup>bf \Lambda}$  These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 13919 1/2" Dr. L-Shaped Wrench 10"













No.	L(mm)	Female	#	¥	ā
13919	260	1/2"	6	-	-

# 1/2"

1/2" Dr. Speeder Handle



17001



No.	Female	#	8	ā
17001	12.5"	6	24	11.3





























# 13970 1/2" Dr. Offset Quick Release Ratchet



- SATA teardrop shaped rotary head
- Comfortable grip for effective use
- Crank design providing special protection for finger joints during use

No.	L(mm)	8	¥	ā
13970	261	4	20	13.3

# 16901 3/4" Dr. Quick Release Ratchet 20"



• Capable of quick release with one hand

No.	Spec.	L(mm)	$\Theta$	¥	ā
16901	20"	500	1	8	22.3

# 13971 1/2"Dr. Quick-Release Ratchet (Tear Drop)



- Made of Chrome Vanadium steel
- Convenient single hand direction change switch
- Quick-release capability to easily eject an engaged socket even under slippery conditions

No.	L(mm)	#	8	ā
13971	250	4	24	12.8

# 3/4" Dr. 12Pt. Socket







 ī	
Ь	1

No.	(mm)	L(mm)	$\Theta$	8	$\overline{\boxtimes}$
16602	19	47.5	4	-	-
16603	21	49.5	4	-	-
16604	22	49.5	4	-	-
16605	23	49.5	4	-	-
16606	24	49.5	4	-	-
16607	25	50	4	-	-
16608	26	50	4	-	-
16609	27	52	4	-	-
16610	28	52	4	-	-
16611	29	52	4	-	-
16612	30	54	4	-	-
16613	32	56	4	-	-
16614	33	56	4	-	-
16615	34	56	4	-	-
16616	35	56	2	-	-
16617	36	58	2	-	-
16618	38	60	2	-	-
16619	41	64	2	-	-
16620	46	68	2	-	-
16622	50	72	2	-	-
16623	55	76	1	-	-
16624	60	78	1	_	_

▲ These sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 13972 1/2"Dr. Quick Release Ratchet (Tear Drop)



- Made of Chrome Vanadium steel
- ${\scriptstyle \bullet}$  Convenient single hand direction change switch
- Quick-release capability to easily eject an engaged socket even under slippery conditions

No.	L(mm)	#	*	ā
13972	250	4	24	14.8































# 3/4" Dr. Extension Bar



- Turning function
- Acting as standard extension after being inserted

No.	Spec.	L(mm)	$\Theta$	*	M
16902	4"	100	6	-	-
16903	8"	200	3	-	-
16904	16"	400	1	-	-

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

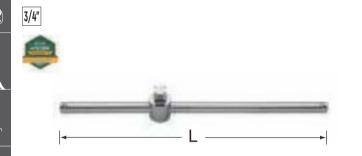
# 16907 3/4" Dr. Universal Joint



No.	Male	Female	$\Theta$	8	<u>M</u>
16907	3/4"	3/4"	3	-	-

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 16905 3/4" Dr. Flexible Handle 18"



No.	L(mm)	#	¥	ā
16905	450	1	-	-

# 16908 3/4"F X 1/2"M Adapter

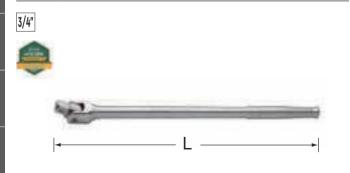


• Made of Chrome Vanadium steel

No.	L(mm)	Male	Female		8	M
16908	35.1	1/2"	3/4"	6	36	8.4

▲ These sockets accessories should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 16906 3/4" Dr. Flexible Handle 18"



¥

M

# 16919 3/4" Dr. L-Shaped Wrench 13"



No.	Female	L(mm)	$\Theta$	8	<u></u>
16919	3/4"	380	1	-	

No.

16906

L(mm)

450



























# 13mm Drive Pass-Thru Socket





No.	Spec. (mm)	$\mathcal{B}$	8	ā
19001	3.5	6	-	-
19002	4	6	-	-
19003	4.5	6	-	-
19004	5	6	-	-
19005	5.5	6	-	-
19006	6	6	-	-
19007	7	6	-	-
19008	8	6	-	-
19009	9	6	-	-
19010	10	6	-	-
19011	11	6	-	-
19012	12	6	-	-
19013	13	6	-	-
No.	Spec.	$\blacksquare$	8	ā
19101	5/32"	6	-	-
19102	3/16"	6	-	-
19103	7/32"	6	-	-
19104	1/4"	6	-	-
19105	9/32"	6	-	-
19106	5/16"	6	-	-
19107	3/8"	6	96	1.3
19108	7/16"	6	-	-
19109	1/2"	6	-	-

# 20mm Drive Pass-Thru Socket





No.	Spec. (mm)	#		<u> </u>
			Ψ	<u>/@/</u>
19021	10	6	-	-
19022	11	6	-	-
19023	12	6	-	_
19024	13	6	-	-
19025	14	6	-	-
19026	15	6	-	-
19027	16	6	-	-
19028	17	6	-	-
19029	18	6	-	-
19030	19	6	-	-
No.	Spec.	$\Theta$	8	<u></u>
19121	3/8"	6	-	-
19122	7/16"	6	-	-
19123	1/2"	6	-	-
19124	9/16"	6	-	-
19125	5/8"	6	-	-
19126	11/16"	6	-	-
19127	3/4"	6	-	-

# **Drive Pass-Thru Ratchet**



No.	Spec. (mm)	L(mm)	#	*	囫
19201	13	145	6	48	10.8
19301	20	203	8	32	9.2
19401	30	253	4	24	7.5

# **Drive Pass-Thru Extension Bar**





No.	Spec.	L	#	8	ā
19071	13"	3" (75mm)	6	-	-
19081	20"	3" (75mm)	6	-	-
19091	30'	6" (150mm)	50	-	-













No.	Male	Spec. (mm)		T	$\overline{\mathbb{Q}}$
19072	1/4"	13	24	-	-
19082	1/4"	20	24	-	-
19083	3/8"	20	24	96	4.6
19092	1/2"	30	18	-	-

# 1/4" Dr. Bit Socket, Hexagon



• Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	#	8	ā
21201	3	36.5	12	-	-
21202	4	36.5	12	-	-
21203	5	36.5	12	-	-
21204	6	36.5	12	-	-
21205*	8	36.5	12	-	-
21206*	7	36.5	12	-	-

 ${\color{blue} \blacktriangle}$  These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/4" Dr. Bit Socket, Torx®





















L(mm)

36.5

36.5

36.5

36.5

36.5

36.5

• Bit made from S2 material for durability and anti-slipping

# 1/4" Dr. Bit Socket, Phillips





T

12

12

12

 $\overline{\mathbb{Q}}$ 



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	#	8	M
21301	#1	36.5	12	-	-
21302	#2	36.5	12	-	-
21303	#3	36.5	12	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

No.

21101

21102

21103

21104

21105

21106

Spec.

T-8

T-10

T-15

T-20

T-25

T-30

































# 1/4" Dr. Bit Socket, Pozidrive



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	#	8	ā
21401	#1	36.5	12	-	-
21402	#2	36.5	12	-	-
21403	#3	36.5	12	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 3/8" Dr. Bit Socket, Torx®



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	$\blacksquare$	¥	M
22101	T-10	48	6	-	-
22102	T-15	48	6	-	-
22103	T-20	48	6	-	-
22104	T-25	48	6	-	-
22105	T-27	48	6	-	-
22106	T-30	48	6	-	-
22107	T-40	48	6	-	-
22108	T-45	48	6	-	-
22109	T-50	48	6	-	-
22110*	T-55	48	6	-	-
22111*	T-60	48	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/4" Dr. Bit Socket, Slotted

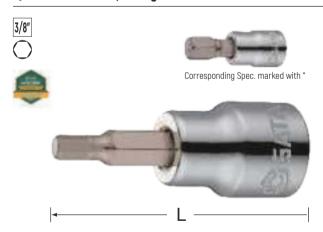


• Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	8	8	ā
21501	4.0	36.5	12	-	-
21502	5.5	36.5	12	-	-
21503	6.5	36.5	12	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 3/8" Dr. Bit Socket, Hexagon



• Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	#	8	靣
22201	3	48	6	-	-
22202	4	48	6	-	-
22203	5	48	6	-	-
22204	6	48	6	-	-
22205*	7	48	6	-	-
22206*	8	48	6	-	-
22207*	10	48	6	-	-

These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.



























3/8"











# 3/8" Dr. Bit Socket, Phillips



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	$\Theta$	8	M
22301	#1	48	6	-	-
22302	#2	48	6	-	-
22303	#3	48	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or

# 3/8" Dr. Bit Socket, Pozidrive



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	$\Theta$	¥	<u></u>
22401	#1	48	6	-	-
22402	#2	48	6	-	-
22403	#3	48	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 3/8" Dr. Bit Socket, Slotted



• Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	#	¥	<b>®</b>
22501	5.5	48	6	-	-
22502*	6.5	48	6	-	-
22503*	8.0	48	6	-	-
22504	4.0	48	6	72	3.9

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.



# High quality of SATA bits Socket



- 1. Bit made of high-grade alloy steel (S-2) for durability and anti-slipping
- 2. Length of 50MM, 100MM or custom one available as required
- 3. 6-point screwdriver bar inserted into 6-point socket for anti-slipping



- 4. Cr-V socket joint for high torque
- 5. Spec. of 6.3MM, 10MM and 12.5MM available

# **SATA Bit Socket Type**





**Pozidrive** 







**Slotted** 





**Triple Square** 

Tamper-Proof Torx®



























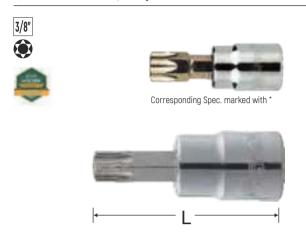








# 3/8" Dr. Bit Socket, Tamper-Proof Torx®

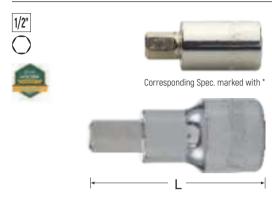


- Bit made from S2 material for durability and anti-slipping
- Bit with tamper suitable for professional Torx® screws

No.	Spec.	L(mm)	#	8	ā
22601	T-45	48	6	-	-
22602	T-50	48	6	-	-
22603*	T-55	48	6	-	-
22604*	T-60	48	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. Bit Socket, 50mm Length, Hexagon

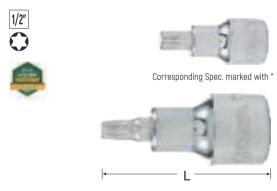


• Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	#	8	ā
24201	4	55	6	-	-
24202	5	55	6	-	-
24203	6	55	6	-	-
24204	7	55	6	-	-
24205	8	55	6	-	-
24206	10	55	6	-	-
24207*	12	55	6	-	-
24208*	14	55	6	-	-
24209*	17	55	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. Bit Socket, 50mm Length, Torx®



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	#	8	ā
24101	T-20	55	6	-	-
24102	T-25	55	6	-	-
24103	T-27	55	6	-	-
24104	T-30	55	6	-	-
24105	T-40	55	6	-	-
24106	T-45	55	6	-	-
24107	T-50	55	6	-	-
24108*	T-55	55	6	-	-
24109*	T-60	55	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. Bit Socket, Hexagon



- Used for auto repair (Volkswagen, Audi, GM, etc.)
   Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	#	8	ā
24301	6	70	6	-	-
24302	8	120	6	-	-
24303	6	250	6	-	-
24304	5	180	6	-	-
24305	6	140	6	-	-
24306	10	140	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.











1/2"



















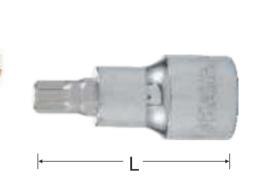








# 1/2" Dr. Bit Socket, 50mm Length, Triple Square

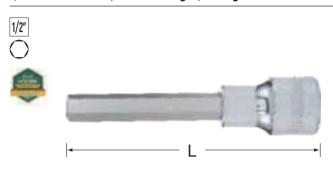


• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	$\Theta$	*	Ō
24801	M-5	55	6	-	-
24802	M-6	55	6	-	-
24803	M-8	55	6	-	-
24804	M-10	55	6	-	-
24805	M-12	55	6	-	-
24806	M-14	55	6	-	-
24807	M-16	55	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or

# 1/2" Dr. Bit Socket, 100mm Length, Hexagon

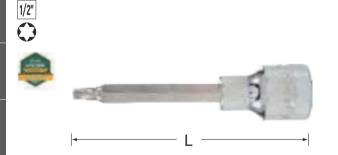


• Bit made from S2 material for durability and anti-slipping

No.	Spec. (mm)	L(mm)	#	8	ā
25201	4	100	6	-	-
25202	5	100	6	-	-
25203	6	100	6	-	-
25204	7	100	6	-	-
25205	8	100	6	-	-
25206	10	100	6	-	-
25207	12	100	6	-	-
25208	14	100	6	-	-
25209	17	100	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.

# 1/2" Dr. Bit Socket, 100mm Length, Torx®



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	#	8	ð
25101	T-20	100	6	-	-
25102	T-25	100	6	-	-
25103	T-27	100	6	-	-
25104	T-30	100	6	-	-
25105	T-40	100	6	-	-
25106	T-45	100	6	-	-
25107	T-50	100	6	-	-
25108	T-55	100	6	-	-
25109	T-60	100	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or

# 1/2" Dr. Bit Socket, 100mm Length, Triple Square



• Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	$\Theta$	¥	ā
25801	M-5	100	6	-	-
25802	M-6	100	6	-	-
25803	M-8	100	6	-	-
25804	M-10	100	6	-	-
25805	M-12	100	6	-	-
25806	M-14	100	6	-	-
25807	M-16	100	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or

## 1/2" Dr. Bit Socket, Triple Square







- Used for auto repair Bit made from S2 material for durability and anti-slipping

No.	Spec.	L(mm)	$\Theta$	8	ā
25901	M-10	120	6	-	-
25902	M-12	140	6	-	-

▲ These bit sockets should never be used on power drivers, pneumatic impact wrench and/or extenders.











































# Wrench

**************************************	Wrench Set	68-73
X-Beam ©	X-Shank Wrench	69
***	Adjustable Wrench	74-75
3	Reversible Ratcheting Wrench	<b>75-76</b>
Gear Wrench	Flex Ratcheting Wrench	76
Gear Wrench	Combination Wrench	77
Gear Wrench	Double Box Ratcheting Wrench	77-78
3	Combination Wrench	79-80
	Double Open End Wrench	80
Q	Double Box Wrench	80-81
	Torx® Key Wrench	80
	Nut Wrench	81
	Socket & Open End Wrench	81-82
0	Construction Ratcheting Wrench	82
	T-shape Socket	83
	Tapping Wrench	82-83

# Wrench

### 08007A 8Pc. Combination Double Ratcheting Wrench

### 08008 8Pc. Combination Ratcheting Wrench Set



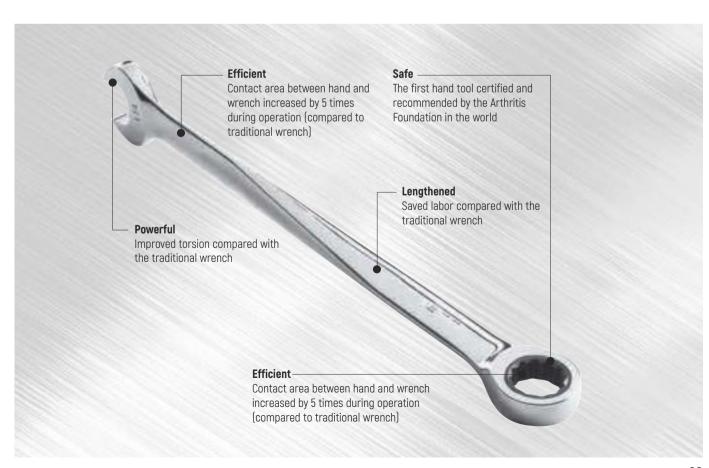


No.	Contents	$\Theta$	8	ā
08007A	8, 10, 12, 13, 14, 15, 17, 19 mm	0	12	12.2

♠ Warran	ty terms of	tool set comp	ly with the ir	ndividual nrodu	ıct

No.	Contents	$\Theta$	¥	M
08008	8, 10, 12, 13, 14, 15, 17, 19mm	2	8	10.4

▲ Warranty terms of tool set comply with the individual product.













































### 08009 8Pc. Open End Wrench Set



No.	Spec. (mm)	No.	Spec. (mm)
41216	5.5×7	41206	14×17
41202	8×10	41207	17×19
41203	10×12	41215	19×22
41205	12×14	41210	22×24

No.	8	8	ā
08009	2	8	10

<sup>▲</sup> Warranty terms of tool set comply with the individual product.

### 08010 10Pc. Open End Wrench Set



No.	Spec. (mm)	No.	Spec. (mm)
41216	5.5×7	41206	14×17
41202	8×10	41207	17×19
41217	9×11	41215	19×22
41203	10×12	41212	24×27
41205	12×14	41213	30×32

No.	#	8	<b>\overline{\over</b>
08010	2	6	12.7

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 08012 11Pc. Box End Wrench Set



No.	Spec. (mm)	No.	Spec. (mm)
42221	5.5×7	42206	17×19
42201	8×10	42219	16×18
42222	9×11	42220	19×22
42202	10×12	42211	24×27
42204	12×14	42212	30×32
42205	14×17		

No.	#	8	ā
08012	2	6	16.1

<sup>▲</sup> Warranty terms of tool set comply with the individual product.

### 08016 10Pc. X-Beam Combination Ratcheting Wrench Set



<sup>•</sup> Portable tray-type tool box for access in narrow spaces

No.	Spec. (mm)		8	<u></u>
08016	8,10,12,13,14,15,16,17,18,19	2	4	9.4





































### 08018 17Pc. Offset Combination Wrench Set



No.	Contents	$\Theta$	8	M
08018	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22mm	1	4	11

▲ Warranty terms of tool set comply with the individual product.

### 09017 6Pc. Combination Wrench Set, SAE



N	lo.	Contents	$\Theta$	¥	M
0	9017	5/16", 3/8", 7/16", 1/2", 9/16", 5/8"	3	18	8.8

▲ Warranty terms of tool set comply with the individual product.

### 08022 10Pc. Combination Wrench Set



No.	Contents	$\Theta$	8	ā
08022	8, 10, 12, 13, 14, 15, 16, 17, 18, 19mm	2	12	15.7

▲ Warranty terms of tool set comply with the individual product.

### 09019 9Pc. Combination Wrench Set, SAE



No.	Contents	$\blacksquare$	8	ā
09019	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"	3	18	16.4

▲ Warranty terms of tool set comply with the individual product.

### 08023 11Pc. Deep Offset Box End Wrench Set



No.	Contents	#	8	ā
08023	6*7, 8*9, 10*11, 12*13, 14*15, 16*17, 18*19, 20*22, 21*23, 24*27, 30*32mm	1	4	13.8

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 09021 11Pc. Combination Wrench Set, SAE



No.	Contents	$\Theta$	¥	M
09021	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"	2	12	17.8

<sup>▲</sup> Warranty terms of tool set comply with the individual product.







### 09023 7Pc. Combination Ratcheting Wrench Set



No.	Contents		8	<b></b>
09023	5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"	3	6	8.3

 $<sup>\</sup>ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

## 09027 23Pc. Combiantion Wrench Set



No.	Contents	$\Theta$	8	<u></u>
09027	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 30, 32mm	2	4	21.5

<sup>▲</sup> Warranty terms of tool set comply with the individual product.

### 09025 6Pc. Box End Ratcheting Wrench Set



No.	Contents	$\blacksquare$	8	ā
09025	8*9mm, 10*11mm, 12*13mm, 14*15mm, 16*18mm, 17*19mm	3	6	7.9

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 09029 13Pc. Open End Wrench Set



No.	Contents	#	8	M
09029	6*7, 8*10, 10*12, 11*13, 12*14, 14*17, 17*19, 19*21, 21*23, 22*24, 23*26, 24*27, 30*32mm	2	4	13

 $<sup>\</sup>ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 09026 14Pc. Combination Wrench Set



No.	Contents	#	8	<b>5</b>
09026	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 22, 24mm	3	6	32.9

▲ Warranty terms of tool set comply with the individual product.

### 09034 7Pc. Combination Ratcheting Stubby Wrench Set



No.	Contents	$\Theta$	T	<b></b>
09034	10, 12, 13, 14, 15, 17, 19mm	3	12	13.6

<sup>▲</sup> Warranty terms of tool set comply with the individual product.







































### 09040 12Pc. Combination Ratcheting Wrench Set



No.	Contents	$\Theta$	¥	ā
09040	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	-	4	7.7

▲ Warranty terms of tool set comply with the individual product.

## 09043 7Pc. Extra Long Locking Flex Ratcheting Wrench Set



No.	Contents	$\Theta$	¥	ā
09043	10, 12, 13, 14, 15, 17, 19mm	6	12	16.6

▲ Warranty terms of tool set comply with the individual product.

### 09041 8Pc. Reversible Ratcheting Wrench Set



No.	Contents	$\Theta$	*	ā
09041	8. 10. 12. 13. 14. 15. 17. 18mm	3	12	16

▲ Warranty terms of tool set comply with the individual product.

### 09044 3Pc Flex Head Socket Wrench Set



No.	Contents	$\square$	8	ā
09044	8x10, 12x14, 17x19 mm	6	24	17.1

<sup>▲</sup> Warranty terms of tool set comply with the individual product.

### 09042 7Pc. Flex Ratcheting Wrench Set



No.	Contents	#	¥	ō
09042	10, 12, 13, 14, 15, 17, 19mm	3	12	18.7

▲ Warranty terms of tool set comply with the individual product.

### 09062 14Pc Combination Wrench Set (Metric)



No.	Contents	#	8	ā
09062	10, 11, 12, 13, 14, 16, 17, 19, 21, 22, 24, 27, 30, 32 mm	1	4	20.5







(3M)

### 09064 11Pc Combination Wrench Set (Metric)

## 09070 7Pc Combination Wrench Set (Metric)





No.	Contents	#	¥	ā
09064	8, 9, 10, 11, 12, 13, 14, 17, 19, 21, 24 mm	3	12	22.5

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

No.	Contents	$\Theta$	8	<u>a</u>
09070	8, 10, 12, 13, 14, 17, 19 mm	6	24	18.8

▲ Warranty terms of tool set comply with the individual product.

### 09069 14Pc. Combination Wrench Set, SAE

### 09079 8Pc Combination Ratcheting Wrench Set





No.		Contents	$\Theta$	8	ē
0906	9	3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-1/4"	-	4	17.3

<sup>▲</sup> Warranty terms of tool set comply with the individual product.

No.	Contents		T	<u></u>
09079	8, 10, 11, 12, 13, 14, 17, 19 mm	0	5	8.3

<sup>▲</sup> Warranty terms of tool set comply with the individual product.

## Wide Jaw Adjustable Wrench







No.	Spec.	Maximum opening(mm)	L(mm)	#	8	M
47122	6"	27.5	163	6	72	12.7
47123	8"	34.5	212	3	48	13.8
47124	10"	36.5	262	2	36	17.7
47125	12"	41.5	310	1	24	17.5

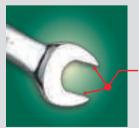


Box end with SATA drive structure to avoid nut slipping

Locking slider: Sliding to left/right for locking/unlocking respectively

The locking flex head capable of moving 180 degrees and locking 13 positions

Adjustable hexagon nut retainer providing continuous tension to the head



Open end with SATA driving technology to avoid nut slipping



Capable of turning nut with only 5 degrees compared to 30 degrees with standard box wrench

### **Adjustable Wrench**





No.	Spec.	Maximum opening(mm)	#	8	ā
47201	4"	12.7	6	24	1.6
47202	6"	23.8	6	36	6.4
47203	8"	28.5	6	36	10.7
47204	10"	33.3	6	48	25.6
47205	12"	38.1	6	18	14.9
47206	15"	42.8	3	6	8.9
47207	18"	52.4	1	4	9.7
47208	24"	61.9	1	2	8.6

### **Locking Adjustable Wrench**





### Different from Common Wrenches:

- Locking device similar to a vise added
  Non-slip teeth in the opening part added
  Handle with anti-skid rubber

- Product advantages:
   Suitable for handling slip nuts and rusty nuts in narrow spaces
- Plain top acting as small clamp

No.	Spec.	Maximum opening(mm)	L(mm)	$\Theta$	8	M
47213	8"	30	200	2	36	16.5
47214	10"	33	250	2	36	26

































































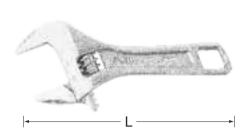












- Made of Cr-V
- Short handle for operation in narrow space
- Chrome-plated surface for rust protection

No.	Spec.	Maximum opening(mm)	L(mm)	#	8	ā
47232	6"	24	118	6	120	12.5
47233	8"	30	142	6	96	16.5
47234	10"	35	159	6	60	16.5
47235	12"	42	205	6	36	18

### **Dipping Handle Adjustable Wrench**



- Pearl nickel plated surface for corrosion resistance and aesthetics
- Injection-moulded handle for firm holding
- · Laser scale indicator, making opening size more intuitive
- CNC machine tool processing with more smooth operation
- Special heat treatment for the head, with higher strength and wear resistance

No.	Spec.	Maximum opening(mm)	$\Theta$	¥	<b>6</b>
47248	4"	12.8	8	240	14.5
47249	6"	19.2	6	144	20.4
47250	8"	24	6	72	19.7
47251	10"	28	6	48	21.1
47252	12"	34	4	24	17.3
47253	15"	43	2	12	16.5
47254	18"	52.4	2	8	18.8
47255	24"	62	1	6	19.8

▲ Excluded from lifetime warranty terms.

### **X-Beam Combination Wrench**



- · Lengthened design, with labor saved and higher torque output
- High efficiency with increased contact area between hand and wrench during operation (compared to traditional wrench)

No.	Spec. (mm)	#	8	ā
40281	8	6	96	4.6
40282	9	6	96	5.3
40283	10	6	36	2.3
40284	11	6	96	8.1
40285	12	6	36	3.5
40286	13	6	36	3.8
40287	14	6	36	5.1
40288	15	6	72	11.9
40289	16	6	36	6.3
40290	17	6	36	8
40291	18	6	36	8.5
40292	19	6	36	9.7

### X-Beam Combination Ratcheting Wrench



- · Lengthened design, with labor saved and higher torque output
- High efficiency with increased contact area between hand and wrench during operation (compared to traditional wrench)

No.	Spec. (mm)	8	***************************************	ā
46301	8	6	36	1.8
46302	9	6	36	2
46303	10	6	36	3
46304	11	6	36	3.8
46305	12	6	36	3.9
46306	13	6	36	4.8
46307	14	6	36	5.8
46308	15	6	72	13.2
46309	16	6	36	7.8
46310	17	6	36	8.9
46311	18	6	36	9.8
46312	19	6	36	12.4

### **Metric Reversible Ratcheting Wrenches**



- To be turned with a gentle push, greatly improving work efficiency
  To-degree inclination design facilitating operation
  Thin but exquisite design with fully polished surface

No.	Spec. (mm)	L(mm)	A(mm)	#	8	ā
46601	8	140	18	6	36	1.7
46602	9	150	19.6	6	36	2
46603	10	159	21.6	6	36	2.2
46604	11	165	23.5	6	36	2.8
46605	12	172	25	6	24	2.3
46606	13	178	27	6	24	2.5
46607	14	191	28.5	6	24	3.1
46608	15	200	31	6	24	3.6
46609	16	208	33	6	60	10
46610	17	226	34.5	6	60	12.4
46611	18	236	36	6	36	7.9
46612	19	248	37	6	36	8.6
46617	20	292	42	6	-	-
46613	21	292	42	6	36	12.5
46614	22	292	42	6	36	12.4
46615	24	334	49	6	36	18.9
46616	25	334	49	4	24	13

### **Metric Flex Head Ratcheting Wrenches**



- Tip capable of rotating 180 degrees for use in narrow spaces Thin but exquisite design with fully polished surface

	T					
No.	Spec. (mm)	L(mm)	A(mm)	$\mathcal{D}$	8	<u></u>
46421	8	140	16	6	96	5.4
46422	9	149	17.5	6	36	2.4
46401	10	158	19	6	36	2.8
46402	11	165	20.5	6	36	3.3
46403	12	171	21.7	6	24	2.8
46404	13	178	23.6	6	24	3
46405	14	190	25.9	6	24	3.6
46406	15	199	26.7	6	24	4.4
46407	16	208	28.4	6	60	11.7
46408	17	225	30.5	6	60	13.7
46409	18	236	31.5	6	36	9.2
46410	19	248	32.5	6	36	10.6
46411	20	291	40	6	36	15.5
46412	21	291	40	6	36	15.1
46413	22	291	40	6	36	14.2
46414	24	333	45.5	6	36	21.5
46415	25	333	45.5	6	36	21.9

### **Metric XL Locking Flex Head Ratcheting Wrenches**





- Box end with SATA drive structure to avoid nut slipping
- · Sliding to left/right for locking/unlocking respectively
- · Locking flex head capable of moving 180 degrees and locking 13 positions
- Adjustable hexagon nut retainer providing continuous tension to the head
- Open end with SATA driving technology to avoid nut slipping
- Capable of turning nut with only 5 degrees compared to 30 degrees with standard box wrench

No.	Spec. (mm)	#	 ♥	颪
46801	8	6	72	5.4
46802	9	6	72	5.9
46803	10	6	72	7.3
46804	11	6	72	8
46805	12	6	72	10.1
46806	13	6	72	11.6
46807	14	6	72	13.5
46808	15	6	72	15.3
46809	16	6	36	9.2
46810	17	6	36	10.2
46811	18	6	36	11.4
46812	19	6	36	12.5
46813	20	6	24	13.1
46814	21	6	24	13.1
46815	22	6	24	14.2
46816	24	6	24	18.2
46817	25	6	24	18.1

### **Metric Ratcheting Wrench Socket Adapters with Quick** Release



Used together with speeder wrench to realize the function of quick-release ratchet wrench



No.	Spec.	L(mm)	#	8	<u></u>
46654	1/4"	10	6	-	-
46655	3/8"	13	6	-	-
46656	1/2"	19	6	-	-













































## Bit Adaptor for 3/8" Ratcheting Wrench





No.	Output end	Driving end	#	8	T
46657	1/4"	3/8"	6	-	-

### **Combination Ratcheting Wrench**





## **Combination Ratcheting Wrench**



No.	Spec. (mm)	L(mm)	A(mm)	$\Theta$	8	ā
43220	5.5	126	17.8	6	36	1.3
43221	6	126	17.8	6	36	1.3
43222	7	133	17.8	6	36	1.5
43201	8	140	19	6	36	1.5
43202	9	150	19.7	6	36	1.8
43203	10	159	21.4	6	36	2.4
43204	11	165.5	23	6	36	2.9
43205	12	172	24.5	6	36	3.5
43206	13	178	26.5	6	36	3.9
43207	14	191	28.6	6	36	4.6
43208	15	200	30	6	36	5.6
43209	16	209	32	6	36	6.1
43210	17	226	33.5	6	36	7.1
43211	18	237	34.6	6	36	7.8
43212	19	248	37	6	36	9.1
43213	21	292	42	4	36	12.4
43214	22	292	42	4	36	12.3
43215	24	334	49	4	24	11.8
43216	25	334	49	4	36	17.7
43217	27	359	52.5	4	24	15.7
43218	30	402	58.5	2	12	10.8
43219	32	426	62	2	12	12.2
43223	34	460	64	2	2	2.4
43224	36	501	68.5	4	10	19.4
43225	41	579	73	3	6	16.8
43226	46	646	78	2	4	15.3
43227	50	656	82	2	4	16.9

No.	Spec.	L(mm)	A(mm)	#	8	ā
43101	5/16"	140	19	6	36	1.5
43102	3/8"	159	21.4	6	36	2.4
43103	7/16"	165.5	23	6	-	-
43104	1/2"	178	26.5	6	36	4.1
43105	9/16"	191	28.6	4	36	4.5
43106	5/8"	209	32	4	36	6
43107	11/16"	226	33.5	4	50	11.6
43108	3/4"	248	37	4	36	8.8

### **Deep Offset Box End Wrench**





- •70-Degree Deep Offset Double Box End Wrench
  •Made of Cr-V with heat treatment and electroplating process

No.	Spec. (mm)	$\blacksquare$	8	ā
42301	6×7	6	96	5
42302	8×9	6	96	6
42303	10×11	6	96	8.8
42304	12×13	6	96	11.2
42305	14×15	6	72	11
42306	16X17	4	48	9.9
42307	18×19	6	72	19.1
42309	20×22	4	48	17.9
42310	21×23	4	48	19.5
42312	24×27	4	24	12.6
42315	30×32	4	24	18.8



## Double Ratcheting Wrench



No.	Spec. (mm)	L(mm)	A(mm)	#	*	<b></b>
43601	5.5	126	17.8	6	96	4
43602	6	126	17.8	6	96	4
43603	7	133	17.8	6	96	4.5
43604	8	140	19	6	96	5.1
43605	9	150	19.7	6	96	5.8
43606	10	159	21.4	6	96	6.9
43607	11	165.5	23	6	36	3.2
43608	12	172	24.5	6	36	3.8
43609	13	178	26.5	6	36	4.1
43610	14	191	28.6	6	36	4.8
43611	15	200	30	6	36	5.8
43612	16	209	32	6	36	6.2
43613	17	226	33.5	6	36	7.7
43614	18	237	34.6	6	36	8.6
43615	19	248	37	6	36	9.4
43616	21	292	42	4	24	8.3
43617	22	292	42	4	24	8.9
43618	24	334	49	4	16	8.3
43619	25	334	49	4	16	8.1

## **Combination Ratcheting Stubby Wrench**



No.	Spec. (mm)	L(mm)	A(mm)	#	8	ā
43301	10	94.8	21.4	6	36	2
43302	11	103	24.2	6	-	-
43303	12	105.8	25.5	6	36	2.8
43304	13	108	28	6	36	3.3
43305	14	115	29	6	36	3.9
43306	15	119	31.3	6	36	4.5
43307	16	123	33.4	6	36	5.1
43308	17	127	35.3	6	36	5.9
43309	18	131	36.4	6	36	6.6
43310	19	139	37.5	6	24	4.7

## **Box End Ratcheting Wrench**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	$\Theta$	8	ā
46101	5/16"×3/8"	131	18.5	21.8	6	-	-
46102	7/16"×1/2"	161	23.5	26.5	6	36	3.2
46103	9/16"×5/8"	191	28.5	32.5	6	36	4.9
46104	11/16"×3/4"	231	34.5	36.5	6	36	6.9

## **Box End Ratcheting Wrench**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	#	***	<u></u>
46201	8×9	131	18	19.5	6	36	1.6
46200	8×10	131	18.5	21.8	6	96	4.8
46202	10×11	151	21.8	23.5	6	36	2.5
46203	12×13	171	25	26.5	6	36	3.4
46204	14×15	191	28.5	30.5	6	36	4.7
46205	16×18	211	32.5	35.5	6	36	6.3
46206	17×19	231	34.5	36.6	6	36	36
46207	22×24	292	42	49	6	24	10.8
46208	27×30	350	52.5	58.5	6	24	19.3
46209	32×34	409	61.5	63.5	6	12	14.1
	-						











































































### 4-in-1 Double Box Ratcheting Wrench Set





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)		¥	M
46621	8X10X12X13	160	22.2	27.1	36	-	-
46622	9X11X14X15	180	23.7	30.7	36	-	-
46623	16X17X18X19	230	35.0	37.0	36	-	-
46624	20X21X22X24	291	42.7	50.0	24	-	-

## **Open End Wrench**





No.	Spec.	L(mm)	D1(mm)	D2(mm)	$\Theta$	¥	ā
41101	1/4"×5/16"	124.0	16.5	12.5	6	96	2.7
41102	3/8"×7/16"	150.0	23.0	20.8	6	36	1.6
41103	1/2"×9/16"	175.0	29.0	27.0	6	36	2.9
41104	5/8"×11/16"	201.0	35.5	33.4	6	36	4.9
41105	11/16"×3/4"	228.0	39.7	35.5	6	36	6.2
41106	13/16"×7/8"	254.0	46.0	43.8	4	24	3.3
41107	15/16"×1"	279.0	52.2	50.0	4	24	8.9
41108	1-1/8"×1-1/4"	310.0	66.8	62.0	4	24	15.4

### **Combination Wrench**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)		***	<u></u>
40233	5.5	127	11.4	13	6	96	2.7
40201	6	127	11.4	13	6	96	2.4
40202	7	133	12.3	14.4	6	96	2.6
40203	8	140	13.6	16.5	6	96	3
40204	9	149	15	18.5	6	36	1.5
40205	10	159	16	20.5	6	36	1.9
40206	11	165	17.5	22.5	6	36	2.1
40207	12	171	18.5	25	6	36	2.4
40208	13	177	20	27	6	36	2.7
40209	14	190	21.5	29	6	36	3.4
40210	15	199	22.5	31	6	36	3.7
40211	16	208	24	33	6	36	4.5
40212	17	225	26	35	6	36	5
40213	18	237	26.6	37	6	36	6.1
40214	19	248	28	39	6	36	7.1
40215	20	265	30	42	4	24	5.8
40216	21	271	31	43	4	24	5.7
40217	22	293	32	45.3	4	24	8.4
40218	23	304	33	47.5	4	24	7.8
40219	24	316	34	49	4	24	9
40220	25	335	37.5	51	4	24	10.4
40221	27	359	39	55	4	24	12.4
40222	30	415	43	65	2	12	9.4
40223	32	426	46	66.5	2	12	10.1

### **Combination Wrench**



No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	#	8	<u></u>
40101	1/4"	127	11.4	13	6	96	2.4
40102	5/16"	140	13.6	16.5	6	96	3
40103	3/8"	159	16	20.5	6	36	1.9
40104	7/16"	165	17.5	22.5	6	36	2.2
40105	1/2"	177	20	27	6	36	2.6
40106	9/16"	190	21.5	29	6	36	3.3
40107	5/8"	208	24	33	6	36	4.3
40108	11/16"	225	26	35	6	36	5
40109	3/4"	248	28	39	6	36	7.1
40110	13/16"	271	31	43	4	24	6
40111	7/8"	293	32	45.3	4	24	7.8
40112	15/16"	316	34	49	4	24	9.1
40113	1"	335	37.5	51	4	16	7
40114	1-1/16"	359	39	55	4	16	8.4
40115	1-1/8"	402	42.8	63	2	12	8.9
40116	1-1/4"	426	26	35	2	12	10.3

### **Offset Combination Wrench**



- Made of Cr-V with heat treatment and fully-polished electroplating process Box end with 55-degree inclination for use at special station

No.	Spec. (mm)	$\blacksquare$	8	ā
40331	6	6	96	2.5
40332	7	6	96	2.8
40333	8	6	96	3.8
40334	9	6	96	4.4
40335	10	6	96	5.6
40336	11	6	96	6
40337	12	6	96	7.3
40338	13	6	96	8.9
40339	14	6	96	10.3
40340	15	6	96	12.1
40341	16	6	96	14.1
40342	17	6	72	12.3
40343	18	6	72	15
40344	19	4	48	11.8
40345	20	4	48	13.3
40346	21	4	48	14.8
40347	22	4	48	17.2

### **Matte Finished Combination Wrench**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	#	8	ā
40241	34	476	50	71	2	2	2.6
40242	35	476	50	71	2	2	2.5
40243	36	501	55.5	79	2	2	3.5
40244	38	501	55.5	79	2	2	3.6
40245	41	578	61	86.5	2	2	4.6
40246	42	578	61	86.5	2	2	4.6
40248	46	615	65.5	93	2	2	5.4
40249	48	654	74.4	100	2	2	7
40250	50	654	74.4	100	2	2	6.7
40251	55	670	80	109	2	2	7.9
40252	60	692	87	120	2	2	10.5

### **Box End Wrench**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	#	8	ā
42101	3/8"×7/16"	196	16.2	18.4	6	36	3.4
42102	1/2"×9/16"	220	19.8	21.8	6	36	4.3
42104	11/16"×3/4"	250	26.6	27.7	6	36	6.5
42105	13/16"×7/8"	290	30.5	33	6	24	7.4
42106	7/8"×15/16"	320	32	34	6	24	8.9
42107	15/16"×1"	360	34	39	4	24	10.9













































### **Open End Wrench**



No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	$\Theta$	8	ō
41216	5.5×7	124	16.5	12.5	6	96	2.5
41201	6×7	124	16.5	12.5	6	96	2.5
41202	8×10	150	20.8	16.5	6	36	1.7
41217	9×11	150	23	20.8	6	36	1.6
41203	10×12	163	25	20.8	6	36	2.2
41204	11×13	175	27	23	6	36	2.4
41205	12×14	187	29	25	6	36	3.2
41218	13×15	182	33.4	27	6	36	3.8
41219	13×16	182	33.4	27	6	36	3.7
41206	14×17	201	35.5	29	6	36	4.4
41214	16×18	201	35.5	33.4	6	36	5.2
41207	17×19	228	39.7	35.5	6	36	6.2
41208	19×21	240	43.8	39.7	4	24	5.7
41215	19×22	254	46	43.8	4	24	6.4
41209	21×23	262	48	43.8	4	24	7
41210	22×24	285	50	46	4	24	8.3
41211	23×26	300	54.3	48	4	24	10.1
41212	24×27	300	54.3	48	4	24	10
41220	27×30	290	62.5	56.4	4	24	15.5
41213	30×32	333	66.8	62	4	24	15.9
41221	30×34	329	69.7	66.8	4	24	19.5
41222	32×34	329	69.7	66.8	4	24	19.1
41223	34×36	341	75.5	70	4	24	24.9

# Torx® Wrench





No.	Spec.	D1(mm)	D2(mm)		¥	<u></u>
45201	E6×E8	12.2	10	6	96	2.3
45202	E10×E12	15.5	13.5	6	96	3.9
45203	E14×E18	22	17.7	6	36	3
45204	E20×E24	28.6	25	6	-	-

### **Metric Offset Double Box End Wrenches**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	$\Theta$	8	M
42221	5.5×7	165	11.3	13.5	6	36	1.8
42213	6×7	165	11.3	13.5	6	36	1.8
42201	8×10	185	14	16	6	36	2.5
42222	9×11	195	16.2	18.4	6	36	3.3
42202	10×12	196	16.2	18.4	6	36	3
42203	11×13	205	18.4	20.7	6	36	4
42204	12×14	220	19.8	21.8	6	36	4.2
42223	13×15	235	22.5	24.8	6	36	5.4
42224	13×16	235	22.5	24.8	6	36	5.4
42205	14×17	235	22.7	25.7	6	36	5.8
42219	16×18	250	26.6	27.7	6	36	7
42206	17×19	250	26.6	27.7	6	36	7
42207	19×21	270	28	32	4	24	6.1
42220	19×22	270	28	32	4	36	9.1
42208	21×23	290	30.5	33	4	24	7.3
42209	22×24	320	32	34	4	24	8.5
42210	23×26	360	34	39	4	24	11.5
42211	24×27	360	34	39	4	24	10.6
42225	27×30	390	39	42.8	4	24	16.8
42212	30×32	420	42.8	46.3	4	24	20

### **Metric Flare Nut Wrenches**





No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	$\Theta$	8	<u></u>
48200	8×10	140	17.3	21	6	36	2.1
48201	9×11	152	19.4	22.2	6	36	2.7
48204	10×12	166	21	23.4	6	36	3.6
48202	13×14	178	24.9	26.1	6	36	4.3
48203	16×17	193	27.5	30.5	6	36	6.3































### **Full Polish Flare Nut Wrenches**



No.	Spec.	L(mm)	#	8	<u></u>
48301	3/8"×7/16"	152	6	-	-
48302	1/2"×9/16"	178	6	-	-
48303	5/8"×11/16"	193	6	-	-

### **Metric Double Flex Head Socket Wrenches**





### **Metric Stubby Combination Wrenches**



• Made of Cr-V for use in narrow spaces

No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)		8	<b></b>
49201	10	95.5	16	20.5	6	96	5.3
49202	11	103	17.5	22.6	6	96	5.3
49203	12	106.5	18.5	24.6	6	96	6
49204	13	108.5	20	26.7	6	36	2.7
49205	14	115.5	21.5	29	6	36	3.3
49208	17	127.5	26	35	6	36	4.5
49210	19	139.5	28	39.5	4	24	4.3

No.	Spec. (mm)	L(mm)	D1(mm)	D2(mm)	$\Theta$	¥	<u></u> ■
47501	8×9	183	14	12.7	6	48	5.2
47502	10×11	197	15.8	14.7	6	48	6.4
47503	12×13	211	17.4	16.2	6	48	9.2
47504	14×15	240	21.9	19.8	6	36	9.4
47505	16×17	256	24	23.9	6	36	12.1
47506	18×19	272	27	26.9	6	36	14.9

## **Metric Construction Ratcheting Wrenches**



No.	Spec. (mm)	L(mm)	A(mm)	$\Theta$	8	$\overline{\otimes}$
47305	12×14	225	35	2	36	9.4
47308	14×17	270	45	2	36	12.8
47309	17×19	305	53	2	36	18.4
47310	17×21	310	50	2	36	18.6
47312	19×21	310	50	2	36	18.3
47313	19×22	310	50	2	36	18
47314	19×24	310	50	2	36	18
47317	21×26	370	55	2	12	12
47319	22×24	370	60	2	12	11.9
47321	24×27	400	65	2	12	14.1
47322	24×30	400	64	2	12	14.2
47324	30×32	420	75	2	12	13.6

### **Metric Flex Head Socket Wrench**



• Made of Cr-V for use in narrow spaces

No.	Spec. (mm)	L(mm)	D1(mm)	#	*	ō
47601	10	180	14.7	12	72	6.7
47602	12	191	17.7	12	72	8.9
47603	13	207	18.7	12	72	11
47604	14	224	19.8	12	72	13.8
47605	17	233	23.8	6	48	12.3
47606	19	250	25.8	6	48	14.6































### **T-Handle 6Pt. Socket Wrench**

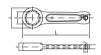


- Socket made of quality Cr-V
- 30cm-long extension bar for use in narrow space
- 20cm-long handle for higher torque

No.	Spec. (mm)	L(mm)	#	8	ā
47701	8	310	-	50	16.2
47702	9	310	-	50	16.4
47703	10	308	-	50	16.8
47704	11	308	-	50	20
47705	12	308	-	50	17.4
47706	13	310	-	35	16.3
47707	14	310	-	35	16.4
47710	17	313	-	25	15.9
47712	19	313	-	25	16.2

### **Metric Box End Slugging Wrenches**



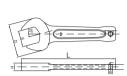


- Forged from alloy steel
- Subjected to heat treatment for uniform hardness
- Surface with hard film and subject to anti-rust treatment for elegance, durability and rust prevention
   Tapping end with a safety hole to be hung with wire and string and connected to device during tapping to
- avoid wounding due to excessive force, and facilitate hanging and storage when not in use

No.	Spec. (mm)	S(mm)	L(mm)	D(mm)	H(mm)	$\Theta$	¥	ō
48505	27	27	175	45	15	6	24	7.9
48506	30	30	185	55	15	6	24	10.1
48507	32	32	185	50	15	6	24	10.8
48509	36	36	205	55	15	6	24	13.8
48512	41	41	225	62	19	6	24	17.7
48515	46	46	235	75	20	6	24	22.3
48516	50	50	250	75	20	6	18	19.6
48517	55	55	265	85	25	6	12	16
48519	60	60	274	90	25	6	12	18.9
48520	65	65	298	90	25	6	12	24.5
48521	70	70	320	105	30	3	6	14.6
48522	75	75	330	110	33.3	1	6	17
48523	80	80	359	131	36	1	6	23
48524	85	85	359	131	36	1	6	23
48525	90	90	391	145	39.8	1	4	24
48526	95	95	391	145	39.8	1	4	22
48527	100	100	421	158	43.5	1	2	14
48528	105	105	421	158	45.5	1	2	14
48529	110	110	450	172	47.5	1	2	17
48530	115	115	450	172	47.5	1	2	16
48531	120	120	480	185	53	1	2	19

### **Metric Open End Slugging Wrenches**





- Forged from alloy steel
- Subjected to heat treatment for uniform hardness
- Surface with hard film and subject to anti-rust treatment for elegance, durability and rust prevention
- Tapping end with a safety hole to be hung with wire and string and connected to device during tapping to avoid wounding due to excessive force, and facilitate hanging and storage when not in use

No.	Spec. (mm)	S(mm)	L(mm)	D(mm)	H(mm)	<b>P</b>	*	ð
48603	27	27	175	45	15	6	24	9.3
48604	30	30	190	65	15	6	24	13.6
48605	32	32	185	60	18	6	24	12.4
48607	36	36	210	70	16	6	24	17.4
48609	41	41	230	85	16	6	24	23.5
48610	46	46	240	95	20	6	18	23.5
48611	50	50	270	100	18	6	12	18.8
48612	55	55	295	115	25	6	12	24.1
48613	60	60	310	120	25	6	6	14.2
48614	65	65	330	195	30	3	6	19.3
48615	70	70	360	150	30	3	6	24
48616	75	75	390	156	30.3	6	6	29
48617	80	80	408	173	33.3	4	4	28
48618	85	85	408	173	33.3	4	4	26
48619	90	90	445	193	38	2	2	19
48620	95	95	445	193	38	2	2	19
48621	100	100	485	214	45.5	2	2	22
48622	105	105	485	214	45.5	2	2	22

# **Torque Wrench**

Mechanical Torque Wrench	85-86
G-series Big Spec. Torque Wrench	86
G-series Industrial Torque Wrench	88
Electronic Torque Wrench	87
Torque Multiplier	91-93







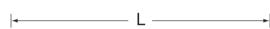
### **Torque Tester**

# **Torque Wrench**











- respectively • Mini USB charger (with 5V/1A charger as standard configuration) for use along or with a computer for good portability and suitable for daily rapid detection of two-way communication between WiFi and USB serial port in workshop and production line
- Communication standard of WiFi module of 2.4G 802.11 b/g/n, with maximum WiFi transmission distance of 30m
- · Computer software (Windows system) provided for writing the device setting value and other information and reading the torque value of the device
- $\cdot \text{Test report to be exported with one click, suitable for calibration in laboratory/measuring room } \\$ • Preset torque value and qualified accuracy percentage of torque set through the software
- interface or buttons at the back of the device (factory default is 3%)

  Capable of tracking and capturing peak torque (the first peak), and automatically determining whether it is OK or not (LED lamp in green if OK, otherwise in red with beeping sound)

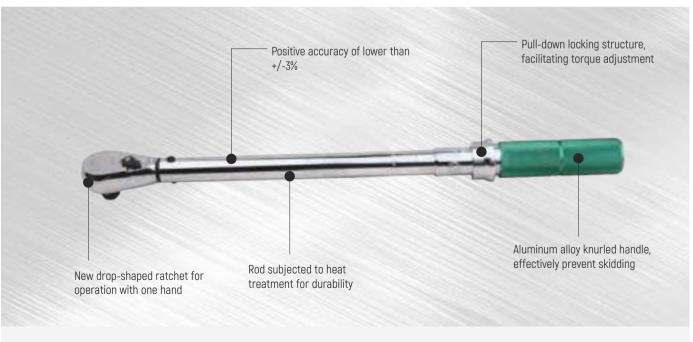
No.	Spec. N·m	Reading Accuracy	Edge-to-Edge Size of Active Tip	#	8	ā
96473	2~50	+/-1%	11mm	-	4	16.3
96474	9~320	+/-1%	19mm	-	4	16.3

▲ Product with warranty of 12 months and accessories with warranty of 6 months.

- New drop-shaped ratchet for operation with one hand
- Positive accuracy +/-3%
- · Aluminum alloy knurled handle, effectively prevent skidding
- · Pull-down locking structure, facilitating torque adjustment

No.	Torsion Range(Nm)	Driving Head	L(mm)	Indexing (N·m)	$\blacksquare$	8	ā
96211	1-5	1/4"	224	0.1	-	10	9.8

▲ Note: When the torque exceeds the specified range, the measured torque can only be used for reference, and the forward +/-3% accuracy cannot be guaranteed. The torque wrench is a precision instrument and is not covered by SATA lifetime warranty. Please refer to the instructions for detailed instructions on how to use the products and services.



### Warranty for torsion wrenches

- Warranty of 90 days [180 days for G series] from the purchase date (as per invoice date). Parts can be repaired or replaced free of charge due to damage caused by materials and processes.

   The premise of free repair or replacement of parts is: The part is within the warranty of 90 days from the purchase date (based on the invoice date) [180 days for G series] with operation times of less than 5000 and accuracy exceeding +/-3% tested by the third-party torque testing instrument;

   Parts are not covered by the warranty if they are damaged or their accuracy exceed +/-3% due to misuse, abuse, accident or non-normal use without following precautions;
- Products are not covered by the warranty if they are repaired by any maintenance agency not authorized by SATA.





### 3/8" Dr. Adjustable Torque Wrench







- · New drop-shaped ratchet for operation with one hand
- Positive accuracy +/-3%
- Aluminum alloy knurled handle, effectively prevent skidding
- Pull-down locking structure, facilitating torque adjustment

No.	Torsion Range(Nm)	Driving Head	L(mm)	Indexing (N·m)	$\Theta$	¥	ā
96212	5-25	3/8"	268	0.1	-	6	10.2
96310	10-50	3/8"	426	0.5	-	10	17.2

▲ Note: When the torque exceeds the specified range, the measured torque can only be used for reference, and the forward +/-3% accuracy cannot be guaranteed. The torque wrench is a precision instrument and is not covered by SATA lifetime warranty. Please refer to the instructions for detailed instructions on how to use the products and services.

### 3/4" Dr. Adjustable Torque Wrench







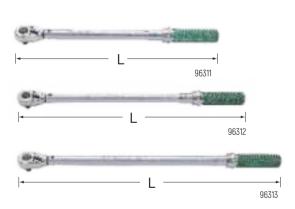
 Product subjected to adjustment and test before delivery +/-3% clockwise accuracy guaranteed

No.	Torsion Range(Nm)	Driving Head	L(mm)	Indexing(N·m)	$\Theta$	¥	ā
96411	110-550	3/4"	864	2.5	-	1	6.7
96412	160-800	3/4"	1075	2.5	-	1	7.3

▲ Note: When the torque exceeds the specified range, the measured torque can only be used for reference, and the forward +/-3% accuracy cannot be guaranteed. The torque wrench is a precision instrument and is not covered by SATA lifetime warranty. Please refer to the instructions for detailed instructions on how to use the products and services.

### 1/2" Dr. Adjustable Torque Wrench





- New drop-shaped ratchet for operation with one hand
- Positive accuracy +/-3%
- Aluminum alloy knurled handle, effectively prevent skidding
- Pull-down locking structure, facilitating torque adjustment

N	lo.	Torsion Range(Nm)	Driving Head	L(mm)	Indexing(N·m)	#	8	ā
9	16311	20-100	1/2"	473	0.5	-	10	17.2
9	16312	40-200	1/2"	555	1	-	10	18.9
9	16313	68-340	1/2"	616	2	-	10	21.8

▲ Note: When the torque exceeds the specified range, the measured torque can only be used for reference, and the forward +/-3% accuracy cannot be guaranteed. The torque wrench is a precision instrument and is not covered by SATA lifetime warranty. Please refer to the instructions for detailed instructions on how to use the products and services.

### 1" Dr. Adjustable Torque Wrench









- · Imported with original packaging from Italy
- Driving head can be pushed up for reverse operation
- Handle with open-welded structure, facilitating adjustment, calibration and maintenance
- Torque accuracy +/-4%
- Applicable for large equipment installation and maintenance in such fields as machinery manufacturing, rail transit, petrochemical, metallurgy and other industries

No.	Driving Head (in.)	Torsion Range (N.m)	Torsion Range (lbf.ft)	Total Length (mm)	Indexing (N·m)	Weight (kg)		¥	ā
96431	1"	200-1000	150-750	1030	25	9.7	-	1	13.8
96433	1"	500-2000	350-1500	1400	50	18	-	1	22.8





































































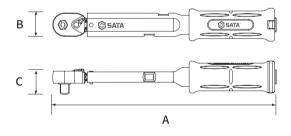






# **Preset Torque Wrench**





- No torque value scale and adjustment mechanism are provided for the Pre-Set Torque Wrench. Only special tools can be used to set and change the torque value of the product.
- Internal tripping mechanism with imported high-precision spring for accuracy and durability
- When reaching the torque set value, the internal device sends out the sound of "click" with vibration. At this time, stop operation immediately to prevent overtightening.
- It can be used in both directions, but only in the forward (clockwise) direction can the torque
- $\bullet$  Ratchet with 36 teeth with operating angle for each tooth of 10°, suitable for use in narrow
- Meeting ISO 6789-2004 standard

### Torque adjustment tools:

- •T15 Torx® wrenches with tamper for 96241, 96242 and 96243
- T25 Torx® wrenches with tamper for 96244 and 96245

No.	Torsion Adjustment Range(N.m)	Driving Head(M) Spec.	Total Length A(mm)	Tip Height B(mm)	Tip Height C(mm)	Weight (kg)	#	¥	<b>®</b>
96241	1~5	1/4"	190	25	21	0.2	-	10	4.5
96242	5~25	3/8"	215	25	25	0.22	-	10	4.8
96243	10~50	3/8"	235	25	25	0.37	-	10	6.2
96244	20~100	1/2"	315	32	34	0.63	-	10	9.6
96245	40~200	1/2"	463	32	34	1.15	-	10	16.2

▲ 1. Default torque of the fixed torque wrench is 0 N.m.

2. Torque can be set according to user's requirement, but the delivery date will be extended. (For details, please contact the local sales staff or call SATA service hotline for consultation.)

### **Electronic Torque Wrench**



- Output torque accuracy up to +/-1.5% (forward) and +/-2% (reverse)
- Three types of prompts available: indicator light, buzzer and vibrator
- Available torque units: n-m/bf-ftt/llbf-in/kgf-m/kgf-cm

No.	Driving Head (in.)	Torsion Range (N.m)	Torsion Range (lbf.ft)	Total Length (mm)	Indexing (N·m)	Weight (g)	#	¥	ā
96525	3/8	27-135	19.9-99.6	400	0.1	980	-	8	11.5
96526	1/2	40-200	29.5-147	550	0.1	1080	-	6	10
96527	1/2	68-340	50-250.9	628	0.1	1380	-	6	12
96528	3/4	120-600	88.5-443	1248	0.1	5940	-	1	8.7
96529	3/4	160-800	118-590	1248	0.1	5940	-	1	8.7
96530	3/4	200-1000	147.5-738	1248	1	5940	-	1	8.7
96531	11	300-1500	221.2-1106	1248	1	6100	-	1	8.9
96532	3/4	400-2000	295-1475	2000	1	12000	-	1	17.4

▲ This product is a precision instrument with warranty of 12 months /10000 times.

### **Interchangeable Torque Wrench**



- Forged from quality Cr-V square joint with chrome-plated surface Rod subjected to heat treatment for durability and anti-deformation
- · Pull-down clasp for torque adjustment for efficiency and convenience
- Anodized and knurled handle made of aluminum alloy, being artistic and elegant
   Applicable to square socket wrench heads with 9\*12mm and 14\*18mm interfaces below

No.	Connector Size (mm)	Torsion Range (N.m)	Total Length (mm)	Indexing (N·m)	Accuracy	Weight (g)	#	¥	ā
96221	9×12	1-5	210	0.1	3%	300	-	16	8.8
96222	9×12	5-25	250	0.1	3%	330	-	16	9.4
96321	9×12	20-100	424	0.5	3%	1020	-	10	14.3
96322	14×18	40-200	530	1	3%	1390	-	10	16.8
96323	14×18	68-340	591	2	3%	1460	-	10	19.7

▲ This product is a precision instrument with warranty of 90 days /5000 times.

### **G Series Adjustable Torque Wrench**

## **G Series Interchangeable Torque Wrench**







No.	Driving Head (in.)	Torsion Range (N.m)	Torsion Range (Ibf.ft)	Total Length (mm)	Indexing (N·m)	Weight (g)	#	8	M
96421	1/4	1-5	0.75-3.7	220	0.025	300	-	1	0.4
96422	1/4	5-25	3.7-18	285	0.1	450	-	1	0.6
96423	3/8	10-50	7.4-37	335	0.25	540	-	1	0.8
96424	1/2	20-100	15-75	395	0.5	900	-	1	1.2
96425	1/2	40-200	30-150	485	1	1100	-	1	1.5
96426	1/2	60-300	45-220	575	1	1400	-	1	1.6
96427	1/2	80-400	59-300	665	1	2000	-	1	2.1
96428	3/4	110-550	81-405	960	1	3800	-	1	4.1
96429	3/4	150-750	111-550	1240	1	4800	-	1	5.4
96430	3/4	250-850	184-630	1390	1	4700	-	1	5.8

▲ Excluded from lifetime warranty terms.

No.	Tip Diameter (mm)	Adaptation Depth (mm)	Torsion Range (N·m)	Torsion Range (lbf-ft)	Total Length (mm)	Indexing (N·m)	Weight (g)	#	¥	ā
96442	16	32	5-25	3.7-18	278.0	0.1	300	-	1	0.5
96443	16	32	10-50	7.4-37	328.0	0.25	450	-	1	0.6
96444	16	32	20-100	15-75	376.5	0.5	600	-	1	0.9
96445	16	32	40-200	30-150	467.5	1	800	-	1	1.1
96446	16	32	60-300	45-220	558.5	1	1200	-	1	1.4
96447	16	32	80-400	59-300	648.5	1	1500	-	1	1.9
96448	22	56	110-550	81-400	917.0	1	3800	-	1	3.5

1198 N

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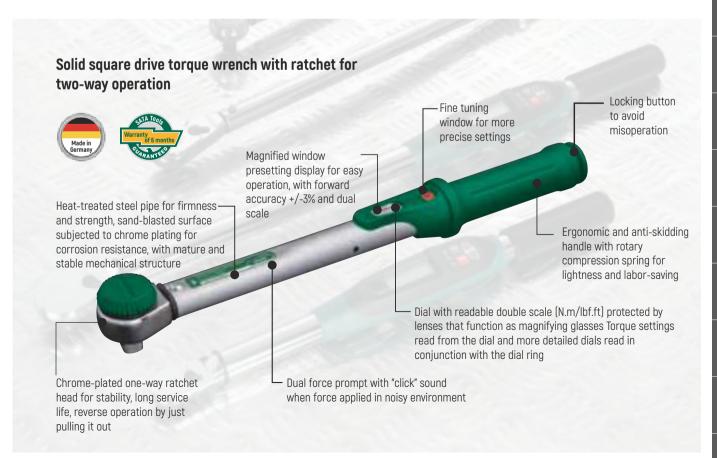
150-750 111-550

56 ▲ Excluded from lifetime warranty terms.

22

96449

· Select wrench head according to the depth





















4.7





















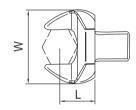


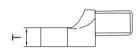


## **Torque Wrench Open End Fitting**









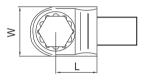


No.	Spec. (mm)	Connector (mm)	L(mm)	T(mm)	W(mm)	Weight (g)	$\Theta$	¥	Ō
96621K	7	9×12	17.5	5.7	20.7	40	12	-	-
96622K	8	9×12	17.5	5.7	22.0	39	12	-	-
96623K	9	9×12	17.5	5.7	23.5	38	12	-	-
96624K	10	9×12	17.5	5.7	24.8	42	12	-	-
96625K	11	9×12	17.5	5.7	26.0	41	12	-	-
96626K	12	9×12	17.5	5.7	27.5	43	12	-	-
96627K	13	9×12	17.5	5.7	28.8	48	12	-	-
96628K	14	9×12	17.5	7.7	31.5	52	12	-	-
96629K	15	9×12	17.5	7.7	33.5	51	12	-	-
96630K	16	9×12	17.5	7.7	36.0	58	12	-	-
96631K	17	9×12	17.5	7.7	37.7	60	12	-	-
96632K	18	9×12	17.5	7.7	39.0	71	12	-	-
96633K	19	9×12	17.5	7.7	41.6	74	12	-	-
96655K	17	14×18	25	9	37.0	136	6	-	-
96656K	18	14×18	25	9	39.0	147	6	-	-
96657K	19	14×18	25	9	40.6	147	6	-	-
96659K	21	14×18	25	11	45.5	171	6	-	-
96660K	22	14×18	25	11	47.3	165	6	-	-
96662K	24	14×18	25	11	50.8	167	6	-	-
96665K	27	14×18	25	13.8	58.4	219	6	-	-
96668K	30	14×18	25	13.8	62.5	245	6	-	-
96670K	32	14×18	25	13.8	65.0	246	6	-	_

## **Torque Wrench Box End Fitting**







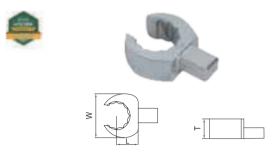


- Torque wrench head easy to change, suitable for narrow space with tight bolt connection
   Made of hot-forged Cr-V with chrome-plated surface
   Capable of bolt tripping

No.	Spec. (mm)	Connector (mm)	L(mm)	T(mm)	W(mm)	Weight (g)	#	8	ā
96621M	7	9×12	17.5	8	19.8	37	12	-	-
96622M	8	9×12	17.5	8	19.8	40	12	-	-
96623M	9	9×12	17.5	8	19.8	44	12	-	-
96624M	10	9×12	17.5	8	20	44	12	-	-
96625M	11	9×12	17.5	8	20	41	12	-	-
96626M	12	9×12	17.5	12	20.2	49	12	-	-
96627M	13	9×12	17.5	12	22.2	56	12	-	-
96628M	14	9×12	17.5	12	23.5	52	12	-	-
96629M	15	9×12	17.5	12	24.6	52	12	-	-
96630M	16	9×12	17.5	13	26.4	54	12	-	-
96631M	17	9×12	17.5	13	27.3	59	12	-	-
96632M	18	9×12	17.5	13	29	56	12	-	-
96633M	19	9×12	17.5	13	31	65	12	-	-
96635M	21	9×12	17.5	14.7	33.4	71	12	-	-
96636M	22	9×12	17.5	14.7	35	74	12	-	-
96655M	17	14×18	25	12.5	30.5	135	6	-	-
96656M	18	14×18	25	12.5	30.5	134	6	-	-
96657M	19	14×18	25	12.5	31	138	6	-	-
96659M	21	14×18	25	15	33.4	144	6	-	-
96660M	22	14×18	25	15	35.2	145	6	-	-
96662M	24	14×18	25	15	37.4	153	6	-	-
96665M	27	14×18	25	17.5	41.7	162	6	-	-
96668M	30	14×18	25	17.5	45.3	182	6	-	-
96670M	32	14×18	25	17.5	47.8	181	6	-	-



### **Torque Wrench Open Box End Fitting**



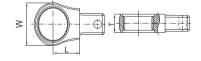
- Torque wrench head easy to change, suitable for narrow space with tight bolt connection
- Made of hot-forged Cr-V with chrome-plated surface
- Capable of bolt tripping

No.	Spec. (mm)	Connector (mm)	L(mm)	T(mm)	W(mm)	Weight (g)	#	8	ā
96710K	10	9×12	17.5	12	21.2	57	12	-	-
96711K	11	9×12	17.5	12	22.6	55	12	-	-
96712K	12	9×12	17.5	12	24.1	59	12	-	-
96713K	13	9×12	17.5	12	25.2	55	12	-	-
96714K	14	9×12	17.5	13	27.3	60	12	-	-
96716K	16	9×12	17.5	13	30.1	65	12	-	-
96717K	17	9×12	17.5	13	31.6	64	12	-	-
96718K	18	9×12	17.5	15	33.3	74	12	-	-
96719K	19	9×12	17.5	15	34.6	80	12	-	-
96721K	21	9×12	17.5	15	37.7	88	12	-	-
96722K	22	9×12	17.5	15	39.3	92	12	-	-

### **Torque Wrench Ratcheting Head**



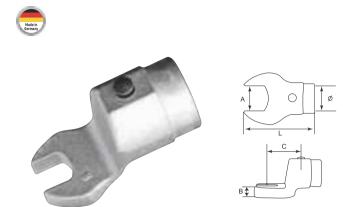




- Torque wrench head easy to change, suitable for narrow space with tight bolt connection
   Made of hot-forged Cr-V with chrome-plated surface
   Capable of bolt tripping

No.	Driving Head		Connector (mm)			W (mm)	Weight (g)	#	8	ā
96572	1/4"	12	9×12	17.5	23	25	69	12	-	-
96573	3/8"	12	9×12	17.5	33	34	143	12	-	-
96574	1/2"	12	9×12	17.5	38	34	154	12	-	-
96575	1/2"	18	14×18	25	43	41	300	6	-	-

### **Torque Wrench Open End Fitting**



- Torque wrench head easy to change, suitable for narrow space with tight bolt connection
   Made of hot-forged Cr-V with chrome-plated surface
   Capable of bolt tripping

No.	Active Tip Width A(mm)	Active Tip Depth B(mm)	Depth C(mm)	Connector Ф(mm)	L (mm)	Weight (kg)	#	¥	ā
96521K	7	5	32	16	54	0.08	1	-	-
96522K	8	5	32	16	54	0.08	1	-	-
96523K	9	5	32	16	58	0.08	1	-	-
96524K	10	7	32	16	58	0.09	1	-	-
96525K	11	7	32	16	58	0.09	1	-	-
96526K	12	7	32	16	55	0.09	1	-	-
96527K	13	8	32	16	58	0.12	1	-	-
96528K	14	8	32	16	58	0.12	1	-	-
96529K	15	8	32	16	58	0.12	1	-	-
96530K	16	9	32	16	58	0.16	1	-	-
96531K	17	9	32	16	58	0.16	1	-	-
96532K	18	9	32	16	58	0.16	1	-	-
96533K	19	10	32	16	63	0.18	1	_	-
96534K	20	10	32	16	63	0.18	1	-	-
96535K	21	10	32	16	63	0.18	1	_	-
96536K	22	11	32	16	63	0.22	1	_	-
96537K	24	11	32	16	64	0.22	1	-	-
96538K	27	12	32	16	66	0.26	1	_	-
96539K	30	12	32	16	66	0.3	1	-	-
96540K	32	12	32	16	66	0.3	1	_	-
96541K	36	12	32	16	65	0.3	1	-	-
96551K	22	11	56	22	90	0.33	1	-	-
96552K	24	11	56	22	90	0.32	1	-	-
96553K	27	12	56	22	93	0.38	1	-	-
96554K	30	12	56	22	93	0.37	1	-	-
96555K	32	12	56	22	98	0.45	1	-	-
96556K	34	12	56	22	98	0.43	1	-	-
96557K	36	12	56	22	96	0.43	1	-	-
96558K	41	12	56	22	103	0.58	1	-	-
96559K	46	12	56	22	103	0.53	1		_

▲ Excluded from lifetime warranty terms.































































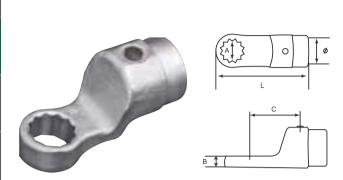






### ▲ Excluded from lifetime warranty terms.

### **Torque Wrench Open End Fitting**



- $\bullet$  Torque wrench head easy to change, suitable for narrow space with tight bolt connection
- Made of hot-forged Cr-V with chrome-plated surface
- Capable of bolt tripping

No.	Active Tip Width A(mm)	Active Tip Depth B(mm)	Depth C(mm)	Connector Φ(mm)	L (mm)	Weight (kg)	$\Theta$	¥	ā
96521M	7	8	32	16	58	0.09	1	-	-
96522M	8	8	32	16	58	0.09	1	-	-
96523M	9	8	32	16	58	0.09	1	-	-
96524M	10	10	32	16	58	0.1	1	-	-
96525M	11	10	32	16	60	0.1	1	-	-
96526M	12	10	32	16	60	0.1	1	-	-
96527M	13	12	32	16	62	0.14	1	-	-
96528M	14	12	32	16	62	0.14	1	-	-
96529M	15	12	32	16	62	0.14	1	-	-
96530M	16	13	32	16	65	0.18	1	-	-
96531M	17	13	32	16	65	0.18	1	-	-
96532M	18	13	32	16	65	0.18	1	-	
96533M	19	14	32	16	65	0.21	1	-	-
96534M	20	14	32	16	65	0.21	1	-	-
96535M	21	14	32	16	66	0.21	1	-	-
96536M	22	15	32	16	66	0.26	1	-	
96537M	24	15	32	16	70	0.26	1	-	-
96538M	27	16	32	16	70	0.3	1	-	-
96551M	22	15	56	22	70	0.35	1	-	-
96552M	24	15	56	22	93	0.33	1	-	-
96553M	27	17	56	22	93	0.37	1	-	
96554M	30	17	56	22	101	0.35	1	-	-
96555M	32	20	56	22	101	0.42	1	-	-
96556M	34	20	56	22	105	0.42	1	-	-
96557M	36	20	56	22	105	0.39	1	-	-
96558M	41	22	56	22	112	0.56	1	-	-
96559M	46	22	56	22	112	0.52	1	-	-

### **Torque Wrench Ratcheting Head**

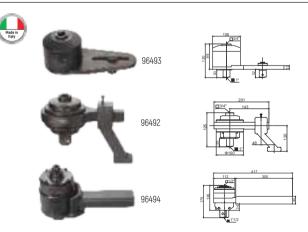


- •Torque wrench head easy to change, suitable for narrow space with tight bolt connection
- Made of hot-forged Cr-V with chrome-plated surface
- · Capable of bolt tripping

No.	Driving Head	Active Tip Width A(mm)		C .	Connector Ф(mm)			#	8	ā
96562	3/8"	35	15	32	16	70	0.17	1	-	-
96563	1/2"	44	35	32	16	70	0.27	1	-	-
96564	3/4"	69	30	56	22	70	0.95	1	-	-

▲ Excluded from lifetime warranty terms.

### **Torque Multiplier**



Note: the conversion ratio in the table is for selection reference only. The actual ratio is subject to the certificate attached to each product.

No.	Maximum Input Torque (N.m)	Maximum Output Torque (N.m)	Gear Ratio	Input Terminal Square Drive Size	Output Terminal Square Drive Size	L (mm)	Diameter (mm)	H (mm)	Weight (kg)	#	¥	
96491	280	1500	1:6	1/2"	3/4"	128	100	105	4.9	-	1	6.2
96492	500	2300	1:5.4	3/4"	1"	221	100	126	6.4	-	1	7.9
96493	777	3100	1:4.5	3/4"	1"	264	108	130	7.3	-	1	9.8
96494	225	4000	1:20	1/2"	1-1/2"	312	120	204	8.3	-	1	16.7
96495	230	5300	1:26	1/2"	1-1/2"	333	130	216	15.7	-	1	21.5

▲ Excluded from lifetime warranty terms.













































































### **Super Lightweight Torque Multiplier**



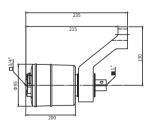
Note: the conversion ratio in the table is for selection reference only. The actual ratio is subject to the certificate attached to each product

No.	Maximum Input Torque (N.m)	Maximum Output Torque (N.m)	Gear Ratio	Input Terminal Square Drive Size	Output Terminal Square Drive Size	Diameter (mm)	H (mm)	Weight (kg)	#	\$	M
96496	80	1000	1:12.5	1/2"	3/4"	75	120	3.2	-	1	5.5
96497	182	2000	1:12.5	1/2"	1"	75	124	3.4	-	1	5.5

▲ Excluded from lifetime warranty terms.

### **Portable Lightweight Torque Multiplier**

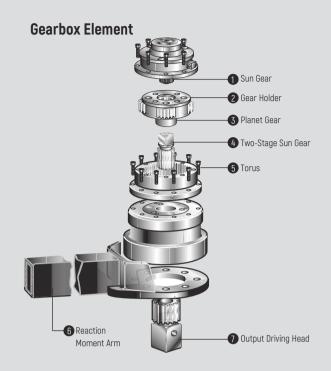




Note: the conversion ratio in the table is for selection reference only. The actual ratio is subject to the certificate attached to each product

No.	Maximum Input Torque (N.m)	Maximum Output Torque (N.m)	Gear Ratio	Input Terminal Square Drive Size	Output Terminal Square Drive Size	Diameter (mm)	H (mm)	Weight (kg)	#	8	Ø
96498	215	2800	1:13	1/2"	1"	95	200	5.2	-	1	10.7
96499	292	3800	1:13	3/4"	1"	95	200	5.2	-	1	4

▲ Excluded from lifetime warranty terms.







Gearbox and torque increase force, with the same principle as a spring!



The multiplier produces maximum torque only when the spring is at its tightest.

# **Hex Key Wrench**

95-101	Hex Key Set	
101-106	Square Male Hex Key	
101-105	Ball Male Hex Key	
103	Tamper Torx® Hex Key	
105	T-Shape Hex Key	<b>A</b>
105-106	Big Hex Key	































# **Hex Key Wrench**

### 9Pc. Extra Long Ball Point Hex Key Set



- New SVCM+ material for higher torque
- Hex key holder specially designed for easy inserting & removing and long-time operation
- · Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	#	8	M
09101	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	36	18.8

▲ Warranty terms of tool set comply with the individual product.

- Material: S2 • Fully polished surface plated with chrome
- · Butterfly socket for easy holding

No	0.	Spec.	$\Theta$	8	ā
09		1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	-	36	20.9

A Warranty terms of tool set comply with the individual product.

09104 12Pc. Extra Long Hex Key Set, SAE

### 12Pc. Extra Long Ball Point Hex Key Set, SAE



- Material: S2
- Fully polished surface with chrome plated
- · Butterfly socket for easy holding

No.	Spec.	$\Theta$	8	M
09102	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	6	36	20.8

▲ Warranty terms of tool set comply with the individual product.

### 9Pc. Long Arm Ball Point Hex Key Set



- New SVCM+ material for higher torque
- Hex key holder specially designed for easy inserting & removing and long-time operation
- · Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	#	8	ā
09105	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	36	15.4

▲ Warranty terms of tool set comply with the individual product.

### 09103 9Pc. Extra Long Hex Key Set



- New SVCM+ material for higher torque
- Hex key holder specially designed for easy inserting & removing and long-time operation
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	#	8	<b>T</b>
09103	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	36	18.9

▲ Warranty terms of tool set comply with the individual product.

### 12Pc. Long Arm Ball Point Hex Key Set, SAE



- Material: S2
- Fully polished surface plated with chrome
- · Butterfly socket for easy holding

No.	Spec.	$\Theta$	8	ā
09106	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	6	36	16.7

## 09107 9Pc. Long Arm Hex Key Set



- New SVCM+ material for higher torque
- Hex key holder specially designed for easy inserting & removing and long-time operation
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	¥	M
09107	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	36	15.6

▲ Warranty terms of tool set comply with the individual product.

### 09108 12Pc. Long Arm Hex Key Set, SAE



- Material: S2
- Fully polished surface plated with chrome
- · Butterfly socket for easy holding

No.	Spec.	$\Theta$	8	ð
09108	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	-	36	16.9

▲ Warranty terms of tool set comply with the individual product.

## 09119 8Pc. Mini Hex Key Set





• Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)		T	<b>5</b>
09119	0.7, 0.9, 1.3, 1.5, 2, 2.5, 3, 4	24	192	7.1

▲ Warranty terms of tool set comply with the individual product.

### 09121 8Pc. Folding Hex Key Set



- New ergonomic handle for higher torque output
- · Material: Cr-V (chrome-vanadium steel)

No	).	Spec. (mm)	$\Theta$	¥	ð
09	121	1.5, 2, 2.5, 3, 4, 5, 6, 8	6	24	5

▲ Warranty terms of tool set comply with the individual product.

### 09122 9Pc. Folding Hex Key Set, SAE



- New ergonomic handle for higher torque output
- Material: Cr-V (chrome-vanadium steel)

No.	Spec.	$\Theta$	8	ā
09122	1/4", 7/32", 3/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"	6	24	4.6

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 09123 8Pc. Folding Tamper-Proof Torx® Key Set





- New ergonomic handle for higher torque output
- · Material: Cr-V (chrome-vanadium steel)

No.	Spec.		¥	M
09123	TT9, TT10, TT15, TT20, TT25, TT27, TT30, TT40	6	24	4.6







































































### 09701 8Pc. Long Arm Tamper-Proof Torx® Key Set



- Made of S2 alloy steel with tamper and quenching treatment
- Chrome-plated mist surface for elegance and rust protection
- · Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance

No.	Spec.	$\Theta$	8	M
09701	TT6, TT7, TT8, TT9, TT10, TT15, TT20, TT25	-	12	1.1

▲ Warranty terms of tool set comply with the individual product.

## 09702 9Pc. Long Arm Tamper-Proof Torx® Key Set



- Made of S2 alloy steel with tamper and quenching treatment
- Chrome-plated mist surface for elegance and rust protection
- Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance

No.	Spec.	$\mathcal{B}$	8	ā
09702	TT10, TT15, TT20, TT25, TT27, TT30, TT40, TT45, TT50	6	48	17.6

▲ Warranty terms of tool set comply with the individual product.

### 09124 9Pc. Extra Long Ball Point Hex Key Set



- New torque extention bar for convenience and comfort
- New SVCM+ material for higher torque
- · Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	¥	M
09124	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	24	16.1

▲ Warranty terms of tool set comply with the individual product.

### 09109 7Pc. Extra Long Ball Point Hex Key Set



- New SVCM+ material for higher torque
- Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	8	M
09109	1.5, 2, 2.5, 3, 4, 5, 6	12	72	13.2

▲ Warranty terms of tool set comply with the individual product.

### 09111 7Pc. Extra Long Hex Key Set

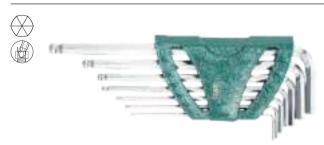


- New SVCM+ material for higher torque
- Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	8	<u></u>
09111	1.5, 2, 2.5, 3, 4, 5, 6	12	72	12.1

▲ Warranty terms of tool set comply with the individual product.

### 7Pc. Long Arm Ball Point Hex Key Set



- New SVCM+ material for higher torque
- •Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	8	<u></u>
09113	1.5, 2, 2.5, 3, 4, 5, 6	12	72	10.9

## 09115 7Pc. Long Arm Hex Key Set



- New SVCM+ material for higher torque
- Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	$\square$	8	M
09115	1.5, 2, 2.5, 3, 4, 5, 6	12	72	11

▲ Warranty terms of tool set comply with the individual product.

### 09125 7Pc. Ball Point Hex Key Set







- New SVCM+ material for higher torque
- •Inner hexagon socket for convenience and steadiness
- · Book-shaped socket with novel appearance
- Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	*	ō
09125	1.5, 2, 2.5, 3, 4, 5, 6	12	72	9.2

▲ Warranty terms of tool set comply with the individual product.

### 







- New SVCM+ material for higher torque
- Inner hexagon socket for convenience and steadiness
- Book-shaped socket with novel appearance
- Fully polished surface plated with chrome

No.	Spec. (mm)	$\Theta$	8	<b></b>
09127	1.5, 2, 2.5, 3, 4, 5, 6	12	72	9.1

▲ Warranty terms of tool set comply with the individual product.

### 09117 9Pc. T-Handle Ball Point Hex Key Set









- New SVCM+ material for high wear resistance and torque
- New ergonomic handle for comfort
- New mirror polished surface, preventing oil penetration, and being elegant and durable

No.	Spec. (mm)	$\Theta$	¥	ā
09117	2, 2.5, 3, 4, 5, 6, 7, 8, 10	1	6	9.2

▲ Warranty terms of tool set comply with the individual product.

### 09118 9Pc. T-Handle Hex Key Set



- New SVCM+ material for high wear resistance and torque
- New ergonomic handle for comfort
- New mirror polished surface, preventing oil penetration, and being elegant and durable

No.	Spec. (mm)	$\Theta$	8	<u></u>
09118	2, 2.5, 3, 4, 5, 6, 7, 8, 10	1	6	9.2







































## 09101CH 9Pc. Antislip Extra Long Arm Ball Point Hex Key Set

### 09103CH 9Pc. Antislip Extra Long Arm Hex Key Set





- Colored sheath for guick identification, oil resistant and anti-slip.
- Special surface treatment to ensure dimensional accuracy.
- · Soft plastic holder, comfortable to hold, not easy to damage or break.

No.	Spec. (mm)	$\Theta$	8	M
09101CH	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	36	18.7

▲ Warranty terms of tool set comply with the individual product.

- Colored sheath for quick identification, oil resistant and anti-slip.
- Special surface treatment to ensure dimensional accuracy.
- · Soft plastic holder, comfortable to hold, not easy to damage or break.

No.	Spec. (mm)		8	<u></u>
09103CH	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	36	18.7

▲ Warranty terms of tool set comply with the individual product.

## ip Extra Long Arm Ball Point Hex Ke







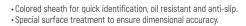












No.	Snac (mm)	Short side length (mm)	Long side length (mm)	<del></del>		
IVU.	Spec. (IIIII)	Short side length (min)	Long side length (min)			701
80104CH	1.5	15.5	91.5	120	720	2.5
80105CH	2	18	102	120	720	3.75
80106CH	2.5	20.5	114.5	80	640	6.8
80107CH	3	23	129	80	640	8.1
80108CH	4	29	144	80	640	13.9
80110CH	5	33	165	50	500	18
80112CH	6	38	186	50	300	16.45
80114CH	8	44	208	25	100	10.9
80116CH	10	50	234	25	100	18.8

▲ Warranty terms of tool set comply with the individual product.

- Colored sheath for quick identification, oil resistant and anti-slip.
- · Special surface treatment to ensure dimensional accuracy.
- · Soft plastic holder, comfortable to hold, not easy to damage or break.

No.	Spec.	$\Theta$	8	ā
09702CH	T10, T15, T20, T25, T27, T30, T40, T45, T50	6	36	20

▲ Warranty terms of tool set comply with the individual product.

### 09110 10Pc. Long Arm Hex Key Set



- New SVCM+ material for higher torque
- •Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)		8	M
09110	2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10	6	36	22

## 09112 10Pc. Long Arm Ball Point Hex Key Set



- New SVCM+ material for higher torque
- Inner hexagon socket for convenience and steadiness
- Butterfly socket with novel appearance
- · Fully polished surface plated with chrome

No.	Spec. (mm)	#	*	ā
09112	2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10	6	36	22

▲ Warranty terms of tool set comply with the individual product.

### 09103A 9Pc. Extra Long Hex Key Set





- · Mist surface plated with chrome
- · Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	$\Theta$	¥	ā
09103A	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	48	26.1

▲ Warranty terms of tool set comply with the individual product.

### 



- Made of Cr-V for good wear resistance and long service life
- Subjected to CNC processing for accuracy
- Chrome-plated mist surface for elegance and rust protection
- Sliding plastic bracket for easily picking and placing wrench

No.	Spec. (mm)	$\Theta$	¥	ā
09128	1.5,2,2.5,3,4,5,6,8,10	6	24	11.8

▲ Warranty terms of tool set comply with the individual product.

### 09105A 9Pc. Long Arm Ball Point Hex Key Set



- Mist surface plated with chrome
- Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	$\Theta$	8	ā
09105A	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	48	20.6

▲ Warranty terms of tool set comply with the individual product.

### 09101A 9Pc. Extra Long Ball Point Hex Key Set



- Mist surface plated with chrome
- Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	$\Theta$	8	ð
09101A	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	48	26.1

▲ Warranty terms of tool set comply with the individual product.

### 09107A 9Pc. Long Arm Hex Key Set



- Mist surface plated with chrome
- Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	$ \Theta $	*	<u> </u>
09107A	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	6	48	21.4







































































### 09141 14Pc. Long Arm Ball Point Hex Key Set



- Common specifications in construction machinery industry available, with iron box, being portable and easy for storage
- New SVCM + material for high wear resistance and torque
- Elegant and durable new mirror polished surface for preventing oil penetration

No.	Spec. (mm)		8	M
09141	1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 7, 8, 10, 12, 14, 17	4	8	18.4

▲ Warranty terms of tool set comply with the individual product.

### 9Pc. Extra Long Arm Ball Point Torx® Key Set





### 09143 14Pc. Long Arm Hex Key Set



- Common specifications in construction machinery industry available, with iron box, being portable and easy for storage
- New SVCM + material for high wear resistance and torque
- Elegant and durable new mirror polished surface for preventing oil penetration

No.	Spec. (mm)	$\Theta$	8	ā
09143	1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 7, 8, 10, 12, 14, 17	4	8	18.5

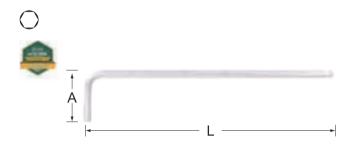
▲ Warranty terms of tool set comply with the individual product.

