



SAS



TAIWAN
Gold National Award
of Excellence 2000

Smart Automatic Screwdrivers

Gold National Award of Excellence 2000



EFFICIENT FASTENING SOLUTIONS

www.sas-tool.com

0.15-200 kgf.cm



We offer a full range of Economical, Intermediate and High-End products

Providing Professional Assembly Solutions for Global Manufacturing Companies

- Our company was founded in Taiwan in 1978 and established a factory in Shanghai in 2005. We have been specializing in R&D, manufacturing, sales, and production of industrial level electric screwdrivers, intelligent torque screwdrivers, automation and other related assembly products. SAS, under the business philosophy of honesty, dedication and innovation, our product image and quality are continuously improving. We have gained more than 50 patents in over 20 countries; under the guidance of Taiwan based market policy, taking the lead in the Asia Pacific market, and pursuit of the world market, we have been able to open to the world and make great achievements. Our aim is being the first in Taiwan and lead the world market to service customers and provide high quality products. All personnel at SAS work together for a common goal; fully dedicate themselves to continuously improve our products and meeting customers' demands.
- Over the years, the industry authorities have held various events to challenge the industry in a positive manner to invest in research and development for new products. Selection of the leading product image by the Ministry of Economic Affairs is the highest honor for the industries innovative products. Not everyone can spare the effort to gather new technical knowledge and actively strive for the awards.
- Since its establishment, SAS has been unremittingly devoted to the research, development and innovation of electric screwdrivers. Based on positive, innovative and sustainable operation concepts, everyone at SAS is actively committed to the innovation and improvement of electric screwdriver products in accordance with the constant spirit of paying back the support of users and indirectly taking up the responsibility for society.



Won the 2000 Taiwan Product Image Gold Award
The only winner in Taiwan



Received ISO9001 Quality Management Systems Certificate



All products are available for a trial Demo

www.sas-tool.com

0.15-200 kgf.cm

Full Range of products

Easy to configure

Full range of economical, intermediate, and high-end products

Consultation available from our engineers

43 YEARS

Leading the future with 43 years
of patented innovation

- 1990 Received the advertising award from Taipei Times
- 1991 Received creative award of Taiwan Advertisement 4A
- 1993 Won the first prize of China Creation and Invention
- 1994 Received Innovative Research and Development award of Taiwan Small and Medium Enterprise Administration
- 1994 Products became UL and CSA certified
- 1997 Products became of CE (EMC/LVD) certified
- 1999 Received Taiwan Excellence Product Marking Award
- 2000 Received Gold National Award of Taiwan Excellence
- 2002 Taiwan Headquarter became ISO9001 certified
- 2005 Shanghai office established (capital investment of 20 million RMB/ \$3 million U.S. dollars)
- 2006 Became 3C, UL, CE, FCC and BMS certified
- 2011 Shanghai office became ISO9001 certified
- 2015 Shanghai R&D established with additional 50 million RMB/\$7.5 million U.S. dollars invested
- 2017 Brushless torque display electric screwdriver (Industry 4.0) was successfully developed
- 2018 Smart torque display electric screwdriver was successfully developed, and the first gyroscope electric screwdriver was launched in the market successfully
- 2019 Brushless electric screwdriver, smart electric screwdriver, torque display electric screwdriver, brushless electric screwdriver was granted multiple patents for invention
- 2019 Created high-end products and high-end brand SAS
- 2021 (5~200kgf.cm)(4.33~173.59lb-in) New series introduced to the market



SAS Product Center

/ MINI ELECTRIC SCREWDRIVER SERIES

- 07 Mini (Swiss) Dust-Free Motor Electric Screwdriver
- 07 Mini (Swiss) dust-free motor Electric Screwdriver + Z-Axis
- 07 Mini (Swiss) dust-free motor Electric Screwdriver + Z-Axis/LED

/ BRUSHLESS ELECTRIC SCREWDRIVER SERIES

- 07 Small Brushless Electric Screwdriver
- 07 Small Brushless Electric Screwdriver + Z-Axis
- 08 Small Brushless Screwdriver + Z-Axis/LED
- 08 Small Brushless Automated Screwdriver
- 08 Medium Brushless Screwdriver
- 08 Medium Brushless W/Fool-proof Counter
- 08 Medium Brushless Automated Screwdriver
- 09 Large Brushless Electric Screwdriver
- 09 Large Brushless Electric Screwdriver + Foolproof Counter Management Power Supply
- 09 Large Brushless Automated Screwdriver
- 09 Large Brushless Screwdriver Gun Type
- 09 Large Brushless Screwdriver Gun Type + Foolproof Counter Management Power Supply