- Chrome-plated mist surface for elegant and rust protection
- Made of S2 alloy steel and subject to quenching treatment
- · Ball point head for tilting operation

No.	Spec.	$\Theta$	8	ā
09716	T10,T15,T20,T25,T27,T30,T40,T45,T50	6	36	17.8

▲ Warranty terms of tool set comply with the individual product.

### 9pc G-series Extra Long Ball Point Hex Key Set



### 09715 9Pc. Long Arm Ball Point Torx® Key Set



- Chrome-plated mist surface for elegant and rust protection
- Made of S2 alloy steel and subject to quenching treatment
- Ball point head for tilting operation

No.	Spec.	#	8	M
09715	T10,T15,T20,T25,T27,T30,T40,T45,T50	6	36	13.3

▲ Warranty terms of tool set comply with the individual product.

- Made of Cr-V for good wear resistance and long service life
- Subjected to CNC processing for accuracy
- Chrome-plated mist surface for elegance and rust protection

No.	Spec. (mm)	L(mm)	A(mm)	#	8	Ā
80204	1.5	90	16	36	2016	5.8
80205	2	101	19	36	2016	7.8
80206	2.5	113	21	36	2016	13.9
80207	3	128	23	18	936	11.1
80208	4	142	29	18	936	19.5
80210	5	163	33	18	450	15.8
80212	6	184	38	18	360	19.6
80213	7	195	39	18	180	15
80214	8	205	44	12	96	10.9
80216	10	231	50	12	96	18.2

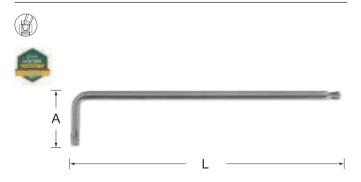
### Long Arm Ball Point Torx® Key



- Chrome-plated mist surface for elegant and rust protection
- Made of S2 alloy steel and subject to quenching treatment
   Ball point head for tilting operation

No.	Spec.	L(mm)	A(mm)	$\Theta$	¥	ā
84604	T10	89.0	20.0	72	864	7
84605	T15	93.5	21.5	72	864	9
84606	T20	99.0	23.0	72	432	5.8
84607	T25	104.5	24.5	72	432	7.5
84608	T27	110.1	26.1	72	432	9.8
84609	T30	120.0	30.0	72	432	14.1
84610	T40	131.0	33.0	72	288	13.9
84611	T45	141.0	37.0	36	144	9.8
84612	T50	161.0	41.0	36	144	13.8

### Extra Long Ball Point Torx® Key

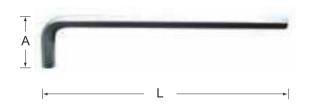


- Chrome-plated mist surface for elegant and rust protection
- Made of S2 alloy steel and subject to quenching treatment
   Ball point head for tilting operation

No.	Spec.	L(mm)	A(mm)	$\Theta$	8	<u>™</u>
84704	T10	93	20	72	864	7.2
84705	T15	103.5	21.5	72	864	9.5
84706	T20	116	23	72	432	6.5
84707	T25	130.5	24.5	72	432	9.4
84708	T27	145.1	30.1	72	432	12.8
84709	T30	166	34	72	432	19.7
84710	T40	187	39	72	288	19.2
84711	T45	208	44	36	144	14.4
84712	T50	233	49	36	144	20

### **Extra Long Hex Key**





- Chrome-plated mist surface
- Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	L(mm)	A(mm)	#	8	ā
80304A	1.5	91	14	72	864	2.8
80305A	2	100	17	72	864	4.1
80306A	2.5	113	20	72	432	3.3
80307A	3	127	21	36	432	5.2
80308A	4	143	28	36	432	9.4
80310A	5	164	32	36	144	5.6
80312A	6	185	35	36	144	8.5
80313A	7	195	39	36	144	11.2
80314A	8	208	43	18	72	7.9
80316A	10	231	47	18	72	13.4

▲ Excluded from lifetime warranty terms.

### **Long Arm Hex Key**



- Chrome-plated mist surface Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	L(mm)	A(mm)	$\Theta$	8	ā
81304A	1.5	62.5	14.5	72	864	3
81305A	2	76	17	72	864	4.1
81306A	2.5	85.5	19.5	72	432	4.6
81307A	3	91	22	36	432	4.9
81308A	4	102	28	36	432	7.6
81310A	5	118	32	36	144	4.6
81312A	6	139	37	36	144	6.5
81313A	7	145	39	36	144	10.4
81314A	8	156	43	18	72	6.8
81316A	10	168	49	18	72	10.7



































































### **Hex Key**



- Chrome-plated mist surface
- Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	L(mm)	A(mm)	#	¥	ā
82304A	1.5	45.5	14.5	72	864	2.3
82305A	2	51	17	72	864	2.5
82306A	2.5	56.5	19.5	72	432	2.1
82307A	3	64	22	36	432	3.1
82303A	3.5	67.5	24.5	36	432	4.6
82308A	4	72	28	36	432	5.6
82310A	5	83	32	36	144	3.1
82312A	6	94	37	36	144	5.2
82313A	7	100	39	36	144	7.5
82314A	8	106	43	18	72	4.7
82316A	10	120	49	18	72	7.7

▲ Excluded from lifetime warranty terms.

### **Extra Long Ball Point Hex Key**

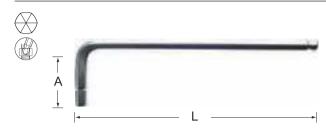


- Chrome-plated mist surface Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	L(mm)	A(mm)	$\Theta$	¥	ā
80104A	1.5	91	14	72	864	3.1
80105A	2	100	17	72	864	4.5
80106A	2.5	113	20	72	432	4.6
80107A	3	127	21	36	432	5.5
80108A	4	143	28	36	432	9.4
80110A	5	164	32	36	144	5.2
80112A	6	185	35	36	144	7.9
80113A	7	195	39	36	144	11.8
80114A	8	208	43	18	72	7.9
80116A	10	231	47	18	72	13.6

▲ Excluded from lifetime warranty terms.

### **Long Arm Ball Point Hex Key**



- · Chrome-plated mist surface
- Material: Cr-V (chrome-vanadium steel)

No.	Spec. (mm)	L(mm)	A(mm)	#	¥	Ā
81104A	1.5	62.5	14.5	72	864	3.3
81105A	2	76	17	72	864	4.1
81106A	2.5	85.5	19.5	72	432	3.3
81107A	3	91	22	36	432	4.9
81108A	4	102	28	36	432	7.2
81110A	5	118	32	36	144	4.6
81111A	5.5	128.5	34.5	36	144	5.4
81112A	6	139	37	36	144	7
81113A	7	145	39	36	144	9.6
81114A	8	156	43	18	72	6.6
81116A	10	168	49	18	72	11

▲ Excluded from lifetime warranty terms.

### Long Arm Tamper-Proof Torx® Key





• Made of S2 alloy steel with tamper

No.	Spec.	L(mm)	A(mm)	$\Theta$	8	<u>™</u>
84501	TT6	72	18.5	72	864	4.9
84502	TT7	76.5	18.5	72	864	5.2
84503	TT8	80.5	18.5	72	864	5.4
84504	TT9	85	19	72	864	6.8
84505	TT10	89	20	72	864	7.2
84506	TT15	93.5	21.5	72	864	9.1
84507	TT20	99	23	72	432	7.1
84508	TT25	104.5	24.5	72	432	8.9
84509	TT27	110	27	72	432	10.5
84510	TT30	119.5	29.5	72	432	13.2
84511	TT40	131	33	72	288	14.2
84512	TT45	141	37	36	144	10.2
84513	TT50	161	41	36	144	14.4
84514	TT55	182.5	46.5	36	72	13
84515	TT60	203.5	51.5	18	36	10

### **Hex Key**



• New SVCM+ material for higher torque, with chamfered end for easy nut inserting

No.	Spec. (mm)	L(mm)	A(mm)	$\Theta$	8	ā
82304	1.5	46	15	72	864	1.2
82305	2	51.5	17.5	72	864	1.9
82306	2.5	58	20	72	432	1.6
82307	3	65.5	22.5	36	432	2.8
82303	3.5	69	25	36	432	3.7
82308	4	73.5	28.5	36	432	5
82310	5	84.5	32.5	36	144	2.9
82312	6	95.5	37.5	36	144	4.6
82313	7	101.5	40.5	36	144	6.5
82314	8	107.5	43.5	18	72	4.7
82316	10	121.5	49.5	18	72	7.8

### **Ball Point Hex Key**



• New SVCM+ material for higher torque, with chamfered end for easy nut inserting

No.	Spec. (mm)	L(mm)	A(mm)	$\Theta$	8	ō
82104	1.5	46	15	72	864	1.2
82105	2	51.5	17.5	72	864	1.9
82106	2.5	58	20	72	432	1.9
82107	3	65.5	22.5	72	432	2.4
82108	3.5	69	25	72	432	3.4
82109	4	73.5	28.5	72	432	4.7
82111	5	84.5	32.5	36	144	2.8
82113	6	95.5	37.5	36	144	4.6
82115	7	101.5	40.5	36	144	6.4
82117	8	107.5	43.5	18	72	4.7
82119	10	121.5	49.5	18	72	8

### **Long Arm Hex Key**



• New mirror polished surface, preventing oil penetration, and being elegant and durable
• New SVCM+ material for higher torque, with chamfered end for easy nut inserting

No.	Spec. (mm)	L(mm)	A(mm)	8	8	<b>T</b>
81304	1.5	78.5	15	72	864	1.7
81305	2	84	17.5	72	864	2.9
81306	2.5	91	20	72	432	2.2
81307	3	101.5	22	36	432	3.9
81308	4	108	28	36	432	6.8
81310	5	121	32	36	144	3.8
81311	5.5	132	34.5	36	144	4.9
81312	6	144	37	36	144	6.4
81313	7	155	40	36	144	9.1
81314	8	166	43	18	72	6.6
81315	9	174	46	18	72	9.4
81316	10	177	49	18	72	10.6
81318	12	221	56	12	48	12.7
81320	14	247	68.5	12	24	9.8
81323	17	263	78.5	12	24	15.4

### **Long Arm Ball Point Hex Key**



• New mirror polished surface, preventing oil penetration, and being elegant and durable
• New SVCM+ material for higher torque, with chamfered end for easy nut inserting

No.	Spec. (mm)	L(mm)	A(mm)	#	8	ā
81104	1.5	78.5	15	72	864	1.7
81105	2	84	17.5	72	864	2.8
81106	2.5	91	20	72	432	2.2
81107	3	101.5	22	36	432	3.9
81108	4	108	28	36	432	6.7
81110	5	121	32	36	144	3.8
81111	5.5	132	34.5	36	144	5.1
81112	6	144	37	36	144	6.4
81113	7	155	40	36	144	9
81114	8	166	43	18	72	6.6
81115	9	174	46	18	72	9.4
81116	10	177	49	18	72	10.6
81118	12	221	56	12	48	12.6
81120	14	247	68.5	12	24	9.7
81123	17	263	78.5	12	24	15.1



































































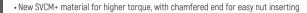






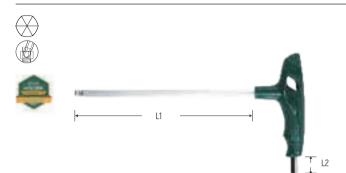
### **Extra Long Ball Point Hex Key**





No.	Spec. (mm)	L(mm)	A(mm)		8	Ī
80104	1.5	90.5	14.5	72	864	1.9
80105	2	101	17	72	864	3.1
80106	2.5	113.5	19.5	72	432	2.6
80107	3	128	22	36	432	4.7
80108	4	143	28	36	432	8.3
80110	5	164	32	36	144	4.8
80112	6	185	37	36	144	7.7
80113	7	196	40	36	144	11
80114	8	207	43	18	72	7.8
80116	10	233	49	18	72	13.2

### **T-Handle Ball Point Hex Key**



- New SVCM+ material for higher torque, with chamfered end for easy nut inserting
   New ergonomic handle with two holding ways available

No.	Spec. (mm)	L1(mm)	L2(mm)		8	ā
83105	2	100	13	12	144	5.2
83106	2.5	100	13	12	144	5.6
83107	3	100	13	12	144	6.1
83108	4	150	13	12	144	8.4
83110	5	150	17	12	144	10.5
83112	6	150	17	12	72	10.5
83113	7	200	17	12	72	9.4
83114	8	200	17	12	72	15.6
83116	10	200	22	12	72	16.1

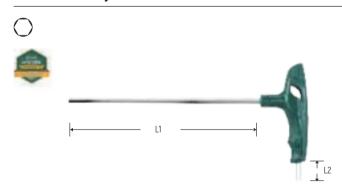
### **Extra Long Hex Key**



• New SVCM+ material for higher torque, with chamfered end for easy nut inserting

No.	Spec. (mm)	L(mm)	A(mm)		8	$\overline{\otimes}$
80304	1.5	90.5	14.5	72	864	1.9
80305	2	101	17	72	864	3
80306	2.5	113.5	19.5	72	432	2.6
80307	3	128	22	36	432	4.6
80308	4	143	28	36	432	8.4
80310	5	164	32	36	144	4.9
80312	6	185	37	36	144	7.8
80313	7	196	40	36	144	11
80314	8	207	43	18	72	7.9
80316	10	233	49	18	72	13.4

### **T-Handle Hex Key**



- New SVCM+ material for higher torque, with chamfered end for easy nut inserting
- New ergonomic handle with two holding ways available

n) L1(mm)	( )			
, [[[[]]]]	L2(mm)		8	M
100	13	12	144	5.2
100	13	12	144	5.6
100	13	12	144	6.1
150	13	12	144	8.9
150	17	12	144	10.5
150	17	12	72	10.5
200	17	12	72	9.3
200	17	12	72	15.9
200	22	12	72	16.5
	150 200 200	150 17 200 17 200 17	150     17     12       200     17     12       200     17     12       200     17     12	150     17     12     72       200     17     12     72       200     17     12     72       200     17     12     72

### **Black Plated Hex Key**



- Made of Cr-V and subject to quenching, with chamfered end for easy nut inserting
   12mm-27mm large hexagon wrench
   Polished and blackened surface

No.	Spec. (mm)	L(mm)	A(mm)	$\blacksquare$	*	M
84318	12	221	56	12	48	12.7
84320	14	247	68.5	12	24	9.8
84321	16	256	74.5	12	24	13.2
84322	18	279	82.5	12	24	18.2
84323	17	263	78.5	12	24	15.3
84324	19	295	87.5	-	10	18.3
84325	22	352	100	10	20	17.9
84328	24	394	112	-	12	16.5
84329	27	437	124.5	-	6	15.6
84332	30	480	135	-	4	13.9
84334	32	502	152	-	4	17
84338	36	526	171	-	2	11.4

### **Black Plated Hex Key**







- 7/16"-3/4" Large SAE Hex Keys
   Made of Cr-V and subject to quenching, with chamfered end for easy nut inserting
   Polished and black oxide surface

No.	Spec.	L(mm)	A(mm)	$\Theta$	8	ā
84413	7/16"	199.1	47.1	12	48	9.9
84414	1/2"	219.7	52.2	12	48	13.8
84415	9/16"	240.3	56.8	6	24	9.7
84416	5/8"	260.9	62.4	6	24	12.9
84417	3/4"	301	71.5	6	24	20.7





































# **Screwdriver & Bits**

	Screwdriver Set	108-111
	Ratcheting Screwdriver	110-112
G	G-series Screwdriver	113
T	T-series Screwdriver	114-115
A	A-series Screwdriver	116-117
	Impact Screwdriver	117
	Bit Set	117-119
8mm	8mm Dr. Bit	122-124
	Bit Accessories	125
6.3mm	6.3mm Dr. Bit	119-127

## **Screwdriver & Bits**

### A Series Screwholding Screwdriver, Slotted



- Screw clamping function for tightening non-magnetic screws with one hand in a narrow space
- Shank made from imported SVCM+ material and subjected to heat treatment for higher torque
   High-strength nylon socket for longer service life
- Ergonomic push-pull knob for easy operation
- Handle made from engineering acetic acid material with stronger impact resistance and better oil resistance

No.	Spec. (mm)	L(mm)	$\Theta$	8	M
62250	4×125	236	12	120	13.5
62251	5×150	261	12	120	15.6
62252	6×175	286	12	120	18.5

### 09305 8Pc. A Series Screwdriver Set, Torx® Tips



No.	Spec.	$\Theta$	¥	ā
09305	Torx Screwdriver T8'75mm, T10*100mm, T15*100mm, T20*100mm, T25*100mm, T27*100mm, T30*100mm, T40*100mm	-	5	6.2

▲ Warranty terms of tool set comply with the individual product.

### A Series Screwholding Screwdriver, Phillips



- Screw clamping function for tightening non-magnetic screws with one hand in a narrow space
   Shank made from imported SVCM+ material and subjected to heat treatment for higher torque
   High-strength nylon socket for longer service life

- Ergonomic push-pull knob for easy operation

  Handle made from engineering acetic acid material with stronger impact resistance and better oil resistance

No.	Spec. (mm)	L(mm)	#	8	<u></u>
62350	PH0×125	236	12	120	13.4
62351	PH1×125	236	12	120	15.7
62352	PH2×175	286	12	120	18.3

### 09306 8Pc. A Series Screwdriver Set, Slotted & Phillips Tips



No.	Spec.	$\Theta$	8	M
09306	Phillips Screwdriver (#1*75mm, #2*38mm, #2*100mm, #2*150mm) Slotted Screwdriver (6*38mm, 5*75mm, 6*100mm, 6*150mm)	-	5	6.1

▲ Warranty terms of tool set comply with the individual product.

### 09304E 10Pc. Screwdriver Set



No.	Spec.	$\Theta$	8	M
09304E	Phillips Screwdriver #1x100mm, #2x38mm, #2x100mm, #2x150mm, #3x150mm, Slotted Screwdriver 5x75mm, 6x38mm, 6x100mm, 6x150mm, 8x150mm	0	4	9

▲ Warranty terms of tool set comply with the individual product.

### 09309 6Pc. T Series Screwdriver Set, Slotted & Phillips Tips



No.	Spec.	$\Theta$	8	$\overline{\otimes}$
09309	Slotted Screwdriver with Rubber Handle (5*75mm, 5*100mm, 6*150mm) Phillips Screwdriver Set with Rubber Handle (#1*75mm, #2*100mm, #2*150mm)	-	6	7.6

▲ Warranty terms of tool set comply with the individual product.













































### 09334 **5Pc. G Series Screwdriver Set, Slotted & Phillips Tips**





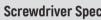
- Through automatic plastic injection, the tri-color handle offers high accuracy and comfortable grip
- The ergonomic designed triangular handle offers higher torque outputs and better anti-impact
- Made of Cr-V-Mo material, the blade offers high hardness and tenacity with more durability and longer lifecycle
- Manganese phosphate plated blade tip offers accurate dimensions and good antirust feature

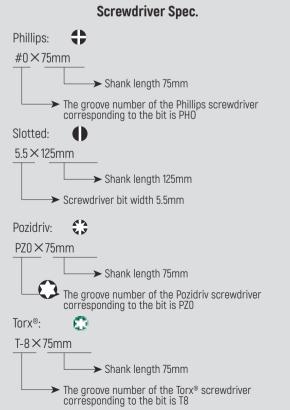
- Please check before using to avoid split handle and ensure the blade without deformed or broken
- · Please clean the oil on blade tip to avoid slip when using
- Please select proper specification according to the screw size to avoid breaking the screwdriver or
- · Can not be used as pry bar, chisel nor impact driver

No.	Product Name	No.	Product Name
63701	G Series Screwdriver, Slotted 3x80mm	63611	G Series Screwdriver, Phillips #1x80mm
63717	G Series Screwdriver, Slotted 5x100mm	63603	G Series Screwdriver, Phillips #2x100mm
63704	G Series Screwdriver, Slotted 6x150mm		

No.	#	8	<u></u>
09334	-	4	2.1

▲ Warranty terms of tool set comply with the individual product.







### **SATA Ratcheting Screwdriver**



Rear cover of SATA 6001 standard ratcheting screwdriver handle capable of storing up to 12 6.3MM replacement



Ergonomic T-shaped ratcheting screwdriver handle for comfort



Ultra-short ratcheting screwdriver for use in narrow spaces



Efficiency improved by 40% with SATA ratcheting screwdriver compared with traditional SATA hand screwdriver



Various accessories and extension rods for various conditions and angles







- Through automatic plastic injection, the tri-color handle offers high accuracy and comfortable grip feeling
- The ergonomic designed triangular handle offers higher torque outputs and better anti-impact features
- Made of Cr-V-Mo material, the blade offers high hardness and tenacity with more durability and longer lifecycle
- Manganese phosphate plated blade tip offers accurate dimensions and good antirust feature

### Note:

- Please check before using to avoid split handle and ensure the blade without deformed or broken
- Please clean the oil on blade tip to avoid slip when using
- Please select proper specification according to the screw size to avoid breaking the screwdriver or screw
- Can not be used as pry bar, chisel nor impact driver

No.	Product Name	No.	Product Name
63716	G Series Screwdriver, Slotted 5x80mm	63611	G Series Screwdriver, Phillips #1x80mm
63703	G Series Screwdriver, Slotted 6x100mm	63603	G Series Screwdriver, Phillips #2x100mm
63706	G Series Screwdriver, Slotted 8x150mm	63606	G Series Screwdriver, Phillips #3x150mm

No.	#	8	ā
09335	-	4	2.9

▲ Warranty terms of tool set comply with the individual product.

46001 Common Ratcheting Screwdriver Handle



46002 Ultra-Short Ratcheting Screwdriver Handle



46003 T-shaped Ratcheting Screwdriver Handle



6.3mm Dr. Bit Magnetic Extension Rod

46004~46006

6.3mm Socket Extension Rod

46007~46009

46012 6.3mm Flex Socket Extension Rod

### 09341 24Pc. T-handle Ratcheting Screwdriver Set

T-shaped handle for easy rotation and comfort



- The bi-color handle is made of composite material composed of engineering plastic PP + highgrade elastomer TPR, soft to the touch. T-Handle design for easy rotation and comfortable grip
- Used with 20 kinds of high hardness S2 material bits to provide multiple functions
- Used with a variety of extension bars in more combinations to adapt to various conditions
- Used with 150mm flexible extension bar for operation at different angles
- Made of nylon fabric the tool bag is waterproof and durable, as well is easy to carry

No.	Product Name	No.	Product Name
46003	T-shaped Ratcheting Screwdriver Handle	59281	20pc 6.3mm Bit Set
46008	6.3mm Socket Extension 6"	11914	6.3mm Dr. Bit
46012	6.3mm Flex Socket Extension 6"		

No.	#	***************************************	ā
09341	-	8	5

▲ Warranty terms of tool set comply with the individual product.

### 09342 25Pc. Stubby Ratcheting Screwdriver Set

Short handle for narrow operation space



- The bi-color handle is made of composite material composed of engineering plastic PP + highgrade elastomer TPR, soft to the touch. T-Handle design for easy rotation and comfortable grip
- Used with 20 kinds of high hardness S2 material bits to provide multiple functions
- Used with a variety of extension bars in more combinations to adapt to various conditions
- Used with 150mm flexible extension bar for operation at different angles
- Made of nylon fabric the tool bag is waterproof and durable, as well is easy to carry

No.	Product Name	No.	Product Name
46002	Short Ratcheting Screwdriver Handle	46012	6.3mm Flex Socket Extension 6"
46004	6.3mm Dr. Bit Magnetic Extension Rod 3.5"	59281	20pc 6.3mm Bit Set
46007	6.3mm Socket Extension 3.5"	11914	6.3mm Dr. Bit

No.	$\Theta$	8	<b>\overline{\over</b>
09342	-	8	4.9

▲ Warranty terms of tool set comply with the individual product.





































































### 09343 24Pc. Ratcheting Screwdriver Set

Extended rod with more combination for narrow operation space



- The bi-color handle is made of composite material composed of engineering plastic PP + highgrade elastomer TPR, soft to the touch. T-Handle design for easy rotation and comfortable grip

  - Used with 20 kinds of high hardness S2 material bits to provide multiple functions
- Used with a variety of extension bars in more combinations to adapt to various conditions
- Used with 150mm flexible extension bar for operation at different angles
- Made of nylon fabric the tool bag is waterproof and durable, as well is easy to carry

No.	Product Name	No.	Product Name
46001	Common Ratcheting Screwdriver Handle	46012	6.3mm Flex Socket Extension 6"
46007	6.3mm Socket Extension 3.5"	59281	20pc 6.3mm Bit Set
46008	6.3mm Socket Extension 6"	11914	6.3mm Dr. Bit
46009	6.3mm Socket Extension 10"		

No.	#	8	<u>a</u>
09343	-	6	5.6

▲ Warranty terms of tool set comply with the individual product.

# 09346 16Pc. Interchangeable Screwdriver Set

- 5.0, 6.0 mm
- **4**0, #1, #2
- T10, T15, T20, T25
- Pointed Cone
- N Hook
- L Hook
- C Hook
- Nail Puller
- **Rotational Shear Apparatus**



• Made of imported SVCM material with overall heat treatment, it has good toughness, not easy to break, and with a longer service life. Imported TPV anti-slip soft rubber, oil-resistant, antiscratch, and with better anti-slip performance.

No.	Spec.	$\Theta$	8	ā
09346	Slotted: 5.0mm,6.0mm Phillips: #0,#1,#2 Torx: T10,T15,T20,T26 Pointed Cone, N Hook, L Hook, C Hook, Nail Puller, Rotational Shear Apparatus	6	24	13.1

▲ Warranty terms of tool set comply with the individual product.

### 09345 10Pc. Interchangeable Screwdriver Set

- **3.0, 5.0, 6.0 mm**
- \$\psi\_0, \#1, \#2\$
- Nail Puller
- Pointed Cone
- Rotational Shear **Apparatus**



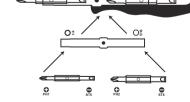
· Made of imported SVCM material with overall heat treatment, it has good toughness, not easy to break, and with a longer service life. Imported TPV anti-slip soft rubber, oil-resistant, antiscratch, and with better anti-slip performance.

No.	Spec.	$\blacksquare$	8	ð
09345	Slotted: 3.0mm,5.0mm,6.0mm Phillips: #0,#1,#3 Nail Puller, Pointed Cone, Rotational Shear Apparatus	6	36	12.8

▲ Warranty terms of tool set comply with the individual product.

### 09347 6-in-1 Interchangeable Screwdriver Set





No.	Spec.	$\Theta$	8	ā
	1pc Nut Driver Available for 5/16" and 1/4" Bits 2pc 75mm Two-Way Bits: 5/16"-ST6*PH2, 1/4"-ST5*PH1	6	48	10.5



4.0, 5.0, 6.0 mm



- •20-teeth high-torque ratchet for high torque
- · 6 different bits available for different requirements

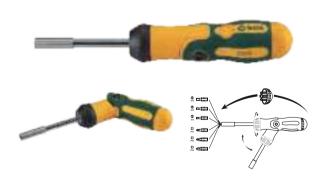
No.	Spec.	$\blacksquare$	8	ā
09348	Slotted: 4mm, 5mm, 6mm Phillips: #1, #2, #3	6	48	7.5

▲ Excluded from lifetime warranty terms.

### 09349 6Pc. Folding Ratcheting Screwdriver Set

4.0, 5.0, 6.0 mm

**4**1, #2, #3



- •20-teeth high-torque ratchet for high torque
- Handle foldable for nearly 90 degrees, effectively increasing the torque output
   Magnetic extension made of stainless steel, facilitating bit replacement
- 6 different bits available for different requirements
- •1pc Foldable Ratchet Handle

No.	Spec.	$\Theta$	8	<u>M</u>
09349	Slotted: 4mm, 5mm, 6mm Phillips: #1, #2, #3	6	48	15

▲ Excluded from lifetime warranty terms.

### Magnetizer/Demagnetizer 64201



Magnetizing: Place the end of the tool to be magnetized into the (+) slot



Demagnetizing: Magnetizing: Place the end of the tool to be demagnetized into the (-) slot



- For magnetizing and demagnetizing screwdriver blade and similar tools made of steel
- Box made of hight quality moulded plastic, impact resistant,cadmium free

No.	$\Theta$	8	ā
64201	10	60	14.4

▲ Excluded from lifetime warranty terms.

### 61004 1/4" Dr. Ratcheting Bit Driver



- Easy to use and carry
- power magnetism

No.	Spec.	$\Theta$	¥	<b>\overline{\over</b>
61004	1/4" Dr.	6	36	9







































































### **G Series Screwdriver, Phillips**



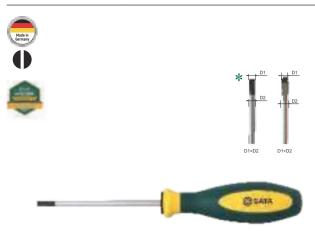


- Handle coated with engineering plastics PP+ advanced elastomer TPR tricolor composite, feeling comfortable and soft
- Ergonomic triangular handle for more comfortable gripping
- Injection-molded trademark for elegant
  Handle molded at one time for safer use
- Front of the handle designed with section to prevent the tool from rolling
- -3-layer injection structure for better impact resistance
   -Shank made of high-performance chrome-vanadium-molybdenum alloy steel, with good hardness and toughness, higher durability and longer service life

  Function end subjected to special phosphating treatment for high accuracy

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	#	¥	ā
63601	#0×60	165	3	10	240	18.6
63608	#0×80	185	3	10	240	18.8
63609	#0×100	205	3	10	240	19.3
63610	#0×150	255	3	10	100	11.6
63611	#1×80	185	4.5	10	100	6.1
63602	#1×100	205	4.5	20	100	17.1
63612	#1×125	230	4.5	10	240	20.8
63613	#1×150	255	4.5	10	100	19.4
63614	#1×200	305	4.5	10	100	17.6
63615	#1×250	355	4.5	5	60	13.6
63616	#1×300	405	4.5	5	60	14.2
63603	#2×100	215	6	20	100	10.6
63604	#2×150	265	6	10	100	20.8
63605	#2×200	315	6	10	80	17.9
63617	#2×250	365	6	5	60	16
63618	#2×300	415	6	5	60	17.8
63606	#3×150	275	8	10	80	14.5
63607	#3×200	325	8	10	80	25.3
63619	#3×250	375	8	5	60	25.5
63620	#3×300	425	8	5	60	15

### **G Series Screwdriver, Slotted**



- Specifications with "\*": Width of the bit and the width of the bit shoulder consistent with the diameter of the shank, facilitating operation the electromechanical box or similar narrow
- Handle coated with engineering plastics PP+ advanced elastomer TPR tricolor composite, feeling comfortable and soft
- · Ergonomic triangular handle for more comfortable gripping
- •Injection-molded trademark for elegant
- Handle molded at one time for safer use
- $\bullet$  Front of the handle designed with section to avoid tool rolling
- 3-layer injection structure for better impact resistance
- Shank made of high-performance chrome-vanadium-molybdenum alloy steel, with good hardness and toughness, higher durability and longer service life
- Function end subjected to special phosphating treatment for high accuracy

No.	Spec. (mm)	L(mm)	T(mm)	Rod Diameter (mm)	#	¥	ā
63708	3.0×60 *	165	0.5	3	10	240	18.4
63701	3.0×80 *	185	0.5	3	10	240	19
63709	3.0×100 *	205	0.5	3	10	240	19
63710	3.0×150 *	255	0.5	3	10	240	10.8
63724	3.5x100 *	205	0.6	3.5	10	-	-
63711	4.5×80 *	185	0.8	4.5	10	100	17.8
63712	4.5×125 *	230	0.8	4.5	10	100	19.9
63713	4.5×200 *	305	0.8	4.5	10	80	14.2
63714	4.5×250 *	355	0.8	4.5	5	60	19.5
63715	4.5×300 *	405	0.8	4.5	5	60	6.6
63716	5.0×80 *	195	0.8	5	10	140	13.8
63717	5.0×100 *	215	0.8	5	10	100	16.1
63718	5.0×150 *	265	0.8	5	10	100	11.1
63702	5.5×125 *	240	1	5.5	10	100	19.7
63719	5.5×200 *	315	1	5.5	10	80	16.1
63720	5.5×250 *	365	1	5.5	5	60	15.7
63721	5.5×300 *	415	1	5.5	5	60	16.9
63703	6.0×100	215	1	5.5	10	100	10.8
63704	6.0×150	265	1	5.5	10	100	19.2
63705	6.0×200	315	1	5.5	10	80	16.4
63722	7.0×250 *	365	1.2	7	5	60	22
63723	7.0×300 *	415	1.2	7	5	60	24
63706	8.0×150	275	1.2	7	10	80	13
63707	8.0×200	325	1.2	7	10	80	22.4
	-						

### **T Series Screwdriver, Phillips**

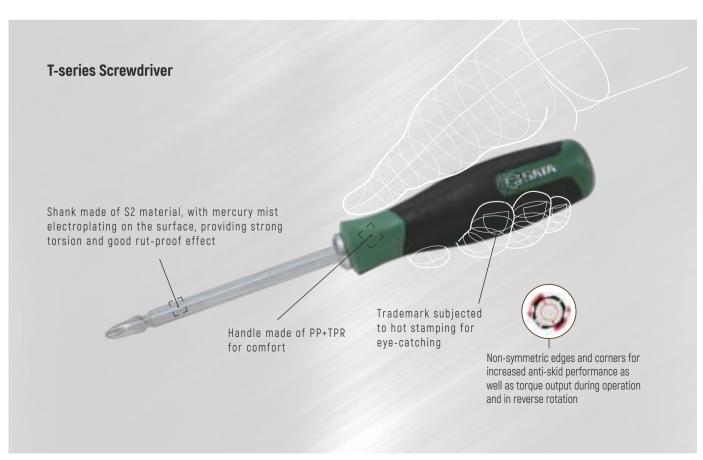
# - Chart

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	$\Theta$	¥	ā
63502	#0×75	171.5	3	12	48	1.8
63503	#0×100	196.5	3	6	36	1.5
63504	#0×150	246.5	3	6	24	1.2
63505	#0×200	296.5	3	12	24	1.2
63507	#1×75	181.5	5	12	48	3.5
63508	#1×100	206.5	5	12	48	3.7
63509	#1×150	256.5	5	6	36	3.3
63510	#1×200	306.5	5	12	24	2.3
63511	#2×38	101	6	6	24	1.5
63512	#2×100	214	6	12	48	5
63513	#2×150	264	6	12	48	5.6
63514	#2×200	314	6	12	48	6.2
63515	#2×250	364	6	6	24	3.7
63516	#3×150	271	8	12	24	4.2
63517	#3×200	321	8	12	24	4.6

### T Series Screwdriver, Slotted



No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	$\Theta$	¥	ā
63402	3×75	171.5	3	12	48	1.8
63403	3×100	196.5	3	12	48	1.9
63404	3×150	246.5	3	6	24	1.2
63405	3×200	296.5	3	12	24	1.1
63407	5×75	181.5	5	12	48	3.5
63408	5×100	206.5	5	12	48	3.7
63409	5×150	256.5	5	6	36	3.3
63410	5×200	306.5	5	12	24	2.3
63411	6×38	101	6	6	24	1.6
63412	6×100	214	6	12	48	5
63413	6×150	264	6	12	48	5.7
63414	6×200	314	6	6	36	4.9
63415	6×250	364	6	6	24	3.7
63416	8×150	271	8	12	24	4.2
63417	8×200	321	8	12	24	4.3































































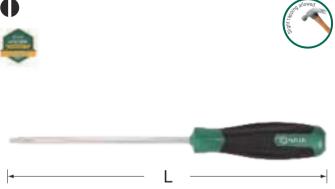








### T Series Go-Through Screwdriver, Slotted



### **T Series Reversible Screwdriver**





- Go-through design for" tapping" the head of the screw
- · Hex shank for better strength

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	#	¥	ē
61603	6×100	213.5	6	6	48	7.4
61605	6×150	263.5	6	6	48	8
61606	8×150	271	8	6	24	5.9
61607	8×200	321	8	6	48	12.9
61608	8×250	371	8	6	48	14.1

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)		¥	ā
66202	#2&6×38	105.5	6.35	6	36	2.5
66203	#1&5×100	214.5	6.35	6	24	2.9
66204	#2&6×100	214.5	6.35	6	24	2.9
66205	#1&5×150	264.5	6.35	6	24	3.2
66206	#2&6×150	264.5	6.35	6	24	3.3

▲ Excluded from lifetime warranty terms.

### T Series Go-Through Screwdriver, Phillips

















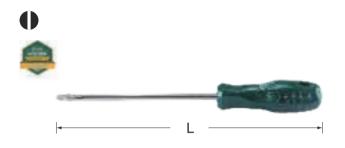


- Go-through design for" tapping" the head of the screw
- · Hex shank for better strength

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)		¥	ā
61703	#2×100	213.5	6	6	48	7.4
61705	#2×150	263.5	6	6	48	8
61706	#3×150	271	8	6	24	6
61707	#3×200	321	8	6	24	6.7
61708	#3×250	371	8	6	24	7.2

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	#	8	ā
61108	T8×75	146	3	12	600	19.6
61101	T10×100	190	5	12	300	20.4
61102	T15×100	190	5	12	300	20.4
61103	T20×100	190	5	12	300	20.4
61104	T25×100	201	6	12	216	21.2
61105	T27×100	201	6	12	216	21.3
61106	T30×100	201	6	12	216	21.3
61107	T40×100	201	8	6	150	21.7

### A Series Screwdriver, Slotted



### • Shank made of quality Cr-V with magnetic bit quenched

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)		8	ā
62202	3.2×75	146	3	12	144	4.8
62203	3.2×100	171	3	12	600	20.5
62204	3.2×150	221	3	12	576	21.7
62205	3.2×200	271	3	12	480	19.9
62207	5×75	165	5	12	300	18.9
62208	5×100	190	5	12	300	20.3
62209	5×150	240	5	12	240	18.5
62210	5×200	290	5	12	240	20.5
62218	5×250	340	5	12	288	19.7
62219	5×300	390	5	12	144	14.2
62211	6×38	99	6	12	144	16
62212	6×100	201	6	12	144	17.8
62213	6×150	251	6	12	144	19.6
62214	6×200	301	6	6	120	19.9
62215	6×250	351	6	6	90	16.9
62220	6×300	401	6	12	120	11.4
62216	8×150	260	8	12	120	12.6
62217	8×200	310	8	12	120	18.1
62221	8×250	361	8	6	90	19.5
62222	8×300	410	8	6	90	21.4

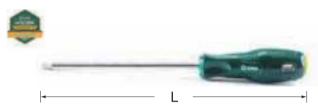
### **A Series Nutdriver**



No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	#	8	ā
61501	5×75	185	5	12	144	16.5
61502	6×75	185	6	12	144	17.8
61503	7×75	185	6	12	144	17.4
61504	8×75	185	6	12	144	17.7
61505	9×75	185	6	12	144	17.2
61506	10×75	190	8	6	144	21.5
61507	11×75	190	8	6	144	21.4
61508	12×75	190	8	6	144	20.7

### A Series Screwdriver, Phillips





### • Shank made of quality Cr-V with magnetic bit quenched

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)	$\blacksquare$	8	ā
62302	#0x75	146	3	12	600	19.5
62303	#0x100	171	3	12	600	20.8
62304	#0x150	221	3	12	576	21.8
62305	#0x200	271	3	12	480	20.1
62307	#1x75	165	5	12	300	19.1
62308	#1x100	171	5	12	300	20.5
62309	#1x150	221	5	12	240	18.6
62310	#1x200	271	5	12	240	20.7
62318	#1x250	321	5	12	288	19.7
62319	#1x300	390	5	12	144	14.2
62311	#2x38	99	6	12	144	16
62312	#2x100	201	6	12	144	17.8
62313	#2x150	251	6	12	144	19.7
62314	#2x200	301	6	6	120	20
62315	#2x250	351	6	6	90	17.2
62320	#2x300	401	6	12	120	11.6
62316	#3x150	260	8	12	120	12.6
62317	#3x200	310	8	12	120	18.1
62321	#3x250	360	8	6	90	19.9
62322	#3x300	410	8	6	90	21.8

### 61613 Go-Through Screwdriver, Slotted 6x100mm







No.	Spec. (mm)	#	8	ā
61613	Slotted 6x100	12	120	17







































































### 61713 A Series Go-Through Screwdriver, Phillips #2x100mm





No.	Spec. (mm)	8	8	ā
61713	Phillips #2x100	12	120	17

### 09602 8Pc. Impact Driver Set



- Impact Screwdriver Set
- •5/16" Dr. Bit Adapter
- •5/16" Shank 70MM Length Bits Slotted 8mm
- •5/16" Shank 30MM Length Bits Slotted 8mm
- •5/16" Shank 30MM Length Bits Slotted 10mm
- •5/16" Shank 70MM Length Bits Phillips #2 •5/16" Shank 30MM Length Bits Phillips #2
- 5/16" Shank 30MM Length Bits Phillips #3

No.	#	8	M
09602	-	12	13.7

▲ Warranty terms of tool set comply with the individual product.

### 09603 8Pc. Protective Grip Impact Driver Set



- Protective Grip Impact Driver Set
- •5/16" Dr. Bit Adapter
- •5/16" Shank 70MM Length Bits Slotted 8mm
- •5/16" Shank 30MM Length Bits Slotted 8mm
- •5/16" Shank 30MM Length Bits Slotted 10mm
- •5/16" Shank 70MM Length Bits Phillips #2
- •5/16" Shank 30MM Length Bits Phillips #2
- •5/16" Shank 30MM Length Bits Phillips #3

No.	#	8	<u></u>
09603	-	12	12.7

▲ Warranty terms of tool set comply with the individual product.

### 09324 60Pc. 1/4" Dr. Socket & Bit Set



- •14Pc. 1/4"Dr.6pt. Socket (3.5,4,4.5,5,5.5,6,7,8,9,10,11,12,13,14mm)
- 4Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (3,4,5.5,6.5mm) 3Pc. 1/4" Hex Shank Bits, 50mm Length, Slotted (4,5.5,6.5mm)
- 4Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#0,#1,#2,#3) 3Pc. 1/4" Hex Shank Bits, 50mm Length, Phillips (#1,#2,#3)
- 6Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon [2,2.5,3,4,5,6mm] 3Pc. 1/4" Hex Shank Bits, 50mm Length, Hexagon [4,5,6mm]
- 7Pc. 1/4" Hex Shank Bits, 25mm Length, Torx@ [T10,T15,T20,T25,T27,T30,T40] 3Pc. 1/4" Hex Shank Bits, 50mm Length, Torx@ [T15,T20,T25,T27,T30,T40]
- •7Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torxe
- (TT10,TT15,TT20,TT25,TT27,TT30,TT40)
- •1Pc. 1/4" Hex Shank Socket Holder, 25mm Length •1Pc. 1/4" Hex Shank Socket Holder, 50mm Length
- •1Pc. 1/4" Hex Shank Magnetic Bits Holder, 60mm Length
- •1Pc. Bits Adaptor 1/4"Fx1/4"Hexagon
- •1Pc. 1/4" Dr. Flexible Extension Bar 6"
- •1Pc. 1/4" Dr. Ratcheting Bit Driver

No.	#	**	Ø
09324	_	6	12.6

▲ Warranty terms of tool set comply with the individual product.





- 6Pc. 1/4" Dr. 25mm Length, Hex Bits (3,4,5,6,7,8mm)
- 7Pc. 1/4" Dr. 25mm Length, Torx Bits(T8,T10,T15,T20,T25,T30,T40)
- 4Pc. 1/4" Dr. 25mm Length, Slotted Bits(4,5.5,6,6.5mm)
- 4Pc. 1/4" Dr. 25mm Length, Phillips Bits (#0,#1,#2,#3)
- 6Pc. 1/4" Dr. 25mm Length, Torx Tamper Bits(TT10,TT15,TT20,TT25,TT30,TT40)
- 3Pc. 1/4" Dr. 25mm Length, Pozi Bits(PZ#1,PZ#2,PZ#3)

No.	$\blacksquare$	**	ā
09331	6	72	20.3

▲ Warranty terms of tool set comply with the individual product.

### 09326 80Pc. 1/4" Hex Shank Bits Set



- 6Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (3,4,5,5.5,6,6.5mm)
- 6Pc. 1/4" Hex Shank Bits, 50mm Lengton, Slotted (3,455.5,6,6.5mm)
   5Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#0,#1,#2,#2,#3)
   4Pc. 1/4" Hex Shank Bits, 50mm Length, Phillips (#0,#1,#2,#3)

- \*4Pc: 1/4\* Hex Shank Bits, 50mm Length, Hexagon (2,2.5,3,4,5,6mm)
  \*6Pc. 1/4\* Hex Shank Bits, 25mm Length, Hexagon (2,2.5,3,4,5,6mm)
  \*6Pc. 1/4\* Hex Shank Bits, 50mm Length, Hexagon (2,2.5,3,4,5,6mm)
  \*8Pc. 1/4\* Hex Shank Bits, 25mm Length, Torx® (T8,T10,T15,T20,T25,T27,T30,T40)
  \*8Pc. 1/4\* Hex Shank Bits, 50mm Length, Torx® (T8,T10,T15,T20,T25,T27,T30,T40)
- 6PC. 1/4 Tex Sharik Bits, 50mm Length, Tamper-Proof Tox.<sup>®</sup> (T18, T110, T112, T120, T125, T127,T130,T140)
   8Pc. 1/4" Hex Sharik Bits, 50mm Length, Tamper-Proof Tox.<sup>®</sup> (T18, T110, T115, T120, T125, T127,T130,T140)

- 8PC, 1/4" Hex Shank Double End Bits, 65mm Lenght
- [#1/#1,#2/#2,#3/#3,#1/4.5mm,#3/5.5mm#3/6.5mm,#3/#2#2/#3]
- 3Pc. 1/4" Hex Shank Double End Bits,110 m Lenght (#1/#1,#2/#2,#3/#3)
- 1Pc. 1/4" Hex Shank Socket Holder, 25mm Length
- 1Pc. 1/4" Hex Shank Socket Holder, 50mm Length
- 1Pc. 1/4" Hex Shank Magnetic Bits Holder, 60mm Length
- 1Pc. 1/4" Dr. Ratcheting Bit Driver

No.	#	¥	ā
09326	-	6	8

▲ Warranty terms of tool set comply with the individual product.

### 09327 42Pc. 8mm Hex Shank Bits Set



- 7Pc. 5/16" Hex Shank Bits, 30mm Length, Hexagon [4,5,6,7,8,10,12mm]
- 7Pc. 5/16" Hex Shank Bits, 70mm Length, Hexagon (4,5,6,7,8,10,12mm)
- 5Pc. 5/16" Hex Shank Bits, 30mm Length, Triple Square (M5,M6,M8,M10,M12)
- 5Pc. 5/16" Hex Shank Bits, 70mm Length, Triple Square (M5,M6,M8,M10,M12)
- 9Pc. 5/16" Hex Shank Bits, 70mm Length, Torve (T20,T25,T27,T30,T40,T45,T50,T55,T53) 7Pc. 5/16" Hex Shank Bits, 30mm Length, Tamper-Proof Torx®
- (TT20,TT25,TT30,TT40,TT45,TT50,TT55) • 1Pc. 1/2" Dr. Bit Adapter 5/16"
- •1Pc. 3/8" Dr. Bit Adapter 5/16"
- No.  $\overline{\mathbb{Q}}$ 09327 6.5

▲ Warranty terms of tool set comply with the individual product.

### 09332 31Pc. 1/4" Hex Shank Bits Set, for Power Tool



- 6Pc. 1/4" Dr. 25mm Length, Hex Bits (3,4,5,6,7,8mm)
- 7Pc. 1/4" Dr. 25mm Length, Torx Bits(T8,T10,T15,T20,T25,T30,T40)
- 4Pc. 1/4" Dr. 25mm Length, Slotted Bits (4,5.5,6,6.5mm) 4Pc. 1/4" Dr. 25mm Length, Phillips Bits (#0,#1,#2,#3)
- 6Pc. 1/4" Dr. 25mm Length, Torx Tamper Bits(TT10,TT15,TT20,TT25,TT30,TT40)
- 3Pc. 1/4" Dr. 25mm Length, Pozi Bits(PZ#1,PZ#2,PZ#3)
- 1Pc. 1/4" Dr. 60mm Length, Magnetic Bits Holder

No.	#	8	ā
09332	12	72	21.9

A Warranty terms of tool set comply with the individual product.

































































### 09333 31Pc. 1/4" Hex Shank Bits Set, for Pneumatic Tool



- 6Pc. 1/4\* Dr. 25mm Length, Hex Bits (3,4,5,6,7,8mm) 7Pc. 1/4\* Dr. 25mm Length, Torx Bits[18,710,715,720,725,730,740] 4Pc. 1/4\* Dr. 25mm Length, Phillips Bits [#0,#1,#2,#3]
- 4Pc.1/4" Dr.25mm Length, Slotted Bits (4,5.5,6,6.5MM)
- 6Pc. 1/4" Dr. 25mm Length, Torx Tamper Bits [T10,TT15,TT20,TT25,TT30,TT40] 3Pc. 1/4" Dr. 25mm Length, Pozi Bits [PZ#1,PZ#2,PZ#3]
- 1Pc. 1/4" Dr. Air Tool Bits Holder

No.	#	8	ā
09333	6	72	21.8

▲ Warranty terms of tool set comply with the individual product.

### 5Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

	T				
No.	① (mm)	L(mm)		8	M
59211	3	25	12	144	4.8
59213	4	25	12	144	5.1
59215	5	25	12	144	5.3
59216	5.5	25	12	144	4.6
59217	6	25	12	144	6.1
59218	6.5	25	12	144	6.1

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- •5pc. display packed

No.	❸	L(mm)	$\Theta$	8	Ō
59221	#0	25	12	144	5.7
59222	#1	25	12	144	5.2
59223	#2	25	12	144	5.5
59224	#3	25	12	144	5.5

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 25mm Length, Torx®





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- •5pc. display packed

No.	0	L(mm)	$\blacksquare$	8	<u></u> ■
59231	T8	25	12	144	4.9
59232	T10	25	12	144	4.8
59233	T15	25	12	144	4.6
59234	T20	25	12	144	5.3
59235	T25	25	12	144	5.5
59236	T27	25	12	144	5.6
59237	T30	25	12	144	5.7
59238	T40	25	12	144	6.2































### 5Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torx®





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.		L(mm)	$\Theta$	8	<b>T</b>
59241	Т8	25	12	144	4.6
59242	T10	25	12	144	4.8
59243	T15	25	12	144	4.9
59244	T20	25	12	144	5.1
59245	T25	25	12	144	5.2
59246	T27	25	12	144	5.3
59247	T30	25	12	144	5.6
59248	T40	25	12	144	6

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon





• Made of premium S2 quality steel, with surface subjected to atin nickel plated • 5pc. display packed

	T				
No.	(mm)	L(mm)		*	<u></u>
59251	2	25	12	144	4.8
59252	2.5	25	12	144	4.9
59253	3	25	12	144	5.1
59254	4	25	12	144	5.5
59255	5	25	12	144	5.9
59256	6	25	12	144	6.5
59257	7	25	12	144	7.5
59258	8	25	12	144	9.1

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 25mm Length, Pozidrive





 $\bullet\,\mbox{Made}$  of premium S2 quality steel, with surface subjected to satin nickel plated • 5pc. display packed

No.	<b>B</b>	L(mm)	$\Theta$	*	ā
59261	PZ#1	25	12	144	6.1
59262	PZ#2	25	12	144	5
59263	PZ#3	25	12	144	6.1

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 50mm Length, Slotted





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	① (mm)	L(mm)	#	8	₪
59311	3	50	12	144	7.9
59313	4	50	12	144	8.4
59315	5	50	12	144	9
59316	5.5	50	12	144	9.5
59317	6	50	12	144	9.9
59318	6.5	50	12	144	10.5



































### 59274 1/4" Dr. Magnetic Quick Change Pneumatic Bit Holder

### 5Pc. 1/4" Hex Shank Bits, 50mm Length, Torx®





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- •5pc. display packed

No.	0	L(mm)		8	ð
59331	Т8	50	12	144	7.8
59332	T10	50	12	144	7.8
59333	T15	50	12	144	8.2
59334	T20	50	12	144	8.6
59335	T25	50	12	144	9
59336	T27	50	12	144	9.5
59337	T30	50	12	144	10.1
59338	T40	50	12	144	11.2

▲ Excluded from lifetime warranty terms.

### · Magnetic holder, easy to install and remove bits Special pinning mechanism, safe and reliable

No.	#	8	ā
59274	6	72	3.3

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 50mm Length, Phillips





### • Made of premium S2 quality steel, with surface subjected to atin nickel plated • 5pc. display packed

No.	⊗	L(mm)	$\Theta$	8	ā
59321	#0	50	12	144	8.2
59322	#1	50	12	144	9
59323	#2	50	12	144	9.9
59324	#3	50	12	144	10.1

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Bits, 50mm Length, Tamper-Proof Torx®





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- •5pc. display packed

No.		L(mm)	$\oplus$	8	ā
59341	Т8	50	12	144	7.8
59342	T10	50	12	144	8
59343	T15	50	12	144	8.5
59344	T20	50	12	144	8.6
59345	T25	50	12	144	9.1
59346	T27	50	12	144	9.4
59347	T30	50	12	144	9.9
59348	T40	50	12	144	10.9































### 5Pc. 1/4" Hex Shank Bits, 50mm Length, Hexagon





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	O (mm)	L(mm)	#	*	ð
59351	2	50	12	144	7.8
59352	2.5	50	12	144	7.9
59353	3	50	12	144	8.3
59354	4	50	12	144	9.3
59355	5	50	12	144	10.3
59356	6	50	12	144	11.3

▲ Excluded from lifetime warranty terms.

### 5Pc. 1/4" Hex Shank Double End Bits, 65mm Length





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	₩	L(mm)	$\Theta$	8	M
59381	PH1-PH1	65	12	72	6.6
59382	PH2-PH2	65	12	72	6.5
59383	PH3-PH3	65	12	72	6.6
59384	4.5mm-PH1	65	12	72	6.4
59385	5.5mm-PH2	65	12	72	6.5
59386	6.5mm-PH3	65	12	72	6.6
59387	PH1-PH2	65	12	72	6.6
59388	PH2-PH3	65	12	72	6.5
59391	PH1-PH1	110	12	72	11.6
59392	PH2-PH2	110	12	72	11.5
59393	PH3-PH3	110	12	72	11.6

▲ Excluded from lifetime warranty terms.

### 5Pc. 5/16" Hex Shank Bits, 30mm Length, Slotted





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

	, ,				
No.	⟨D⟩ (mm)	L(mm)	#	8	ā
59411	5.5	30	12	144	8.3
59413	6.5	30	12	144	9.1
59415	8	30	12	144	9.4
59416	10	30	12	144	11.8
59417	12	30	12	72	7

▲ Excluded from lifetime warranty terms.

### 5Pc. 5/16" Hex Shank Bits, 30mm Length, Phillips





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	⊗	L(mm)	$\Theta$	8	ā
59421	#1	30	12	144	9.4
59422	#2	30	12	144	8.7
59423	#3	30	12	144	8.6
59424	#4	30	12	144	9.6







### 59515

### 5Pc. 5/16" Hex Shank Bits, 70mm Length, Slotted 8mm

### 5Pc. 5/16" Hex Shank Bits, 30mm Length, Triple Square













































- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- •5pc. display packed

No.	0	L(mm)	$\Theta$	8	<b>a</b>
59464	M5	30	12	144	8.9
59465	M6	30	12	144	9.4
59467	M8	30	12	144	9.7
59468	M10	30	12	144	13.3
59469	M12	30	12	72	8.1

<sup>▲</sup> Excluded from lifetime warranty terms.

### • Made of premium S2 quality steel, with surface subjected to atin nickel plated • 5pc. display packed

No.	① (mm)	L(mm)	#	8	ā
59515	8	70	12	72	11.5

▲ Excluded from lifetime warranty terms.

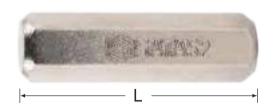
### 5Pc. 5/16" Hex Shank Bits, 30mm Length, Tamper-Proof Torx®





### 5Pc. 5/16" Hex Shank Bits, 30mm Length, Hexagon





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	<b>©</b>	L(mm)	$\Theta$	8	ð
59453	T20	30	12	144	8.4
59454	T25	30	12	144	8.5
59456	T30	30	12	144	8.9
59457	T40	30	12	144	9.4
59458	T45	30	12	144	8.9
59459	T50	30	12	144	10.2

▲ Excluded from lifetime warranty terms.

- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	(mm)	L(mm)	$\Theta$	¥	ō
59471	4	30	12	144	8.9
59472	5	30	12	144	9.2
59473	6	30	12	144	10
59478	7	30	12	144	10.1
59474	8	30	12	144	14.7
59475	10	30	12	72	9.2
59476	12	30	12	144	10.7































### 59522 5Pc. 5/16" Hex Shank Bits, 70mm Length, Slotted 8mm







5Pc. 5/16" Hex Shank Bits, 70mm Length, Triple Square

- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	0	L(mm)	$\blacksquare$	8	ā
59562	M5	70	12	72	10.9
59563	M6	70	12	72	11.4
59564	M8	70	12	72	11.7
59565	M10	70	12	48	10.6
59566	M12	70	12	48	13.2

▲ Excluded from lifetime warranty terms.

• Made of premium S2 quality steel, with surface subjected to atin nickel plated • 5pc. display packed

No.	₩	L(mm)	$\Theta$	8	ā
59522	#2	70	12	72	11.2

▲ Excluded from lifetime warranty terms.

### 5Pc. 5/16" Hex Shank Bits, 70mm Length, Torx®





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	0	L(mm)	$\blacksquare$	8	<u></u>
59533	T20	70	12	72	10.7
59534	T25	70	12	72	11.2
59535	T27	70	12	72	11.2
59536	T30	70	12	72	11.4
59537	T40	70	12	72	11.6
59538	T45	70	12	72	12
59539	T50	70	12	72	12.2
59540	T55	70	12	48	11.7

▲ Excluded from lifetime warranty terms.

### 5Pc. 5/16" Hex Shank Bits, 70mm Length, Hexagon





- Made of premium S2 quality steel, with surface subjected to atin nickel plated
- 5pc. display packed

No.	(mm)	L(mm)	$\Theta$	8	ā
59571	4	70	12	72	11.2
59572	5	70	12	72	11.4
59573	6	70	12	72	11.8
59574	7	70	12	72	12.2
59575	8	70	12	72	12.4
59576	10	70	12	48	11.9
59577	12	70	12	48	15.7
59578	14	70	12	48	20.9







### **Quick Change Bit Holder**



Made of high-strength SCM material

Driver

1/4"

3/8"

1/2"











No.

21510

22610

25910





















▲ Excluded from lifetime warranty terms.

• Made of Cr-V, with surface subjected to stain nickel treatment

### 59273 3Pc. 1/4" Hex Shank Magnetic Bit Holders



- Magnetic function end of the holder made of stainless steel
- · Bit holder made of Cr-V
- · Surface subjected to stain nickel treatment
- •3pc. display packed

M

9.3

16.2

14.9

6

96

96

No.	L(mm)	#	8	ā
59273	60	12	144	12.9

▲ Excluded from lifetime warranty terms.

### 61002 1/4" Hex Shank Magnetic Bit Driver



• Structure for quick bit replacement for high efficiency and cost reduction

5Pc. 1/4" Hex Shank Socket Holders

L(mm)

50

60



- Suitable for 6.3mm series bits
- Magnetic shank to prevent bit from slipping

No.	Spec. (mm)	#	8	ā
61002	1/4"x100	12	150	20.9

▲ Excluded from lifetime warranty terms.

• 5pc. display packed



































### 10Pc. 1/4" Hex Shank Impact Bits, Phillips





No.	<b>⊕</b>	L(mm)	$\Theta$	8	ā
59602	#1	29	12	144	9.4
59603	#2	29	12	144	9.4
59604	#3	29	12	144	9.4

▲ Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Impact Bits, Slotted







No.	① (mm)	L(mm)	#	8	ā
59713	3	50	12	144	15.9
59714	4	50	12	144	15.9
59716	5	50	12	144	15.9
59718	6	50	12	144	15.9

▲ Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Impact Bits, Torx®



No.	0	L(mm)	$\Theta$	*	M
59620	T8	29	12	144	9.4
59622	T10	29	12	144	9.4
59623	T15	29	12	144	9.4
59624	T20	29	12	144	9.4
59625	T25	29	12	144	9.4
59627	T30	29	12	144	9.4
59628	T40	29	12	144	9.4

▲ Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Impact Bits, Torx®



No.	0	L(mm)	$\Theta$	¥	ā
59731	T8	50	12	144	15.9
59732	T10	50	12	144	15.9
59733	T15	50	12	144	15.9
59734	T20	50	12	144	15.9
59735	T25	50	12	144	15.9
59737	T30	50	12	144	15.9
59738	T40	50	12	144	15.9

▲ Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Impact Bits, Phillips





No.	<b>⊕</b>	L(mm)		8	ā
59702	#1	50	12	144	15.9
59703	#2	50	12	144	15.9
59704	#3	50	12	144	15.9

▲ Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Double End Impact Bits







No.	<b>⊕</b>	L(mm)		8	ā
59801	#1/#1	65	12	144	17.3
59802	#2/#2	65	12	144	17.3
59803	#3/#3	65	12	144	17.3

































### 10Pc. 1/4" Hex Shank Impact Bits, Hexagon



No.	(mm)	L(mm)	#	*	M
59751	2	50	12	144	15.9
59752	2.5	50	12	144	15.9
59753	3	50	12	144	15.9
59754	4	50	12	144	15.9
59755	5	50	12	144	15.9
59757	6	50	12	144	15.9

<sup>▲</sup> Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Double End Impact Bits





No.	<b>⊕</b>	L(mm)	#	8	ā
59811	#1/#1	110	12	72	18.8
59812	#2/#2	110	12	72	18.8
59813	#3/#3	110	12	72	18.8

<sup>▲</sup> Excluded from lifetime warranty terms.

### 10Pc. 1/4" Hex Shank Double End Impact Bits



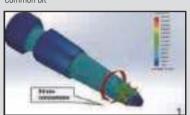
## 

No.	<b>⊕</b>	L(mm)	#	8	<u></u>
59821	#1/#1	150	12	48	16.1
59822	#2/#2	150	12	48	16.1
59823	#3/#3	150	12	48	16.1

▲ Excluded from lifetime warranty terms.



Common bit



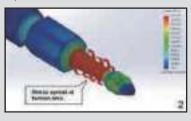


Distortion and destruction due to shock load limited exceeded on tip bearing too much stress



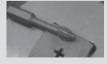
Common bit after impact test

Impact-resistance bit





Service life prolonged due to impact force reduced and tip load reduced thanks to the deformed area of the neck to effectively dispersing the stress



Impact-resistance bit after impact test

# **Pliers**

	G-series Pliers	129-131
Pro Pro	Professional Japannish Pliers	131-132
Value	Electronic Pliers	135-137
	TPE Two-Tone Pliers	138-139
Mini	Diagonal Mini Pliers	138-139
Energy	High Leverage Pliers	133-139
	Cable Tools	139-148
	Slip Joint Pliers	147-148
	Groove Joint Pliers	148
	Circlip pliers	149-150
	Vise Grip Pliers	151-153































## **Pliers**

### **Quick Release Groove Joint Pliers**



- Slim head for application in limited space
   Speedy and easy adjusting mechanism for high efficiency
   Wider opening with bigger application range for pipes

No.	Spec.		L3 (Max.)		W (Max.)		T2 (Max.)	$\Theta$	8	ā
72411	8"	185mm	32mm	34mm	45mm	13mm	7mm	6	60	14
72412	10"	260mm	38mm	55mm	45mm	13mm	7mm	6	60	23
72413	12"	305mm	45mm	67mm	50mm	15mm	10mm	6	60	30

### **G-series Long Nose Combination Pliers**



- High leverage designHigh frequency hear-treatment blades
- · Comfortable grip with dual materials

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ā
72741	6"	165	copper wire $\Phi 3.0$ , iron wire $\Phi 2.2$ , hard steel wire $\Phi 1.6$	6	-	0.18
72742	8"	205	copper wire Φ3.8, iron wire Φ2.7, hard steel wire Φ2.3	6	-	0.22



### **Quick Groove Joint Pliers**



- 72421
- Thin head design, convenient and practical in narrow spaces
- Patent-protected quick adjustment, operable with one hand
- Multi-gear adjustment, more precise clamping

No.	Spec.	Applicable Tube Diameter(mm)	Maximum clamping force(N)	#	¥	Ø
72419	7"	25	630	-	-	-
72420	10"	35	1000	-	-	-
72421	12"	40	1250	-	-	-

### **Long Nose Pliers**



- Prolonged service life for cutting
- Three-dimensionally machined by CNC machine tool, to ensure high precision and consistency
- Bi-color oil-resistant non-slip handle, not prone to aging and peeling off
- Forged from high-grade special tool steel, ensuring long service life
- Three-dimensionally machined by CNC machine tool, to ensure high precision dimensions of profile and cutting edge fitness
- Ergonomic handle, providing gripping comfort and easy, smooth opening and closing
- Small round head for precision operation, and tightly closed tip for clamping slim and small workpieces even thin plates
- The cutting edge is able to cut flexible wires and medium hard wires
- $\bullet \mbox{Special heat treatment increases the hardness of cutting edge and shear strength} \\$

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	*	M
72710	6"	160	Copper wire Ø2.5, iron wire Ø1.6	6	120	22.9
72712	8"	200	Copper wire Ø2.8, iron wire Ø1.8	6	60	22.9

### **Diagonal Pliers**







- Prolonged service life for cutting
- Three-dimensionally machined by CNC machine tool, to ensure high precision and consistency
- Bi-color oil-resistant non-slip handle, not prone to aging and peeling off
- Forged from high-grade special tool steel, ensuring long service life
- Three-dimensionally machined by CNC machine tool, to ensure high precision dimensions of profile and cutting edge fitness
- Ergonomic handle, providing gripping comfort and easy, smooth opening and closing
- Special heat treatment increases the hardness of cutting edge and shear strength
- •The cutting edge is able to cut flexible wires and hard wires

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ā
72721	6"	160	Copper wire Ø3.0, iron wire Ø2.3, spring steel wire Ø1.6	6	60	33.5
72722	7"	180	Copper wire Ø3.2, iron wire Ø2.5, spring steel wire Ø1.8	6	60	17.5

### 72723 Diagonal Pliers







- Prolonged service life for cutting
- Three-dimensionally machined by CNC machine tool, to ensure high precision and consistency
- Bi-color oil-resistant non-slip handle, not prone to aging and peeling off
- Forged from high-grade special tool steel, ensuring long service life
- Three-dimensionally machined by CNC machine tool, to ensure high precision dimensions of profile and cutting edge fitness
- $\bullet$  Ergonomic handle, providing gripping comfort and easy, smooth opening and closing
- Special heat treatment increases the hardness of cutting edge and shear strength
- The cutting edge is able to cut flexible wires and hard wires

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	¥	M
72723	8"	200	Copper wire Ø4.2, iron wire Ø3.0, spring steel wire Ø2.5	6	60	19.5





































































### **Combination Pliers**



- Prolonged service life for cutting
  Three-dimensionally machined by CNC machine tool, to ensure high precision and consistency
  Bi-color oil-resistant non-slip handle, not prone to aging and peeling off
  Forged from high-grade special tool steel, ensuring long service life
  Three-dimensionally machined by CNC machine tool, to ensure high precision dimensions of profile and cutting edge fitness

  Fronzenic handle, excitoning engricular comfort and easy smooth engine and election.
- Frgonomic handle, providing gripping comfort and easy, smooth opening and closing
   Clamping hole is suitable for round or flat materials
   Special heat treatment increases the hardness of cutting edge and shear strength

- Great shearing force is suitable for cutting flexible wires and hard wires

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	¥	<u></u>
72730	6"	160	Copper wire Ø2.5, iron wire Ø1.8	6	60	30
72731	7"	180	Copper wire Ø2.8, iron wire Ø2.5	6	60	20.4
72732	8"	200	Copper wire Ø3.0, iron wire Ø2.8	6	60	24.2

### **Japannish Long Nose Pliers**





- Cr-V steel forged
- High frequency heat-treatment blades
   Comfortable TPR handle

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ā
70121A	6"	167+/-2	Copper wire Ø2.6, iron wire Ø1.5	6	36	7.3
70122A	8"	200+/-2	Copper wire Ø3.0, iron wire Ø2.0	6	36	10



### 70123A Japannish Curved Jaw Long Nose Pliers 6"



- Cr-V steel forged
- High frequency heat-treatment blades
   Comfortable TPR handle

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ā
70123A	6"	166+/-2	Copper wire Ø2.6, iron wire Ø1.5	6	36	7.1

### 70124A Japannish Multipurpose Long Nose Pliers 6"





- Cr-V steel forged
- High frequency heat-treatment blades
- Comfortable TPR handle

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\mathcal{B}$	8	ā
70124A	6"	168+/-2	Copper wire Ø2.6, iron wire Ø1.5	6	36	7.4

### **Japannish Diagonal Pliers**



- Cr-V steel forged
  High frequency heat-treatment blades
  Comfortable TPR handle
  Can strip the wire of \$\phi\$.2MM

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	¥	ā
70221A	5"	136+/-2	Copper wire Ø2.0, iron wire Ø1.2	6	36	6.4
70222A	6"	167+/-2	Copper wire Ø3.0, iron wire Ø2.0	6	36	8.7
70223A	7"	181+/-2	Copper wire Ø3.0, iron wire Ø2.0	6	36	11.1

### **Japannish Combination Pliers**



- Cr-V steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	$\bigoplus$	8	ō
70321A	6"	164+/-2	Copper wire Ø3.0, iron wire Ø2.2	6	36	9.7
70322A	7"	188+/-2	Copper wire Ø3.5, iron wire Ø3.0	6	36	12.8
70323A	8"	213+/-2	Copper wire Ø4.0, iron wire Ø3.4	6	36	15.1

### **Japannish Plastic Flush Cutting Pliers**



- Cr-V steel forged
   High frequency heat-treatment blades
   Flat blade style with spring
   Used for cutting plastic gate and burrs

No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	#	8	ō
70921A	6"	160+/-2	Resin Ø5.0	6	36	8.4
70922A	7"	178+/-2	Resin Ø6.0	6	36	10.3



























































- Cr-V steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	Ō
72201B	6"	Copper wire Ø2.2, iron wire Ø2.0, steel wire Ø1.6	6	36	10
72202B	7"	Copper wire Ø2.6, iron wire Ø2.4, steel wire Ø2.0	6	36	11
72203B	8"	Copper wire Ø2.6, iron wire Ø2.4, steel wire Ø2.0	6	36	15

- Cr-V steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	M
72301B	6"	Copper wire Ø2.2, iron wire Ø2.0, steel wire Ø1.6	6	36	9
72302B	7"	Copper wire Ø2.6, iron wire Ø2.4, steel wire Ø2.0	6	36	12
72303B	8"	Copper wire Ø2.6, iron wire Ø2.4, steel wire Ø2.0	6	36	13.5



### **High Leverage Long Nose Pliers**



- Cr-V steel forged
- High frequency heat-treatment bladesComfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	M
72401B	6"	Copper wire Ø2.2 iron wire Ø2.0 steel wire Ø1.6	6	36	9
72402B	8"	Copper wire Ø2.6 iron wire Ø2.4 steel wire Ø2.0	6	36	12

### **Long Nose Pliers**



- Cr-Ni steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	M
70101A	6"	Copper wire Ø2.2, iron wire Ø2.0, hard steel wire Ø1.6	6	36	8.5
70102A	8"	Copper wire 2.6, iron wire 2.4, hard steel wire Ø2.0	6	36	12

### **Diagonal Pliers**



- Cr-Ni steel forged
- High frequency heat-treatment bladesComfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	ā
70201A	5″	Copper wire Ø2.2, iron wire Ø2.0, hard steel wire Ø1.6	6	36	7
70202A	6"	Copper wire Ø2.6, iron wire Ø2.4, hard steel wire Ø1.8	6	36	9.1

### 70203A Diagonal Pliers 7"



- Cr-Ni steel forged
- High frequency heat-treatment blades
   Comfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	*	<u></u>
70203A	7"	Copper wire Ø2.6, iron wire Ø2.4, hard steel wire Ø2.0	6	36	11.7

### **Combination Pliers**



No.	Spec.	Max. Cutting Capacity(mm)	$\blacksquare$	8	ō
70301A	6"	Copper wire Ø2.6, iron wire Ø2.4, hard steel wire Ø2.0	6	36	9.6
70302A	7"	Copper wire Ø2.6, iron wire Ø2.4, hard steel wire Ø2.0	6	36	11.7
70303A	8"	Copper wire Ø2.6, iron wire Ø2.5, hard steel wire Ø2.3	6	36	15.6

### **High Leverage Long Nose Pliers**



- High leverage design
   High frequency heat-treatment blades
   TRP handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	<b></b>
70121D	6"	copper wire Φ3.0, iron wire Φ2.6, hard steel wire Φ2.0	6	-	0.21
70122D	8"	copper wire $\Phi4.0$ , iron wire $\Phi3.0$ , hard steel wire $\Phi3.0$	6	-	0.28



































































### **High Leverage Diagonal Pliers**



- Cr-Ni steel forged
   Body hardness HRC 42-46°
   High leverage design
   High frequency heat-treatment blades
- TRP handle

No.	Spec.	Max. Cutting Capacity(mm)	$\blacksquare$	¥	ā
70221D	5"	copper wire $\Phi 3.0,$ iron wire $\Phi 3.0,$ hard steel wire $\Phi 2.3$	6	-	0.16
70222D	6"	copper wire $\Phi$ 4.0, iron wire $\Phi$ 4.0, hard steel wire $\Phi$ 3.0	6	-	0.21
70223D	7"	copper wire $\Phi$ 4.5, iron wire $\Phi$ 4.0, hard steel wire $\Phi$ 3.0	6	-	0.28

### **High Leverage Combination Pliers**



- Cr-Ni steel forged
   Body hardness HRC 42-46°
   High leverage design
   High frequency heat-treatment blades
   TRP handle

No.	Spec.	Max. Cutting Capacity(mm)		8	ā
70321D	6"	copper wire $\Phi 4.0$ , iron wire $\Phi 4.0$ , hard steel wire $\Phi 3.0$	6	-	0.25
70322D	7"	copper wire $\Phi 4.5,$ iron wire $\Phi 4.0,$ hard steel wire $\Phi 3.0$	6	-	0.27
70323D	8"	copper wire Φ4.5, iron wire Φ4.0, hard steel wire Φ3.0	6	-	0.38

### **Electronic Long Nose Pliers**



- Cr-V steel forged

- High frequency heat-treatment blades
   Long nose style with spring
   Used for electronic bendding and cutting

No.	Spec.	Max. Cutting Capacity(mm)	#	8	<u></u>
70621	5"	Copper wire <b>\$\Phi\$</b> 2.6	6	36	4.4
70622	6"	Copper wire ф2.6	6	36	5.2

▲ Excluded from lifetime warranty terms.

### **70635A Electronic Cutting Pliers**



- The blade and surface are processed with advanced Japanese mirror polishing technology, which makes cutting easier and lasts longer.
- The small size of the pliers head is suitable for cutting electronic components and narrow
- Made of Cr-V alloy steel, it is suitable for cutting soft iron wire and copper wire materials.
- · Curved edge design with spring, easy to use

No.	Spec.	Max. Cutting Capacity(mm)	$\blacksquare$	8	ā
70635A	5"	copper wire Φ2.0, iron wire Φ1.6	4	-	4.4

▲ Excluded from lifetime warranty terms.

### **Electronic Bent Nose Pliers 6"**



• Cr-V steel forged

70623

- · High frequency heat-treatment blades
- •45° bending slim tips with spring · Helical groove to increase clamping force

6"

No. Max. Cutting Capacity(mm) M

36

6

Copper wire  $\phi$ 2.6





- Cr-V steel forged
- High frequency heat-treatment blades
- Bent blade style with spring
- · Used for electronic components cutting

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	¥	<u>a</u>
70631	4"	Copper wire <b>φ</b> 1.8	6	36	4

▲ Excluded from lifetime warranty terms.

### 70632 Electronic Cutting Pliers 5"



- Cr-V steel forged
- High frequency heat-treatment blades
- · Bent blade style with spring
- · Used for electronic components cutting

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	ā
70632	5″	Copper wire <b>φ</b> 2.0	6	36	14

▲ Excluded from lifetime warranty terms.

### 70633 Electronic Cutting Pliers 5"



- Cr-V steel forged
- High frequency heat-treatment blades
- Slim tips, flat blade style with spring
- · Used for cutting electronic components

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	M
70633	5"	Copper wire <b>\$\Phi\$</b> 2.0	6	36	5

▲ Excluded from lifetime warranty terms.

### **Plastic Flush Cutting Pliers**



- Cr-V steel forged
- High frequency heat-treatment blades
- Slim tips, flat blade style with spring
- Used for cutting electronic components

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	ā
70641	5"	Resin φ3.0	6	36	4.4
70642	6"	Resin φ5.0	6	36	7.1
70643	7"	Resin <b>φ</b> 6.0	6	36	9.5

▲ Excluded from lifetime warranty terms.

### 70651 **Electronic Stripping Pliers 6"**



- Cr-V steel forged
- High frequency heat-treatment blades
- · Addition stripper fuction with spring

No.	Spec.	Max. Cutting Capacity(mm)	#	8	ā
70651	5"	Copper wire φ2.3	6	36	9

▲ Excluded from lifetime warranty terms.

### **ESD Electronic Side Cutting Pliers 5"** 75101



- · Handle made from antistatic material for antistatic work place
- Maximum diameter of wire to be cut: Ø1.3mm
- Fine-shaped cutting edge
- · Not suitable for cutting steel wire or iron wire

No.	L(mm)	Body Thickness (mm)	$\Theta$	8	<u></u>
75101	125	2.5	6	72	8







































































### **ESD Electronic Side Cutting Pliers 5"** 75102



- Handle made from antistatic material for antistatic work place
- Maximum diameter of wire to be cut: Ø1.6mm
- Powerful cutting edge
- · Not suitable for cutting steel wire or iron wire

No.	L(mm)	Body Thickness (mm)	$\Theta$	¥	M
75102	125	3.0	6	72	8.6

▲ Excluded from lifetime warranty terms.

### **75103 ESD Electronic Side Cutting Pliers 5"**

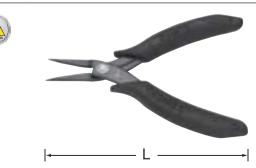


- Handle made from antistatic material for antistatic work place
- Maximum diameter of wire to be cut: Ø1.3mm
- Fine-shaped cutting edge with safety catch
- · Not suitable for cutting steel wire or iron wire

No.	L(mm)	Body Thickness (mm)	$\blacksquare$	8	ā
75103	120	2.5	6	72	8.6

▲ Excluded from lifetime warranty terms.

### **ESD Electronic Long Nose Pliers 5"** 75111

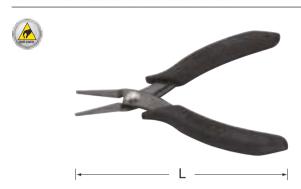


• Handle made from antistatic material for antistatic work place

No.	L(mm)	#	8	<b>\overline{\over</b>
75111	150	6	72	8.6

▲ Excluded from lifetime warranty terms.

### **ESD Electronic Flat Nose Pliers 5"** 75121

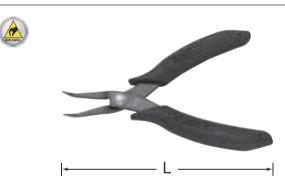


• Handle made from antistatic material for antistatic work place

No.	L(mm)	#	8	Ø
75121	150	6	72	8.5

▲ Excluded from lifetime warranty terms.

### 75131 **ESD Electronic Bent Nose Pliers 5"**



• Handle made from antistatic material for antistatic work place

No.	L(mm)	$\blacksquare$	*	ē
75131	145	6	72	8.5

▲ Excluded from lifetime warranty terms.

### 70611A ESD Electronic Bent Nose Pliers 5"



- Cr-Ni steel forged
- High frequency heat-treatment blades
   Comfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	<b>®</b>
70611A	5"	Copper wire Ø1.5, iron wire Ø1.5, hard steel wire Ø1.2	6	36	5.3

## 70612A Mini Long Nose Pliers 5.5"



No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	*	ð
70612A	5.5"	Copper wire Ø1.5, iron wire Ø1.5, hard steel wire Ø1.2	6	36	5.3

#### 70614A Mini Flat Nose Pliers 5.5"



- Cr-Ni steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	#	8	<u></u>
70614A	5.5"	6	36	5.5

## 70613A Mini Bent Nose Pliers 5.5"



- Cr-Ni steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	$\Theta$	8	<b>\overline{\over</b>
70613A	5.5"	6	36	5.3

## 70615A Mini Diagonal Pliers 5"



- Cr-Ni steel forged High frequency heat-treatment blades Comfortable TPR handle

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	¥	ā
70615A	5"	Copper wire Ø1.5, iron wire Ø1.5, hard steel wire Ø1.2	6	36	5.3







































































## 70616A Mini End Cutting Pliers 4.5"



No.	Spec.	Max. Cutting Capacity(mm)		8	M
70616A	4.5"	Copper wire Ø1.5, iron wire Ø1.5, hard steel wire Ø1.2	6	36	5.1

## 70617A Mini Needle Nose Pliers 6"



- Cr-Ni steel forged
- High frequency heat-treatment blades
   Comfortable TPR handle

No.	Spec.	#	***	ā
70617A	6"	6	36	5.3

## 70618A Mini Plastic Flush Cutting Pliers 5"



- No. Max. Cutting Capacity(mm)  $\overline{\mathbb{Q}}$ 70618A 5" Resin Ø3.0 6 36 5.3
- ▲ Excluded from lifetime warranty terms.

## **Cable Cutting Pliers**



No.	Spec.	L(mm)	Max. Cutting Capacity(mm)	#	8	ā
72501	6"	150	9	6	72	15.6
72502	8"	200	11	6	36	13
72503	10"	250	13	6	36	19.4

## **ESD Wire Stripper 5"**

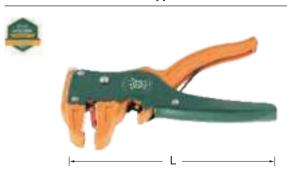


• Handle made from antistatic material for antistatic work place

No.	L(mm)	Wire stripping diameter (mm)	#	8	ā
75141	150	0.8-2.6	6	72	10.9
75142	150	0.2-0.8	6	72	11.2

▲ Excluded from lifetime warranty terms.

## **Automatic Wire Stripper 6.5"**

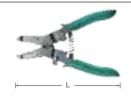


- Wire stripping range: Single wire or flat cable of diameter from 0.5 to 6.0mm
- Attention: Take appropriate protections for first time users who are uncertain on how to adjust the cutting edge to the right place, so as to avoid damaging the core wire (for example, sticking rubber cloth on the cutting edge).

No.	Spec.	$\blacksquare$	8	ā
91108	6.5"	6	36	10.4

## **Wire Stripper with Cutter**





- Cutting capacity for hard wire diameter 1.0mm
- Precision wire-stripping hole, which can be easily sheathed without damage to the inner core of the electric wire
- Easy to store, comfortable plastic handle, easy to use
- Integral high carbon steel manufacturing, non-deformable

#### Stripping wire range:

	American wire standard	Cross aread
91201	20-30AWG	0.05-0.52mm2
91202	10-20AWG	0.52-5.26mm

No.	Spec.	#	8	ā
91201	6"	12	96	14.6
91202	7"	12	96	18.5

#### 91212 **Automatic Wire Stripper, Type A**



- Stripping range: Ø0.5, 1.2, 1.6, 2.0mm
- Jaw with free opening and closing, ensuring comfortable gripping.

No.	Spec.	Wire stripping diameter (mm)	$\blacksquare$	8	ā
91212	7"	Ø0.5, 1.2, 1.6, 2	6	24	9.7

▲ Excluded from lifetime warranty terms.

#### 91213 **Automatic Wire Stripper, Type B**



- Stripping range: Ø1.0, 1.6, 2.0, 2.6, 3.2mm
- Jaw with free opening and closing, ensuring comfortable gripping.

No.	Spec.	Wire stripping diameter (mm)	#	8	<b>®</b>
91213	7"	Ø1, 1.6, 2, 2.6, 3.2	6	24	9.6

▲ Excluded from lifetime warranty terms.

#### 91215 G Series Cable Stripper 0.2-6mm<sup>2</sup>







- Made of nylon + glass fiber for lightness and comfort
- V-shaped blade without damage to wire core
- Locking device provided to save space
- Built-in side blade to cut 2 wire
- Limit device provided to control the stripping range in 5-12mm

No.	Spec.	#	8	ō
91215	0.2-6mm <sup>2</sup>	6	-	-

#### **G Series Cable Stripper 4-28mm**







- Made of nylon for lightness and comfort
- Special bit for stripping in one step

No.	Spec.	$\blacksquare$	8	ā
91217	4-28mm	12	-	-





































































#### **Crimping Pliers for D-SUB Terminals 8"** 91101







- Made of carbon steel with fiberglass handle
- · Adjustable locking mechanism easily controlled by pressing/releasing handle

AWG	Capacity
30-24AWG	0.05-0.25mm <sup>2</sup>
22-18AWG	0.5-1mm <sup>2</sup>

No.	Spec.	#	*	ā
91101	8"	6	20	16.7

## **Crimping Pliers for European Cable Terminals 8"**



- High accuracy connector crimping pin to moderately press connector on cable wire without damaging the connector
- · Made of carbon steel with fiberglass handle
- · Adjustable locking mechanism easily controlled by pressing/releasing handle

anniping rai	iye
WG	Capacity
2-20AWG	0.5-0.75mm
8-16AWG	1-1.5mm <sup>2</sup>
6-14AWG	2.5mm <sup>2</sup>
4-12AWG	4mm <sup>2</sup>
2-10AWG	6mm <sup>2</sup>

No.	Spec.	$\blacksquare$	8	ā
91102	8"	6	20	10.3

#### 91104 **Crimping Pliers for Coaxial Terminals 9"**



- · High accuracy connector crimping pin to moderately press connector on cable wire without damaging the connector
- Made of carbon steel with fiberglass handle
- Adjustable locking mechanism easily controlled by pressing/releasing handle
- 1.72mm<sup>2</sup>, 2.5mm<sup>2</sup>, 5.4mm<sup>2</sup>, 6.48mm<sup>2</sup>, 8.2mm<sup>2</sup>

No.	Spec.	#	*	<u>a</u>
91104	9-1/2"	6	20	13.3

#### 91105 **Crimping Pliers for Insulated Terminals 9"**



Crimping Shape





- · High accuracy connector crimping pin to moderately press connector on cable wire without damaging the connector
- · Made of carbon steel with fiberglass handle
- Adjustable locking mechanism easily controlled by pressing/releasing handle
- Crimping range

AWG 0.5-1.5mm<sup>2</sup> 1.1-2.5mm<sup>2</sup> 22-18AWG Red 16-14AWG Blue 12-10AWG Yellow 4-6mm<sup>2</sup>

No.	Spec.	#	8	ā
91105	9"	6	20	13





















Crimping Shape











#### 91106 **Crimping Pliers for Non-Insulated Terminals 10"**



Crimping Shape





91109





- · High accuracy connector crimping pin to moderately press connector on cable wire without damaging the connector
- · Made of carbon steel with fiberglass handle
- · Adjustable locking mechanism easily controlled by pressing/releasing handle
- Crimping range

AWG<sup>°</sup> Capacity 22-16AWG 0.5-1.5mm<sup>2</sup> 14-12AWG 2.5-4mm<sup>2</sup> 10-8AWG 6-8mm<sup>2</sup> 7AWG 10mm<sup>2</sup>

No.	Spec.	#	8	<u></u>	_
91106	10-1/4"	1	20	13	



**Crimpring Pliers for Telecom Connector 9"** 



- · Ratchet crimping for convenience and labor saving
- Made of steel plate for firmness without deformation
- Connector ranges from telephone to network connector, including 4P, 6P, 8P
- Wire stripping and cutting functions
- Crimping range: 4P4C, 4P2C, 6P6C, 6P4C, 6P2C, 8P8C, 8P6C, 8P4C, 8P2C
- During crimping, if the handle cannot be released due to big connector crimping size or tight wire, try to grip the handle more tightly or open it by hand, which is not the product quality

No.	Spec.	L(mm)	#	*	ā
91109	9"	230	6	24	14

▲ The product is covered by SATA lifetime warranty (except for the cutting edge)

#### **Crimping Pliers for Non-Insulated Terminals 9"**













- · High accuracy connector crimping pin to moderately press connector on cable wire without damaging the connector
- · Made of carbon steel with fiberglass handle
- Adjustable locking mechanism easily controlled by pressing/releasing handle
- Crimping range

AWG Capacity 22-18AWG 0.5-1mm 16-14AWG 1.5-2.5mm<sup>2</sup> 12-10AWG 4-6mm<sup>2</sup>

No.	Spec.	#	*	ā
91107	9"	6	20	13.1

- · High accuracy connector crimping pliers to moderately press connector on cable wire without damaging the connector
- Made of carbon steel with fiberglass handle
- · Adjustable locking mechanism easily controlled by pressing/releasing handle
- Suitable for precise crimping of small computer connectors
- · Crimping range:

Capacity 30-24AWG 0.05-0.25mm<sup>2</sup> 22-18AWG 0.5-1mm<sup>2</sup>

No.	Spec.	$\Theta$	8	ā
91111	7.5"	6	36	15.5































## **Crimping Pliers for End Sleeves 7.5"**



- · High accuracy connector crimping pliers to moderately press connector on cable wire without damaging the connector
- Made of carbon steel with fiberglass handle
- Adjustable locking mechanism easily controlled by pressing/releasing handle
- Suitable for precise crimping of small European-type connectors
- · Crimping range:

	AWG	Capacity
91112	26-14AWG	0.14-2.5mm <sup>2</sup>
91213	24-10AWG	0.25-6mm <sup>2</sup>

No.	Spec.	#	*	ā
91112	7.5"(0.14-2.5mm <sup>2</sup> )	6	36	15.8
91113	7.5"(0.25-6mm <sup>2</sup> )	6	36	15.8

#### 91114 **Crimping Pliers for Insulated Terminals 7.5"**



- High accuracy connector crimping pliers to moderately press connector on cable wire without damaging the connector
- Made of carbon steel with fiberglass handle
- · Adjustable locking mechanism easily controlled by pressing/releasing handle
- Suitable for precise crimping of small insulated connectors
- · Crimping range:

AWG Capacity 24-22AWG 0.25-0.5mm<sup>2</sup> 20-16AWG 0.75-1.5mm<sup>2</sup> 14AWG 2.0-2.5mm<sup>2</sup>

	_			
No.	Spec.	#	₩	Ō
91114	7.5"	6	36	15.8

## **Crimping Pliers for Non-Insulated Terminals 7.5"**



Crimping Shape

Crimping Shape







- High accuracy connector crimping pliers to moderately press connector on cable wire without damaging the connector
- Made of carbon steel with fiberglass handle
- Adjustable locking mechanism easily controlled by pressing/releasing handle
- Suitable for precise crimping of small naked connectors

• or irriping	range.	
	AWG	Capacity
91115	24AWG	0.25mm <sup>2</sup>
	16AWG	1.5mm <sup>2</sup>
	14AWG	2.5mm <sup>2</sup>
91116	22-18AWG	0.5-1mm <sup>2</sup>
	16-14AWG	1.5-2.5mm
	12_10AWG	4_6mm <sup>2</sup>

No.	Spec.	#	8	ā
91115	7.5"(0.25-2.5mm²)	6	36	15.3
91116	7.5"(0.5-6mm²)	6	36	15.8

#### 91117 **Crimping Pliers for Open Plug Type Connectors 7.5"**







- High accuracy connector crimping pliers to moderately press connector on cable wire without damaging the connector
- · Made of carbon steel with fiberglass handle
- · Adjustable locking mechanism easily controlled by pressing/releasing handle
- · Suitable for precise crimping of small plug connectors
- Crimping range:

AWG Capacity 22AWG 0.5mm 18AWG 1.0mm<sup>2</sup> 16AWG 1.5mm

No.	Spec.	$\blacksquare$	8	ā
91117	7.5"	6	36	15.8



























#### 91118 **Self-Adjusting Crimping Pliers for End Sleeves 7"**



Crimping Shape



- · High precision terminal crimping holes, ensuring crimping accuracy
- · Labor-saving ratchet device, ensuring easy operation and effective crimping
- · Automatic adjustment of the dimension of the crimping line, ensuring no crimping error due to mismatched pressing dies and forming a quadrilateral column shape after crimping
- · Compact size, simple operation, and pressure regulation button and ratchet force release button, ensuring the service life and efficiency of the product

AWG Capacity 28-7AWG 0.08-10mm<sup>2</sup>

No.	Spec.	#	8	<u></u>
91118	7"	6	36	17.6

#### 91119 **Multipurpose Crimping Pliers for Telecom Connectors 8"**





- High accuracy connector crimping pliers to moderately press connector on cable wire
   Vertical crimping with ratchet for labor saving and improved crimping effect
- Built-in spring with soft TPR handle, being simple and elegant.
- · Capable of wire cutting, wire stripping and wire crimping, and round twisted pair stripping
- Connector ranges from telephone to network connector, including 4P4C, 4P2C, 6P6C, 6P4C, 6P2C, 8P8C, 8P6C, 8P4C, 8P2C
- During crimping, if the handle cannot be released due to big connector crimping size or tight wire, try to grip the handle more tightly or open it by hand, which is not the product quality problem.

No.	Spec.	$\square$	¥	ā
91119	8"	6	24	12.1

Crimping Pliers for D-SUB Connectors 8.5"

Crimping Shape

▲ The product is covered by SATA lifetime warranty (except for the cutting edge)

# 91118A Self-adjusting Continental Terminal Crimping Pliers









91121







- Suitable for continental terminal crimping
- Crimped line size adjusted automatically in hexagon, facilitating round hole wiring
- Pressure adjustment knob provided to adapt to various terminals

American wire standard Cross-sectional area 24-10AWG 0.25-6mm<sup>2</sup>

No.	Spec.	$\blacksquare$	8	ā
91118A	7"	6	-	-

- · High crimping force through efficient force transfer
- · Compact and light
- Small grip spread

 Capacity:  $\mathsf{AWG}$ 27-23AWG 0.1-0.25mm<sup>2</sup> 22-18AWG 0.5-1.0mm<sup>2</sup> 16-13AWG 1,5-2.5mm<sup>2</sup>

No.	Spec.	$\Theta$	*	ā
91121	8.5"	6	36	20























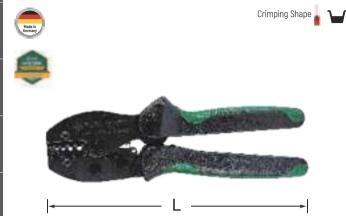








#### 91122 **Crimping Pliers for End Sleeves 8.5"**













- · High crimping force through efficient force transfer
- · Compact and light
- Small grip spread

Japacity:	
AWG	Capacity
23-19AWG	0.25-0.75mm <sup>2</sup>
18-16AWG	1.0-1.5mm <sup>2</sup>
14AWG	2.5mm <sup>2</sup>
12AWG	4.0mm <sup>2</sup>
1NAWG	6 ∩mm <sup>2</sup>

10AWG	6.0mm <sup>2</sup>			
No.	Spec.	#	8	ā
91122	8.5"	- fi	36	20

- · High crimping force through efficient force transfer
- · Compact and light
- ·Small grip spread
- · Capacity:

AWG Capacity 20-18AWG 0.5-1.0mm<sup>2</sup> 1.5-2.5mm<sup>2</sup> 16-14AWG 12-10AWG 7AWG 4.0-6.0mm<sup>2</sup> 10mm<sup>2</sup>

No.	Spec.	#	8	<u></u>
91126	8.5"	6	36	20

#### 91125 **Crimping Pliers for Insulated Terminals 8.5"**









91127

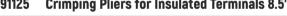


Crimping Shape















- High crimping force through efficient force transfer
- · Compact and light
- Small grip spread
- Capacity

Japaonej.	
AWG	Capacity
20-18AWG Red	0.5-1.0mm <sup>2</sup>
6-14AWG Blue	1.5-2.5mm <sup>2</sup>
2-10AWG Yellow	4.0-6.0mm <sup>2</sup>

No.	Spec.	8	8	ā
91125	8.5"	6	36	20

- High crimping force through efficient force transfer
- · Compact and light
- ·Small grip spread
- Capacity:

AWG	Capacity
20-18AWG	0.5-1.0mm <sup>2</sup>
16-14AWG	1.5-2.5mm <sup>2</sup>
12-10ΔWG	4 N-6 Nmm <sup>2</sup>

No.	Spec.	$\blacksquare$	¥	ā
91127	8.5"	6	36	20

#### 91128 Self-Adjusting Crimping Pliers for End Sleeves 7"



- Automatic self-adjustment to wire size
- Square crimp 4 serrated crimp. Profile
- Capacity:

AWG Capacity 28-5AWG 0.08-16mm<sup>2</sup>

No.	Spec.	#	¥	<u></u>
91128	7"	6	36	16

#### 91131 Self-Adjusting Wire Stripper 7.5"



- Fully automatic adjustment to all solid, multi-and fine stranded conductors with PVC insulation and a number of special insulations
- Capacity: 0.03-10.0 mm<sup>2</sup>
- Cable Cutter inside
- Application No. Spec. M 7.5" 0.03-10.0 mm<sup>2</sup>

#### 91132 **Automatic Wire Stripper 7.5"**



- PVC-Single stranded wire:Ø 0.70/1.35/1.70/2.30/2.70/3.50 mm
- Capacity:0.25/0.75/1.5/2.5/4/6 mm<sup>2</sup>

No.	L	Application	#	8	ā
91132	7.5"	0.25/0.75/1.5/2.5/4/6 mm <sup>2</sup>	6	36	22

## **Crimping Pliers For Terminals**



- Strong terminal crimping pliers, moderately press the terminal on the wire without damaging the terminal
  With ratchet device, easy to operate
  Crimp operation for large gauge bare terminals
  Capacity:

oupdoitj.		
	American wire standard	Cross-sectional area
91141	22-10AWG	$0.5-6MM^{2}$
91142	14-5AWG	2.5-16MM <sup>2</sup>
91143	7-2AWG	10-35MM <sup>2</sup>

No.	Spec.	L	#	8	ā
91141	0.5-6MM <sup>2</sup>	7"	6	-	-
91142	2.5-16MM <sup>2</sup>	11"	6	-	-
91143	10-35MM <sup>2</sup>	13"	6		







































































## **Energy-saving Continental Terminal Crimping Pliers**



91151 for small continental terminals

91152 for continental terminals

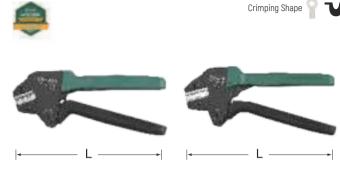
Crimping Shape

- Eccentric labor-saving mechanism for easy crimping Pressure adjustment knob provided to adapt to various terminals

	American wire standard	Cross-sectional area
91151	24-19AWG	0.25-0.75MM <sup>2</sup>
	18-16AWG	1-1.5MM <sup>2</sup>
	14AWG	2.5MM <sup>2</sup>
	12AWG	4MM <sup>2</sup>
	10AWG	6MM <sup>2</sup>
91152	24-19AWG	0.25-0.75MM <sup>2</sup>
	18-16AWG	1-1.5MM <sup>2</sup>
	14AWG	2.5MM <sup>2</sup>
	12AWG	4MM <sup>2</sup>
	10AWG	6MM <sup>2</sup>
	7AWG	10MM <sup>2</sup>

No.	Spec.	L	#	8	<u></u>
91151	0.25-6MM <sup>2</sup>	6.8"	6	-	-
91152	0.25-10MM <sup>2</sup>	8"	6	_	_

## **Energy-saving Bare Terminal Crimping Pliers**



- 91155 Suitable for small bare terminals
- 91156 Suitable for bare terminals
- Eccentric labor-saving mechanism for easy crimping Pressure adjustment knob provided to adapt to various terminals

	American wire standard	Cross-sectional area
91155	22-16AWG	0.5-1.5MM <sup>2</sup>
	14AWG	2.5MM <sup>2</sup>
	12-10AWG	4-6MM <sup>2</sup>
91156	22-18AWG	0.5-1MM <sup>2</sup>
	16-14AWG	1.5-2.5MM <sup>2</sup>
	12-10AW6	4-6MM <sup>2</sup>
	7AWG	10MM <sup>2</sup>

No.	Spec.	L	#	8	<u></u>
91155	0.5-6MM <sup>2</sup>	6.8"	6	-	-
91156	0.5-10MM <sup>2</sup>	8"	6	-	-

## **Energy-saving Insulated Terminal Crimping Pliers**









91153 Suitable for small insulated terminals

91154 Suitable for insulated terminals

- Eccentric labor-saving mechanism for easy crimping
   Pressure adjustment knob provided to adapt to various terminals
- Capacity:

	American wire standard	Cross-sectional area
91153	24-16AWG	0.25-1.5MM <sup>2</sup>
	16-14AWG	1.5-2.5MM <sup>2</sup>
91154	22-16AWG	$0.5-1.5MM^2$
	16-14AWG	1.5-2.5MM <sup>2</sup>
	12-10AWG	4-6MM <sup>2</sup>

				_	
No.	Spec.	L	$\Theta$	8	ā
91153	0.25-2.5MM <sup>2</sup>	6.8"	6	-	-
91154	0.5-6MM <sup>2</sup>	8"	6	-	-

## **Slipping Bolt Removal Pliers**











- $\bullet \text{Specially designed head shape and tooth shape for clamping and removing rusty or slipping bolts } \\$
- $\bullet\,\mbox{Made}$  of Cr-V for firmness and long service life

No.	Spec.	Clamping Capacity	$\blacksquare$	8	<u>@</u>
70501	7"	M2-M6	6	36	6.4































## **Energy-saving Plug Terminal Crimping Pliers**



Suitable for small plug terminals (28B)



91158 Suitable for small plug terminals (48B)

Suitable for plug terminals



- Eccentric labor-saving mechanism for easy crimping
   Pressure adjustment knob provided to adapt to various terminals
   Capacity:

<ul> <li>Gapacity.</li> </ul>		
	American wire standard	Cross-sectional area
91157	24-22AWG	0.25-0.5MM <sup>2</sup>
	24-18AWG	0.25-1MM <sup>2</sup>
91158	22-18AWG	0.5-1MM <sup>2</sup>
04450	18-16AWG	1-1.5MM <sup>2</sup>
91159	22AWG	0.5MM <sup>2</sup>
	18-16AWG	1-1.5MM <sup>2</sup>
	14AWG	2.5MM <sup>2</sup>
	12-10AWG	4-6MM <sup>2</sup>

No.	Spec.	L	#	8	<u></u>
91157	0.25-1MM <sup>2</sup>	6.8"	6	-	-
91158	0.5-1.5MM <sup>2</sup>	6.8"	6	-	-
91159	0.25-6MM <sup>2</sup>	8"	6	-	-

## **Slip Joint Pliers**



- Cr-Ni steel forged
- Embossing handle

No.	Spec.	#	8	ā
70521	6"	6	36	9
70522	8"	6	36	10

## **Groove Joint Pliers**



• A6 straight jaw, and body forged from CR-V alloy steel

No.	Spec.	Applicable Tube Diameter(mm)	$\Theta$	8	ō
70411	8"	4-31	6	60	19.3
70412	10"	5-45	3	24	12.2
70413	12"	5-54	3	24	16.9
70414	16"	10-92	3	18	26.9

## **Slip Joint Pliers**



• Double curved jaws and forged from Cr-V alloy steel

No.	Spec.	L(mm)	Applicable Tube Diameter(mm)	$\Theta$	8	ā
70511	6"	159	5-30	6	60	12.8
70512	8"	204	6-36	6	48	17.5

## **5Pc. Convertible Snap Ring Pliers Set**





- •1pc Snap Ring Pliers •2pc Straight Tip (1.2, 1.4) •2pc Degree Tip (45° 90° )

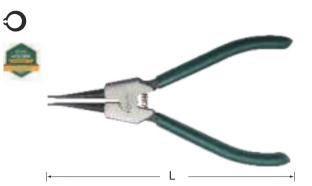
No.	#	8	<u> </u>
09251	6	48	15.7







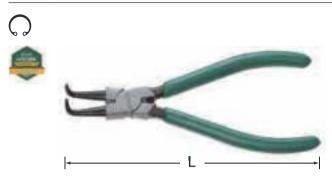
#### External Snap Ring Pliers 7", Straight Tips 72001



• Cr-V steel forged

No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)		¥	<b>5</b>
72001	7"	175	Ø1.7+/-0.2	19-60	6	36	7.8

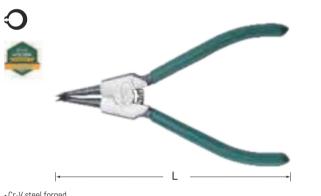
## 72005 Internal Snap Ring Pliers 7", Curved Tips



• Cr-V steel forged

No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	#	¥	ā
72005	7"	175	Ø1.7+/-0.2	19-60	6	36	6.8

## 72002 External Snap Ring Pliers 7", Curved Tips



• Cr-V steel forged

No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	#	8	ā
72002	7"	175	Ø1.7+/-0.2	19-60	6	36	7.7

## **External Snap Ring Pliers, Straight Tips**



• Cr-V steel forged

No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)		¥	Ō
72011	5"	125	Ø1.30 — 0.3	10-22	6	36	6.1
72012	7"	175	Ø1.80 — 0.3	19-60	6	36	7.7
72013	9"	225	Ø2.30 — 0.35	40-100	6	36	12.8
72014	13"	325	Ø3.20 — 0.35	85-140	6	24	13.2

## 72004 Internal Snap Ring Pliers 7", Straight Tips



• Cr-V steel forged

No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	#	¥	ā
72004	7"	175	Ø1.7+/-0.2	19-60	6	36	6.8

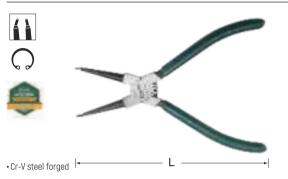
## **External Snap Ring Pliers, Curved Tips**



• Cr-V steel forged

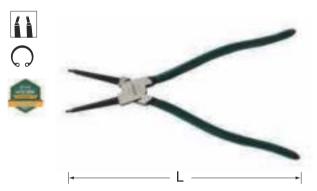
No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	$\Theta$	¥	ā
72021	5"	125	Ø1.30 — 0.3	10-22	6	36	6.2
72022	7"	175	Ø1.80 — 0.3	19-60	6	36	7.7
72023	9"	225	Ø2.30 — 0.35	40-100	6	36	12.8
72024	13"	325	Ø3.20 — 0.35	85-140	6	24	13.6

## **Internal Snap Ring Pliers, Straight Tips**



No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	$\Theta$	¥	ā
72031	5"	125	Ø1.30 — 0.3	10-22	6	36	5.6
72032	7"	175	Ø1.80 — 0.3	19-60	6	36	6.8
72033	9"	225	Ø2.30 — 0.35	40-100	6	36	11.8

## Internal Snap Ring Pliers 13", Straight Tips



• Cr-V steel forged

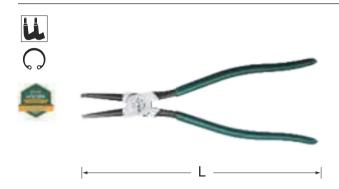
No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	$\blacksquare$	¥	Ō
72034	13"	325	Ø3.20 — 0.35	85-140	6	24	12.5

## **Internal Snap Ring Pliers, Curved Tips**



No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range	$\blacksquare$	8	<u></u>
72041	5"	125	Ø1.30 — 0.3	10-22	6	36	5.4
72042	7"	175	Ø1.80 — 0.3	19-60	6	36	6.9
72043	9"	225	Ø2.30 — 0.35	40-100	6	36	11.9

## Internal Snap Ring Pliers 13", Curved Tips



• Cr-V steel forged

No.	Spec.	L(mm)	Tip Size(mm)	Snap Ring Range (mm)	$\blacksquare$	¥	ā
72044	13"	325	Ø3.20 — 0.35	85-140	6	24	12.5

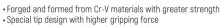
## **G** Series External Snap Ring Pliers, Straight Tips











- Antirust surface with high-quality black finish

No.	Spec.	Tip Diameter Ø(mm)	Tip Length (mm)	Applicable Snap Ring Range D(mm)	$\Theta$	¥	ā
73010	5″	0.9	1.2	3-10	6	120	16
73011	5"	1.3	1.5	10-25	6	120	16
73012	7"	1.8	2.5	19-60	6	60	13
73013	9"	2.3	3.5	40-100	6	60	17
73014	13"	3.2	4.5	85-140	6	60	28.5

## **G** Series External Snap Ring Pliers, Curved Tips

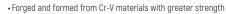












Special tip design with higher gripping force
 Antirust surface with high-quality black finish

No.	Spec.	Tip Diameter Ø(mm)	Tip Length (mm)	Applicable Snap Ring Range D(mm)	$\Theta$	¥	ā
73020	5"	0.9	1.2	3-10	6	120	16
73021	5"	1.3	1.5	10-25	6	120	16
73022	7"	1.8	2.5	19-60	6	60	13
73023	9"	2.3	3.5	40-100	6	60	16.5
73024	13"	3.2	4.5	85-140	6	60	28



























































## **G** Series Internal Snap Ring Pliers, Straight Tips



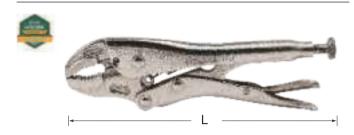




- Forged and formed from Cr-V materials with greater strength
- Special tip design with higher gripping force
- · Antirust surface with high-quality black finish

No.	Spec.	Tip Diameter Ø(mm)	Tip Length (mm)	Applicable Snap Ring Range D(mm)	$\Theta$	¥	Ā
73030	5"	0.9	1.2	8-13	6	120	16
73031	5"	1.3	1.5	12-25	6	120	16
73032	7"	1.8	2.5	19-60	6	120	24
73033	9"	2.3	3.5	40-100	6	60	17
73034	13"	3.2	4.5	85-140	6	60	28

## **Locking Pliers, Curved Jaw**



- Jaw made of Cr-Mo for high toughness
   Body made of high alloy steel without deformation
   Screw-rod fine tuning knob, facilitating clamping size adjustment
   Round jaw capable of cutting

No.	Spec.	L(mm)	Maximum opening(mm)	#	8	画
71101	5″	144	37	6	24	5.4
71102	7"	186	51	6	36	14
71103	10"	244	63	6	36	20.6

## **G Series Internal Snap Ring Pliers, Curved Tips**







- Forged and formed from Cr-V materials with greater strength
- Special tip design with higher gripping force
- · Antirust surface with high-quality black finish

No.	Spec.	Tip Diameter Ø(mm)	Tip Length (mm)	Applicable Snap Ring Range D(mm)	$\Theta$	¥	ā
73040	5"	0.9	1.2	8-13	6	60	8.5
73041	5″	1.3	1.5	12-25	6	60	8.5
73042	7"	1.8	2.5	19-60	6	60	13
73043	9"	2.3	3.5	40-100	6	60	17
73044	13"	3.2	4.5	85-140	6	60	28

## **Quick Release Locking Pliers, Curved Jaw**



No.	Spec.	L(mm)	Maximum opening(mm)	#	8	<u></u>
71105	5"	144.3	37	6	72	18.5
71106	7"	186	51	6	48	22.1
71107	10"	226	63	6	36	24.6

## **Quick Release Locking Pliers, Curved Jaw**



No.	Spec.	L(mm)	Maximum opening(mm)	#	*	ā
71001	7"	190	51	6	48	22.5
71002	10"	220	63	6	36	24.8

## **Locking Pliers, Straight Jaw**



- Jaw made of Cr-Mo for high toughness
- · Body made of high alloy steel without deformation
- · Screw-rod fine tuning knob, facilitating clamping size adjustment
- Round jaw capable of cutting

No.	Spec.	L(mm)	Maximum opening(mm)	#	8	ð
71202	7"	185	51	6	24	10.8
71203	10"	224	57	6	36	21.5

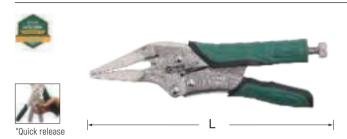




- Jaw made of Cr-Mo for high toughness
- · Body made of high alloy steel without deformation
- Screw-rod fine tuning knob, facilitating clamping size adjustment
- Round jaw capable of cutting

No.	Spec.	L(mm)	Maximum Cutting Edge Opening (mm)	Maximum opening(mm)		8	Ø
71301	6"	169	7	62	6	24	5.7
71302	9"	225	23	86	6	12	5.8

#### **Quick Release Locking Pliers, Long Nose**



- · Jaw made of Cr-Mo for high toughness
- · Body made of high alloy steel without deformation
- •One-hand release mechanism without common trigger device of traditional vise for easier
- Anti-slip and anti-pinch two-tone handle for comfort and reduced fatigue

No.	Spec.	L(mm)	Maximum opening(mm)	#	8	<u></u>
71305	6"	187	62	6	72	20.4
71306	9"	230	86	6	36	18.1

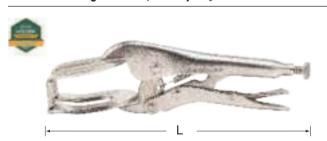
## **Quick Release Locking Pliers, Straight Jaw**



- Jaw made of Cr-Mo for high toughness
- · Body made of high alloy steel without deformation
- One-hand release mechanism without common trigger device of traditional vise for easier
- Anti-slip and anti-pinch two-tone handle for comfort and reduced fatigue

No.	Spec.	L(mm)	Maximum opening(mm)	#	8	ā
71205	7"	170	51	6	48	23.9
71206	10"	220	57	6	36	16

## Locking Pliers 9", U-Shaped Jaw



- Jaw made of carbon steel for high toughness
- Body made of high alloy steel without deformation
   Screw-rod fine tuning knob, facilitating clamping size adjustment

No.	Spec.	L(mm)	Depth(mm)	Maximum opening (mm)	$\square$	¥	ā
71401	9"	204	70	62	6	12	8.1









































































#### 71501 Locking Pliers 8", Wide Jaw



- · Jaw made of carbon steel for high toughness
- Body made of high alloy steel without deformation
- Screw-rod fine tuning knob, facilitating clamping size adjustment

No.	Spec.	L(mm)	Plier Head Width (mm)	Maximum opening (mm)	#	¥	ā
71501	8"	232	78.5	52	6	12	7.3

#### 71601 Locking Pliers 11", C-Shaped Jaw



- Jaw made of carbon steel for high toughness
- Body made of high alloy steel without deformation
- Screw-rod fine tuning knob, facilitating clamping size adjustment

No.	Spec.	L(mm)	Depth(mm)	Maximum opening (mm)	$\Theta$	¥	ē
71601	11"	273	78	98	6	12	10.4

#### Locking Pliers 19", Chain Clamp 71701



- Jaw made of carbon steel for high toughness Body made of high alloy steel without deformation
- Screw-rod fine tuning knob, facilitating clamping size adjustment

No.	Spec.	L(mm)	Chain Length(mm)	$\blacksquare$	¥	ā
71701	19"	714	485	6	12	9.9

# **Cutting Tool**

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# **Cutting Tool**

## 93101A Aviation Snips 10", Left-hand Cut



- · Precise fit, ensuring no deviation during cutting
- · Safety circlip design and large plastic handle, easy to grip
- Max. cutting capability: 1.2MM cold rolled steel sheet or 0.7MM stainless steel plate
- Made of chrome-vanadium steel. Cutting port with special quenching treatment, making a smoother cutting and no crack

No.	Spec.	Cold rolled iron plate(mm)	Stainless steel plate(mm)	#	¥	ā
93101A	10"	1.2	0.8	-	6	0.37

▲ Excluded from lifetime warranty terms.

#### 93102A Aviation Snips 10", Right-hand Cut



- · Available in straight or right cutting
- · Serrated cutting blades avoid slip when cutting
- TPR handle makes comfortable when gripping
- Forged & hardened Cr-Mo blades for long service life
- Maximum cutting capacity: 1.2mm cold rolled iron plate or 0.8mm stainless steel plate

No.	Spec.	Cold rolled iron plate(mm)	Stainless steel plate(mm)	#	¥	ā
93102A	10"	1.2	0.8	-	6	0.37

▲ Excluded from lifetime warranty terms.

## **Aviation Snips, Straight Cut**



- Available in straight, left or right cutting
   TPR handle makes comfortable when gripping
   Serrated cutting blades avoid slip when cutting
- Forged & hardened Cr-Mo blades for long service life
- Maximum cutting capacity: 1.2mm cold rolled iron plate or 0.8mm stainless steel plate

No.	Spec.	Cold rolled iron plate(mm)	Stainless steel plate(mm)	#	¥	ā
93103A	10"	1.2	0.8	-	6	0.38
93104A	10"	1.2	0.8	-	6	0.45

▲ Excluded from lifetime warranty terms.

#### **Heavy Duty Bolt Cutter**



- •Two-colored anti-slip grips •The blade is forged with Cr-V steel
- High frequency quenching for cutting edge

No.	Spec.	Cutting capability for low carbon steel (Ømm)	Cutting capability for Medium carbon steel (Ømm)	Blade spare part No	#	¥	ā
93501A	8"	Ø3.5	Ø3.17	/	1	6	0.29
93502A	12"	Ø5	Ø4	P93502A-01	1	4	0.82
93503A	14"	<b>Ø</b> 7	Ø5	P93503A-01	1	4	0.97
93504A	18"	Ø8	Ø6	P93504A-01	1	4	1.55
93505A	24"	Ø10	Ø8	P93505A-01	1	4	2.5
93506A	30"	Ø13	Ø10	P93506A-01	1	4	3.95
93507A	36"	Ø16	Ø12	P93507A-01	1	4	5.5
93508A	42"	Ø19	Ø14	P93508A-01	1	2	7.95
93509A	48"	Ø22	Ø16	P93509A-01	1	2	9.65

▲ Excluded from lifetime warranty terms.

#### 93121 **Antislip Scissors 8"**



- It is suitable for high strength and high toughness fabrics such as Kevlar
- The blade is serrated, sharp and can prevent slipping
- The thickening and lengthening blade design can save labor and prevent deforma-tion during
- Surface plating process improves wear resistance and prolongs product life

#### Scope of application:

• Kevlar fabric, copper wire, leather, cardboard, plastic plate and thin aluminum sheet, soft wire below Φ1mm

No.	#	8	ā
93121	10	40	8

#### 93122 Stanless Steel Scissors 7"

## 93125A Multi-purpose Electrical Scissors





- The blade is made of high-grade stainless steel, which is suitable for various environments such as family, office, factory and so on.
- The handle is made of zinc alloy, durable and enlarged grip design, so that it can be used for a long time.
- · Longer blade design can save effort during cutting.

#### Scope of application:

• Copper wire, leather, cardboard, plastic plate and thin aluminum sheet

No.	#	8	ā
93122	12	96	20

▲ Excluded from lifetime warranty terms.

- The blade is serrated, sharp and can prevent slipping
- Special shearing port, suitable for all kinds of wire shearing
  Hardness up to HRC55±3

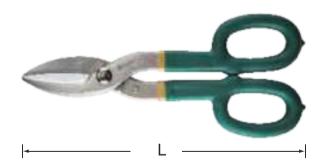
No.	L×W×H (mm)	#	¥	M
93125A	150 × 80 × 18	4	-	0.15

▲ Excluded from lifetime warranty terms.

#### 93123 **Universal Scissors**



## **Straight Pattern Tinner's Snips**



- The blade is made of high-grade stainless steel with sharp and durable edge
- The cutter edge has anti-skid tooth design to avoid skidding during shearing
- · Aluminum alloy handle, shear more forcefully
- · Anti-rust as a whole, suitable for humid environment

No.	L×W×H (mm)	#	8	ā
93123	200×85×12	-	-	0.14

▲ Excluded from lifetime warranty terms.

No.	Spec.	L(mm)	Cold-Rolling Iron Plate (mm)	Stainless Steel Plate (mm)	#	¥	ā
93302	8"	205	0.61	0.41	8	48	17.5
93303	10"	270	0.78	0.45	6	36	20.5
93304	12"	331	0.91	0.63	6	24	17.1
93305	14"	360	1.2	0.7	6	24	20.8
93306	16"	415	1.6	1	-	10	18.5

















































- Forged body for good strength Finely machined blades for smooth cutting

No.	Spec.	L(mm)	Cold-Rolling Iron Plate (mm)	Stainless Steel Plate (mm)		¥	ā
93211	7"	183	0.6	0.36	-	36	-
93213	10"	260	0.7	0.45	-	24	-
93216	12"	312	0.9	0.7	-	24	-
93219	16"	420.9	1.5	1.2	-	16	-

▲ Excluded from lifetime warranty terms.

#### 93214 Bent Snips 10"



- Offset handle to keep the handle above the cut material for safety
- Forged body for good strength
- Finely machined blades for smooth cutting

No.	Spec.	L(mm)	Cold-Rolling Iron Plate (mm)	Stainless Steel Plate (mm)	$\Theta$	¥	ā
93214	10"	285.7	0.7	0.45	-	24	-

▲ Excluded from lifetime warranty terms.

## **Pointed Snips**



- Pointed blade for cutting straight, leftward and rightward bent wires
   Forged body for good strength
   Finely machined blades for consistent cutting performance

No.	Spec.	L(mm)	Cold-Rolling Iron Plate (mm)	Stainless Steel Plate (mm)	#	¥	ā
93215	10"	263	0.6	0.45	-	24	-
93218	12"	325.6	0.7	0.6	-	24	-

▲ Excluded from lifetime warranty terms.

## 93601 Wire Rope Cutter 8"



- Blade made of Cr-V
- Capable of cutting single or multiple wire ropes, spring steel wires, cables, etc.

No.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	¥	ē
93601	190	Wire rope Ø5 Spring steel wire Ø1.6	6	36	14

# **Straight Pattern Tinner's Snips**



Retractable spring for easy storage



- With anti-slip screw which can prevent slipping during cutting
- Shot blasting on entire surface for aesthetic appear-ance
- The cutting edge hardened by high frequency quenching makes cutting smooth
- The whole item has undergone heat treatment, which makes it durable

No.	Spec.	L(mm)	c	<del>9</del>	8	<u></u>
93201	8"	205		6	48	0.4
93202	10"	255		6	36	0.5
93203	12"	305		6	24	0.8
93204	14"	355		5	20	1

▲ Excluded from lifetime warranty terms.

## 93473 Wire Stripping Knife, Straight Blades



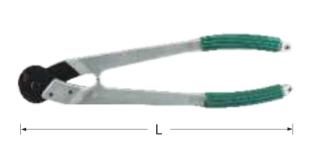
- · Withe sharp & durable ultra-finished blade
- Used for handing wires and cables in electric power industry and related industries

Wire Stripping Knife, Curved Blades

No.	#	8	ā
93473	10	40	5.7

▲ Excluded from lifetime warranty terms.

#### 93603 Wire Rope Cutter 24"





- Blade made of Cr-V
- Capable of cutting single or multiple wire ropes and cables
- · Handle made of aluminum alloy for lightness and durability

No.	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	*	M
93603	625	Wire rope Ø12mm Cable 150mm²	1	4	10

▲ Excluded from lifetime warranty terms.

- · Withe sharp & durable ultra-finished blade
- Including sickle shaped blade, with sliding guide on the cutting tip, without damaging cable
- Used for handing wires and cables in electric power industry and related industries

No.	#	₩	<b>®</b>
93474	10	40	5.9











































## **Electricians Scissors 7"**

#### **Electricians Scissors, Curved Blades 7"** 93107





- The blade is serrated, sharp and can prevent slipping
- With special anti-slip groove for easy wire cutting
- Hardness up to HRC55+/-3
- Designed with small cutting edge for cutting hard objects
- With self-tensing spring, much easier to use
- Adjustable bolted joint for easy maintenance

#### Scope of application:

- 4-conductor copper cable, Fishing line
- Φ0.5mm The following soft wire
- · Leather, Cardboard, plastic sheet, thin aluminum sheet
- Do not use it to cut the steel wire.

No.	#	8	ā
93105	10	40	7.8

▲ Excluded from lifetime warranty terms.

- Precision-machined blade, being sharp and durable
- Two-tone ergonomic handle for skid resistance and comfort
- Small-angle cutting edge for cutting hard objects
- · Self-tension spring for convenient operation
- · Adjustable bolted joint for easy maintenance

No.	#	8	ā
93107	10	40	8.2

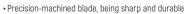
**Electricians Coaxial Cable Cutter 7"** 

▲ Excluded from lifetime warranty terms.

#### 93106 Electricians Scissors 8"







- Two-tone ergonomic handle for skid resistance and comfort
- Small-angle cutting edge for cutting hard objects
- · Self-tension spring for convenient operation
- · Adjustable bolted joint for easy maintenance

No.	#	8	ā
93106	10	40	8.2

▲ Excluded from lifetime warranty terms.



- •10mm copper-alumi •Hardness up to HRC55+/-3
- $\bullet \mbox{With self-tensing spring, much easier to use} \\$
- · Adjustable bolted joint for easy maintenance

#### Scope of application:

•Cutting capacity: Mas Φ10mm copper-alumi cable

No.	#	8	ā
93108	10	40	7.9



#### 93109 **Heavy Duty Electricians Cable Cutter 7"**



- · Ultra-precision blade, sharp and durable
- 10mm copper-alumi Hardness up to HRC55+/-3
- $\bullet$  With self-tensing spring, much easier to use
- Adjustable bolted joint for easy maintenance

#### Scope of application:

• Cutting capacity: Mas Φ10mm copper-alumi cable

No.	#	8	ā
93109	10	40	8.2

▲ Excluded from lifetime warranty terms.

#### 93127 **General Long-Blade Scissors**



- · Lengthen the cutting edge, cutting more labor-saving
- · Symmetrical handle, both right and left hands are convenient to use

No.	#	8	Ø
93127	4	24	5

▲ Excluded from lifetime warranty terms.

#### 93110 **Electricians Diagonal Cutter 7"**



- · With sharp & durable ultra-finished blade
- · Suitable for electronic factory operation
- Self-stretching spring, more convenient to use

#### Scope of application:

- 4-conductor copper cable
- $\bullet$   $\Phi$ 0.5mm The following soft wire
- Plastic nozzle
- Do not use it to cut the steel wire.

No.	#	8	ā
93110	10	40	7.4

▲ Excluded from lifetime warranty terms.

#### 93128 **Rubber Grip Long-Blade Scissors**



- Thickened titanium-plated blade for heavy-duty cutting
- Offset handle keeping the handle above the material to be cut for safety
- Rubber-coated handle for comfort

No.	#	8	<u> </u>
93128	4	24	7.1

▲ Excluded from lifetime warranty terms.

#### **Rubber Grip Heavy Duty Scissors** 93126



- Thickened titanium-plated blade for heavy-duty cutting
- · Concealed spring facilitating operation and avoiding jamming
- Rubber-coated handle for comfort

No.	#	8	<u></u>
93126	4	24	6.1

▲ Excluded from lifetime warranty terms.

#### 93129 **Rubber Grip Long-Blade Heavy Duty Scissors**



- · Thickened titanium-plated blade for heavy-duty cutting
- · Concealed spring facilitating operation and avoiding jamming
- · Pass-thru metal handle for high strength
- · Enlarged rubber-coated handle for comfort

No.	#	8	<u></u>
93129	4	24	8.5















































































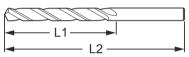


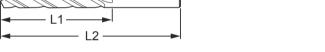


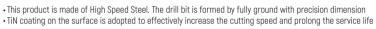












#### 10Pc. HSS-TIN TWIST DRILL

No.	Spec. (mm)	L1(mm)	L2(mm)	$\Theta$	¥	<u></u> ■
52110A	1	12	34	20	400	-
52115A	1.5	18	43	20	400	-
52120A	2	24	49	20	400	-
52125A	2.5	30	57	20	400	-
52128A	2.8	33	61	20	400	-
52130A	3	33	61	20	400	-
52132A	3.2	36	65	20	400	-
52133A	3.3	36	65	20	400	-
52135A	3.5	39	70	20	400	-
52138A	3.8	43	75	10	60	-
52140A	4	43	75	10	60	-
52142A	4.2	43	75	10	60	-
52145A	4.5	47	80	10	60	-
52148A	4.8	52	86	10	60	-
52150A	5	52	86	10	60	-
52152A	5.2	52	86	10	60	-
52155A	5.5	57	93	10	60	-
52160A	6	57	93	10	60	-
52165A	6.5	63	101	10	60	-
52168A	6.8	69	109	10	60	-
52170A	7	69	109	10	60	-
52175A	7.5	69	109	10	60	-
52180A	8	75	117	10	50	-
52185A	8.5	75	117	10	50	-

#### 5Pc. HSS-TIN TWIST DRILL

No.	Spec. (mm)	L1(mm)	L2(mm)	$\Theta$	¥	<u></u>
52190A	9	81	125	5	30	-
52195A	9.5	81	125	5	30	-
52200A	10	87	133	5	30	-
52205A	10.5	87	133	5	30	-
52210A	11	94	142	5	30	-
52215A	11.5	94	142	5	30	-
52220A	12	101	151	5	30	-
52225A	12.5	101	151	5	30	-
52230A	13	101	151	5	30	-

 ${\color{red} igap A}$  Excluded from lifetime warranty terms.

#### 52906A 6Pc. HSS-TiN Twist Drill Set



No.	Spec. (mm)	$\Theta$	8	<b></b>
52906A	2, 3, 4, 5, 6, 8	-	100	11.5

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

#### 52910A 10Pc. HSS-TiN Twist Drill Set



No.	Spec. (mm)	$\bigoplus$	*	ā
52910A	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	-	80	20.6

▲ Warranty terms of tool set comply with the individual product.

#### 52919A 19Pc. HSS-TiN Twist Drill Set

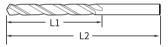


No.	Spec. (mm)	$\Theta$	8	<b></b>
52919A	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10	-	30	21.1

▲ Warranty terms of tool set comply with the individual product.

#### **Cobalt Twist Drill**





Made of M35 high vanadium high-speed steel containing cobalt, the twist drill supports
operation on alloy and non-alloyed materials below HB250 such as cast steel, cast iron, diecasting fitting, nonferrous metal, aluminum, rigid plastic.

#### 10Pc. Cobalt Twist Drill

No.	Spec. (mm)	L1(mm)	L2(mm)	$\Theta$	8	M
52310	1.0	12	34	20	400	6.9
52315	1.5	20	40	20	400	8.1
52320	2.0	24	49	20	400	9.7
52325	2.5	30	57	20	400	10.9
52328	2.8	33	61	20	400	12.9
52330	3.0	33	61	20	400	16
52332	3.2	36	65	20	400	18
52333	3.3	36	65	20	400	18.4
52335	3.5	39	71	20	400	22
52338	3.8	43	75	10	60	5
52340	4.0	43	75	10	60	5.5
52342	4.2	43	75	10	60	5.9
52345	4.5	47	85	10	60	6.9
52348	4.8	52	86	10	60	7.9
52350	5.0	52	86	10	60	8.5
52352	5.2	52	86	10	60	9
52355	5.5	57	93	10	60	10.2
52360	6.0	57	93	10	60	11.5
52365	6.5	63	101	10	60	14.1
52368	6.8	69	109	10	60	14.9
52370	7.0	69	109	10	60	17.1
52375	7.5	69	109	10	60	19.2
52380	8.0	75	117	10	50	11.2
52385	8.5	75	117	10	50	12.2

































































135°

M35

**GB** 









#### 5Pc. Cobalt Twist Drill

No.	Spec. (mm)	L1(mm)	L2(mm)	$\Theta$	¥	M
52390	9.0	81	125	5	30	8.9
52395	9.5	81	125	5	30	9.5
52400	10.0	87	133	5	30	11
52405	10.5	87	133	5	30	11.9
52410	11.0	97	142	5	30	13.5
52415	11.5	97	142	5	30	14.7
52420	12.0	101	151	5	30	16.3
52425	12.5	101	151	5	30	17.7
52430	13.0	101	151	5	30	19

▲ Excluded from lifetime warranty terms.

#### 52806 6Pc. Cobalt Twist Drill Set



- Made of M35 high-speed steel with 5% cobalt
- Bit formed by grinding with precise size
- Anti-slipping with self-centering function of 135° double relief angles
- Fine thread for higher cutting speed and longer service life

No.	Spec. (mm)	$\Theta$	8	ā
52806	2, 3, 4, 5, 6, 8	10	100	11

▲ Warranty terms of tool set comply with the individual product.

#### 10Pc. Cobalt Twist Drill Set 52810



- Made of M35 high-speed steel with 5% cobalt
- Bit formed by grinding with precise size
- Anti-slipping with self-centering function of 135° double relief angles
- Fine thread for higher cutting speed and longer service life

No.	Spec. (mm)	#	8	<b></b>
52810	1, 2, 3, 4, 5, 6, 8, 9, 10	10	80	21

▲ Warranty terms of tool set comply with the individual product.

#### 19Pc. Cobalt Twist Drill Set 52819



- Made of M35 high-speed steel with 5% cobalt
- · Bit formed by grinding with precise size
- Anti-slipping with self-centering function of 135° double relief angles
- Fine thread for higher cutting speed and longer service life

No.	Spec. (mm)	<b>#</b>	8	ā
52819	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10	5	40	19

▲ Warranty terms of tool set comply with the individual product.

#### **Grinding Wheel**



- High grinding speed
- •3-layer glass fiber mesh, with high safety and revolving strength meeting European standard
- Suitable for mainstream drive tools in the market
- Surface grinding Welding scar cleaning
- · Chamfering and deburring

No.	0D (mm)	ID (mm)	Thickness (mm)	Minimum order quantity (pc)		¥	ā
55200	100	16.00	6.00	200	25	200	2.9
55220	100	16.00	4.00	200	25	200	1.4
55221	100	16.00	6.00	200	25	200	2.9
55222	125	22.23	6.00	100	25	100	4.4
55223	150	22.23	6.00	100	25	100	6.4
55224	180	22.23	6.00	50	10	50	3.8

## **Cutting-Off Wheel**

## **Flap Discs**









- Fast cutting with less burr and less deformation
- High safety and revolving strength meeting European standard
   Capable of cutting metal plate and thin-wall profiles with thickness no more than 1.6mm
   Capable of cutting solid materials and profiles with standard thickness
   Rail cutting blades for cutting railway and subway tracks

No.	OD (mm)	ID (mm)	Thickness (mm)	Minimum order quantity (pc)	#	¥	ā
55002	105	16.00	1.00	400	25	400	0.6
55010	105	16.00	1.20	600	25	600	0.6
55015	355	25.40	2.60	25	5	25	3.2
55018	400	32.00	3.00	20	5	20	4.8
55032	100	16.00	1.20	600	25	600	0.6
55033	100	16.00	2.50	400	25	400	1.1
55040	105	16.00	1.20	600	25	600	0.6
55041	107	16.00	1.20	600	25	600	0.6
55046	125	22.23	1.60	400	25	400	1.1
55049	125	22.23	3.00	200	25	200	2.1
55050	150	22.23	1.60	200	25	200	1.6
55053	150	22.23	3.00	150	25	150	3.3
55054	180	22.23	1.60	200	25	200	2.6
55057	180	22.23	3.00	100	25	100	4.8
55070	300	25.40	3.00	25	5	25	2.8
55075	355	25.40	3.00	25	5	25	3.8
55080	400	32.00	3.20	20	5	20	4.8
55090	355	25.40	4.00	10	5	10	4.5

▲ Excluded from lifetime warranty terms.

- Different particle sizes available for various grinding requirements on surface smoothness
   Soft grinding with low vibration and low noise
   Low operating pressure
   Seven-layer fiber back disk with high safety, suitable for mainstream drive tools in the market
   Surface grinding with grain sizes of 40, 60, 80 and 120 meshes available
   Weld bead cleaning
   Chamfering and deburring

No.	OD (mm)	ID (mm)	Number of Mesh (es)	Minimum order quantity (pc)	#	¥	ā
55401	100	16	40	200	10	200	13.8
55402	100	16	60	200	10	200	13.7
55403	100	16	80	200	10	200	11.9
55404	100	16	120	200	10	200	11.2
55411	125	22.23	40	100	10	100	12.1
55412	125	22.23	60	100	10	100	11.4
55413	125	22.23	80	100	10	100	10.3
55414	125	22.23	120	100	10	100	9.7
55421	180	22.23	40	50	5	50	11.6
55422	180	22.23	60	50	5	50	11.6
55423	180	22.23	80	50	5	50	10.2
55424	180	22.23	120	50	5	50	9.8













































































## **Zirconia Flap Discs**



- Applicable for various particle sizes and various grinding requirements of workpiece surfaces • Soft grinding with low vibration and low noise
  • 10-layer fiber back plate structure with high safety, suitable for mainstream drive tools with
- high power in the market

- Surface grinding with grain sizes of 40, 60, 80 and 120 meshes available
   40 and 60 meshes for grinding aluminum alloy workpiece
   Suitable for grinding surface and edge of aluminum alloy, stainless steel, chromium and nickel steel, low alloy steel, high alloy steel and cast iron, and cleaning welding scar

No.	Spec. (mm)	OD (mm)	ID (mm)	Number of Mesh (es)	Minimum order quantity (pc)	#	¥	Ā
55501	125×P40×22.23	125	22.23	40	100	10	100	0.5
55502	125×P60×22.23	125	22.23	60	100	10	100	0.5
55503	125×P80×22.23	125	22.23	80	100	10	100	0.5
55504	125×P120×22.23	125	22.23	120	100	10	100	0.5
55505	180×P40×22.23	180	22.23	40	80	10	80	0.7
55506	180×P60×22.23	180	22.23	60	80	10	80	0.6
55507	180×P80×22.23	180	22.23	80	80	10	80	0.6
55508	180 × P120 × 22.23	180	22.23	120	80	10	80	0.6

▲ Excluded from lifetime warranty terms.

## **Flap Discs**





#### **Application**

- Flocked on the back for quick sticking with pneumatic or electric grinding machine
   Meeting surface polishing requirements of metal surface, putty, paint, wood, plastic and various composite materials

- Particle size of P80-P240 used with grinder with an eccentricity of 5mm for rough grinding surfaces of putty, metal or wood
- Particle size of P320 P600 used with grinder with an eccentricity of 2.5mm for fine grinding

#### Self-Adhesive Discs

No.	Spec. (mm)	Package (pc/ inner box)	Package (pc/case)	Minimum order quantity/case	#	¥	ā
55602	Ø125×P80	100	1000	1000	100	1000	1
55604	Ø125×P120	100	1000	1000	100	1000	1
55606	Ø125×P180	100	1000	1000	100	1000	1
55608	Ø125×P240	100	1000	1000	100	1000	1
55610	Ø125×P320	100	1000	1000	100	1000	1
55611	Ø125×P400	100	1000	1000	100	1000	1
55613	Ø125×P600	100	1000	1000	100	1000	1



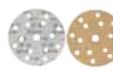




#### Self-Adhesive Discs, 6 Hole

No.	Spec. (mm)	Package (pc/ inner box)	Package (pc/case)	Minimum order quantity/case	#	¥	ā
55622	Ø125×P80	100	1000	1000	100	1000	1
55624	Ø125×P120	100	1000	1000	100	1000	1
55626	Ø125×P180	100	1000	1000	100	1000	1
55628	Ø125×P240	100	1000	1000	100	1000	1
55630	Ø125 × P320	100	1000	1000	100	1000	1
55631	Ø125×P400	100	1000	1000	100	1000	1
55633	Ø125×P600	100	1000	1000	100	1000	1





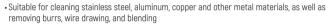
#### Self-Adhesive Discs, 15 Hole

No.	Spec. (mm)	Package (pc/ inner box)	Package (pc/case)	Minimum order quantity/case	#	¥	ā
55662	Ø150×P80	100	1000	1000	100	1000	1
55664	Ø150 × P120	100	1000	1000	100	1000	1
55666	Ø150×P180	100	1000	1000	100	1000	1
55668	Ø150 × P240	100	1000	1000	100	1000	1
55670	Ø150 × P320	100	1000	1000	100	1000	1
55671	Ø150 × P400	100	1000	1000	100	1000	1
55673	Ø150 × P600	100	1000	1000	100	1000	1



## 56025 20 pc Commercial Scouring Pad 150X100MM





- Soft grinding: It can fit all kinds of workpiece surface, such as curved surface and corner
- Elastic structure: prevent blocking and tear
- Cold grinding: It adopts open mesh three-dimensional structure to avoid deformation and discoloration caused by overheating in processing

No.	Spec. (mm)		T	靣
56005	150X230MM(6"X9"); 150X230MM (6"X9")	-	100	-
56006	125X200MM(5"X8"); 125X200MM (5"X8")	-	100	-

▲ Excluded from lifetime warranty terms.



- Quick cleaning: decontamination particles and fiber evenly distributed
- Easy to clean: Open structure for easily washing off residue and dirt
- Suitable for cleaning various kitchen and sanitary utensils, including pots with scorched or yellowed stains
- Suitable for cleaning various heavy scale and heavy greasy of kitchen hearth, baking equipment, cooking utensils and so on

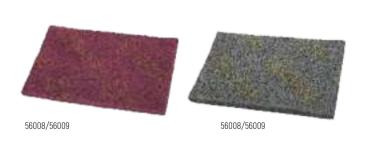
#### Note:

•This product has strong scraping force. Please test it on small area before use

No.	Spec. (mm)	$\Theta$	8	<u>a</u>
56025	150X100MM	20	-	-

 $\blacktriangle$  Excluded from lifetime warranty terms.

#### Industrial Scouring Pad (Red/Grey)



- Suitable for cleaning stainless steel, aluminum, copper and other metal materials, as well as removing burrs, wire drawing, and blending
- Soft grinding: It can fit all kinds of workpiece surface, such as curved surface and corner
- Elastic structure: prevent blocking and tear
- Cold grinding: It adopts open mes<sup>T</sup> three-dimensional structure to avoid deformation and discoloration caused by overheating in processing

No.	Spec. (mm)	$\Theta$	8	ē
56008	150X230MM(6"X9"); 150X230MM (6"X9")	-	100	-
56009	125X200MM(5"X8"); 125X200MM (5"X8")	-	100	-
56015	150X230MM(6"X9"); 150X230MM (6"X9")	-	100	-

▲ Excluded from lifetime warranty terms.

## 56026 8 pc Commercial Sponge Scouring Pad 140X70MM



- Dual cleaning: Dual cleaning effect of medium sand surface and sponge surface
- Wide application: It can clean most pots, bowls, cooking utensils, etc
- Suitable for cleaning various kitchen and sanitary utensils, including pots with scorched or yellowed stains
- Suitable for cleaning various heavy scale and heavy greasy of kitchen hearth, baking equipment, cooking utensils and so on

#### Note:

• This product has strong scraping force. Please test it on small area before use

No.	Spec. (mm)	$\Theta$	¥	ā
56026	140X70MM	20	-	-













































#### **Rotary File**























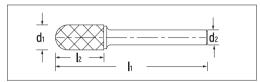








Dimension mark for carbide rotary file



Alloy rotary file is used with electric or pneumatic die grinder. It is mainly used for processing and cleaning the fly, burr and weld seam of casting, forging and welding parts as well as edge trimming, chamfering, etc.; different types of rotary files and their recommended applications are as follows:

#### Rotary file teeth type

Single teeth M

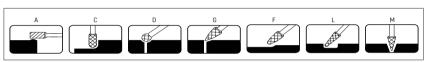






Dual teeth X

Coarse teeth C



#### Single-Tooth Alloy Rotary File



• It is mainly used for general processing of steel, cast steel, cast iron, stainless steel and other metal materials

No.	Туре	Tooth type	Head diameter $d_1 \times Length I_2$ (mm)	Shank diameter d₂(MM)	Total length I <sub>1</sub> (MM)		8	Ō
53715	Α	М	10X20	6	60	20	-	-
53725	С	М	10X20	6	60	20	-	-
53735	D	М	10X9	6	49	20	-	-
53745	F	М	10X20	6	60	20	-	-
53755	L	М	10X25	6	65	20	-	-
53765	М	М	10X20	6	60	20	-	-

#### Coarse-Tooth Alloy Rotary File



 $\bullet$  It is mainly used for processing non-ferrous metals, such as copper, aluminum, plastic etc. with good chip removal effect

No.	Туре	Tooth type	Head diameter $d_1 \times Length I_2$ (mm)	Shank diameter d <sub>2</sub> (MM)	Total length I <sub>1</sub> (MM)	$\Theta$	¥	M
53717	Α	С	10X20	6	60	20	-	-
53727	С	С	10X20	6	60	20	-	-
53737	D	С	10X9	6	49	20	-	-
53747	F	С	10X20	6	60	20	-	-
53757	L	С	10X25	6	65	20	-	-
53767	М	С	10X20	6	60	20	-	-

#### **Dual-Tooth Alloy Rotary File**



• It is mainly used for processing of steel, cast steel, cast iron, stainless steel and other metal materials with the widest application

No.	Туре	Tooth type	Head diameter $d_1 \times Length I_2$ (mm)	Shank diameter d <sub>2</sub> (MM)	Total length I <sub>1</sub> (MM)		¥	M
53716	Α	Χ	10X20	6	60	20	-	-
53726	С	Х	10X20	6	60	20	-	-
53736	D	Χ	10X9	6	49	20	-	-
53746	F	Χ	10X20	6	60	20	-	-
53756	L	Χ	10X25	6	65	20	-	-
53766	М	Χ	10X20	ĥ	60	20	_	_

▲ Excluded from lifetime warranty terms.





 ${ullet}$  It is mainly used for processing of steel, cast steel, cast iron, stainless steel and other metal materials with the widest application

No.	Туре	List of items in the set		8	M
53701	М	A1020M06,C1020M06,D1009M06,F1020M06,L1025M06 A1020M06, C1020M06, D1009M06, F1020M06 and L1025M06	-	6	-
53702	Х	A1020X06,C1020X06 A1020X06, C1020X06,D1009X06,F1020X06,L1025X06	-	6	-
53706	Х	A0616X06,A1020X06,C1020X06,C1225X06,D1009X06,F1020X06,F12 25X06,G1020X06,G1025X06,M1225X06 A0616X06, A1020X06, C1020X06, C1225X06, D1009X06, F1020X06, F1225X06, G1020X06, G1025X06 and M1225X06	-	6	-

#### **Circular Saw Blades**



#### **Cutting wood**

- Ideal for cutting all kinds of softwood, hardwood, plywood, MDF etc.
- Cuts material up to 22mm depth
- · Alternating tooth design for fast, effortless operation
- · Suitable for matching angle grinders, portable circular saws, etc.

No.	Spec. (mm)		Variable Diameter Ring (mm)	Package (pc/ case)	#	¥	ā
53601	Ø110×1.6×20	30T	16	100	25	100	0.5
53602	Ø110×1.6×20	40T	16	100	25	100	0.5
53611	Ø180×2.1×25.4	40T	20	50	-	50	0.7
53612	Ø180×2.1×25.4	60T	20	50	-	50	0.7
53621	Ø230×2.4×25.4	60T	-	25	-	25	0.7
53622	Ø230×2.4×25.4	80T	-	25	-	25	0.7
53631	Ø254×2.5×25.4	60T	-	20	-	20	0.7
53632	Ø254×2.5×25.4	80T	-	20	-	20	0.7



#### **Cutting aluminum**

- Suitable for cutting various aluminum profiles, plastic PVC, composite board, etc
- Sawteeth made of industrial grade alloy with stage teeth design
- · Laser cutting adopted for expansion slot and silent line for reduced vibration and noise
- Diameters available:254mm(10"), 305mm(12") and 355mm(14") for mainstream drive tools in the market

No.	Spec. (mm)		Variable Diameter Ring (mm)	Package (pc/ case)	#	8	Ø
53633	Ø254×2.6×25.4	100T	-	20	-	20	0.7
53634	Ø254×2.6×25.4	120T	-	20	-	20	0.7
53641	Ø305×2.8×30	100T	25.4	10	-	10	0.7
53642	Ø305×2.8×30	120T	25.4	10	-	10	0.7
53651	Ø355×3.2×30	100T	25.4	55	-	5	0.7
53652	Ø355×3.2×30	120T	25.4	25	-	5	0.7



#### **Cutting metal**

- Ideal for cutting ferrous metal such as channel steel, square steel, I-beam, angle iron, square pipe, hollow galvanized round pipe, RODS etc., compatible with cutting of other copper and aluminum pipes
- 0° rake design for shock absorption during cutting various sorts of metal
- Features laser cut blanks with stablizer for reduced noise and vibration.

No.	Spec. (mm)	Number of Teeth	Package (pc/ case)	$\Theta$	¥	ā
53666	Ø305×2.6×25.4	60T	5	-	5	0.6

▲ Excluded from lifetime warranty terms.

#### **5pc Reciprocating Saw Blade**



#### **Cutting wood**

- 93320S: For wood materials, ideal for straight cutting hard and soft wood, chipboard, plywood, plastic (6-100mm), Fast and plunge cut.
- passes for some plangs of the plangs of the

No.	Spec.		Minimum order quantity (set/case)	$\Theta$	8	<u></u>
93320S	152×19.0×1.30mm	4.2mm/6T	90	6	90	11.9
93321S	240×19.0×1.30mm	5.0mm/5T	60	6	60	20.6



#### **Cutting wood with nails**

- 93325S: For wood & metal materials, apply for cutting wood with nails/metal, chipboards (10-100mm), solid plastic and glass fibre reinforced plastics (8-50mm), curve cut.
- 93326S: For wood & metal materials, apply for cutting wood with nails/metal, chipboards (10-250mm), plastics and glass fibre reinforced plastics, profiles.
- 93327S: For wood & metal materials, apply for cutting wood with nails/metal (5-250mm), metal sheet, aluminium profiles (3-10mm), glass fibre reinforced plastics (-250mm).

No.	Spec.		Minimum order quantity (set/case)	$\Theta$	¥	ā
93325S	152×18.0×1.25mm	4.2mm/6T	90	6	90	13.6
93326S	300 × 19.0 × 1.25mm	4.2mm/6T	48	6	48	17.7
93327S	300×19.0×0.90mm	1.8-2.6mm/10-14T	60	6	60	15.2



#### **Cutting metal**

- 93330S For wood & metal materials, apply for cutting wood with nails/metal, pallets (4-100mm), mediumm thick plate (2-8mm), pipe and profiles (5-100mm).
- 93331S: For metal materials, apply for straight cutting thick sheet metal (3-8mm), solid pipes and profiles (dia. 5-100mm)
- 93332S: For metal materials, apply for straight cutting thick sheet metal (1.5-4mm), pipes and profiles (dia 5-100mm)
- profiles (dia. 5-100mm)

   93333S: For metal materials, apply for straight cutting thick sheet metal (3-8mm), solid pipes
- 93334S: For metal materials, apply for straight cutting thin sheet metal (1.5-4mm), pipes and profiles (dia. 5-175mm). Flexible flush cut.
- 93335S: Apply for cutting metal sheet (thickness: 4-12mm), pipe profiles (dia. 《175mm)

and profiles (dia. 10-175mm) Flexible flush and fast cut.

 93336S: For wood and metal materials. Apply for straight cutting wood with nails/metal, metal sheet (2-10mm), pipes and profiles (dia. <175mm), flexible flush cut.</li>

No.	Spec.	Minimum order quantity (set/case)	$\Theta$	¥	ā
93330S	150×19.0×0.90mm 1.4-3.4mm/8-18T	90	6	90	13.8
93331S	150×19.0×0.90mm 1.8mm/14T	90	6	90	13.8
93332S	150×19.0×0.90mm 1.4mm/18T	90	6	90	13.8
93333S	228×19.0×0.90mm 1.8mm/14T	90	6	90	19.9
93334S	228×19.0×0.90mm 1.4mm/18T	90	6	90	19.9
93335S	228×254×1.10mm 2.5-3.2mm/8-10T	48	6	48	22.5
93336S	228×19.0×1.25mm 1.8-2.6mm/10-14T	48	6	48	22.9







































































#### 93404 Mini Hacksaw 6"



- Injection molded nylon handle, comfortable and durable
- Please use saw blade 93411#

No.	Spec.	#	8	ā
93404	6"(150mm)	-	24	4.3

▲ Excluded from lifetime warranty terms.

#### **Aluminum Bow**



- Aluminum handle made from soft rubber (TPR) and engineering plastic ABS for anti-slipping, shock reduction and comfort
- Adapting to 12" saw blade for 45° and 90° mounting and cutting •12" bow containing a 93407 bimetal flexible saw blade
- 6" bow for 93411 saw blade

No.	Spec.	$\Theta$	8	<b></b>
93401A	Light aluminum bow 12"	-	24	-
93402A	Heavy aluminum bow 12"	-	24	-
93513	Heavy aluminum bow 6"	-	24	-

▲ Excluded from lifetime warranty terms.

#### 93515 **Heavy Hand Saw 18"**



- Handle made from soft rubber (TPR) and engineering plastic ABS for anti-slipping, anti-vibration
- · Saw blade made of SK5 material for sharpness and durability
- Triple-side grinding teeth for easy cutting labor-saving, applicable for sawing wood

No.	Spec.	$\Theta$	*	<b></b>
93515	18"	-	24	-

▲ Excluded from lifetime warranty terms.

#### 93518 **Aluminum Mini Bow 10"**



Containing a 93407 bimetal flexible saw blade

- Aluminum handle made from soft rubber (TPR) and engineering plastic ABS for anti-slipping, anti-vibration and comfort
- Adapting to 10"/12" saw blade for operation in small space

No.	Spec.	$\Theta$	¥	M
93518	10"	-	48	-

▲ Excluded from lifetime warranty terms.

#### 93405 Aluminum Hacksaw 12"



- Including a bimetallic flexible saw blade 93407#
- · With comfortable handle

No.	Spec.	$\Theta$	8	ā
93405	12"(300mm)	-	24	15.9





- Body with solid steel bar structure, firm and durable, lightweight, 115 kg tension test passed
- · Beech handle, comfortable and elegant
- SATA bimetallic flexible saw blade or HHS saw blade is recommended

No.	Spec.	#	¥	ā
93413A	12"	6	24	0.59

▲ Excluded from lifetime warranty terms.

#### 93414A Adjustable Hacksaw 10"/12"



- This item is designed to be retractable, lightweight and flexible, and can be installed with 10" and 12" saw blade, which makes it portable.
- Tensioner and butterfly bolts for fastening the saw blade have undergone heat treatment and have a longer service life
- SATA bimetallic flexible saw blade or HHS saw blade is recommended

No.	Spec.	#	8	ā
93414A	10"/12"	6	24	0.46

▲ Excluded from lifetime warranty terms.

#### 93536 HEAVY DUTY PRUNING SAW 12"



- The saw blade is made of SK5 material, which is sharp and durable
- The three-sided teeth design provides easy and effortless sawing, mainly used for sawing wet wood such as live branches
- The handle is covered with soft rubber for anti-slip and shockproof properties, providing comfortable handling
- The sheath and waist saw are designed as an integrated system for convenient storage and portability
- Contains one 12" waist saw blade with model number 93537

No.	Spec.	#	8	<u> </u>
93536	12"	6	24	0.26

▲ Excluded from lifetime warranty terms.

#### 93537 HEAVY DUTY PRUNING SAW BLADE 12"



- The saw blade is made of SK5 material, which is sharp and durable
- The three-sided teeth design provides easy and effortless sawing, mainly used for sawing wet wood such as live branches
- It is suitable for the 93536 12" waist saw

No.	Spec.	#	8	<b>\overline{\over</b>
93537	12"	10	60	0.11

▲ Excluded from lifetime warranty terms.

#### **FOLDING HAND SAW**



- •The saw blade is made of SK5 material, which is sharp and durabl.
- The three-sided teeth design provides easy and effortless sawing, mainly used for sawing wet wood such as live branches
- The handle is covered with soft rubber for anti-slip and shockproof properties, providing comfortable handling

No.	Spec.	$\blacksquare$	8	ā
93522	6"	6	24	0.21
93526	9"	6	24	0.34

▲ Excluded from lifetime warranty terms.

#### 12" HSS Hacksaw Blade



- The whole saw blade is made of imported high-speed steel, which makes it sharp, strong and can provide smooth cutting
- The ultra-finished teeth provide straight and quick sawing
- It has undergone heat treatment by the vacuum furnace, thus its overall hardness can be up to HRC63-66
- It applies to cut metals such as the stainless steel, alloy steel, bearing steel, carbon steel, spring steel, cast iron, aluminum and copper

No.	Spec.	#	8	<u></u>
93416	18 Teeth	100	1000	18.3
93417	24 Teeth	100	1000	18.1
93418	32 Teeth	100	1000	18.1















































#### 12" Bi-Metal Hacksaw Blade



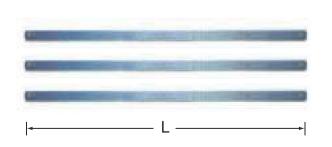


- The teeth is made of high-speed steel, and the back edge are made of high quality spring steel and welded by the electron beam.
- It has excellent elasticity and strong & sharp teeth, thus it can provide smooth cutting and good toughness
- Note: Please wear PPE such as safety goggles during use

No.	Spec.	L(mm)	#	¥	M
93406	18 Teeth	310	100	500	9.5
93407	24 Teeth	310	100	1000	18.9
93408	32 Teeth	310	100	500	9.5

▲ Excluded from lifetime warranty terms.

#### 3Pc. Mini Hacksaw Blades 6"



- 3pc. display packed
- Resilient, strong and sharp sawtooth for smooth cutting

No.	L(mm)	Including		8	Ō
93411	152	3PC	12	144	4.5

▲ Excluded from lifetime warranty terms.

#### Stainless Steel Pointed Box Cutter 9X73MM 93611





- · Stainless steel blade for durability and rust prevention
- Tail with a snap device and with pen clip function
- Please select SATA 93617 blades made of SK2 material imported from Japan for sharpness and

No.	#	8	<u> </u>
93611	12	48	-

▲ Excluded from lifetime warranty terms.

#### **Aluminum Heavy Box Cutter**





93612: Please select SATA 93433A, 93436, 93437 and 93616 blades made of SK2 material imported from Japan for sharpness and durability



93613: Please select SATA 93438 blades made of SK2 material imported from Japan for sharpness and durability

- Body made of aluminum and coated with soft rubber (TPR) for comfort
- Symmetrical design for both left and right hand operation

No.	Spec.	#	¥	<u> </u>
93612	18X100	8	48	-
93613	25X125	6	36	-

## 93641 Universal Utility Box Cutter





## 93643 Heavy Utility Box Cutter











- Body made of aluminum and coated with soft rubber (TPR) for comfort
- Five trapezoid blades stored inside for easy access
- Please select SATA 93434A and 93435A blades made of SK2 material imported from Japan for sharpness and durability

No.	#	8	ā
93641	8	48	-

▲ Excluded from lifetime warranty terms.

- Body made of aluminum and coated with soft rubber (TPR) for comfort
- Capable of quick blade change and safety belt cutting
- Five trapezoid blades stored inside for easy access
- Please select SATA 93434A and 93435A blades made of SK2 material imported from Japan for sharpness and durability

No.	#	8	ā
93643	8	48	-

▲ Excluded from lifetime warranty terms.

#### 93642 Safety and Utility Box Cutter







#### 93646 Utility Knob Box Cutter











- Body made of aluminum and coated with soft rubber (TPR) for comfort
- Automatic recovery of blade for safety and reliability
- Five trapezoid blades stored inside for easy access
- Please select SATA 93434A and 93435A blades made of SK2 material imported from Japan for sharpness and durability

No.	8	8	<u> </u>
93642	8	48	-

▲ Excluded from lifetime warranty terms.

- Body made of aluminum and coated with soft rubber (TPR) for comfort
- Knob adopted for locking firmly
- Five trapezoid blades stored inside for easy access
- Please select SATA 93434A and 93435A blades made of SK2 material imported from Japan for sharpness and durability

No.	#	8	<u></u>
93646	8	48	-



































































#### 93647 **Folding Utility Box Cutter**





- · Body made of aluminum and coated with soft rubber (TPR) for comfort
- Special blade changing device provided for simple and fast operation
- Please select SATA 93434A and 93435A blades made of SK2 material imported from Japan for sharpness and durability

No.	#	8	ā
93647	8	48	-

▲ Excluded from lifetime warranty terms.

#### 93621 **Aluminum Shovel 18X100MM**



- · Aluminum head for durability with handle made of ABS anti-skidding material
- Hollow handle tail for connecting with extension rod
- Please select SATA 93433A, 93436, 93437 and 93616 blades made of SK2 material imported from Japan for sharpness and durability

No.	#	8	ā
93621	8	48	-

▲ Excluded from lifetime warranty terms.

## 93622 Safety Box Cutter



- · Body made of aluminum alloy for firmness and durability
- · Customized blade for safety
- One special blade stored inside for easy access
- Please select SATA 93618 box cutter blades for sharpness and durability

No		#	8	ā
936	322	8	48	-

▲ Excluded from lifetime warranty terms.

#### 93616 110 Sets Titanium Box Cutter Blade with 8 Sections 18X100MM



- · Made of SK2 material imported from Japan for sharpness and durability
- Cutting edge subjected to special titanium plating process to prolong the service life
- •10 pieces in a package with plastic case
- Suitable for SATA 93422A, 93425A,93428, 93429, 93430, 93482 and 93612 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	Number of sections	$\blacksquare$	¥	ā
93616	10	100	18	0.5	8	10	80	-

▲ Excluded from lifetime warranty terms.

#### 93617 10 Sets Pointed Box Cutter Blade with 9 Sections 9X73MM



- Made of SK2 material imported from Japan for sharpness and durability
- •10 pieces in a package with plastic case
- · Suitable for SATA 93611 box cutter

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	Number of sections	$\Theta$	¥	ā
93617	10	73	9	0.4	9	10	120	-

▲ Excluded from lifetime warranty terms.

#### 2 Sets Box Cutter Blade



• Thickened nylon wrapping tip for durability and safety

No.	#	8	ā
93618	24	144	-

### 93422A Plastic Snap-Off Knife, 8-Point, 18x100mm





- Manufactured by mould injection with engineering plastics
- (ABS), with stainless steel knife pouch. Durable
- Please use SATA 93433A,93437 blades made of Japanese
- imported SK2 material, which are sharp and durable

No.	#	8	ā
93422A	10	80	5.5

▲ Excluded from lifetime warranty terms.

### 93481 Rubber Grip Snap-Off Knife, 13-Point, 9x80mm





- The dual materials TPR/ABS handle
- The thickened stainless steel blade cover to provide, higher strength
- Please use SATA 93432A blades made of Japanese imported SK2 material, which are sharp and durable

No.	#	**	ā
93481	12	72	4.5

▲ Excluded from lifetime warranty terms.

### 93482 Rubber Grip Snap-Off Knife, 8-Point, 18x100mm





- The dual materials TPR/ABS handle
- The thickened stainless steel blade cover to provide higher strength
- Please use SATA 93433A.93737 blades made of Japanese imported SK2 material, which are sharp and durable

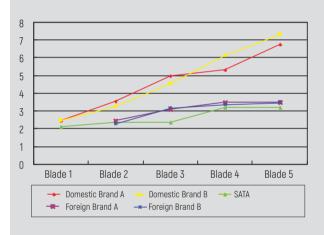
No.	#	8	<u></u>
93482	12	72	9.2

▲ Excluded from lifetime warranty terms.



### Characteristics of saw blades:

- •SATA bimetal saw blade: Teeth made of quality high-speed steel for high cutting strength and long service life Back material made of alloy spring steel for good toughness, elasticity and safety Vacuum furnace heat treatment for improved mechanical properties
- •SATA high-speed steel saw blade: Made of imported high-speed steel for hardness and high strength, especially suitable for folding saw bow, with high cutting efficiency and flat cutting plane and without twist or deformation Subjected to vacuum furnace heat treatment to maximize the mechanical properties; pin holes at both ends of the saw blade tempered twice for longer service life and higher safety



•Cutting efficiency of HSS saw blade (longitudinal axis is the time spent in cutting test bar (HRC37) (unit: minute), and horizontal axis is the number of cutting)

### Saw Blade Selection

Material	Selection number of teeth for over 5mm	Selection number of teeth for 2-5mm	Selection number of teeth for less than 2mm
Hard Plastic	18	18-24	24-32
Hard Rubber	18	18	24
Copper	18	18-24	24-32
Brass	18	24-32	32
Aluminum	18	18-24	24-32
Cast Iron	18	18-24	24-32
Low Carbon Steel	18	24	32
High Alloy-	24	24	32
structural Steel			
High-Speed Steel	24	24	32
Stainless Steel	18	24	32







































































- The dual materials TPR/ABS handle
- The thickened stainless steel blade cover to provide higher strength
- Please use SATA 93438 blades made of Japanese imported SK2 material, which are sharp and

No.	#	8	<b>\overline{\over</b>
93483	6	36	8.7

▲ Excluded from lifetime warranty terms.

### 93486 Folding Utility Knife



- · Durable zinc alloy housing, TPR/ABS material
- Unique blade replacer, which makes blade replacement convenient
- Small and portable foldable body
- Please use SATA blades 93434A,93435A made of japanese imported material
- · SK2, which makes them sharp and duable

N	0.	#	8	<b>5</b>
93	3486	8	48	8.8

▲ Excluded from lifetime warranty terms.

### 93438 10Pc. Spare Blades, 7-Point, 25x125mm



- Made of SK2 material imported from Japan, being sharp and durable
- •10 blades in one package, 2 in black and 8 in silver
- · Suitable for SATA 93483 box cutter

No.	#	8	ā
93438	12	72	16

▲ Excluded from lifetime warranty terms.

# 93424A Zinc Alloy Snap-Off Knife, 13-Point, 9x80mm



- · Cutter body made of zinc alloy with baking varnish on surface, and stainless steel cutter socket,
- SATA 93432A blades made of SK2 material imported from Japan, being sharp and durable

No.	#	*	Ō
93424A	12	72	4.5

▲ Excluded from lifetime warranty terms.

### 93485 **Heavy Duty Utility Knife**



- · Zinc alloy housing, TPR/ABS material handle
- 5 pieces of spare blades
- Please use SATA blades 93434A,93435A made of japanese imported material
- SK2, which makes them sharp and duable

No.	#	¥	ā
93485	8	48	10.8

▲ Excluded from lifetime warranty terms.

# 93425A Zinc Alloy Snap-Off Knife, 8-Point, 18x100mm



- Cutter body made of zinc alloy with baking varnish on surface, and stainless steel cutter socket, being solid and durable
- SATA 93432A blades made of SK2 material imported from Japan, being sharp and durable

No.	#	*	<u>a</u>
93425A	8	48	6.2

### 93426 Plastic Snap-Off Knife, 13-Point, 9x80mm





- Manufactured by mould injection with engineering plastics(ABS), with stainless steel knife pouch. Durable
- Please use SATA 93432A blades made of Japanese imported
- SK2 material, which are sharp and durable

No.	#	8	Ø
93426	10	80	2.6

▲ Excluded from lifetime warranty terms.

### 93428 Rubber Grip Snap-Off Knife, 8-Point, 18x100mm



- Stainless steel cutter socket coated with soft rubber (TPR) and engineering plastic (ABS) twotone composite materials for comfort
- · Automatic blade loading for simple and safe blade replacement
- Capable of storing three 18mm box cutter blades
- SATA 93433A, 93436 and 93437 blades made of SK2 material imported from Japan, being sharp and durable

No.	#	8	ā
93428	12	72	9.5

▲ Excluded from lifetime warranty terms.

# 93427 Rubber Grip Snap-Off Knife, 13-Point, 9x80mm



- Stainless steel cutter socket coated with soft rubber (TPR) and engineering plastic (ABS) twotone composite materials for comfort
- Automatic blade loading for simple and safe blade replacement
- Capable of storing 3 9mm box cutter blades, suitable for narrow space and precision cutting
- SATA 93432A blades made of SK2 material imported from Japan, being sharp and durable

No.	$\Theta$	8	ā
93427	12	72	4

▲ Excluded from lifetime warranty terms.

# 93429 Plastic Snap-Off Knife, 8-Point, 18x100mm





- Manufactured by mould injection with engineering plastics(ABS), with stainless steel knife pouch.Durable
- Please use SATA 93433A,93437 blades made of Japanese
- imported SK2 material, which are sharp and durable :

No.	#	8	ā
93429	10	80	5.6

 ${\color{red} lack}$  Excluded from lifetime warranty terms.

### 93432A 10Pc. Spare Blades, 13-Point, 9x80mm



- $\bullet\,\mbox{Made}$  of SK2 material imported from Japan, being sharp and durable
- •10 blades in one package, 2 in black and 8 in silver
- Suitable for SATA 93424A, 93426 and 93427 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	Number of sections	$\Theta$	¥	ā
93432A	10 pc	80	9	0.4	13	10	120	2.9

▲ Excluded from lifetime warranty terms.

### 93430 Industrial Snap-Off Knife, 8-Point, 18x100mm



- Zinc alloy cutter body with baking varnish on surface, and stainless steel cutter socket for comfort
- Rotary knob provided on the head to lock the blade for precise and professional cutting
- Automatic blade loading for simple and safe blade replacement
- Capable of storing five 18mm box cutter blades
- SATA 93433A, 93436 and 93437 blades made of SK2 material imported from Japan, being sharp and durable

No.	#	8	<b>®</b>
93430	8	48	11.4





































































- Made of SK2 material imported from Japan, being sharp and durable
- •10 blades in one package, 2 in black and 8 in silver
- · Suitable for SATA 93424A, 93426 and 93427 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	Number of sections	$\Theta$	¥	ā
93433A	10 pc	100	18	0.5	8	10	80	6.8

▲ Excluded from lifetime warranty terms.

### 93436 10Pc. Spare Blades, 8-Point, 18x100mm

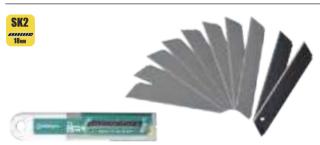


- Made of SK2 material imported from Japan, being sharp and durable
- •10 blades in one package
- · Simple box package, being cost-effective
- Suitable for SATA 93422A, 93425A, 93428, 93429 and 93430 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	Number of sections	$\Theta$	¥	<b>7</b>
93436	10 pc	100	18	0.5	8	30	180	13.4

▲ Excluded from lifetime warranty terms.

### 93437 10Pc. Spare Blades, 15-Point, 18x100mm



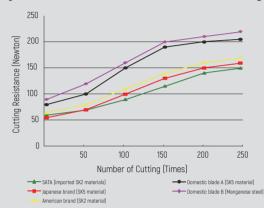
- Made of SK2 material imported from Japan, being sharp and durable
- •15-section blade for longer service life
- •10 blades in one package, 2 in black and 8 in silver
- Suitable for 93422A, 93425A, 93428, 93429 and 93430 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	Number of sections	$\Theta$	¥	ā
93437	10 pc	100	18	0.5	15	10	80	6.8

▲ Excluded from lifetime warranty terms.



# **⑤ SATA世述** Blade Performance Advantage



### **Blade features:**

- Sharp
  - Made from SK2 material imported from Japan for high blade
  - Cutting edge subjected to special grinding process for improved sharpness and durability
- Economical
  - Improved service life compared with similar products in the market

### Note:

- 1) Wear safety goggles when using the blades
- 2) Return the blade to the handle after use
- 3) Dispose used blades properly
- 4) Keep the blade out of reach of children

### Schematic diagram of automatic blade change



Push the button to the top and remove the blade



n Push the button back to the bottom

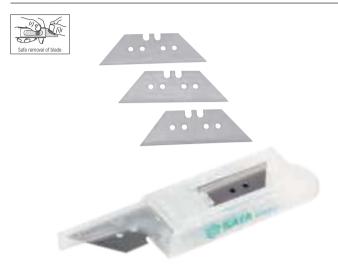


• Push out the button once again to replace the blade automatically



• Unplug the back cover, insert the blade into the groove of the back cover, and break it along the crease (Note: break one section at one time to prevent the blade from flying

# 93434A 10Pc. Spare Utility Blades



- Made of SK2 material imported from Japan, being sharp and durable
- •10 blades in one package
- Safety blade box for easy access and avoiding hand injury
- Suitable for SATA 93441, 93442, 93443 and 93446 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	#	8	Ø
93434A	10 pc	60	19	0.6	18	72	4.4

▲ Excluded from lifetime warranty terms.

### 03901 5Pc. Mini File Set, 185mm



• Imported from Japan in original packing

No.	Sectional Form	Product Name
03923		Mini Flat Second Cut File
03943		Mini Half Round Second Cut File
03963		Mini Square Second Cut File
03975	0	Mini Round Second Cut File
03995	Δ	Mini Three Square Second Cut File

No.	Spec. (mm)	$\boldsymbol{\mathscr{B}}$	***	<u></u>
03901	185	5	60	9

▲ Warranty terms of tool set comply with the individual product.

### 93435A 100Pc. Spare Utility Blades



- Made of SK2 material imported from Japan, being sharp and durable
- •10 blades in one package
- · Safety blade box for easy access and avoiding hand injury
- Suitable for SATA 93441, 93442, 93443 and 93446 box cutters

No.	Number of blades	L(mm)	W(mm)	Thickness (mm)	#	¥	ā
93435A	100 pc	60	19	0.6	12	24	11.1

▲ Excluded from lifetime warranty terms.

# 03902 5Pc. Mini File Set, 200mm



No.	Sectional Form	Product Name
03924		Mini Flat Second Cut File
03944		Mini Half Round Second Cut File
03964		Mini Square Second Cut File
03976	0	Mini Round Second Cut File
03996	Δ	Mini Three Square Second Cut File
NI-	(	2 22 2

 No.
 Spec. (mm)
 B
 B
 B

 03902
 200
 5
 60
 13

▲ Warranty terms of tool set comply with the individual product.













































### 









• Imported from Japan in original packing

No.	Sectional Form	Product Name
03925		Mini Flat Second Cut File
03945		Mini Half Round Second Cut File
03965		Mini Square Second Cut File
03977	0	Mini Round Second Cut File
03997	Δ	Mini Three Square Second Cut File

No.	Spec. (mm)	$\Theta$	8	ā
03903	215	5	60	18.8

•Imported from Japan in original packing

No.	Sectional Form	Product Name
03924		Mini Flat Second Cut File 200mm
03925		Mini Flat Second Cut File 215mm
03926		Mini Flat Smooth Cut File 185mm

No.	Spec. (mm)	#	*	ā
03904	3Pc. Mini Flat File Set	5	125	17.4

▲ Warranty terms of tool set comply with the individual product.

▲ Warranty terms of tool set comply with the individual product.









































### **Flat Bastard Cut File**

Sectional Form



- The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency 1-Bastard cut 2-Second cut 3-Smooth cut

No.	Spec.	L(mm)	$\Theta$	8	ā
03911	6"	262	12	96	11.4
03912	8"	315	12	96	16.3
03913	10"	365	12	72	18.8
03914	12"	430	12	48	21.2

▲ Excluded from lifetime warranty terms.

### **Flat Second Cut File**

Sectional Form



- The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- •File teeth have uniform form and depth, ensuring high filing efficiency 1-Bastard cut 2-Second cut 3-Smooth cut

No.	Spec.	L(mm)	#	*	ā
03915	6"	262	12	96	11.4
03916	8"	315	12	96	15.9
03917	10"	365	12	72	18.8
03918	12"	430	12	48	21.6

▲ Excluded from lifetime warranty terms.

### **Flat Smooth Cut File**

Sectional Form



- •The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency 1-Bastard cut 2-Second cut 3-Smooth cut

No.	Spec.	L(mm)	$\Theta$	8	M
03919	6"	262	12	96	11.4
03920	8"	315	12	96	16.1
03921	10"	365	12	72	18.8
03922	12"	430	12	48	21.2

▲ Excluded from lifetime warranty terms.

# Mini File (Single Piece)



• Imported from Japan in original packing

No.	Sectional Form	Product Name	$\Theta$	8	ā
03923		Mini Flat Second Cut File 185mm	10	250	9
03924		Mini Flat Second Cut File 200mm	10	250	12.5
03925		Mini Flat Second Cut File 215mm	10	250	6.3
03926		Mini Flat Smooth Cut File 185mm	10	250	8.7
03943		Mini Half Round Second Cut File 185mm	10	250	9.2
03944		Mini Half Round Second Cut File 200mm	10	250	13.2
03945		Mini Half Round Second Cut File 215mm	10	250	18.7
03946		Mini Half Round Smooth Cut File 185mm	10	250	9.8
03963		Mini Square Second Cut File 185mm	10	250	7.8
03964		Mini Square Second Cut File 200mm	10	250	10.8
03965		Mini Square Second Cut File 215mm	10	250	15.3
03975	0	Mini Round Second Cut File 185mm	10	250	6.5
03976	0	Mini Round Second Cut File 200mm	10	250	9.2
03977	0	Mini Round Second Cut File 215mm	10	250	13
03995	Δ	Mini Three Square Second Cut File 185mm	10	250	10.3
03996	Δ	Mini Three Square Second Cut File 200mm	10	250	11.7
03997	Δ.	Mini Three Square Second Cut File 215mm	10	250	16.5

▲ Excluded from lifetime warranty terms.