/ BRUSH ELECTRIC SCREWDRIVER SERIES

- 10 Medium-large Brush Electric Screwdriver

/ ECO-FRIENDLY BRUSHLESS SEMI-AUTO SERIES

- 10 Medium ECO Brushless Semi-Auto Screwdriver
- 10 Large ECO Brushless Semi-Auto Screwdriver
- 10 Large ECO Brushless Semi-Auto Gun Type

/ POWER SUPPLIES

- 10 Foolproof Counter Management Power Supply
- 11 Brush and Brushless Power Supply
- 11 Small Foolproof Counter Power Supply

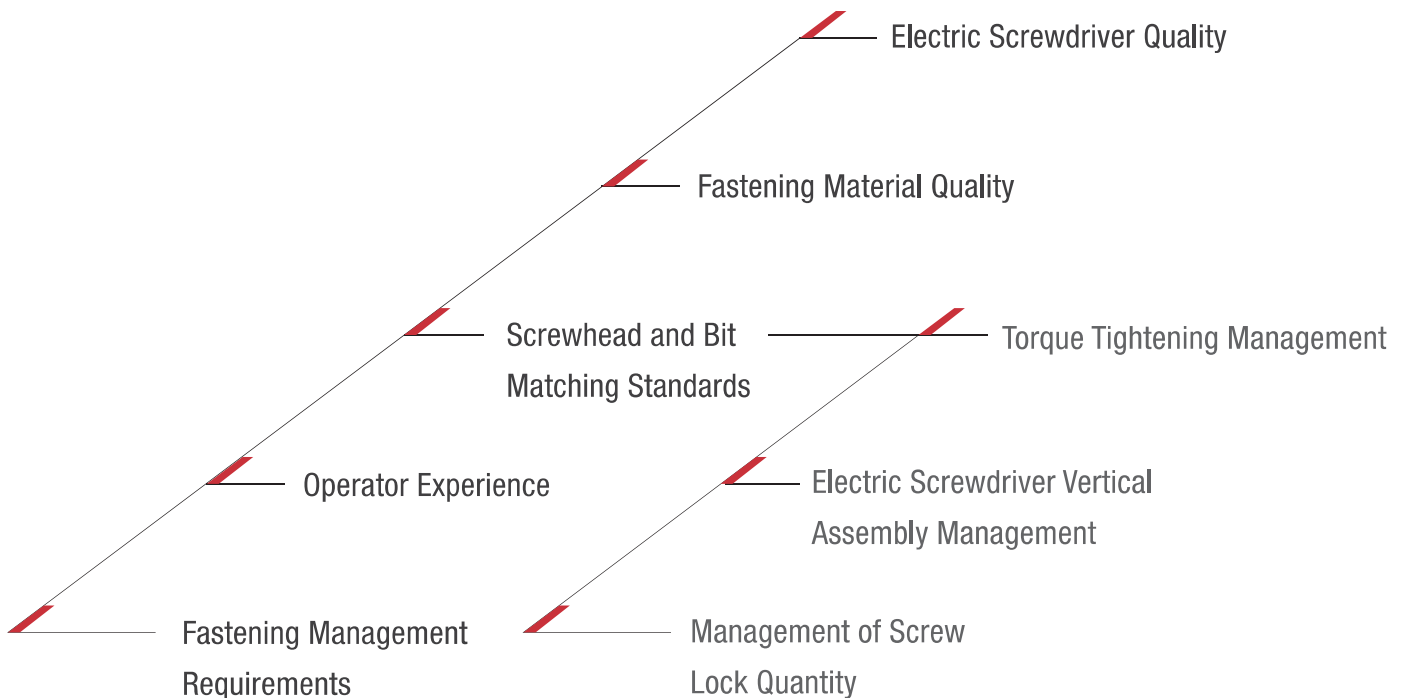
/ ACCESSORIES

- 11 Manual Screw Feeders
- 11 Automatic Screw Feeders
- 11 Air Blow Automatic Screw Feeder Machine
- 12 Manual Screw Counting Feeder
- 12 Automated Vibration Disc Column Screw Feeder
- 12 Intelligent Dynamic Wireless-data-upload High-Precision Torque Tester
- 12 Japanese-Made High-Precision Torque Tester
- 12 Industrial Grade High-Precision Torque Tester
- 13 Torque Arms
- 13 Large Torque Arms
- 13 Misc. Accessories