### **Half Round Bastard Cut File**

Sectional Form



- The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	#	¥	ā
03931	6"	262	12	96	11.7
03932	8"	315	12	96	18.7
03933	10"	365	12	72	22.7
03934	12"	430	12	48	24.5



























### **Half Round Second Cut File**

Sectional Form



- The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	$\Theta$	¥	<u></u>
03935	6"	262	12	96	11.9
03936	8"	315	12	96	18.3
03937	10"	365	12	72	22.6
03938	12"	430	12	48	24.6

▲ Excluded from lifetime warranty terms.

### **Half Round Smooth Cut File**

Sectional Form



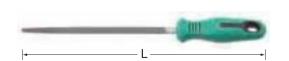
- The product is made of special carbon tool steel, with file body hardness up to 63-66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	#	8	ā
03939	6"	262	12	96	12
03940	8"	315	12	96	18.2
03941	10"	365	12	72	22.4
03942	12"	430	12	48	24.9

▲ Excluded from lifetime warranty terms.

### **Square Bastard Cut File**

Sectional Form



• The product is made of special carbon tool steel, with file body hardness up to 63-66HRC • File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	$\blacksquare$	¥	<u>M</u>
03951	6"	262	12	96	9.5
03952	8"	315	12	96	13.5
03953	10"	365	12	72	15.5
03954	12"	430	12	48	19.5

▲ Excluded from lifetime warranty terms.

# **Square Second Cut File**

Sectional Form



- The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	#	8	ā
03955	6"	262	12	96	9.7
03956	8"	315	12	96	13.3
03957	10"	365	12	72	15.5
03958	12"	430	12	48	19.6

▲ Excluded from lifetime warranty terms.

### **Square Smooth Cut File**

Sectional Form



- •The product is made of special carbon tool steel, with file body hardness up to 63-66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	#	¥	<b>T</b>
03959	6"	262	12	96	9.5
03960	8"	315	12	96	13.2
03961	10"	365	12	72	15.6
03962	12"	430	12	48	19.5

▲ Excluded from lifetime warranty terms.

### **Round Second Cut File**

Sectional Form O



- $\bullet$  The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)	$\Theta$	8	ā
03971	6"	262	12	96	9.2
03972	8"	315	12	96	11.9
03973	10"	365	12	72	13.5
03974	12"	430	12	48	16.6



Sectional Form 🛆



- The product is made of special carbon tool steel, with file body hardness up to 63~66HRC
- File teeth have uniform form and depth, ensuring high filing efficiency

No.	Spec.	L(mm)		8	ā
03991	6"	262	12	96	12.7
03992	8"	315	12	96	21.1
03993	10"	365	12	72	25.1
03994	12"	430	12	48	26.7

▲ Excluded from lifetime warranty terms.

# 03801 10Pc. Assorted Needle File Set 3×140mm

Diameter of round rod \* full length: 3×140mm



• Suitable for filing small workpieces and precision parts

# Single Product Introduction

Section Form Product Name

Flat Needle File

Pointed Half Round Needle File Pointed Square Needle File

Pointed Equilateral Triangular Needle File

Pointed Round Needle File

Pointed Dual-Sided Flat Needle File

Pointed Cutter Needle File

Pointed Single-Sided Triangular Needle File Pointed Flat Round Needle File

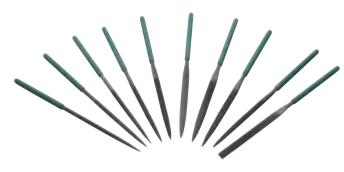
Pointed Oval Needle File

No.	Spec. (mm)	$\Theta$	¥	<b>\overline{\overline{\sigma}}</b>
03801	3×140	5	60	8.5

▲ Excluded from lifetime warranty terms.

### 03802 10Pc. Assorted Needle File Set 4×160mm

Diameter of round rod \* full length: 4×160mm



· Suitable for filing small workpieces and precision parts

### Single Product Introduction

Section Form Product Name

Flat Needle File 0

Pointed Half Round Needle File Pointed Square Needle File

Pointed Equilateral Triangular Needle File

Pointed Round Needle File

Pointed Dual-Sided Flat Needle File

Pointed Cutter Needle File

Pointed Single-Sided Triangular Needle File Pointed Flat Round Needle File

Pointed Oval Needle File

No.	Spec. (mm)	#	**	<u></u>
03802	4×160	5	60	13.2

▲ Excluded from lifetime warranty terms.

### 03803 10Pc. Assorted Needle File Set 5×180mm

Diameter of round rod \* full length: 5×180mm



• Suitable for filing small workpieces and precision parts

### Single Product Introduction

Section Form Product Name Flat Needle File

Pointed Half Round Needle File 

Pointed Square Needle File Pointed Equilateral Triangular Needle File

Pointed Round Needle File

Pointed Dual-Sided Flat Needle File

Pointed Cutter Needle File

Pointed Single-Sided Triangular Needle File Pointed Flat Round Needle File

Pointed Oval Needle File

No.	Spec. (mm)	$ \theta $	8	<u></u>	
03803	5×180	5	60	23.3	





























































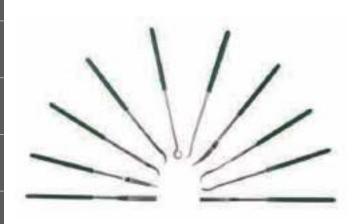








### 03804 10Pc. Assorted Diamond Riffler Needle File Set 3×140mm

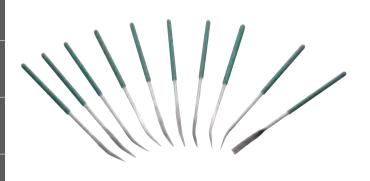


- Round rod diameter \* full length: 3\*140mm
- Suitable for filing special workpieces and precision parts

No.	#	8	<u></u>
03804	5	60	8.7

▲ Excluded from lifetime warranty terms.

### 03805 10Pc. Assorted Diamond Needle File Set 3×140mm



- Round rod diameter \* full length: 3\*140mm
- Suitable for filing special workpieces and precision parts

No.	#	8	ā
03805	5	60	8.8

▲ Excluded from lifetime warranty terms.

### 10Pc. Diamond Needle File Set 3×140mm 03810



- Made of #45 steel electroplated with high-hardness rhinestone, achieving high working efficiency
- Suitable for file finishing of high-hardness metal such as hard alloy, and for quenched or nitrided alloy steel cutter, grinding tool, fixture, etc.
- Length of needle file: 3X140mm (round bar diameter X overall length) Length of working surface:50mm Grit size: D 150

No.	Sectional Form	Product Name
03811		Diamond Flat Needle File
03812		Diamond Pointed Half Round Needle File
03813		Diamond Pointed Square File
03814	Δ	Diamond Pointed Equilateral Triangle File
03815	0	Diamond Pointed Round Needle File
03816		Diamond Pointed Double-side Round/Flat File
03817	Western .	Diamond Pointed Knife File
03818		Diamond Pointed Single-side Triangular File
03819		Diamond Pointed Flat/Round File
03820	0	Diamond Pointed Cross File

No.	#	8	<u></u>
03810	10	40	6.2

▲ Excluded from lifetime warranty terms.

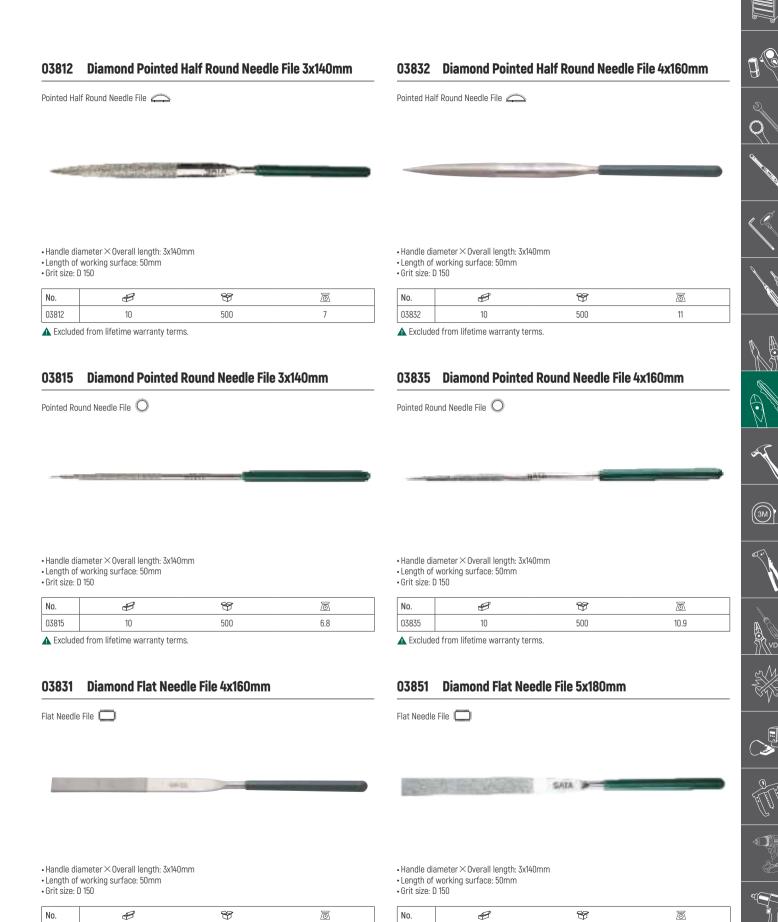
### 03811 Diamond Flat Needle File 3x140mm

Flat Needle File



- Handle diameter × Overall length: 3x140mm
- Length of working surface: 50mm
- Grit size: D 150

No.	#	8	Q
03811	10	500	7.4



T

500

 $\overline{\mathbb{Q}}$ 

11.8

No.

03851

10

▲ Excluded from lifetime warranty terms.

No.

03831

10

▲ Excluded from lifetime warranty terms.

18.4

500































### 03852 Diamond Pointed Half Round Needle File 5x180mm

Pointed Half Round Needle File



- Handle diameter × Overall length: 3x140mm
- · Length of working surface: 50mm
- Grit size: D 150

No.	$\blacksquare$	8	ā
03852	10	500	17.2

▲ Excluded from lifetime warranty terms.

### 03855 Diamond Pointed Round Needle File 5x180mm

Pointed Round Needle File O



- Handle diameter × Overall length: 3x140mm
- Length of working surface: 50mm
- Grit size: D 150

No.	#	*	ā
03855	10	500	16.5

▲ Excluded from lifetime warranty terms.

### 03830 10Pc. Diamond Needle File Set 4x160mm



- Made of #45 steel electroplated with high-hardness rhinestone, achieving high working efficiency.
- Suitable for file finishing of high-hardness metal such as hard alloy, and for quenched or nitrided alloy steel cutter, grinding tool, fixture, etc.
- Length of needle file: 4X160mm (round bar diameter X overall length) Length of working surface:50mm Grit size: D 150

UTIL SIZE. L	3125. D 130	
No.	Sectional Form	Product Name
03831		Diamond Flat Needle File
03832		Diamond Pointed Half Round Needle File
03833		Diamond Pointed Square File
03834	Δ.	Diamond Pointed Equilateral Triangle File
03835	0	Diamond Pointed Round Needle File
03836		Diamond Pointed Double-Side Round/Flat File
03837	- Control	Diamond Pointed Knife File
03838		Diamond Pointed Single-Side Triangular File
03839		Diamond Pointed Flat/Round File
03840A		Diamond Pointed Cross File

No.	#	8	ā
03830	10	40	9.2

▲ Excluded from lifetime warranty terms.

### 03850 5Pc. Diamond Needle File Set 5x180mm

Diameter of round rod \* full length: 5X180mm Working plane length: 70mm



- Made of #45 steel electroplated with high-hardness rhinestone, achieving high working efficiency.
- •Suitable for file finishing of high-hardness metal such as hard alloy, and for quenched or nitrided alloy steel cutter, grinding tool, fixture, etc.
- Length of needle file: 5x180mm (round bar diameter X overall length) Length of working surface: 70mm Grit size: D 150

No.	Sectional Form	Product Name
03851		Diamond Flat Needle File
03852		Diamond Pointed Half Round Needle File
03853		Diamond Pointed Square File
03854	Δ	Diamond Pointed Equilateral Triangle File
03855	0	Diamond Pointed Round Needle File

No.	#	*	<u></u>
03850	10	40	7.6

































### 03860 3Pc. Diamond Needle File Set 3x140mm

Needle File Length: 3x140mm (Shank diameter\* full length) Working plane length: 50mm

Working plane length: 50mm Fineness: 150 meshes



- Made of #45 steel electroplated with high-hardness rhinestone, achieving high working efficiency.
- Suitable for file finishing of high-hardness metal such as hard alloy, and for quenched or nitrided alloy steel cutter, grinding tool, fixture, etc.
- Length of needle file: 3x/40mm (round bar diameter X overall length) Length of working surface: 50mm Grit size: D 150

No.	Sectional Form	Product Name
03811		Diamond Flat Needle File
03812		Diamond Pointed Half Round Needle File
03815	0	Diamond Pointed Round Needle File

No.	#	8	<b>\overline{\over</b>
03860	10	40	2.2

▲ Excluded from lifetime warranty terms.

# 03870 3Pc. Diamond Needle File Set 4x160mm

Needle File Length: 4x160mm (Shank diameter\* full length) Working plane length: 50mm Fineness: 150 meshes



- Made of #45 steel electroplated with high-hardness rhinestone, achieving high working efficiency.
- Suitable for file finishing of high-hardness metal such as hard alloy, and for quenched or nitrided alloy steel cutter, grinding tool, fixture, etc.
- Length of needle file: 4x160mm (round bar diameter X overall length) Length of working surface: 50mm Grit size: D 150

No.	Sectional Form	Product Name	
03831		Diamond Flat Needle File	
03832		Diamond Pointed Half Round Needle File	
03835	0	Diamond Pointed Round Needle File	
		\$	

	* Carrier		
No.	#	8	ā
03870	10	40	3.3

▲ Excluded from lifetime warranty terms.

### 03880 3Pc. Diamond Needle File Set 5x180mm



- Made of #45 steel electroplated with high-hardness rhinestone, achieving high working efficiency.
- Suitable for file finishing of high-hardness metal such as hard alloy, and for quenched or nitrided alloy steel cutter, grinding tool, fixture, etc.
- Length of needle file: 5x180mm (round bar diameter X overall length)
   Length of working surface: 70mm
   Grit size: D 150

No.	Sectional Form	Product Name	
03851		Diamond Flat Needle File	
03852		Diamond Pointed Half Round Needle File	
03855	0	Diamond Pointed Round Needle File	

No.	$\Theta$	8	<b>\overline{\over</b>
03880	10	40	4.9

▲ Excluded from lifetime warranty terms.

### Hole Saw Arbor



- Hole saw arbor shank, used to connect the hole saw and drill chuck, and playing the positioning role when the hole saw is working
- Guide drill bit is made of high-speed steel alloy with hardness of HRC63-66
- Fast exit spring, allowing the round disc easier to be taken out after cutting

Note: Please wear PPE such as safety goggles during use

No.	<u>(mm)</u>	🎳 (mm)	$\Theta$	8	ā
53401	14-30	9.5	10	160	17.3
53402	32-152	11.1	6	72	16

▲ Excluded from lifetime warranty terms.

53402

































### **Bi-Metal Hole Saw**



- SATA bimetallic hole saw, with teeth made of high-speed steel with hardness of HRC65-68, strong cutting power, and back material of good toughness, ensuring safety in use
- Strong cutting power, and back material or good toughness, ensuring safety in use
   Special teeth profile design, achieving smooth swarf expelling and high cutting efficiency
- Special ceeting from leasing, achieving smooth swap expensing and high caccing embersly

   -ligh-precision concentricity allows more even force on teeth, prolongs the service life of hole
   saw, and ensures the quality and precision of holing.
- · Used for cutting wood, aluminum, copper, low carbon steel, cast iron and stainless steel
- Please add coolant before use

Note: Please wear PPE such as safety goggles during use

No.	Cutting Diameter (mm)	SAE	#	*	M
53301	16	5/8"	10	200	7.3
53302	19	3/4"	10	200	8.3
53303	20	25/32"	10	200	9
53304	22	7/8"	10	200	9
53305	25	1"	10	200	13.8
53306	30	1-3/16"	10	200	18.8
53307	32	1-1/4"	10	120	10.6
53308	35	1-3/8"	10	120	12.4
53309	38	1-1/2"	10	120	13.9
53310	44	1-3/4"	6	108	13.2
53311	51	2"	6	108	16.2
53312	57	2-1/4"	6	72	13.6
53313	60	2-3/8"	6	72	14.4
53314	64	2-1/2"	6	72	15.6

▲ Excluded from lifetime warranty terms.

### 53501 Pilot Drill 80mm



- Made of high-speed steel alloy
- Suitable for 53401 and 53402

No.	#	8	<u> </u>
53501	20	640	10.6

▲ Excluded from lifetime warranty terms.

### 93451 2Pc. Deburring Tool Set



- Including 1 mini trimmer and 1 piece of ordinary trimmer blade
- Used for trimming edge of the workpieces in the following shapes:
   Deep holes
   Holes

Holes Curved edge

Straight holes

No.	#	8	<b>5</b>
93451	15	150	6

▲ Warranty terms of tool set comply with the individual product.

# 93452 3Pc. Deburring Tool Set



- Including 1 trimmer, 1 standard deburring blades and 1 heavy duty deburring blades
- Used for trimming edge of the workpieces in the following shapes:

Deep holes

Holes

Curved edge Straight holes

No.	8	*	ō
93452	8	-	-

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 93453 5Pc. Standard Deburring Blades



- Used for trimming edge of workpieces made of steel, aluminum and etc.;
- Made of M2 high speed steel (HSS), hardness of blade up to 62-64HRC
- Blade diameter: 3.2 mm

No.	#	*	ā
93453	12	-	-

### 93454 5Pc. Heavy Duty Deburring Blades



- For trimming edge of most workpieces such as those made of stainless steel;
- Made of M35 high speed steel (HSS), adding element cobalt (Co), achieving high durability and
- strong cutting power. Hardness of blade up to 63HRC;
- · Blade diameter: 3.2 mm.

No.	#	8	Q
93454	12	960	20.6

▲ Excluded from lifetime warranty terms.

### **5Pc. Medium Duty Deburring Blades**



- Used for workpieces made of copper and cast iron, can be operated by both hands
- Made of high speed steel (HSS), the hardness of blade up to 62-64HRC
- Used together with SATA 2Pc. deburring tool set 93451 and SATA 3pc. deburring tool set 93452

No.	#	8	<u></u>
93455	10	-	-

▲ Excluded from lifetime warranty terms.

# 93456 5Pc. Deburring Blades for Plastics



- · Used for plastic materials
- Made of high speed steel (HSS), the hardness of blade up to 62-64HRC
- Blade diameter: 3.2 mm
- Can be operated in holes with diameter as small as 1.5 mm
- Used together with SATA 2Pc. deburring tool set 93451 and SATA 3Pc. deburring tool set 93452

No.	#	***	ā
93456	10	-	-

▲ Excluded from lifetime warranty terms.

### **3Pc. Scraper Set**



- · Special handle: applicable to different quick-change cutting tips;
- Applicable to all types of hand;
- The chuck can adjust and fix length of the cutting tip.

### **SATA 93460**

- · Reversible triangular scraper;
- · Hardness of blade up to 58-60HRC;
- · Blade size: 80xФ4.2 mm;
- · Widely used in machining and mold manufacturing;
- · Used for scraping, trimming and deburring tools and castings made of various materials.

### SATA 93461

- · HSS triangular scraper;
- Hardness of blade up to 62-64HRC;
- Blade size: 75x- The cutting tip can be operated in more limited space;
- Used for scraping, trimming and deburring objects made of various materials.
- This item is consumable, and is not covered under SATA lifetime warranty.

No.	#	8	ā
93457	10	-	-

▲ Warranty terms of tool set comply with the individual product.

# 93458 2Pc. Reversible Triangular Scraper Set







- Special handle: Capable of changing blade quickly
- · Suitable for various hand shapes
- · Adjustable chuck for locking blade length
- · SATA 93460 medium double-headed triangular scraper:
- Suitable for scraping, trimming and burr removing of various material tools and castings
- Applicable to machining and mold manufacturing
- Blade size 80\*4.2mm

No.	#	8	ā
93458	10	-	-

▲ Warranty terms of tool set comply with the individual product.





































































### 93459 **2Pc. Reversible Triangular Scraper Set**



- Special handle: Capable of changing blade quickly
- · Suitable for various hand shapes
- Adjustable chuck for locking blade length
   SATA 93461 small triangular scraper made of HSS high-speed steel:
- Suitable for scraping, trimming and burr removing of various materials
- Tip applicable in narrow space
- Blade size 75\*3.2mm

No.	#	8	ā
93459	10	-	-

▲ Warranty terms of tool set comply with the individual product.

### 93462 **Heavy Duty Rotary Deburring Tool Set**



- · Capable of quick manual internal chamfering
- Applicable to handle of SATA 93452 3-piece trimmer
- Suitable for SATA 93463 crank counterbore trimmer:
- Applicable aperture range: 1-16.5mm
- · Made of HSS high-speed steel

No.	#	8	<b>5</b>
93462	10	-	-

▲ Warranty terms of tool set comply with the individual product.

### 93460 **Reversible Triangular Scraper**



- · Suitable for scraping, trimming and burr removing of various material tools and castings
- Applicable to machining and mold manufacturing
- Blade size 80\*4.2mm

No.	#	8	ā
93460	10	-	-

▲ Excluded from lifetime warranty terms.

### **Countersink Chamfering Blade**



- Made of HSS high-speed steel
- Applicable to handles of SATA 93451 2-piece mini trimmer and SATA 93452 3-piece trimmer

No.	#	8	ā
93463	10	-	-

▲ Excluded from lifetime warranty terms.

### 93461 **HSS Triangular Scraper**



- Suitable for scraping, trimming and burr removing of various materials
- Tip applicable in narrow space
- Blade size 75\*3.2mm

No.	#	8	ā
93461	10	-	-

▲ Excluded from lifetime warranty terms.

# **Internal O-Ring Groove Deburring Blade**



- Suitable for burr removing of O-shaped groove with width of less than 3mm
- Made of HSS high-speed steel
- Applicable to handles of SATA 93451 2-piece mini trimmer and SATA 93452 3-piece trimmer

No.	#	8	ā
93464	10	-	-





- · Made of HSS high-speed steel
- Applicable to handles of SATA 93451 2-piece mini trimmer and SATA 93452 3-piece trimmer

No.	#	8	ā
93466	10	-	-

▲ Excluded from lifetime warranty terms.

### 50401 **Ratcheting Tap & Die Wrench**



Arc swing of less than 5° for narrow rotating space



- $\bullet$  With the function of arc swing of less than  $5^\circ$  , it can be rotated in a narrow space to ensure that the tap and die adapters are locked
- Through the arrow buttons, quick and easy reversing can be achieved, such that the tap and die adapters can be twisted quickly without manual reversing
- Fully polished and electroplated handle for comfortable grip and long-term operation
- Used with tap adapter 50421/50422 and die adapter 50423

No.	#	8	<u></u>
50401	20	40	13

### **Ratcheting Tap Wrench**



- Integral all steel machining makes the product suitable for hith torque and load applications.
- The jaws have good toughness and surface hardness.

   The following three positions are set: Fast left-handed, fast right-handed and fixed. This wrench
- is more durable than the conventional zinc alloy ratchet wrench.

   Provided with a two-way ratchet for tightening the square handle of the tap. Adjustable extension bar with grooves at both ends for snap-on positioning of the ball.
- Ideal for tapping in small stations.

No.	Spec.	L(mm)	Tube Body Diameter (mm)	Four-side Opening (mm)	Four-side Clamping Range (mm)	#	¥	ā
50403	M3-M8	85	21	2.6-5.5	2.4-5.5	6	48	11
50404	M5-M12	110	23	4.6-8	4.5-8	6	48	16

▲ Excluded from lifetime warranty terms.

### **Steel Tap Wrench**



- Made of steel with longer service life than that of zinc alloy wrench
- Blackened surface
- Removable steel handle for use in narrow spaces

No.	Spec.	#	¥	ā
50405	M3-M12	10	60	9.2
50406	M5-M20	10	-	-
50407	M9-M27	10	-	-

▲ Excluded from lifetime warranty terms.

### **Steel Round Die Wrench**



- Made of steel with longer service life than that of zinc alloy wrench
- Blackened surface
- Removable steel handle for use in narrow spaces

No.	Spec.	#	¥	ā
50411	M3-M12	10	60	12.5
50412	M14	10	-	-
50413	M16-M20	10	-	-
50414	M22-M24	10	-	-

▲ Excluded from lifetime warranty terms.

### **Tap Adaptor**



- Automatic locking function for easy and safe removal Spring-loaded chuck cap design for quick removal
- · Equipped with a simple extension bar for tapping in a small station
- Suitable for M3-M4 taps
- It can be used with a tap and die ratchet wrench or directly with an operating lever

No.	Spec.	#	8	<b>\overline{\over</b>
50421	M3-M4	20	40	7.8
50422	M5-M12	20	40	9.8





































































# 50423 Die Adaptor M3-M12



- Patented twist lock guide rail, to ensure the accurate concentricity of threading die
- · Applicable to isometric round die
- To be used with patented tap and die ratchet wrench

No.	$\Theta$	8	<b>\overline{\over</b>
50423	20	40	6.7

▲ Excluded from lifetime warranty terms.



50452 32Pc. HSS Coarse Thread Tap & Die Set

- High accuracy with full milling process
- Vapor oxide surface treatment to make tapping smoother
- Longer lifecycle than other traditiional tap and die
- Scope of Application: Used for machining for material of carbon steel, alloy steel and casting iron, etc.
- 21Pc. Tap Set (M3x0.5,M4x0.7,M5x0.8,M6x1.0,M8x1.25,M10x1.5,M12x1.75)x3Pc.
- •7Pc. Die Set (M3x0.5,M4x0.7,M5x0.8,M6×1.0,M8x1.25,M10x1.5,M12x1.75)
- •1Pc. Adjustable Tap Wrench M3-M12
- •1Pc. Die Stock M3-M12
- 1Pc. Screwdriver
- •1Pc. Thread Pitch Gauge

No.	#	8	ā
50452	-	10	16.1

▲ Warranty terms of tool set comply with the individual product.

# 50451 40Pc. HSS Coarse Thread Tap & Die Set



- 21Pc.Tap Set: M3x0.5、 M4x0.7、 M5x0.8、 M6x1.0、 M8x1.25、 M10x1.5、 M12x1.75 7Pc.Die Set: M3x0.5、 M4x0.7、 M5x0.8、 M6x1.0、 M8x1.25、 M10x1.5、 M12x1.75
- 5Pc.Threaded Extractor Set
- Pc.Ratcheting Tap Wrench
   Pc.Tap Adaptor M3-M4、M5-M12
- 1Pc.Die Adaptor M3-M12
- 1Pc.Handle
- 1Pc.CRV Hex Key 4MM
- •1Set Thread Pitch Gauge
- SATA ratcheting tap and die wrench offers higher torque, makes the operation quicker and more durable as well
- Full milling process to make die have higher accuracy
- · Vapor oxide surface treatment to make tapping smother, longer lifecycle than other traditional tap • Used for machining for material of carbon steel, alloy steel and casting iron, etc.

No.	#	8	<u>a</u>
50451	1	8	16.2

▲ Warranty terms of tool set comply with the individual product.

### 50453 21Pc. HSS Coarse Thread Tap Set



- · High accuracy with full milling process
- · Vapor oxide surface treatment to make tapping smoother
- · Longer lifecycle than other traditiional tap and die
- Scope of Application: Used for machining for material of carbon steel, alloy steel and casting
- •21Pc. Tap Set (M3x0.5,M4x0.7,M5x0.8,M6x1.0,M8x1.25,M10x1.5,M12x1.75)x3Pc.

No.	#	8	ā
50453	-	20	15

▲ Warranty terms of tool set comply with the individual product.





- •14 pc nosecone / diagonal cone: M3X0.5, M4X0.7, M5X0.8, M6X1, M8X1.25, M10X1.5, M12X1.75
- •7 pc twist: Ø 2.5, Ø 3.3, Ø 4.2, Ø 5, Ø 6.8, Ø 8.5, Ø 10.2
- •1 pc steel tap wrench M3-M12
- · Subjected to grinding process
- Surface subjected to steam oxidation for smooth tapping without bonding
- Longer service life compared with that of regular tap

No.	#	8	ā
50454	-	9	-

▲ Warranty terms of tool set comply with the individual product.

### 50455 37 pc Speed Steel Coarse Tap Die Twist Set



- •14 pc nosecone / diagonal cone: M3X0.5, M4X0.7, M5X0.8, M6X1, M8X1.25, M10X1.5, M12X1.75
- •7 pc die: M3X0.5, M4X0.7, M5X0.8, M6X1, M8X1.25, M10X1.5, M12X1.75 •7 pc twist: ⊘ 2.5, ⊘ 3.3, ⊘ 4.2, ⊘ 5, ⊘ 6.8, ⊘ 8.5, ⊘ 10.2
- •5 pc screw extractor: N0.1, N0.2, N0.3, N0.4, N0.5
- •1 pc steel tap wrench M3-M12
- •1 pc steel die wrench M3-M12
- •1 pc special screwdriver
- •1 pc screw gauge
- Subjected to grinding process
- Surface subjected to steam oxidation for smooth tapping without bonding
- · Longer service life compared with that of regular tap

No.	#	8	Q
50455	-	-	-

▲ Warranty terms of tool set comply with the individual product.

### 50457 7Pc. Threading Tool Set



- Made of HSS 6542 high-speed steel, and with full grinding process Time and labor saving. One-time operation can complete the whole process such as drilling, Inne and labor saving. One-time operation can complete the whole process such as drilling, tapping, deburring/countersinking
   Designed with back tap after tapping, to prevent damaging threads after over-drilling
   After tapping, the drill bit spins reversely to exit
   Tapping speed is generally slower than drilling speed, and a little lubricant should be applied
   Scope of application: in general, processing of carbon steel, alloy steel, cast iron, etc
   Specifications of 6-piece compound tap drill: M3x0.5, M4x0.7, M5x0.8, M6x1.0, M8x1.25, M10x1.5
   1/4" quick change magnetic holder

No.	#	8	Ø
50457	5	10	4

▲ Warranty terms of tool set comply with the individual product.

# **5 pc Speed Steel Coarse Machine Tap**









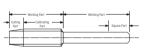












- Surface subjected to steam oxidation for smooth tapping without bonding
- · Longer service life compared with that of regular tap
- · Suitable for processing carbon steel, alloy steel and cast iron

No.	Spec.	Pitch (MM)	Thread (mm)	L (mm)	Shank Diameter (mm)	Party width (MM)	Taping depth ≤2 × d (mm)	#	8	ā
50603	M3	0.5	11	48	3.15	2.5	9	20	120	4
50604	M4	0.7	13	53	4	3.15	12	20	120	5
50605	M5	0.8	16	58	5	4	15	10	80	5.8
50606	M6	1	19	66	6.3	5	18	10	80	7.8
50608	M8	1.25	22	72	8	6.3	24	10	80	11.4
50610	M10	1.5	24	80	10	8	30	5	60	14
50612	M12	1.75	29	89	9	10	36	5	60	15
50614	M14	2	30	95	11.2	9	28	6	-	-
50616	M16	2	32	102	12.5	10	32	6	-	-
50618	M18	2.5	37	112	14	11.2	36	6	-	-
50620	M20	2.5	37	112	14	11.2	40	2	-	-
50622	M22	2.5	38	118	16	12.5	44	2	-	-
50624	M24	3	45	130	18	14	48	2	-	-







































































# Speed Steel Manual Tap (Set)



- Surface subjected to steam oxidation for smooth tapping without bonding
- · Longer service life compared with that of regular tap
- · Applicable for machine
- Suitable for processing carbon steel, alloy steel and cast iron

No.	Spec.	Pitch (MM)	Thread (mm)		Shank Diameter (mm)	Party width (MM)	Taping depth ≤2 × d (mm)	#	¥	<b>5</b>
50703	M3	0.5	11	48	3.15	2.5	6	30	-	-
50704	M4	0.7	13	53	4	3.15	8	30	-	-
50705	M5	0.8	16	58	5	4	10	30	-	-
50706	M6	1	19	66	6.3	5	12	30	-	-
50708	M8	1.25	22	72	8	6.3	16	20	-	-
50710	M10	1.5	24	80	10	8	20	20	-	-
50712	M12	1.75	29	89	9	7.1	24	20	-	-

▲ Warranty terms of tool set comply with the individual product.

### **5Pc. HSS Drill/Tap Bits**



- Time and labor saving. One-time operation can complete the whole process including drilling, tapping, deburring, and countersinking
- Designed with back tap after tapping, to prevent damaging threads after over-drilling After tapping, the drill bit spins in reverse to exit
- Tapping speed is generally slower than drilling speed, and a little lubricant should be applied
- Scope of application: in general, processing of carbon steel, alloy steel, cast iron, etc

### Warning:

- Must wear goggles to avoid possible broken danger
- Be careful to harm of flying swarf when using
- Do not touch the cutting edge with hands

No.	Spec.	Screw Pitch (mm)	Thread (mm)		Hexagonal Shank Diameter (mm)	Depth of Tapping ≤3xd(mm)		¥	ā
50803	M3	0.5	99	52.3	7.2	9	10	80	6
50804	M4	0.7	12	52.3	7.2	12	10	80	6
50805	M5	0.8	12	56.6	7.2	15	10	80	7
50806	M6	1.0	12	56.6	7.2	18	10	80	6
50808	M8	1.25	14	57.2	7.2	24	10	80	8
50810	M10	1.50	24	57.9	7.2	30	5	60	8

▲ Excluded from lifetime warranty terms.

### **HSS Coarse Thread Die**











50904

50916

- HSS speed steel 6542
- Application: Suitable for through-hole processing of carbon steel, alloy steel and cast iron

- Pay attention to the danger of damage, and wear protective goggles
- When using, there are chips flying out; pay attention to safety to avoid injury. Do not touch the blade with your hand

No.	Spec.	Screw Pitch (mm)	OD×Thickness (mm)	#	¥	ā
50903	M3	0.5	25×9	10	120	5.8
50904	M4	0.7	25×9	10	120	5.8
50905	M5	0.8	25×9	10	120	5.8
50906	M6	1	25×9	10	120	5.8
50908	M8	1.25	25×9	10	120	5.2
50910	M10	1.50	25×9	10	120	5.2
50912	M12	1.75	25×9	10	120	4.9
50914	M14	2.0	38X14	10	-	-
50916	M16	2.0	45X18	10	-	-
50918	M18	2.5	45X18	10	-	-
50920	M20	2.5	45X18	10	-	-
50922	M22	2.5	55X22	5	-	-
50924	M24	3.0	55X22	5	-	-

# **Striking Tool**

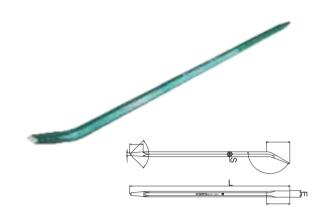
_		
195	Crowbar	
195-195	Punch, Chisel and Hammer	
200-203	Ball Pein Hammer	
198-202	Claw Hammer	
200	Engineers Hammer	
200-201	Soft Face Hammer	
201	Dead Blow Hammer	
203	Damping Claw Hammer	







### **Pinch Bar**



- Made of alloy steel for high strength and good toughness
   Subjected to heat treatment for uniform hardness and strong load bearing capacity
- Power-coated surface for elegance and strong anti-rust ability

No.	Spec. (mm)	E(mm)	S(mm)	L(mm)	#	¥	M
92551	18x400	22	18	400	4	24	20
92552	20x600	24	20	600	4	16	25.4
92553	22x800	26	22	800	4	8	20.7
92554	22x1000	26	22	1000	4	8	26
92556	25x1500	30	25	1500	2	4	25.8

▲ Excluded from lifetime warranty terms.

### **5Pc. Punch Set** 09161

**Striking Tool** 



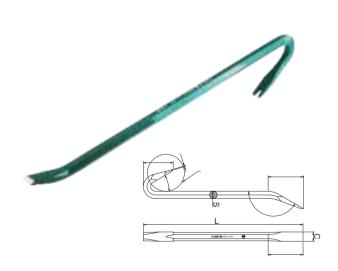
- Made of 60Cr-V, ensuring superior mechanical properties Surface plated with chrome ensuring high anti-rust capability

No.	Spec. (mm)
90751	Center Punch 4x120
90752	Taper Punch 3x120
90753	Pin Punch 4x150
90754	Cape Chisel 5x130
90755	Cold Chisel 12x130

No.	#	8	ā
09161	20	40	14.4

▲ Warranty terms of tool set comply with the individual product.

### **Wrecking Bar**



- Made of alloy steel for high strength and good toughness
   Universal nail nipping end for wide application and good effect
   Power-coated surface for elegance and strong anti-rust ability

No.	Spec. (mm)	C(mm)	S(mm)	L(mm)	#	8	ā
92561	18x400	22	18	400	4	16	17.3
92562	18x600	22	18	600	4	16	25.2
92564	20x1000	24	20	1000	2	8	25.7

▲ Excluded from lifetime warranty terms.

### 09162 6Pc. Pin Punch Set





- Made of Cr-V, ensuring superior mechanical properties
- Surface plated with chrome ensuring high anti-rust capability

No.	Spec. (mm)
90771	Pin Punch 2x150
90772	Pin Punch 3x150
90753	Pin Punch 4x150
90774	Pin Punch 5x150
90775	Pin Punch 6x150
90776	Pin Punch 8x150

No.	#	8	<b>\overline{\over</b>
09162	6	24	17.5

▲ Warranty terms of tool set comply with the individual product.

### 09163 3Pc. Chisel Set



Made of Cr-V (chrome-
· Surface spray plastics, 1665

No.	Spec. (mm)
90784	Cold Chisel 20x200
90785	Cold Chisel 22x250
90786	Cold Chisel 25x300

No.	#	8	<u></u>
09163	3	6	12.2

▲ Warranty terms of tool set comply with the individual product.

# 09164 13Pc. Punch & Chisel Set



- Made of 60Cr-V (chrome-vanadium steel) ensuring high strength and toughness
- Surface plated with chrome, ensuring high anti-rust capabilit

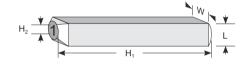
No.		Spec. (mm)	No.	Spec. (mm)
90751		Center Punch 4x120	90776	Pin Punch 8x150
90762		Center Punch 5x150	90752	Taper Punch 3x120
90771		Pin Punch 2x150	50 90755 Cold Chisel 12x130	
90772		Pin Punch 3x150 90782 Cold Chise		Cold Chisel 15x150
90753		Pin Punch 4x150	90783	Cold Chisel 18x175
90774		Pin Punch 5x150	90754	Cape Chisel 5x130
90775		Pin Punch 6x150		
No.		$\blacksquare$	8	<b></b>

▲ Warranty terms of tool set comply with the individual product.

09164

### 9Pc. Number Punch Set





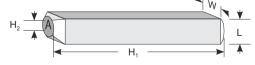
- · Artistic font
- High hardness
- Baking varnish on surface for rust protection

No.	L((mm)	W(mm)	H <sub>1</sub> (mm)	H <sub>2</sub> (mm)	$\Theta$	8	ā
90800	7	7	60	3	10	100	21.6
90801	7.5	7.5	60	4	5	50	13.1
90802	8.8	8.8	63	5	5	50	18
90803	10	10	65	6	5	50	23.7
90804	12	12	69	8	5	20	14.1

▲ Warranty terms of tool set comply with the individual product.

### 27Pc. Letter Punch Set





• Artistic font

11.5

- High hardness
- Baking varnish on surface for rust protection

No.	L((mm)	W(mm)	H₁(mm)	H <sub>2</sub> (mm)	$\Theta$	¥	ā
90805	7	7	60	3	5	30	19.1
90806	7.5	7.5	60	4	5	20	14.9
90807	8.8	8.8	63	5	5	20	21
90808	10	10	65	6	3	12	17
90809	12	12	69	8	2	8	16.8

▲ Warranty terms of tool set comply with the individual product.













































### **Center Punch**



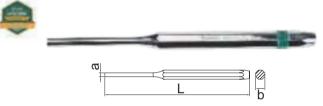




No.	Working End Diameter a(mm)	Rod Diameter L(mm) b(mm)		$\Theta$	¥	ā
90751	4	8	120	10	300	16.5
90762	5	10	150	10	120	14



























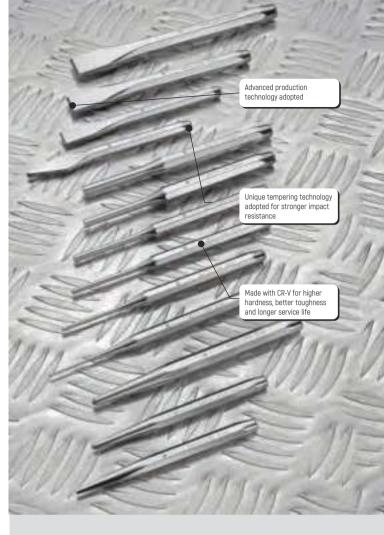
No.	Working End Diameter a(mm)	Rod Dia b(mm)	meter L(mm)	#	¥	ā
90771	2	8	150	10	200	12.2
90772	3	8	150	10	200	12.2
90753	4	8	150	10	300	17.9
90774	5	8	150	10	200	12.9
90775	6	10	150	10	120	12.1
90776	8	10	150	10	120	13.2

### **Taper Punch**



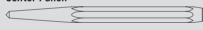


No.	Working End Diameter a(mm)	Rod Diameter b(mm)	L(mm)	$\Theta$	¥	ā
90752	3	8	120	10	300	17.2



# **Impact Chisel Application**

### **Center Punch**



Mainly used for positioning and marking before tapping in mechanical maintenance, installation, construction, automobile repair and other industries

### **Pin Punch**



Mainly used for mechanical maintenance, installation, bicycle, motorcycle, automobile maintenance and other industries where pins are required. The dimensional tolerance of each pin punch working end is strictly controlled to ensure a good fit with the dimensions of the corresponding pins.

### **Taper Punch**



Mainly used for mechanical maintenance, installation, bicycle, motorcycle, automobile maintenance and other industries where pins (taper pins) are required. The dimensional tolerance of each pin punch working end is strictly controlled to ensure a good fit with the dimensions of the corresponding pins. Taper punch can also be used for chambering.

# **Cold Chisel**





Mainly used for grooving, welding slag removal, shaping and carving in mechanical maintenance, installation, construction, automobile repair, rock engineering and concrete engineering and other industries.





















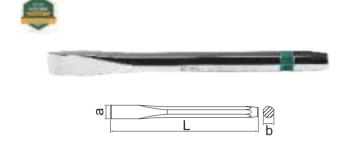








### **Cold Chisel**

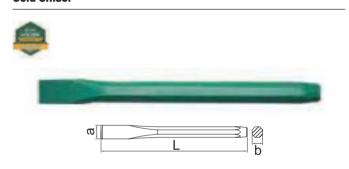


No.	Working End Diameter a(mm)	Rod Diar b(mm)	meter L(mm)		8	ā
90755	12	8	130	10	250	17.5
90782	15	10	150	10	120	15.4
90783	18	12	175	10	80	16.5

# 92309 Fiberglass Short Handle Claw Hammer



### **Cold Chisel**



No.	Working End Diameter a(mm)	Rod Diam b(mm)	eter L(mm)	#	¥	ā
90784	20	14	200	6	48	15.1
90785	22	17	250	6	24	14.8
90786	25	18	300	4	16	14.5

- Short handle for operation in narrow space
- PP+TPR handle for comfort
- Magnetic hammerhead suitable for fixing nails, with powder coating for rust protection and elegance

No.	Spec.	L(mm)	#	8	ā
92309	0.5 lbs	180	6	36	13

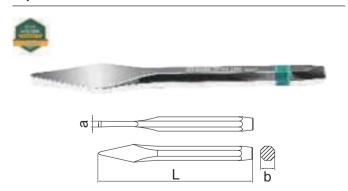
▲ Excluded from lifetime warranty terms.

# **One-Piece Forged Claw Hammer**





# **Cape Chisel**



No.	Working End Diameter a(mm)	Rod Dia b(mm)	meter L(mm)	#	¥	ð
90754	5	8	130	10	250	16.5

- Forged with medium carbon steel with fully-polished surface
   Double-injection molded handle (PP&TPR soft material) for comfort
- P-shaped two-tone shockproof handle
- Integrated hammer for higher safety

No.	Spec.	L(mm)	$\Theta$	8	ā
92331	1 lbs	331	4	24	22.5
92332	1.25 lbs	350	4	24	23.4































# **Fiberglass Handle Sledge Hammer**



- Concave and convex design on both sides of the handle for tapping direction control
- Bottom with baseball bat shape for anti-slipping

No.	Working End Diameter a(mm)	Rod Diameter b(mm)	#	¥	ā
92341	2.5 lbs	361	4	12	18.4
92342	3 lbs	400	4	12	21.2
92343	4 lbs	400	4	12	27
92344	6 lbs	910	2	6	25
92345	8 lbs	910	2	6	30.7
92346	10 lbs	910	2	4	37
92347	12 lbs	910	2	4	28.1
92348	14 lbs	910	-	2	30.8
92349	16 lbs	910	-	2	17.8

### Welders Chipping Hammer 0.5 Lb.





- Pointed head for removing welding slag
- Tip baked with black lacquer + walnut handle

No.	Spec.	L(mm)	$\Theta$	¥	ē
92351	0.5 lbs	295	6	48	17.2

### 92352 Welders Scaling Hammer 0.6 Lb.



- Flat tip for removing rust spots from workpiece before welding
- •Tip baked with black lacquer + walnut handle

No.	Spec.	L(mm)	$\blacksquare$	¥	ā
92352	0.6 lbs	180	6	36	17.9

### **Hickory Sledge Copper Hammer**



- Hammer head made of copper material with 99% red copper for moderate hardness, avoiding damage to workpiece surface
- Octagonal hammerhead for various surfaces
- $\bullet$  Handle made of imported hickory for comfort and toughness

No.	Spec.	L(mm)	#	8	画
92365	1 lbs	310	6	36	21
92366	2 lbs	320	6	24	27
92367	3 lbs	360	6	18	31

▲ Excluded from lifetime warranty terms.

### Hatchet 1.25 Lbs. 92371



- iacket provided
- Forged with medium carbon steel, with fully-polished tip surface, chrome-plated anti-rust iron tube + iron ring + environmentally-friendly TPR handle, and blade subjected to heat treatment for lasting sharpness

No.	Spec.	L(mm)	$\Theta$	¥	ā
92371	1.25 lbs	330	6	24	22.1

### **Rubber Mallet**



No.	Spec.	L(mm)	$\Theta$	8	ā
92912	1 lbs	315	6	36	26.2
92913	1.5 lbs	331	4	16	20.2

▲ Excluded from lifetime warranty terms.

### **Hickory Ball Pein Hammer**



- Hammerhead made of high carbon steel for impact resistance
- · Special embedding technology adopted to preventing hammerhead from fall-off
- Handle made of American walnut for comfort and toughness

No.	Spec.	L(mm)	$\Theta$	8	ā
92311	0.5 lbs	290	6	12	5.4
92312	1 lbs	350	6	12	9.2
92313	1.5 lbs	360	6	12	12
92314	2 lbs	390	6	12	15.2
92315	2.5 lbs	400	4	8	12.5

### **Hickory Claw Hammer**



- Hammerhead made of high carbon steel for impact resistance
- Special embedding technology adopted to preventing hammerhead from fall-off
- Handle made of American walnut for comfort and toughness

No.	Spec.	L(mm)	$\Theta$	8	ā
92321	0.5 lbs	275	6	12	5
92322	0.8 lbs	308	6	12	7.5
92323	1 lbs	330	6	12	8.5
92324	1.25 lbs	335	6	12	9
92325	1.5 lbs	390	6	12	12.8

# **Hickory Engineers Hammer**





- Hammer head made of high carbon steel for impact resistance
- Handle made of American hickory for comfort and toughness
- Special embedding technology adopted to preventing hammerhead from fall-off

No.	Spec.	L(mm)	$\Theta$	*	ā
92401	200	285	8	16	5.2
92402	300	300	8	16	8
92403	400	320	4	8	4.7
92404	500	320	4	8	6
92405	800	350	4	8	8.8
92406	1000	360	4	8	10.7

### **Hickory Soft Face Hammer**



- Hammer head made of high carbon steel for impact resistance
- Handle made of American hickory for comfort and toughness
- · Special embedding technology adopted to preventing hammerhead from fall-off

No.	Hammerhead Diameter (mm)	L(mm)	$\Theta$	¥	ā
92501	22	260	6	12	2.5
92502	28	303	6	12	3
92503	35	320	6	12	4.8
92504	45	323	6	12	6.6
92505	60	380	4	8	8

### **Threaded Soft Face Hammer Tip**





- The hammer is made of amine phenolic material and will not deform, crack or leave remnants.
- Good match between hammer hardness and that of the material surface, eliminating wears and dents on the surface

No.	L(mm)	8	8	ā
92521	22	6	180	8.1
92522	28	6	144	8
92523	35	6	96	7
92524	45	6	48	6
92525	60	6	48	8





































































# **Threaded Hard Face Hammer Tip**



- The hammer is made of amine phenolic material and will not deform, crack or leave remnants.
- Good match between hammer hardness and that of the material surface, eliminating wears and dents on the surface

No.	L(mm)	8	8	ā
92531	22	6	180	7.2
92532	28	-	180	7.7
92533	35	6	96	7.8
92534	45	6	48	6.5
92535	60	-	80	14.2

▲ Excluded from lifetime warranty terms.

### **Dead Blow Hammer**





- Made of industrial-grade SBR rubber for resistance to knock, anti-slip, anti-oil and comfort, suitable for fire prevention
   Hammerhead with steel balls to avoid rebounding
- No damage to workpiece surface and free of tapping spark

No.	Hammerhead Diameter (mm)	L(mm)	$\Theta$	8	M
92921	35	260	6	36	13.1
92922	45	286	6	36	16.6
92923	55	350	4	16	17.3
92924	65	370	2	12	19.1

### **Dead Blow Hammer**

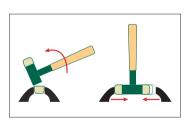


- $\bullet \mbox{Made of industrial-grade NBR for stronger wear resistance and oil corrosion resistance \\$
- Tapping surface thickness increased from 5-6mm to 10-16mm for longer service life
- · Anti-slipping handle tail

No.	Hammerhead Diameter (mm)	L(mm)	#	8	ā
92901	35+/-0.5	280	6	36	13.1
92902	45+/-0.5	300	6	24	16.6
92903	55+/-0.5	350	4	16	17.3
92904	65+/-0.5	370	2	12	19.1

### **Hickory Dead Blow Hammer**





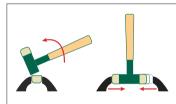
- $\bullet$  Hammerhead made of special material for good wear resistance and low temperature resistance, high corrosion resistance and chemical stability
  • Anti-blocking with other materials

- Embedded hammerhead for firmness
   Improved impact effect with sensitive workpiece surface protected
- Handle made of American walnut
   Built-in steel balls for increased tapping force and rebounding prevention
   Hammerhead replaceable with bench vice
- Anti-slipping handle tail

No.	Hammerhead Diame	eter (mm) L(mm)	#	8	ā
92601	30	320	6	48	22
92602	35	325	6	48	25
92603	40	352	6	36	25
92604	50	365	6	24	24
92605	60	400	4	16	27

### **Tubular Steel Handle Dead Blow Hammer**





- Hammerhead made of special material for good wear resistance and low temperature
- resistance, high corrosion resistance and chemical stability
- Anti-blocking with other materials
- Embedded hammerhead for firmness
- Improved impact effect with sensitive workpiece surface protected
- Handle made of American walnut
- Built-in steel balls for increased tapping force and rebounding prevention
- Hammerhead replaceable with bench vice
- Anti-slipping handle tail

No.	Hammerhead Diameter (mm)	L(mm)	$\Theta$	8	ā
92611	30	280	6	48	25
92612	35	285	6	36	23
92613	40	300	6	24	22
92614	50	315	6	18	24
92615	60	325	4	12	22

▲ Excluded from lifetime warranty terms.

### **Fiberglass Handle Claw Hammer**



- Hammerhead made of high carbon steel for strong impact resistance
- Embedded hammerhead for firmness
- Glass fiber handle for comfort, with fashionable two-tone option available

No.	Spec.	L(mm)	#	¥	ā
92306	1 lbs	330	2	8	6.4
92307	1.5 lbs	380	2	8	8.5
92308	0.5 lbs	280	4	8	3.6

### **Fiberglass Handle Ball Pein Hammer**



- · Hammerhead made of high carbon steel for strong impact resistance
- · Embedded hammerhead for firmness
- Glass fiber handle for comfort, with fashionable two-tone option available

No.	Spec.	L(mm)	$\Theta$	¥	ā
92301	0.5 lbs	297	4	8	3.6
92302	1 lbs	343	4	8	6.6
92303	1.5 lbs	349	4	8	8.6
92304	2 lbs	351	4	8	11.5
92305	2.5 lbs	380	4	8	13.2

### 92703 Anti-Vibration Claw Hammer 1Lb.



- Hammerhead made of chrome-molybdenum alloy steel for high toughness and durability
- Integrated rivet shape keeping hammerhead and handle together
- Capable of shock absorption to reduce vibration for comfort and safety
- Round-hole damping handle, being elegant and ergonomic

No.	Weight (g)	L(mm)	#	¥	ā
92703	870	340	5	20	20.4

### 92712 Anti-Vibration Curved Claw Hammer 0.8Lb.



- $\bullet \mbox{Hammerhead made of chrome-molybdenum alloy steel for high toughness and durability}$
- · Integrated rivet shape keeping hammerhead and handle together
- Capable of shock absorption to reduce vibration for comfort and safety
- Round-hole damping handle, being elegant and ergonomic

No.	Weight (g)	L(mm)	#	8	ā
92712	730	335	5	20	22





































































### **Anti-Vibration Ball Pein Hammer 1 Lb.**



- Hammerhead made of chrome-molybdenum alloy steel for high toughness and durability
- · Integrated rivet shape keeping hammerhead and handle together
- Capable of shock absorption to reduce vibration for comfort and safety
- Round-hole damping handle, being elegant and ergonomic

No.	Weight (g)	L(mm)	#	¥	ā
92722	780	335	5	20	19.2

### **Anti-Vibration Engineers Hammer 440g** 92734



- Hammerhead made of chrome-molybdenum alloy steel for high toughness and durability
- · Integrated rivet shape keeping hammerhead and handle together
- Capable of shock absorption to reduce vibration for comfort and safety
- Round-hole damping handle, being elegant and ergonomic

No.	Weight (g)	L(mm)		¥	<u></u> ■
92734	890	335	5	20	20.4

# **Measuring Tool**

3M)	Tape Measure	205-206
***	Feeler Gauge	207-208
	Level	208
	Ruler/Angle Ruler	209
	Vernier Caliper	210-212
	Micrometer	213-214
	Laser Distance Meter	215







### **Tape Measure**



No.	Ruler Length (m)	Tape Width L (mm)	$\Theta$	¥	M
91311A	2	13	12	120	8.6
91312A	3	16	12	120	13.6
91314A	5	19	12	120	23.3
91315A	5	25	12	120	30.5
91316A	7.5	25	6	60	22.3
91317A	10	25	6	60	28.6

▲ Excluded from lifetime warranty terms.

### **Tape Measure**

**Measuring Tool** 



- •TPE cover, not easy to damage when dropped
- · Ruler tape double-sided printing
- Strong springs for longer life

No.	Ruler Length (m)	Tape Width L (mm)	#	8	ā
91333A	3.5	16	12	-	-
91334A	5	19	12	-	-
91335A	5.5	25	6	-	-
91336A	7.5	25	6	-	-

▲ Excluded from lifetime warranty terms.

### **Grade-1 Precision Tape**



- · High precision up to JIS1
- Durable matte paint for easy reading in bright light
- Double-sided printing for easy reading on both sides
- Double-sided crochet hook with automatic resetting to ensure that both internal and external measurements starting from zero
- · Climbing hook provided for easy carrying

No.	Ruler Length (m)	Tape Width L (mm)	$\Theta$	8	<b>™</b>
91311B	2	13	12	-	-
91312B	3	16	12	-	-
91314B	5	19	12	-	-
91315B	5	25	12	-	-
91316B	7.5	25	6	-	-
91317B	10	25	6	-	-
91322B	5M/16Ft.	19	12	-	-

▲ Excluded from lifetime warranty terms.



\*Nylon-coated steel ruler tape can be used in inclement weather or environment and can be scrubbed repeatedly



\*Nylon-covered steel ruler tape can be washed







- TPE cover, not easy to damage when dropped
- · Ruler tape double-sided printing
- · Strong springs for longer life

No.	Ruler Length (m)	Tape Width L (mm)	$\Theta$	*	ā
91341A	3.5	16	12	-	-
91342A	5	19	12	-	-
91343A	5.5	25	6	-	-
91344A	7.5	25	6	-	-

▲ Excluded from lifetime warranty terms.

### **Fiberglass Tape Measure**



- Measuring range 0-20 meters • ABS high-strength engineering plastics: strong and durable, good impact resistance Back hand-held design: easy to carry
  • Fiberglass ruler tape: rustproof and insulted

No.	Ruler Length (m)	Tape Width L (mm)		8	ā
91361B	20	13	20	-	-
91362B	30	13	20	-	-
91363B	50	13	20	-	-

▲ Excluded from lifetime warranty terms.

### **Steel Tape Measure**

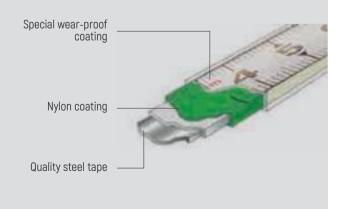


- Return quickly
   ABS/TPR Cover, soft and shatter-proof
   Metal tailhook for easy handling

No.	Ruler Length (m)	Tape Width L (mm)	#	8	ā
91351B	15	10	20	-	-
91353B	30	10	20	-	-

▲ Excluded from lifetime warranty terms.

# Nylon coating and wear-proof treatment technology



SATA tapes are nylon-coated











































# 09401 14Pc. Feeler Gauge Set 0.05-1.00mm

### 09405 23Pc. Feeler Gauge Set 0.02-1.00mm, Metric & SAE





### **Specification**

- Feeler Gauge: 0.05mm, 0.10mm, 0.15mm, 0.20mm, 0.25mm, 0.30mm, 0.40mm, 0.50mm, 0.60mm, 0.70mm, 0.80mm, 0.90mm, 1.00mm
- Ruler: 2"

No.	#	8	ā
09401	-	24	1.8

▲ Excluded from lifetime warranty terms.



• Made of Mn steel, with polished surface

### **Specification**

• Feeler Gauge: 0.02mm, 0.03mm, 0.04mm, 0.05mm, 0.10mm, 0.15mm, 0.20mm, 0.25mm, 0.30mm, 0.35mm, 0.40mm, 0.45mm, 0.55mm, 0.55mm, 0.60mm, 0.65mm, 0.70mm, 0.75mm, 0.80mm, 0.85mm, 0.90mm, 0.95mm, 1.00mm

No.	#	**	ā
09405	-	36	3.7

▲ Excluded from lifetime warranty terms.

### 09402 16Pc. Feeler Gauge Set 0.05-1.00mm



• Made of Mn steel, with polished surface

### **Specification**

• Feeler Gauge: 0.05mm, 0.10mm, 0.15mm, 0.20mm, 0.25mm, 0.35mm, 0.35mm, 0.40mm, 0.50mm, 0.55mm, 0.60mm, 0.75mm, 0.75mm, 0.80mm, 0.90mm, 1.00mm

No.	#	8	ā
09402	-	12	1.3

▲ Excluded from lifetime warranty terms.

### 09407 32Pc. Feeler Gauge Set 0.02-1.00mm, Metric & SAE



• Made of 65Mn steel, with polished surface

### **Specification**

• Feeler Gauge: 0.02mm, 0.03mm, 0.04mm, 0.05mm, 0.06mm, 0.07mm, 0.08mm, 0.09mm, 0.10mm, 0.13mm, 0.15mm, 0.18mm, 0.20mm, 0.23mm, 0.25mm, 0.28mm, 0.30mm, 0.33mm, 0.33mm, 0.38mm, 0.40mm, 0.45mm, 0.50mm, 0.55mm, 0.60mm, 0.63mm, 0.65mm, 0.70mm, 0.75mm, 0.80mm, 0.85mm, 0.90mm, 1.00mm

No.	#	8	ā
09407	-	24	3.1



### 23 Pc. Metric High Precision Feeler Set



- Body made of Mn steel with surface polished
- Ruler 4" long

### Specification

• 0.02,0.03,0.04,0.05,0.10,0.15,0.20,0.25,0.30,0.35,0.40,0.45,0.50,0.55,0.60,0.65, 0.70,0.75,0.80,0.85,0.90,0.9

No.	#	8	ā
09415	-	-	-

▲ Excluded from lifetime warranty terms.

### 32 Pc. Metric and Inch High Precision Feeler Set



- Body made of Mn steel with surface polished Ruler 3.5" long
- Metric-inch system

• 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.13, 0.15, 0.18, 0.20, 0.23, 0.25, 0.28, 0.30, 0.33, 0.38, 0.40, 0.45, 0.50, 0.55, 0.60, 0.63, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 1.00MM

No.	#	8	ā
09416	-	-	-

▲ Excluded from lifetime warranty terms.

### Level





No.

91601A

91602A

91603A

91604A

91605A

91606A



• High precision within error 0.5mm/m

L(mm)

300

450

600

750

900

1200

**Magnetic Level** 

▲ Excluded from lifetime warranty terms.



• Bubble tube being anti-UV and impact resistance, not easy to break • Highly elastic material of end cap, and the drop performance is good









6

6

6

6

6

6

6

8

30

30

30

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8





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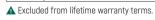












• With Magnet, easy to operate.  ${f \cdot}$  High precision within error 0.5mm/m

L(mm)

300

450

600

750

900

1200

No.

91611A

91612A

91613A

91614A

91615A

91616A

 $\bullet$  Bubble tube being anti-UV and impact resistance, not easy to break • Highly elastic material of end cap, and the drop performance is good



























































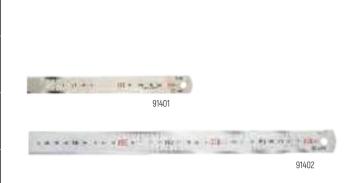








# **Steel Rules**

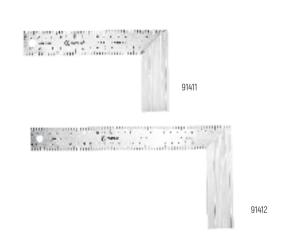


- Made of stainless steel
- Clear calibration and wear-resistance

No.	Spec.	$\blacksquare$	8	ā
91401	150	12	144	4
91402	300	12	108	7.8
91403	500	10	90	12
91404	1000	10	40	12.3

▲ Excluded from lifetime warranty terms.

### **Carpenter's Squares**



- Made of stainless steel
- Clear calibration and wear-resistance

No.	Spec.	$\mathcal{G}$	8	ā
91411	200	10	40	7.1
91412	300	10	40	10.1

▲ Excluded from lifetime warranty terms.

# **Vernier Height Gauge**



- •The ruler frame has high fitting accuracy and smooth pulling
- The base can be replaced, enhancing the service life
- The base material is solid and the measurement is more stable

No.	Range (mm)	Resolution(mm)	Accuracy (mm)	#	8	M
91542	0-200	0.02	± 0.03	1	4	-
91543	0-300	0.02	±0.04	1	4	-
91544	0-500	0.02	±0.04	1	2	-

▲ Excluded from lifetime warranty terms.

### **Digital Height Gauge**



- The ruler frame has high fitting accuracy and smooth pulling
- The base can be replaced, enhancing the service life.
  The base material is solid and the measurement is more stable.

No.	Range (mm)	Resolution(mm)	Accuracy (mm)	$\blacksquare$	8	ā
91545	0-200	0.01	± 0.03	1	4	-
91546	0-300	0.01	±0.04	1	4	-
91547	0-500	0.01	±0.04	1	2	-





- Measurement range: 0-150mm
- Made of stainless steel, ensuring high measurement accuracy
- · For measurement of inner hole, outer circle and depth

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	Ø
91501	0-150	0.02	+/-0.02	6	36	12.2

▲ Excluded from lifetime warranty terms.

### 91503 Vernier Caliper 0-300mm



- Measurement range: 0-300mm
- Made of stainless steel, ensuring high measurement accuracy
- For measurement of inner hole, outer circle and depth

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	ā
91503	0-300	0.02	+/-0.03	4	24	22.9

▲ Excluded from lifetime warranty terms.

### 91502 Vernier Caliper 0-200mm



- Measurement range: 0-200mm
- Made of stainless steel, ensuring high measurement accuracy
- For measurement of inner hole, outer circle and depth

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	8	ā
91502	0-200	0.02	+/-0.02	6	36	17

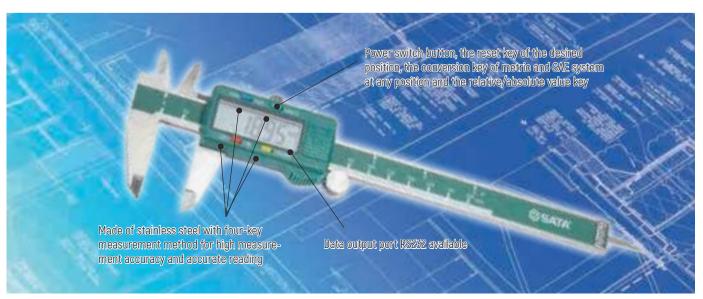
▲ Excluded from lifetime warranty terms.

### 91511 Digital Caliper 0-150mm



- Measurement range: 0-150mm and accurate reading Made of stainless steel, ensuring high measurement accuracy
- Reset at any position, and metric/inch conversion
- Relative/absolute value. With data output port RS232

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	#	¥	ā
91511	0-150	0.01	+/-0.03	6	36	13.9



































































## 91512 Digital Caliper 0-200mm



- Measurement range: 0-200mm and accurate reading Made of stainless steel, ensuring high measurement accuracy
- Reset at any position, and metric/inch conversion
- Relative/absolute value. With data output port RS232

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	Ø
91512	0-200	0.01	+/-0.03	6	36	18

▲ Excluded from lifetime warranty terms.

### 91513 Digital Caliper 0-300mm



- Measurement range: 0-300mm and accurate reading Made of stainless steel, ensuring high measurement accuracy
- Reset at any position, and metric/inch conversion
- Relative/absolute value. With data output port RS232

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	#	¥	ā
91513	0-300	0.02	+/-0.03	4	24	19.8

▲ Excluded from lifetime warranty terms.

### 91521 Dial Caliper 0-150mm



- Measurement range: 0-150mm
- Made of stainless steel, easy to read
- Indicator core upgraded to two-way shockproof performance
- With outer ring locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	ā
91521	0-150	0.02	+/-0.03	6	36	13.8

▲ Excluded from lifetime warranty terms.



## **Measurement Applications**



Outer diameter measurement



Inner diameter measurement



Difference measurement



Depth measurement

### 91522 Dial Caplier 0-200mm



- Measurement range: 0-200mm
- · Made of stainless steel, easy to read
- Indicator core upgraded to two-way shockproof performance
- With outer ring locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	#	8	ā
91522	0-200	0.02	+/-0.03	6	36	19.4

▲ Excluded from lifetime warranty terms.

### 91523 Dial Caplier 0-300mm



- Measurement range: 0-300mm
- Made of stainless steel, easy to read
- Indicator core upgraded to two-way shockproof performance
- With outer ring locking device

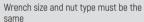
No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	ā
91523	0-200	0.02	+/-0.03	4	24	23

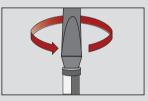
▲ Excluded from lifetime warranty terms.



## Common Sense for using SATA tools Use tools correctly







Make sure the tool is in normal use



Repair frequently and replace rusty or damaged tools in time



When using with electric and pneumatic tools, please select special electric and pneumatic hand tools



Wear protective equipment if required by work environment



Make sure the cabinet is locked and pulley active before moving the toolbox

































































## 213

## **Digital Depthometer**



• Measuring base is polished twice to fit close to the measuring object · Large digital display for quick reading

No.	Measuring Range (mm)	8	8	ā
91551	0-150	6	36	7
91552	0-200	6	36	8
91553	0-300	6	24	10

▲ Excluded from lifetime warranty terms.

### 91531 **Outside Micrometer 0-25mm**



- Measurement range: 0-25mm
- · Hard alloy measuring surface, ensuring high wear resistance
- · With micrometer screw locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	#	¥	ā
91531	0-25	0.01	+/-0.004	6	36	12.3

### ▲ Excluded from lifetime warranty terms.

### 91532 **Outside Micrometer 25-50mm**



- Measurement range: 25-50mm
- Hard alloy measuring surface, ensuring high wear resistance
- · With micrometer screw locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	ā
91532	25-50	0.01	+/-0.004	6	36	16

▲ Excluded from lifetime warranty terms.

### 91533 **Outside Micrometer 50-75mm**



- Measurement range: 50-75mm
- Hard alloy measuring surface, ensuring high wear resistance
- · With micrometer screw locking device

No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	8	<u></u>
91533	50-75	0.01	+/-0.005	6	36	23.3

▲ Excluded from lifetime warranty terms.

### 91539 **Micrometer Base**



No.	#	*	ā
91539	-	10	4

### **IP65 Digital Micrometer**



No.	Measuring Range (mm)	Indexing (mm)	Accuracy(mm)	$\Theta$	¥	ā
91534	0-25	0.001	0.002	6	36	7
91535	25-50	0.001	0.002	6	36	7

▲ Excluded from lifetime warranty terms.

### Mechanical dial gauge



- Hat lift design
- Indication of value range, easy to read

No.	Measuring Range (mm)	Indexing (mm)	#	8	ā
91561	0-5	0.01	-	-	-
91562	0-10	0.01	-	-	-

▲ Excluded from lifetime warranty terms.

## **IP54 Digital display dial indicator**



- Dust cap design with minimal environmental impact IP54 waterproof and dustproof design

- Zero at any positionMetric to English conversionWith data output interface

No.	Measuring Range (mm)	Indexing (mm)	#	8	ā
91563	0-12.7	0.01	-	-	-
91564	0-25.4	0.01	-	-	-

▲ Excluded from lifetime warranty terms.

### 91565 Lever dial indicator



- Gem bearing, high sensitivity, long service life Built in rubber pad for good shock resistance
- · Hard alloy probe, more durable
- Anti magnetic pointer, measurement not affected by magnetic field

No.	Measuring Range (mm)	Indexing (mm)	$\Theta$	¥	ā
91565	0-0.8	0.01	-	-	-

▲ Excluded from lifetime warranty terms.

### **MMagnetic base**



- Universal magnetic base
   Universal shaft design for flexible rotation
   With fine tuning function
   The special structure of the locking nut prevents rotation when adjusting the upper/lower arms

### Mechanical magnetic base

- · Be able to lock the upper/lower arms separately
- The lower arm is fixed on the side of the base for greater stability

No.	Product Name	Measuring Range (KGF)	Clamping aperture(mm)	$\Theta$	¥	ā
91566	Universal magnetic base	60	8	-	-	-
91567	Universal magnetic base	80	8	-	-	-
91568	Mechanical magnetic base	60	8	-	-	-
91569	Mechanical magnetic base	80	8	-	-	-









































































### **Laser Distance Meter 30M** 62709





Maximum measuring range<sup>1</sup> 0.2~30m Measurement accuracy +/-3 mm Measurement Unit m/ft+in Laser level Class 2 630-670nm, < 1mW Laser type Single measurement Soft rubber key Operating temperature 0°C ~40°C -10°C ~60°C Storage temperature

Up to 5000 measurements Battery life Battery selection AAA 2 x 1.5V

Automatic laser shutdown 30s Automatic instrument shutdown After 3 minutes

### 1 Range:

- Use sighting board or a better reflecting surface if under sunlight or target is not reflecting well
- In good measuring conditions (good measuring surface, room temperature, indoor lighting, etc.), the rated range can be reached. In poor measurement conditions, such as too strong light, weak reflection on the surface of the measured object or too large temperature difference, the error will increase
- Typical accuracy +/-3mm
- · Small size for easy carrying
- · Single key for easy operation
- HD backlight display for clear data display
- · Rugged case for durability
- 2 \* AAA 15V batteries
- · Automatic shutdown for saving power

No.	Spec.	$\blacksquare$	8	<u></u>
62709	30	8	20	13

### **Laser Distance Meter**







62712

62713

0.2~60mm (62712) Range 0.2~100mm (62713) (2.0mm+5x10-5D) Accuracy 2 Single measurement Continuous measurement

Area measurement Volume measurement Simple Pythagorean Quadratic Pythagorean 1 Quadratic Pythagorean 2 Automatic level Automatic verticality Addition and Subtraction Angular Transducer

Angle measurement accuracy3 +/- (0.3° +0.1° +0.01 \* D) Measuring Basis Front/rear benchmark Measurement Unit m /ft/ in /ft+in

Auto shutdown Automatic shutdown after no operation for 3 minutes Screen Type 20-inch screen

History measurement record 20 sets Laser level Class 2 Laser type 630-670nm, <1mw Operating temperature 0~+40 (32F~+104F) Size  $115 \times 49 \times 26$ mm

### 1 Range:

- The range data is referenced against the default rear benchmark; the maximum range will be changed according to different models. For the actual range, see the outer packing of the
- 2 Accuracy (refers to the measured distance):
- In good measuring conditions (good measuring surface, room temperature, indoor lighting, etc.), the rated range can be reached. In poor measurement conditions, such as too strong light, weak reflection on the surface of the measured object or too large temperature difference, the error will increase
- 3 Angle measurement accuracy
- •01° is the error caused by temperature, D is +/-45, for example: 0° error is +/-0.3° at normal temperature, and 45 ° error is +/-0.85° at abnormal temperature
- Tip: Use sighting board or a better reflecting surface if under sunlight or target is not reflecting
- Typical accuracy +/-2mm
- · Angle measurement function
- High-definition backlight display capable of displaying 5 lines of data at the same time, with data comparison at a glance
- · Capable of storing 20 sets of history data
- · Capable of single measurement, continuous measurement, maximum/minimum measurement, area and volume measurement, hook, automatic leveling, automatic verticality, as well as Pythagorean, addition and subtraction operation
- · Prompt with beeper
- · Charging with Micro USB
- · Automatic shutdown for saving power

No.	Spec.	#	¥	Ō
62712	60	-	20	5.3
62713	100	-	20	5.3

# **Others Hand Tools**

Pipe Wrench	217
Bench Vice	218
Pipe Cutter	219-220
Chain Pipe Wrench	221
G Clamp	222
Riveter	222-223
Puller	223
Extractor	224







### **Heavy Duty Pipe Wrench**













- Cr-V material forged jaws
- · Special designed jaws to ensure tight clamping

No.	Spec.	L(mm)	Net Weight(kg)	$\Theta$	¥	M
70812	8"	200	0.38	6	36	17.8
70813	10"	250	0.78	6	24	20
70814	12"	300	1.04	6	12	14.3
70815	14"	350	1.54	6	12	20.5
70816	18"	450	2.32	3	6	15.6
70817	24"	600	3.82	2	4	16.2
70818	36"	900	8.72	1	2	18.4
70819	48"	1200	13.84	1	2	30

- The weight is lighter than the heavy duty pipe wrench of the same specification
- Reach the same torque, the operating force is more labor-saving than the heavy pipe wrench of the same specification
- The wrench head is made of special alloy steel
- ullet The handle is made of special alloy steel pipe, and the torque exceeds the American Standard for heavy pipe wrench of the same specification

No.	Spec.	L before stretching(mm)	L after stretching(mm)	Net Weight(kg)		¥	ā
70836	18"	460	615	1.85	3	6	12.3
70837	24"	530	715	3.18	2	4	13.7
70838	36"	760	1135	6.08	1	2	13.3
70839	48"	850	1270	9.6	1	2	21.3

















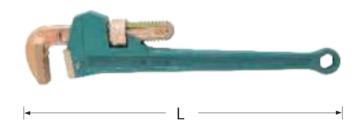
## **Aluminum Pipe Wrench**





### Heavy duty pipe pliers with titanium





- $\bullet$  The aluminum pipe wrench decrease the weight 30%-50% to compare with the same specification of casting iron one • Cr-V material forged jaws
- Special designed jaws to ensure tight clamping

No.	Spec.	L(mm)	Net Weight(kg)	$\Theta$	8	M
70823	10"	250	0.5	6	36	19.3
70824	12"	300	0.76	6	24	19.1
70825	14"	350	0.92	6	24	24
70826	18"	450	1.52	2	6	9.6
70827	24"	600	2.52	2	4	10.4
70828	36"	900	4.63	-	2	9.8
70829	48"	1200	8.06	-	2	17

- The clamp head is made of titanium alloy material, with overall heat treatment, high hardness, and good wear resistance
- $\bullet \hbox{The pliers handle adopts precision casting technology, with high density and strong bending } \\$

No.	Spec.	L(mm)	Net Weight(kg)	$\Theta$	8	M
70816A	18"	450	2.35	-	-	-
70817A	24"	600	3.89	-	-	-
70818A	36"	900	8.11	-	-	-
70819A	48"	1200	12.82	-	-	-

### **Heavy Duty Bench Vise**



- · Forged with quality material, with electrostatic-sprayed surface
- · Square steel structure for high clamping force with safety
- · Special screw fixing nut to avoid deformation, breakage and fall-off
- · Special chassis free of sliding after locking

No.	Spec.	Openness (mm)	Clamping force (kg)	Gross/Net Weight(kg)		8	ā
70841	4"	108	1700	19/17	-	1	17.6
70842	5"	133	2100	25/23	-	1	22.4
70843	6"	152	3000	31/29	-	1	30.2
70845	8"	203	4000	42/39	-	1	39.9

▲ Excluded from lifetime warranty terms.

## **Heavy-Duty Ductile Iron Bench Vice**



- Clamp body made of ductile iron
- · Big clamping force
- · Big openness
- Rotation of up to 210°

	No.	Spec.	Openness (mm)	Clamping force (kg)	Gross/Net Weight(kg)	$\Theta$	¥	ā
	70851	4"	127	2500	8.7/7.9	-	1	9.4
ĺ	70852	5"	152	3500	12.5/11.8	-	1	13.3
	70853	6"	178	4500	19/17.8	-	1	20
	70854	8"	229	5000	27/25.8	-	1	28.2

▲ Excluded from lifetime warranty terms.

### **Ratcheting Pipe Cutter**



- Special blades ensure operating without chips or burrs
- Including two piece of blade 97317
- Suitable for pipe of carbon steel and stainless steel
- It applies to the carbon steel pipe and stainless steel pipe
- For stainless steel pipe (thickness < 1.5 mm) to be cut, it is necessary to replace to blade 97318 which is sold separately
- The ratchet mechanism makes it easier to cut. Constant blade feeding amount (power) is kept by the automatic feeding function without any excessive forces
- Swing angle is 75°, which makes it easy to operate even in narrow places
- The body is made of aluminum alloy; the surface treatment is chrome-plated finish with excellent wear resistance
- · Release function can prevent the rotary head locking

No.	Spec. (mm)	Steel tube wall thickness(mm)	Stainless steel tube weight(kg)	#	¥	靣
97315	Ø16~35	<3.2	1.5~3.0	-	10	10.5
97316	Ø35~66	<3.8	1.5~3.0	-	10	19.4

### **Ratcheting Pipe Cutter Blade**







97318

- Suitable for carbon steel and stainless steel pipe
- Special for 97315, 97316 Ratcheting pipe cutter

### **Cutting capacity**

• Carbon steel pipe • Stainless steel pipe Pipe wall thickness < 3.2mm Pipe wall thickness 1.5mm-3.0mm

No.	Blade cutting capability	Tube wall thickness(mm)	$\Theta$	8	颪
97317	Carbon steel pipe Stainless steel pipe	< 3.2 1.5< Pipe wall thickness< 3.0	10	100	2.1
97318	Stainless steel pipe	< 1.5	10	100	3







































































- 97301 suitable for cutting copper, aluminum and thin-walled tubes between 3mm and 30mm in
- diameter

   97302 suitable for cutting copper, aluminum and thin-walled tubes between 3mm and 32mm in diameter
- Cleanliness and integrity guaranteed Spare blades available in handle
- When closing the cutter, do not contact the cutter with the roller, keep it clean and lubricate the parts regularly with light grease.

No.	Cutting Range(mm)	$\Theta$	8	ā
97301	3-30	6	60	16
97302	3-32	6	60	19.9

▲ Excluded from lifetime warranty terms.

## 97304 PVC Pipe Cutter 3-42mm



• Suitable for the PVC pipe below Diameter 42mm

No.	Max. Cutting Range(mm)	#	8	ā
97304	3-42	12	48	19.3

▲ Excluded from lifetime warranty terms.

### Pipe Cutter 6-64mm 97303



- Suitable for cutting copper pipe, aluminum pipe and thin-walled pipe with diameter between 6mm and 64mm
- · Cleanliness and integrity guaranteed
- Spare blades provided in handle
- When closing the cutter, do not contact the cutter with the roller, keep it clean and lubricate the parts regularly with light grease.

No.	Cutting Range(mm)	#	*	ā
97303	6-64	6	24	16.9

▲ Excluded from lifetime warranty terms.

## **Pipe Cutter**



- •Two-section blade for easily cutting into PVC pipes
   •Surface is covered with Teflon coating for labor saving
   •Moving the pin position to change the maximum pipe cutting diameter

No.	Cutting Range(mm)	$\blacksquare$	8	<u></u>
97351	32MM	-	-	-
97352	26/42MM	-	-	-
97353	42/63MM	-	-	-

## 97305 Mini Pipe Cutter 3-16mm



- Suitable for cutting thin-walled pipe, plastic pipe and copper pipe with diameter between 3mm
- Free of rough edges
- Suitable for use in narrow spaces

No.	Cutting Range(mm)	#	8	ā
97305	3-16	12	120	14.6

▲ Excluded from lifetime warranty terms.

### S/S Pipe Cutter

\* One high-speed steel trimmer provided for 97307



- Special pin for quick blade replacement without special tools Spare blades available in cutter holder Please select SATA blade 97313

No.	Max. Cutting Range(mm)	8	8	ā
97306	3-35	6	18	14
97307	3-45	6	18	19

▲ Excluded from lifetime warranty terms.

### **Tube Bender**



- Suitable for copper tubes and aluminum tubes with different curved outer diameters
- Elbow range: 0-180°
- · Elbow coil made of aluminum alloy for firmness and durability
- · Anti-slipping handle coated with two-tone rubber for comfort

No.	Maximum bending diameter(mm)	#	8	Ø
97321	6	1	18	16
97322	8	1	18	19
97323	10	1	12	18
97324	12	1	12	18
97325	16	1	6	17

### 3-in-1 Tube Bender 90°



- Suitable for bending copper pipes and aluminum pipes with outer diameter of 6/8/10mm
- Elbow range: 0-90°
- Elbow coil made of aluminum alloy for firmness and durability

No.	Maximum bending diameter(mm)	8	¥	ā
97326	6/8/10	1	18	17

### 3-in-1 Tube Bender 180°



- Suitable for bending copper pipes and aluminum pipes with outer diameter of 6/8/10mm
- Elbow range: 0-90°
- · Elbow coil made of aluminum alloy for firmness and durability

No.	Maximum bending diameter(mm)	#	¥	ā
97327	6/8/10	1	18	17

### Flaring Tool Φ3/16"-Φ5/8"



• Suitable for copper, aluminum and other metal pipes

No.	Expansion pipe diameter		8	ā
97331	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	6	24	20





































































### **Stainless Tube Bender**



- $\bullet$  Elbow range: 0-180°
- The elbow coil forged with carbon steel for firmness and durability

No.	Maximum bending diameter (mm)	Pipe thickness	#	¥	ā
97341	6	Below 1mm	1	12	14
97342	8	Below 1mm	1	12	14.6
97343	10	Below 1.2mm	1	6	12.4
97344	12	Below 1.2mm	1	6	16.2

### 97311 2Pc. Pipe Cutter Blades 3x18mm



- Made of hardened alloy steel for cutting copper and aluminum tubes and thin conduits
- Suitable for 97301 and 97302 97305 pipe cutters

No.	Spec. (mm)	$\Theta$	8	ā
97311	3.0x18, 3.0x18	24	240	4.4

▲ Excluded from lifetime warranty terms.

### 2Pc. Pipe Cutter Blades (6.2x18, 6.2x22mm) 97312



- Made of hardened alloy steel for cutting copper pipes, aluminum tubes and thin tubes
- Suitable for 97303 pipe cutters

No.	Spec. (mm)	#	8	ā
97312	6.2x18, 6.2x22	24	240	5.7

▲ Excluded from lifetime warranty terms.

### 97313 Stainless Pipe Cutter Blade 5x20mm



- Made of HSS high speed steel for cutting stainless steel pipes
- Suitable for 97306 and 97307 stainless steel pipe cutters

No.	Spec. (mm)	#	¥	ā
97313	5x20	24	240	6

▲ Excluded from lifetime warranty terms.

### **Strap Wrench**



- Nylon-based belt to protect workpiece surface
- · Suitable for twisting working parts

No.	Spec. (mm)	#	8	ā
97461	9"	6	60	20
97462	11"	5	20	12

▲ Excluded from lifetime warranty terms.

### **Chain Pipe Wrench**



- Cr-V steel forged
- •28 chains, clamping range 55-110mm

No.	Spec. (mm)	Application(mm)	$\Theta$	8	ē
97451	12"(28 Sections)	Diameter 55-110	4	16	14.6
97452	15"(34 Sections)	Diameter 60-130	4	16	19.3

### **G** Clamp

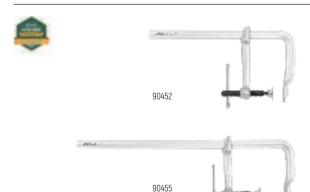


- Made by precision casting with high quality spheroidal cast iron, with electrostatic coating on
- · Special reinforcement rib design, ensuring higher clamping force and safer use
- Precision machined screw rod, black finished surface, longer service life
- Special movable clamping head, ensuring efective clamping of workpiece and not easy to fall off

No.	Spec.	$\blacksquare$	8	<u></u>
90433	3"	6	24	17.8
90434	4"	4	16	17
90435	6"	6	12	20
90436	8"	1	8	18

▲ Excluded from lifetime warranty terms.

### G series all steel T-handle F clamp



- $\cdot$  Large clamping force: > 5000N
- · Special tempering process, with good toughness of the force arm
- The groove design of the force arm increases the overall rigidity of the product

No.	L (mm)	Openness (mm)	Depth (mm)	$\Theta$	8	<u>™</u>
90451	271	200	100	10	-	-
90452	333	250	121	10	-	-
90453	388	301	141	10	-	-
90454	501	401	119	10	-	-
90455	588	501	120	5	-	-
90456	699	601	119	5	-	-
90457	911	801	120	5	-	-

▲ Life time warranty, except for screw rods, T-shaped handles, and gaskets.

### 90521 **Manual Rivet Nut Tool**



- · Replaceable head for wide riveting range, suitable for the following rivet nuts
- M5(10-24), M6(1/4-20)
- M8(5/16-18), M10( 3/8-16), M12(1/2-13)
- · Handle with connecting rod to drive the part to exit the nut automatically
- · New structure for easy operation and labor saving

No.	L(mm)	#	8	<b>5</b>
90521	400	-	5	9

▲ Excluded from lifetime warranty terms.

### 90501 **Manual Riveter 8"**



- Nose piece configuration specifications including 2.4mm [3/32"]; 3.2mm [1/8"]; 4.0mm(5/32"]; 4.8mm(3/16")
- Circular knurled nose piece available for removal without tools, nose piece with lock structure design, ensuring no looseness
- · Ergonomic handle, comfortable and labor-saving

No.	Spec.	$\mathcal{B}$	8	ā
90501	8"	-	10	6.1

▲ Excluded from lifetime warranty terms.

## **Heavy Duty Riveter**



- Outer hexagon socket, available for operating stroke adjustment
- Thicker heat-treated handle, ensuring long service life
   3-piece chromium-molybdenum alloy heat-treated claw, ensuring a long service life
- Nose piece replacement wrench fixed on the riveter, ensuring easy access

No.	Spec.	#	***	<u></u>
90502	13"	-	8	9.5
90504	11"	10	10	16





































































## ▲ 1-year warranty for overall unit, lifetime warranty for jaw

### 90522 3-in-1 Multifunctional Hand Riveter



- · Simple Structure, high reliability
- Reinforced carbon steel heat treatment handle

No.	L(mm)	#	8	<b>5</b>
90522	265	-	8	18

▲ Excluded from lifetime warranty terms.