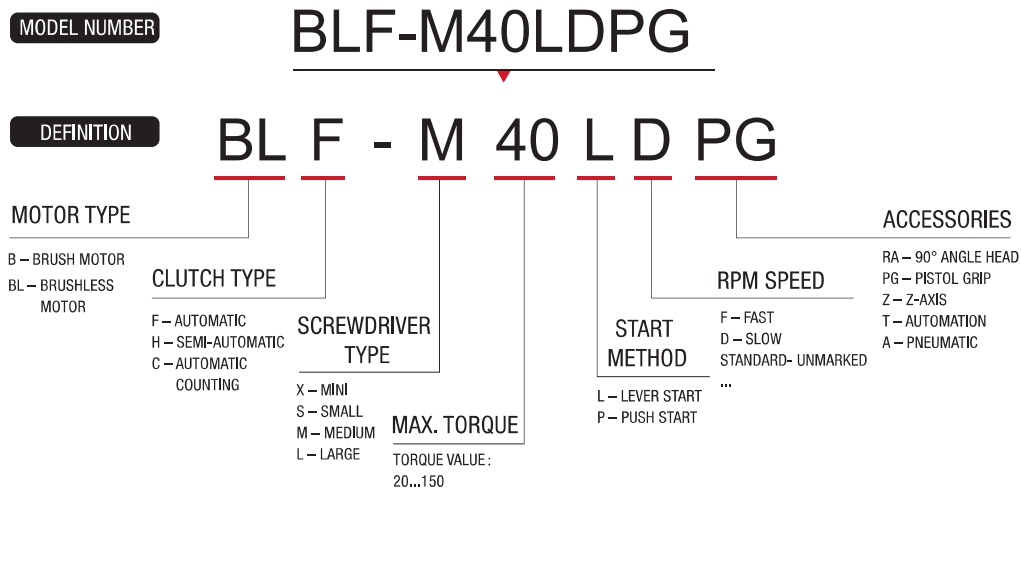
OUR MISSION IS TO PROVIDE HIGHER QUALITY SCREW FASTENING

- SAS will always stand from the perspective of the user and work to create quality and efficient products for the fastening process.
- SAS will hold a high standard of fine craftsmanship and continue to explore and improve in the assembly field.
- SAS screwdrivers provide a high efficiency, high reliability and high-quality management for all your assembly needs.