### **Reversible 2-Jaw Puller**



- The heat treated pin of drive screw is strong and durabile
   High strongth drive screw and cold-rolled threads offer smooth operation
   Special designed and forged puller jaws offer high clamping and pulling force to avoid slip

No.	Spec.	L(mm)	Maximum drawing diameter(mm)	Stroke (mm)	$\blacksquare$	¥	ā
90623	3"	140	75	60	-	48	21.8
90624	4"	160	100	95	-	24	19.6
90626	6"	240	150	160	1	12	21.9
90628	8"	333	200	235	-	5	19
90630	10"	360	250	240	-	4	23.9
90632	12"	405	300	270	-	3	24.9

### **Reversible 3-Jaw Puller**



- The heat treated pin of drive screw is strong and durabile
  High strongth drive screw and cold-rolled threads offer smooth operation
  Special designed and forged puller jaws offer high clamping and pulling force to avoid slip

No.	Spec.	L(mm)	Maximum drawing diameter(mm)	Stroke (mm)	$\Theta$	¥	Ø
90633	3"	130	75	60	-	24	14.5
90634	4"	160	100	95	1	18	20.1
90636	6"	245	150	160	1	8	20.9
90638	8"	330	200	235	-	4	21.6
90640	10"	360	250	240	-	3	25.1
90642	12"	405	300	270	-	2	23.1

▲ 1-year warranty for overall unit, lifetime warranty for jaw

## 90510 Caulking Gun 9"



- High quality aluminum alloy handle, design for labor-saving
- Anti- Slip 360° rotating gun body, suitable for narrow space

No.	Spec.	#	8	ā
90510	9"	-	12	9.6

## 90511 Caulking Gun 15"



- High quality aluminum alloy handle, design for labor-saving
- Anti- Slip
- · Able to extrude high viscosity glue

No.	Spec.	$\Theta$	8	<b>5</b>
90511	15"	-	12	10.9

▲ Excluded from lifetime warranty terms.

## Magnetic Pickup Tool 380mm



11924



No.	Spec. (mm)	#	8	ā
11924	380	6	-	-

▲ Excluded from lifetime warranty terms.

## Flexible Megnetic Pickup Tool



- Acetate handle for heat, filth and dirt resistance
- $\bullet$  Long-life flexible rod with chrome-plated surface for flexibility
- Quality strong magnet capable of adsorbing falling workpiece

No.	Spec.	L(mm)	Pickup weight(kg)	$\Theta$	*	Ø
64104	6	502	0.5	6	48	7.8
64101	8	510	1	6	48	11.2
64102	8	510	2	6	48	11.5
64103	8	510	3	6	48	11.6

▲ Excluded from lifetime warranty terms.

### **5Pc. Fine / Coarse Threaded Extractor Set**



5Pc. Fine Threaded Extractor Set

09/04A 5Pc. Coarse Threaded Extractor Set

- Made of GCr. Bearing steel
- Quick and convenient removing of damaged screws, pipes, bolts and tacks

Spec.	Applicable screw specification	Applicable drill bits specification	Handle diameter
No.1	M3-M6	2.0	3.3
No.2	M6-M8	3.0	5.3
No.3	M8-M10	4.0	6.4
No.4	M10-M14	6.5	8.8
No.5	M14-M18	7.0	11.2

No.	#	*	ā
09704	12	72	11.1
09704A	6	72	11.1







































# **Insulated Tools**

NEV Repair Tool Set	226-228
Insulated Set	228-229
Insulated Socket	229-231
Insulated Wrench	233-235
Insulated Screwdriver	236-240
Insulated Pliers	240-245
Insulated Cable Cutter	246

## **Insulated Tools**

### AE4012 39pc NEV Power System Maintenance Set





- •1Pc. 6.3MM series VDE insulated quick-release ratchet wrench 145MM
- 1Pc. 6.3MM series VDE insulated steering extension bar 75MM
- •1Pc. 6.3MM series VDE insulated hexagon socket 7MM
- •1Pc. 6.3MM series VDE insulated hexagon socket 8MM
- •1Pc. 6.3MM series VDE insulated hexagon socket 10MM
- •1Pc. 6.3MM series VDE insulated hexagon bits socket 3MM
- •1Pc. 6.3MM series VDE insulated hexagon bits socket 5MM
- •1Pc. 6.3MM series VDE insulated hexagon bits socket 6MM
- 1Pc. 6.3MM series VDE insulated hexagon bits socket 8MM
- •1Pc. 6.3MM series VDE insulated torx bits socket T20
- •1Pc. 6.3MM series VDE insulated torx bits socket T25 •1Pc. 6.3MM series VDE insulated torx bits socket T27
- •1Pc. 6.3MM series VDE insulated torx bits socket T30
- •1Pc. 10MM series VDE insulated quick-release ratchet wrench 200MM
- 1Pc. 10MM series VDE insulated steering connector 125MM
- •1Pc. 10MM series VDE insulated hexagon socket 8MM
- •1Pc. 10MM series VDE insulated hexagon socket 10MM
- 1Pc. 10MM series VDE insulated hexagon socket 12MM
- 1Pc. 10MM series VDE insulated hexagon socket 13MM
- 1Pc. 10MM series VDE insulated hexagon socket 14MM
- •1Pc. 10MM series VDE insulated hexagon bits socket 4MM
- 1Pc. 10MM series VDE insulated hexagon bits socket 5MM
- 1Pc. 10MM series VDE insulated hexagon bits socket 6MM
- 1Pc. 10MM series VDE insulated hexagon bits socket 8MM
- •1Pc. 10MM series VDE insulated torx bits socket T20
- 1Pc. 10MM series VDE insulated torx bits socket T25
- •1Pc. 10MM series VDE insulated torx bits socket T27
- •1Pc. 10MM series VDE insulated torx bits socket T30
- 1Pc. T series cross insulated screwdriver with dual-color handle #2x100MM
- •1Pc. T series slotted insulated screwdriver with dual-color handle  $5.5 \times 125$ MM
- 1Pc. VDE insulated and voltage withstand diagonal pliers 7"
- •1Pc. Straight-blade VDE wire stripping pliers
- •1Pc. 3/8" series VDE insulated torque wrench 10-50Nm
- •1Pc. Insulated fitter hammer
- •1Pc. Insulated suction wand
- •1Pc. Insulation crow plate
- •1Pc. Voltage testing pen
- •1Pc. Hand-held insulation resistance tester
- 1Pc. True RMS AC-DC clamp meter
- This set is mainly used in the detection and maintenance of the motor, power battery and electric control system of NEVs.
- The set includes a voltage test pen, a hand-held insulation resistance tester and a true RMS AC-
- · Necessary instruments for testing the motor, power battery and electric control system, and the insulation tools for disassembling and assembling of the high-voltage system and the battery pack
- Reasonable configuration to meet the requirements of the motor, power battery and electric control system of the NEV
- Insulation tools comply with the IEC60900 standard. VDE-GS certified

No.	#	8	<u></u>
AE4012	-	1	6.5

A Warranty terms of tool set comply with the individual product.

### 09933 39Pc. NEV Repair Tool Set





- 8Pc. 3/8" Dr. VDE Insulated 6-Point Socket (8,10,11,12,13,14,17,19mm)
- •1Pc. 3/8" Dr. VDE Insulated T-shaped Handle 200mm
- 1Pc. 3/8" Dr. VDE Insulated Drive Wobble Extensions 125mm •1Pc. 3/8" Dr. VDE Insulated Quick-Release Ratchets 200mm
- 4Pc. 3/8" Dr. VDE Insulated 6-Point Screwdriver Socket [4,5,6,8mm]
- 7Pc. VDE Insulated Open End Wrench (7,8,10,12,13,14,17mm)
- 3Pc. T-Series Insulated Phillips Screwdriver Set with Two-Tone Handle (#0\*60.#1\*80.#2\*100mm)
- 3Pc. T-Series Insulated Slotted Screwdriver with Two-Tone Handle (2.5\*75,4\*100,5.5\*125mm)
- •1Pc. G-Series VDE Insulated Circuit Tester 3\*70mm
- •1Pc. VDE Insulated Voltage-Withstanding Long Nose Pliers 6"
- 1Pc. VDE Insulated Voltage-Withstanding Diagonal Pliers 6"
- 1Pc. VDE Insulated Voltage-Withstanding Linesman Pliers 8"
- 7Pc. VDE Insulated Torx® Hex Key (T10, T15, T20, T25, T27, T30, T40)

No.	#	8	ā
09933	1	1	6.9

▲ Warranty terms of tool set comply with the individual product.

### 09928 68Pc. NEV Repair Tool Set











- \* Applicable to tool trolley 95125 (tool trolley not included)
- 8Pc. 3/8" Dr. VDE Insulated 6-Point Socket (8.10.12.13.14.16.17.18mm)
- 1Pc. 3/8" Dr. VDE Insulated Drive Wobble Extensions 125mm
- 1Pc. 3/8" Dr. VDE Insulated Drive Wobble Extensions 250mm
- •1Pc. 3/8" Dr. VDE Insulated Quick-Release Ratchets 200mm
- 1Pc. 1/2" Dr. VDE Insulated Quick-Release Ratchets 250mm
- 1Pc. 1/2" Dr. VDE Insulated T-Shaped Handle 200mm
- 2Pc. 1/2" Dr. VDE Insulated Drive Wobble Extensions (125,250mm)
- 11Pc. 1/2" Dr. VDE Insulated 6-Point Socket (10,11,12,13,14,16,17,19,21,22,24mm) • 5Pc. 1/2" Dr. VDE Insulated 6-Point Screwdriver Socket (4,5,6,8,10mm)
- 13Pc. VDE Insulated Open End Wrench (8,10,12,13,14,15,16,17,18,19,21,22,24mm)
- 13Pc. VDE Insulated Box Wrench (8,10,12,13,14,15,16,17,18,19,21,22,24mm)
- 1Pc. VDE Insulated Voltage-Withstanding Adjustable Wrench 8" • 3Pc. T-Series Insulated Phillips Screwdriver Set with Two-Tone Handle (#0\*60,#1\*80,#2\*100mm)
- 3Pc. T-Series Insulated Slotted Screwdriver with Two-Tone Handle (2.5\*75,4\*100,5.5\*12mm)
- 1Pc. VDE Insulated Voltage-Withstanding Long Nose Pliers 8"
- 1Pc. VDE Insulated Voltage-Withstanding Diagonal Pliers 7"
- 1Pc. Insulated Voltage-Withstanding Linesman Pliers 8"
- 1Pc. Protected-Type VDE Insulated Cable Stripper

No	- A		
NU.		Ψ	/⊕\
09928	1	1	10

A Warranty terms of tool set comply with the individual product













































### 09935 59Pc. NEV Repair Tool Set

































• 4Pc. T-Series Insulated Phillips Screwdriver Set with Two-Tone Handle (#0\*60,#1\*80,#2\*100,#3\*150mm)

• 4Pc. T-Series Insulated Slotted Screwdriver with Two-Tone Handle (2.5\*75,4\*100,5.5\*125,6.5\*150mm)



• 8Pc. 3/8" Dr. VDE Insulated 6-Point Socket (8,10,12,13,14,17,19,22mm) •1Pc. 3/8" Dr. VDE Insulated T-Shaped Handle 200mm

2Pc. 3/8" Dr. VDE Insulated Drive Wobble Extensions (125,250mm)
 1Pc. 3/8" Dr. VDE Insulated Quick-Release Ratchets 200mm

• 1Pc. VDE Insulated Voltage-Withstanding Adjustable Wrench 8"

• 1Pc. VDE Insulated Voltage-Withstanding End Cutting Nippers 6"

• 1Pc. VDE Insulated Voltage-Withstanding Diagonal Pliers 6"

•1Pc. VDE Insulated Voltage-Withstanding Linesman Pliers 8"

• 1Pc. Insulated Voltage-Withstanding Cable Nippers 6"

• 6Pc. VDE Insulated Hex Key (2.5,3,4,5,6,8mm)

• 1Pc. Straight-Blade VDE Insulated Cable Stripper

•1Pc. G-Series VDE Insulated Circuit Tester 3\*70mm •1Pc. VDE Insulated Voltage-Withstanding Long Nose Pliers 8"

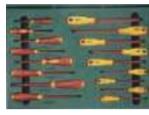
• 4Pc. 3/8" Dr. VDE Insulated 6-Point Screwdriver Socket (4,5,6,8mm)

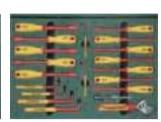
•12Pc. VDE Insulated Open End Wrench (6,7,8,10,12,13,14,15,16,17,18,19mm)

9Pc. VDE Insulated Torx® Screwdriver (T8,T10,T15,T20,T25,T27,T30,T40,T45)

## 09936 116Pc. NEV Repair Tool Set

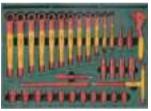












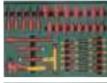
- •11Pc. 3/8" Dr. VDE Insulated 6-Point Socket (8,10,12,13,14,16,17,18,19,21,22mm)
- 6Pc. 3/8" Dr. VDE Insulated Long 6-Point Socket (8,10,12,14,15,17mm)
- 1Pc. 3/8" Dr. VDE Insulated T-Shaped Handle 200mm
- 2Pc. 3/8" Dr. VDE Insulated Drive Wobble Extensions (125,250mm)
- 1Pc. 3/8" Dr. VDE Insulated Quick-Release Ratchets 200mm
- 1Pc. 1/2" Dr. VDE Insulated Quick-Release Ratchets 250mm
- 1Pc. 1/2" Dr. VDE Insulated T-Shaped Handle 200mm
- 2Pc. 1/2" Dr. VDE Insulated Drive Wobble Extensions (125,250mm) • 12Pc. 1/2" Dr. VDE Insulated 6-Point Socket (10,11,12,13,14,16,17,18,19,21,22,24mm)
- 5Pc. 1/2" Dr. VDE Insulated 6-Point Screwdriver Socket (4,5,6,8,10mm)
- 16Pc. VDE Insulated Open End Wrench (6,7,8,10,11,12,13,14,15,16,17,18,19,21,22,24mm)
- 12Pc. VDE Insulated Box Wrench (6,8,10,12,13,14,16,17,18,19,21,22mm)
   1Pc. VDE Insulated Voltage-Withstanding Adjustable Wrench 8"
- · 4Pc. T-Series Insulated Phillips Screwdriver Set with Two-Tone Handle (#0\*60,#1\*80,#2\*100,#3\*150mm)
- 4Pc. T-Series Insulated Slotted Screwdriver with Two-Tone Handle (2.5\*75,4\*100,5.5\*125,6.5\*150mm)
- •12Pc. VDE Insulated Nutdriver (4.0\*125,5.0\*125,5.5\*125,6.0\*125,7.0\*125,8.0\*125,9.0\*125,10\*125,11\*125,12\*12 5.13\*125.14\*125mm)
- 9Pc. VDE Insulated Torx® Screwdriver (T8,T10,T15,T20,T25,T27,T30,T40,T45)
- 1Pc. Non-Contact Circuit Tester
- 1Pc. G-Series VDE Insulated Circuit Tester 3\*70mm
- 1Pc. VDE Insulated Voltage-Withstanding Long Nose Pliers 8"
- 1Pc. VDE Insulated Voltage-Withstanding End Cutting Nippers 6"
- 1Pc. VDE Insulated Voltage-Withstanding Diagonal Pliers 6"
- 1Pc. VDE Insulated Voltage-Withstanding Linesman Pliers 8"
- 1Pc. Insulated Voltage-Withstanding Cable Nippers 6"
- 6Pc. VDE Insulated Hex Key (2.5, 3, 4, 5, 6, 8mm)
- 1Pc. VDE Insulated Electrician's Scissors 150mm
- 1Pc. Protective VDE Insulated Cable Stripper • 1Pc. Straight-Blade VDE Insulated Cable Stripper

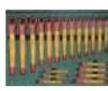
No.	#	8	ā
09936	1	1	16.3

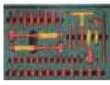
A Warranty terms of tool set comply with the individual product.

### 09937 166Pc. NEV Repair Tool Set

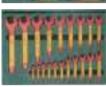


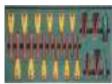












- 12Pc. 1/4" Dr. VDE Insulated 6-Point Socket (4,5,5,5,6,7,8,9,10,11,12,13,14mm)
- 1Pc. 1/4" Dr. VDE Insulated Quick-Release Ratchets
- 2Pc. 1/4" Dr. VDE Insulated Drive Wobble Extensions (75,150mm)
- 12Pc. 3/8" Dr. VDE Insulated 6-Point Socket (8,10,11,12,13,14,16,17,18,19,21,22mm)
- 7Pc. 3/8" Dr. VDE Insulated Long 6-Point Socket (8,10,12,13,14,17,19mm)
- 1Pc. 3/8" Dr. VDE Insulated T-Shaped Handle 200mm
- 2Pc. 3/8" Dr. VDE Insulated Drive Wobble Extensions (125,250mm)
- 1Pc. 3/8" Dr. VDE Insulated Quick-Release Ratchets 200mm
- 1Pc. 1/2" Dr. VDE Insulated Quick-Release Ratchets 250mm
- 1Pc. 1/2" Dr. VDE Insulated T-Shaped Handle 200mm
- 2Pc. 1/2" Dr. VDE Insulated Drive Wobble Extensions (125,250mm)
- 15Pc. 1/2" Dr. VDE Insulated 6-Point Socket (10,11,12,13,14,16,17,18,19,21,22,24,27,30,32mm)
- 5Pc. 1/2" Dr. 6-Point Screwdriver Socket (4mmx120mm,5mmx120mm,6mmx120mm,8mmx120mm,10mmx1
- 20Pc. VDE Insulated Open End Wrench (6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,24,27,30,32mm)
- 20Pc. VDE Insulated Box Wrench (6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,24,27,30,32mm)
- 1Pc. VDE Insulated Voltage-Withstanding Adjustable Wrench 8"
- 4Pc. T-Series Insulated Phillips Screwdriver Set with Two-Tone Handle (#0\*60,#1\*80,#2\*100,#3\*150mm)
- 4Pc. T-Series Insulated Slotted Screwdriver with Two-Tone Handle (2.5\*75,4\*100,5.5\*125,6.5\*150mm)
- 12Pc. VDE Insulated Nutdriver (4.0\*125,5.0\*125,5.5\*125,6.0\*125,7.0\*125,8.0\*125,9.0\*125,10\*125,11\*125,12\*125,13\*125, 14\*125mm)
- 9Pc. VDE Insulated Torx® Screwdriver (T8,T10,T15,T20,T25,T27,T30,T40,T45)
- 1Pc. Non-Contact Circuit Tester
- 1Pc. G-Series VDF Insulated Circuit Tester 3\*70mm
- 3Pc. VDE Insulated Slotted Precision Screwdriver with Two-Tone Handle (1.5\*0.23\*50,1.8\*0.30\*50, 2.0\*0.40\*50mm)
- 3Pc. VDE Insulated Phillips Precision Screwdriver with Two-Tone Handle (PH00\*50,PH0\*50,PH1\*50mm)
- Spc. VDE Insulated Tonx® Precision Screwdriver with Two-Tone Handle (T6\*50,T8\*50,T10\*50,T15\*50,T20\*50mm)
   IPc. VDE Insulated Voltage-Withstanding Long Nose Pliers 6\*
- 1Pc. VDE Insulated Voltage-Withstanding End Cutting Nippers 6"
- 1Pc. VDE Insulated Voltage-Withstanding Diagonal Pliers 6" 1Pc. VDE Insulated Voltage-Withstanding Linesman Pliers 8'
- 1Pc. Insulated Voltage-Withstanding Bent Nose Pliers 6"
- 1Pc. Insulated Voltage-Withstanding Cable Nippers 6" • 6Pc. VDE Insulated Hex Key (2.5, 3, 4, 5, 6, 8mm)
- 1Pc. Injection-Molded Two-Tone Insulated Saw Frame 150mm
- 1Pc. VDE Insulated Electrician's Scissors 150mm
- 1Pc. Straight-Blade VDE Insulated Cable Stripper
- 1Pc. 1/4" Series Insulated Torque Wrench 5-25Nm
- 1Pc. 3/8" series Insulated Torque Wrench 10-50Nm
- 1Pc. Injection-Molded Two-Tone VDE Insulated Fine Pointed Tips Tweezers 134mm
- 1Pc. Injection-Molded Two-Tone VDE Insulated Pointed Tips Tweezers, Inside Serrated 160mm
- 1Pc. Injection-Molded Two-Tone VDE Insulated Curved Pointed Tips Tweezers, Inside Serrated 159mm
- 1Pc. Injection-Molded Two-Tone VDE Insulated Flat Round Tips Tweezers, Inside Serrated 145mm

No.	8	8	<u></u>
09937	1	1	23.4

A Warranty terms of tool set comply with the individual product.

### 09267 20Pc. 1/2" Dr. VDE Socket Set





- •11Pc, 1/2" Dr. 6-Point Socket (10.11.12.13.14.17.19.22.24.27.32mm)
- •1Pc. 1/2" Dr. Professional Quick-Release Ratchets 250mm
- •1Pc. 1/2" Dr. Professional T-Shaped Handle 200mm
- •1Pc, 1/2" Dr. Professional Extension 125mm
- 1Pc. 1/2" Dr. Professional Extension 250mm
- 5Pc. 1/2" Dr. Hex Bits Socket (4,5,6,8,10mm)
- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Passed impact test, insulation layer adhesion test for safety and reliability
- Passed high and low temperature test with low temperature resistance of up to -40 degrees

No.	Spec.	$\blacksquare$	8	ā
09267	1/2"	-	2	8.7

▲ Warranty terms of tool set comply with the individual product.

### 09268 16Pc. 3/8" Dr. VDE Socket Set





- 8Pc. 3/8" Dr. 6-Point Socket (8,10,12,13,14,17,19,22mm)
- •1Pc. 3/8" Dr. Professional Quick-Release Ratchets 200mm
- •1Pc. 3/8" Dr. Professional T-Shaped Handle 200mm
- •1Pc. 3/8" Dr. Professional Extension 150mm
- •1Pc. 3/8" Dr. Professional Extension 250mm
- 4Pc. 3/8" Dr. Hex Bits Socket (4,5,6,8mm)
- · Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Passed impact test, insulation layer adhesion test for safety and reliability
- Passed high and low temperature test with low temperature resistance of up to -40 degrees

No.	Spec.	#	8	<u></u>	
09268	3/8"	-	2	4.6	

A Warranty terms of tool set comply with the individual product.



































































## AE9101 20pc NEV VDE Tool Set



- Meet the most basic needs of NEV maintenance for insulation tools
- Blow box easy to carry
- Comply with requirements of JT/T 1344-2020 for insulating tools
- Insulation tools comply with IEC/EN 60900 standards, and has passed the German VDE certification

No.	Spec. (mm)	#	8	ā
AE9101	10	1	1	2.9

▲ Warranty terms of tool set comply with the individual product.

### AE9102 39pc NEV VDE Tool Set



- Meet the most basic needs of NEV maintenance for insulation tools
- · Blow box easy to carry
- Comply with requirements of JT/T 1344-2020 for insulating tools
- Insulation tools comply with IEC/EN 60900 standards, and has passed the German VDE

No.	Spec. (mm)	#	***	ā
AE9102	10	1	1	5.7

▲ Warranty terms of tool set comply with the individual product.

## 1/4" Dr. 6Pt. VDE Socket



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Made of Cr-V via cold extrusion
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	#	8	Ō
11504	4	42	12	192	2.5
11505	5	42	12	192	2.8
11515	5.5	42	12	192	2.8
11506	6	42	12	192	3
11507	7	42	12	192	3
11508	8	42	12	192	3
11509	9	42	12	192	3.4
11510	10	42	12	192	3.5
11511	11	42	12	144	4.5
11512	12	42	12	144	4.5
11513	13	42	12	144	4.5
11514	14	42	12	144	5.5

### 1/4" Dr. 6Pt. VDE Bit Socket, Hexagon







- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Hexagonal bit made of S2 material
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	$\Theta$	*	Ō
11523	3	66	6	108	2.6
11524	4	66	6	108	2.6
11525	5	66	6	108	2.6
11526	6	66	6	108	2.9
11528	8	66	6	108	3

## 1/4" Dr. VDE Extension Bar









- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V material and subjected to heat treatment
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	$\Theta$	8	ō
11982	75	91	6	108	6
11983	150	166	6	72	4

### 3/8" Dr. 6Pt. VDE Socket







- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V via cold extrusion
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	#	***	ā
12508	8	45	7	126	4.8
12510	10	45	7	126	4.8
12511	11	45	7	126	4.8
12512	12	45	7	126	4.8
12513	13	45	7	126	6
12514	14	45	7	126	6
12516	16	45	7	126	6
12517	17	45	5	90	6
12518	18	45	5	90	4.6
12519	19	47	5	90	5.5
12521	21	47	5	90	6.5
12522	22	47	4	72	6.6

## 3/8" Dr. 12Pt. VDE Deep Socket







- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V via cold extrusion
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	$\Theta$	8	ā
12538	8	80	12	144	7.5
12540	10	80	12	144	9
12542	12	80	12	144	11.5
12544	14	80	12	144	12.5
12545	15	80	12	144	12.5
12547	17	80	8	96	9.9
12549	19	80	8	96	11
12552	22	80	6	72	10

### 3/8" Dr. VDE Extension Bar







- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V material and subjected to heat treatment
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	#	8	ā
12941	125	141	18	72	11.1
12942	250	266	12	48	14

































































## 3/8" Dr. VDE Bit Socket, Hexagon



- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Hexagonal bit made of S2 material
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	#	¥	M
22704	4.0	77	12	144	8.5
22705	5.0	77	12	144	9
22706	6.0	77	12	144	9
22708	8.0	77	12	144	9

### 1/2" Dr. VDE Extension Bar







- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard  $\bullet$  Made of Cr-V material and subjected to heat treatment
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	#	¥	M
12985	125	141	6	72	17.6
12986	250	266	8	32	15.1

## 1/2" Dr. 6Pt. VDE Socket







- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V via cold extrusion
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	$\Theta$	8	M
14010	10	55	12	144	9.6
14011	11	55	12	144	9.6
14012	12	55	12	144	9.6
14013	13	55	12	144	9.6
14014	14	55	12	144	9.6
14016	16	55	12	144	9.6
14017	17	55	12	144	11.1
14018	18	55	12	144	11.1
14019	19	55	12	144	11.1
14021	21	55	10	120	10.7
14022	22	55	10	120	11.9
14024	24	55	10	120	11.9
14027	27	55	6	72	10.4
14030	30	55	6	72	11.9
14032	32	55	6	72	11.9

### 1/2" Dr. VDE Bit Socket, Hexagon



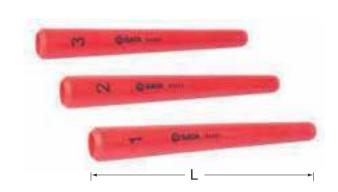




- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V material and subjected to heat treatment
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	$\Theta$	8	ð
24404	4x120	120	18	144	16.8
24405	5x120	120	18	144	16.8
24406	6x120	120	18	144	16.8
24408	8x120	120	18	144	16.8
24410	10x120	120	18	144	18.3





- Impregnated insulation layer meeting VDE680 standard Three specifications printed for distinguishing

No.	Spec.	L(mm)	#	8	<u></u>
93491	1#	100	5	90	1
93492	2#	100	5	90	1
93493	3#	100	5	90	1

▲ Excluded from lifetime warranty terms.

### **Insulated Self-Gripping Cord Sleeve**



- Impregnated insulation layer meeting VDE680 standard Cross card slot provided

No.	Spec. (mm)	L(mm)	#	*	<u> </u>
93494	10	80	5	90	1.5
93495	20	100	5	90	2.5
93496	30	110	5	90	4

▲ Excluded from lifetime warranty terms.

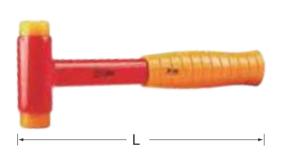
### 93480 VDE Electricians Insulated Tape



No.	Thickness(mm)	Length(mm)	L(mm)	#	¥	M
93480	0.15	10	71	20	240	13

▲ Excluded from lifetime warranty terms.

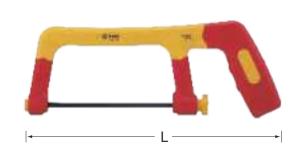
### 92801 **Insulated Dead Blow Hammer**



No.	L(mm)	#	8	ā
92801	310	4	24	18

▲ Excluded from lifetime warranty terms.

### 93419 **Insulated Hacksaw 6"**



- Socket handle insulation meeting EN/IEC 60900 standard
- Firm and durable metal saw frame
- Screw tightening structure, facilitating saw blade replacement

No.	Spec. (mm)	L(mm)	#	8	<b>T</b>
93419	150	275	8	48	25













































### 03181 **VDE Fine Pointed Tips Tweezers 134mm**







• Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard

No.	Spec. (mm)	#	8	ā
03181	134	12	288	10

• Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard

No.	Spec. (mm)	#	8	ā
03184	145	12	288	13

### 03182 **VDE Pointed Tips Tweezers, Inside Serrated 160mm**













No.	Spec. (mm)	#	8	<u></u>
03182	160	12	288	13

### **VDE Hex Key**







### 03183 **VDE Curved Pointed Tips Tweezers, Inside Serrated 159mm**



 $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard

No.	Spec. (mm)	#	8	ā
03183	159	12	288	13

- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of S2 material and subjected to heat treatment
- Blackened surface for high rust protection

No.	Spec. (mm)	L(mm)	#	8	ē
80402	2.5	134	20	400	7.2
80403	3	134	20	400	7.2
80404	4	170	10	200	11.7
80405	5	170	10	200	11.7
80406	6	215	10	120	20.3
80408	8	215	10	120	20.6



## **VDE Torx® Wrench**







## 3/8" Dr. VDE Torque Wrench



- Tested to 10,000 volts, meeting IEC/EN 60900 standard
- Forward torque accuracy: +/-4%

No.	Spec. (Nm)	L(mm)	#	8	ā
96611	5-25	285	1	12	6.5
96612	10-50	285	1	12	6.5
96614	20-100	390	1	12	15

▲ Warranty of 6 months (except for the insulating layer)

## 1/2" Dr. Insulated Torque Wrench

- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of S2 material and subjected to heat treatment
- Blackened surface for high rust protection

No.	Spec.	L(mm)	$\Theta$	8	ā
84801	T10	134	20	200	4
84802	T15	134	20	200	4
84803	T20	170	10	200	12.5
84804	T25	170	10	200	12.5
84805	T27	170	10	200	12.6
84806	T30	170	10	240	13.9
84807	T40	215	10	120	20.2
84808	T45	215	10	160	26.9
84809	T50	215	10	80	13.9



- Tested to 10,000 volts, meeting IEC/EN 60900 standard
- Forward torque accuracy: +/-4%

No.	Spec. (Nm)	L(mm)	#	8	ā
96613	10-50	285	1	12	6.6
96615	20-100	390	1	12	10
96616	40-200	560	1	6	11

▲ Warranty of 6 months (except for the insulating layer)

## 96610 1/4" Dr. Insulated Torque Wrench 5-25N.m



- $\bullet$  Tested to 10,000 volts, meeting IEC/EN 60900 standard
- Forward torque accuracy: +/-4%

No.	Spec. (Nm)	L(mm)	#	8	<b>T</b>
96610	5-25	285	1	12	6.5

▲ Warranty of 6 months (except for the insulating layer)

### 1/4" Dr. VDE Quick Release Ratchet



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Turning with only one hand for effortlessness
- Capable of quick release, requiring only one hand for operation

No.	L(mm)	$\Theta$	*	ā
11981	145	6	72	13





































































## 3/8" Dr. VDE Quick Release Ratchet



- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Turning with only one hand for effortlessness
- Capable of quick release, requiring only one hand for operation
- Made of Cr-V material and subjected to heat treatment

No.	L(mm)	$\Theta$	8	ā
12982	200	6	48	18.3

### 12984 1/2" Dr. VDE T-Handle 10"



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V material and subjected to heat treatment
- Elegant chrome-plated surface for rust protection

No.	L(mm)	#	8	ō
12984	200	4	32	19.6

### 12983 1/2" Dr. VDE Quick Release Ratchet



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Turning with only one hand for effortlessness
- Capable of quick release, requiring only one hand for operation
- Made of Cr-V material and subjected to heat treatment

No.	L(mm)	#	*	ā
12983	250	6	36	25.5

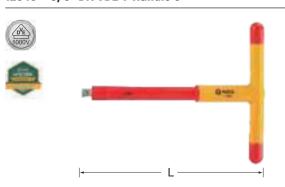
## **VDE Open End Wrench**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Forged with Cr-V material with high strength
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	#	8	ā
41306	6	90	6	108	3.2
41307	7	90	6	108	3.2
41308	8	100	6	108	4.2
41309	9	100	6	108	5.3
41310	10	110	6	108	5.3
41311	11	110	6	108	5.3
41312	12	130	6	108	6.4
41313	13	135	6	72	8.6
41314	14	145	6	72	6.8
41315	15	150	6	72	7.5
41316	16	160	6	72	8.2
41317	17	160	6	72	8.9
41318	18	175	6	72	10.4
41319	19	175	6	72	11.8
41321	21	195	6	72	14
41322	22	195	6	72	15.5
41324	24	225	6	72	20.5
41327	27	250	4	60	21.5
41330	30	290	4	48	21
41332	32	310	4	48	26

## 3/8" Dr. VDE T-Handle 8"



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V material and subjected to heat treatment
- Elegant chrome-plated surface for rust protection

No.	L(mm)	#	8	ā
12940	200	4	32	12.5

## **VDE Adjustable Wrench**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
   Handle made from imported two-tone material, being elegant, oil-resistance and scratch-proofing
   Forged with alloy steel, with chrome-plated surface for strong rust protection

No.	Spec.	L(mm)	$\Theta$	8	ð
47101	6"	163	6	48	9
47102	8"	215	6	48	15.9
47103	10"	260	6	36	21.6
47104	12"	312	6	24	18.5

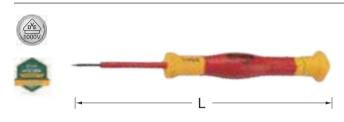
### **VDE Box End Wrench**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard Forged with Cr-V material with high strength
- Elegant chrome-plated surface for rust protection

No.	Spec. (mm)	L(mm)	$\Theta$	*	ā
42406	6	150	6	126	7.3
42407	7	150	6	126	7.3
42408	8	155	6	126	9.8
42409	9	155	6	90	9.8
42410	10	170	6	90	9.1
42411	11	170	6	90	10
42412	12	190	6	90	12.7
42413	13	190	6	90	12.7
42414	14	205	6	90	15.4
42415	15	205	6	90	15.4
42416	16	215	6	90	18.1
42417	17	215	6	90	18.1
42418	18	230	6	90	22.6
42419	19	230	6	90	22.6
42421	21	245	6	48	16.4
42422	22	245	6	48	16.4
42424	24	265	6	48	19.2
42427	27	290	4	40	18.2
42430	30	310	4	40	21.4
42432	32	310	4	40	23

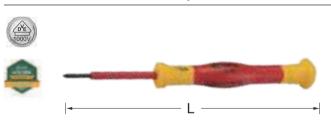
## **VDE Precision Screwdriver, Slotted**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Shank made of S2 material with high strength

No.	Spec.	L(mm)	#	*	ā
63301	1.5×0.23×50	145	12	144	2
63302	1.8 × 0.30 × 50	145	12	144	2
63303	2×0.40×50	145	12	144	2
63304	2.5×0.40×50	145	12	144	2
63305	3×0.50×50	145	12	144	2

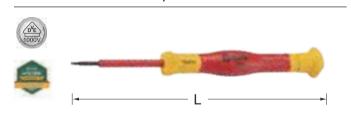
### **VDE Precision Screwdriver, Phillips**



- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard  $\bullet$  Shank made of S2 material with high strength

No.	Spec.	L(mm)	#	8	ā
63801	PH00×50	145	12	144	2
63802	PH0×50	145	12	144	2
63803	PH1×50	145	12	144	2

## **VDE Precision Screwdriver, Torx®**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard Shank made of S2 material with high strength

No.	Spec.	L(mm)	#	¥	ō
63901	T6×50	145	1	1	2
63902	T8×50	145	12	144	2
63903	T10×50	145	12	144	2
63904	T15×50	145	12	144	2
63905	T20×50	145	12	144	2







































































### 09318 7Pc. VDE Precision Screwdriver Set





- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Shank made of S2 material with high strength

No.	Spec. (mm)	$\Theta$	¥	<b>6</b>
09318	Slotted: $1.5\times50$ , $1.8\times50$ , $2.0\times50$ , $2.5\times50$ , $3.0\times50$ Phillips: PH0 $\times50$ , PH00 $\times50$	6	72	24

▲ Warranty terms of tool set comply with the individual product.

### **VDE Screwdriver, Torx®**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Made of S2 material and subjected to heat treatment
- Blackened surface for high rust protection

No.	Spec.	L(mm)	#	¥	M
61801	T8	181	10	100	4.3
61802	T10	181	10	100	4.3
61803	T15	181	10	100	4.5
61804	T20	181	10	100	4.8
61805	T25	231	10	100	9.2
61806	T27	231	10	100	9.2
61807	T30	256	10	100	11
61808	T40	291	10	100	16
61809	T45	291	10	100	16

### **VDE Nutdriver**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V via cold extrusion
- Elegant blackened surface for rust protection

No.	Spec.	L(mm)	$\blacksquare$	8	ō
61404	4.0 × 125	231	10	100	9
61405	5.0×125	231	10	100	9.2
61415	5.5×125	231	10	100	9.5
61406	6.0 × 125	231	10	100	9.5
61407	7.0 × 125	231	10	100	11
61408	8.0×125	231	10	100	11
61409	9.0×125	231	10	100	11
61410	10×125	241	10	100	15.5
61411	11×125	241	10	100	16
61412	12×125	241	10	100	16.4
61413	13×125	241	10	100	16.7
61414	14×125	241	10	100	17.1

### **VDE Circuit Tester** 62707



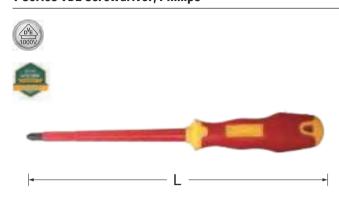




- $\bullet$  Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of Cr-V via cold extrusion
- $\bullet \, \mathsf{Elegant} \, \, \mathsf{blackened} \, \, \mathsf{surface} \, \, \mathsf{for} \, \, \mathsf{rust} \, \, \mathsf{protection}$

No.		#	8	ō
627	07	10	240	6.5

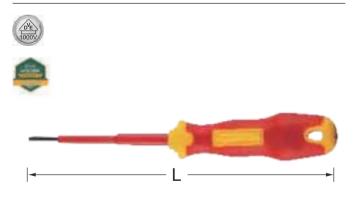




- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Shank made of imported S2 material and subjected to heat treatment with phosphated head for accurate function end dimension
- Triangular handle made with imported two-tone material for big torque output, comfort, strong oil resistance and scratch proofing

No.	Spec.	L(mm)	Rod Diameter (mm)	$\Theta$	¥	ā
61221	#0x60	151	3	12	48	1.9
61222	#1x80	191	4.5	12	48	3.6
61223	#2x100	225	6	12	48	5.3
61224	#3x150	285	8	6	24	4.9

### **T Series VDE Screwdriver, Phillips**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Shank made of imported S2 material and subjected to heat treatment with phosphated head for accurate function end dimension
- Triangular handle made with imported two-tone material for big torque output, comfort, strong oil resistance and scratch proofing

No.	Spec.	L(mm)	Rod Diameter (mm)		¥	ð
61321	2.5x75	165	2.5	12	48	1.9
61322	3x100	190	3	12	48	2.2
61323	4x100	211	4	12	48	3.6
61324	5.5x125	250	5.5	12	48	5.5
61325	6.5x150	275	6.5	12	48	6.5

### 09303 7Pc. T Series VDE Screwdriver Set









- The imported S2 steel
- Shank has been subject to overall heat
  - Treatment and proved by strict 10000V
- Insulation withstand voltage test. Handle made of special material, ensuring good skid and
- · Scratch resistance and higher oil resistance.

No.	Spec.	$\Theta$	¥	M
09303	VDE Slotted: 2.5x75mm, 4.0x100mm, 5.5x125mm, 6.5x150mm VDE Phillips: #0x60mm, #1x80mm, #2x100mm	0	10	6.4

▲ Warranty terms of tool set comply with the individual product.

### 09262 9Pc. VDE Tool Set





- $\hbox{\bf \cdot} \hbox{With VDE certification passed 1000V insulated test to meet standard EN90900:} 2004 \\$
- 100% passed 10000V insulated test within mass production
- Forged by 60Cr-V steel, the pliers offers high strength and long lifecycle
   Nickel plated surface makes the pliers have high antirust feature
- Offering high cutting capacity to meet ASME standard:

Combination Pliers ASME B107.20-2004 Long Nose Pliers ASME B107.13-2003 Diagonal Pliers ASME B107.11-2002

• Germany made VDE screwdrivers meet DIN standard: DIN7437 and DIN7438

No.	Spec.	$\Theta$	8	ā
09262	G Series VDE Slotted: 2.5x75mm, 4x100mm, 5.5x125mm G Series VDE Phillips: #0x60mm, #1x80mm, #2x100mm VDE Combination Pliers8" VDE Diagonal Pliers 6" VDE Long Nose Pliers 6"	-	4	5.5

▲ Warranty terms of tool set comply with the individual product.





































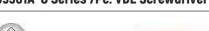








## 09301A G Series 7Pc. VDE Screwdriver Set

































- Made in Germany in accordance with EN/IEC 60900:
- 2004 to meet DIN standard: DIN7437, DIN7438

No.	Spec.	$\Theta$	¥	ā
09301A	VDE Slotted: 2.5x75mm, 4x100mm, 5.5x125mm, 6.5x150mm VDE Phillips: #0x60mm, #1x80mm, #2x100mm	-	4	2.4

 $\ensuremath{\Delta}$  Warranty terms of tool set comply with the individual product.

### 09302 5Pc. VDE Screwdriver Set







- Made in Germany in accordance with EN/IEC 60900:
- 2004 to meet DIN standard: DIN7437, DIN7439

No.	Spec.	$\Theta$	8	M
09302	G Series VDE Slotted: 3x100mm, 5.5x125mm G Series VDE Phillips: #1x80mm, #2x100mm	-	6	2.8
	Circuit Tester 190mm			

▲ Warranty terms of tool set comply with the individual product.





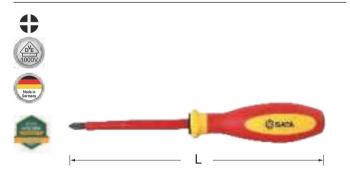


- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Made of imported SVCM+ material and subjected to heat treatment for high toughness,
- brittleness resistance, and long service life
- Made with imported TPV anti-slip soft rubber for oil resistance, scratch proofing and skidding
- Handle acting as a mini screwdriver handle, suitable for various workplaces

No.	Spec.	$\Theta$	¥	ā
09304	VDE Slotted: 3mm, 5.5mm, 6.5mm VDE Phillips: #0, #1, #2 VDE Torx®: T15, T20	6	24	12.3

▲ Warranty terms of tool set comply with the individual product.

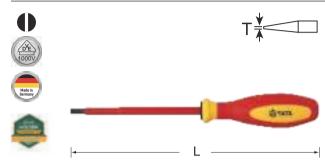
## **G Series VDE Screwdriver, Phillips**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Handle coated with engineering plastics PP+ advanced elastomer TPR trichromatic composite, feeling comfortable and soft
- Injection-molded trademark, being elegant and firm
- Front of the handle designed with section to avoid tool rolling
- Shank made of high-performance chrome-vanadium-molybdenum alloy steel, with good hardness and toughness, higher durability and longer service life
- Function end subjected to special phosphating treatment for high accuracy

No.	Spec.	L(mm)	Rod Diameter (mm)	$\Theta$	8	ā
61211	#0x60	165	3	10	240	11.6
61212	#1x80	185	4.5	10	140	8.5
61213	#2x100	215	6	10	100	10.6
61214	#3x150	275	8	10	80	24.9

### **G Series VDE Screwdriver, Slotted**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Handle coated with engineering plastics PP+ advanced elastomer TPR trichromatic composite, feeling comfortable and soft
- Injection-molded trademark, being elegant and firm
   Front of the handle designed with section to avoid tool rolling
- Shank made of high-performance chrome-vanadium-molybdenum alloy steel, with good hardness and toughness, higher durability and longer service life
- Function end subjected to special phosphating treatment for high accuracy

No.	Spec.	L(mm)	T(mm)	Rod Diameter (mm)		¥	ā
61311	2.5x75	180	0.4	2.5	10	240	10.5
61312	3x100	205	0.5	3	10	240	12.3
61310	3.5x100	205	0.6	3.5	10	-	-
61313	4x100	205	0.8	4	10	140	8.3
61314	5.5x125	240	1	5.5	10	100	11.4
61315	6.5x150	265	1.2	6.5	10	100	13.4

### **3Pc. VDE Pliers Set** 09261





- With VDE certification passed 1000V insulated test to meet standard EN90900:2004
- •100% passed 10000V insulated test within mass production
- Forged by 60Cr-V steel, the pliers offers high strength and long lifecycle
- · Nickel plated surface makes the pliers have high antirust feature
- Offering high cutting capacity to meet ASME standard:

No.	Spec.	$\blacksquare$	8	ā
09261	VDE Combination Pliers 8" VDE Long Nose Pliers 6" VDE Diagonal Pliers 6"	-	6	5.5

▲ Warranty terms of tool set comply with the individual product.













































## 93450 VDE Electricians Scissors



• Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard

No.	Spec. (mm)	#	¥	ā
93450	160	6	48	5

▲ Excluded from lifetime warranty terms.

### 93117 **Insulated Bolt Cutter 24"**



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	8	¥	<b>5</b>
93117	600	1	2	4.9

▲ Excluded from lifetime warranty terms.

### **VDE Ratcheting Cable Cutter**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Two-stage transmission for saving labor
- Special linkage feeding mechanism for high feeding speed and cutting efficiency

No.	Spec.	L(mm)	#	8	ā
93113	240mm <sup>2</sup>	285	1	12	9.6
93114	380mm <sup>2</sup>	380	1	10	14

▲ Excluded from lifetime warranty terms.

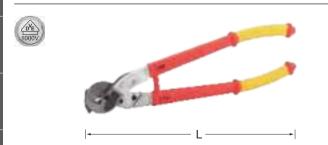
### 70111 Insulated Flat Nose Pliers 6"



- Cr-V steel forged
- Pinstriped groove on clamping surface to make clamping tightly
- •100% passed 10000V insulation test to reach IEC/EN 60900-2012 standard

No.	Spec. (mm)	L(mm)	#	¥	ā
70111	6"	170	6	36	6.9

### **Insulated Cable Cutter**



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Nwo-stage transmission for saving labor
   Special linkage feeding mechanism for high feeding speed and cutting efficiency

No.	Spec.	L(mm)	$\Theta$	¥	ð
93115	250mm <sup>2</sup>	610	1	4	9.6
93116	500mm <sup>2</sup>	805	1	4	16

▲ Excluded from lifetime warranty terms.

## **VDE Long Nose Pliers**



- Cr-V steel forged
- Body hardness HRC40~50
- Cutting blades hardness: HRC55~65
- •Cutting capacity: medium hard steel wire Φ1.6mm
- Germany VDE certification, pass 10000V insulated test, meet IEC/EN60900-2012 standard

No	D.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ð
70	131	6"	170	Medium hard steel wire Ø1.6	6	36	8
70	132	8"	212	Medium hard steel wire Ø1.8	6	36	9.9



































### **Insulated Round Nose Pliers 6"** 70161



- Cr-V steel forged
- Nose diameter: Ф2.3-7.3mm

  100% passed 10000V insulation test to reach IEC/EN 60900-2012 standard

No.	Spec. (mm)	L(mm)	Outside diameter range of clamp opening (mm)	#	¥	<u></u>
70161	6"	170	Ф2.3-7.3	6	36	6.4

### **Insulated Cable Cutting Pliers**



- Cr-V steel forged Cutting ability :Copper / Aluminum Cable 22mm 100% passed 10000V insulation test to reach IEC/EN 60900-2012 standard

No.	Spec. (mm)	L(mm)	Cutting Capacity		8	ā
70191	6"	175	Copper-Aluminum Cable: 22mm²	6	36	8.7
70192	10"	245	Copper-Aluminum Cable: 80mm²	6	24	12.8

▲ Excluded from lifetime warranty terms.

### **Insulated Bent Nose Pliers**



- Cr-V steel forged
- Cutting ability: Medium hard steel wire Φ1.6mm
- 100% passed 10000V insulation test to reach IEC/EN 60900-2012 standard

No.	Spec. (mm)	L(mm)	Cutting Capacity(mm)	$\Theta$	8	ð
70181	6"	166	Medium hard steel wire: Φ1.6	6	36	6.8
70182	8"	205	Medium hard steel wire: Φ1.8	6	36	8.9

### **G Series VDE Long Nose Pliers**



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\blacksquare$	8	ā
72610	6"	160	Medium hard steel wire ø2.5, hard steel wire ø1.6	6	120	22.9
72611	8"	200	Medium hard steel wire ø2.8, hard steel wire ø1.8	6	60	29.9

### 70234 Insulated Diagonal Pliers 8"



- Cr-V steel forged
- Cutting ability : Medium hard steel wire Φ2.2mm
- •100% passed 10000V insulation test to reach IEC/EN 60900-2012 standard

No.	Spec. (mm)	L(mm)	Cutting Capacity(mm)	$\Theta$	*	ā
70234	8"	215	Medium hard steel wire: Φ2.2	6	36	12.9

### **G Series VDE Diagonal Pliers**



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	$\overline{\boxtimes}$
72615	6"	160	Medium hard steel wire ø2.8, hard steel wire ø2.0, piano wireø1.4	6	60	33.5
72616	7"	180	Medium hard steel wire ø3.2, hard steel wire ø2.5, piano wireø1.8	6	60	19.5































### 72620 G Series Insulated Diagonal Pliers 8"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	M
72620	8"	200	Medium hard steel wire ø4.2, hard steel wire ø3.0, piano wireø2.5	6	60	40.8

### 72630 G Series VDE Wire Stripper 6"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Stripping Range (mm)	$\Theta$	*	ā
72630	6"	160	ø5.0/10	6	60	19.8

### **G Series VDE Combination Pliers**



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

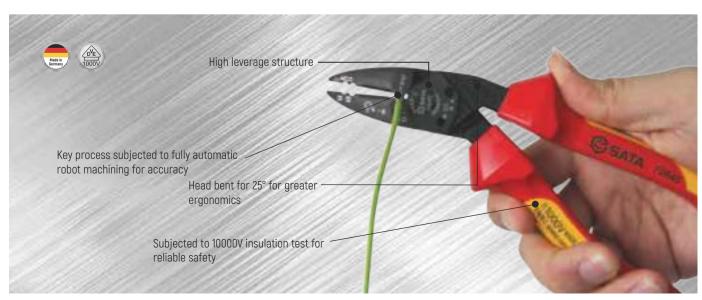
No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ē
72625	6"	160	Medium hard steel wire ø2.5, hard steel wire ø1.8	6	60	30
72626	7"	180	Medium hard steel wire ø2.8, hard steel wire ø2.5	6	60	20.4
72627	8"	200	Medium hard steel wire ø3.0, hard steel wire ø2.8	6	60	24.2

## 72635 G Series VDE Groove Joint Pliers 10"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Applicable Tube Diameter(mm)	$\Theta$	8	M
72635	10"	250	6-38	6	54	28





































### 72640 G Series High Leverage VDE Diagonal Pliers 7"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	<b></b>
72640	7"	180	Medium hard steel wire ø3.8, hard steel wire ø2.7, piano wireø2.3	6	60	35.5

### 72655 G Series High Leverage VDE Combination Pliers 7.5"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	¥	ā
72655	7.5"	190	Medium hard steel wire ø3.5, hard steel wire ø2.5, piano wireø2.0	6	60	37

## 72645 G Series Multipurpose High Leverage VDE Diagonal Pliers 7"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ā
72645	7"	180	Medium hard steel wire ø3.5, hard steel wire ø2.5, piano wireø2.0	6	60	19.1

### 72660 G Series VDE Cable Cutting Pliers 7"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Cutting Capacity(mm)	$\Theta$	8	ā
72660	7"	180	ø18.0/50	6	60	38.3

### 72650 G Series High Leverage VDE Long Nose Pliers 9"



- Sleeve handle tested to 10,000 volts, meeting IEC/EN 60900 standard
- Suitable for cutting copper-aluminum cable and steel bar

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ð
72650	9"	220	Medium hard steel wire ø3.0, hard steel wire ø2.0, piano wireø1.4	6	60	38.5

### **VDE Diagonal Pliers**



- Cr-V steel forged
- Body hardness HRC40~50
- Cutting blades hardness: HRC55~65
- Cutting capacity: medium hard steel wire Φ1.6mm
- Germany VDE certification, pass 10000V insulated test, meet IEC/EN60900-2012 standard

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	#	8	ā
70232	6"	170	Medium hard steel wire Ø1.6	6	36	8.7
70233	7"	212	Medium hard steel wire Ø1.8	6	36	13.6

































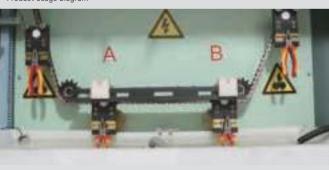
Handle passed flame-retardant test



Handle passed impact resistance test



Product Usage Diagram



Passed 10,000V limit insulation and voltage resistance test



Handle passed 500N drawing force test

### **VDE Insulated Groove Joint Pliers 10"**



- Cr-V steel forged
- Body hardness HRC40~50
- Clamping range 0~36mm
- Germany VDE certification, pass 10000V insulated test, meet IEC/EN60900-2012 standard

No.	Spec. (mm)	L(mm)	#	8	ā
70145	10"	255	6	24	17

### **VDE Combination Pliers**



- Cr-V steel forged
   Body hardness HRC40-50
   Cutting blades hardness: HRC55-65
   Cutting capacity: medium hard steel wire Φ1.6mm
   Germany VDE certification, pass 10000V insulated test, meet IEC/EN60900-2012 standard

No.	Spec. (mm)	L(mm)	Max. Cutting Capacity(mm)	$\Theta$	8	ā
70331	6"	170	Medium hard steel wire Ø1.6	6	36	9.9
70332	7"	190	Medium hard steel wire Ø2.0	6	36	13
70333	8"	210	Medium hard steel wire Ø2.0	6	36	16

### 70141 **VDE Wire Stripper 6"**



- Cr-V steel forged
- Body hardness HRC40~50
- Use for stripping the insulating layer of the wire with 0.5-2.5mm diameter
   Germany VDE certification, pass 10000V insulated test, meet IEC/EN60900-2012 standard

No.	Spec. (mm)	L(mm)	#	¥	ē
70141	6"	170	6	36	9.3



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Sickle-shaped blade with sliding guide block to avoid damage to lead core
- Ergonomic handle for safety and comfort
- · Suitable for cutting wires and cables

No.	#	8	ā
93470	6	72	12.3

▲ Excluded from lifetime warranty terms.

#### 93472 VDE Insulated Cable Knife, Straight Blade



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- · Ergonomic handle for safety and comfort
- Suitable for cutting wires and cables

No.	#	8	Ø
93472	6	72	11.9

▲ Excluded from lifetime warranty terms.

#### 93471 VDE Insulated Cable Knife, Hooked Blade



- Certified by VDE and tested to 10,000 volts, meeting IEC/EN 60900 standard
- Bent blade with special insulating coating on the back to prevent short circuit
- · Ergonomic handle for safety and comfort
- · Suitable for cutting wires and cables

No.	#	8	ā
93471	6	72	11.4

▲ Excluded from lifetime warranty terms.

#### **Notes:**

Insulating layers of all VDE tools are excluded from lifetime warranty.









































# **Explosion-Proof Tool**

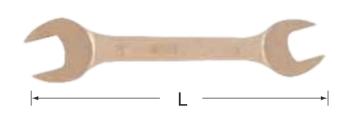
	Explosion-Proof Adjustable Wrench	248
	Explosion-Proof Combination Pliers	249
	Explosion-Proof Ball Pein Hammer	249
	Explosion-Proof Cold Chisel	250
	Explosion-Proof F Wrench	250
l lo	Explosion-Proof Scraper	250

# **Explosion-Proof Tool**

#### **Explosion-Proof Adjustable Wrench**

#### **Explosion-Proof Open End Wrench**





- Special beryllium bronze material is adopted, which is suitable for safe use environment such
- as non sparking and non magnetism
   Laser scale indication, maximum opening size 24mm
- Moderate soft hardness, high torque and long service life

No.	L	Maximum opening(mm)	$\square$	8	M
31101	8"	24	4	24	11
31102	10"	30	4	16	10.8
31103	12"	36	2	16	17.6
31104	15"	46	-	-	-
31105	18"	55	-	-	-

▲ Excluded from lifetime warranty terms.

- Made of special beryllium bronze for safe operation environment free of spark and magnetic
- Moderate hardness for high torque and long service life

No.	Spec. (mm)	L(mm)	#	8	ā
31121	14×17	150	4	24	6.2
31122	17×19	170	4	24	7.2
31123	19×22	185	4	24	8.4
31124	22×24	210	4	24	9.8
31125	24×27	230	4	24	12.4
31126	27×30	250	2	12	9.6
31127	30×32	265	2	12	11.1
31128	12×14	150	4	-	-
31129	16×18	170	4	-	-

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Combination Wrench**



- $\bullet \ \ \text{Made of special beryllium bronze for safe operation environment free of spark and magnetic}$
- Moderate hardness for high torque and long service life

No.	Spec. (mm)	L(mm)	$\Theta$	8	ā
31111	14	175	4	24	6.2
31112	17	195	4	24	7.4
31113	19	215	4	24	8.4
31114	22	245	4	24	10.5
31115	24	265	4	24	12.0
31116	27	290	2	12	9.6
31117	30	320	2	12	11.5
31118	32	340	2	12	13.2
31119	16	195	4	-	-
31120	18	215	4	-	-

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Box End Wrench**



- Made of special beryllium bronze for safe operation environment free of spark and magnetic
- Moderate hardness for high torque and long service life

No.	Spec. (mm)	L(mm)	#	¥	ō
31131	14×17	208	4	24	7.6
31132	17×19	235	4	24	9.3
31133	19×22	255	4	24	11
31134	22×24	280	4	24	12.9
31135	24×27	300	4	24	13.4
31136	27×30	325	2	12	11
31137	30×32	335	2	12	12





























































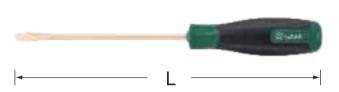








#### **Explosion-Proof Screwdriver, Slotted**



• Made of special beryllium bronze for safe operation environment free of spark and magnetic

No.	Spec. (mm)	L(mm)	Rod Diameter (mm)		¥	ā
31141	6×100	200	6	4	24	5.7
31142	6×150	250	6	4	24	6
31143	8×200	300	8	4	24	7.9
31144	8×250	350	8	4	24	8.4

▲ Excluded from lifetime warranty terms.

#### 31154 **Explosion-Proof Long Nose Pliers 6"**

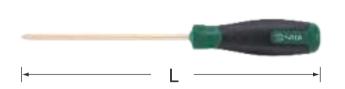


- Special beryllium bronze material is adopted, which is suitable for safe use environment such as non sparking and non magnetism
- New design of handle, more comfortable to hold

No.	Spec.	#	8	ā
31154	6"	4	24	8.1

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Screwdriver, Phillips**



• Made of special beryllium bronze for safe operation environment free of spark and magnetic

No.	Spec. (mm)	L(mm)	$\Theta$	8	M
31146	#2×100	200	4	24	5.7
31147	#2×150	250	4	24	6.2
31148	#3×200	300	4	24	7.9
31149	#3×250	350	4	24	8.4

▲ Excluded from lifetime warranty terms.

# **Explosion-Proof Diagonal Pliers 6"**



- Special beryllium bronze material is adopted, which is suitable for safe use environment such as non sparking and non magnetism
- Maximum shear capacity: low carbon steel wire φ 1.6mm
- · New design of handle, more comfortable to hold

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	ā
31156	6"	Mild carbon steel wire Ø1.6	4	24	8.8
31158	8"	Mild carbon steel wire Ø1.6	4	-	-

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Combination Pliers 8"** 31152



- Special beryllium bronze material is adopted, which is suitable for safe use environment such as non sparking and non magnetism
- Maximum shear capacity: low carbon steel wire φ 1.6mm
- New design of handle, more comfortable to hold

No.	Spec.	Max. Cutting Capacity(mm)	$\Theta$	8	ā
31152	8"	Mild carbon steel wire Ø1.6	4	24	13.4

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Ball Pein Hammer**



- Made with special beryllium bronze for safe operation environment free of spark and magnetism
- Handle made of imported Hickory for comfort and toughness

No.	Spec.	L(mm)		8	<u></u> ■
31161	1 lbs	325	2	12	10.8
31162	1.5 lbs	365	2	12	14





- $\bullet \mbox{Made with special beryllium bronze for safe operation environment free of spark and } \\$
- · Fiberglass handle for anti-skidding and durability

No.	Spec.	L(mm)	#	8	ō
31166	4 lbs	405	2	8	17.7
31167	6 lbs	676	2	4	15.6
31168	8 lbs	680	2	4	19

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Cold Chisel**



• Made of special beryllium bronze for safe operation environment free of spark and magnetic

No.	Spec. (mm)	L(mm)	#	8	M
31171	14×160	160	4	24	8.1
31172	18×200	200	4	24	12.9
31173	20×250	250	2	12	11

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof Pipe Wrench**

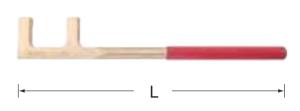


- Made with special beryllium bronze for safe operation environment free of spark and magnetism
- Moderate hardness for high torsion

No.	Spec.	L(mm)	#	¥	ð
31181	10"	250	2	12	13.4
31182	12"	300	2	12	17
31183	14"	350	1	6	11.3
31184	18"	450	1	6	17
31185	24"	600	1	-	-

▲ Excluded from lifetime warranty terms.

#### **Explosion-Proof F Wrench**



- Made with special beryllium bronze for safe operation environment free of spark and
- Moderate hardness for high torsion

No.	Spec. (mm)	L(mm)	#	8	ā
31191	40×300	300	2	12	10.2
31192	50×400	400	2	12	15
31193	60×500	500	2	12	21

▲ Excluded from lifetime warranty terms.

#### 31194 **Explosion-Proof Double Head Oil Drum Wrench**

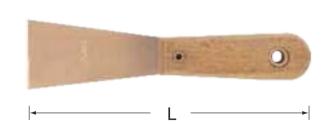


- Made with special beryllium bronze for safe operation environment free of spark and
- Moderate hardness for high torsion

No.	Spec. (mm)	L(mm)	#	8	ā
31194	70×95×350	350	1	6	10.7

▲ Excluded from lifetime warranty terms.

## **Explosion-Proof Scraper**



• Made of special beryllium bronze for safe operation environment free of spark and magnetic

No.	Spec. (mm)	L(mm)	#	8	ā
31196	50×200	200	2	24	9.2
31197	65×200	200	2	24	9.2







































































# **Explosion Proof Slogging Open End Wrench**



- Special beryllium bronze material is adopted, which is suitable for safe use environment such as non sparking and non magnetism
- Moderate soft hardness, high torque and long service life

No.	Spec. (mm)	L (mm)		8	ā
31231	27	175	6	-	-
31232	30	185	6	-	-
31233	32	185	6	-	-
31235	36	195	6	-	-
31237	41	215	6	-	-

▲ Excluded from lifetime warranty terms.

## **Explosion Proof Slogging Open End Wrench**



- Special beryllium bronze material is adopted, which is suitable for safe use environment such as non sparking and non magnetism
- · Moderate soft hardness, high torque and long service life

No.	Spec. (mm)	L (mm)	$\Theta$	¥	<u></u>
31211	27	175	6	-	-
31212	30	185	6	-	-
31213	32	185	6	-	-
31215	36	195	6	-	-
31217	41	215	6	-	-

▲ Excluded from lifetime warranty terms.

# **Explosion Proof Bar**



- $\bullet \text{Special beryllium bronze material is adopted, which is suitable for safe use environment such } \\$ as non sparking and non magnetism

  • Moderate soft hardness, high torque and long service life

No.	Spec. (mm)	L (mm)	$\Theta$	8	<u></u>
31271	18×500	500	2	-	-
31272	22×800	800	2	-	-

▲ Excluded from lifetime warranty terms.

#### **Explosion Proof Round Point Shovel**



- $\bullet$  Special beryllium bronze material is adopted, which is suitable for safe use environment such as non sparking and non magnetism
- · Handle with glass fiber materials, anti-skid and durable

No.	Spec. (mm)	L (mm)	#	8	ā
31291	210×1030	1030	2	-	-
31292	235×1100	1100	2	-	-

# **Electrician's & Electronic Tool**

	Electronic Welding Tool	253-257
	Multimeter	259-265
	Infrared Thermometer	265-267
	Hot Air Gun	267-271
	Lighting Electrical Appliances	272-283
	Electronic Set	284-286
	Electrical Maintenance Tool	286-288
⊜ sata	Miniature Screwdriver	288-291
	Other Electronic Tools	291-294





























# **Electrician's & Electronic Tool**

#### 02002A ESD Digital Lead-Free Soldering Station



Max Power 90W Temperature 50-600°C Temperature Stability (No load) +/-2°C Time of Temperature Rising 25s (20-350°C) Tip to Ground Resistance <20 Heating Mode High Frequency Current Auto Sleeping Yes

ESD Housing Yes Weight About 1.2kg

- LED display, key type temperature adjustment, digital temperature calibration
- Advanced HFEC heating technology realizes rapid heating and back to temperature
- Special sensor design ensures fast response and quick temperature adjustment
- Accurate temperature control circuit with a constant temperature accuracy of +/-2°C
- · Automatic sleep function for power saving and extended service life
- · Specially designed split internal heating welding head with smaller ground resistance
- · Compact and robust housing made of aluminum alloy
- ESD design realizes anti-static operation

No.	#	8	ā
02002A	-	6	14.2

▲ 1-year warranty for overall unit except heating element, soldering iron, soldering tips

#### 03200 ESD Digital Lead-Free Soldering Station



Supply Voltage 220VAC, 50Hz Leakage Current

Electric Strength No breakdown in 1 min. at 1500V Static Capacity ≤20pF

Consumed Power 60W Starting Time 60s 200°C-450°C Temperature Range

#### **Product Feature:**

- · Lead-free long-life welding nozzle for lead-free welding and durability
- · Handle with temperature control structure and knob for direct temperature indication
- Quality high-grade ceramic heating core for quick heating and high thermal efficiency
- High-precision IC temperature control circuit for accurate constant temperature control
- Equipped with LED indicator to provide more intuitive status indication during working and

#### **Precautions**

- It is strictly prohibited to remove the electric heating parts when the electric iron is in use
- Soldering iron base with natural heat dissipation structure shall be provided during operation
- If the power cord is damaged, it must be repaired and replaced by a professional
- · Keep the welding tip always hanging tin
- Do not use a file or hammer to repair and knock the welding tip
- · Place it away from children to avoid scald

No.	#	8	ā
03200	-	18	4.3

▲ Excluded from lifetime warranty terms.

#### 02003 ESD Digital Lead-Free Soldering Station



Power Consumption Working Voltage Temperature (As per Working Mode) Temperature Stability (Still Air Without Load) Ambient Temperature (Max) Tip to Ground Voltage Tip to Ground Reistance Dimensions Main Unit Weight (Including Power Cord) Length of Handle Wire Soldering Iron Weight

Display Type Digital LED 7NW AC 220V/50Hz 100°C - 450°C 40°C <2mV <2Ω (WxHxD): 85x110x138mm About 1.4kg 1.2m

- · High temperature resistant heating element, long lifetime
- · High-precision sensor, accurate temperature control and sensitive response
- · Fast heating and rapid thermal compensation
- Digital temperature regulation, various of tips available, easy to use
- · Special designed three temperature points for quick temperature switchingand make sure consistent process

No.	8	8	<u></u>
02003	-	6	13.2

About 70a

▲ 1-year warranty for overall unit except heating element, soldering iron soldering tips

#### 03260 Inner-Heated Ceramic Heating Element Soldering Iron 25W



Voltage AC 220V/50Hz Insulation resistance Greater than 100M  $\!\Omega\!$ 

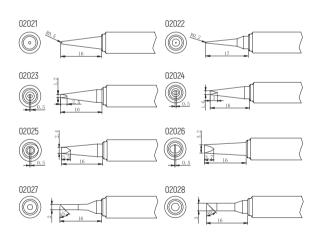
Power

- · High-quality high-grade ceramic heating element, ensuring fast temperature rise and high thermal efficiency
- Heating temperature within 420° C~450° C, ultra-long service life, energy conservation and environmental protection
- · Compatible with 900M series soldering tips
- Long-life lead-free soldering tips, especially suitable for lead-free soldering process, and also applicable to continuous soldering in production lines
- \*Replaceable soldering tips:03264,03265,03266,03267,03268,03269,03270,03271,03272,03273

No.	Spec.	$\Theta$	¥	ā
03260	25 Watts	18	36	5.9

# 5pc Lead-Free Soldering Tip Set (for 02002A Lead-Free Soldering Station)





- Special tubing design, small touching resistance
- Processed by CNC digital machine, high precision sizes
- Ultra-long time of electroplating, excellent corrosion resistance
- Kinds of lead free soldering tips optional
- Suitable for SATA 02002A digital soldering station

No.	Model	$\Theta$	8	ā
02021	Lead-Free Soldering Tip, Round	5	100	6.2
02022	Lead-Free Soldering Tip, Pointed	5	100	6.5
02023	Lead-Free Soldering Tip, Slotted 1.2D	5	100	6.4
02024	Lead-Free Soldering Tip, Slotted 1.6D	5	100	6.4
02025	Lead-Free Soldering Tip, Slotted 2.4D	5	100	6.5
02026	Lead-Free Soldering Tip, Slotted 3.2D	5	100	6.6
02027	Lead-Free Soldering Tip, U-Shaped 2C	5	100	5.8
02028	Lead-Free Soldering Tip, U-Shaped 3C	5	100	6.5

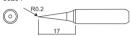
▲ Excluded from lifetime warranty terms.

## Lead-Free Internally-Heating Soldering Tip (Suitable for 02003 Lead-Free Soldering Station, 03260 Electric Soldering Iron)



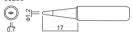






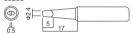
Suitable for welding high frequency devices, high frequency cables and plug cores, and applicable to SATA industrial-grade intelligent lead-free soldering station 2003, SATA 08260 ceramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03266



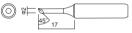
Suitable for welding components with narrow print line, and applicable to SATA industrial-grade intelligent lead-free soldering station 02003, SATA 03260 ceramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03268



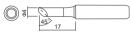
Suitable for welding of plugs, socket leads, small components and components with high density, and applicable to SATA industrial-gradinate intelligent lead-free soldering station 2003, SATA 03290 caramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03270



Suitable for welding of plugs, socket leads, small components and components with high density, and applicable to SATA industrial-gradinal intelligent lead-free soldering station 2003, SATA 03250 creamic internally-heated electric iron and 900M series electric iron products of other brands

#### 03272



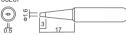
Suitable for welding components with wide print line and large welding surface such as panel components and ground wire, and applicable to SATA industrial-grade intelligent lead-free soldering station 02003, SATA 0252

#### 03265



Suitable for welding high frequency devices, high frequency cables and plug cores, and applicable to SATA industrial-grade intelligent lead-free soldering station 2020, SATA 05260 ceramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03267



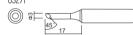
Suitable for welding components with narrow print line, and applicable to SATA industrial-grade intelligent lead-free soldering station 02003, SATA 03260 ceramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03269



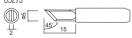
Suitable for welding components with narrow print line and low density, and applicable to SATA industrial-grade intelligent lead-free soldering station 02003, SATA 03260 ceramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03271



Suitable for welding components with wide print line and large welding surface such as panel components and ground wire, and applicable to SATA industrial-grade intelligent lead-free soldering station 2003, SATA 03:200 ceramic internally-heated electric iron and 900M series electric iron products of other brands

#### 03273



Littable for welding components with wide print line and large welding surface such as panel components and ground wire, and applicable to SATA industrial-grade intelligent lead-free soldering station 02005, SATA 02260 ceramic internally-heated electric iron and 900M series electric iron products of other brands

- Long-life internal heating soldering iron tip made of high-grade and high-quality copper through special processing
- Specially treated surface: alloy layer with high resistance to oxidation and wear. Surface underwent anti-corrosion treatment, ensuring excellent corrosion resistance
- Service life up to 40000 soldering spots ucder normal-use conditions
- Tinned soldering iron tip, making the welding operation faster and more convenient
- This soldering iron tip is sultable for SATA 02003 lead-free soldering station, SATA 03260 ceramic internal heating soldering iron, and 900M series soldering iron products of general brands

No.	Model	$\Theta$	8	ā
03264	Lead-Free Inner-Heated Soldering Tip, Pointed	10	1000	6
03265	Lead-Free Inner-Heated Soldering Tip, Round	10	1000	6
03266	Lead-Free Inner-Heated Soldering Tip, Slotted 1.2D	10	1000	6
03267	Lead-Free Inner-Heated Soldering Tip, Slotted 1.6D	10	1000	6
03268	Lead-Free Inner-Heated Soldering Tip, Slotted 2.4D	10	1000	6
03269	Lead-Free Inner-Heated Soldering Tip, Slotted 3.2D	10	1000	6
03270	Lead-Free Inner-Heated Soldering Tip, U-Shaped 2C	10	1000	6
03271	Lead-Free Inner-Heated Soldering Tip, U-Shaped 3C	10	1000	6
03272	Lead-Free Inner-Heated Soldering Tip, U-Shaped 4C	10	1000	11.5
03273	Lead-Free Inner-Heated Soldering Tip, Knife-Shaped 5K	10	1000	6



































#### 03261 Inner-Heated Ceramic Heating Element Soldering Iron 40W



- It is especially suitable for industrial to use on large workpieces
- High-quality high-grade ceramic heating element ensuring fast temperature rise and high thermal efficiency
- Heating temperature within 420° C-450° C,ultra-long service life, energy conservation and environmental protection
- Long-life lead-free soldering tips, especially suitable for lead-free soldering process, and also applicable to continuous soldering in production lines
   \*Replaceable soldering tips:03274

No.	Spec.	#	8	<u> </u>
03261	40 Watts	_	18	4.8

03261 40 Watts 
Excluded from lifetime warranty terms.

#### 03262 Inner-Heated Ceramic Heating Element Soldering Iron 60W



- · It is especially suitable for industrial to use on large workpieces
- High-quality high-grade ceramic heating element ensuring fast temperature rise and high thermal efficiency
- Heating temperature within 420° C-450° C, ultra-long service life, energy conservation and environmental protection
- Long-life lead-free soldering tips, especially suitable for lead-free soldering process, and also applicable to continuous soldering in production lines
- \*Replaceable soldering tips:03275

No.	Spec.	#	8	ā
03262	60 Watts	-	18	5.9

▲ Excluded from lifetime warranty terms.

## 03263 Dual Power Soldering Iron 20W/130W



- Traditional soldering iron is configured with power in one-level mode. However, 03263 is configured with power in two-level mode. The power can be increased from 20W to 130W when the button is pressed. Therefore, one soldering iron can weld components in different sizes
- Provided with the ceramic heating element, heat-insulated handle for fear of scalds, and lightweight unit, ensuring a comfortable grip
- \*Replaceable soldering tips:03276

No.	Spec.	#	***************************************	ā
03263	20W/130W	18	36	6.7

▲ Excluded from lifetime warranty terms.



# What is an externally-heating electric soldering iron?

Insert the soldering tip into the heater hole of the electric iron, and the heat of the heater is transmitted to the iron tip to make it heat up and complete the welding function. The temperature of the iron tip can be adjusted, and the length of the iron tip in the heater hole can be adjusted or different shapes of the iron tip can be used.

#### **Product Knowledge**

#### Why does the iron tip service life vary?

The life of the iron tip is determined by the number of solder joints, which is subjected to the thickness of the coating on the tip. The thicker the coating, the longer the service life of the soldering tip, but the heat transfer efficiency will be greatly reduced.

#### What is the feature of SATA product?

Iron tip with 40,000 solder joints can be called the long-life iron tip. The welding points of SATA iron tip are more than 40,000 points.

SATA electric iron tip coating is subjected to electroplating with optimal pyroconductivity while guaranteeing 40,000 solder joints.





- · Long-life internal heating soldering iron tip made of high-grade and high-quality copper through special processing
- Specially treated surface: alloy layer with high resistance to oxidation and wear. Surface underwent anti-corrosion treatment, ensuring excellent corrosion resistance
- Service life up to 40000 soldering spots ucder normal-use conditions
- Tinned soldering iron tip, making the welding operation faster and more convenient
- This soldering iron tip is sultable for SATA 03261 ceramic internal heating soldering iron

No.	#	8	ā
03274	10	480	6.1

▲ Excluded from lifetime warranty terms

#### 03275 Lead-Free Inner-Heated Soldering Tip, U-Shaped 6C



- · Long-life internal heating soldering iron tip made of high-grade and high-quality copper through special processing
- Specially treated surface: alloy layer with high resistance to oxidation and wear. Surface underwent anti-corrosion treatment, ensuring excellent corrosion resistance
- Service life up to 40000 soldering spots ucder normal-use conditions
- Tinned soldering iron tip, making the welding operation faster and more convenient
- This soldering iron tip is sultable for SATA 03262 ceramic internal heating soldering iron

No.	#	8	ā
03275	10	480	6.1

♠ Excluded from lifetime warranty terms

#### 03276 Lead-Free Inner-Heated Soldering Tip, Conic T-B



- · Long-life internal heating soldering iron tip made of high-grade and high-quality copper through special processing
- Specially treated surface: alloy layer with high resistance to oxidation and wear. Surface underwent anti-corrosion treatment, ensuring excellent corrosion resistance
- Service life up to 40000 soldering spots ucder normal-use conditions
- Tinned soldering iron tip, making the welding operation faster and more convenient
- This soldering iron tip is sultable for SATA 03263 rapid temperature rise dual power soldering

No.	#	8	ā
03276	10	1000	6

♠ Excluded from lifetime warranty terms

#### **Outer-Heated Soldering Iron**



- High-impedance natural mica heating element ensuring high durability
- Complete with different soldering tips suitable for micro and large areas of electronic soldering
- · Easily replaceable heating element

No.	Power	#	8	ā
03210	30W	18	36	7.3
03220	40W	18	36	7.6
03230	50W	-	18	4
03240	60W	-	18	4

Excluded from lifetime warranty terms.

#### Long-life heating core

Heating core made of quality double-layer nickel-chromium wire winded around natural mica from India Surface load area of the heating core with double-layer nickel-chromium wire winding process doubled compared with the previous single-layer nickel-chromium wire winding process, with load borne by the unit area reduced by half Heating core life of SATA external heating iron extended



#### Simple replacement device for heating core

End of the heating core outlet and the end of the power outlet connected via micro-connector crimping process Connection between the heating core and the power supply realized through connector Convenient heating core replacement

#### 03255 Portable Soldering Iron Stand

Each SATA externally-heated electric soldering iron equipped with stand with a natural heat dissipation structure made of bakelite for safety and convenience

▲ Excluded from lifetime warranty terms.



#### Various quality soldering tips available

Advanced surface plating and plating treatment technology adopted for SATA external heating soldering tip

Service life of the welding nozzle prolonged

Excellent thermal conductivity, abrasion resistance and corrosion resistance of the welding nozzle guaranteed







































































#### **Outer-Heated Soldering Tip, Pointed**



<u>c</u>	Δ Δ	-		
No.	Name	Length (A)	Diameter (B)	Tip Size (C)
03241	Outer-Heated Soldering Tip, Ultra Pointed 30W	70mm	4mm	R 0.2
03242	Outer-Heated Soldering Tip, Ultra Pointed 40W	70mm	5mm	R 0.2
03211	Outer-Heated Soldering Tip, Pointed 30W	75mm	4mm	R 0.5
03212	Outer-Heated Soldering Tip, Pointed 40W	75mm	5mm	R 0.5
03213	Outer-Heated Soldering Tip, Pointed 50W	80mm	6mm	R 0.3

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-	A	-

	'			
No.	Name	Length (A)	Diameter (B)	Tip Size (C)
03231	Outer-Heated Soldering Tip, Skew 30W	70mm	4mm	45°
03232	Outer-Heated Soldering Tip, Skew 40W	75mm	5mm	45°
03233	Outer-Heated Soldering Tip, Skew 50W	80mm	6mm	45°

4	υ <u>‡</u>		$\leq$		 m
		_		Α	
	No.		Name		Leng

No.	Name	Length (A)	Diameter (B)	Tip Size (C)
03221	Outer-Heated Soldering Tip, Slotted 30W	70mm	4mm	3
03222	Outer-Heated Soldering Tip, Slotted 40W	75mm	5mm	3
03223	Outer-Heated Soldering Tip, Slotted 50W	80mm	6mm	3.5

- SATA long-life externally-heated soldering iron tip made of quality copper by precision processing
- · Specially treated alloy layer for excellent high temperature oxidation resistance and wear resistance with anti-corrosion surface for excellent corrosion resistance
- Tinned tip of the soldering iron to facilitate welding
- · Suitable for SATA external long-life electric soldering iron

No.	Tip Shape	Power	#	8	<b>™</b>
03211	Pointed	30W	10	-	-
03212	Pointed	40W	10	1000	10
03213	Pointed	50W	10	800	15.6
03221	Slotted	30W	10	1000	8.1
03222	Slotted	40W	10	-	-
03223	Slotted	50W	10	800	14.7
03231	Skew	30W	10	250	4.6
03232	Skew	40W	10	1000	12
03233	Skew	50W	10	300	12.3
03241	Ultra Pointed	30W	10	1000	12
03242	Ultra Pointed	40W	10	1000	12

▲ Excluded from lifetime warranty terms.

#### **Outer-Heated Natural Mica Heating Element**



- Externally-heated mica heating core suitable for SATA external long-life electric soldering iron
- · Heating core with long life
- Heating core made of quality double-layer nickel-chromium wire winded around natural mica from India
- Heating core life of SATA external heating iron extended
- · Simple replacement device for heating core
- End of the heating core outlet and the end of the power outlet connected via micro-connector
- Connection between the heating core and the power supply realized through connector

No.	Power	#	8	ā
03251	30W	10	480	5.7
03252	40W	10	480	6.1
03253	50W	10	480	7
03254	60W	10	480	7.4

▲ Excluded from lifetime warranty terms.

#### **Coiled Soldering Wire**





No.	Model	#	8	ā
90311	0.5mm/250g	-	10	2.6
90312	0.8mm/250g	-	10	2.6
90313	1.0mm/250g	-	10	2.6
90314	1.0mm/500g	-	10	5.6

#### **Led-free Coiled Soldering Wire**



- Led under 0.02% for environment protection and friendly smell
- Even flux distribution for high wielding efficiency
- · RoHS certified

No.	Spec.	#	8	<u></u>
90321	0.5MM/250g	1	10	2.6
90322	0.8MM/250g	1	10	2.6
90323	1.0MM/250g	1	10	2.6
90324	1.0MM/250g	1	10	5.2

▲ Excluded from lifetime warranty terms.

#### 90315 Pocket Pack Soldering Wire 1.0mm/17g



- Meeting national standards and the requirements of federal regulations of the United States
- Made of highly-purified lead tin alloy
- Made from 63% tin and 2% flux and suitable for printed circuit boards with strict temperature limits and other places with limited narrow melting temperature range of lead
- Few solder residues produced, and solder joints, being clean, plump and bright with low corrosivity
- Small smoke and irritation produced, ensuring safe operation of operators for fast melting, fast welding speed, and improved work efficiency

No.	#	8	<u></u>
90315	-	24	0.7

▲ Excluded from lifetime warranty terms.

#### 03511 Plastic Desoldering Pump



- Strong suction, able to realize fast and effective removal of soldering tin, and rapid separation of connectors
- High quality PTFE suction nozzle, featuring high resistance to high temperature and solvent

No.	#	8	<u></u>
03511	12	48	4.1

▲ Excluded from lifetime warranty terms.

#### 03512 Aluminum Desoldering Pump



- Strong suction, able to realize fast and effective removal of soldering tin, and rapid separation of connectors
- High quality PTFE suction nozzle, featuring high resistance to high temperature and solvent

No.	#	8	ā
03512	12	48	4.3

▲ Excluded from lifetime warranty terms.

#### 03513 5Pc. Desoldering Pump Tips



 $\hbox{\bf \cdot} \hbox{ High quality PTFE suction nozzle, featuring high resistance to high temperature and solvent } \\$ 

No.	#	8	ā
03513	25	-	-

▲ Excluded from lifetime warranty terms.

#### 03080 Multi-functional Pen Multimeter





- Automatic range and full-scale overload protection
- Black crystal high-brightness large screen with maximum reading 5999
- Used to measure AC/DC, frequency, capacitance, resistance, diode and continuity
- Room temperature monitoring

No.	#	8	<u></u>
03080	1	18	-





































































#### 03021 **Digital Clamp Meter**



- 3-1/2 digits LCD, with a max. reading of 1999
   Designed to measure DC/AC voltage, AC current, resistance, diode and continuity in addition hase sequence test function is also provided
   Data hold, backlight full-range overload protection

No.	#	8	ā
03021	1	12	6.5

▲ Warranty of 2 years (excluding battery and probe).

# 03022 AC/DC Clamp Meter







- 3-3/4 digits LCD, with a max. reading of frequency measurement: 9999
   Used to measure DC/AC voltage, DC/AC current, resistance, capacitance, frequency, diode and continuity
   Data-hold, backlight, full-range overload protection, etc.

No.	#	8	ā
03022	1	12	6.5

No.			03021	03022		
Property						
Maximum Reading	1999			3999		
Measurement Function	Range	Resolution	Accuracy	Range	Resolution	Accuracy
	200mV	0.1mV	+/-[0.5%+5]	400mV	0.1mV	
	2V	1mV		4V	1mV	/ (0.00/ 5)
C Voltage	20V	10mV	/ (0.00/ 5)	40V	10mV	+/-(0.8%+5)
	200V	100mV	+/-[0.8%+5]	400V	0.1V	1
	600V	1V		600V	1V	+/-(1.0%+5)
	2V	1mV		4V	1mV	+/-(0.8%+5)
214.14	20V	10mV	+/-[1.2%+5]	40V	10mV	
C Voltage	200V	100mV		400V	100mV	+/-(1.2%+5)
	600V	1V	+/-[1.5%+5]	600V	1V	
	-	-	-	40A	0.01A	+/-(3.0%+10)
C Current	-	-	-	400A	0.1A	/ (7.00/ 0)
	-	-	-	600A	1A	+/-(3.0%+6)
	2A	0.001A	+/-(6%+20)=0.4A +/-(5%+10)	40A	0.01A	
C Current	20A	0.01A	+/-[4%+10]≤4A +/-[3%+8]	400A	0.1A	+/-(2.5%+6)
	200A	0.1A	+/-[2.5%+5]	600A	1A	
	600A	1A	+/-[2.5%+5]	DUUA	IA IA	
	200Ω	0.1Ω	+/-[1.2%+5]]	400Ω	0.1Ω	
	2kΩ	1Ω		4kΩ	1Ω	+/-(1.0%+5)
esistance	20kΩ	10Ω	+/-(1%+5)	40kΩ	10Ω	+/-(1.0%+3)
ESISTRICE	200kΩ	100Ω		400kΩ	100Ω	
	2ΜΩ	1kΩ	+/-[1.2%+5]	4ΜΩ	1kΩ	+/-(1.5%+5)
	20ΜΩ	10kΩ	+/-[1.5%+5]	40ΜΩ	10kΩ	+/-(3.0%+10)
	-	-	-	40nF	10pF	
apacitance	-	-	-	400nF	100pF	
deasurements using	-	-	-	4μF	1nF	+/- (5.0%+5)
elative values)	-	-	-	40μF	10nF	1
	-	-	-	100µF	100nF	1
	-	-	-	9.999Hz	0.001Hz	
	-	-	-	99.99Hz	0.01Hz	
	-	-	-	999.9Hz	0.1Hz	( (200 5)
requency	-	-	-	9.999kHz	1Hz	+/- (1.0%+5)
	-	-	-	99.99kHz	10Hz	1
	-	-	-	200kHz	100Hz	
ontinuity and Diode	-1))	0.1Ω	When resistance is ≤ about 30 Ω, the buzzer buzzes	-1))	The buzzer buzzes whe	
esting	<b>→</b> +	1mV	The screen shows an approximation of forward voltage drop of diode; open circuit voltage: approx. 1,48V	<b>→</b> +	The screen shows an a open circuit voltage: ap	approximation of forward voltage drop of oppox. 3V
	Measuring Range	Phase Sequence Indication	Phase voltage accuracy	-	-	-
hase Sequence Test	380V+/-10%,50Hz	Negative phase sequence, reverse phase sequence, missing phase sequence	+/-2%	-	-	-
ommon						
attery			Two 1.5 V AAA bat	teries		
ize (mm)			185 X 74 X 40		202.5 X 7	3.5 X 40
Veight (G)		195	i (battery included)	220 (battery included)		

#### 03025 Wide Jaw Clamp Meter







- 3-3/4 digits LCD, with a max. reading of frequency measurement : 9999
   Used to measure DC/AC voltage, AC current, resistance, frequency, duty cycle, capacitance,
- Data-hold, backlight, flashlight function, full-range overload protection and etc.

No.	#	8	<u> </u>
03025	1	12	6.3

▲ Warranty of 2 years (excluding battery and probe).

# 03026 Wide Jaw AC/DC Clamp Meter







- 3-5/6 digits LCD, with a max. reading of frequency measurement : 9999
   Used to measure DC/AC voltage, DC/AC current, resistance, frequency, duty cycle, capacitance,
- NCV, data-hold, backlight, flashlight, full-range overload protection and etc.

No.	#	8	ā
03026	1	12	6.5

No.			03025			03026
Property						
Maximum Reading			3999			5999
Measurement Function	Range	Resolution	Accuracy	Range	Resolution	Accuracy
	4V	1mV		6V	1mV	
DO Valta	40V	10mV	+/- (0.8%+5)	60V	10mV	+/- (0.8%+5)
DC Voltage	400V	0.1V		600V	0.1V	
	1000V	1V	+/- (1.0%+5)	1000V	1V	+/- (1.0%+5)
	4V	1mV	+/- (0.8%+5)	6V	1mV	+/- (0.8%+5)
AQ Valta	40V	10mV		60V	10mV	/ // ***
AC Voltage	400V	100mV	+/- (1.2%+5)	600V	0.1V	+/- (1.2%+5)
	750V	1V		750V	1V	
	40A	0.01A	+/- (3.0%+8)	60A	0.01A	( (0.00)
AC Current	400A	0.1A	(0.50/.0)	600A	0.1A	+/- (2.5%+6)
	1000A	1A	+/- (2.5%+6)	1000A	1A	
	-	-	-	60A	0.01A	+/- (3.0%+10)
DC Current	-	-	-	600A	0.1A	/ /7.00/ 6\
	-	-	-	1000A	1A	+/- (3.0%+6)
	400Ω	0.1Ω		600Ω	0.1Ω	
	4kΩ	1Ω	+/- (1.0%+5)	6kΩ	1Ω	+/- (1.0%+5)
Basistana	40kΩ	10Ω	+/- (1.0%+5)	60kΩ	10Ω	+/- (1.0%+5)
Resistance	400kΩ	100Ω		600kΩ	100Ω	
	4ΜΩ	1kΩ	+/- (1.5%+5)	6ΜΩ	1kΩ	+/- (1.5%+5)
	40ΜΩ	10kΩ	+/- (3.0%+10)	60MΩ	10kΩ	+/- (3.0%+10)
	40nF	10pF		40nF	10pF	
	400nF	100pF	+/- (5.0%+5)	400nF	100pF	
0	4µF	1nF		4µF	1nF	+/- (5.0%+5)
Capacitance	40µF	10nF		40μF	10nF	
	400µF	100nF		400µF	100nF	
	4000µF	1μF	For reference only	4000µF	1μF	For reference only
	9.999Hz	0.001Hz		9.999Hz	0.001Hz	
	99.99Hz	0.01Hz		99.99Hz	0.01Hz	
	999.9Hz	0.1Hz	+/- (1.0%+5)	999.9Hz	0.1Hz	/ /100/ 5
Frequency	9.999kHz	1Hz	+/- (1.0%+5)	9.999kHz	1Hz	+/- (1.0%+5)
	99.99kHz	10Hz		99.99kHz	10Hz	
	999.9kHz	100Hz		999.9kHz	100Hz	
	9.999MHz	1kHz	For reference only	9.999MHz	1kHz	For reference only
Frequency	-	-	-	40Hz~99.99Hz	0.01Hz	+/- (1.0%+5)
(Use binding clip)	-	-	-	100.0~999.9Hz	0.1Hz	+/- (I.U/o+J/
Duty ratio			5%~95	5%		
Short-circuit beep			Yes			
Diode test			Yes			
Non-contact circuit measurement			No			Yes
Data Retention			Yes			
Backlight			Yes			
Auto shutdown			Yes			
Flashlight function			Yes			
Common						
Battery			3 1.5 V AAA b			
Size (mm)			243 X 87	X 44		
Weight (G)			364 (battery included)		380 (	battery included)
						200



































































#### 03005 Mini Digital Multimeter



- High-performance, low power consumption, auto-range
   Used to measure DC/AC voltage, DC/AC current, resistance, capacitance, continuity test, diode,
- Full-range overload protection

No.	$\Theta$	8	ā
03005	1	16	6.8

▲ Warranty of 2 years (excluding battery and probe).

#### **Mini Digital Multimeter with Frequency Test**







- AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle, continuity test,diode, backlight
- Auto-range
- Full-range overload protection

No.	#	¥	ā
03007	1	16	6.8

No.	C	3005	03	3007
Property				
Maximum Reading		3999	3	999
Automatic/manual range	manual Automatic		Automatic	
Measurement Function	Range	Basic Accuracy	Range	Basic Accuracy
	4V		4V	
DOW II	40V	+/-[0.5%+5]	40V	+/-[0.5%+5]
DC Voltage	400V		400V	
	600V	+/-[1.0%+5]	600V	+/-[1.0%+5]
	400mV	+/-(1.0%+5)	400mV	+/-[1.0%+5]
	4V	+/-[0.8%+5]	4V	+/-[0.8%+5]
AC Voltage	40V		40V	
	400V	+/-(1.0%+5)	400V	+/-[1.0%+5]
	600V		600V	
	4A	+/-[1.0%+7]	4A	+/-[1.0%+7]
DC Current	10A	+/-[1.5%+7]	10A	+/-[1.5%+7]
	4A	+/-[1.5%+10]	4Α	+/-[1.5%+10]
AC Current	10A	+/-[2.5%+10]	10A	+/-[2.5%+10]
	400Ω	+/-(1.0%+5)	400Ω	+/-[1.0%+5]
	4ΚΩ	+/-[0.5%+5]	4ΚΩ	
	40ΚΩ		40ΚΩ	+/-[0.5%+5]
Resistance	400ΚΩ		400ΚΩ	
	4ΜΩ	+/-(1.5%+5)	4ΜΩ	+/-[1.5%+5]
	40ΜΩ	+/-[3.0%+10]	40ΜΩ	+/-[3.0%+10]
	51.2nF	+/-(3.5%+20)	51.2nF	+/-[3.5%+20]
	512nF	+/-[2.5%+5]	512nF	+/-[2.5%+5]
Capacitance	5.12µF		5.12μF	
	51.2µF	+/-[5.0%+5]	51.2μF	+/-[5.0%+5]
	100μF		100μF	
_	-	-	5Hz-500KHz	+/-[1.0%+5]
Frequency	-	-	5MHz	For reference only
Duty ratio	-	-	5%-95%	+/-[2.0%+3]
Short-circuit beep		Yes		/es
Diode test		Yes	,	/es
Other properties				
Data Retention		Yes		/es
Backlight		Yes	1	ves .
Auto shutdown		Yes	1	ves .
CAT level	CAT	III 600V	CAT I	III 600V
Battery	Two 1.5V	AAA batteries	Two 1.5V A	AA batteries
Size (mm)	150 2	( 78 X 38	150 X	78 X 38
Weight (G)	245 (Battery ar	nd jacket included)	245 (Battery and	d jacket included)

#### **Digital Multimeter** 03015







- High performance, low power consumption, auto range function
   AC / DC voltage, AC / DC current, resistance, capacitance, frequency, continuity, diode, backlight function

No.	$\Theta$	8	<u></u>
03015	1	12	10.8

▲ Warranty of 2 years (excluding battery and probe).

#### **Digital Multimeter with Temperature Test** 03017







- High performance, low power consumption, auto range function
   AC / DC voltage, AC / DC current, resistance, capacitance, frequency, continuity, diode, backlight function, temperature measurement

No.	8	8	ā
03017	1	12	10.8

No.	030	15	03017	
Property				
Maximum Reading	399	19	5999	
Automatic/manual range	Auton	natic	Automat	ic
Measurement Function	Range	Basic Accuracy	Range	Basic Accuracy
	400mV	+/-[0.8% + 5]	600mV	+/-[0.8% + 5]
DC Voltage	4V / 40V / 400V	+/-[0.5% + 5]	6V / 60V / 600V	+/-[0.5% + 5]
	1000V	+/-[1.0% + 5]	1000V	+/-[1.0% + 5]
	4V	+/-[0.8% + 5]	6V	+/-[0.8% + 5]
AC Voltage	40V / 400V	+/-[1.0% + 5]	60V / 600V	+/-[1.0% + 5]
	1000V	+/-[1.2% + 5]	1000V	+/-[1.2% + 5]
DC Current	400μA / 4000μA / 40mA / 400mA	+/-[1.0% + 7]	600μA / 6000μA / 60mA / 600mA	+/-[1.0% + 7]
DC CUITEIIL	4A / 20A	+/-[1.5% + 7]	6A / 20A	+/-[1.5% + 7]
AC Current	400μA / 4000μA / 40mA / 400mA	+/-[1.8% + 10]	600μA / 6000μA / 60mA / 600mA	+/-[1.8% + 10]
AC Current	4A / 20A	+/-[2.5% + 10]	6A / 20A	+/-[2.5% + 10]
	400Ω	+/-[1.0% + 5]	600Ω	+/-[1.0% + 5]
Resistance	4kΩ / 40kΩ / 400kΩ	+/-[0.5% + 5]	6kΩ / 60kΩ / 600kΩ	+/-[0.5% + 5]
Resistance	4ΜΩ	+/-[1.5% + 5]	6ΜΩ	+/-[1.5% + 5]
	40ΜΩ	+/-[3.0% + 10]	60ΜΩ	+/-(3.0% + 10)
-	10Hz ~ 1MHz	+/-[1.0% + 5]	10Hz ~ 1MHz	+/-[1.0% + 5]
Frequency	10MHz	For reference only	10MHz	For reference only
	40nF	+/-[3.5% + 20]	40nF	+/-(3.5% + 20)
	400nF	+/-[2.5% + 5]	400nF	+/-[2.5% + 5]
	4μF	+/-[3.5% + 5]	4μF	+/-[3.5% + 5]
Capacitance	40μF	+/-[4.0% + 5]	40μF	+/-[4.0% + 5]
	400µF	+/-[5.0% + 5]	400μF	+/-[5.0% + 5]
	1000μF	For reference only	1000μF	For reference only
Duty ratio	5% ~ 95%	+/-[2.0% + 3]	5% ~ 95%	+/-[2.0% + 3]
	-	-	-20°C ~ 0°C	+/-(6.0% + 5°C )
Temperature	-	-	0°C ∼ 400°C	+/-[1.5% + 4°C ]
	-	-	400°C ∼ 1000°C	+/-[1.8% + 5°C ]
Short-circuit beep	Ye	S	Yes	
Diode test	Ye	S	Yes	
Relative mode test	Ye	S	Yes	
Other properties				
Data Retention	Ye	s	Yes	
Backlight	Ye		Yes	
Auto shutdown	Ye		Yes	
EN61010-1 CAT II/CAT III	CAT III 1		CAT III 100	OV
Battery	9V 6F22E		9V 6F22Bat	
Size (mm)	184 X 8		184 X 89 X	· · · · · · · · · · · · · · · · · · ·
Weight (G)	440 (Battery and		440 (Battery and jac	



































































## 03075 EBTN Intelligent True RMS Multimeter





- 4-5/6-digit true RMS digital multimeter
- Basic measurement features: DC/AC voltage, AC/DC current, resistance, capacitance, frequency, continuity,
- Special measurement: ACV LoZ, AC voltage AC+DC, lowpass filtering, current loop, conductivity, ACV peak • USB data transmission, lithium battery charging protection, square wave output, and automatic alarm for
- · Safe, reliable, all-position 1000V protection, TPR bi-color plastic-coated enclosure, resistant to dropping

No.		8	ā
03075	1	4	5

▲ Warranty of 2 years (excluding fuse, battery and probe).

## 03079 OLED Intelligent True RMS Multimeter







- 4-5/6-digit true RMS digital multimeter
- · Basic measurement features: DC/AC voltage, AC/DC current, resistance, capacitance, frequency, continuity,
- Special measurement: ACV LoZ, AC voltage AC+DC, lowpass filtering, current loop, conductivity, ACV peak
- USB data transmission, lithium battery charging protection, square wave output, and automatic alarm for
- Safe, reliable, all-position 1000V protection, TPR bi-color plastic-coated enclosure, resistant to dropping

No.	#	8	<u></u>
03079	1	4	5

Function	03075 EBTN Intelligent True RMS Multimeter	03079 LED Intelligent True RMS Multimeter	
Safety level	CAT IV 600V/CAT III 1000V	CAT IV 600V/CAT III 1000V	
Maximum Reading	59999	59999	
Automatic/manual range	Automatic/manual	Automatic/manual	
DC Voltage	0.01 mV~1000 V	0.01 mV~1000 V	
AC Voltage	0.01 mV~1000 V	0.01 mV~1000 V	
LoZ ACV	Yes	Yes	
DC Current	0.01 μA ~10 A	0.01 µA ~10 A	
AC Current	0.01 μA ~10 A	0.01 µA ~10 A	
Resistance	0.01 Ω~60 ΜΩ	0.01 Ω~60 ΜΩ	
Capacitance	1 pF~60 mF	1 pF-60 mF	
Frequency Measuring Range	60 MHZ	60 MHZ	
Duty ratio	1%~99%	1%-99%	
Temperature Measurement	-40°C ~1000°C / − 40 ~ 1832F	-40°C -1000°C / − 40 ~ 1832F	
Lowpass filtering	Yes	Yes	
Current loop measurement %(4-20mA)	Yes	Yes	
Conductivity measurement	60.00nS	60.00nS	
Square Wave Output	No	Yes	
Current Transducer	No	1mV/A maximum range 600A (optional)	
ACV peak measurement	Yes	Yes	
USB transmission	Yes	Yes	
Display Type	EBTN	OLED	
Bluetooth	(Optional)	[Optional]	
Charging Function	Yes	Yes	
Input hole mis-plugging alarm	Yes	Yes	
Common			
Power		One 74V/1800mAh lithium ion battery	
Overall dimensions		206mm*95mm*53mm	
Weight	518g (battery included)		

#### **AE3501 Hand-held Insulation Resistance Tester**













- This meter is a hand-held insulation resistance tester integrated the digital multimeter and digital insulation tester. It can be used for testing the DC voltage, AC voltage resistance, and on-off. This meter has such functions as polarity indicator, over range indicator, data holding, manual range and automatic
- It integrates 4 test voltage levels, namely, 100V/250V/500V/1000V
- Humanized design with remote control line for operation by just one person
- · 4000-word reading display with analog bar display
- Automatic voltage release to improve the safety of user operation

No.	#	8	
AE3501	-	30	24

▲ Warranty of 2 years (excluding fuse, battery and probe).

Performance		
DC voltage	400mV/4V/40V/400V/1000V	
AC voltage	400mV/4V/40V/400V/1000V	
Insulation resistance measurement	0.1ΜΩ-2GΩ	
4001	0.1M $\Omega$ -20.00M $\Omega$ (resolution: 0.01M $\Omega$ )	
100V	20.0M $\Omega$ -100.00M $\Omega$ (resolution: 0.1M $\Omega$ )	
0507	$0.1$ Μ $\Omega$ - $20.00$ Μ $\Omega$ (resolution: $0.01$ Μ $\Omega$ )	
250V	20.0M $\Omega$ -200.00M $\Omega$ (resolution: 0.1M $\Omega$ )	
	0.1M $\Omega$ -20.00M $\Omega$ (resolution: 0.01M $\Omega$ )	
500V	20.0M $\Omega$ -200.00M $\Omega$ (resolution: 0.1M $\Omega$ )	
	200M $\Omega$ -500M $\Omega$ (resolution: 0.1M $\Omega$ )	
	0.1M $\Omega$ -20.00M $\Omega$ (resolution: 0.01M $\Omega$ )	
1000V	20.0M $\Omega$ -200.00M $\Omega$ (resolution: 0.1M $\Omega$ )	
	200M $\Omega$ -2000M $\Omega$ (resolution: 1M $\Omega$ )	
Resistance measurement	400Ω-40ΜΩ	
Diode	Yes	
On-off test	Yes	
Manual/automatic range	Switchable (no manual range for insulation resistance)	
Overrange indication	Yes	
Data retention	Yes	
Auto power-off	Yes	
Backlight	Yes	
Power supply	6*1.5VAAA	
Safety level	CATIII 1000V CATIV600V	

## 03055 Slim Digital Multimeter







- LCD with Max. reading of 3999, with higt definition white backlight
   Used to measure DC/AC voltage, DC/AC current, resistance, capacitance, continuity test, diode
- Ultra-thin, easy to hold
- · Auto-range
- Full-range overload protection

No.	8	¥	ā
03055	-	12	6.5

Function	03055 Slim Digital Multimeter
Maximum Reading	3999
Automatic/ manual range	Automatic
DC Voltage	400mV/4V/40V/600V
AC Voltage	400mV/4V/40V/600V
DC Current	400μA/4000μA/40mA/400mA/4A/10A
AC Current	400μA/4000μA/40mA/400mA/4A/10A
Resistance	400Ω/4κΩ/40κΩ/400κΩ/4ΜΩ/40ΜΩ
Capacitance	10nF/100nF/1μF/10μF/100μF
Frequency	No
Duty ratio	No
Temperature	No
Short-circuit beep	Yes
Diode test	Yes
Data Retention	Yes
Backlight	White
Auto shutdown	Yes
Common	
Power	Two 1.5 V AAA batteries
Size	175×78×18.5mm
Weight	1906 (battery included)



































































## Slim Digital Multimeter with Temperature Tester







- •LCD with Max. reading of 3999, with higt definition white backlight
  •Used to measure DC/AC voltage, DC/AC current, resistance, capacitance, continuity test, diode, frequency, duty cycle, temperature
- · Ultra-thin, easy to hold

No.	$\Theta$	8	ā
03057	-	12	6.5

▲ Warranty of 2 years (excluding fuse, battery and probe).

Function	03057 Slim Multimeter with Temperature Test		
Maximum Reading	3999		
Automatic/ manual range	Automatic		
DC Voltage	400mV/4V/40V/400V/600V		
AC Voltage	400mV/4V/40V/400V/600V		
DC Current	400μΑ/4000μΑ/40mA/400mA/4A/10A		
AC Current	400μA/4000μA/40mA/400mA/4A/10A		
Resistance	$400\Omega/4$ k $\Omega/4$ 0k $\Omega/4$ 00k $\Omega/4$ Μ $\Omega/4$ 0Μ $\Omega$		
Capacitance	10nF/100nF/1µF/10µF/100µF		
Frequency	10Hz/100Hz/1KHz/10KHz/100KHz		
Duty ratio	5%-95%		
Temperature	-20°C∼1000°C (4°F∼1832°F)		
Short-circuit beep	Yes		
Diode test	Yes		
Data Retention	Yes		
Backlight	White		
Auto shutdown	Yes		
Common			
Power	Two 1.5 V AAA batteries		
Size	175×78×18.5mm		
Weight	190G (battery included)		

#### 03031A Infrared Thermometer





- Non-contact temperature thermometer
- Three-color backlight display
- The temperature change point can be quickly detected according to the settings.
- Distance coefficient ratio is 12:1

No.	#	8	ā
03031A	1	12	5

▲ Warranty of 2 years (excluding battery).

Performance	
Measuring Range	-38°C ~ +520°C ( -364 °F ~ +968 °F )
Spectral Response	7.5 ~ 13.5µm
Measurement accuracy	+/-2 ° C (4° F) or 2% of the reading, taking the one with bigger error range
Response time	1s, 95%
Distance coefficient ratio D:S	12:1
Emissivity	0.95
Reading Resolution	0.1°C /0.1 °F
Backlight automatic shutdown time	15s
Automatic shutdown time	60s
Operating temperature	0°C ~ 40°C
Operating humidity	<75%
Battery	Two 1.5 V AAA batteries
Size (mm)	160 X 118 X 40
Weight (G)	155g (battery included)

#### 03032 Industrial Infrared Thermometer 800

# 03036 High-Precision Infrared Thermometer 33.5-42







- Capable of measuring temperature of up to 800°C Simple operation Adjustable transmission power

No.	#	8	ā
03032	-	24	6.3

▲ Warranty of 2 years (excluding battery).

Temperature Range	-20°C~800°C
Accuracy	+/-2°C or +/-2% reading (+/-3.6°F or +/-2% reading) Of the two reading choose the maximum value.
Resolution Ratio	0.1°C
Emissivity	Adjustable between 0.10~1.00 (0.95 by default), adjusting 0.01 each time
Automatic shutdown time	Automatic shutdown after no operation for about 1 minute
Operating temperature	0~40°C, relative humidity ≤85%
Battery model/quantity	Two 1.5 V AAA batteries
Weight	145+/- 10g (battery not included)

- · High-precision measurement
- 6 set of memories

No.	#	¥	ā
03036	-	24	6.3

▲ Warranty of 2 years (excluding battery).

Temperature Range	33.5°C~42°C
Measurement accuracy	+/-0.3°C
Resolution	0.1°C
Automatic shutdown time	Automatic shutdown after no operation for about 30s
Record storage	Automatically storing 6 sets of recent measurements
Temperature measurement	Green backlight lit when <374°C, while red backlight lit when measuring temperature ${\approx}374^{\circ}C$
Operating temperature	16°C-35°C, relative humidity ≤85%
Battery model/quantity	Two 1.5 V AA batteries
Weight	135+/- 10g (battery not included)



































































#### **AE3508 Handhold Oscilloscope**



- This oscilloscope is a multi-functional handheld meter which integrates the functions of dual channel, 25MHz digital storage oscilloscope and 6000-count true RMS digital multimeter for field test, maintenance
- Wide test range from 10mV/div to 500V/div
- Automatic tracking and measurement by touching without manual shifting
- Concave BNC socket to prevent the terminal from being damaged when falling
- · Side strap for easy holding.

No.	$\Theta$	8	ō
AE3508	-	12	16

▲ Warranty of 2 years (excluding fuse, battery and probe).

Performance	
Display	3.5-inch TFTLCD,240 x 320 pixels
Broadband	DC-25MHz[-3dB]
Number of channels	2
Rising lime	14ns
Sampling frequency	100MS/S
Horizontal sensitivity	10ns/div-5s/div
Horizontal accuracy	0.01%+1 pixel
Vertical sensitivity	10mV/div-500V/div
Vertical precision	± 3%+1 pixel
Vertical resolution	8bit
Saving depth	1Kpts
Saving mode	Setting, waveform
Coupling	AC, DC
Input impedance	1MΩ,≤20pF
Trigger source	CHA\CHAB\ external trigger
Trigger edge	Trigger on rising or falling edge
Trigger coupling	AC, DC
Multimeter performance	
Display	6000 count
Maximum allowable input voltage	CATIII 600V
DC voltage	600mV/6V/60V/600V/1000V
AC voltage	600mV/6V/60V/600V/1000V
Resistance	600Ω/6kΩ/60kΩ/600kΩ/6ΜΩ/60ΜΩ
Capacitance	6nF/60nF/600nF/6nF/60nF/600nF/6mF
Diode test	Yes
On-off test	Yes

#### **Heat Gun**



- Double insulation protection, ensuring higher safety High durability with lifecycle over 700 hours

- Thermal-shutdown design ensures good protection of heating components
   Hardened housing made of nylon and fiberglass provides protection from impact
- Keep good protection of the fragile heating core from dropping

#### **Digital Heat Gun**





- Large screen display parameters
- Five sets of parameters can be set in tool
- Double insulation protection, ensuring higher safety • High durability with lifecycle over 700 hours
- Thermal-shutdown design ensures good protection of heating components
- $\bullet$  Hardened housing made of nylon and fiberglass provides protection from impact • Keep good protection of the fragile heating core from dropping

No.	Voltage (V)	Output Power (W)	Temperature Range	Air Flow (L/ MIN)	$\Theta$	¥	ā
97921A	220	1600	350-500° C	350/500	1	8	8
97922A	220	2000	80-600° C	250-500	1	8	8.24
97923A	220	2300	80-650° C	200-550	1	8	8.24

▲ Warranty of 3-month excluding the heating core.

#### **Heat Gun Set**



#### Product List

#### 09811A

No.	Product name	Quantity
97921A	Heat Gun	1
97904	Reflector Nozzle	1
97902	Spreader Nozzle	1

#### 09812A

No.	Product name	Quantity
97922A	Heat Gun	1
97904	Reflector Nozzle	1
97901	Deflector Nozzle	1
97903	Reduction Nozzle	1

#### 09813A

No.	Product name	Quantity
97922A	Heat Gun	1
97904	Reflector Nozzle	1
97905	Reduction Nozzle for Welding	1
97906	Reduction Nozzle for Precision Welding	1
97907	Reflector Nozzle for Soldering	1
97908	Seam Roller	1

No.	#	8	<u></u>
09811A	14.3	14.3	14.3
09812A	14.3	14.3	14.3
09813A	14.3	14.3	14.3

▲ Warranty terms of tool set comply with the individual product.

# Industrial hot air gun accessories (Others only applicable to industrial hot air gun except for the pressure roller)

#### 97901 **Deflector Nozzle**





• Application: Protecting glass when peeling off the glass frame paint

No.	#	8	<u></u>
97901	1	-	-

▲ Excluded from lifetime warranty terms.

# 97902 Spreader Nozzle





• Application: Scraping paint, etc

No.	#	8	ā
97902	6	180	7.8

▲ Excluded from lifetime warranty terms.

#### 97903 **Reduction Nozzle**





• Application: Stripping tags, etc

No.	#	8	<u> </u>
97903	1	-	-

















































#### 97904 Reflector Nozzle

#### **Reflector Nozzle for Soldering**









• Application: Forming processing and copper pipe welding

No.	#	8	ā
97904	1	90	3.9

▲ Excluded from lifetime warranty terms.

· Application: Thermoplastic casing

No.	#	8	ā
97907	-	6	4.5

▲ Excluded from lifetime warranty terms.

# 97905 Reduction Nozzle for Welding





#### 97908 Seam Roller





• Application: Pendulum welding

No.	#	**	ā
97905	-	140	6.2

▲ Excluded from lifetime warranty terms.

• Application: Furniture facing and repair welding

No.	$\Theta$	8	園
97908	-	60	7.4

50

▲ Excluded from lifetime warranty terms.

# 97906 Reduction Nozzle for Precision Welding



#### 97936 **Anti-heat Protective Cover**



• Application: Attach to the heat gun for • Application: Repair welding protecting workers from burns

No.	#	*	ā
97906	-	180	8.2

lack Excluded from lifetime warranty terms.



▲ Excluded from lifetime warranty terms.

No.

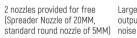
97936



#### **Industrial Heat Gun**









Large turbofan for stable output air volume and low



Customized industrial motors adopted for continuous operation of production line











Suitable for various heating operation Used with quick welding nozzle for higher welding efficiency

- Industrial hot air gun with customized industrial motor, suitable for continuous use on production lines
- Air outlet temperature up to 700° C
- · High-power fan for high air supply efficiency and low noise
- · Anti-watering and anti-electric design, suitable for outdoor work
- Design featured by quick replacement of the heating core and carbon brush
- Fragile heating core, no dropping

No.	#	¥	ā
97927	-	5	16

▲ 1-year warranty for overall unit except heating core.

# **Optional Components of Industrial Heat Gun**

#### 97930 Tubular Nozzle Ф5mm



· Application: Plastic welding and car body repair

No.	#	8	<u></u>
97930	-	50	1.8

▲ Excluded from lifetime warranty terms.

#### **Triangular Speed Welding Nozzle 7mm** 97933



• Application: Fast plastic welding with plastic welding rod

No.	#	8	ā
97933	-	50	1.1

<sup>▲</sup> Excluded from lifetime warranty terms.

#### 97935 Tacking Nozzle



· Application: Fine welding operation

No.	#	8	ō
97935	-	50	1

<sup>▲</sup> Excluded from lifetime warranty terms.

#### **Spreader Nozzle**



· Application: Small area welding and heating

No.	Spec. (mm)	$\Theta$	¥	<u>a</u>
97928	20	-	50	2.6
97929	40	-	50	2.7







































































# **Round Speed Welding Nozzle**



• Application: Fast plastic welding with plastic welding rod

No.	Spec. (mm)	#	8	ā
97931	Ф5	-	50	1.4
97932	Ф4	-	50	1.4

▲ Excluded from lifetime warranty terms.

#### 97934 Silicone Seam Roller 40mm



· Application: Facing

No.	#	8	ā
97934	-	50	9.6

▲ Excluded from lifetime warranty terms.

#### **Adjustable Heat Gun**



- Unique overheat protection, ensuring normal operation of the heating element
- Long life ceramic heater and motor, ensuring long-term continuous operation
- Technical
- Voltage 220V 50Hz
- Output Power 2000W
- Switch Position (I / II / III)
- Temperature Range I: 50° C II: 50-450° C III: 50-600° C
- · Air Flow I: 250L/MIN II: 250L/MIN III: 500L/MIN

No.	#	8	<u> </u>
97924	-	6	8.8

▲ Warranty of 3-month excluding the heating core.

#### 97925 Digital Heat Gun



- Unique overheat protection, ensuring normal operation of the heating element
- · Long life ceramic heater and motor, ensuring long-term continuous operation
- Technical
- Voltage 220V 50Hz
- Output Power 2000W
- Switch Position ( I / II)
- •Temperature Range I: 50° C II: 50° -650°
- Air Flow I: 250-500L/MIN II: 250-500L/MIN

No.	#	8	<u></u>
97925	-	6	9.1

▲ Warranty of 3-month excluding the heating core.

#### 97926 6Pc. Adjustable Heat Gun Set



- Unique overheat protection, ensuring normal operation of the heating element
- Long life ceramic heater and motor, ensuring long-term continuous operation
- Technical
- Voltage 220V 50Hz
- Output Power 2000W
- Switch Position ( I / II)
- •Temperature Range I: 50° C II: 50-650° C
- Air Flow I: 250-500L/MIN II: 250-500L/MIN

No.	#	*	<u> </u>
97926	-	6	14.7

▲ Warranty terms of tool set comply with the individual product.

# Overview of SATA Lighting Series:

SATA Glare Flashlight Series: Suitable for all kinds of professional users with small size, high brightness and powerful function	273-274
SATA Alkaline-Battery Flashlight Series: Suitable for entry-level users with affordable price and rich variety	275-283
High-brightness ABS Flashlight Series: Floodlight: Suitable for a wide range of operation lighting and users with special working requirements with high brightness, wide range of illumination, various shapes and powerful extension function	276-279
<b>Headlamp Series:</b> Spotlight: suitable for polling, long distance lighting and operation lighting with high brightness, long irradiation distance, and hands-free feature	281-282
Portable Worklight Series: Suitable for automobile repair and other machine repair environment You can choose products according to different color block labeling and performance description of each product.	279-283













































































- · Wireless charging / wired charging dual charging mode
- IP65 waterproof and dustproof
- Pocket size only, easy to carry and store
- · Maximum 300lm LED (Front), 100lm LED (Torch)
- · Plastic body case with soft rubber. Lightweight and durable
- $\bullet$  Can fold or set at different angle with continuous adjustable lamp stand
- High efficiency COB strip LED provides a wide range of lighting angles of 110 degrees
- · Stepless dimming (Front light)
- Back and bottom magnets can be fixed on the metal surface to release hands
- 360 degree swivel hook at back to hang to release hands
- Constant current drive, stable brightness, no noise

#### **Product parameters**

- · Luminous flux: 300-100lm LED (Front), 100lm LED (Torch)
- Operating time: 3-6 hours (Front light) / 6 hours (Torch light)
- Charging time: 2.5 hours(USB charging), 3.5 hours(wireless charging)
- · Switch mode: light touch to turn on the light (Torch light Front light off), long press to adjust the front light)
- · battery: Build-in 1500mAh Li-poly battery
- · Weight: 200g
- Dimensions (L/W/H): 133x68x25mm

#### Standard equipment:

- · Wireless Charging Folding Worklight 300lm x1
- •1m USB type-C cable x1

No.	L×W×H(mm)	Rated Luminous Flux(Im)	Rated Maximum Battery Life(h)	Rated Charging Time(h)	Battery(MAH)	Weight(kg)	$\Theta$	8	ā
90606	133×68×25	300-100 (Front light) 100 (Dome light)	3-6 (Front light) 6 (Dome light)	Approx. 2.5 (wired) Approx. 3.5 (wireless)	1500 lithium polymer battery	0.2	-	34	9.4

₿5ATA

▲ Excluded from lifetime warranty terms.

#### 90607 Wireless Charging Folding Worklight





- Wireless charging / wired charging dual charging mode IP65 waterproof and dustproof
- · Impact resistant case
- Maximum 600lm LED (Front), 100lm LED (Torch) · Plastic body case with soft rubber. Lightweight and durable
- Can fold or set at different angle with continuous adjustable lamp stand
- High efficiency COB strip LED provides a wide range of lighting angles of 110 degrees
- Stepless dimming (Front light)
- · Back and bottom magnets can be fixed on the metal surface to release hands
- 360 degree swivel hook at back to hang to release hands
- · Constant current drive, stable brightness, no noise

#### **Product parameters:**

- Luminous flux: 600-100lm LED (Front), 100lm LED (Torch)
- Operating time: 3-10 hours (Front light) / 10 hours (Torch light)
- Charging time: 2.5 hours(USB charging), 4.5 hours(wireless charging) • Switch mode: light touch to turn on the light (Torch light - Front light - off), long press to adjust the front light)
- Battery: Build-in 2600mAh Li-ion battery
- · Weight: 302g
- Dimensions (L/W/H): 205x55x40mm

#### Standard equipment:

- Wireless Charging Folding Worklight 600lm x1
- •1m USB type-C cable x1







## 90608 Wireless Charging Folding Slim Worklight





- Wireless charging / wired charging dual charging mode
- IP65 waterproof and dustproof
- Thin aluminum alloy lamp head, suitable for using in narrow space
- Maximum 600lm LÉD (Front), 100lm LED (Torch)
- Plastic body case with soft rubber. Lightweight and durable
- Stainless steel shaft can be folded 180 degrees and rotated 270 degrees
- High efficiency COB strip LED provides a wide range of lighting angles of 110 degrees
- Stepless dimming (Front light)
- Back and bottom magnets can be fixed on the metal surface to release hands
- •180 degree swivel hook at bottom to hang to release hands
- Constant current drive, stable brightness, no noise

#### **Product parameters:**

- Luminous flux: 600-100lm LED (Front), 100lm LED (Torch)
- Operating time: 3-10 hours (Front light) / 10 hours (Torch light)
- Charging time: 2.5 hours(USB charging), 4.5 hours(wireless charging)
- Switch mode: light touch to turn on the light (Torch light Front light off), long press to adjust the front light)
- Battery: Build-in 2600mAh Li-ion battery
- · Weight: 230g
- Dimensions (L/W/H): 325x44x38mm

#### Standard equipment:

- Wireless Charging Folding Slim Worklight 600lm x1
- •1m USB type-C cable x1

No.	L×W×H(mm)	Rated Luminous Flux(Im)	Rated Maximum Battery Life(h)	Rated Charging Time(h)	Battery(MAH)	Weight(kg)	$\Theta$	¥	M
90608	325×44×38	600-100 (Front light) 100 (Dome light)	3-10 (Front light) 10 (Dome light)	Approx. 2.5 (wired) Approx. 4.5 (wireless)	2600 lithium polymer battery	0.2	-	50	16.1

▲ Excluded from lifetime warranty terms.

#### 90609 Single Output Wireless Charger





- · Single output wireless charger
- Stick to Wireless Worklight and metal surface with build-in magnet
- Charging for mobile phones with wireless charging function

#### **Product parameters:**

- Output power: 5W
- Input: 5V / 2a, USB type-C input
- Weight: 190g
- Dimensions (L/W/H): 55x24x115mm

No.	#	8	ā
90609	-	30	10.4

▲ Excluded from lifetime warranty terms.

# 90610 Double Output Wireless Charger

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- Double output wireless charger
- •Stick to Wireless Worklight and metal surface with build-in magnet
- Charging for mobile phones with wireless charging function

#### **Product parameters:**

- Output power: 5W/single charger
- Input: 5V / 2a, USB type-C input
- Weight: 270g
- · Dimensions (L/W/H): 52x35x204mm

No.	#	8	ā
90610	-	30	13.6















































## 90609A Multipurpose Battery Charger





- Adaptor 1pc (2 USB output mouth)
- Type C wire 1PC
- Micro USB wire 1PC





▲ Excluded from lifetime warranty terms.











- IP54 water and dust proof suitable for outdoor application
- 600LM High brightness COB for repair and maintenance in dark place
- Flexible using in different places with accessories of hook and magnets
- 100LM Torch light on the top
- · Swivel head for convenient using

#### No. L×W×H Brightness Battery (AH) Working Time $\overline{\otimes}$ (mm) (LM) (Hour) 90717A $210 \times 58 \times 32$ 600 (Front) 2.0 ≈2.5-8 50 16.33 110 (Top)

▲ Excluded from lifetime warranty terms.

#### 90722A Work Light 400LM









- IP54 water and dust proof suitable for outdoor application
- 400LM High brightness COB for repair and maintenance in dark place
- Flexible using in different places with accessories of hook and magnets
- •80LM Torch light on the top
- · Swivel head for convenient using

No.	L×W×H (mm)	Brightness (LM)	Battery (AH)	Working Time (Hour)	$\Theta$	¥	ā
90722A	208×48×28	400 (Front) 80 (Top)	2.0	≈3-5	1	20	13.83

▲ Excluded from lifetime warranty terms.

#### 90704B Waterproof Worklight 400lm



No.	L×W×H (mm)	Brightness (LM)	Battery (AH)	Working Time (Hour)	$\square$	¥	ā
90704B	200×50×30	400	2.0AH	3H	-	20	-

#### Folding Worklight 250lm 90621



- Light and small, easy to hold
  Can set at different angle with continuous adjustable lamp stand
  Maximum 250lm LED (Front), 70lm LED (Torch)

  Can be a small to the continuous adjustable lamp stand
  Maximum 250lm LED (Front), 70lm LED (Torch)
- High efficiency COB strip LED provides a wide range of lighting angles of 110 degrees
   Back and bottom magnets can be fixed on the metal surface to release hands
- 360 degree swivel hook at back to hang to release hands

#### **Product parameters:**

- Luminous flux: 250lm LED (Front), 70lm LED (Torch)
- Operating time: 3.5 hours (Front light) / 8 hours (Torch light)
- Charging time: 2.5 hours
- Switch mode: Short press to turn on the light (Torch- Front light-off)
- Battery: Build-in 1000mAh Li-poly battery
- Weight: 127g
- Dimensions (L/W/H): 186x47x30mm

#### Standard configuration

- Folding work light 250lmx1
- •1m micro USB cable x1
- 5v1a charger x1

No.	L×W×H(mm)	Rated Luminous Flux(Im)	Rated Maximum Battery Life(h)	Rated Charging Time(h)	Battery(MAH)	Weight(kg)	$\blacksquare$	¥	<u></u>
90621	186×47×30	250 (Front light) 70 (Dome light)	3-5(Front light) 8 (Dome light)	About 2.5	1000 lithium ion battery	0.1	-	50	12.4

▲ Excluded from lifetime warranty terms.

#### 90720A Pen Light 300LM



- Small size as pen and easy to carry
- 300LM High brightness COB for repair and maintenance in dark place
- 200LM Torch light on the top
- Type C charging mouth

No.	L×W×H (mm)	Brightness (LM)	Working Time (Hour)	$\Theta$	¥	Ō
90720A	162×14×17	300 (Front) 200 (Top)	≈2.5	1	50	4.13

▲ Excluded from lifetime warranty terms.

# AE5923 Work Light



- · Smart and easy to carry
- 240ml and 80lm two levels of brightness
- Strong magnet at the bottom

No.	L×W×H (mm)	Luminous flux	Working Time (COB)		N.W. (kg)		¥	ā
AE5923	89×23×17.5	240	1.3	2.5	0.04	12	96	8













































































- · Heavy duty IP54 cover suitable for outdoor application
- 350LM High brightness LED
- 80LM Led torch light on the top
- · Swivel hook at both ends for convenient using
- Two modes of wireless charging and wired charging

No.	L×W×H (mm)	Brightness (LM)	Battery (AH)	Working Time (Hour)	#	¥	ā
90703C	450×44×50	350 (Front) 80 (Top)	2.6	≈4-9	1	25	10.13

▲ Excluded from lifetime warranty terms.

#### 90619 **Battery Replaceable Folding Worklight 500lm**



- IP54 waterproof and dustproof
- Exchangeable battery can be replace when used outdoors, greatly extending the Operating time Maximum 500lm LED (Front), 100lm LED (Torch)
- Plastic body case with soft rubber. Lightweight and durable
- Can fold or set at different angle with continuous adjustable lamp stand
   High efficiency COB strip LED provides a wide range of lighting angles of 110 degrees
- Stepless dimming (Front light)
- Back and bottom magnets can be fixed on the metal surface to release hands
- 360 degree swivel hook at back to hang to release hands Constant current drive, stable brightness, no noise

#### **Product parameters:**

- Luminous flux: 500-100lm LED (Front), 100lm LED (Torch)
- Operating time: 3-8 hours (Front light) / 8 hours (Torch light)
- Charging time: 3.5 hours
- Switch mode: light touch to turn on the light (Torch light Front light off), long press to adjust the front light)
- battery: 2600mAh Li-ion battery
- Weight: 302g
- Dimensions (L/W/H): 58x32x200mm

#### Standard equipment:

- Battery Replaceable Folding Worklight 500lm x1
- •18650 Li-ion rechargeable battery x1
- •1m USB type-C cable x1
- •18650 Li ion battery charging stand x1
- 5V 1A charger x1

No.	L×W×H(mm)	Rated Luminous Flux(Im)	Rated Maximum Battery Life(h)	Rated Charging Time(h)	Battery(MAH)	Weight(kg)	$\Theta$	¥	ā
90619	58×32×200	500-100(Front light) 100 (Dome light)	3-8(Front light) 8 (Dome light)	About 3.5	2600 lithium ion battery	0.3	-	50	18.6









AE5921/AE5922

- · Foldable, light and compact
- Three lights, suitable for a variety of lighting applications
- Main Light has red flash function
- · Bottom magnet can fix to steel surface
- Top magnet used as a picker
- Bottom clip can be clamped on the edge of plate material
- · Hidden hook can hang in suitable position
- USB Type-C charging port with charging cable

No.	L×W×H(mm)	Luminous flux	Working Time (COB)	Charging Time	N.W.(kg)	$\Theta$	8	ā
AE5921	130×41.5×26.5	220	3	2.5	0.12	-	-	-
AE5922	158×45×30.5	360	3	4	0.18	-	-	-

▲ Excluded from lifetime warranty terms.

#### 90620 Folding Worklight 400lm



- Thin aluminum alloy lamp head, suitable for using in narrow space
  Stainless steel shaft can be folded 180 degrees and rotated 270 degrees
  Maximum 400Im LED (Front), 70Im LED (Torch)
  Plastic body case with soft rubber. Lightweight and durable

- High efficiency COB strip LED provides a wide range of lighting angles of 110 degrees
- Stepless dimming (Front light)
   Back and bottom magnets can be fixed on the metal surface to release hands
- 180 degree swivel hook at bottom to hang to release hands
- · Constant current drive, stable brightness, no noise

#### **Product parameters:**

- · Luminous flux: 400-70lm LED (Front), 70lm LED (Torch)
- Operating time: 3-8 hours (Front light) / 8 hours (Torch light)
- · Charging time: 3 hours
- Switch mode: touch switch + Front light roller switch, rolling dimming (5% 100%)
- Battery: 2000mAh Li-ion battery
- Weight: 220g Dimensions (L/W/H): 300x44x34mm

#### Standard equipment:

- Folding Worklight 400lm x1
- •1m Micro-USB cable x1
- 5V 1A charger x1





























































# Multi-purpose Flashlight (High Color Rendering)













- · Flashlight 250LM
- Color matching lamp 120LM
- Maximum service life 45 h
- · Sidelight used for frame work and painting during auto repair and color matching in printing, and headlights used as flashlights or battery pack to charge the phone

No.	#	*	ā
90791	10	40	3

▲ Warranty of 6 months (excluding the battery)

# 90738 Super Bright Rechargeable Flashlight 270lm

Classic Flashlight



- CREE XP-E2R3 high-power LED light source imported from USA with original packaging
- High-performance lithium ion rechargeable battery provided with drive circuit of 6-level linear dimming mode (rather than PWM dimming mode), without strobe or noise for eyesight protection and keeping quiet at night
- · Super highlight: 2.5h; Highlight: 8h; Normal light: 100h
- Self-defense blasting flash: 10h; Framing signal: 34h; SOS distress signal: 20h
   Integrated solid cylinder ensuring water resistance and preventing accidental removing.
- Operated with one standard 18650 lithium ion battery or two standard CR123A disposable lithium
- · Fluorescent silica gel waterproof ring adopted at the front for searching at night
- · Complying with IP67 waterproof standard
- · High-light flashlight subjected to normal temperature rise due to high brightness and high
- · Product service time based on test data obtained under initial performance and full charge of the battery at room temperature (20°C)

No.	#	¥	<b>®</b>
90738	-	6	2.3

▲ Excluded from lifetime warranty terms.

#### 90743 Multipurpose Rechargeable Flashlight 120lm

Classic model with universal nickel-metal hydride rechargeable batteries and AA alkaline batteries for high expansibility



- Suitable for industrial lighting, security patrol and camping expedition
- CREE XP-E2R3 high-power LED light source imported from USA with original packaging
- Equipped with high-performance rechargeable Ni-MH battery for operation for more than 4 hours after full charge
- Solid integrated flashlight body for water resistance and against accidental removing
- Drive circuit of linear dimming mode (rather than PWM dimming mode) for eyesight protection and keeping quiet at night without strobe or noise
- Operated with two standard AA batteries or two rechargeable Ni-MH batteries
- Fluorescent silica gel waterproof ring adopted at the front to facilitate search at night
- Complying with IP67 waterproof standard
- · High-light flashlight subjected to normal temperature rise due to high brightness and high calorific value
- · Product service time based on test data obtained under initial performance and full charge of the battery at room temperature (20°C)

No.	#	8	<b>\overline{\over</b>
90743	-	6	2.5

▲ Excluded from lifetime warranty terms.

#### 90745 Penlight 60lm

Portable with common alkaline battery



- · Pen-shaped for easy operation
- CREE R2 high-power LED light source imported from America
- · Reflective orange peel cup made of aluminum alloy for soft light
- Operated with two standard AAA batteries
- · Dustproof and splashproof for safety
- · High-light flashlight subjected to normal temperature rise due to high brightness and high

No.	#	8	ā
90745	_	12	1.4



































#### 90746 Mini Rechargeable Flashlight 280lm

Just a little longer than a cigarette with high brightness and various functions



- Light: Optimal 18650 rechargeable flashlight
- Highlight: CREE series high-power LED imported from the USA with original packaging.
- Long service time: Illumination time up to 100 hours
- Intelligence: HDD 6-level (3+3) linear LED drive circuit with hidden function
- Firmness: Aviation-grade aluminum alloy housing for long life and wear resistance
- · Utility: Invertible with switch against unintended activation
- Benefits: Complimentary quality anti-slipping wrist rope
- High-light flashlight subjected to normal temperature rise due to high brightness and high calorific value
- Product service time based on test data obtained under initial performance and full charge of the battery at room temperature (20°C)

No.	#	8	ā
90746	-	6	1.6

▲ Excluded from lifetime warranty terms.

for outdoor polling

Long range: 295m
Highlight: CREE series high-power LED imported from the USA with original packaging

90748 Long Throw Rechargeable Flashlight 460lm

• Long service time: Illumination time up to 100 hours

Large light cup with strong long-range performance

- Intelligence: HDD 6-level (3+3) linear LED drive circuit with hidden function
- Firmness: Aviation-grade aluminum alloy housing for long life and wear resistance
- Utility: Invertible with switch against unintended activation
- · Quality silicone tactical ring on the body for better grip
- Benefits: Complimentary quality anti-slipping wrist rope
- High-light flashlight subjected to normal temperature rise due to high brightness and high calorific value
- Product service time based on test data obtained under initial performance and full charge of the battery at room temperature (20°C)

No.	8	¥	<u></u>
90748	-	6	2.4

▲ Excluded from lifetime warranty terms.

# 90747 Zoomable Rechargeable Flashlight 480lm

Adjustable range with long range for point light source and short range for area light source



#### Precision: New full-reflection optical focusing lens with precision optical focusing structure for free switch of irradiation range

- Highlight: CREE series high-power LED imported from the USA with original packaging
- Long service time: Illumination time up to 100 hours
- Intelligence: HDD 6-level (3+3) linear LED drive circuit with hidden function
- Firmness: Aviation-grade aluminum alloy housing for long life and wear resistance
- High-light flashlight subjected to normal temperature rise due to high brightness and high calorific value
- Product service time based on test data obtained under initial performance and full charge of the battery at room temperature (20  $^{\circ}\text{C}$  )

No.	#	8	<b>\overline{\over</b>
90747	-	6	2

▲ Excluded from lifetime warranty terms.

# 18650 Li-Ion Battery



SEALA

90749B

No.	Spec.	—————————————————————————————————————	99	<u></u>
	Flat-end 18650 battery	12	96	4.8
90749B	Pivot-end 18650 battery	12	96	4.8







# 90750 18650 Li-Ion Battery Charger





No.	Spec.	#	8	ā
90750	Dedicated high-performance charger provided	-	12	1.7

▲ Excluded from lifetime warranty terms.

#### **Aluminum Flashlight**























90741A

- American Cree 3W LED light source adopted with brightness of up to 90LM Single light intensity up to 12,000 MCD  $\,$
- Energy conservation compared with conventional xenon bulbs
   Dustproof and splashproof for safety
- Batteries not provided
- $\bullet$  Product performance subjected to occasional upgrade and improvement from SATA to meet various requirements and parameters subjected to those shown on the package Note: Do not tap the flashlight, and prevent it from dropping.

No.	Spec.	Light bulb specification	$\Theta$	8	<b>®</b>
90732A	2 AA batteries	5LED	6	60	7.3
90741A	3 AAA batteries	Cree LED 3W	6	36	7.1

▲ One-year warranty provided under normal use (excluding bulbs)

#### 90715 Portable Worklight



- · Non-flammable ABS handle for comfort and safety
- 10m-long 3C-certificated power supply extension cord for safety
   Cymbiform switch for easy operation and safety
- · Galvanized antirust metal lampshade facilitating bulb replacement
- Product performance subjected to occasional upgrade and improvement from SATA to meet various requirements and parameters subjected to those shown on the package

No.	L(mm)	Voltage(V) Light bulb specifications		Weight(kg)	$\Theta$	¥	ā
90715	350	220	60	0.9	-	10	12.4

▲ Excluded from lifetime warranty terms.

#### **Dual Purpose Headlamp**





Three AAA batteries provided with the product for free





USB cable provided with the product for free

- $\bullet\,\mbox{Dual LED}$  design, suit for large area and detail lighting
- Memory mode function
   Sensor on/off switch function
- Detachable design, can be used as independent light source

No.	SMDLED	COBLED	SMDCOB	Charging time	$\Theta$	8	Ø
90901 AAA Battery	250lm/2h 75lm/5h	180lm/3h	300lm/1.2h	-	6	24	4.6
90902 Li-Ion Battery	250lm/4h 75lm/10h	180lm/6h	350lm/2.5h	About 3h	6	24	4

## 90903 Portable aluminum alloy headlamp 140LM





- · Aircraft-grade aluminum alloy housing
- Weighing only 118 grams for handiness, firmness and durability
- 2600mAh lithium battery
- · Dual charging mode
- \*Direct charge battery compartment
- \*Taking battery out for charging
   Luminophor: American CREE high-power LED

- LED drive circuit:
  Linear constant current drive, without strobe or noise
  Six-gear (3+3) hidden dimming output with memory function
  Three lighting modes: high, medium and low
  Maximum output: 140 lumens & 8 hours (high mode)

- Operating light endurance: no less than 26 hours
- Max. endurance: 120 h
- \*Three hidden flashing modes: sharp-flash, positioning and SOS
- Drop resistance level: 1m; Waterproof grade: IP67; Waterproof immersion level: 1m
- Standard configuration
- · Light, angle-adjustable and direct charge headlamp X1
- 18650 lithium-ion rechargeable battery X1
- •Smart charger for lithium-ion battery with Ø 3.5 port X1"



No.	Continuous lighting time(h)	Irradiation distance(m)	Light intensity(CD)	Falling distance(m)	Lumen(LM)	Waterproofing grade	$\Theta$	8	ā
90903	8 (high) /120 (low)	70	1225	1	140/50/10	IP67	-	6	2.4

▲ Warranty of 12 months (excluding the battery)

## **Multipurpose Spotlight Headlamp**



- Suitable for industrial lighting, security patrol and camping expedition
   American CREE-1W highlight LED light source with brightness up to 70LM
- Irradiation range over 50m
- Dustproof and splashproof for safety
- Operated with three AAA batteries for more than 5 hours
- Product performance subjected to occasional upgrade and improvement from SATA to meet various requirements and parameters subjected to those shown on the package

No.	#	8	ā
90710	-	12	2.3

▲ Excluded from lifetime warranty terms.

## Li-Ion Waterproof Headlamp



- COB LED adopted for floodlight illumination, with maximum brightness up to 150 lumens
- Three-level switch (weak/strong/flicker) with working time of 4-12 hours
- IP54 dustproof and splashproof for outdoor operation
- Helmet clasp and USB universal charging cable available
- Constant current for little brightness change from full power to no power

No.	#	8	ā
90716	6	24	6

▲ Warranty of 1 year, excluding USB cable and battery







































































# **High Brightness Waterproof Floodlight**





- IP67 dust and water proof
- High-power floodlighting
   Working duration: 3-9 hours

No.	L×W×H (mm)	Max. Brightness (LM)	Battery (AH)	Working Time (Hour)	$\Theta$	¥	<u></u>
90765A	167×18×43	1500	4.5	≈5	1	6	3.6
90766A	194×1124×52	3000	7.8	≈4.5	1	6	5.8

▲ Excluded from lifetime warranty terms.

## 90708A Portable Li-Ion Spotlight

Upgraded light source and brightness Upgraded charging base not compatible with old model Upgraded battery and capacity





- High quality LED ilumination
- · High power LED, for a wide range and long distance lighting
- Strong lighting: 600LM
- Save lighting: 300LM
- Easy to use and carry
- · Double switches design
- Three steps lighting: strong lightingsave lightingand flashing function
- Fluorescence straps
- Adjustable bracket
- · Special charger base
- · Dust&water proof
- Easy to charge
- · Charged with special charger base for 4-7hours
- · Full capacity
- 3.7v 6000mÁh LF ion battery for 3 6hrs lighting

No.	Capacitance	$\Theta$	8	<u></u>
90708A	Lithium battery 6000 MAH	-	4	5.8

▲ Excluded from lifetime warranty terms.

## 90736 3-in-1 Quick Change Flashlight



\* This product does not include a charger plug

## Zoom lamp holder

- •3.320 lm
- Condensation: 140m
- Operating time: 2h





## Zoom lamp hose holder

- 700m
- •180 lm
- Operating time: 5.5h



- Foldable in 360°

















- Quick-change light holder
- Three kinds of light holders for multiple applications Conventional long-range zoom light COB high-intensity short-beam work light, flexible tube zoom light fully folded for easy carrying,
- Constant current
- USB charging interface
- Strong magnetic base
- IP rating: IP54
- Providing battery power indicator, convenient to check the status of battery

## Operation instructions:

- Before using it for the first time, charge it for at least 8h.
- When the charging indicator comes on in red, the charging begins; when it turns to green, the charging is completed.
- · Switch cycle: Low High OFF
- Remove the battery from the product, which will not be used for a long time. It is recommended to fully charge the battery once every 30 days.
- Always use a power adapter with an output of 5V 1A or 5V 2A to charge the product.
- Red switch light indicates the battery level is lower than 10% and reminds of battery charging.

No.	#	*	ā
90736	-	10	9.5



































#### 03710 13Pc. Electronic Tool Set





- •1Pc. Outer-Heated Soldering Iron 30W
- Proc. Soldering Iron Bracket
   Proc. Pocket Pack Soldering Wire 1.0mm/17g
- 1Pc. Plastic Desoldering Pump
- 1Pc. Fine Pointed Tips Tweezers 125mm
- 1Pc. Electricians Scissors 138mm
- 1Pc. Circuit Tester 145mm
- •1Pc. Mini Long Nose Pliers 5.5'
- 1Pc. Mini Diagonal Pliers 5"
- 1Pc. Screwdriver, Slotted 3.2x75mm
- 1Pc. Screwdriver, Slotted 5x75mm
- 1Pc. Screwdriver, Phillips #0x75mm • 1Pc. Screwdriver, Phillips #1x75mm
- · Special designed for electronic engineers and technicians
- · Adding the anti-freezing component to avoid split in winter and offering a comfortable touch
- Adding the reinforced lining to avoid deformation when used

Note: please protect the tool bag from water to avoid damaging bag

No.	#	*	ā
03710	4	16	15.9

▲ Warranty terms of tool set comply with the individual product.

# 03750 9Pc. Electronic Tool Set



- •1Pc. Electronic Long Nose Pliers 5"
- •1Pc. Electronic Cutting Pliers 5" •1Pc. Wire Stripper with Cutter 6"
- 1Pc. Electricians Scissors 138mm
- 1Pc. Digital Circuit Tester
- 1Pc. Electricians Insulated Tape
- 1Pc. Fine Pointed Tips Tweezers 125mm
- 1Pc. Screwdriver, Slotted 5x75mm
- 1Pc. Screwdriver, Phillips #1x75mm
- Special designed for electronic engineers and technicians
- Adding the anti-freezing component to avoid split in winter and offering a comfortable touch
- Adding the reinforced lining to avoid deformation when used Note: please protect the tool bag from water to avoid damaging bag

No.	#	8	ā
03750	-	12	9

▲ Warranty terms of tool set comply with the individual product.

03760 28Pc Electronic Tool Set

## 03720 22Pc. Electronic Tool Set



- •1Pc. Outer-Heated Soldering Iron 30W
- 1Pc. Soldering Iron Bracket
- •1Pc. Pocket Pack Soldering Wire 1.0mm/17g
- •1Pc. Plastic Desoldering Pump
- •1Pc. Fine Pointed Tips Tweezers 125mm •1Pc. ESD Nylon Toothbrush-Shaped Brush
- 1Pc. ESD Wrist Strap1Pc. Digital Circuit Tester
- 1Pc. Zinc Alloy Snap-Off Knife, 13-Point, 9x80mm
- •1Pc. ESD Wire Stripper 5", 0.8-2.6mm
- •1Pc. Mini Long Nose Pliers 5.5'
- •1Pc. Mini Diagonal Pliers 5"
- 2Pc. Precision Screwdriver, Slotted (1x40,2x50mm)
- 2Pc. Precision Screwdriver, Phillips (#000x40,#00x50mm)
- 3Pc. Screwdriver, Slotted (3.2x75,5x75,6x100mm)
- 3Pc. Screwdriver, Phillips (#0x75,#1x75,#2x100mm)
- · Special designed for electronic engineers and technicians
- · Adding the anti-freezing component to avoid split in winter and offering a comfortable touch feeling
- · Adding the reinforced lining to avoid deformation when usedNote: please protect the tool bag from water to avoid damaging bag

Note: please protect the tool bag from water to avoid damaging bag

No.	#	8	<u> </u>
03720	4	16	26.7

▲ Warranty terms of tool set comply with the individual product.



- •1Pc. Soldering Iron Bracket • 1Pc. Pocket Pack Soldering Wire 1.0mm/17g
- 1Pc. ESD Wrist Strap
- 1Pc. Plastic Desoldering Pump
- •1Pc. Fine Pointed Tips Tweezers 125mm
- 1Pc. ESD Nylon Toothbrush-Shaped Brush
- 1Pc. Digital Circuit Tester
- Pc. Electricians Scissors 138mm
   Pc. Multipurpose Wire Stripper 8
- 1Pc. Electronic Long Nose Pliers 5" 1Pc. Electronic Cutting Pliers 5"
- 1Pc. Adjustable Wrench 6"
- 8Pc. Folding Hex Key Set (1.5,2,2.5,3,4,5,6,8mm)
- 3Pc. Screwdriver, Slotted (6x38,3.2x75,5x100mm)
- 3Pc. Screwdriver, Phillips (#2x38,#0x75,#1x100mm)

• 1Pc. Tape Measure 3mx16mm

No.

- · Special designed for electricians and electronic technicians to repair electric and electronic appliance
- · Adding the anti-freezing components into bag fabric to avoid split in winter and offering a comfortable touch feeling
- · Adding the reinforced lining of bag to avoid deformation when used Note: please protect the tool bag from water to avoid damaging bag

03760 ĥ M

12.2







































- 1Pc. Mini Digital Multimeter 1Pc. Circuit Tester 145mm
- •1Pc. Electricians Insulated Tape •1Pc. Adjustable Wrench 6"
- 7Pc. Ball Point Hex Key Set • 1Pc. Combination Pliers 6"
- 1Pc. Long Nose Pliers 6"
- 1Pc. Diagonal Pliers 6"
- 2Pc. Screwdriver, Slotted (3.2x75,6x100mm)
- 2Pc. Screwdriver, Phillips (#0x75,#2x100mm)
- 1Pc. Plastic Snap-Off Knife, 8-Point, 18x100mm • 1Pc. Tape Measure 3mx16mm
- 1Pc. Aluminum Flashlight, 2-Cell AA
- Special designed for electricians and electronic technicians to repair electric and electronic appliance
- · Adding the anti-freezing components into bag fabric to avoid split in winter and offering a comfortable touch feeling
- Adding the reinforced lining of bag to avoid deformation when used Note: please protect the tool bag from water to avoid damaging bag

No.	#	8	ā
03790	1	6	13.5

▲ Warranty terms of tool set comply with the individual product.

## 03780 25Pc. Electricians Tool Set



- 1Pc. Aluminum Desoldering Pump 1Pc. Fine Pointed Tips Tweezers 125mm
- IPc. Fine Pointed Tips Iweezers
   IPc. Digital Circuit Tester
   IPc. Wire Stripper with Cutter 7'
   IPc. Electricians Insulated Tape
   IPc. 1/4" Dr. Spinner Handle
   IPc. 1/4" Dr. 6Pt. Socket 5mm
   IPc. 1/4" Dr. 6Pt. Socket 6mm
   IPc. Adjustable Wrench 6"

- 1Pc. Combination Pliers 6" 1Pc. Long Nose Pliers 6" 1Pc. Diagonal Pliers 5"
- •6Pc. 6-in-1 Interchangeable Screwdriver Set
   •1Pc. Hickory Claw Hammer 0.5Lb.
   •1Pc. Flat Second Cut File 6"

- •1Pc. Round Second Cut File 6" •1Pc. Aluminum Flashlight, 2-Cell AA
- Special designed for electricians and electronic technicians to repair electric and electronic appliance
   Adding the anti-freezing components into bag fabric to avoid split in winter and offering a comfortable touch feeling
- Adding the reinforced lining of bag to avoid deformation when used Note: please protect the tool bag from water to avoid damaging bag

No.	#	8	ā
03780	-	6	14.6

▲ Warranty terms of tool set comply with the individual product.

## 03795 32Pc. Electricians Tool Set





• 1Pc. Outer-Heated Soldering Iron 40W

Plc. Soldering from Bracket
 Plc. Pocket Pack Soldering Wire 1.0mm/17g
 Plc. Aluminum Desoldering Pump

Proc. Adjustable Wrench 8"
 Proc. Long Arm Ball Point Hex Key Set [1.5,2,2.5,3,4,5,6,8,10mm]
 Proc. Combination Pliers 7"

- 1Pc. Long Nose Pliers 6" 1Pc. Diagonal Pliers 6"
- SPc. Screwdriver, Slotted (3x75,5x100,6x150mm)
   3Pc. Screwdriver, Phillips (#0x75,#1x100,#2x150mm)
   1Pc. Hickory Claw Hammer 0.5 Lb.

- 1Pc. Mini Hacksaw 6" 1Pc. Plastic Snap-Off Knife, 8-Point, 18x100mm
- Pc. Tape Measure 5mx19mm
   Pc. Aluminum Flashlight 3-Cell AAA
- Special designed for electricians and electronic technicians to repair electric and electronic appliance
  - Adding the anti-freezing components into bag fabric to avoid split in winter and offering a
- Adding the reinforced lining of bag to avoid deformation when used Note: please protect the tool bag from water to avoid damaging bag

No.	#	8	<u> </u>
03795	1	4	18

▲ Warranty terms of tool set comply with the individual product.

## 09535 56Pc. Telecom Tool Set



• 1Pc. Soldering Iron Bracket • 1Pc. Pocket Pack Soldering Wire 1.0mm/17g

• 1Pc. Plastic Desoldering Pump • 1Pc. Aluminum Flashlight 1-Cell AAA

•1Pc. Combination Pliers 7 •1Pc. Long Nose Pliers 6" •1Pc. Diagonal Pliers 6"

• 1Pc. Diagonal Pilers 6"
• 1Pc. 1/4" Dr. Bit Driver
• 1Pc. 1/4" Dr. Bit Driver
• 1Pc. 1/4" Hex Shank Socket Holder, 25mm Length
• 3Pc. 1/4" Hex Shank Stocket Holder, 25mm Length
• 3Pc. 1/4" Hex Shank Bits, 25mm Length, 180tted (4,5.56mm)
• 3Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#2,#3)
• 3Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torx (TT10, TT15,TT20)
• 1Pc. Adjustable Wench 8"

- IPC. Adjustable wrench o
- SPC. Long Arm Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 2Pc. Screwdriver, Slotted (5x/50,6x/50mm)
- 2Pc. Screwdriver, Phillips (#1x/5, #2x/50mm)
- 3Pc. Precision Screwdriver, Sloted (2x/5,3X/100,4x/100mm)
- 3Pc. Precision Screwdriver, Phillips (#000x/5,#0x/100, #1X/100mm)

•1Pc. Tape Measure 3mx16mm

No.	#	8	ā
09535	-	2	9.9

A Warranty terms of tool set comply with the individual product.





- 1Pc. Mini Multimeter
- 1Pc. Digital Circuit Tester 1Pc. Wire Stripper With Cutter 7"
- 1Pc. Electricians Insulated Tape 1Pc. Outer-Heated Soldering Iron 30w
- 1Pc. Soldering Iron Bracket
- 1Pc. Pocket Pack Soldering Wire 1.0mm/17g 1Pc. Plastic Desoldering Pump
- Pc. Fine Pointed Tips Tweezers 125mm
   Pc. Combination Pliers 8"

- IPC. LOMDINATION PIIER'S 8"
   IPC. LONG NOSE PIIER'S 6"
   IPC. Diagonal Plier'S 6"
   IPC. Diagonal Plier'S 6"
   I3PC. 1/4" Dr. 6Pt. Socket (4,4,5,5,5,5,6,7,8,9,10,11,12,13,14mm)
   IPC. 1/4" Dr. Spirner Handle
   IPC. 1/4" Dr. Bit Adaptor 1/4" Fx1/4" Hexagon

- -3Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (4,5.56mm)
  -3Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#2,#3)
  -3Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torx®(TT10,TT15,TT20)
- 1Pc. Fiberglass Handle Claw Hammer 0.5Lb. 1Pc. Adjustable Wrench 6"
- 9Pc. Long Arm Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 3Pc. Screwdriver, Slotted (3.2x75,5x100,6x150mm)
   3Pc. Screwdriver, Phillips (#0x75,#1x100,#2x150mm)
- 6Pc. Precision Screwdriver Set, Slotted & Phillips
  1Pc. Plastic Snap-off Knife, 8-Point, 18x100mm
- 1Pc. Tape Measure 3mx16mm
- Special designed for telecommunication industry, used for telecommunication equipment installation and repair

No.	$\blacksquare$	8	ā
09536	-	2	21

▲ Warranty terms of tool set comply with the individual product.

## 62601 **Digital Circuit Tester**



- Convenient and economical, and capable of operation with no batteries
- Elegant and multi-purpose
- LCD display with the straightforward reading
- Induction testing available for induction breakpoints, wire breaking points, microwave radiation and leakage detection, etc
- Direct or indirect measurement of 12, 36, 55, 110, 220V AC/DC current for wide application

- · It cannot be used to test the 380V power supply.
- Do not use it as screwdriver.

No.	L(mm)	#	8	<b>a</b>
62601	130	24	144	5.3

▲ Excluded from lifetime warranty terms.

## **Circuit Tester**





- Measurement range no more than 500VAC
- · Shank made of quality Cr-V steel with hard heat treatment for durability
- · Made to CE standard for safety
- Portable 62501 provided with electroplated test holder made of highly elastic steel
- · Not used as screwdriver

No.	L(mm)	$\Theta$	₩	ā
62501	145 (with pen holder)	24	480	12
62502	190	24	72	3.1

A Warranty of electrical parts of one year under normal use

## 62602 Digital Circuit Tester













Blue clear display circuit induction test

Contact voltage LED Light

Wire continuity test

- testailable for detection of AC and DC voltage, and segmented LCD display (display max. reference value)
- Test range: DC 12/36/55V, AC 70~250V
- · Available for checking on/off states of circuits, distinguishing zero wire and phase wire, finding break-point, and detecting battery level
- · With non-contact induction test function, available for detecting automobile high voltage branch wires
- With LED lighting, blue display design, facilitating test in a dark environment

Before conducting test, first do self-inspection for the test pen, and test a known circuit with the inspected pen. If the test fails, please replace the battery. If the pen still does not work, please contact the dealer

No.	L(mm)	#	***************************************	ā
62602	140	10	120	7.9









































































62603 Multi-functional Digital Circuit Tester

- Multi-functioned as circuit tester and tightening with exchangeable Slotted and Phillips bits
- Rechargeable through Type-C output
- Available for detection of AC and DC voltage, and segmented LCD. Test range: 12-250AC/DC
- · Available for checking on/off states of circuits, distinguishing zero wire and phase wire, finding break-point
- With non-contact induction test function, available for detecting automobile high voltage
- With LED lighting, torch functional and facilitating test in a dark environment

Before conducting test, first do self-inspection for the test pen, and test a known circuit with the inspected pen. If the test fails, please replace the battery. If the pen still does not work, please contact the dealer

No.	Test Range	L×W×H(mm)	#	8	<u></u>
62603	12-250V	145×23×20	15	60	2.7

▲ Excluded from lifetime warranty terms.

## **62702A High-precision Non-contact Test Probe**



Ahnut 12V-1000V

50Hz/60Hz

0oC~40oC

About 48g

2x1.5V AAA battery

162X23X27mm

[The "S" function button indicator is on]

AC voltage test range

Frequency Auto power-off Battery under-voltage warning Operating temperature Battery Size Weight

· Safety level CAT III 1000V

- Three voltage signal intensity indicators
- · LED for operation in dark environment
- Prompt mode: sound and light prompt

No.	#	8	ā
62702A	15	60	6.3

▲ Exclude from lifetime warranty terms.

## **Ratcheting Cable Cutter**





- Used for cutting copper and aluminum cables and armoured cables
- Not used for stranded steel wires, stranded steel-conductor aluminium wires and steel wire
- Two-stage driver for labor-saving cutting
- Special linkage type feeding mechanism allows for faster feeding and higher cutting efficiency
- · lightweight, compact structure, easy to carry

No.	Spec.	L(mm)	Max. Cutting Diameter (mm)		¥	ā
72511	240mm <sup>2</sup>	245	36	3	6	4.9
72512	400mm <sup>2</sup>	320	52	3	6	6.6

▲ Excluded from lifetime warranty terms.

#### 03109 **Electricians Knife, Straight Blade 70mm**



- $\, \cdot \,$  It is made of special hard steel containing manganese and thus boasts good toughness
- The blade hardness is greater than 52HRC (Rockwell hardness), achieving high durability and strong cutting power
- The handle is made of imported rosewood, achieving aesthetic appearance and comfortable operation

- Please keep the blade clean and dry after operation.
- · Keep blade away from saline environments to prevent rusting
- Please preserve the product with antirust paint before putting it into a long-term stoppage
- This product is uninsulated and thus shall never be operated with power on, for fear of an
- The handle is made of wood and thus shall never be knocked with force, for fear of cracking

No.	#	8	ā
03109	20	40	6

## 03110 Electricians Knife, Curved Blade 70mm



- •It is made of special hard steel containing manganese and thus boasts good toughness
- The blade hardness is greater than 52HRC (Rockwell hardness), achieving high durability and strong cutting power
- The handle is made of imported rosewood, achieving aesthetic appearance and comfortable operation

## Note

03131

- Please keep the blade clean and dry after operation
- Keep blade away from saline environments to prevent rusting
- $\bullet \ \text{Please preserve the product with antirust paint before putting it into a long-term stoppage } \\$
- This product is uninsulated and thus shall never be operated with power on, for fear of an accident
- The handle is made of wood and thus shall never be knocked with force, for fear of cracking

No.	#	8	ā
03110	20	40	5.9

▲ Excluded from lifetime warranty terms.

**Electricians Scissors** 



- Made of stainless steel with hardness up to HRC52-56
- · Serrated blade for antislip when operating
- Cutting capecity: 13-16AWG
- Overall length 138mm, blade length 42mm

No.	#	8	ā
03131	12	48	6.1

▲ Excluded from lifetime warranty terms.

## 03141 6Pc. Precision Screwdriver Set, Slotted & Phillips Tips



- All screwdriver bits made of CrVMo through special heat treatment, ensuring high hardness and toughness. Hardness above 52HRC (Rockwell hardness)
- · Precisely designed and manufactured chunk capable of locking the required bits safely
- Screwdriver rod made of professional aviation aluminum, featuring high strength, light weight and high corrosion resistance; miniature bits stored inside the screwdriver rod
- Screwdriver with holder made of high quality manganese steel and treated by fine polishing and electroplating, easy to carry
- · Stylish lightweight pen-type design, being your good helper in household use

No.	Spec.	$\Theta$	¥	ā
03141	Phillips: PH00,PH0,PH1 Slotted: 1.6mm,2mm,24mm	-	20	1.2

## 03142 6Pc. Precision Screwdriver Set, Phillips & Torx® Tips



- All screwdriver bits made of CrVMo through special heat treatment, ensuring high hardness and toughness. Hardness above 52HRC [Rockwell hardness]
- · Precisely designed and manufactured chunk capable of locking the required bits safely
- Screwdriver rod made of professional aviation aluminum, featuring high strength, light weight and high corrosion resistance; miniature bits stored inside the screwdriver rod
- Screwdriver with holder made of high quality manganese steel and treated by fine polishing and electroplating, easy to carry
- Stylish lightweight pen-type design, being your good helper in household use

No.	Spec.	$\Theta$	8	ā
03142	Torx: T5,T6,T7,T8 Phillips: PH00,PH0	-	10	0.6



































































#### 09311 **6Pc. Precision Screwdriver Set, Slotted Tips**



- Applicable to the main+V151tenance and repairof TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- · Unique rotary screw cap design, easy to use and labor saving

No.	Spec.	$\Theta$	8	M
09311	Slotted: 1.0X40,14X50,2.0X50,24X50,3.0X50,3.5X50mm	6	24	10.1

▲ Warranty terms of tool set comply with the individual product.

#### 09312 6Pc. Precision Screwdriver Set, Slotted & Phillips Tips



- Applicable to the main+V151tenance and repair of TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- Unique rotary screw cap design, easy to use and labor saving

No.	Spec.	$\Theta$	8	M
09312	Slotted: 14X50,2.0X50,2.4X50,3.0X50 Phillips: PH0X50,PH00X50	6	24	10.4

▲ Warranty terms of tool set comply with the individual product.

#### 09313 6Pc. Precision Screwdriver Set, Torx® Tips



- · Applicable to the main+V151tenance and repairof TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- · Unique rotary screw cap design, easy to use and labor saving

No.	No. Spec.		8	ā
09313	Torx: T6X50,T7X50,T8X50,T9X50,T10X50,T15X50	6	24	10.3

A Warranty terms of tool set comply with the individual product.

#### 09314 7Pc. Precision Screwdriver Set, Slotted & Phillips Tips





- Applicable to the main+V151tenance and repair of TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- · Unique rotary screw cap design, easy to use and labor saving

No.	Spec.	$\Theta$	8	ā
09314	Slotted : 14X50,2.0X50,24X50,3.0X50 Phillips : PH0X50,PH00X50,PH000X40	6	24	10.7

A Warranty terms of tool set comply with the individual product.

## 09315 7Pc. Precision Screwdriver Set, Torx® Tips



- Applicable to the main+V151tenance and repairof TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- · Unique rotary screw cap design, easy to use and labor saving

No.	Spec.	$\bigoplus$	8	ā
09315	Torx: T5X50,T6X50,T7X50,T8X50,T9X50,T10X50,T15X50mm	6	24	10.8

▲ Warranty terms of tool set comply with the individual product.

## **9Pc. Precision Screwdriver Set, Slotted & Phillips Tips**





- Applicable to the main+V151tenance and repairof TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- · Unique rotary screw cap design, easy to use and labor saving

No.	Spec.	$\Theta$	8	ð
09316	Slotted : 1.0X40,2.0X50,24X75,3.0X75,4X100 Phillips : PH0X75,PH1X100,PH00X75,PH000X40	6	12	6.2

A Warranty terms of tool set comply with the individual product.

#### 15Pc. Precision Screwdriver Set 09317





- Applicable to the main+V151tenance and repair of TV, clock & watch, computer, glasses, communication equipment, optical instrument, VCR, telephone, toy & model, camera, and various precision instruments and equipment
- The rod is made of importer SVCM+alloy steel, and has been subject to precision machining and heat treatment, achieving best torque and hardness. The cutting tip is blackened
- Unique rotary screw cap design, easy to use and labor saving

No.	Spec.	#	8	M
09317	Slotted : 1.0X40,2.0X50,3.0X50,3.5X50 Phillips : PH0X50,PH00X50,PH000X40 Hex : 1.5X50,2.0X50,2.5X50,3.0X50 Torx : T6X50,T8X50,T10X50,T15X50	5	12	7.1

▲ Warranty terms of tool set comply with the individual product.

## **Precision Screwdriver, Slotted**



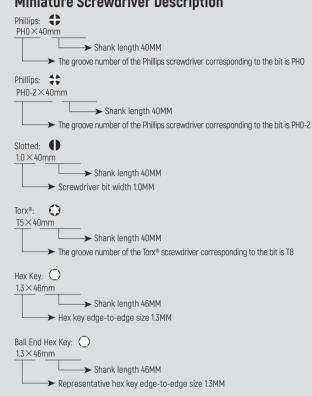




- · Suitable for maintenance and repair of TV, clock, computer, glasses, communication instrument, optical instrument, video recorder, telephone, toy model, camera and all kinds of precision instrument and equipment
- Imported SVCM+ shank with heat treatment
- Matte-electroplated shank surface with phosphated and blackened tip for accuracy
- Rotary turncap adopted

No.	Spec. (mm)	#	8	ā
62802	1.0x40	12	432	8
62803	1.2x40	12	432	7.8
62804	1.4x50	12	432	8
62805	1.6x50	12	432	8
62806	1.8x50	12	432	8
62807	2.0x50	12	432	8
62808	2.0x75	12	432	8.7
62809	2.4x50	12	432	9.5
62810	2.4x75	12	432	10.2
62811	3.0x50	12	432	8.5
62813	3.0x75	12	432	9.3
62816	3.0x100	12	432	10.3
62817	3.5x50	12	432	11
62821	4.0x100	12	432	8
62822	4.0x150	12	288	10.9

# **Miniature Screwdriver Description**



## **Precision Screwdriver, Phillips**







- Suitable for maintenance and repair of TV, clock, computer, glasses, communication instrument, optical instrument, video recorder, telephone, toy model, camera and all kinds of precision instrument and equipment
- Imported SVCM+ shank with heat treatment
- Matte-electroplated shank surface with phosphated and blackened tip for accuracy
- Rotary turncap adopted

No.	Spec. (mm)	$\blacksquare$	8	<b>5</b>
62903	#000x40	12	432	7.4
62907	#000x75	12	432	8.7
62904	#00x50	12	432	9.3
62908	#00x75	12	432	9.3
62905	#0x50	12	432	9.4
62910	#0x75	12	432	10.2
62911	#0x100	12	432	11
62906	#1x50	12	432	10
62915	#1x100	12	432	12.4
62916	#1x150	12	288	9.7



































































## **Precision Screwdriver, Torx®**



- Suitable for maintenance and repair of TV, clock, computer, glasses, communication instrument, optical instrument, video recorder, telephone, toy model, camera and all kinds of precision instrument and equipment
- Imported SVCM+ shank with heat treatment
- Matte-electroplated shank surface with phosphated and blackened tip for accuracy
- Rotary turncap adopted

No.	Spec. (mm)	#	8	ā
63012	T3x40	12	432	7.9
63013	T4x40	12	432	7.9
63001	T5x50	12	432	8
63002	T6x50	12	432	8.9
63003	T7x50	12	432	8.7
63004	T8x50	12	432	9.3
63005	T9x50	12	432	9.5
63008	T9x60	12	432	9.4
63006	T10x50	12	432	9.3
63007	T15x50	12	432	10.3
63009	T10x60	12	432	9.8
63010	T15x60	12	432	10.7
63011	T20x60	12	432	11.7

## **Precision Screwdriver, Hexagon**



- Suitable for maintenance and repair of TV, clock, computer, glasses, communication instrument, optical instrument, video recorder, telephone, toy model, camera and all kinds of precision instrument and equipment
- Imported SVCM+ shank with heat treatment
- $\bullet \ \, \text{Matte-electroplated shank surface with phosphated and blackened tip for accuracy } \\$
- Rotary turncap adopted

No.	Spec. (mm)	#	8	M
63101	0.67x40	12	432	7.8
63102	0.9x40	12	432	7.9
63103	1.3x50	12	432	8.1
63104	1.5x50	12	432	8.1
63105	2.0x50	12	432	6.5
63106	2.5x50	12	432	9.4
63112	2.5x75	12	432	10.3
63107	3.0x50	12	432	10.4
63113	3.0x75	12	432	11.4

## **Precision Screwdriver, Ball Point, Hexagon**



- Suitable for maintenance and repair of TV, clock, computer, glasses, communication instrument, optical instrument, video recorder, telephone, toy model, camera and all kinds of precision instrument and equipment
- Imported SVCM+ shank with heat treatment
- Matte-electroplated shank surface with phosphated and blackened tip for accuracy
- Rotary turncap adopted

No.	Spec. (mm)	$\Theta$	¥	<b>a</b>
63201	1.3x50	12	432	8.1
63202	1.5X50	12	432	8.9
63207	2.0x50	12	432	8.8
63210	2.5x75	12	432	10.3
63211	3.0x75	12	432	11.3

## 03371 ESD Nylon Toothbrush-Shaped Brush





- It is applicable to dust-free plant or laboratory in industries including electronics, communications, semiconductor and optics.
- This product can withstand normal cleaning agents such as gasoline, alcohol, acetone and Freon, without damage to appearance and performance.
- Performance parmeters:
- Surface resistance of brush holder: <106 $\Omega$
- •Surface resistance of bristle: <109 $\Omega$

## Size/Specifications:

- Brush length × width: 175mm × 12mm
- Brush head length imes width: 40mmimes12mm
- Bristle height: 18mm
- •Arranement of bristle: 8 holes/row imes 2

No.	#	8	Ō
03371	10	160	6.2

▲ Excluded from lifetime warranty terms.

## 03372 ESD Nylon U-Shaped Brush





- It is applicable to dust-free plant or laboratory in industries including electronics, communications, semiconductor and optics.
- •This product can withstand normal cleaning agents such as gasoline, alcohol, acetone and Freon, without damage to appearance and performance.
- · Performance parmeters:
- Surface resistance of brush holder: <106 $\Omega$
- Surface resistance of bristle: <109 $\Omega$

## Size/Specifications:

- Brush length × width: 115mm × 55mm
- Brush head length imes width: 95mm imes 45mm
- Bristle height: 25mm
- Arranement of bristle: 14 holes/row imes 7

No.	#	*	ā
03372	10	80	12.2

## 03310 ESD Wrist Strap



- The wrist strap may be optionally stretchable to 2.5M
- The wrist strap applies unique knitted mesh structure which ensures uniform load distribution and good resistance to deformation and no-clean
- · Safe, reliable, able to discharge static within 0.1 s
- · Allowing for safe operation in a clean room

No.	#	¥	ā
03310	-	18	1.4

▲ Excluded from lifetime warranty terms.

# 62701 Digital Tire Pressure Gauge



- · Light weight, compact structure, easy to use
- It can measure vehicle's tire pressure
- It can measure tire thread depth for safe driving
- Accuracy: +/-0.1 BAR
- Units: PSI, BAR
- Auto power off
- LCD backlight: Easy to read in low light environment

No.	#	8	ā
62701	10	40	6.4

▲ Exclude from lifetime warranty terms.

## 03311 ESD Liquid Dispenser Bottle 60ml





- Applicable to electronic manufacturers and various laboratories
- Stainless steel resistant to strong corrosive solvents
- Stainless steel pump with unique mechanical structure and bottle body made from highdensity polyethylene material for holding various solvents
- Capable of holding various cleaning agents, oil remover, rosin cleaning agents, ethanol, pure alcohol, methanol acetone and water-based solution
- Anti-static design for operation safety in electrostatic protection environment
- Pump head of each alcohol bottle sealed with plastic film before delivery for internal cleanliness
- Proper dosage obtained by gently pressing the pump head once to avoid solvent overflowing and dirt infiltration
- $\bullet$  Pump head with a hinged stainless steel cover to prevent impurities from entering the bottle when not in use
- Precise pump head valve against solvent volatilization

No.	#	8	ā
03311	10	40	4.6

▲ Excluded from lifetime warranty terms.

# 03101 Fine Pointed Tips Tweezers 125mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- Fine tips for components in different sizes
- Moderate hardness of working tips, providing excellent performance in operation
  - Please choose the SATA industrial electric tweezers with a specification suitable for your application
  - The tips of tweezers are sharp, thus please use them carefully
  - · Keep them out of the reach of children

No.	L(mm)	8	***	<u></u>
03101	125	48	144	4.3



































































## 03102 Extra Pointed Tips Tweezers 135mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- Fine tips for components in different sizes
- Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your
- The tips of tweezers are sharp, thus please use them carefully
- · Keep them out of the reach of children

No.	L(mm)	#	8	ā
03102	135	24	144	4.4

▲ Excluded from lifetime warranty terms.

## 03103 Extra Pointed Tips Tweezers 115mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- Fine tips for components in different sizes
- Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your application
- The tips of tweezers are sharp, thus please use them carefully
- · Keep them out of the reach of children

No.	L(mm)	#	8	ā
03103	115	12	144	4.2

▲ Excluded from lifetime warranty terms.

#### 03104 Flat Round Tips Tweezers 120mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- · Fine tips for components in different sizes
- · Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your
- The tips of tweezers are sharp, thus please use them carefully
- Keep them out of the reach of children

No.	L(mm)	#	8	ā
03104	120	24	144	4.5

♠ Excluded from lifetime warranty terms.

## 03105 Pointed Tips Tweezers 115mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- · Fine tips for components in different sizes
- · Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your
- The tips of tweezers are sharp, thus please use them carefully
- · Keep them out of the reach of children

No.	L(mm)	#	8	<b>5</b>
03105	115	12	144	4.3

Excluded from lifetime warranty terms.