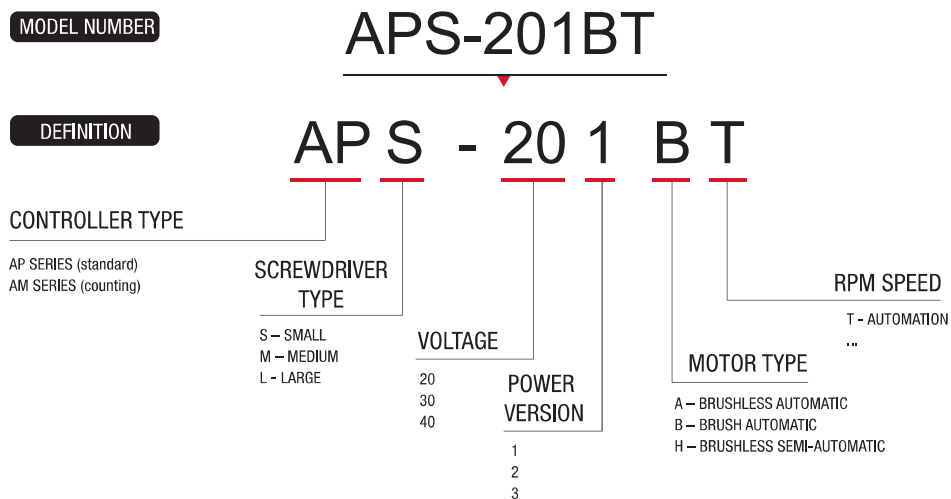
ASSEMBLY FASTENING CONDITIONS AND REQUIREMENTS



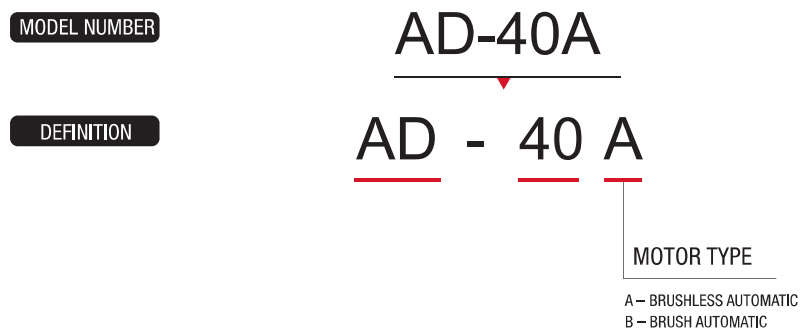
MODEL NUMBERS AND DEFINITIONS



POWER CONTROLLER DESCRIPTION



SMALL COUNTER CONTROLLER DESCRIPTION



INNOVATIVE DESIGN FUNCTIONS AND FEATURES



Life cycle test of over 20 million 

Gyroscopic Sensor (Optional) 

All Models Share 12 Common Function Platforms 

Insulated design effectively reduces heat output 

Rotational Slip Proof Design 

Mechanical Loss Reduction and more Accurate Torque precision 

Extended life Guarantee and can Replace Pneumatic Hydraulic Screwdrivers 

LCD Display Provides 3 Fool-proofing Colors and Alarm Volumes 

Military-Grade Chip Used 

Compact Size with Higher Torque 

Significantly improved motor efficiency 

Designed to prevent clutch torque degrade 

Precision, Temperature, and Service Life are improved with our custom created Planetary Gear 

Pull-Out Bit Holder, Prevents Bit from Coming Loose or Falling Out 

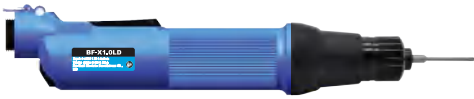
TORQUE CONVERSION TABLE

| UNIT OF MEASURE | METRIC | NEWTONS | USCS/ IMPERIAL |
|---------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------|
| TORQUE UNITS | Kgf.cm Kgf.m gf.cm | N.m N.cm | lbf.in lbf.Ft OZ.in |
| METRIC CONVERSION | 1Kgf.m=100Kgf.cm 1Kgf.cm=1000gf.cm 1Kgf.cm=10Kgf.mm | 1N.m=100N.cm | 1lbf.Ft=12lb.in 1lbf.Ft=16OZ.in |
| USCS/IMPERIAL CONVERSION | 1kgf.m=9.8067N.m 1Kgf.cm=0.867962lbf.in 1Kgf.cm=0.072330lbf.Ft | 1N.m=10.197Kgf.cm 1N.m=8.850lbf.in 1N.m=0.737562lbf.Ft | 1lbf.in=1.15Kgf.cm 1lbf.in=11.2985N.cm 1lbf.Ft=13.825Kgf.cm |
| FORCE UNITS | 1Kgf.cm=9.807N.cm 1Kgf.cm=2.205lbf.cm | 1N=0.101972Kgf 1N=0.224809lbf | 1lbf=0.453592Kgf 1lbf=4.448N (1lbf=16OZf) |
| LENGTH UNITS | 1cm=0.393701in | 1m=3.281Ft | 1in=2.54cm 1Ft=0.305m (1Ft=12in) |

Note: ounce (OZ) , pound (lb) 1OZ=28.3g 1Kg=2,201lb

1 MINI ELECTRIC SCREWDRIVER SERIES ►

Mini (Swiss) Dust-Free Motor Electric Screwdriver



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|-----------|--------------|------------|------------------------|
| | (kgf.cm) | N.m | |
| BF-X0.8LD | 0.15~0.8 | 0.015~0.08 | 80~180 |
| BF-X1.0LD | 0.15~1.0 | 0.015~0.1 | 150~300 |
| BF-X1.0L | 0.15~1.0 | 0.015~0.1 | 650~1000 |
| BF-X2.0L | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BF-X3.0L | 0.4~3.0 | 0.04~0.3 | 450~700 |