## 03106 Curved Pointed Tips Tweezers 118mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- · Fine tips for components in different sizes
- Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your application
- The tips of tweezers are sharp, thus please use them carefully
- Keep them out of the reach of children

No.	L(mm)	#	8	ē
03106	118	24	144	4.5

♠ Excluded from lifetime warranty terms.

#### 03151 Fine Pointed Tips Tweezers, Serrated Grips 175mm



- Made of high-grade stainless steel with acid resistance and diamagnetism
- · Fine tips for components in different sizes
- · Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your
- The tips of tweezers are sharp, thus please use them carefully
- Keep them out of the reach of children

No.	L(mm)		¥	ā
03151	175	12	144	8.4





- · Made of high-grade stainless steel with acid resistance and diamagnetism
- · Fine tips for components in different sizes
- · Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your
- The tips of tweezers are sharp, thus please use them carefully
- · Keep them out of the reach of children

No.	L(mm)	#	¥	<u>a</u>	
03152	175	12	144	8.7	

Excluded from lifetime warranty terms.

#### 03153 **Curved Pointed Tips Tweezers, Serrated Grips 175mm**



- Made of high-grade stainless steel with acid resistance and diamagnetism.
- · Fine tips for components in different sizes
- Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your application
- The tips of tweezers are sharp, thus please use them carefully
- Keep them out of the reach of children

No.	L(mm)	#	¥	ā
03153	170	12	144	8.5

▲ Excluded from lifetime warranty terms.

## **ESD Fine Pointed Tips Tweezers 130mm**



- Made of high-grade stainless steel with acid resistance and diamagnetism
- · Fine tips for components in different sizes
- Moderate hardness of working tips, providing excellent performance in operation
- Please choose the SATA industrial electric tweezers with a specification suitable for your application
- The tips of tweezers are sharp, thus please use them carefully
- · Keep them out of the reach of children

No.	Product Name	L(mm)	#	8	ā
03161	ESD Fine Pointed Tips Tweezers 130mm	130	12	144	4.8
03162	ESD Flat Round Tips Tweezers 130mm	130	12	144	4.8
03163	ESD Curved Pointed Tips Tweezers 130mm	130	12	144	4.8

▲ Excluded from lifetime warranty terms.

#### 03120 6Pc. Soldering Aid Set



SATA six-piece solder aid set is widely used for soldering assembly and repair of printed circuit boards (PCB). Terminals of various shapes can achieve the following functions:

- Component positioning terminals for easy and correct adjustment of the position of pins of surface-mounted components on the soldering pad or gold finger
   Curved needle; for adjustment of pins of mounted components such as IC and PLCC
- · Hook: for hooking out pins and leads of components
- Fork: for fixation and adjustment of pins or connecting lines of components
- Awl: for cleaning or enlargement of the hole of the soldering pad
   Scraper: for removal of residual sold and welding flux as well as oxide layer on the soldering
- Knife: for cutting copper-clad connecting lines on printed circuit boards
   Brush: for removal of dust and residues from the welded part before welding

No.	#	8	Ø
03120	12	216	18.9

▲ Excluded from lifetime warranty terms.

#### **PLCC Chip Extractor** 03107



- Gently squeeze the puller handle to separate PLCC components from the socket safely and reliably
- Spring-assisted pulling structure, and one hand operation for convenience and fastness
- Sizes of PLCC that can be pulled: 20-pin to 84-pin

No.	#	8	<u> </u>
03107	12	360	15.8

▲ Excluded from lifetime warranty terms.

## **IC Chip Extractor**



- A universal integrated circuit (IC) puller quickly separates components from the circut board
- Specification of integrated circuit that can be pulled: 8-pin to 24-pin

No.	#	8	ā
03108	12	480	16.7







































# **Auto Repair Tool**

	Lifting&Jack Tools	296-298
	Tube Coiler	299
	Cable Reel	299
	Universal Auto Repair Set	300-301
	Lubricating Equipment and Tools	305-307
٥	Tyre Repair Tools	307-317
	Engine Repair Tools	309-314
	Chassis Repair Tools	314-316
	Autobody Repair Tools	316-318
4	Electric Appliance Repair Tools	318-319

# **Auto Repair Tool**

#### 97813 2.5T Heavy Duty Service Jack



No.	Rated load	Net weight	Gross weight	t Highest level Lowest level		Product dimension (mm)		8	囫
97813	2500 kg	31.5 kg	33.5 kg	455 mm	130 mm	695×345×160	-	1	33

▲ Excluded from lifetime warranty terms.

## 97813A 3T Heavy Duty Lowprofile Service Jack

- Dual pump design
- Capacity upgrade to 3000KG
- Stroke extend 83-502mm
- Add Rubber pad tray
- Make sure the capacity value reaches the marked value
- Each machine passed 1.5 times load test befor leave the factory, ensure adequate safety load factor and product durability(Overload test is carried out in the laboratory, the user should not overload when use)
- When the actual load reaches more than 1.1 times of the rated load, the safety valve automatically opens for protection, and can not rises, ensuring the safety of use
- · Double oil hydraulic pump design, according to the amoint of the load automatically adjust the lifting speed, fast lifting under light load, when under heavy load to
- reduce the handle operating force, reduce the user's labor intensity
- Universal joint pressure relief valve structure, more durable Tray come with rubber pad, fix the lifting point more better





No.	Capacity	N.W.	Max. Height	Min. Height	Product dimension (mm)	$\Theta$	¥	ā
97813A	3000KG	35KG	502MM	83MM	735×349×161	-	1	36.5

▲ Excluded from lifetime warranty terms.

## 97821 1.5T Low Profile Aluminum Service Jack



- · Made of aluminum alloy, light weight, corrosion-resistant
- · Rubber mat on the tray will effectively protect raised parts

No.	Rated load	nd Net weight Gr		Highest level	Lowest level	Product dimension (mm)		8	M
97821	1500 kg	19.5 kg	21 kg	470 mm	85 mm	715×295×160	-	1	21









































































## **Heavy Duty Gearbox Bracket**





• High quality special hydraulic oil, minimum tolerable -45°C

• The surface of pump core and piston rod is treated with chrome plating

• Structure classic, specially designed piston rod dustproof ring and pump core dustproof cover

• Fast rise and slow down, adopt speed limit unloading structure (AE5822) • Special bracket head, 360 ° adjustable (AE5822)



No.	Name	Capacity	Piston Route(mm)			Highest			G.W(kg)	Size(cm)	$\Theta$	¥	<u>a</u>
		(TON)	Class 1	Class 2	- (mm)	(mm)							
AE5821	0.5T Gearbox bracket	0.5	475	475	812	1760	Iron	51.2	64.0	49×31×77	-	1	55.5
AE5822	0.5T Heavy duty gearbox bracket	0.5	485	515	927	1933	Rubber cover iron	70.2	79.2	53×28×84	-	1	79

<sup>▲</sup> Pump and cylinder warranty for 6 months

## **20T Press**



- Safety valve design, use safety
- The surface of pump core and piston rod is treated with chrome plating
   Shockproof pressure gauge, stainless steel case, high precision and long life
- Imported polyurethane oil seal seals, life is longer
- Double speed oil pump design, improve work efficiency (AE5832)
   Equipped with parts box and can be equipped with top end accessories (AE5832-P)





AE5831

No.	Name	Capacity(TON)	Highest(mm)	Lowest(mm)	Cylinder route(mm)	Piston route(mm)	N.W(kg)	G.W(kg)	Size(cm)	$\Theta$	¥	ā
AE5831	20T Press	20	1010	49	397	185	93	97	156×32×19	-	1	115
AE5822	20T Heavy duty Press	20	920	40	175	185	112	136	169×71×27	-	1	135.5

<sup>▲</sup> Pump and cylinder warranty for 6 months

## **2T Shop Crane**



- The Lifting Arm can be folded and the supporting Legs can be removed to reduce the storage space
- Insert Legs to make the structure strength stronger
   Pass 125% capactiry (2250kg) proof test, safe and reliable

No.	Description Description	Rated Max.		4 hole to adjust loa	ıd(Kg)		Hook Max. height	Max. Size	#	*	Ō
		Load(Kg)	2T position	1-1/2T position	1T position	1/2T position	— (1/2T-2T)	(mm)			
AE5842	2T Shop Crane	1800	1800	1350	900	450	2190/2080/1970/1820mm	1550x865x1500	-	1	82

<sup>▲</sup> Excluded from lifetime warranty terms.

## **Porta Power Kit**



- Chrome plated pump core with better wear resistance.
   Seals made of imported material with better performance
   Metal head made of casting steel.

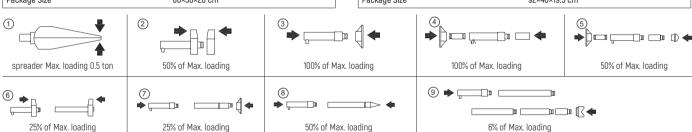
## AE5861 4 Ton Porta Power kit

Rated capacity	4000 Kg
Min. height of pump	268 mm
Max. height of pump	388 mm
Rise of Piston	120 mm
Net weight	18.6Kg
Gross weight	19.5 Kg
Package Size	60×36×20 cm

- Scraper seal design, effectively protected from severe environment
   Double speed structure, obviously improving no-load efficiency (AE5862)
   Oil Pump

## AE5862 10 Ton Porta Power Kit

10000 Kg
322 mm
452 mm
30 mm
31.1 Kg
32.2 Kg
92×40×19.5 cm
3



Loading of Head Combination								
Combinatio	n	proportion	AE5861	AE5862				
1	Spreader	-	0.5 Ton	0.5 Ton				
2	cylinder+Square saddle+hanging foot	50%	2 Ton	5 Ton				
3	cylinder+base	100%	4 Ton	10 Ton				
4	base+connector+cylinder+round head	100%	4 Ton	10 Ton				
5	base+connector+cylinder+1 rod+rubber head	-	0.5 Ton	1 Ton				
3	flat head or hanging foot	25%	1 Ton	2.5 Ton				
7	cylinder+2 rods+base	25%	1 Ton	2.5 Ton				
8	cylinder+1 rods+wedge head	50%	2 Ton	5 Ton				
9	cylinder+4 rods+ square head	6%	0.24 Ton	0.6 Ton				

No.	8	8	<u></u>
AE5861	-	1	19.5
AE5862	-	1	32.2





































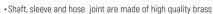




## **Air Hose Reel**







· Air hose is made of imported polyether TPU, which is resistant to hydrolysis

No.	Air Hose Spec (mm)	Output Hose Length (m)	Inlet Plug Spec (PM)	Outlet Coupler Spec (RC)		¥	ē
98003	Ø6.5×10	10	20	1/4"	-	4	4.2
98004	Ø6.5×10	15	20	1/4"	-	4	4.7
98005	Ø8×12	10	30	3/8"	-	4	5.3

## **3-Core Cable Reel**





- · Shaft, sleeve are made of high quality brass
- Cable rubber is made of special synthetic, soft and well tensile strength

No.		Output Cable Length (m)		Rated Current (A)	#	8	ē
98025	1.5	10	220	6	-	4	5
98026	1.5	15	220	6	-	4	6.1

## 09014A 128Pc. 1/4"x3/8"x1/2" Dr. Mechanics Tool Set



- •11Pc. 1/4" Dr. 6pt. Socket (4,5,6,7,8,9,10,11,12,13,14mm)
- •5Pc. 1/4" Dr. 6Pt. Deep Socket (8,9,10,11,12mm)
- •1Pc. 1/4" Dr. Quick Release Ratchet 5"
- •1Pc. 1/4" Dr. Extension Bar 2"
- •1Pc. 1/4" Dr. Universal Joint
- •1Pc. 1/4" Dr. Spinner Handle
- •1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/4"Hexagon
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (4,5,6.5mm)
- 2Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#3)
- 3Pc. 1/4" Hex Shank Bits, 25mm Length, Pozidriv (#1,#2) • 4Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (3,4,5,6mm)
- •7Pc. 1/4" Hex Shank Bits, 25mm Length, Tamper-Proof Torx@ (TT10,TT15, T20,TT25, TT27, T30,TT40)
- •11Pc.3/8" Dr. 6pt. Socket (9,10,11,12,13,14,15,16,17,18,19mm)
- •7Pc. 3/8" Dr. 6Pt. Deep Socket (13,14,15,16,,18,19mm) • 8Pc. 3/8" Dr. Torx@ Socket (E8,E10,E11,E12,E14,E16,E18,E20)
- 2Pc. 3/8" Dr. Spark Plug Socket (16,21mm)
- •2Pc. 3/8" Dr. Bit Socket, Slotted (5.5,6.5mm) • 4Pc. 3/8" Dr. Bit Socket, Phillips (#1,#2)x2pc
- •4Pc. 3/8" Dr. Bit Socket, Hexagon (3,4,5,6mm)
- 3Pc. 3/8" Dr. Bit Socket, Torxe (T20, T30,T40)
- 4Pc. 3/8" Dr. Bit Socket, 50mm Length, Tamper-Proof Torxe (TT45,TT50,TT55,TT60)
- •1Pc. 3/8" Dr. Quick Release Ratchet 8"
- •2Pc.3/8"r. Extension Bar (3",6") •1Pc. 3/8" Dr. Universal Joint
- 1Pc. 3/8" Dr. Socket Adaptor 3/8"Fx1/4"M
  1Pc. 3/8" Dr. Socket Adapter 3/8"Fx1/2"M
- •7Pc. 1/2" Dr.6pt. Socket (20,21,22,24,27,30,32mm)
- •1PC. 1/2" Dr. Quick Release Ratchet 10"
- 2Pc. 1/2" Dr. Extension Bar (5",10")
- •1Pc. 1/2" Dr. Universal Joint
- •12Pc. Combination Wrench (8,9,10,11,12,13,14,15,16,17,18,19mm)
- •1Pc. X-Beam Combination Wrench 13mm
- 9Pc. Long Arm Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 1Pc. Go-Through Screwdriver, Slotted 6x100mm
- •1Pc. Go-Through Screwdriver, Phillips #2x100mm
- •1Pc. Universal 3-Jaw Oil Filter Wrench 63-102mm •1Pc. Bit Socket for Engine Cover Screws
- •1Pc. Automotive Circuit Tester 6V/12V/24V

No.	#	*	M
09014A	_	2	21.7

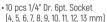
▲ Warranty terms of tool set comply with the individual product.

## 09014G 128 pcs 1/4" x 3/8" x 1/2" Dr. Master Tool Set

## 09508 49Pc. Mechanics Tool Set







• 4 pcs 1/4" Dr. 6pt. Deep Socket (8, 9, 10, 12 mm)

• 9 pcs 3/8" Dr. 6pt. Socket

(11, 12, 13, 14, 15, 16, 17, 18, 19 mm)

4 pcs 3/8" Dr. 6pt. Deep Socket (13, 14, 15, 17 mm)

• 8 pcs 3/8" Dr. Torx Socket

(E8, E10, E11, E12, E14, E16, E18, E20)

• 2 pcs 3/8" Dr. Spark Plug Socket (16, 21 mm)

•7 pcs 1/2" Dr. 6pt. Socket (20, 21, 22, 24, 27, 30, 32 mm)

•17 pcs 3/8" Dr. Bit Socket

Bit Socket, Torx (T20, T30, T40, T45, T50, T55, T60)

Bit Socket, Hexagon (3, 4, 5, 6)

Bit Socket, Pozidriv (#1, #2)

Bit Socket, Phillips (#1, #2)

Bit Socket, Slotted (5.5, 6.5) • 3 pcs Quick Release Ratchet with Grip

[1/4" Dr. 5", 3/8" Dr. 8", 1/2" Dr. 10"]
• 3 pcs Universal Joint (1/4", 3/8", 1/2")

• 2 pcs 3/8" Adapter (3/8" F x 1/4" M, 3/8" F x 1/2" M)

• 5 pcs Extension Bar

(1/4" Dr. 2", 3/8" Dr. 5", 3/8" Dr. 6", 1/2" Dr. 5", 1/2" Dr. 10") •1 pc 1/4" Dr. Socket Driver

• 1 pc Bit Adapter, 1/4" F x 1/4" Hex • 9 pc 1/4" Dr. Bit Socket Slotted (4, 5, 6.5)

Phillips (#1, #3) Hexagon (3, 4, 5, 6) • 11 pcs Full Polish Combination Wrench

(8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19 mm)
• 2 pc A Series Go Through Screwdriver, Slotted

[6x100 mm, #2x100 mm]

•1 pc T52 Bit Socket Special for Engine Head Screw

•1 pc Combination Filter Wrench 63-102 mm

•1 pc Automotive Circuit Tester 6V/12V/24V

•1 pc M16 Oil Pan Bits Socket (with hole)

•1 pc H17 Oil Pan Bits Socket

•1 pc 3/8" Dt. 12pt.T/W Spark Socket 14 mm

•10 pcs Long Arm Hex Key Wrench Set

• 9 pcs Long Arm Torx Key Set

•1 pc 1/2" Dr. Sliding Head (1/2" F x 3/8" M)

• 3 pcs X-beam Combination Ratcheting Wrench 10 mm, 13 mm, 17 mm

•1 pc Shock Absorber Socket

No.	#	8	<u> </u>
09014G	-	2	22.7







- •11Pc. 1/2" Dr. 6pt. Socket (8,10,12,17,18,19,20,21,22,24,27mm)
- 2Pc. 1/2" Dr. Spark Plug Socket (16,21mm) 1Pc. 1/2" Dr. Bit Socket, 50mm Length, Hexagon 17mm
- •1Pc. 1/2" Dr. Bit Socket, 70mm Length, Hexagon 6mm
- •1Pc. 1/2" Dr. Bit Socket, 100mm Length, Hexagon 7mm •1Pc. 1/2" Dr. Bit Socket, 120mm Length, Hexagon 8mm

- IPC. 1/2" Dr. Bit Socket, rednin Length, Hexagon (6,10mm)
   IPC. 1/2" Dr. Bit Socket, 140mm Length, Hexagon (6,10mm)
   IPC. 1/2" Dr. Bit Socket, 100mm Length, Triple Square M8
   IPC. 1/2" Dr. Bit Socket, 100mm Length, Triple Square M10
- 1Pc. 1/2" Dr. Bit Socket, 100mm Length, Triple Square M12 1Pc. 1/2" Dr. Quick Release Ratchet 10"
- 1Pc. 1/2" Dr. L-Shaped Wrench 10"
- 2Pc. 1/2" Dr. Extension Bar (5,10")
- 1Pc. 1/2" Dr. Sliding T-Handle 10"
- •1Pc. 1/2" Dr. Universal Joint
- 6Pc. Combination Wrench (8, 10,13, 17,19,22mm)
- 9Pc. Extra Long Ball Point Hex Key Set (1.5,2,2.5,3,4,5,6,8,10mm)
- 1Pc. Go-Through Screwdriver, Slotted 6x100mm
- 1Pc. Go-Through Screwdriver, Phillips #2x100mm
- •1Pc. Front Shock Absorber Socket
- 1Pc. Shock Absorber Removal Socket
- 1Pc. Universal 3-Jaw Oil Filter Wrench 63-102mm
- 1Pc. Automotive Multimeter

No.	#	₩	<u></u>
09508	-	2	18.1

A Warranty terms of tool set comply with the individual product.













































## 09509 59Pc. Mechanics Tool Set



















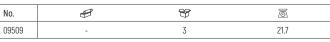












• 9Pc. Long Arm Tamper-Proof Torx@ Key Set (TT10, TT15,TT20, T25,TT27, 30, TT40, TT45, TT50)



• 15Pc. 3/8" Dr. 6pt. Socket (7,8,10,11,12,13,14,15,16,17,18,19,21,22,24mm) • 2Pc. 3/8" Dr. Spark Plug Socket (16,21mm) • 1Pc. 3/8" Dr. Quick Release Ratchet 8"

• 3Pc. 1/4" Hex Shank Bits, 25mm Length, Slotted (4,5,6.5mm)

• 4Pc. 1/4" Hex Shank Bits, 25mm Length, Hexagon (3,4,5,6mm)

• 11Pc. Combination Wrench (8,10,12,13,14,15,16,17,18,19,22mm)

• 2Pc. 1/4" Hex Shank Bits, 25mm Length, Phillips (#1,#3)

• 1Pc. Go-Through Screwdriver, Slotted 6x100mm

• 1Pc. Go-Through Screwdriver, Phillips #2x100mm

• 2Pc. 3/8" Dr. Extension Bar (3",10") • 1Pc. 3/8" Dr. Universal Joint • 1Pc. 3/8" Dr. Socket Adaptor 3/8"Fx1/ 4"M • 1Pc. 1/4" Dr. Socket Adaptor 1/4"Fx3/8"M

• 1Pc. 1/2" Dr. 3-Way Socket Adaptor

•1Pc. 1/4" Dr. Bit Adaptor 1/4"Fx1/"Hexagon

• 1Pc. 1/4" Dr. Spinner Handle

•1Pc. Long Nose Pliers 6"

•1Pc. Slip Joint Pliers 8"

#### 80Pc. 1/4"x1/2" Dr. Mechanics Tool Set 09518





- •7Pc. 1/4" Dr. 6Pt. Socket (7, 8, 9, 10, 11, 12, 13mm)
- 3Pc. 1/4" Dr. Bit Socket, Slotted (4, 5.5, 6.5mm)
- 2Pc. 1/4" Dr. Bit Socket, Phillips (#1, #2)
- 2Pc. 1/4" Dr. Bit Socket, Pozidriv (#1, #2)
- 4Pc. 1/4" Dr. Bit Socket, Hexagon (3, 4, 5, 6mm) 7Pc. 1/4" Dr. Bit Socket, Torx® (T8, T10, T15, T20, T25, T30, T40)
- •1Pc. 1/4" Dr. Quick Release Ratchet 5"
- 2Pc. 1/4" Dr. Extension Bar (2", 4")
- •1Pc. 1/4" Dr. Sliding T-Handle 4"
- •1Pc. 1/4" Dr. Universal Joint •1Pc. 1/4" Dr. Flexible Extension Bar 6"
- 1Pc. 3/8" Dr. 3-Way Socket Adaptor (3/8" Fx1/2" M) 13Pc. 1/2" 6Pt. Socket (8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24mm)
- •2Pc. 1/2" Dr. Spark Plug Socket [16, 21mm]
- •1Pc. 1/2" Dr. Quick Release Ratchet 10"
- •2Pc. 1/2" Dr. Extension Bar (5", 10")
- •1Pc. 1/2" Dr. Universal Joint
- •1Pc. 1/4" Dr. Spinner Handle
- •1Pc. 1/2" Bit Holder (5/16" Dr.)
- 3Pc. 5/16" 30mm-long Slotted Bit (8, 10, 12mm)
- 2Pc. 5/16" 30mm-long Phillips Bit (#3, #4)
- 2Pc. 5/16" 30mm-long Pozidriv Bit (#3, #4)
- •4Pc. 5/16" 30mm-long 6Pt. Bit (8, 10, 12, 14mm))
- 4Pc. 5/16" 30mm-long Torx® Bit (T40, T45, T 50, T55)
- •12Pc. combination wrench set (8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm)

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•1 pc 11302 1/4" Dr. 6pt. Socket 4MM	•1 pc 12706 3/8" Dr. Torx Socket E10	•1 pc 13912 Universal Joint, 1/2"Fx1/2"M
•1 pc 11304 1/4" Dr. 6pt. Socket 5MM	•1 pc 12707 3/8" Dr. Torx Socket E11	•1 pc 12913 Socket Adaptor, 3/8"Fx1/4"M
•1 pc 11306 1/4" Dr. 6pt. Socket 6MM	•1 pc 12708 3/8" Dr. Torx Socket E12	•1 pc 12930 3/8" Dr. Sliding Head, 3/8"Mx1/2"F
•1 pc 11307 1/4" Dr. 6pt. Socket 7MM	•1 pc 12709 3/8" Dr. Torx Socket E14	•1 pc 11903 1/4" Dr. Extension Bar 2"
•1 pc 11308 1/4" Dr. 6pt. Socket 8MM	•1 pc 12710 3/8" Dr. Torx Socket E16	•1 pc 12903 3/8" Dr. Extension Bar 3"
•1 pc 11309 1/4" Dr. 6pt. Socket 9MM	•1 pc 12711 3/8" Dr. Torx Socket E18	•1 pc 12904 3/8" Dr. Extension Bar 6"
•1 pc 11310 1/4" Dr. 6pt. Socket 10MM	•1 pc 12712 3/8" Dr. Torx Socket E20	•1 pc 13904 1/2" Dr. Extension Bar 5"
•1 pc 11311 1/4" Dr. 6pt. Socket 11MM	•1 pc 12915 3/8" Dr. Spark Plug Socket 16MM	•1 pc 13905 1/2" Dr. Extension Bar 10"
•1 pc 11312 1/4" Dr. 6pt. Socket 12MM	•1 pc 12916 3/8" Dr. Spark Plug Socket 21MM	•1 pc 11911 1/4" Dr. Plastic Handle Driver
•1 pc 11313 1/4" Dr. 6pt. Socket 13MM	•1 pc 13601 1/2" Dr.12pt. Socket 10MM	•1 pc 11914 Bit Adaptor, 1/4"Fx1/4"Hexagon
•1 pc 11314 1/4" Dr. 6pt. Socket 14MM	•1 pc 13602 1/2" Dr.12pt. Socket 11MM	•1 pc 50213 1/4" Hex Shank Bit, Slotted 4MM, 25MM Length
•1 pc 11405 1/4" Dr. 6pt. Deep Socket 8MM	•1 pc 13603 1/2" Dr.12pt. Socket 12MM	•1 pc 50215 1/4" Hex Shank Bit, Slotted 5MM, 25MM Length
•1 pc 11406 1/4" Dr. 6pt. Deep Socket 9MM	•1 pc 13604 1/2" Dr.12pt. Socket 13MM	•1 pc 50218 1/4" Hex Shank Bit, Slotted 6.5MM, 25MM Length
•1 pc 11407 1/4" Dr. 6pt. Deep Socket 10MM	•1 pc 13605 1/2" Dr.12pt. Socket 14MM	•1 pc 50222 1/4" Hex Shank Bit, Philips #1, 25MM Length
•1 pc 11408 1/4" Dr. 6pt. Deep Socket 11MM	•1 pc 13606 1/2" Dr.12pt. Socket 15MM	•1 pc 50224 1/4" Hex Shank Bit, Philips #3, 25MM Length
•1 pc 11409 1/4" Dr. 6pt. Deep Socket 12MM	•1 pc 13607 1/2" Dr.12pt. Socket 16MM	•1 pc 50253 1/4" Hex Shank Bit, Hexagon 3MM, 25MM Length
•1 pc 11410 1/4" Dr. 6pt. Deep Socket 13MM	•1 pc 13608 1/2" Dr.12pt. Socket 17MM	•1 pc 50254 1/4" Hex Shank Bit, Hexagon 4MM, 25MM Length
•1 pc 11701 1/4" Dr. Torx Socket E4	•1 pc 13609 1/2" Dr.12pt. Socket 18MM	•1 pc 50255 1/4" Hex Shank Bit, Hexagon 5MM, 25MM Length
•1 pc 11703 1/4" Dr. Torx Socket E6	•1 pc 13610 1/2" Dr.12pt. Socket 19MM	•1 pc 50256 1/4" Hex Shank Bit, Hexagon 6MM, 25MM Length
•1 pc 11705 1/4" Dr. Torx Socket E8	•1 pc 13611 1/2" Dr.12pt. Socket 20MM	•1 pc 43201 Full Polish Combination Ratcheting Wrench 8MM
•1 pc 11707 1/4" Dr. Torx Socket E10	•1 pc 13612 1/2" Dr.12pt. Socket 21MM	•1 pc 43202 Full Polish Combination Ratcheting Wrench 9MM
•1 pc 12301 3/8" Dr. 6pt. Socket 6MM	•1 pc 13613 1/2" Dr.12pt. Socket 22MM	•1 pc 43203 Full Polish Combination Ratcheting Wrench 10MM
•1 pc 12302 3/8" Dr. 6pt. Socket 7MM	•1 pc 13614 1/2" Dr.12pt. Socket 23MM	•1 pc 43204 Full Polish Combination Ratcheting Wrench 11MM
•1 pc 12303 3/8" Dr. 6pt. Socket 8MM	•1 pc 13615 1/2" Dr.12pt. Socket 24MM	•1 pc 43205 Full Polish Combination Ratcheting Wrench 12MM
•1 pc 12304 3/8" Dr. 6pt. Socket 9MM	•1 pc 13616 1/2" Dr.12pt. Socket 27MM	•1 pc 43206 Full Polish Combination Ratcheting Wrench 13MM
•1 pc 12305 3/8" Dr. 6pt. Socket 10MM	•1 pc 13617 1/2" Dr.12pt. Socket 30MM	•1 pc 43207 Full Polish Combination Ratcheting Wrench 14MM
•1 pc 12306 3/8" Dr. 6pt. Socket 11MM	•1 pc 13618 1/2" Dr.12pt. Socket 32MM	•1 pc 43208 Full Polish Combination Ratcheting Wrench 15MM
•1 pc 12307 3/8" Dr. 6pt. Socket 12MM	•1 pc 22103 3/8" Dr. Bit Socket, Torx T20	•1 pc 43209 Full Polish Combination Ratcheting Wrench 16MM
•1 pc 12308 3/8" Dr. 6pt. Socket 13MM	•1 pc 22106 3/8" Dr. Bit Socket, Torx T30	•1 pc 43210 Full Polish Combination Ratcheting Wrench 17MM
•1 pc 12309 3/8" Dr. 6pt. Socket 14MM	•1 pc 22107 3/8" Dr. Bit Socket, Torx T40	•1 pc 43211 Full Polish Combination Ratcheting Wrench 18MM
•1 pc 12310 3/8" Dr. 6pt. Socket 15MM	•1 pc 22601 3/8" Dr. Bit Socket, 50MM Length, Resistorx TT45	•1 pc 43212 Full Polish Combination Ratcheting Wrench 19MM
•1 pc 12311 3/8" Dr. 6pt. Socket 16MM	•1 pc 22602 3/8" Dr. Bit Socket, 50MM Length, Resistorx TT50	•1 pc 43213 Full Polish Combination Ratcheting Wrench 21MM
•1 pc 12312 3/8" Dr. 6pt. Socket 17MM	<ul> <li>1 pc 22603 3/8" Dr. Bit Socket, 50MM Length, Resistorx TT55</li> </ul>	•1 pc 43214 Full Polish Combination Ratcheting Wrench 22MM
•1 pc 12313 3/8" Dr. 6pt. Socket 18MM	•1 pc 22604 3/8" Dr. Bit Socket, 50MM Length, Resistorx TT60	<ul> <li>1 pc 61613 A Series Go Through Screwdriver, Slotted</li> </ul>
•1 pc 12314 3/8" Dr. 6pt. Socket 19MM	•1 pc 22201 3/8" Dr. Bit Socket, Hexagon 3MM	6x100MM
•1 pc 12401 3/8" Dr. 6pt. Deep Socket 8MM	•1 pc 22202 3/8" Dr. Bit Socket, Hexagon 4MM	•1 pc 61713 A Series Go Through Screwdriver, Philips
•1 pc 12403 3/8" Dr. 6pt. Deep Socket 10MM	•1 pc 22203 3/8" Dr. Bit Socket, Hexagon 5MM	#2x100MM
•1 pc 12404 3/8" Dr. 6pt. Deep Socket 11MM	•1 pc 22204 3/8" Dr. Bit Socket, Hexagon 6MM	•1 pc 97422 Universal 3-jaw Oil Filter Wrench 63-102MM
•1 pc 12405 3/8" Dr. 6pt. Deep Socket 12MM	•1 pc 22401 3/8" Dr. Bit Socket, Pozidriv #1	•1 pc 62503 Automotive Circuit Tester 6V/12V/24V
•1 pc 12406 3/8" Dr. 6pt. Deep Socket 13MM	•1 pc 22402 3/8" Dr. Bit Socket, Pozidriv #2	•1 pc 97631 Oil Pan Bits Socket (With Hole) M16
•1 pc 12407 3/8" Dr. 6pt. Deep Socket 14MM	•1 pc 22301 3/8" Dr. Bit Socket, Phillips #1	•1 pc 97635 Oil Pan Bits Socket H17
•1 pc 12408 3/8" Dr. 6pt. Deep Socket 15MM	•1 pc 22302 3/8" Dr. Bit Socket, Phillips #2	•1 pc 12925 3/8" Dr. 12Pt T/W Spark Socket 14MM
•1 pc 12410 3/8" Dr. 6pt. Deep Socket 17MM	•1 pc 22501 3/8" Dr. Bit Socket, Slotted 5.5MM	• 10 pcs 09128 10Pc Extra Long Arm Hex Key Wrench Set
•1 pc 12412 3/8" Dr. 6pt. Deep Socket 19MM	•1 pc 22502 3/8" Dr. Bit Socket, Slotted 6.5MM	9 pcs 09702 9Pc Long Arm Torx Key Wrench Set     1 pc 17070 1/2" Pc Sliding Head 1/2" Pc 7/2" M
•1 pc 12701 3/8" Dr. Torx Socket E4	•1 pc 11902 1/4" Dr. Quick Release Ratchet with Grip 5"	•1 pc 13930 1/2" Dr. Sliding Head, 1/2"Fx3/8"M
•1 pc 12702 3/8" Dr. Torx Socket E5	•1 pc 12902 3/8" Dr. Quick Release Ratchet with Grip 8"	•1 pc 70512 Slip Joint Pliers 8"
•1 pc 12703 3/8" Dr. Torx Socket E6 •1 pc 12704 3/8" Dr. Torx Socket E7	•1 pc 13902 1/2" Dr. Quick Release Ratchet with Grip 10"	•1 pc 70101A Long Nose Pliers 6"
•1 pc 12704 3/8" Dr. Torx Socket E7 •1 pc 12705 3/8" Dr. Torx Socket E8	•1 pc 11912 Universal Joint, 1/4"Fx1/4"M •1 pc 12912 Universal Joint, 3/8"Fx3/8"M	
- 1 po 12/03 3/0 bl. 1013 300ket E0	יו אס ובשוב טווועפושמו זטוווג, אין ט דאאין ט וייו	

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# 09942 60pc Automotive Master Tool Set



<ul><li>1 pc</li></ul>	40204	Full Polish Combination Wrench 9MM
•1 pc	40205	Full Polish Combination Wrench 10MM
•1 pc	40206	Full Polish Combination Wrench 11MM
•1 pc	40207	Full Polish Combination Wrench 12MM
•1 pc	40208	Full Polish Combination Wrench 13MM
•1 pc	40209	Full Polish Combination Wrench 14MM
•1 pc	40210	Full Polish Combination Wrench 15MM
•1 pc	40211	Full Polish Combination Wrench 16MM
•1 pc	40212	Full Polish Combination Wrench 17MM
•1 pc	40213	Full Polish Combination Wrench 18MM
•1 pc	40214	Full Polish Combination Wrench 19MM
•1 pc	40217	Full Polish Combination Wrench 22MM
-1 nc	12015	7 /0" Dr. Spark Dlug Sooket 16MM

40203 Full Polish Combination Wrench 8MM

• 1 pc 12916 3/8" Dr. Spark Plug Socket 21MM • 1 pc 12302 3/8" Dr. 6pt. Socket 7MM • 1 pc 12303 3/8" Dr. 6pt. Socket 8MM • 1 pc 12304 3/8" Dr. 6pt. Socket 9MM

•1 pc 12304 3/8" Dr. 6pt. Socket 9MM •1 pc 12305 3/8" Dr. 6pt. Socket 10MM •1 pc 12306 3/8" Dr. 6pt. Socket 11MM •1 pc 12307 3/8" Dr. 6pt. Socket 12MM

•1 pc 12308 3/8" Dr. 6pt. Socket 13MM •1 pc 12309 3/8" Dr. 6pt. Socket 14MM •1 pc 12310 3/8" Dr. 6pt. Socket 15MM

•1 pc 12311 3/8" Dr. 6pt. Socket 16MM •1 pc 12312 3/8" Dr. 6pt. Socket 17MM •1 pc 12313 3/8" Dr. 6pt. Socket 18MM •1 pc 12314 3/8" Dr. 6pt. Socket 19MM

•1 pc 12315 3/8" Dr. 6pt. Socket 20MM •1 pc 12316 3/8" Dr. 6pt. Socket 21MM •1 pc 12317 3/8" Dr. 6pt. Socket 22MM

•1 pc 12318 3/8" Dr. 6pt. Socket 24MM •1 pc 12902 3/8" Dr. Quick Release Ratchet with Grip 8"

 •1 pc
 12903
 3/8" Dr. Extension Bar 3"

 •1 pc
 12904
 3/8" Dr. Extension Bar 6"

 •1 pc
 12912
 Universal Joint, 3/8"Fx3/8"M

 •1 pc
 12913
 Socket Adaptor, 3/8"Fx1/4"M

•1 pc 13930 1/2" Dr. Sliding Head, 1/2"Fx3/8"M •1 pc 11913 Socket Adaptor, 1/4"Fx3/8"M

•1 pc 11911 1/4" Dr. Plastic Handle Driver •1 pc 11914 Bit Adaptor, 1/4"FX1/4"Hexagon

1 pc
 50213
 1/4" Hex Shank Bit, Slotted 4MM, 25MM Length
 1 pc
 50215
 1/4" Hex Shank Bit, Slotted 5MM, 25MM Length
 1 pc
 50218
 1/4" Hex Shank Bit, Slotted 6.5MM, 25MM Length

•1 pc 50222 1/4" Hex Shank Bit, Philips #1, 25MM Length •1 pc 1/4" Hex Shank Bit, Philips #3, 25MM Length 50224 1/4" Hex Shank Bit, Hexagon 3MM, 25MM Length •1 pc 50253 1/4" Hex Shank Bit, Hexagon 4MM, 25MM Length 50254 •1 pc •1 pc 50255 1/4" Hex Shank Bit, Hexagon 5MM, 25MM Length •1 pc 1/4" Hex Shank Bit, Hexagon 6MM, 25MM Length 50256

•1pc 50232 1/4" Hex Shank Bit, Torx T10, 25MM Length •1pc 50233 1/4" Hex Shank Bit, Torx T15, 25MM Length

 •1 pc
 50234
 1/4" Hex Shank Bit, Torx T20, 25MM Length

 •1 pc
 50235
 1/4" Hex Shank Bit, Torx T25, 25MM Length

 •1 pc
 50237
 1/4" Hex Shank Bit, Torx T30, 25MM Length

 •1 pc
 50238
 1/4" Hex Shank Bit, Torx T40, 25MM Length

•1 pc 50238 1/4" Hex Shank Bit, •1 pc 70512 Slip Joint Pliers 8" •1 pc 70101A Long Nose Pliers 6"

•1 pc 61613 A Series Go Through Screwdriver, Slotted 6x100MM •1 pc 61713 A Series Go Through Screwdriver, Philips #2x100MM

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09942	-	4	22.4



## 09943 42pc 1/4" Dr.socket Set



•1 pc	11301	1/4" Dr. 6pt. Socket 3.5MM
•1 pc	11302	1/4" Dr. 6pt. Socket 4MM
•1 pc	11303	1/4" Dr. 6pt. Socket 4.5MM
•1 pc	11304	1/4" Dr. 6pt. Socket 5MM
•1 pc	11305	1/4" Dr. 6pt. Socket 5.5MM
•1 pc	11306	1/4" Dr. 6pt. Socket 6MM
•1 pc	11307	1/4" Dr. 6pt. Socket 7MM
•1 pc	11308	1/4" Dr. 6pt. Socket 8MM
•1 pc	11309	1/4" Dr. 6pt. Socket 9MM
•1 pc	11310	1/4" Dr. 6pt. Socket 10MM
•1 pc	11311	1/4" Dr. 6pt. Socket 11MM
•1 pc	11312	1/4" Dr. 6pt. Socket 12MM
•1 pc	11313	1/4" Dr. 6pt. Socket 13MM
•1 pc	11314	1/4" Dr. 6pt. Socket 14MM
•1 pc	11405	1/4" Dr. 6pt. Deep Socket 8MM
•1 pc	11407	1/4" Dr. 6pt. Deep Socket 10MM
•1 pc	11408	1/4" Dr. 6pt. Deep Socket 11MM
•1 pc	11409	1/4" Dr. 6pt. Deep Socket 12MM
•1 pc	11410	1/4" Dr. 6pt. Deep Socket 13MM
•1 pc	11902	1/4" Dr. Quick Release Ratchet with Grip 5"
•1 pc	11903	1/4" Dr. Extension Bar 2"
•1 pc	11904	1/4" Dr. Extension Bar 4"
•1 pc	11910	1/4" Dr. Sliding T-handle 4"
•1 pc	11911	1/4" Dr. Plastic Handle Driver
•1 pc	11912	Universal Joint, 1/4"Fx1/4"M
•1 pc	21102	1/4" Dr. Bit Socket, Torx T10
•1 pc	21103	1/4" Dr. Bit Socket, Torx T15
•1 pc	21104	1/4" Dr. Bit Socket, Torx T20
•1 pc	21105	1/4" Dr. Bit Socket, Torx T25
•1 pc	21106	1/4" Dr. Bit Socket, Torx T30
•1 pc	21107	1/4" Dr. Bit Socket, Torx T40
•1 pc	21201	1/4" Dr. Bit Socket, Hexagon 3MM
•1 pc	21202	1/4" Dr. Bit Socket, Hexagon 4MM
•1 pc	21203	1/4" Dr. Bit Socket, Hexagon 5MM
•1 pc	21204	1/4" Dr. Bit Socket, Hexagon 6MM
•1 pc	21206	1/4" Dr. Bit Socket, Hexagon 7MM
•1 pc	21205	1/4" Dr. Bit Socket, Hexagon 8MM
•1 pc	21301	1/4" Dr. Bit Socket, Phillips #1
•1 pc	21302	1/4" Dr. Bit Socket, Phillips #2
•1 pc	21501	1/4" Dr. Bit Socket, Slotted 4MM
•1 pc	21502	1/4" Dr. Bit Socket, Slotted 5.5MM
•1 pc	21503	1/4" Dr. Bit Socket, Slotted 6.5MM

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09943	-	12	19

▲ Warranty terms of tool set comply with the individual product.

## 09944 58pc 3/8" Dr.socket Set

•1 pc

•1 pc

•1 pc

•1 pc

•1 pc

12905

12902

12912

12301

## 09945 34pc 1/2" Dr.socket Set











•1 pc	13601	1/2" Dr.12pt. Socket 10MM
•1 pc	13602	1/2" Dr.12pt. Socket 11MM
•1 pc	13603	1/2" Dr.12pt. Socket 12MM
•1 pc	13604	1/2" Dr.12pt. Socket 13MM
•1 pc	13605	1/2" Dr.12pt. Socket 14MM
•1 pc	13606	1/2" Dr.12pt. Socket 15MM
•1 pc	13607	1/2" Dr.12pt. Socket 16MM
•1 pc	13608	1/2" Dr.12pt. Socket 17MM
•1 pc	13609	1/2" Dr.12pt. Socket 18MM
•1 pc	13610	1/2" Dr.12pt. Socket 19MM
•1 pc	13611	1/2" Dr.12pt. Socket 20MM
•1 pc	13612	1/2" Dr.12pt. Socket 21MM
•1 pc	13613	1/2" Dr.12pt. Socket 22MM
•1 pc	13614	1/2" Dr.12pt. Socket 23MM
•1 pc	13615	1/2" Dr.12pt. Socket 24MM
•1 pc	13616	1/2" Dr.12pt. Socket 27MM
•1 pc	13617	1/2" Dr.12pt. Socket 30MM
•1 pc	13618	1/2" Dr.12pt. Socket 32MM
•1 pc	13912	Universal Joint, 1/2"Fx1/2"M
•1 pc	13904	1/2" Dr. Extension Bar 5"
•1 pc	13905	1/2" Dr. Extension Bar 10"
•1 pc	13902	1/2" Dr. Quick Release Ratchet with Grip 10"
•1 pc	13930	1/2" Dr. Sliding Head, 1/2"Fx3/8"M
•1 pc	13812	1/2" Dr. 12pt.Deep socket 12MM
•1 pc	13813	1/2" Dr. 12pt Deep socket 13MM
•1 pc	13814	1/2" Dr. 12pt Deep socket 14MM
•1 pc	13817	1/2" Dr. 12pt Deep socket 17MM
•1 pc	13819	1/2" Dr. 12pt Deep socket 19MM
•1 pc	13703	1/2" Dr. Torx Socket E14
•1 pc	13704	1/2" Dr. Torx Socket E16
•1 pc	13705	1/2" Dr. Torx Socket E18
•1 pc	13706	1/2" Dr. Torx Socket E20
•1 pc	13707	1/2" Dr. Torx Socket E22
•1 pc	13708	1/2" Dr. Torx Socket E24

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09945	-	3	16.2

▲ Warranty terms of tool set comply with the individual product.







































3/8" Dr. Extension Bar 10"

Universal Joint, 3/8"Fx3/8"M

Socket Adaptor, 3/8"Fx1/2"M

3/8" Dr. Quick Release Ratchet with Grip 8"























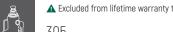












# 09531 3Pc. L-Shaped Lug Wrench Set





- 1pc 1/2" Dr. L-Shaped Lug werench
- 2pc 1/2" Double End Socket (17 $\times$ 19, 21 $\times$ 23mm)
- Cr-V material forged sockets
- Extension type wrench in length from 340mm to 550mm

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09531	-	10	12

#### 97201 **Pistol Grip Grease Gun 100cc**



- Engineering machine
- Agriculture equipments
- Automobiles
- 2 applicable greases: 3 oz standard barrel packed grease; 100 CC bulk grease
- Pressure zinc alloy die cast head
- · Heat-treated spring ensures constant and balanced pressure during filling
- Unique self-locking device making filling safe and convenient
   Nozzle with special design added a steel ball, preventing the grease from returning
- Highest pressure for the grease gun: 4500 PSI (300 KGF/CM2)

No.	Working pressure (PSI)	Burst pressure (PSI)	Oil pump capacity	$\Theta$	8	ā
97201	2900	4000	0.5 oz./40 compressions	-	12	9.1

## ▲ Excluded from lifetime warranty terms.

## 97202 Grease Gun 400cc





- Engineering machine
- Agriculture equipments
- Automobiles
- •2 applicable greases: 14oz standard barrel packed grease; 400CC bulk grease
- Pressure zinc alloy die cast head
- Heat-treated spring ensures constant and balanced pressure during filling
- Unique self-locking device making filling safe and convenient
- Nozzle with special design added a steel ball, preventing the grease from returning
- Highest pressure for the grease gun: 10000 PSI (300 KGF/CM2)

No.	Working pressure (PSI)		Oil pump capacity	#	¥	ā
97202	4500	10000	1 oz./40 compressions	-	12	17.3

▲ Excluded from lifetime warranty terms.

## Plastic Handle Grease Gun 400cc





- Engineering machine
- Agriculture equipments
- Automobiles
- 3 applicable grease: 14oz standard barrel packed grease; grease in sealed tank; 400CC bulk
- Pressure Zinc alloy die cast head, designed with easy-to-handle plastic handle
- · Heat-treated spring ensures constant and balanced pressure during filling
- · Unique self-locking device making filling safe and convenient
- Nozzle with special design added a steel ball, preventing the grease from returning
- Highest pressure for the gease gun: 10000PSI (700 KGF/CM2)

No.	Working pressure (PSI)		Oil pump capacity	$\Theta$	8	ā
97203	4500	10000	1 oz./40 compressions	-	12	18.4

## 97204A Ouick Release Grease Gun 600cc



- Engineering machine
- Agriculture equipmentsAutomobiles
- For #0-#3 grease only
- New "flared" exhaust nozzle design ensures better exhaust effect and reduces empty bleeding
- · Add an anti-impurity filter screen to prevent impurities from entering the grease pipeline and causing block-age during filling of bulk grease
- Lightweight aluminum tip and extended handle design makes the product more labor-saving and more portable
- Equipped with grease gun hose and tip nozzle to meet the grease filling requirements of small space or multiple nozzles

No.	Working Burst pressure (PSI)		Oil pump capacity	$\Theta$	8	<u></u> ■
97204A	7000	10000	1.20z/40 compressions (36cc/40 compressions)	-	10	18

▲ Excluded from lifetime warranty terms.

## 97205 High Pressure Grease Gun 400cc



- High-low pressure switch, easy to operate
- Patented circulating air bleed valve, ensuring to discharge air in the gun cylinde, making the grease gun operate smootherly
- Patented large-small shaft design, lubricating through switching from high pressure to low pressure and vice versa. Firstly use high pressure to get through the grease passage instantly, to ensure smooth filling of grease; then switch to low pressure to fill in grease rapidly, thus increasing working efficiency
- · Unique square thread, ensuring convenient assembly and disassembly of the nozzle and the gun cylinder, increasing airtightness
- Detachable rear cover for easy cleaning of the gun cylinder
- · Heavy duty thickened handle, bearing higher operating forces

No.	Working pressure (PSI)	Burst pressure (PSI)	Oil pump capacity	#	¥	ā
97205	Small core: 8000 Large core: 1000	Small core: 13000 Large core: 2000	Small core: 0.50Z/40 compressions Large core: 3.50Z/40 compressions	-	10	22.9

▲ Excluded from lifetime warranty terms.

#### 97206 Transparent Barrel Grease Gun 400cc



- · Engineering machine
- Agriculture equipments
- Automobiles
- · Aluminum alloy adapter, enable frequent open and close the nozzle to fill in grease, avoid direct connection between the cylinder and nozzle to increase durability
- Special transparent tube design, easy to observe the reserved grease amount
- · Self-locking rear cover is easy to be removed

No.	Working pressure (PSI)		Oil pump capacity	$\Theta$	¥	ā
97206	4500	7000	1 OZ/40 compressions	-	12	22.9

▲ Excluded from lifetime warranty terms.

#### 97101 **Tire Valve Extractor 320mm**







• For quick removing or installation of tire valve inserts

No.	L(mm)	#	8	ā
97101	320	12	60	19

#### 97211 **Grease Gun Coupler**





• Nozzle with special design added a steel ball, preventing the grease from returning

No.	#	8	<u>a</u>
97211	18	72	3.3













































#### **Grease Gun Flexible Hose 12"** 97212







No.	Spec.	L(mm)	#	8	<u></u>
97212	12"	308	9	72	7.2

▲ Excluded from lifetime warranty terms.

## 96351 1/2" Series Car Tire Preset Torque Wrench





- · Easy to use and effortless
- · long life
- Reversible operation
- Used to tighten most car wheel bolts

No.	Drive head size	Set torque (N·m)	L×W×H(mm)	N.W. (kg)	$\Theta$	8	ð
96351	1/2"	118	$578.5 \times 40.5 \times 40.5$	2.65	-	-	-

#### 97213 **Grease Gun Flexible Hose 18"**







• High pressure nylon hose, easy to be inserted into working area

No.	Spec.	L(mm)	$\Theta$	8	ē
97213	18"	450	9	72	10

▲ Excluded from lifetime warranty terms.

## 96352 1/2" Series SUV Tire Preset Torque Wrench





- Easy to use and effortless
- · long life
- Reversible operation
- Used to tighten most car wheel bolts

No.	Drive head size	Set torque (N·m)	L×W×H(mm)	N.W. (kg)	#	8	ā
96352	1/2"	138	$578.5 \times 40.5 \times 40.5$	2.65	-	-	-

#### 97216 **Grease Gun Taper Nozzle**





• Nozzle Suitable for lubrication under special conditions

No.	#	₩	Q
97216	10	80	1.8

▲ Excluded from lifetime warranty terms.

## Flat Beam Torque Wrench

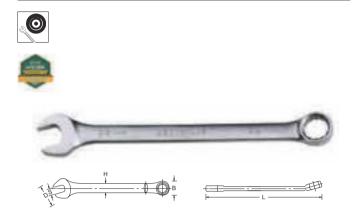


- •The working tip and rod are made of Cr-V steel
- · Nickel plated surface, high antirust performance

No.	Spec. (N.m)	Driver	$\Theta$	¥	ð
48111	300	1/2"	-	12	12.2
48112	500	3/4"	-	12	19.4



## **Combination Wrench**



- Forged with quality Cr-V with high durability
- Electroplated matte surface with texture
- Suitable for auto maintenance

No.	Spec. (mm)	L(mm)	H(mm)	S(mm)	D(mm)	B(mm)	$\Theta$	8	ā
40504	8	112	10.0	8.15	16.5	14.4	6	96	3.3
40505	9	123	10.0	9.15	18.2	16.3	6	96	3.8
40506	10	131	10.5	10.1	20.5	16.3	6	96	4.5
40507	11	147.6	11.8	11.1	22.6	17.8	6	36	2.3
40508	12	155	12.8	12.1	24.5	19.4	6	36	3
40509	13	164	13.0	13.1	26.7	21	6	36	3.5
40510	14	182	15.3	14.2	28.8	22.3	6	36	4.5
40511	15	192	15.5	15.2	30.8	23.7	6	36	5.2
40512	16	202	15.9	16.2	32.8	24.5	6	36	5.9
40513	17	223	16.7	17.2	35.1	27.8	6	36	7
40514	18	236	17.4	18.2	37	28.5	4	24	5.2
40515	19	245	17.8	19.2	39	29.6	6	36	8.9
40516	21	271	18.7	21.2	43	32	4	24	7.6
40517	22	296	18.7	22.2	45	34	4	24	8
40518	24	322	19.6	24.3	49	36	4	24	10.2

## **Oil Filter Wrench**



No	0.	Spec. (mm)	8	8	<b></b>
97	7427	55~75	12	24	7.3
97	7428	75~95	12	24	8.4

▲ Excluded from lifetime warranty terms.

## **Cross Lug Wrench**



- Cr-V material forged 3pc. Socket End (17, 19, 21mm) and 1pc. 1/2" Drive End

No.	Spec.	#	8	ā
48101	16"	-	12	16.4
48102	20"	-	12	20.8

▲ Excluded from lifetime warranty terms.

#### 98111 **Tyre Inflator**



- Avoiding wetted from water and impacted
- After continuous inflating 10 mins, cool 15min at least
- After connecting the pipeline connector, manually turn on or off the switch
   When there is abnormal noise in inflation, please turn off the machine and send it to the aftersales outlet for repair

No.	Rated Voltage	Air output	Rated Power	Max. Pressure		Pressure Precision	$\Theta$	8	M
98111	DC12V	30L/min	120W	6Bar	10A	+ 2Psi	-	12	20.8

▲ Excluded from lifetime warranty terms.

#### 97106 **Round Point Finishing Hammer 260g**



## **Operating Instructions**

- Capable of marking tire puncture and pulling out the debris
- Capable of finding out puncture direction via spiral needle and inserting it to remove debris
- Capable of repairing tire by inserting the rubber strip into the crochet needle by 2/3 in length along the hole, rotating 360°
- Pulling it out and cutting off the remaining rubber strip

No.	#	8	<u></u>
97106	10	40	8.8







































































#### 09412 **Disc Brake Piston Tool Set**



- Capable of replacing brake pad by adjusting brake pump
- Universal type
- · Smooth thread with precision machining

No.	#	8	ā
09412	-	8	17.7

▲ Warranty terms of tool set comply with the individual product.

## 3/8" Dr. 12Pt. Thin Wall Spark Plug Socket 14mm







- Forged with Cr-V with chrome-plated surface
- Rubber plug inserted for holding spark plug

No.	Spec. (mm)	$\mathcal{B}$	8	ā
12925	14	6	48	3.6

#### 97631 1/2" Dr. Bit Socket for Oil Pan Screw M16







- Forged with Cr-Mo with chrome-plated surface and tamper at the function end
- Suitable for removing and assembling oil pan screws of German cars

No.	Spec.	#	*	<u></u>
97631	M16	6	48	6.3

## 09003 5Pc. 3/8" Dr. Spark Plug Socket Set





- •3/8" Dr. Spark Plug Socket 16mm
- •3/8" Dr. Spark Plug Socket 21mm
- •3/8" Dr. Flex-Head Quick Release Ratchet
- •3/8" Dr. Extension Bar 6"
- •3/8" Dr. Locking Extension Bar 6"

No.	#	8	<u></u>
09003	-	5	6.1

▲ Warranty terms of tool set comply with the individual product.

## 97635 1/2" Dr. Bit Socket for Oil Pan Screw H17







# 3/8" Dr. Spark Plug Socket







- Forged with Cr-V with chrome-plated surface
- $\bullet$  Suitable for removing and assembling oil pan screws of German cars

No.	Spec.	#	8	ā
97635	H17	6	48	5

No.	○ (mm)	$\Theta$	8	ā
12915	16	6	-	-
12916	21	6	-	-





































No.	○ (mm)	$\blacksquare$	8	ā
13915	16	4	-	-
13916	21	4	-	-

## **T-Handle Flex Spark Plug Socket**

1/2" Dr. Spark Plug Socket



- · Shank length: 450mm
- Magnetic sleeve
- Made of Cr-V with sandblasted electroplated surface
- · Equipped with movable handle and suitable for ratchet wrench

No.	Spec.(mm)	#	8	<u></u>
47801	16	10	30	15.8
47802	21	10	30	17.8

# 09705 25pcs Universal cap filter wrench set



• 98204 36/6P Inner Dia. 64-65MM 14 teeth • 98205 Inner Dia. 66-67MM 14 teeth •98206 Inner Dia. 72-73MM 14 teeth • 98207 Inner Dia. 73MM 15 teeth • 98208 98209 Inner Dia. 74MM 8 teeth • 98210 Inner Dia. 72-73MM 14 teeth Inner Dia. 72-73MM 15 teeth . 98211 Inner Dia. 74-75MM 14 teeth • 98212 Inner Dia. 75-76MM 15 teeth . 98213 Inner Dia. 77MM 12 teeth 98214 • 98215 Inner Dia. 78-79MM 15 teeth Inner Dia. 80MM 12 teeth - 98216 • 98217 Inner Dia, 79-80MM 15 teeth • 98218 Inner Dia. 73-84MM 14 teeth • 98219 Inner Dia. 86MM 18 teeth Inner Dia. 86-87MM 16 teeth •98220 • 98221 Inner Dia, 88-89MM 15 teeth • 98222 Inner Dia. 90-91MM 15 teeth Inner Dia. 91-92MM 15 teeth • 98223 Inner Dia. 92-93MM 15 teeth • 98224 • 98225 Inner Dia. 93-94MM 15 teeth

•98202

• 98203

• For the removal and installation of the filter

Inner Dia. 101MM 15 teeth

• It adopts imported high carbon stretching materials, plate thickening and heat treatment quality process, surface treatment black electrophoresis, expansion of the tight design, slove the impact of small errors

No.	#	8	ā
09705	-	4	8.8

▲ Warranty terms of tool set comply with the individual product.

## 09703 8Pc. End Cap Oil Filter Wrench



- 6Pc Oil Filter Wrench (65, 74, 76, 80, 90, 93 mm)
- •1pc 10 mm Quick-Release Ratchet
- •1pc 10 mm Adapter (3/8" F X1/2" M)
- \* Oil filter wrench used with 3/8"DR. or 1/2"DR. drive tool

No.	#	8	<b>\overline{\over</b>
09703	-	4	8.8

▲ Warranty terms of tool set comply with the individual product.

## **End Cap Oil Filter Wrench**



• 98226







- Made from imported high-carbon tensile material
   Plates thickened and tempered by heat treatment
   Black electro-deposition coated finish for durability and corrosion resistance
   New model upgraded to 12.5mm [1/2"] and applicable to 1/2" ratchet wrench for auto repair
   Tightly-fit adapter for firmness and anti-deformation

No.	Spec. (mm)	$\blacksquare$	8	ā
97401	65	10	12	12.4
97403	74	-	12	3.1
97404	76	1	12	14.3
97405	80	-	12	15
97406	90	-	12	17
97407	93	-	12	16.3

































## 97422 Universal 3-Jaw Oil Filter Wrench 63-102mm



•1/2" Drive size fit to used with 1/2" Dr. Ratchet

No.	Scope of application(mm)	8	8	ā
97422	63-102	-	24	8.5

## 97426 Adjustable Oil Filter Wrench Pliers 12"



- For removing oil filters from 63.5mm to 116mm in diameters
- Suitable for removing stubborn oil filters
- Two-clamp handle allows larger clamping power
- Plastisol coated handles provides a firm grip

No.	#	**	Q
97426	6	36	18.4

## 97441 1/2" Dr. Oil Filter Strap Wrench 18"



- Used for disassembling A/C pipe and oil pipe
- Applicable pipe diameters:
- •1/4"(6mm), 5/16"(8mm), 3/8"(9.5mm), 1/2"(12.7mm), 5/8"(16mm), 3/4"(19mm), 7/8"(22mm)

No.	Spec.	$\mathcal{G}$	¥	ā
97441	18"	12	72	12.8

## **Piston Ring Compressor**





- Made of high-strength spring steel with ratchet and locking device
- •Working range: 97501 53-175mm 97502 60-175mm

No.	Spec.	#	₩	ā
97501	3"	30	60	19.3
97502	4"	30	60	21.8

▲ Excluded from lifetime warranty terms.

## 09406 3Pc. A/C & Fuel Line Spring Lock Coupling Tool Set







- Suitable for most Fords, GM and Mazda vehicles
- $\bullet$  Suitable for Chrysler and Ford A/C circuit adapters
- Used for other purposes

No.	8	8	ā
09406	10	50	10.9

▲ Warranty terms of tool set comply with the individual product.

#### 09411 7Pc. A/C & Fuel Line Disconnect Set





- Used for disassembling A/C pipe and oil pipe
- · Applicable pipe diameters:
- •1/4"(6mm), 5/16"(8mm), 3/8"(9.5mm), 1/2"(12.7mm), 5/8"(16mm), 3/4"(19mm), 7/8"(22mm)

No.	8	8	ā
09411	6	72	11.2

▲ Excluded from lifetime warranty terms.

## 09706 12Pc. Transmission Repair Tool Set





## Contents

- Jaw and locking ring Bearing
- Mandrel
- Pulling device Thrust washer
- Quad4 drawing pin
- GM3.1 drawing pin
- Quad4 screw-shaped drawing pin
- Ford4.6 Modular screw-shaped drawing pin
- · Drawing pins for other vehicle model
- GM.3.1 screw-shaped drawing pin
- · Buckle-type head
- Used to remove and install power steering pulley on the alternator of most domestic cars

No.	#	8	<u></u>
09706	-	18	16.5

▲ Warranty terms of tool set comply with the individual product.

## 





- •5-piece set including an extended magnetic grip to be absorbed at places within easy reach
- · Heat treated picks for improved durability
- · Use picks to pull O-Rings, seals and cotter pins quickly and easily

No.	#	8	<u></u>
09709	20	200	9.7

▲ Warranty terms of tool set comply with the individual product.

## Valve Seal Removal Pliers 10"





• For removing or installation of valve stem seals and valve spring

No.	Spec. (mm)	#	8	<u></u>
97511	250	6	48	20

## **Bearing Separator**





- Used to pull and remove bearings
- Made of Cr-Mo

No.	Spec. (mm)	#	8	ā
90657	30-50	1	25	17.5
90658	50-75	-	12	17.6













































































Heavy-duty 4-hole drawing choke, long jackscrew, short jackscrew, long terminal, and flat short terminal X3PCS

Screws:

1/4"-28"3"x2pc, 5/16"-18"4-1/2"x3pc, 5/16"-24"3-1/2"x2pc, 3/8"-16"4" x3pc, 8mm 1.25"65"2pc, 8mm 1.25"90"3pc, 8mm 1.25"40"3pc, 10mm 1.5"50"3pc, 3/8"-16"2"3pc, 3/8"-24"2"3pc and 5/16"-18"2"3pc)

• Suitable for removing harmonic balancer, crank wheel and steering wheel

- Used for flywheel removing of electric engine with mechanical taphole or 2-stroke engine

No.	#	8	ā
09712	1	5	17.2

▲ Warranty terms of tool set comply with the individual product.

#### 09410 **Valve Spring Compressor Set**





- · For removing or installing valve springs
- The arch structure ensures coaxiality with the valve
- Connector size: 16mm, 19mm, 23mm, 25mm, 30mm
- Length of crimping thread: 70mm, 110mm, 120mm

No.	#	8	Ø
09410	-	8	16.3

▲ Warranty terms of tool set comply with the individual product.

#### 90664 **Timing Belt Pulley Puller**





- · Used for removing crankshaft timing belt pulley
- Adjustable jaw opening from 40mm to 90mm to be compatible with most cars
- Claw of 100mm long and 22mm wide

No.	#	8	ā
90664	10	20	15.2

▲ Excluded from lifetime warranty terms.

#### 97512 **Hose Gripper Pliers**





- Aperture of 15mm with total length of 280mm and inclination angle of tooth surface jaw of 30°
- Used to disassemble round and oval parts
- · Suitable for sparking plug removing and assembly

No.	#	8	ā
97512	6	36	11.9

▲ Excluded from lifetime warranty terms.

#### 97619 **Bit Socket for Engine Cover Screws**







• Used to disassemble and install screws of cylinder heads of Volkswagen's Jetta and Santana

Ν	No.	Spec.	$\mathscr{B}$	¥	ā
9	97619	T52	24	144	18.4

# 90651 Universal Ball Joint Separator



- For separating the ball joint from the steering knuckles
- · Lengthened gasket for various applications
- Made of Cr-V with special heat treatment to withstand heavy duty work

No.	Spec.	#	8	ā
90651	Small Type	-	18	22.1

## 90652 Ball Joint Separator for European Vehicle



- Bolt subjected to heat treatment for durability
- For separating the ball joint from the spindle support arm in narrow spaces

No.	Spec.	$\Theta$	8	ā
90652	Small Type	-	16	21.6

## 90654 Disc Brake Piston Separator







- Used for pressing back piston during brake pad installation
- Professional design
- Easy to use
- Fine thread for accurate stroke adjustment
- Made of special steel for high performance

No.	#	8	Ø
90654	-	16	18.7

# 90653 Ball Joint Separator for Japannish Vehicle



For separating the ball joint from the spindle support arm for most cars and light trucks Working range: 30mm-56mm

No.	#	8	ā
90653	-	16	20.2

## 90662 Outer Tie Rod Romover



- $\bullet$  For separating the ball joint from the steering knuckles
- Powerful center force screw for maximum torque
- $\bullet$  Made of Cr-V with special heat treatment to with stand heavy duty work
- $\bullet \, \text{Reasonable shape for anti-slipping} \\$

No.	Spec.	$\boldsymbol{\varnothing}$	贸	ā
90662	Large Type	6	12	14

## 90663 Pitman Arm Puller





- Used to remove connecting rod arm
- Made of medium carbon steel
- Subjected to stamp forging and heat treatment
- Note: Please wear goggles. Do not use power tools.

No.	#	 ♥	<u> </u>
90663	6	24	22.1





































































## 90665 Ball Joint Separator 12"



- Used to separate ball joint from steering knuckles
- Separating ball joint by inserting the tool in place and tapping to separate it with a hammer
- Forged to withstand hard usage

No.	Spec.	$\boldsymbol{\mathscr{G}}$	8	ō
90665	12"	6	24	19.3

## **Front Shock Absorber Removal Socket**





- Used for disassembling and assembling front shock absorber of Santana cars
- Forged with Cr-V

N	0.	Application	$\Theta$	8	ð
9	7102	Front shock absorber of Santana cars	6	36	13.1

## 90666 Ball Joint Separator 16"



- Powerful tool used to remove the ball joint of steering tie rod
- Separating ball joint by inserting the tool in place and tapping to separate it with a hammer
- Forged to withstand hard usage

No.	Spec.	#	8	ā
90666	16"	6	24	24.4

## **Rear Shock Absorber Removal Socket**





- $\bullet$  Used for disassembling and assembling front shock absorber of Santana cars
- Forged with Cr-V

No.	Application	#	8	<b>a</b>
97103	Front shock absorber of Santana cars	12	36	16.8

## **Coil Spring Compressor**



- Forged with quality carbon steel for high strength
- Works with 1/2" drive tools or with 21mm socket and wrench
- Reinforced screw thread design to ensure safety

No.	Spec. (mm)	#	8	<u> </u>
97701	270	-	8	14.9
97702	370	1	8	17.1

## **Shock Absorber Removal Socket**







- $\bullet$  Used for disassembling and assembling front shock absorber of Santana cars
- Forged with Cr-V

No.	Application	#	8	ā
97104	Shock absorber	24	48	3.1

































#### 09413 **Bearing Separator Set 30-75mm**



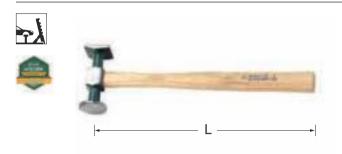


- Remove the steering wheel bearing
- · Remove the bearing
- Remove the crankshaft belt pulley

No.	#	8	<b>®</b>
09413	-	3	15.7

▲ Warranty terms of tool set comply with the individual product.

#### 92101 **Standard Bumping Hammer 320g**



- Hammerhead forged with high milling steel and subjected to quenching for anti-breakage
- Miniature plane for uniform force on the tapping surface
- Special embedding technology adopted to avoid fall-off
- Hickory handle ensuring dryness, elasticity, firmness and fitness with octagonal shape

No.	Spec. (G)	L(mm)	$\Theta$	8	<u></u>
92101	320	330	6	36	17.3

## 6Pc. Auto Body Repair Tool Set

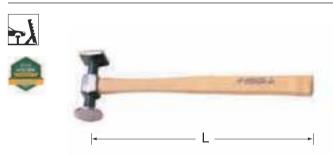


- •1pc Light Shrinking Hammer
- •1pc Pick & Finishing Hammer of 260G

No.	#	8	ō
09152	-	2	14.6

▲ Warranty terms of tool set comply with the individual product.

## **Heavy Duty Shrinking Hammer 390g**



- Hammerhead forged with high milling steel and subjected to quenching for anti-breakage
- Miniature plane for uniform force on the tapping surface
- Special embedding technology adopted to avoid fall-off
- Hickory handle ensuring dryness, elasticity, firmness and fitness with octagonal shape

No.	Spec. (G)	L(mm)	$\Theta$	8	ā
92102	390	330	6	36	17

## 09408 Auto Clips Removal Pliers



- Special rivet tongs for removing rivets holding the car door panel and other parts (for example, wheel covers)
- Suitable for removing plastic rivets for automobile bodies and industrial applications
- Used to selectively remove plastic rivet fastening systems
- Special flat nose pliers for pulling rivets without risk

No.	#	8	ā
09408	12	72	20.5

## **Curved Pein Finishing Hammer 350g**



- Hammerhead forged with high milling steel and subjected to quenching for anti-breakage
- Miniature plane for uniform force on the tapping surface
- Special embedding technology adopted to avoid fall-off
- Hickory handle ensuring dryness, elasticity, firmness and fitness with octagonal shape

No.	Spec. (G)	L(mm)	$\Theta$	8	ā
92103	305	330	6	36	16.1





















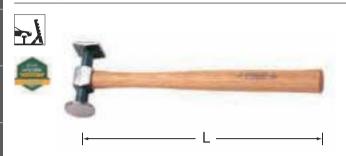








# 92104 Light Duty Shrinking Hammer 320g



- Hammerhead forged with high milling steel and subjected to quenching for anti-breakage
- · Miniature plane for uniform force on the tapping surface
- Special embedding technology adopted to avoid fall-off
- Hickory handle ensuring dryness, elasticity, firmness and fitness with octagonal shape

No.	Spec. (G)	L(mm)		¥	<b>6</b>
92104	320	330	6	36	17.4

## 92105 Straight Pein Finishing Hammer 305g



- Hammerhead forged with high milling steel and subjected to quenching for anti-breakage
- Miniature plane for uniform force on the tapping surface
- Special embedding technology adopted to avoid fall-off
- Hickory handle ensuring dryness, elasticity, firmness and fitness with octagonal shape

No.	Spec. (G)	L(mm)	#	¥	ð
92105	305	330	6	36	16

## 92106 Round Point Finishing Hammer 260g



- Hammerhead forged with high milling steel and subjected to quenching for anti-breakage
- Miniature plane for uniform force on the tapping surface
- Special embedding technology adopted to avoid fall-off
   Hickory handle answing dryness electicity firmness and fit
- Hickory handle ensuring dryness, elasticity, firmness and fitness with octagonal shape

No.	Spec. (G)	L(mm)	$\Theta$	8	<u>a</u>
92106	260	330	6	36	15.5

## 92107 Wheel Weight Pliers



• Designed to remove and install wheel weights, allowing user to pinch, pry and hammer weights

No.	#	8	ā
92107	12	48	23

▲ Excluded from lifetime warranty terms.

## 92203 Anvil Dolly



• Made of high carbon steel, forged and tempered, for strength and durability

No.	Spec.	#	8	ā
92203	Anvil Dolly	6	12	14.1

## 92205 Wedge Dolly



• Made of high carbon steel, forged and tempered, for strength and durability

No.	Spec.	#	8	ā
92205	Wedge Dolly	6	12	14.3

#### 92207 Toe Dolly



• Made of high carbon steel, forged and tempered, for strength and durability

No.	Spec.	$\blacksquare$	8	ā
92207	Pry Bumping Spoon	6	12	16.2

#### 97105 **Rigid Scraper**





- Used for surface cleaning for installing new gaskets
- Used for cleaning cylinder cover surface of the automatic temperature regulating pump, crankcase and timing chain before gasket installation

No.	#	¥	ā
97105	12	72	15.3

▲ Excluded from lifetime warranty terms.

#### 92209 Pry Bumping Spoon



• Made of high carbon steel, forged and tempered, for strength and durability

No.	Spec.	#	8	V
92209	Toe Dolly	-	12	15.4

#### 62503 Automotive Circuit Tester 6V/12V/24V





- Used for detection of low voltage circuit faults in transportation machinery
- For use in automobiles, motorcycles, bulldozers, rollers and other transportation machinery maintenance/operations

No.	Voltage Measuring Range	#	¥	ā
62503	6V-12V-24V	-	36	2.4

▲ Excluded from lifetime warranty terms.

#### 95201 **Wood Handle Putty Scraper**





- Heavy duty blade with ground edge for maximum strength
- · Wood handle provides more comfort
- Capable of clearing dirt on engine cylinder surface and all kinds of metal surfaces

No.	#	₩	ā
95201	6	120	17.4

▲ Excluded from lifetime warranty terms.

#### **Dual Purpose Automotive Circuit Tester**



- Used to test 6V and 12V circuit voltage and spark plug discharge
- Testing by grounding the duckbill clip end, and inserting the probe end into the tested end
- Testing spark plug by unscrewing the probe and screwing it into the other end of the handle

No.	#	8	<u>p</u>
62504	10	100	14.9

▲ Excluded from lifetime warranty terms.







































































**Multi-purpose Wire Stripper 8"** 



- •7 features in one

97521

- Insulated-terminal crimper
- End cutting nippers (0.75-6mm)
- · Non-insulated-terminal crimper
- Wire cutters 7-8mm
- Terminal pliers for automobiles
- · Bolt cutter M2.6-M5

No.	#	*	ā
97521	6	72	17.3

#### **AE5931 Swivel Jaw Hose Clamp Pliers**



- Applying to quick release pipe clamp, easy to disassemble water pipe, avoiding the harm from voilent disassembly.
- · Adjustable ratchet structure can quick tighten and release, applying to pipes in lower position.
- Rotated top concave is easy to fit clamp, applying to small space.
- Plier head and top concave formed by excellent steel with heat treament assure lifetime.
- thicker and bigger handle with two color PVC dipped, more comfortable, more labor saving.
- · Whole length of product is 9 " (230mm).

No.	#	8	ā
AE5931	6	36	11.7

♠ Excluded from lifetime warranty terms.

#### **AE5932 Hose Clamp Pliers**



- · Applying to quick release pipe clamp, easy to disassemble water pipe, avoiding the harm from voilent disassembly. More reachable than straight one
- · Adjustable ratchet structure can quick tighten and release, applying to pipes in lower position.
- · Rotated top concave is easy to fit clamp, applying to small space.
- Plier head and top concave formed by excellent steel with heat treament assure lifetime.
- thicker and bigger handle with two color PVC dipped, more comfortable, more labor saving. Whole length of product is 9 " (230mm).

No.	#	8	ā
AE5932	6	36	11.7

▲ Excluded from lifetime warranty terms.

#### **AE5934 Right Angle Sure Grip Trim Clip Plier**



- Disassemble metal clamp safely, which can be used again. Avoid damage to clamp, Save cost and increase efficient.
- Three slots are designed for metal clamps with different size
- Plier head made of excellent steel with heat treament assure lifetime.
- · Lengthened handle with two color PVC dipped, more comfortable, more labor saving.
- · Whole length of product is 220mm

No.	#	8	ā
AE5934	6	48	11.06

Excluded from lifetime warranty terms.

#### **AE5937 8pc Adjust Tightener Wrench Tool Kit**



- Disassemble and replace the generator belt by pulling the elastic idler/tensioner pulley
- Apply to idlers and tensioners pulley with 15mm, 16mm, 18mm hex or 3/8" or 1/2" square drives
- Equipped with 1/2" drive head long rod, equipped with 3/8" drive head conversion rod
- Equipped with 15mm/16mm/18mm/ 3/8" socket. Equipped with 13mm/14mm/15mm horn wrench
- The long and short connecting rods are made of high-quality steel with the head heat-treated

No.	#	*	Ō
AE5937	6	12	14.5

▲ Excluded from lifetime warranty terms.

#### **AE5938 20pc Brake Caliper Wind Back Tool Set**



- It is used to reset the piston of the brake cylinder when replacing the brake pads.
- Provides positive and negative screw and screw sets and 17pcs connecting pieces, which can meet the needs of most models.
- Made of high-quality steel and key parts with heat treatment, round pin material 40Cr alloy steel
- · Surface Anti-rust treatment with a special gray phosphate

No.	#	8	ā
AE5938	-	5	13.65

▲ Warranty terms of tool set comply with the individual product.





- Because the oxygen sensor is connected to the signal line and the heating line, and the narrow space in the car, it is difficult to complete this work with ordinary sleeves and hand tools. A special oxygen sensor wrench can make this job easy.
- Multi-specification sleeve is suitable for disassembly and replacement of different car oxidation sensors
- Suitable for dismantling some models of coolant temperature sensor and oil pressure switch
- Made of high-quality 42 chromium molybdenum steel, which improves the toughness and wear resistance, and improves the lifetime. The surface is treated with electrophoretic paint.

No.	#	8	ā
AE5941	-	5	11

▲ Warranty terms of tool set comply with the individual product.

#### AE5955 11pc Auto Fastener & Molding Removal Set



- When using metal tools to disassemble car interiors, plastic parts, chrome plating of parts, and leather are often damaged, which can cause various losses. This product will effectively reduce such problems. The kit includes 11 unique tools that can be used to remove various fasteners and molded parts
- For interior and exterior vehicle styling and decorative fasteners
- The plastic structure of the tool prevents scratches and damage to car paint, leather, chrome, etc.

No.	#	8	ā
AE5955	-	20	11.7

▲ Warranty terms of tool set comply with the individual product.

#### **AE5953 Trim Pad Remover**



- The flat head and opening of the special stamping process ensure a smooth fit to the panel. Reasonable head angle and handle design make work more labor-saving, smoothly take out the interior plastic buckle, and complete the internal plastic board disassembly work.
- $\bullet \text{The shank is made of high-quality steel with heat treatment, and the surface is chrome-plated} \\$
- The diameter of the shank is 9mm, and the overall length is 222mm.

No.	#	8	ā
AE5953	6	72	14.22

Excluded from lifetime warranty terms.

#### **AE5954 Trim Pad Remover**



- The flat head and opening of the special stamping process ensure a smooth fit to the panel. Reasonable head angle and handle design make work more labor-saving, smoothly take out the interior plastic buckle, and complete the internal plastic board disassembly work.
- The shank is made of high-quality steel with heat treatment, and the surface is chrome-plated
- The diameter of the shank is 6mm, and the overall length is 205mm.

No.	#	8	
AE5954	6	72	13.43

▲ Excluded from lifetime warranty terms.







































# **Cordless Tool**

J-Series Li-Ion Tools	322-325
Li-Ion Impact Wrench	326
Li-Ion Dr. Rachet	326
Electric Drill Chuck	328-329

# **Cordless Tool**

# 51011C J Series 18V Lithium Brushless Drill / Driver (One Battery Pack and One Charger)



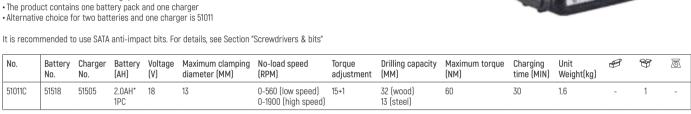








- Quick charger for full charging in half an hour and operation continuity
- · Metal chuck, featuring strong and durable
- · Front white LED to light up the work space
- · Stepless speed switch for quick speed adjustment
- Brushless motor, requiring no carbon brush replacement or reversing spark to improve service life
- · High torque to cope with heavy load
- · Shank covered with soft PVC for grip comfort



#### 51012C J Series 18V Lithium Brushless Impact Drill / Driver (One Battery Pack and One Charger)









Battery 51518

Charger 51505

- Quick charger for full charging in half an hour and operation continuity
- · Metal chuck, featuring strong and durable
- Front white LED to light up the work space
- · Stepless speed switch for quick speed adjustment
- High torque to cope with heavy load
- · Shank covered with soft PVC for grip comfort
- The product contains one battery pack and one charger
- Alternative choice for two batteries and one charger is 51012

It is recommended to use SATA anti-impact bits. For details, see Section "Screwdrivers & bits"

No.	Battery No.	Charger No.	Battery (AH)	Voltage (V)	Maximum clamping diameter (MM)	No-load speed (RPM)	Torque adjustment	Drilling capacity (MM)	Maximum torque (NM)	Charging time (MIN)	Unit Weight(kg)	#	¥	ā
51012C	51518	51505	2.0AH* 1PC	18	13	0-560 (low speed) 0-1900 (high speed)	21+1	32 (wood)/13 (steel) /6.5 (brick wall)	60	30	1.7	-	1	-











































































# 51073C J Series 18V Lithium Brushless Impact Wrench 220N·m (One Battery Pack and One Charger)









- Compact body with impact torque up to 220NM
- Front white LED to light up the work space
- Three-stage electronic control of speed and impact frequency
- · Brushless motor, requiring no carbon brush replacement or reversing spark for longer service life
- · Shank covered with soft PVC for grip comfort
- · Large-capacity 5.0Ah battery pack
- The product contains one battery pack and one charger

• Alternativ	e choice	for two bat	teries an	d one cha	arger is 51	073										
No.	, , , ,	Charger No.		Voltage (V)			RPM 2/ Impact frequency 2		Maximum Torque(NM)		High- Strength Bolt		Unit Weight(kg)		8	ā
51073C	51528	51505	5.0AH* 1PC	18	1/2"Square head	0-1200/0-1600	0-1800/0-2300	0-2500/0-3200	220	M8-M16	M6-M14	80	1.6	-	1	-

# 51074C J Series 18V Lithium Brushless Impact Wrench 580N·m (One Battery Pack and One Charger)











• Front white LED to light up the work space

Battery 51528

- Three-stage electronic control of speed and impact frequency
- Strong brushless motor, requiring no carbon brush replacement or reversing spark for longer service life
- Compact body with impact torque up to 580NM
- Shank covered with soft PVC for grip comfort
- Large-capacity 5.0Ah battery pack
- The product contains one battery pack and one charger
- Alternative choice for two batteries and one charger is 51074

No.		Charger No.	Battery (AH)			RPM 1/ Impact frequency 1	RPM 2/ Impact frequency 2					Charging time (MIN)			¥	ā
51074C	51528	51505	5.0AH* 1PC	18	1/2"Square head	0-900/0-1700	0-1400/0-2500	0-2000/0-3400	580	M12-M22	M10-M20	80	2.5	-	1	-



# 51075C J Series 18V Lithium Brushless Impact Wrench 1000N·m (One Battery Pack and One Charger)







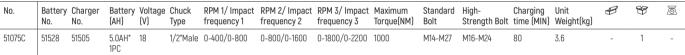








- Impact torque up to 1000NM
- Three-stage electronic control of speed and impact frequency
- · Shank covered with soft PVC for grip comfort
- Front white LED to light up the work space
- · Large-capacity 5.0Ah battery pack
- The product contains one battery pack and one charger
- Alternative choice for two batteries and one charger is 51075



#### 51085C J Series 18V Lithium Brushless Impact Driver (One Battery Pack and One Charger)











- Compact body with impact torque up to 155NM
- Front white LED to light up the work space
- Three-stage electronic control of speed and impact frequency
- · Brushless motor, requiring no carbon brush replacement or reversing spark for longer service life
- Shank covered with soft PVC for grip comfort
- · Large-capacity 5.0Ah battery pack
- The product contains one battery pack and one charger
- Alternative choice for two batteries and one charger is 51085

It is recommended to use SATA anti-impact bits. For details, see Section "Screwdrivers & bits"

No.	Battery No.	Charger No.	Battery (AH)	Voltage (V)	Chuck Type	RPM 1/ Impact frequency 1	RPM 2/ Impact frequency 2	RPM 3/ Impact frequency 3	Maximum Torque(NM)	Charging time (MIN)	Unit Weight(kg)	#	¥	ā
51085C	51528	51505	5.0AH* 1PC	18	1/4" Inner hexagon	0-1200/0-1600	0-1800/0-2300	0-2500/0-3200	155	80	1.6	-	1	-



































































# 51090C J Series 18V Lithium Brushless Grinder 5" (One Battery Pack and One Charger)





- Brushless motor, requiring no carbon brush replacement or reversing spark for longer service life
- Overload protection to prevent motor overload
- · Removable air filter to effectively prevent dust
- · Safety switch and quick brake for dual tool safety
- Small shank covered with large-area soft PVC for grip comfort
- · Electronic safety clutch to prevent tool rebounding in case of saw blade sticking
- · Angle guard requiring no tool adjustment

Battery

No.

51528

• The product contains one battery pack and one charger

51505

• Alternative choice for two batteries and one charger is 51090







Charger 51505

Charger No. Battery Output shaft Grinding Wheel No-load **Driving Capacity**  $\overline{\otimes}$ Voltage(V) Charging Speed(RPM) Specification(mm) Weight(kg) (AA) time(MIN) specification (mm) 5.0AH\*1PC 8000 18

#### 51006A 12V Li-Ion Brushless Drill/Screwdriver



No.