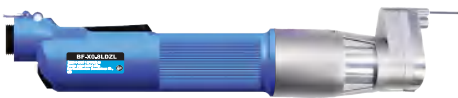
Mini (Swiss) dust-free motor Electric Screwdriver + Z-Axis



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|--------------|--------------|------------|------------------------|
| | (kgf.cm) | N.m | |
| BF-X0.8LDZ | 0.15~0.8 | 0.015~0.08 | 80~180 |
| BF-X0.8LDZ-1 | 0.15~0.8 | 0.015~0.08 | 80~180 |

Mini (Swiss) dust-free motor Electric Screwdriver + Z-Axis/LED



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|---------------|--------------|------------|------------------------|
| | (kgf.cm) | N.m | |
| BF-X0.8LDZL | 0.15~0.8 | 0.015~0.08 | 80~180 |
| BF-X0.8LDZL-1 | 0.15~0.8 | 0.015~0.08 | 80~180 |

2 BRUSHLESS ELECTRIC SCREWDRIVER SERIES ►

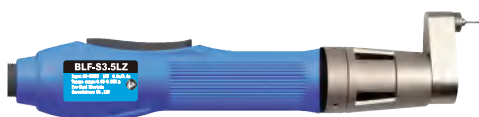
Small Brushless Electric Screwdriver



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|------------|--------------|-----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-S1.0LD | 0.15~1.0 | 0.015~0.1 | 100~200 |
| BLF-S1.0L | 0.15~1.0 | 0.015~0.1 | 350~500 |
| BLF-S2.0L | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BLF-S3.0L | 0.4~3.0 | 0.04~0.3 | 450~700 |
| BLF-S5.0L | 0.5~5.0 | 0.05~0.5 | 650~1000 |
| BLF-S6.0L | 1.0~6.0 | 0.1~0.6 | 650~1000 |
| BLF-S10L | 1.5~10.0 | 0.15~1.0 | 650~1000 |

Small Brushless Electric Screwdriver + Z-Axis



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|--------------|--------------|-----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-S2.0LZ | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BLF-S2.0LZ-1 | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BLF-S3.5LZ | 0.5~3.5 | 0.05~0.35 | 650~1000 |
| BLF-S3.5LZ-1 | 0.5~3.5 | 0.05~0.35 | 650~1000 |

Small Brushless Screwdriver
+ Z-Axis/LED



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|---------------|--------------|-----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-S2.0LZL | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BLF-S2.0LZL-1 | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BLF-S3.5LZL | 0.5~3.5 | 0.05~0.35 | 650~1000 |
| BLF-S3.5LZL-1 | 0.5~3.5 | 0.05~0.35 | 650~1000 |

Small Brushless Automated
Screwdriver



INDUSTRY USED: Mobile phone, iWatch, iPad, Wearable products, 5C and related industries, suitable for dust-free operation.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|-------------|--------------|-----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-S1.0LDT | 0.15~1.0 | 0.015~0.1 | 100~200 |
| BLF-S1.0LT | 0.15~1.0 | 0.015~0.1 | 350~500 |
| BLF-S2.0LT | 0.3~2.0 | 0.03~0.2 | 650~1000 |
| BLF-S3.0LT | 0.4~3.0 | 0.04~0.3 | 450~700 |
| BLF-S5.0LT | 0.5~5.0 | 0.05~0.5 | 650~1000 |
| BLF-S6.0LT | 1.0~6.0 | 0.1~0.6 | 650~1000 |
| BLF-S10LT | 1.5~10.0 | 0.15~1.0 | 650~1000 |

Medium Brushless
Screwdriver

L: Level Start
P: Push Start



INDUSTRY USED: Large and small household appliances, Auto parts, Electric power Machinery, High-end medical equipment, Aviation and Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|--------------|--------------|---------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-M20L/P F | 5.0~20 | 0.5~2.0 | 1400~2000 |
| BLF-M20L/P | 5.0~20 | 0.5~2.0 | 650~1100 |
| BLF-M30L/P | 8.0~30 | 0.8~3.0 | 650~1100 |
| BLF-M40L/P | 10~40 | 1.0~4.0 | 650~1100 |
| BLF-M50L/P | 20~50 | 2.0~5.0 | 280~500 |