51090C



- High efficiency brushless motor for quick work progress
- Two speed control for multiple applications
- · Self-lock for quick accessory discharge
- Recommended application for screw fastening and drilling on wood and metal piece





Battery 05860

No.	Battery No.	Charger No.	Voltage(V)	Battery(AH)	Max. Clamping Diameter (mm)	No-load Speed(RPM)	Maximum Torque (NM)	Charging time (MIN)	Unit Weight (kg)	#	¥	ā
51006A	05860	05806-2	12	2.0AH * 2PC	10	0-400 (low speed) 0-1680 (high speed)	30	≈100	1.25	1	10	17.8

# 51086C J Series 12V Lithium Drill / Driver (One Battery Pack and One Charger)







- Small size with powerful output
- · Light weight for grip comfort
- · Front white LED to light up the work space
- · Stepless speed switch for quick speed adjustment
- Shank with large area soft PVC to prevent slippage and facilitate graping
- · Quick charger for full charging in half an hour and operation continuity
- The product contains one battery pack and one charger
- Alternative choice for two batteries and one charger is 51086

It is recommended to use SATA anti-impact bits. For details, see Section "Screwdrivers & bits"





Battery 51517

No.	Battery No.	Charger No.	Battery(AH)	Voltage(V)	Max. Clamping Diameter (mm)	No-load Speed(RPM)	Impact frequency (BPM)	Maximum Torque(NM)	Charging time(MIN)	Unit Weight(kg)	#	8	ā
51086C	51517	51504	2.0AH*1PC	12	6.35	0-2300	0-3000	100	30	1.1	-	1	-

#### 51021 **Professional Lithium Brushless Grease Gun Set**













51521 Lithium Charger 18V

- Brushless motor
   Operating pressure: 5000PSI
   Capacity:
   H gear: ≥110g/min
   L gear: ≥85g/min
   3 grease filling methods:
   1) Filling via grease bucket
   2) Filling wis seal pot
   3) Filling with bulk grease

Camp

No.	,	Charger No.		Voltage (V)		RPM 1/ Impact frequency 1	RPM 2/ Impact frequency 2		Maximum Torque(NM)	Standard Bolt	High- Strength Bolt		Unit Weight(kg)	$\blacksquare$	8	ā
51021	51520	51521	5.0AH* 1PC	18	1/2" Square head	0-1200/0-1600	0-1800/0-2300	0-2500/0-3200	220	M8-M16	M16-M24	80	1.6	-	1	-

#### Li-Ion Dr. Rachet





















Battery 51510

Battery 51511

Charger 51500

- With greased ratchet head
  Compact and robust 4-pole motor and all metal drive system
  Fast response type Multi-speed control switch
  14.4V 2.0 Ah high capacity battery
  Residual battery display
  This set includes two batteries and one charger









51081

51082

No.	Battery No.	Charger No.	Battery(AH)	Voltage(V)	Male Size	No-load Speed(RPM)	Maximum Torque(NM)	Unit Weight(kg)	#	\$	ā
51080	51510	51500	2.0	10.8	1/4"	0-220	57	0.96	1	4	21.8
51081	51511	51500	2.0	14.4	3/8"	0-220	68	1.09	1	8	23.5
51082	51511	51500	2.0	14.4	1/2"	0-180	100	1.52	1	4	26.6













































# **AC/DC Driven Electrical Fan**





























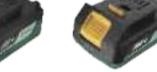






Battery 05861

Charger 05867



Battery 05862



Charger 05868



- Stepless speed switch for quick speed adjustment
- Small size suitable for narrow spaces
- AC/DC dual usage in different applications
- Head can tilt 180° with limited position adjustment
- Lithium battery pack and charger need to be purchased separately under recommended models: 05861 or 05862 for battery and 05867 or 05868 for charger

No.	Battery No.	Charger No.	Water Proof IP	Fan Leaf Diameter(mm)	Battery and Charger	Voltage(V)	Speed(RPM)	$\Theta$	*	ā
51121	05861 05862	05867 05868	IP54	178	2.0(05861/05867) 4.0(05862/05868)	18	1300/2200	1	4	12

#### 51040 18V Li-Ion Hydraulic Crimping Tool



- Widely open clamping head for easy terminal change
- Constant voltage ensures consistent single crimping force output
- One click reset on clamping head
- Accessories: 2 batteries, 1 charger and 11pc crimping heads

No.	Crimping Force (KN)	Battery (AH)			Cycle	Max. Crimping Times (Full Load)	Time	#	¥	<b>®</b>
51040	≥58	2.0*2	16-300	17	≤9	≈120 (Cu150mm)	≈35	1	1	3.8

#### 51048 18V Li-Ion Battery Cable Cutting Tool



- Heavy duty blade for high durabilityOne switch for forward and reverse operation
- Accessories: 2 batteries and 1 charger
- · Blade is excluded from warranty

1	No.	Crimping Force (KN)	Battery (AH)	Max. Cutting Force (Cable Фmm)		Cutting Efficiency (S)	Charging Time (Min)	#	¥	ā
į	51048	≥50KN	4.0Ah*2pc	50	20000	≤8	≈60	1	1	-





- Electroplated body for good rust protection
- · Wide application
- Gripper jaw with higher wear resistance

No.	Clamping range(mm)	Connectiong Spec.	#	8	ā
53101	0-6.5	3/8" x 24	-	12	1.9

▲ Excluded from lifetime warranty terms.



Industrial Drill Chuck 0-6.5mm, B10 Mount

- High wear-resistance jaw with socket teeth and keyhole
- Integral sleeve for anti-breakage
- · Little runout

53131

· Big clamping force

No.	Clamping range(mm)	Connectiong Spec.	$\Theta$	¥	ā
53131	0-6.5	B10 (Taper)	1	4	0.7

▲ Excluded from lifetime warranty terms.

#### 53111 Drill Chuck 1-10mm, 3/8" Mount



- Electroplated body for good rust protection
- · Wide application
- Gripper jaw with higher wear resistance

No.	Clamping range(mm)	Connectiong Spec.	#	8	ā
53111	1-10	3/8" x 24	-	12	2.4

▲ Excluded from lifetime warranty terms.

#### 53132 Industrial Drill Chuck 2-13mm, B16 Mount



- High wear-resistance jaw with socket teeth and keyhole
- Integral sleeve for anti-breakage
- Little runout
- · Big clamping force

No.	Clamping range(mm)	Connectiong Spec.	$\blacksquare$	8	Ō
53132	1-13	B16 (Taper)	1	4	2

▲ Excluded from lifetime warranty terms.

#### 53121 Drill Chuck 1.5-13mm, 1/2" Mount



- Electroplated body for good rust protection
- Wide application
- Gripper jaw with higher wear resistance

No.	Clamping range(mm)	Connectiong Spec.	#	8	M
53121	1.5-13	1/2" x 20	-	12	4.3

▲ Excluded from lifetime warranty terms.

#### **Chuck Key, KG Style** 53201



• Suitable for KG-toothed chucks of all brands with wrenches

No.	#	8	<u> </u>
53201	1	-	-

▲ Excluded from lifetime warranty terms.













































# 53202 Chuck Key, KK Style





















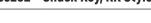














• Suitable for KG-toothed chucks of all brands with wrenches

No.	#	8	ā
53202	-	24	1.9

 $\ \ \, \triangle$  Excluded from lifetime warranty terms.

# 53203 Chuck Key, S2 Style



• Suitable for KG-toothed chucks of all brands with wrenches

No.	#	8	Ō
53203	-	24	1.8

 $\ensuremath{\Delta}$  Excluded from lifetime warranty terms.

# 53204 String for Chuck Key



• Compatible with various drill chuck wrenches of SATA

No.	#	8	ā
53204	-	48	10.6

 ${\color{red} \underline{ \hspace{0.1cm} \Delta}}$  Excluded from lifetime warranty terms.

# **Air Tool**

331-340	Pneumatic Fastening Tools	
336-341	Pneumatic Polishing & Grinding Tools	
342	Pneumatic Drilling & Cutting Tools	-E[[]]
344-352	Pneumatic Socket	























02312A

• Dual hammer strike structure provides stable torque output







# **Air Tool**

#### **Professional Pistol Grip Air Screwdriver**







#### **Professional Straight Grip Air Screwdriver**









- High precise cylinder ensures durability
- Forward and reverse adjustable in 3 level

No.	Output End Specification	Working Torque <sup>4</sup> (N·m)	Max. Reversal Torque <sup>5</sup> (N·m)		Bolt Tightening Capacity <sup>1</sup>	Average Gas Consumption (CFM)	Noise Level <sup>2</sup> dB(A)	L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight (kg)	#	T	ā
02311A	1/4" hex	50	68	11000	M6	3.5	90	146x167x41	1/4"	8	6.35	0.88	1	10	8.9
02312A	1/4" hex	100	120	9000	M12	4.2	98	161x171x46	1/4"	8	6.35	1.15	1	10	11
02313A	1/4" hex	50	68	11000	M6	3.5	100	175x62x41	1/4"	8	6.35	0.73	1	16	11.4
02314A	1/4" hex	40	68	11000	M6	3.5	100	175x62x41	1/4"	8	6.35	0.73	1	16	11.4
02315A	1/4" hex	90	110	7000	M8	3.5	95	185x63x47	1/4"	8	6.35	0.99	1	16	15.5

<sup>🛕</sup> For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. Noise level is sound pressure of level A. Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working to refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; S Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### **Dr. Composite Air Impact Wrench**

































- Output shaft forged with SNCM616 steel imported from Japan
- Self-reset blade capable of attaching to the inner surface of the cylinder for quick startup and strong explosive force
   All series provided with 360-degree rotating intake assembly, free of pipe winding

No.	Output End Specification	Working Torque⁴ (N·m)	Max. Reversal Torque⁵ (N·m)		Bolt Tightening Capacity <sup>1</sup>	Average Gas Consumption (CFM)	Noise Level <sup>2</sup> dB(A)	L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight (kg)	#	8	ā
02124	3/8"	450	650	7000	M16	4.4	89.5	159.1×178.9×60.3	1/4"	10	6.35	1.43	-	10	15.1
02135	1/2"	500	650	8000	M18	4.5	90	159.1×178.9×60.3	1/4"	10	6.35	1.44	-	10	15.2
02136	1/2"	800	1050	6700	M20	5.5	92	193.5×191.5×72	1/4"	10	6.35	2.34	-	8	20
02139	1/2"	850	1120	7300	M20	5.5	92	174.8×184×70	1/4"	10	6.35	1.79	-	10	19.5
02145	3/4"	1220	1700	4000	M24	7.0	97	220.8×221.1×89.2	3/8"	12.5	6.35	4.04	-	4	16.6
02146	3/4"	1450	1800	4900	M24	15.9	108	216x211x85	3/8"	12.5	6.35	4.35	1	4	17.4
02160	1"	1220	1700	4000	M24	7.0	97	228.6×221.1×89.2	3/8"	12.5	6.35	4.14	-	4	17

<sup>▲</sup> ¹ For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. ² Noise level is sound pressure of level A. ³ Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; ⁴Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; ⁵ Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure







































































#### **Dr. Air Impact Wrench**























• Push-rod reversing knob operated with only one hand

No.	Output End Specification	Working Torque <sup>4</sup> (N·m)	Max. Reversal Torque <sup>5</sup> (N·m)		Bolt Tightening Capacity <sup>1</sup>				Air Inlet Size		Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight(kg)	#	8	ā
02123	3/8"	350	500	10500	M16	9.9	105	191×118×60	1/4"	10	6.35	1.47	-	10	16.8
02150	1/2"	650	880	7000	M18	10.6	103	202×169×71	1/4"	10	6.35	2.6	-	6	17.8
02144	3/4"	1200	1500	5000	M24	13.5	100	218×213×85	3/8"	12.5	6.35	4.55	-	4	20.8

Δ 1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure.

#### 1" Dr. Air Impact Wrench



























01133

- Suitable for disassembly and assembly of tires of large buses as well as disassembly and assembly and maintenance of large mechanical equipment
- Main parts subjected to vacuum heat treatment and ultra-low temperature quenching for high hardness, good toughness, good wear resistance and long product life
- 8" output shaft (01123) suitable for tire disassembly and assembly of large buses
- 2" output shaft (01132S) suitable for narrow space operation

- Maximum output torque 4000N·M (Reverse)
- Suitable for disassembly and assembly of tires of heavy trucks and large passenger cars, as well as disassembly and maintenance of heavy vehicle chassis and large mechanical
- The main parts adopt vacuum heat treatment and ultra-low temperature quenching process, which have high hardness, good toughness, good wear resistance and long product
- Light weight, effectively reducing labor intensity

No.	Output End Specification	Working Torque⁴ (N·m)	Max. Reversal Torque⁵ (N·m)		Bolt Tightening Capacity <sup>1</sup>	Average Gas Consumption (CFM)		L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight(kg)	#	¥	ā
01132	1"Male	2300	2900	4700	M30	16	110	537×123.5×176	1/2"	12.5	8	12.4	-	1	13.4
01132S	1"Male	2300	2900	4700	M30	16	110	384×123.5×176	1/2"	12.5	8	11.4	-	1	12.4
01133	1"Male	3200	4000	4000	M33	16	110	623×140×176	1/2"	12.5	8	16.8	-	1	18

▲ 1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### 1/2" Compact Air Impact Wrench 01111









- Compact air wrench, total length 125mm High speed, high impact frequency
- Net weigh 1.5kg

# 01113C 1/2" Dr. Air Impact Wrench





- Maximum torque: 800N.m Downward exhaust design
- Increased service life

#### 01118 1/2" Air Impact Wrench













- Compact design
- Double hammer impact structure
- Maximum reverse torque 750N M
- · Lower exhaust structure



### 01113A 1/2" Dr. Air Impact Wrench





- High torque output
- CVT trigger for easy initial positioning

#### 1/2" Component Air Impact Wrench















- Nylon and glass fiber material shell
- Maximum reverse torque 1050N·M
- Double hammer impact structure



# 02233 3/8" Dr. Composite Air Ratchet





• Handle designed with hexagon ring and made with composite for comfort

No.	Output end Spec.	Idling speed	Working torque <sup>4</sup>	Max.reverse torque⁵	Tighten bolt capacity <sup>1</sup>	Air consu	mption	Noise <sup>2</sup>	L×W×H	N.W.	Air inlet dimension	Inner diameter of pipe	Standard working pressure <sup>3</sup>		#	¥	ā
	in.	RPM	N·m	N⋅m	DIN 12.9	CFM	L/min	dB(A)	mm	Kg	NPT	mm	kgf/cm <sup>2</sup>	PSI			
01111	1/2"	10000	400	625	M16	4.7	134	110	125×58×177	1.5	1/4"	10	6.35	90	-	10	17.5
01118	1/2"	8500	600	750	M18	5.4	153	100	161×70×186	2.3	1/4"	10	6.35	90	-	8	19.8
01119	1/2"	8500	800	1050	M20	4.8	136	89	190×73×185	2.2	1/4"	10	6.35	90	-	6	19.2
01113C	1/2"Male	7500	600	800	M18	4.2		110	192×195×69	2.58	1/4"	10	6.35	90	-	6	28.5
01113A	1/2"Male	7000	610	810	M18	4.2		102	189×191×69	2.66	1/4"	10	6.35	90	-	6	18
02233	3/8"Male	280	34	41	M6	3.5		89	177×52×40	0.59	1/4"	10	6.35	90	-	10	7.9

<sup>▲</sup> ¹ For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. ² Noise level is sound pressure of level A. ³ Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure









































































#### 02231 1/2" Dr. Air Ratchet





- Ratchet yoke made of chromium-molybdenum alloy steel and subjected to precision machining
- special heat treatment for high precision and long service life
- Exhaust hood rotatable in 360 degrees for safety
- Precise planetary gear running in the inner ring gear tube made of nitride steel for stability and durability
- Trigger upgraded to stepless speed control
- · Novel exhaust hood profile
- Reversing knob facilitating operation
- · Output torque and service life increased

**Straight Grip Air Screwdriver** 





- Main shaft and blow mechanism made of nickel-chrome-molybdenum alloy steel and subjected to special heat treatment and suitable for production line
- · Blow chamber made of hot-forged steel blank for firmness and durability
- Preciously-casted steel cylinder for firmness and wear resistance
- Exhaust hood rotatable in 360 degrees for safety

#### 02312 Heavy Duty Pistol Grip Air Screwdriver



- Exquisite special dual non-pin totally-enclosed blow mechanism for stable and strong torque output
- Suitable for 150mm-long screws or hardwood work piece
- Seven-blade high-efficiency motor with aluminum alloy cylinder without nickel plating, being light and
- durable and weighing only 0.9kg
- Accurate speed adjustment buttons provided
- Exhaust hood rotatable in 360 degrees for safetyPositive/negative rotation with only one hand
- · Suitable for left-handed operators
- \*It is recommended to use SATA anti-impact bits. See the section of "Screwdrivers and bits" for details.

#### 02311 Composite Air Impact Screwdriver





- Handle coated with composite, weighing only 0.9kg
- Fully-enclosed reversing knob for effective dust control
- Main shaft, hammer, cam and hammer frame made of nickel-chrome-molybdenum alloy steel and subjected to special heat treatment
- CVT trigger for easy initial positioning
- "It is recommended to use SATA anti-impact bits. See the section of "Screwdrivers and bits" for

No.	Output End Specification	Working Torque <sup>4</sup> (N·m)	Max. Reversal Torque <sup>5</sup> (N·m)		Bolt Tightening Capacity <sup>1</sup>	Average Gas Consumption (CFM)		L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight(kg)	#	8	ā
02231	1/2"Male	75	81	160	M8	4	92.5	265×60×49	1/4"	8	6.35	1.13	-	16	20.8
02312	1/4" Hex Key	88	95	10000	M10	1.87	92	155×160×58	1/4"	6.35	6.35	0.97	-	10	12.6
02313	1/4" Hex	28	40	10000	M6	7	90	185×65×47	1/4"	6.35	6.35	0.85	-	10	10.3
02311	1/4" Hex	50	68	12500	M6	1.76	83.6	220×150×45	1/4"	10	6.35	1	-	10	11.4

▲ ¹ For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. ² Noise level is sound pressure of level A. ³ Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; ⁴Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; ⁵ Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### 01501 **Auto 6mm Mini Pneumatic Grinder**





- Small size, easy to hold Suitable for small space operation

#### 6mm Collet Air Die Grinder





- Made to industrial-grade grinding machine and suitable for small production in factory and general maintenance
- Cylinder made of special cast steel for wear resistance and long service life
- Elastic clamps subjected to precision machining for smoothness and little deflection and

#### 01503 Auto Pneumatic Low-speed Tire Sander







- •Stable low speed
- · Special for tire grinding

#### Air Pencil Die Grinder





- Lightweight and compact design for comfort
- Rotary switch for safety

No.	Output End Specification	Free Speed(RPM)	Average Gas Consumption(CFM)	Noise Level <sup>1</sup> dB(A)	L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>2</sup> (Kgf/cm <sup>2</sup> )	Unit Weight(kg)	$\Theta$	¥	ā
01501	6mm Collect	22000	3	91	122×61.2×33.5	1/4"	8	6.35	0.33	-	10	5.58
02511	6mm Chuck	20000	3	95.1	154×70×40	1/4"	10	6.35	0.60	1	10	8.7
01503	10mm Quick Coupler	2200	4	98	210.9×70.3×40.5	1/4"	8	6.35	1.08	-	5	7.92
02514	3mm Chuck	54000	1	78	135×17×17	1/4"	10	6.35	0.21	-	10	4











































































#### 02515 **Air Tire Buffer**





- Quick-release chuck facilitating replacement
- Speed control switch for accurate speed control
- · Suitable for polishing, repairing, refurbishing tires and cleaning tire grooves

#### 5" Air Angle Grinder





- Industrial-grade tools only suitable for 4.5 "or 5" grinding wheel with inner hole diameter of
- Spiral bevel gear made of nickel-chrome-molybdenum alloy steel and subjected to special heat treatment for stability and wear resistance
- · Coaxial centrifugal speed controller of motor for accurate motor speed control and safety
- Exhaust hood rotatable in 360 degrees to avoid exhausting to debris and sand dust, causing injury due to debris splash

#### 02521 **Compisite Air Pre Surface Sander Set**





#### 02522 Composite Air Random Orbital Sander Set





- Suitable for quick removing of paint, rust, and bump and welding slag from castings such as brake drum, brake disc and aluminum alloy steel ring
  Fully-enclosed reversing knob for effective dust prevention
  Speed adjustment button for use with only one hand, facilitating speed control
  CVT trigger for continuous fine tuning speed

- Suitable for grinding and sanding metal in small area and corners
- Eccentric sanding free of eddy grinding marks
- Eccentric mechanism for stability
- Fully-enclosed reversing knob for effective dust prevention
   Speed adjustment button for use with only one hand, facilitating speed control
   CVT trigger for continuous fine tuning speed

No.	Output End Specification	Grinding Disc Specification			Average Gas Consumption (CFM)	Noise Level <sup>2</sup> dB(A)	L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight(kg)	#	¥	ā
02515	10mm Hex: Chunk	-	-	2500	4	92	217×60×40	1/4"	10	6.35	0.97	-	10	11.7
02521	1/4"-20T Main Shaft	2", 3"	-	16000	2.1	84.9	130×150×50	1/4"	10	6.35	0.63	-	5	9.1
02541	M14 Main Shaft	-	-	11000	5	80.6	223×196×93	1/4"	10	6.35	2.13	-	8	18.4
02522	5/16"-24T Main Shaft	3"	-	15000	2.1	84.2	150×150×45	1/4"	10	6.35	0.80	-	5	9.9

▲ 1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### 02523 Composite Air Polisher Set





- Suitable for polishing of work pieces in small or narrow area
- Capable of polishing metal, paint finish or plastic surface, such
- as car bumper, plastic lamp shell surface, etc
- Fully-enclosed reversing knob for effective dust prevention Speed adjustment button for use with only one hand,
- facilitating speed control
   CVT trigger for continuous fine tuning speed

#### 02524 5" Non-Vacuum Air Random **Orbital Sander**



- · Lightweight and durable composite shell for handiness and comfort
- Low vibration for smoothness and comfort
- · Low grinding center of gravity for smooth polishing surface

#### 02525 5" Central Vacuum Air Random **Orbital Sander**





Applicable sandpaper



- Used with vacuum cleaning system for collecting impurities and dust
- · Lightweight and durable composite shell for handiness and comfort
- Low vibration for smoothness and comfort
- · Low grinding center of gravity for smooth polishing surface

02422 3/8" Reversible Air Drill

#### **Auto 10mm Reversible Air Drill**







- Self-locking drill chuck
- Gear reduction mechanism, strong output

#### 3/8" Composite Reversible Air Drill 02421





- · Suitable for drilling, hole grinding, reaming, and fraising
- Handle coated with composite, weighting only 0.98KG, with low noise and light weight Fully-enclosed reversing knob for effective dust control • 3/8" Jacobs drill chuck for durability
  • CVT trigger for easy initial positioning







- High-power industrial-grade air drill suitable for precision drilling, hole grinding, reaming, fraising and wire brush
- Cage-type planetary gear housing for sound transmission and solid spindle support
- Precisely-casted alloy steel cylinder for wear resistance and durability
- · CVT trigger for easy initial positioning

No.	Output End Specification	Grinding Disc Specification	Eccentric Distance (mm)	Free Speed (RPM)	Average Gas Consumption (CFM)		L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/ cm <sup>2</sup> )	Unit Weight(kg)	#	8	Ø
02523	5/16"-24T Main Shaft	3"	-	2200	2.2	83.5	160×147×47	1/4"	10	6.35	0.82	-	5	9.4
02524	5/16″-24(F)	Self-Adhesive Discs 5"	5	11000	2	80	140×123×103	1/4"	10	6.35	0.80	-	8	9.9
02525	5/16″-24(F)	6-Hole Self- Adhesive Discs 5"	5	11000	2	80	198×123×103	1/4"	10	6.35	0.86	-	8	10
01401	3/8" Drill Chuck	-	-	2000	4	98	202×165.8×42	1/4"	8	6.35	1.21	-	10	14.76
02421	3/8" Drill Chuck	-	-	1800	1.92	83.60	200×148×45	1/4"	10	6.35	0.98	-	10	12.3
02422	3/8" Drill Chuck	-	-	1800	5	78	215×150×44	1/4"	10	6.35	1.20	-	10	14.7

A 1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; "Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure



































































# **Self-Suction Air-Hydro Riveter**





#### **Riveter Accessories**

No.	Specification	Remark
P02704-2	Gripper	Standard Configuration 02704
P02705-2	Gripper	Standard Configuration 02705, 02706
P02707-2	Gripper	Standard Configuration 02707
P02704-49A	Top Tube Assembly 2.9MM ( Ø 3.2)	Standard Configuration 02704
P02704-49C	Top Tube Assembly 1.9MM ( Ø 2.4)	Standard Configuration 02704

No.	Specification	Remark
P02705-49A	Top Tube Assembly 3.9MM ( Ø 4.8)	Standard Configuration 02705, 02706
P02705-49B	Top Tube Assembly 2.9MM ( Ø 3.2)	Standard Configuration 02705
P02706-49	Top Tube Assembly 4.4MM ( Ø 6.4)	Standard Configuration 02706
P02707-49A	Top Tube Assembly 5.0MM ( Ø 6.4)	Standard Configuration 02707
P02707-49B	Top Tube Assembly 4.0MM ( Ø 4.8)	Standard Configuration 02707

		Rivet s	pecificati	ons availa	ble												
2		02704			02705			02706			02707		02715			02716	
Open-End Blind Rivet  Close-End Blind Rivet  Close-End Blind Rivet  Al Close-End Blind Rivet  Cc St Lantern Rivet  Al Grip Rivet  Peel-Type Blind Rivet  Al Self-lock Rivet  Cc Molobolt Rivet  Cc St  Hemlock (Hemlock Rivet)  Cc  Cc St  Cc Cc Cc Cc Cc Cc St  Cc	Rivet Material (Rivet Body - Nail Rod)	Tension	ı ≥ 5800N	•	Tension	Tension ≥ 9400N *		Tension	Tension ≥ 13000N *		Tension ≥ 18900N		* Tension	≥ 9500N*		Tension	≥ 19000N*
		Ø2.4	Ø3.2	Ø4.0	Ø3.2	Ø4.0	Ø4.8	Ø4.0	Ø4.8	Ø6.4	Ø4.8	Ø6.4	ф3.2	Ф4.0	Ф4.8	Ф4.8	Ф6.4
	Aluminum-Aluminum	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Aluminum/copper - Carbon steel/stainless steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Carbon steel-Carbon steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Stainless steel - Stainless steel	•	•	•	•	•	0	•	•	0	•	•	•	•	•	•	•
	Aluminum-Aluminum	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Aluminum - Carbon steel/stainless steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Carbon steel-Carbon steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Stainless steel - Stainless steel	•	•	0	•	•	0	•	•	0	•	•	•	•	•	•	•
Lantern Rivet	Aluminum-Aluminum	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Grip Rivet	Carbon steel-Carbon steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Peel-Type Blind Rivet	Aluminum - Carbon steel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
O-lé la al- Dissat	Aluminum-Aluminum	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Peel-Type Blind Rivet	Carbon steel-Carbon steel	•	•	0	•	•	•	•	•	0	•	•	•	•	•	•	•
	Carbon steel-Carbon steel	-	-	-	-	-	•	-	•	0	•	•			•	•	•
	Stainless steel - Stainless steel	-	-	-	-	-	0	-	•	0	•	•			•	•	•
	Carbon steel-Carbon steel	-	-	-	-	-	•	-	•	0	•	•			•	•	•
	Stainless steel - Stainless steel	-	-	-	-	-	0	-	•	0	•				•	•	•

- Self-Suction function design
- · Safety mechanism Designed
- No need tools to disassemble for maintenance

No.	Spec.	Max. rivet specifications available	Working Tension (N)	Effective Working Stroke (mm)	Max. Working Stroke (mm)	Air Consumption of Self-priming Function (L/ min)	Single-cycle Gas Consumption (L)		L×W×H(mm)	Working Air Pressure <sup>3</sup> (Kgf/cm <sup>2</sup> )	Min. Air Hose ID		#	8	Ō
02704	Ø3.2	Ø4.0 Close-Type Carbon Steel	≥5800	14	19	4.5	1.4	80	285×82×250	5~7	Ø8	1.3	1	10	20.7
02705	Ø4.8	Ø4.8 Close-Type Carbon Steel	≥9400	13	18	6	2.1	80	300×86×280	5~7	Ø8	1.55	1	10	23.3
02706	Ø6.4	Ø6.4 Close-Type Carbon Steel	≥13000	15	20	9	3.2	80	300×95×286	5~7	Ø8	1.6	1	10	24
02707	Ø6.4	Ø6.4 Stainless Steel Maolock	≥18900	20.5	25.5	16.5	6.2	80	335×108×320	5~7	Ø8	2.55	1	5	17.4
02715	Ø4.8	Ø4.8 Close-Type Carbon Steel	≥9500	14	19	6	2.1	80	275x105x265	5~7	Ø8	1.28	1	10	-
02716	Ø6.4	Ø6.4 Close-Type Carbon Steel	≥19000	20.5	27	16.5	6.2	80	330x115x340	5~7	Ø8	2.27	1	4	-

<sup>↑</sup> For tightening capability standard for bolts, ref"r to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound press"re of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; 4Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

\*The tension listed refers to the tension under the working condition of 6.3 Kgf/cm2 at the inlet pressure of the tool. " - ": No such specification

\* ● ": Specification recommended

#### 02755 Automatic Air-Hydro Rivet Nut Tool



#### 02755 Accessories List

No.	Specification
P02755M3	Pull Rod M3
P02755M4	Pull Rod M4
P02755M5	Pull Rod M5
P02755M6	Pull Rod M6
P02755M8	Pull Rod M8
P02755M10	Pull Rod M10
P02755M12	Pull Rod M12
P02755M14	Pull Rod M14
P02755M14U	M14 Pull Rod Assembly Package (Including M14 Head Housing, M14 Gun Head Nut and M14 Pull Rod)

- Automatic one-touch operation
- Adjustable riveting stroke
- Replacement of pull rod without using any tools
- Suitable for M3-M14 standard rivet nuts made of multiple materials
- Special nozzle assembly is required to be purchased separately for M14 rivet nuts







No.			Specification
P02765-79	P02765-85	P02765-03	M10 Pull Rod + M10 Gun Head + Gun Gead Nut
P02765-80	P02765-86	P02765-03	M8 Pull Rod + M8 Gun Head + Gun Gead Nut
P02765-81	P02765-87	P02765-03	M6 Pull Rod + M6 Gun Head + Gun Gead Nut
P02765-82	P02765-88	P02765-03	M5 Pull Rod + M5 Gun Head + Gun Gead Nut
P02765-83	P02765-89	P02765-03	M4 Pull Rod + M4 Gun Head + Gun Gead Nut
P02765-84	P02765-90	P02765-03	M3 Pull Rod + M3 Gun Head + Gun Gead Nut

- · Automatic one-touch operation
- · Adjustable riveting stroke
- Replacement of pull rod without using any tools
- · Smooth operation free from stuck
- One-touch reverse button for easy operation

No.	Rivet Nut Specification Applicable	Working Tension (N)	Max. Working Stroke (mm)	Working Air Pressure <sup>3</sup> (Kgf/cm <sup>2</sup> )	Min. Air Hose ID	Single-cycle Gas Consumption (L)	Noise Level <sup>2</sup> dB(A)	L×W×H(mm)	Unit Weight(kg)	#	¥	ā
02755	M3 - M14	≥19100	7	5-7	Ø8	2.76	80	160×115×280	2.5	1	5	19.7
02765	M3 - M12	≥29000	7	5-7	Ø8	2.76	80	290x100x298	2	1	3	-

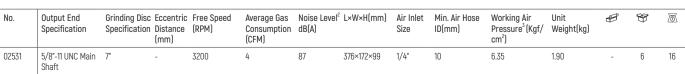
🛕 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. Noise level is sound pressure of level A. Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; "Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure The tension listed refers to the tension under the working condition of 6.3 Kgf/cm<sup>2</sup> at the inlet pressure of the tool. 2 Special pull rod assembly is required for M14 rivet nut

#### 7" Air Angle Polisher

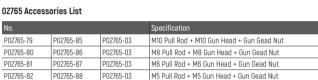




- · Capable of polishing and waxing various surfaces such as paints, metals and plastics at a speed of 3200RPM
- Built-in speed regulator · Platen switch for easy operation



1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. Noise level is sound pressure of level A. Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure























































#### 6" Self Vacuum Palm Sander, 2.5mm Orbit





- · Industrial-grade product for strong suction, handiness and comfort
- · Low vibration for smoothness
- •5" and 6" stickup grinding disc for easy sandpaper replacement
- 2.5mm and 5.0mm eccentricities for fine grinding and common grinding respectively





No.		Grinding Disc Specification	Eccentric Distance(mm)	Free Speed (RPM)			L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/cm <sup>2</sup> )	Unit Weight(kg)	$\Theta$	¥	ā
02659	5/16"-24(F)	6"	2.5	11000	2.2	88	213.2×150×96.3	1/4"	10	6.35	1.12	-	6	11.4
02662	5/16"-24(F)	6"	5	11000	2.2	88	213.2×150×96.3	1/4"	10	6.35	1.12	-	6	11.4
02665	5/16"-24(F)	5"	2.5	11000	2.2	88	200.6×124.7×96.8	1/4"	10	6.35	1.07	-	6	11.4
02668	5/16"-24(F)	5"	5	11000	2.2	88	200.6×124.7×96.8	1/4"	10	6.35	1.07	-	6	11.4

A 1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation, Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### 02545 Air Reciprocating Saw









- 32T saw blade available with additional one 24T saw blade and one 32T saw blade, with reciprocation of 9000BPM
- Capable of cutting iron plate with thickness of less than 1.6mm, 2mm-thick aluminum plate, glass fiber, plastic, etc
- · Safety trigger with locking device provided to prevent accidental activation
- · Adjustable hood for cutting depth adjustment

No.	Saw Blade Specification	Reciprocating Times(BPM)	Average Gas Consumption(CFM)	Noise Level <sup>2</sup> dB(A)	L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/cm <sup>2</sup> )	Unit Weight(kg)		8	ā
02545	32T, 24 Saw Blade	9000	9	88	279×36×68	1/4"	10	6.35	0.65	-	20	17

Δ 1 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; "Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### 02542 2" Air Cutter





- · Rotary switch for safety
- · Handiness for cutting in narrow spaces

No.	Output End Specification	Free Speed (RPM)	Average Gas Consumption (CFM)	Noise Level <sup>2</sup> dB(A)	L×W×H (mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> [Kgf/cm <sup>2</sup> ]	Unit Weight(kg)	#	*	ā
02542	1/4"-28 (F) Main Shaft	15000	3	90	160×66×60	1/4"	10	6.35	0.655	-	10	9.3

<sup>▲ 1</sup> For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. 2 Noise level is sound pressure of level A. 3 Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### 01511K 12pcs Penumatic shovel and hammer set





- Strong impact
- -Variety of accessories
   -Suitable for disassembly of chassis, suspension and brake system components
- Suitable for dismantling the car body

No.	Shank hole spec.(mm)	Impact frequency(BPM)	L×W×H(mm)	Unit Weight(kg)	$\Theta$	¥	<b>®</b>
01511K	ф10	2200	284×52×162	2.2	-	3	17.5

▲ Three-month warranty. Accessories and wearing parts are not covered by the warranty

#### **Air Hammer Set**



- •The set includes: 1 pc Pneumatic Chipping Hammer, 5 pc Medium Carbon Steel Chisel of 175mm in length subjected to heat treatment, 1 pc Spring Fixator, and 1 pc Blow Mold Case
- Cylinder and piston made of alloy steel for long service life
- Power control switch for speed and power output adjustment
- Rear exhaust keeping airflow away from operator and workpiece

No.	Output End Specification	Free Speed (RPM)	Average Gas Consumption (CFM)	Noise Level <sup>2</sup> dB(A)	L×W×H (mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/cm <sup>2</sup> )	Unit Weight(kg)	#	¥	ā
02571	10MM Round Bar Chuck	3000 BPM	3	101.4	175×180×50	1/4"	10	6.35	1.58	-	4	16

🛕 For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. Noise level is sound pressure of level A. Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; "Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure, 5 Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure

#### **Air Blow Gun**





- Working air pressure 5.0-8.0KGF/cm<sup>2</sup>
- Brass joint dimensions 1/4"NPT
   Gas flow
- •1/4"-inner-diameter air tube: 350L/min 3/8"-inner-diameter air tube: 430L/min
- Safety precautions
- Wear ear protection, eye protection, work gloves and other personal protective equipment for operation.

No.	Spec. (mm)	$\Theta$	¥	ā
97221	100	5	60	10.6
97222	250	5	50	12.6









































97222































#### **Industrial Air Blow Gun**



No.	Air Outlet ID	Air Flow (L/MIN)	Noise Level <sup>2</sup> dB(A)	L×W×H(mm)	Air Inlet Size	Min. Air Hose ID(mm)	Working Air Pressure <sup>3</sup> (Kgf/cm <sup>2</sup> )	Unit Weight(kg)	$\Theta$	8	<u></u>
97223	ф2.3	380	85	233×122×23	1/4"	6.5	6~8	0.11	-	50	9.5
97224	ф2.3	380	85	414×122×23	1/4"	6.5	6~8	0.14	-	50	11.4

<sup>▲</sup> ¹ For tightening capability standard for bolts, refer to bolts with strength level of 12.9 in DIN 267. ² Noise level is sound pressure of level A. ³ Working air pressure refers to the real-time dynamic air pressure measured at the air inlet of the product during idling operation; ⁴Working torque refers to the accumulated torque actually output by the tool running forward for 5 seconds under working pressure; ⁵ Maximum reversing torque refers to the torque actually accumulated when the tool reverses for 15 seconds under operating air pressure Excluded from lifetime warranty terms.

#### **Air Source Processor**







No.	Connector Specification	Filtration Accuracy	Maximum Flow	Maximum Air	Inlet Pressure	Maximum Air (	Outlet Pressure	Filter Cup Capacity	Oil Cup Capacity	L×W×H	Unit Weight	$\Theta$	8	ā
	(PT)	(µm)	(L/min)	(psi)	(bar)	(psi)	(bar)	(ml)	(ml)	(mm)	(kg)			
29921	1/4"	5	2200	215	15	145	10	55	80	115×69×233	1.5	-	12	19.9
29931	3/8"	5	3000	215	15	145	10	55	80	115×69×233	1.5	-	12	19.9
29941	1/2"	5	3100	215	15	145	10	55	80	115×69×233	1.5	-	12	19.9

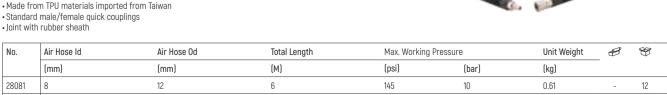
<sup>▲</sup> Excluded from lifetime warranty terms.

# PU spiral air hose

- Made from TPU materials imported from Taiwan
- · Joint with rubber sheath

,									
No.	Air Hose Id	Air Hose Od	Total Length	Max. Working Pressu	re	Unit Weight	$\Theta$	8	M
	(mm)	(mm)	(M)	(psi)	(bar)	(kg)			
28081	8	12	6	145	10	0.61	-	12	8.2
28082	8	12	9	145	10	0.84	-	12	11.2
28101	10	14	6	132	9	0.76	-	12	10.2
28102	10	14	9	132	9	1.04	-	12	13.8
28103	10	14	12	132	9	1.34	-	9	13.7





#### 09008 12Pc. 1/2" Dr. Impact Socket Set, SAE



- •10Pc. 1/2" Dr. SAE Impact Socket (7/16",1/2",9/16",5/8",11/16",3/4",13/16",7/8",15/16",1")
- •1Pc. 1/2" Dr. Impact Universal Joint •1Pc. 1/2" Dr. Impact Extension Bar (5")

No.	#	8	ā
09008	-	8	17.9

#### 09009 12Pc. 1/2" Dr. Impact Socket Set, SAE



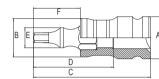
- 10 Pc. 1/2" Dr. Impact Socket (10,11,13,14,17,19,21,22,23,24mm) 1Pc. 1/2" Dr. Impact Universal Joint
- •1Pc. 1/2" Dr. Impact Extension Bar (5")

No.	#	8	<u></u>
09009	-	8	16.5

#### 1/4" Dr. Impact Bit Socket, Torx®







- Bit made of special alloy steel for high hardness and wear resistanceSocket made of CR-Mo by cold forging process for impact resistance
- Cylindrical shank for better torsion resistance
- · Special construction for tight connection between bit and socket

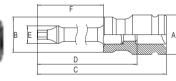
No.	Spec. (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	#	8	<b>5</b>
35203	3	12.6	11.5	35	24	6	14	10	200	4.4
35204	4	12.6	11.5	35	24	6	14	10	200	4.5
35205	5	12.6	11.5	35	24	6	14	10	200	4.6
35206	6	12.6	11.5	35	24	7	14	10	200	4.7

▲ Excluded from lifetime warranty terms.

#### 3/8" Dr. Impact Bit Socket, Hexagon







- Bit made of special alloy steel for high hardness and wear resistanceSocket made of CR-Mo by cold forging process for impact resistance
- Cylindrical shank for better torsion resistance
- · Special construction for tight connection between bit and socket

No.	Spec. (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	#	8	ð
35304	4	20	18	70	57	8	39	6	120	9.2
35305	5	20	18	70	57	8	39	6	120	9.2
35306	6	20	18	70	57	9	39	6	120	9.3
35307	7	20	18	70	57	9	39	6	120	9.5
35308	8	20	18	70	57	9.5	39	6	120	10

▲ Excluded from lifetime warranty terms.















































1/2"





















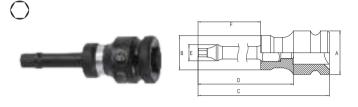




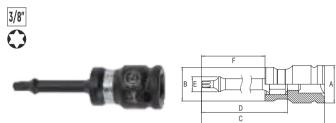




#### 1/2" Dr. Impact Bit Socket, Hexagon



#### 3/8" Dr. Impact Bit Socket, Torx®



- · Bit made of special alloy steel for high hardness and wear resistanceSocket made of CR-Mo by cold forging process for impact resistance
- Cylindrical shank for better torsion resistance
- Special construction for tight connection between bit and socket

No.	Spec. (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)		¥	ā
35404	4	24	19	75	57	8	39	6	60	6.6
35405	5	24	19	75	57	8	39	6	60	6.6
35406	6	24	19	75	57	9	39	6	60	6.7
35407	7	24	19	75	57	9	39	6	60	6.8
35408	8	24	19	75	57	9.5	39	6	60	7
35410	10	25	25	75	57	14	39	6	60	8.2
35412	12	25	25	75	57	15	39	6	60	8.9
35414	14	25	25	75	57	17	39	ĥ	60	9.5

▲ Excluded from lifetime warranty terms.

- · Bit made of special alloy steel for high hardness and wear resistanceSocket made of CR-Mo by cold forging process for impact resistance
- Cylindrical shank for better torsion resistance
- Special construction for tight connection between bit and socket

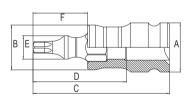
No.	Spec.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	#	¥	ā
35322	T15	20	18	70	57	5.2	39	6	120	8.9
35323	T20	20	18	70	57	5.2	39	6	120	8.9
35324	T25	20	18	70	57	8	39	6	120	8.9
35325	T27	20	18	70	57	8	39	6	120	9
35326	T30	20	18	70	57	8	39	6	120	9
35327	T40	20	18	70	57	9.5	39	6	120	9.4
35328	T45	20	18	70	57	9.5	39	6	120	10.2
35329	T50	20	18	70	57	11	39	6	120	10.2

▲ Excluded from lifetime warranty terms.

#### 1/4" Dr. Impact Bit Socket, Torx®





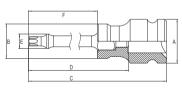


#### 1/2" Dr. Impact Bit Socket, Torx®









- Bit made of special alloy steel for high hardness and wear resistanceSocket made of CR-Mo by cold forging process for impact resistance
  • Cylindrical shank for better torsion resistance
- Special construction for tight connection between bit and socket

No.	Spec.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	#	8	ā
35221	T10	12.6	11.5	35	24	6	14	10	200	4.2
35222	T15	12.6	11.5	35	24	6	14	10	200	4.3
35223	T20	12.6	11.5	35	24	6	14	10	200	4.3
35224	T25	12.6	11.5	35	24	6	14	10	200	4.3
35225	T27	12.6	11.5	35	24	6	14	10	200	4.4
35226	T30	12.6	11.5	35	24	7	14	10	200	4.4

▲ Excluded from lifetime warranty terms.

- Bit made of special alloy steel for high hardness and wear resistanceSocket made of CR-Mo by cold forging process for impact resistance
  • Cylindrical shank for better torsion resistance
- Special construction for tight connection between bit and socket

No.	Spec.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	#	¥	ā
35425	T27	24	19	75	57	8	39	6	60	6.5
35426	T30	24	19	75	57	8	39	6	60	6.5
35427	T40	24	19	75	57	9.5	39	6	60	6.7
35428	T45	24	19	75	57	9.5	39	6	60	6.9
35429	T50	24	19	75	57	11	39	6	60	7.1
35430	T55	25	25	75	57	14	39	6	60	8.9

▲ Excluded from lifetime warranty terms.





















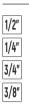








# **Impact Socket Adaptor**





• Made of CR-Mo by cold forging process for impact resistance

No.	Male × Female	$\Theta$	8	ā
34714	3/8"×1/4"(M×F)	20	300	5.2
34715	1/2"×3/8"(M×F)	20	200	12.7
34716	3/8"×1/2"(M×F)	20	200	13.5
34717	3/4"×1/2"[M×F]	12	60	9.4
34718	1/2"×3/4"[M×F]	12	60	20.7

# **Impact Universal Joint**

3/8"



32902





34719





34/2

 $\bullet\,\mbox{Made}$  of CR-Mo by cold forging process for impact resistance

No.	L			
32902	3/8"×3/8"(M×F)	-	140	12.8
34719	1/2"×1/2"(M×F)	6	90	16
34720	3/4"×3/4"(M×F)	4	24	16.4

# 3/8" Dr. 6Pt. Impact Deep Socket

3/8"



• Made of CR-Mo by cold forging process for impact resistance

No.	○ (mm)	#	8	ā
34101	7	6	-	-
34102	8	6	-	-
34103	9	6	-	-
34104	10	6	-	-
34105	11	6	-	-
34106	12	6	-	-
34107	13	6	-	-
34108	14	6	-	-
34109	15	6	-	-
34110	16	6	-	-
34111	17	6	-	-
34112	18	6	-	-
34113	19	6	-	-

# 3/8" Dr. 6Pt. Impact Socket

3/8"



• Made of CR-Mo by cold forging process for impact resistance

No.	○ (mm)	#	8	ā
34202	7	6	-	-
34203	8	6	-	-
34204	9	6	-	-
34205	10	6	-	-
34206	11	6	-	-
34207	12	6	-	-
34208	13	6	-	-
34209	14	6	-	-
34210	15	6	-	-
34211	16	6	-	-
34212	17	6	-	-
34213	18	6	-	-
34214	19	6	-	-

































#### 3/8" Dr. Impact Extension Bar

3/8"



• Made of CR-Mo by cold forging process for impact resistance

No.	L(mm)	Material	#	8	ā
34701	75	Cr-Mo	12	180	15
34702	150	Cr-Mo	6	60	9.7

# 1/2" Dr. Impact Extension Bar

1/2"



• Made of CR-Mo by cold forging process for impact resistance

No.	Spec.	#	8	ā
33911	3"	1	90	12.9
33901	5"	-	80	17.1

#### 1/2" Dr. 6Pt. Impact Socket

1/2"



• Made of CR-Mo by cold forging process for impact resistance

No.	(mm)	#	¥	<b>\overline{\overline{\sigma}}</b>
34303	10	6	-	-
34304	11	6	-	-
34305	12	6	-	-
34306	13	6	-	-
34307	14	6	-	-
34308	15	6	-	-
34309	16	6	-	-
34310	17	6	-	-
34311	18	4	-	-
34312	19	4	-	-
34314	21	4	-	-
34315	22	4	-	-
34316	23	4	-	-
34317	24	4	-	-
34320	27	4	-	-
34322	29	2	-	-
34323	30	2	-	-
34325	32	2	-	-

#### 1/2" Dr. 6Pt. Thin Wall Impact Socket

1/2"



- Made of CR-Mo by cold forging process for impact resistance
- Thin-walled for use in narrow spaces

No.	○ (mm)	$\blacksquare$	8	<u></u>
34303T	10	6	-	-
34304T	11	6	-	-
34305T	12	6	-	-
34306T	13	6	-	-
34307T	14	6	-	-
34308T	15	6	-	-
34309T	16	6	-	-
34310T	17	6	-	-
34311T	18	4	-	-
34312T	19	4	-	-
34314T	21	4	-	-
34315T	22	4	-	-
34316T	23	4	-	-
34317T	24	4	-	-
34320T	27	4	-	-

▲ Excluded from lifetime warranty terms.

#### 1/2" Dr. 6Pt. Thin Wall Impact Deep Socket

1/2"



- Made of CR-Mo by cold forging process for impact resistance
- Thin-walled for use in narrow spaces

No.	○ (mm)	$\Theta$	¥	<b>\overline{\overline{\sigma}}</b>
34403T	10	6	-	-
34404T	11	6	-	-
34405T	12	6	-	-
34406T	13	6	-	-
34407T	14	6	-	-
34408T	15	6	-	-
34409T	16	6	-	-
34410T	17	6	-	-
34411T	18	6	-	-
34412T	19	4	-	-
34414T	21	4	-	-
34415T	22	4	-	-
34417T	23	4	-	-
34419T	24	4	-	-
34420T	27	4	-	-

▲ Excluded from lifetime warranty terms.

# 1/2" Dr. 6Pt. Impact Deep Socket

1/2"



 $\bullet$  Made of CR-Mo by cold forging process for impact resistance

No.	(mm)	$\blacksquare$	8	ത
34403	10	6	-	-
34404	11	6	-	-
34405	12	6	-	-
34406	13	6	-	-
34407	14	6	-	-
34408	15	6	-	-
34409	16	6	-	-
34410	17	6	-	-
34411	18	6	-	-
34412	19	4	-	-
34414	21	4	-	-
34415	22	4	-	-
34417	23	4	-	-
34419	24	4	-	-
34420	27	4	-	-
34422	29	2	-	-
34423	30	2	-	-
34425	32	2	-	-

# 1/2" Dr. Impact Extension Bar

1/2"



 $\bullet\,\mbox{Made}$  of CR-Mo by cold forging process for impact resistance

No.	L(mm)	#	8	<b>5</b>
34703	125	6	72	17.2
34704	150	6	72	20.1
34705	250	6	36	16.2
34706	300	6	30	16

# 3/4" Dr. 6Pt. Impact Socket

3/4"



• Made of CR-Mo by cold forging process for impact resistance

No.	○ (mm)	$\blacksquare$	8	ā
34505	17	6	72	17.1
34506	18	6	72	17.9
34507	19	6	72	17.8
34508	20	6	72	18.6
34509	21	6	72	19.6
34510	22	6	72	19.1
34511	23	6	54	14
34512	24	6	54	15.4
34513	25	6	54	15.4
34514	26	6	54	14.3
34515	27	6	36	10.9
34516	28	6	36	10.5
34517	29	6	36	12.1
34518	30	6	36	13.5
34519	31	6	36	15.4
34520	32	6	36	16.7
34521	33	6	36	16
34522	34	2	-	-
34523	35	6	36	16.7
34524	36	6	36	17.7
34525	37	6	36	20.3
34526	38	6	36	19.4
34527	39	6	36	21
34528	40	6	36	21.8
34529	41	6	36	21.7
34530	42	6	36	22.5
34531	43	1	18	12.8
34532	44	1	18	13
34533	45	1	18	13.6
34534	46	1	18	13.8
34535	47	1	18	15.1
34536	48	1	18	15.2
34537	49	-	18	16.5
34538	50	-	18	20.2
34540	52	1	-	-
34542	54	1	18	1.7
34543	55	1	12	14.9
34544	56	1	12	23.8
34545	57	-	12	15.5
34546	58	1	-	-
34547	59	1	12	25.7
34548	60	-	12	17.6
34549	63	-	12	18.5
34550	65	1	12	20
34551	67	1	12	21.4







































































# 3/4" Dr. 6Pt. Impact Deep Socket

3/4"



# 3/4" Dr. Impact Extension Bar

3/4"



• Made of CR-Mo by cold forging process for impact resistance

No.	○ (mm)	#	8	ā
34605	17	1	20	12.5
34606	18	1	20	12.7
34607	19	1	20	12.8
34608	20	1	20	20.6
34609	21	1	20	13
34610	22	1	20	13.3
34611	23	1	20	13.8
34612	24	1	20	13.9
34613	25	1	20	14.4
34614	26	1	20	22.9
34615	27	1	20	12.9
34616	28	1	-	-
34617	29	1	-	-
34618	30	1	20	14.1
34619	31	1	20	23
34620	32	1	20	14.8
34621	33	1	20	15.9
34622	34	1	20	16
34623	35	1	-	-
34624	36	1	20	17
34625	37	-	20	28.1
34626	38	1	20	18
34628	40	1	18	17.6
34629	41	1	18	17.8
34630	42	1	18	18.6
34631	43	1	-	-
34632	44	-	18	19.7
34633	45	1	18	19.9
34634	46	6	18	20.4
34635	47	1	-	-
34636	48	1	-	-
34637	49	1	-	-
34638	50	-	12	16.5
34640	55	-	12	18.7

• Made of CR-Mo by cold forging process for impact resistance

No.	L(mm)	#	8	ā
34707	90	4	24	13.5
34708	100	4	24	14.4
34709	150	3	18	14.2
34710	175	3	18	15.9
34711	200	2	12	11.9
34712	250	-	10	12.1

#### 1/2" Dr. Wheel Protector Impact Socket

1/2"



• Made of CR-Mo by cold forging process for impact resistance

No.	Spec. (mm)	#	8	ā
34410H	17	6	60	11
34412H	19	6	60	12
34414H	21	6	60	15

▲ Excluded from lifetime warranty terms.

# 1" Dr. 6Pt. Impact Socket

1"



• Made of CR-Mo by cold forging process for impact resistance

No.	○ (mm)	$\Theta$	8	ā
34805	17	6	36	19.7
34806	18	6	36	19.9
34807	19	6	36	20.1
34808	20	6	36	20.1
34809	21	6	36	20.3
34810	22	6	36	20.6
34811	23	1	30	20.1
34812	24	5	30	17.6
34813	25	6	30	21.9
34814	26	6	30	22.3
34815	27	5	30	18.9
34816	28	6	30	19.2
34817	29	5	30	19.9
34818	30	4	24	16.3
34819	31	6	24	19.5
34820	32	4	24	16.7
34821	33	4	24	16.8
34822	34	4	24	17.1
34823	35	4	24	18.3
34824	36	4	24	18.6
34825	37	4	24	19.1
34826	38	4	24	19.7
34827	39	4	24	19.8
34828	40	4	24	20.2
34829	41	4	16	14.5
34830	42	4	16	14.7
34831	43	4	16	15.1
34832	44	4	16	15.5
34833	45	4	16	16.8
34834	46	4	16	17.3
34835	47	4	16	17.4
34836	48	4	16	19
34837	49	1	12	19.6
34838	50	4	12	15
34839	51	2	12	15.4
34840	52	2	12	17
34841	53	-	12	17.6
34842	54	2	12	17.9
34843	55	2	12	18.8
34844	56	2	12	37.6
34845	57	2	12	19.6
34846		1		13.7
34847	58	1	8 8	15.7
34848	59	1	8	14.8
	60			
34849	63	1	8	15.1
34850	65	1	8	16.8
34851	67	- 1	8	17.5
34852	68	1	8	18.2

# 1" Dr. 6Pt. Impact Deep Socket

1"



• Made of CR-Mo by cold forging process for impact resistance

34906         18         1         18         254           34907         19         -         18         10.8           34908         20         1         -         -           34909         21         1         18         16           34910         22         1         18         16.2           34911         23         1         -         -           34912         24         1         18         16.4           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         171           34917         29         1         18         17.6           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18	No.	○ (mm)	$\Theta$	8	ā
34907         19         -         18         10.8           34908         20         1         -         -           34909         21         1         18         16           34910         22         1         18         16.2           34911         23         1         -         -           34912         24         1         18         16.4           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         171           34917         29         1         18         17.6           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12	34905	17	1	18	15.7
34908         20         1         -         -           34909         21         1         18         16           34910         22         1         18         16.2           34911         23         1         -         -           34912         24         1         18         16.4           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.6           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12	34906	18	1	18	25.4
34909         21         1         18         16           34910         22         1         18         16.2           34911         23         1         -         -           34912         24         1         18         16.4           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17.1           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.7           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12<	34907	19	-	18	10.8
34910         22         1         18         16.2           34911         23         1         -         -           34912         24         1         18         16.4           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12<	34908	20	1	-	-
34911         23         1         -         -           34912         24         1         18         164           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34921         33         1         18         18.5           34921         33         1         18         18.5           34922         34         -         18         18.6           34922         34         -         12         12.7           34924         36         -         12         12.7           34925         37         1         12 </td <td>34909</td> <td>21</td> <td>1</td> <td>18</td> <td>16</td>	34909	21	1	18	16
34912         24         1         18         16A           34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12 </td <td>34910</td> <td>22</td> <td>1</td> <td>18</td> <td>16.2</td>	34910	22	1	18	16.2
34913         25         -         18         16.6           34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12<	34911	23	1	-	-
34914         26         1         -         -           34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -	34912	24	1	18	16.4
34915         27         1         18         17           34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         - </td <td>34913</td> <td>25</td> <td>-</td> <td>18</td> <td>16.6</td>	34913	25	-	18	16.6
34916         28         1         18         17.1           34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6	34914	26	1	-	-
34917         29         1         18         17.3           34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6	34915	27	1	18	17
34918         30         -         18         17.6           34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34916	28	1	18	17.1
34919         31         1         18         17.8           34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         194           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34917	29	1	18	17.3
34920         32         1         18         18.7           34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34918	30	-	18	17.6
34921         33         1         18         18.5           34922         34         -         18         18.6           34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         194           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34919	31	1	18	17.8
34922     34     -     18     18.6       34923     35     1     12     12.5       34924     36     -     12     12.7       34925     37     1     12     19.4       34926     38     -     12     13.3       34928     40     1     -     -       34929     41     1     12     14.5       34930     42     1     -     -       34931     43     1     -     -       34934     46     1     6     9.3       34937     49     1     6     10.2       34938     50     1     6     10.3	34920	32	1	18	18.7
34923         35         1         12         12.5           34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34921	33	1	18	18.5
34924         36         -         12         12.7           34925         37         1         12         19.4           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34922	34	-	18	18.6
34925         37         1         12         194           34926         38         -         12         13.3           34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34923	35	1	12	12.5
34926     38     -     12     13.3       34928     40     1     -     -       34929     41     1     12     14.5       34930     42     1     -     -       34931     43     1     -     -       34934     46     1     6     9.3       34937     49     1     6     10.2       34938     50     1     6     10.3	34924	36	-	12	12.7
34928         40         1         -         -           34929         41         1         12         14.5           34930         42         1         -         -           34931         43         1         -         -           34934         46         1         6         9.3           34937         49         1         6         10.2           34938         50         1         6         10.3	34925	37	1	12	19.4
34929     41     1     12     14.5       34930     42     1     -     -       34931     43     1     -     -       34934     46     1     6     9.3       34937     49     1     6     10.2       34938     50     1     6     10.3	34926	38	-	12	13.3
34930     42     1     -     -       34931     43     1     -     -       34934     46     1     6     9.3       34937     49     1     6     10.2       34938     50     1     6     10.3	34928	40	1	-	-
34931     43     1     -     -       34934     46     1     6     9.3       34937     49     1     6     10.2       34938     50     1     6     10.3	34929	41	1	12	14.5
34934     46     1     6     9.3       34937     49     1     6     10.2       34938     50     1     6     10.3	34930	42	1	-	-
34937     49     1     6     10.2       34938     50     1     6     10.3	34931	43	1	-	-
34938 50 1 6 10.3	34934	46	1	6	9.3
	34937	49	1	6	10.2
34940 55 1 6 11.4	34938	50	1	6	10.3
	34940	55	1	6	11.4

# 1/4" Dr. Magnetic Nut Driver







- Made of SVCM for high hardness, wear resistance and toughness
   Cold forged and subjected to integral heat treatment for impact resistance
   Applicable to electric and pneumatic screwdrivers
- Built-in magnet for easy connection with screws and nuts

No.	○ (mm)	L(mm)	$\Theta$	8	ō
35106	6	65	12	144	5.5
35107	7	65	12	144	6
35108	8	65	12	144	6
35110	10	65	12	144	6.2
35112	12	65	12	144	8.2
35113	13	65	12	144	8.2





































































# **Warranty Terms for Pneumatic Tools**

#### Warranty Scope

Subject to the provisions of "Non-Warranty Scope" in Part II below, all pneumatic tools marked with the 😂 SATA trademark can be repaired free of charge or replaced at the designated maintenance store of SATA within 3 months from the date of purchase in case of any malfunction during normal use. Repaired or replaced items shall be warranted for the rest of the valid period in accordance with This Clause.

Non-Warranty Scope
Pneumatic tools without the SATA trademark will not be warranted. Products that are damaged due to abnormal use will not be warranted.

Products that are worn due to too-much continuous use will not be warranted. Products that are not repaired by maintenance store designated by SATA, disassembled without permission, or damaged due to the use of spare and accessory parts not authorized by SATA will not be warranted.

Products that are subjected to rust, plating peeling, surface scratches or plastic handle damage after use will not be repaired or replaced by SATA.

Products with warranty card not sent back within the specified time will not be repaired or replaced by SATA.

#### How to replace or repair products

Users shall, within one month from the date of purchase of SATA pneumatic tools (i.e., within 30 days from the date marked on the purchase voucher, and the final date shall be subject to the postmark of the buyer), send back to SATA a complete and valid copy of the "Return Receipt of SATA Pneumatic Tools Warranty Card". Otherwise, it shall be deemed to be a waiver of the warranty rights.

For products within free repair or free replacement scope, users can go to the nearest SATA designated sales shop to fill in the product warranty card and enjoy free repair even repairment with proof of purchase like original receipts and copies

#### Service Consulting

If you have any question about warranty terms for \$\infty\$ **SATA**\* pneumatic tools, or if you are not satisfied with the service provided by designated sales shop, please contact SATA Tool (Shanghai) Co., Ltd.: SATAMarcom\_Asia@ApexToolGroup.com.

#### Power of Interpretation

These Terms shall be interpreted by SATA Tools (Shanghai) Co., Ltd.

#### 98101 **Dial Tire Inflation Gun**



- The measurement range is specially designed for passenger cars, with scales displayed clearer
- High-precision mechanical pressure gauge, with better stable performance
   Aluminum body with rubber sheath, better shockgroof and impact-proof performance
- Stainless steel braided hose, resistant to bending with longer life
- · Copper intake connector, rust-proof and durable

No.	Measurement range	Reading accuracy	Precision	Max. inlet pressure	L×W×H (mm)	B	¥	<b>5</b>
98101	0-8 bar / 117 psi	0.1 bar	JJG 927-2013 Standard Grade 1.6, Within max.range 90- 100%, tolerance ±2.5% The rest of range tolerance ±1.6%		315×100× 170	-	20	22

#### **Digital Tire Inflation Gun**





- LCD display with backlight, which is clearer
   Aluminum body with rubber sheath, better shockproof and impact-proof performance
- · Stainless steel braided hose, resistant to bending with longer life
- Copper intake connector, rust-proof and durable

No.	Measurement range	Reading accuracy	Precision	Max. inlet pressure	L×W×H (mm)	$\square$	¥	M
98103	0-12 bar/ 174 psi		JB/T 7392-2006 Standard Grade 0.4 Tolerance ±0.4%	,	315×100× 170	-	20	22

#### 98104 **Exquisite Digital Tire Inflation Gun**



- Cast aluminum body with shock-absorbing protective cover
   There are three units of PSI, BAR, KPA to choose from
   Three-in-one function, can be used to inflate, deflate and measure tire pressure
- The metal spring sheath protects the hose and prevents the hose from entanglement

No.	Reading accuracy	Digital display meter range	Max Intake pressure	Product accuracy	Work Temperature	#	¥	ā
98104	0.01Bar (0.1Psi)	0-12Bar (174Psi)	15 bar/ 218Psi	JB/T 7392-2006 Standard Grade 0.25 Tolerance ±0.25%	-10° C-60° C	-	20	22

# 98105 Automatic Tire Inflator





- Automatic inflation, easy to operate and comes with a reminder
  Imported high precision ceramic sensors, ensuring accurate tire pressure
  Aluminum cast body has a modern look, light-weighted and durable
  New tyre inflation function, helping tires to get closer to the hub

No.	Measurement range	Reading accuracy	Precision	Max. inlet pressure	L×W×H (mm)	Operating temperature		¥	M
98105	0-10 bar/ 145 psi	0.01 bar/ 0.1 psi	0.5-4 Bar: JJ875 Standard Grade 0.2 4-10 Bar: JJ875 Standard Grade 0.5		315×1300× 220	-10°C~50°C	-	21	22.5





































# **Hydraulic & Lifting**

	Hydraulic Puller	354-355
	Hydraulic Bottle Jack	354
C	Hand Chain Hoist	360
	Lever Block Chain Hoist	358
	Dr. Hydraulic Wrench	361
	Hydraulic Offset Ring Wrench	362
	Hydraulic Hose	362
	Electric Hydraulic Pump	363

## **Hydraulic Bottle Jack**



Welded sturdy steel construction for strength and leak free performance
 Improved overall mechanical strength and resistance to biased load
 Integrated base forged with quality steel and new hydraulic oil circuit for stability
 Free of oil leakage with long service life, facilitating maintenance
 Note: Jacks of 2T to 20T can pass the dynamic overload test with 1.5 times of the load capacity,

No.	Spec. (t)	L×W×H(mm)	Max. Height(mm)	Extension Height(mm)	Unit Weight(kg)	$\blacksquare$	8	ā
97801A	2	99×93×181	344	48	2.4	1	6	15.5
97802A	4	110×103×193	373	60	3.2	1	6	20.3
97803A	6	122×115×210	416	70	3.9	-	4	16.5
97804A	8	130×121×230	455	80	5	-	4	21.3
97805A	10	132×120×230	460	80	5.6	1	4	23.7
97807A	16	144×134×230	440	60	7.1	-	2	15
97808A	20	159×143×242	452	60	9.1	-	2	19.1
97809A	32	169×153×275	440	-	12	-	1	12.4
97810A	50	210×176×265	425	-	25.3	-	1	26.9

▲ Excluded from lifetime warranty terms.

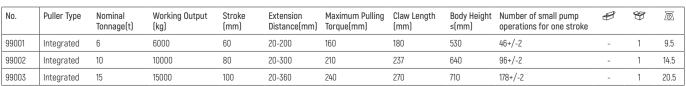
### **Hydraulic Puller**





Plastic Box Set

- With claws forming a "safe cage", three jaws ensure even clamping force Built-in "safety valve" design to avoid overload Japan imported NOK seals











































































## **Hydraulic Puller**





Puller Body



Manual Hydraulic Pump



- With claws forming a "safe cage", three jaws ensure even clamping force Built-in "safety valve" design to avoid overload
- · Japan imported NOK seals

No.	Puller Type	Nominal Tonnage(t)	Working Output (kg)	Stroke (mm)	Extension Distance(mm)	Maximum Pulling Torque(mm)	Claw Length (mm)	Body Height ≤(mm)	Number of small pump operations for one stroke	$\blacksquare$	¥	ā
99014	Split	20	20000	100	25-420	285	320	620	Manual Pump 28+/-2	-	1	38.7
99015	Split	30	30000	100	25-515	340	375	715	Manual Pump 44+/-2	-	1	51.7

▲ 1-Year warranty for overall unit, lifetime warranty for jaw

### **Hydraulic Cutter**

085 Hydraulic Cutter 5T







• Suitable for cutting ACSR steel-core aluminum wire, soft copper, aluminum and iron bars, steel strand, steel cable, and reinforced steel iron
•Ultra high-pressure integrated hydraulic cutter with high and low pressures output via manual

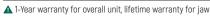
99038

- extrusion
- Two-stage oil ingress with maximum pressure of 700Kgf/ cm2 (10000psi)
   Tip rotatable in 180 degrees to facilitate operation
   FRP handle capable of insulating 20KV voltage for 5 minutes

# •Suitable for cutting copper and aluminum cables, communication wires, and various soft wires •Ultra high-pressure integrated hydraulic cutter with high and low pressures output via manual extrusion

- Two-stage oil ingress with maximum pressure of 700Kgf/ cm2 (10000psi)
   Tip rotatable in 180 degrees to facilitate operation

No.	Output	Opening						Cutt	ing Capacity				Unit	$\Theta$	8	M
	(T)	(MM)	Wire Ro	pe (MM)		Round Bar(mn	n)			Stranded Wire(mm)		Communication	Weight (kg)			
			6x7	6x12	Soft Copper Bar	Soft Aluminum Bar	Soft Iron Bar		Steel-Cored Aluminum Wire	Aluminum-Copper Stranded Wire	Steel Stranded Wire(1 x9)	Cable(mm)	. 0,			
99036	5	85	-	-	-	-	-	-	-	28/38	-	85	8.5	-	1	8.5
99038	7.1	40	25	25	24	24	16	16	38	40	20	40	6	-	1	6



## 99046 Hydraulic Crimper





- Suitable for crimping copper pipes, copper plate terminals, and C- and H-shaped overhead terminals
- Main body made of high carbon steel and subjected to heat treatment for high tensile strength
- · Crimping via single loop for handiness
- Used with 99045

No.	Output (T)	Applicable Crimping Range(mm²)	Crimping Type	Unit Weight(kg)	$\blacksquare$	8	ā
99046	12	JIS: 38, 60-70, 80, 100, 150-180, 200, 325 DIN: 50, 70, 95, 120, 150, 185, 240, 300, 400	Hexagonal	7.8	-	1	7.8

▲ 1-Year warranty for overall unit, lifetime warranty for jaw

### **Hydraulic Cable Crimping Pliers**



## **Hydraulic Cable Crimping Pliers 8T**

- Hydraulic Lable Crimping Pilers 81

  Jaw made of forged alloy steel for strength and durability

  H-shaped jaw capable of rotating in 180 degrees

  Quick crimping for easy operation

  Hexagonal die adopted for tight crimping and firmness

  Reset by just turning the decompression value

  Fiberglass insulated handle for voltage-withstanding and safety



- Hydraulic Cable Crimping Pliers 11T

  Jaw made of forged alloy steel for strength and durability

  C-shaped big jaw capable of rotating in 180 degrees for easy operation

  Two-stage hydraulic design for quick crimping with little force

  Decompression value adopted for decompression by just turning and pressing the free handle with the hand holding the handle
- Built-in pressure relief valve with overload protection for automatic decompression after crimping
- Fiberglass insulated handle for voltage-withstanding and safety

No.	Hydraulic Pliers Type	Output(T)	Stroke(mm)	Crimping Range(mm²)	Body Length(mm)	Die Type	Configuration Mould(mm²)	$\blacksquare$	¥	M
99018	Integrated	8	15.5	16~240	530	Hexagonal	16, 25, 35, 50, 70, 95, 120, 150, 185, 240	-	1	13.2
99019	Integrated	11	38	50~400	640	Hexagonal	50, 70, 95, 120, 150, 185, 240, 300, 400	-	1	20.7









































































# 99045 Electric Hydraulic Pump





- 360-Degree flipping and suspension with normal output Fully closed for various harsh environments
- · Auto shutdown at limit for safety and stability

No.	Maximum Output Pressure (kg/cm2 psi)	Output Pressure(kg/cm)2	Oil pump capacity(L/min)	Voltage(V/Hz)	Motor Power(KW)	Oil Capacity(CC)	Unit Weight(kg)	$\Theta$	8	<u>P</u>
99045	700/10000	Low 0-100 High 10-700	Low 0-100 High 10-700	110/60	0.35	1000	7.2	-	1	7.2

▲ 1-Year warranty for overall unit, lifetime warranty for jaw

## 99047 Hydraulic Puncher





- Suitable for punching angle steel, copper, aluminum and iron plates, I-steel and all kinds of channel irons
   Oil cylinder and body forged with alloy steel together in C shape for firmness, durability and high tensile strength
- · Small, portable, easy positioning and less burr from punching
- Used with 99045

No.	Output(T)	Punching Capacity(mm)	Standard Mould(mm)	Unit Weight(kg)	$\Theta$	8	M
99047	31	Copper & aluminum 12, iron 10	3/8", 1/2", 5/8", 3/4"	16.5	-	1	16.5

# **Aluminum Wire Grip**





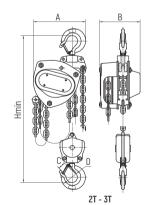
- Aluminum shell for lightness and convenience
   Multi-stage ratchet device for labor saving
   Symmetrical dual pawl for reliable braking
   Safety factor higher than 3:1 for safety and reliability

No.		Standard	Rated load	Lifting chain specification			Maiı	n Dime	nsions	(mm)		Unit	Weight for every	$\Theta$	8	ā
	weight M (tons)	traction length (m)	operating force	Diameter x number of rows/Dxn	between hooks (mm)	A (mm)	B (mm)	C (mm)	L (mm)	E (mm)	Ø (mm)	Weight (kg)	1-meter increase in traction length (kg)			
97881	0.75	3	215	Ф5.6Х1	335	158	105	99	353	26	40	6.0	0.7	-	-	-
97882	0.75	5	215	Ф5.6Х1	335	158	105	99	353	26	40	7.4	0.7	-	-	-
97883	1.5	3	260	Ф7.1Х1	367	176	110	123	353	31	45	9.2	1.1	-	-	-
97884	1.5	5	260	Ф7.1Х1	367	176	110	123	353	31	45	11.4	1.1	-	-	-
97885	3	3	340	Ф8Х1	415	193	119	128	465	30	40	13.8	1.4	-	-	-
97886	3	5	340	Ф8Х1	415	193	119	128	465	30	40	16.6	1.4	-	-	-

## **Stainless Steel Chain Block**







- Main parts made of stainless steel for pollution resistance, corrosion resistance and wear resistance
   Smooth and compact product surface for dust prevention and good self-cleaning performance
   Safety factor higher than 4:1 for safety and reliability
   Suitable for corrosive or high cleanliness environment

No.	Rated traction		Liftin	g Chain	Hand chain	Hand pulling		Main D	imensio	ns(mm)		Unit	$\Theta$	8	Ō
	weight M (tons)	height (m)	Number of chains/Falls	Diameter X Pitch/ Ø XP	•	force (N)	A (mm)	B (mm)	C (mm)	D (mm)	H min	Weight (kg)			
97891	1	3	1	7X21		304	172	151	26	40	376	13	-	-	-
97892	1	6	1	7X21		304	172	151	26	40	376	19	-	-	-
97893	2	3	2	7X21	EV07.7	335	192	151	34	50	470	19	-	-	-
97894	2	6	2	7X21	5X23.3	335	192	151	34	50	470	28	-	-	-
97895	3	3	2	9X27		343	230	173	39	55	580	31	-	-	-
97896	3	6	2	9X27		343	230	173	39	55	580	44	-	-	-





























































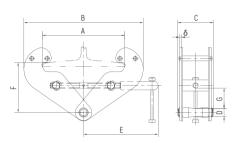


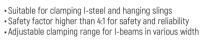




## **Heavy Gripper**







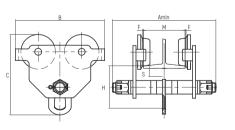
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No.	Rated load	Width range of I-track					Mair	dimension	S				Unit	$\Theta$	8	<u>™</u>
	(tons)	available (mm)	A max.		В	С	δ	E	F		G min.	D	Weight (kg)			
				min.	max.				min.	max.			. 0.			
98901	1	75-230	284	180	375	80	4	220	102	160	29	20	3.4	-	-	-
98902	2	75-230	284	180	375	90	6	220	102	160	28	22	4.5	-	-	-
98903	3	80-320	365	220	498	117	8	271	168	240	60	24	9.5	-	-	-
98904	5	80-320	365	220	498	117	10	271	168	240	57	30	11.5	-	-	-

# **Heavy Hand-pushed Monorail Trolley**







- Suitable for hanging slings on I-steel and pushing trolley through the steel trough by hand Safety factor higher than 4:1 for safety and reliability Adjustable clamping range for I-beams in various width

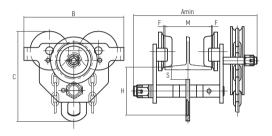
No.	Rated load	Min. curve radius			Main dir	nensions			Track width range	Unit Weight	#	*	<u></u>
	(tons)	passable (m)	A min. (mm)	B (mm)	C (mm)	H (mm)	S (mm)	F (mm)	M (mm)	— (kg)			
98911	1	1.0	311	246	222	125	38		64-203	9.5	-	-	-
98912	2	1.1	327	276	263	150	38	1570	88-203	15.5	-	-	-
98913	3	1.3	343	332	309	171	40	— 1.5-3.0 —	100-203	25.0	-	-	-
98914	5	1.4	355	377	353	196	42		114-203	39.0	-	-	-



## **Heavy Hand-pushed Monorail Trolley**









· Safety factor higher than 4:1 for safety and reliability

· Adjustable clamping range for I-beams in various width



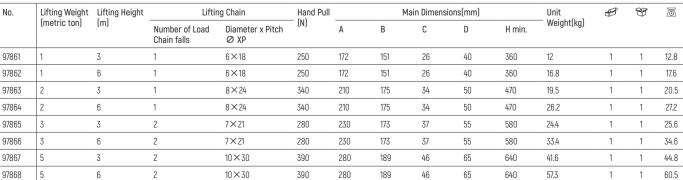
No.	Rated load	Standard operating	Min. curve radius			Main dim	ensions			Track width range	Unit Weight	$\Theta$	8	<u></u>
	(tons)	height (m)	passable (m)	A min. (mm)	B (mm)	C (mm)	H (mm)	S (mm)	F (mm)	M (mm)	(kg)			
98916	1		1.0	338	246	222	125	38		64-203	13.0	-	-	-
98917	2	7	1.1	349	276	263	150	38	- 1.5-3.0	88-203	18.5	-	-	-
98918	3	- 3	1.3	362	332	309	171	40	- 1.3-3.0	100-203	28.5	-	-	-
98919	5	-	1.4	374	377	353	196	42	-	114-203	42.0	-	-	-

## **Hand Chain Hoist**

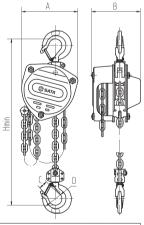




- High strength soft hook with safety clamp is adopted to effectively prevent breakage and decoupling
- · High mechanical efficiency and low hand pull force
- Symmetrical double pawl design, reliable braking effect
- The shell has high stiffness and strong anti-falling deformation abilit
- The safety factor is over 4:1, safe and reliable to use
- The integral bearing is used in the interior, which is convenient for disassembly, assembly and maintenance
- Implement standard JB/T7334-2016







































































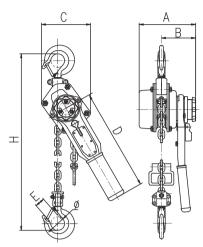




### **Lever Block Chain Hoist**





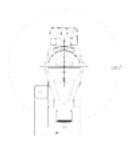


- High strength soft hook with safety clamp is adopted to effectively prevent breakage and decoupling
   Aluminum alloy handwheel with comfortable handle and light weight
   The design of the wrench reinforces the ribs and has a strong ability to resist falling
   The integral bearing is used in the interior, which is convenient for disassembly, assembly and maintenance
   Implement standard JB/T 7335-2016

No.	Lifting Weight			Handle Length	Pull Force			Main Dim	nensions(m	m)	,	Unit Weight(kg)	$\Theta$	8	ā
	(metric ton)	(m)	Spec. (mm)	(mm)	(N)	Α	В	С	Ø	Е	H min.	_			
97871	0.75	1.5	6×18	250	200	162	96	140	37	24	350	6.7	1	1	7.2
97872	0.75	3	6×18	250	200	162	96	140	37	24	350	8.0	1	1	8.5
97873	1.5	1.5	7×21	340	280	181	99	145	42.5	29	400	10.0	1	1	10.8
97874	1.5	3	7×21	340	280	181	99	145	42.5	29	400	11.7	1	1	12.5
97875	3	1.5	10×30	280	350	206	112	199	55	40	500	19.3	1	1	20.3
97876	3	3	10×30	280	350	206	112	199	55	40	500	22.6	1	1	23.6

### **Dr. Hydrualic Wrench**







- It is made of new Al-Ti alloy of high hardness and high, strength alloy steel
- The reaction arm allows 360° rotation to adjust and the tenon-type connection design facilitates the position adjustment according to different working conditions
- 360x180° oil inlet can be adjusted by universal rotation
- Unique chrome plating process makes the surface capable of rust proof; the reliable and endurable double anti-reversing claw is provided with a ntillocking function, effectively improving the work efficiency

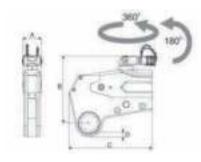
  Output accuracy: +/-3%, Repeat accuracy: +/-1%

No.	Driving	L1(mm)	L2(mm)	H1(mm)	H2(mm)	H3(mm)	H4(mm)	R1(mm)	R2(mm)	Min.	Torque	Мах.	Torque	Bolt Range(mm)	W	eight	$\Theta$	8	ð
	Head Size									(LBF.FT)	(N.m)	(LBF.FT)	(N.m)	-	(LB)	(KG)			
99050	3/4"	126	193	51	72	92	132	26	115	203	270	1366	1950	16~36	5.29	2.4	-	1	4
99051	1"	162	244	68	95	125	167	34	135	446	650	3031	4650	22~48	11.34	5.15	-	1	7
99052	1-1/2"	210	271	81	123	150	195	40	140	811	1150	5663	7650	27~56	19.5	8.86	-	1	10.5
99053	1-1/2"	223	295	91	131	168	220	48	154	841	1200	6890	9400	30~64	28.2	12.8	-	1	15.5
99054	1-1/2"	244	370	101	145	188	232	51	262	1538	2100	10910	14800	36~72	35.9	16.3	-	1	20
99055	2-1/2"	311	388	121	184	221	273	60	187	2960	4050	20115	27200	42~90	66.98	30.41	-	1	38
99056	2-1/2"	331	409	138	200	248	230	67	199	3817	5150	25697	34750	48~100	85.9	39	-	1	48
99057	2-1/2"	354	540	149	220	278	315	77	323	5235	7150	37756	51000	64~120	95.15	43.2	-	1	53



# **Hydraulic Offset Ring Wrench**









- \*360° ×180° swivel allow movement of duplex hose
   \*Steel alignment pins connect lower reaction area for added strength
   \*Narrow nose radius allows to fit in applications where clearance constraintsmake other tools too big
   \*Rust-resistant finish
   \*Bronze bushing anti galling

No.	Hexagon Head	Min.	Torque	Max.	Torque	Weig	ht(kg)		External D	imension(mm)		$\blacksquare$	8	M
	Size(mm)	(LBF.FT)	(N.m)	(LBF.FT)	(N.m)	Cylinder Block	Connector	Α	В	С	D	_		
99060	30-60	182	250	2108	2850	1.99	1.48~1.85	32	148.8~156.8	168.0~175.5	9.1~11.7	-	1	5
99061	41-80	357	470	4336	5800	3.35	3.05~3.95	41.4	172.9~189.2	204.4~220.8	12.7~13.7	-	1	9.5
99062	50-105	750	1050	9800	13200	6.54	6.25~8.60	52.5	210.4~235.4	268.1~283.9	13.7~19.5	-	1	15.5
99063	70-115	1437	1950	15444	20800	9	11.98~14.16	64	245.7~258.3	326.7~344.7	19.5~23.0	-	1	26
99064	80-155	2910	3951	34421	46500	16.1	25.10~30.36	82.5	287.6~313.1	422.5~442.5	23.0~26.0	-	1	55

# **Hydraulic Hose**





NPT 1/4" Connector



- Twin pipe coated with polyurethane for both oil and aging resistance
   Pipe body with safety factor of 4 and winded with 6 layers of steel wire for safety and anti-bursting

No.	Spec. (m)	Pipe Diameter(in.)		Length	Size at Both Ends(in.)	Working pressure(bar)	Burst pressure(bar)	$\Theta$	8	M
			(FT)	(m)						
99035	6	1/4"	20	6	1/4"	1/4"	700	-	1	5
99037	12	1/4"	40	12	1/4"	1/4"	700	-	1	10

































































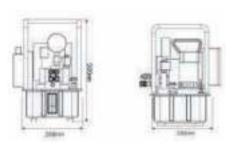






## 99030 Electric Hydraulic Pump, Brush Motor







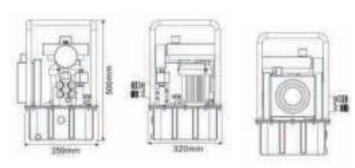


- External pressure regulating valve for high accuracy
- External pressure regulating valve for nigh accuracy
   Built-in safety relief valve for safety
   Carbon-brush high-speed motor capable of automatic idling protection and shutdown with safety start button for quick restart
   Built-in air cooling system for safety
   Large flow provided for high efficiency

No.	Speed(RPM)	Noise Level(dB)	Motor(kW)	Ampere		Flow	(L/min)		Oil Tank(L)	Available Oil	Unit Weight(kg)	$\Theta$	8	ē
					O(Bar)	50(Bar)	350(Bar)	700(Bar)		Amount(L)				
99030	12000	80	0.84	25/110V 13/220V	11.3	7.1	1.2	0.9	8	7	32	-	1	40

## 99032 Electric Hydraulic Pump, Brushless Motor





- External pressure regulating valve for high accuracy
- · Built-in safety relief valve for safety
- Carbon-brush high-speed motor capable of automatic idling protection and shutdown with safety start button for quick restart
- Built-in air cooling system for safety
- · Large flow provided for high efficiency

No.	Speed(RPM)	Noise Level(dB)	Motor(kW)	Ampere		Flow(L/mir	n)	Oil Tank(L)	Available Oil	Unit Weight(kg)	#	***	<u> </u>
					70(Bar)	350(Bar)	700(Bar)		Amount(L)				
99032	1800	70	1.1	13/220V	16	1.5	0.85	8	7	33	-	1	42





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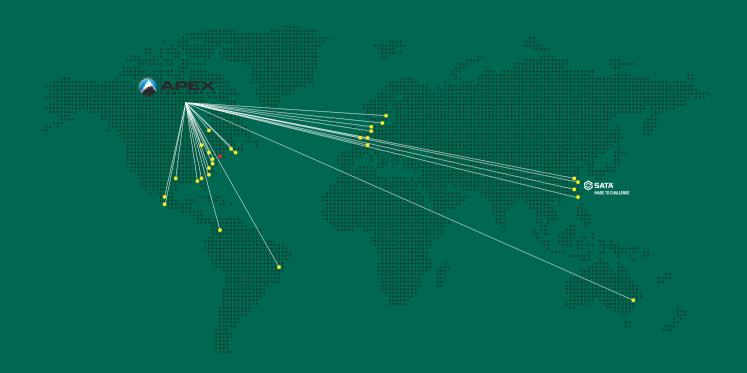


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96610	234	97312	221	97921A	267		
96611	234	97313	221	97922A	267		
96612 96613	234 234	97315 97316	218 218	97923A 97924	267 271		
96614	234	97317	218	97925	271		
96615	234	97318	218	97926	271		

The following products have been removed from the market.				
No.				
	F04F0	70701	00007	F007F F0
29022	52158	72301	06003	59035-50
29032 29042	52159 52160	72302 72303	06004 06005	59035-70 59036-50
29122	52161	72303 72401	09811	59036-70
29132	52162	72402	09812	59041-110
29142	52163	90613	09813	59041-150
29222	52164	90614	09911	59041-65
29232	52165	90615	09912	59042-110
29242	52166	90616	09913	59042-150
29322	52167	90617	34303T	59042-65
29332	52168	90618	34304T	59043-110
29342	52169	90661	34305T	59043-150
29422 29432	52170 52171	90709 90717	34306T 34307T	59043-65 90701A
29442	52172	90718	34308T	90702A
29522	52173	90719	34309T	90703A
29532	52174	90720	34310T	90704A
29542	52175	90721	34311T	90705A
29622	52176	90722	34312T	90706A
29632	52177	90723	34314T	90707A
29642	52178	90724	34315T	90731A
29722	52179	90725	34316T	90734A
29732	52180	90726	34317T	90742A
29742	52181	90727	34320T	08011
29822	52182	90728	34403T 34404T	09031 09909
31341 31342	52183	90729	344041 34405T	09909
51542 51005	52184 52185	90749 90765	344051 34406T	00010
51006	52186	90766	34407T	
51070	52187	90767	34408T	
51071	52188	90769	34409T	
51072	52189	90790	34410T	
51501	52190	90795	34411T	
51503	52191	90797	34412T	
51504	52192	91321	34414T	
51512	52193	91322	34415T	
51516	52194	91323	34417T	
51517	52195 52196	91333 91334	34419T 34420T	
52110 52111	52197	91335	51005C	
52112	52198	91336	51006C	
52113	52199	91341	59001-25	
52114	52200	91342	59001-50	
52115	52201	91343	59002-25	
52116	52202	91344	59002-50	
52117	52203	91351	59002-70	
52118	52204	91352	59003-25	
52119	52205	91361	59003-50	
52120	52206	91362	59003-70	
52121	52207 52208	91363 91514	59011-50 59012-50	
52122 52123	52206	91514	59012-50	
52124	52210	91516	59013-70	
52125	52211	91601	59014-50	
52126	52212	91602	59014-70	
52127	52213	91603	59021-25	
52128	52214	91604	59021-50	
52129	52215	91605	59022-150	
52130	52216	91606	59022-25	
52131	52217	91611	59022-50	
52132	52218	91612	59022-70	
52133	52219	91613	59023-150	
52134 52135	52220	91614	59023-25 59023-50	
52136	52221 52222	91615 91616	59023-30	
52137	52222	93101	59024-150	
52138	52223	93102	59024-25	
52139	52225	93103	59024-50	
52140	52226	93104	59024-70	
52141	52227	93413	59025-150	
52142	52228	93414	59025-25	
52143	52229	93501	59025-50	
52144	52230	93502	59025-70	
52145	52906	93503	59026-150	
52146	52910	93504	59026-25	
52147 52148	52919 62702	93505 93506	59026-50 59026-70	
52148 52149	62704	93500	59025-70	
52149 52150	62704	93508	59027-150	
52150 52151	70634	93509	59027-23	
52152	70635	97921	59027-70	
52153	70645	97922	59031-50	
52154	70646	97923	59032-50	
52155	72201	03031	59033-50	
52156	72202	06001	59034-50	
52157	72203	06002	59034-70	







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