Medium Brushless W/Fool-proof
counter

L: Level Start
P: Push Start



INDUSTRY USED: Large and small household appliances, Auto parts, Electric power Machinery, High-end medical equipment, Aviation and Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|--------------|--------------|---------|------------------------|
| | (kgf.cm) | N.m | |
| BLC-M20L/P F | 5.0~20 | 0.5~2.0 | 1400~2000 |
| BLC-M20L/P | 5.0~20 | 0.5~2.0 | 650~1100 |
| BLC-M30L/P | 8.0~30 | 0.8~3.0 | 650~1100 |
| BLC-M40L/P | 10~40 | 1.0~4.0 | 650~1100 |
| BLC-M50L/P | 20~50 | 2.0~5.0 | 280~500 |

Medium Brushless Automated
Screwdriver



INDUSTRY USED: Large and small household appliances, Auto parts, Electric power Machinery, High-end medical equipment, Aviation and Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|------------|--------------|---------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-M20LFT | 5.0~20 | 0.5~2.0 | 1400~2000 |
| BLF-M20LT | 5.0~20 | 0.5~2.0 | 650~1100 |
| BLF-M30LT | 8.0~30 | 0.8~3.0 | 650~1100 |
| BLF-M40LT | 10~40 | 1.0~4.0 | 650~1100 |
| BLF-M50LT | 20~50 | 2.0~5.0 | 280~500 |

Large Brushless Electric Screwdriver

L: Level Start

P: Push Start



INDUSTRY USED: Auto parts, Electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat) Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|---------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-L35L/P F | 15~35 | 1.5~3.5 | 3600 |
| BLF-L50L/P F | 20~50 | 2.0~5.0 | 2400 |
| BLF-L60L/P F | 25~60 | 2.5~6.0 | 2000 |
| BLF-L60L/P | 25~60 | 2.5~6.0 | 1300 |
| BLF-L90L/P | 40~90 | 4.0~9.0 | 700~1000 |
| BLF-L110L/P | 60~110 | 6.0~11.0 | 650~850 |
| BLF-L150L/P D | 80~150 | 8.0~15.0 | 400 |

Large Brushless Electric Screwdriver + Foolproof Counter Management Power Supply

[Functions: Mis-Lock detection, Cross Thread detection, Float Screw detection, counting statistics, time detection, transfer data storage]



INDUSTRY USED: Auto parts, Electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat) Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|---------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-L35L/P F | 15~35 | 1.5~3.5 | 3600 |
| BLF-L50L/P F | 20~50 | 2.0~5.0 | 2400 |
| BLF-L60L/P F | 25~60 | 2.5~6.0 | 2000 |
| BLF-L60L/P | 25~60 | 2.5~6.0 | 1300 |
| BLF-L90L/P | 40~90 | 4.0~9.0 | 700~1000 |
| BLF-L110L/P | 60~110 | 6.0~11.0 | 650~850 |
| BLF-L150L/P D | 80~150 | 8.0~15.0 | 400 |

Large Brushless Automated Screwdriver



INDUSTRY USED: Auto parts, Electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat) Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|--------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-L35L FT | 15~35 | 1.5~3.5 | 3600 |
| BLF-L50L FT | 20~50 | 2.0~5.0 | 2400 |
| BLF-L60L FT | 25~60 | 2.5~6.0 | 2000 |
| BLF-L60LT | 25~60 | 2.5~6.0 | 1300 |
| BLF-L90LT | 40~90 | 4.0~9.0 | 700~1000 |
| BLF-L110LT | 60~110 | 6.0~11.0 | 650~850 |
| BLF-L150L DT | 80~150 | 8.0~15.0 | 400 |

Large Brushless Screwdriver Gun Type

L: Level Start

P: Push Start



INDUSTRY USED: Auto parts, Electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat)

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|-----------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-L35L/P FPG | 15~35 | 1.5~3.5 | 3600 |
| BLF-L50L/P FPG | 20~50 | 2.0~5.0 | 2400 |
| BLF-L60L/P FPG | 25~60 | 2.5~6.0 | 2000 |
| BLF-L60L/P PG | 25~60 | 2.5~6.0 | 1300 |
| BLF-L90L/P PG | 40~90 | 4.0~9.0 | 700~1000 |
| BLF-L110L/P PG | 60~110 | 6.0~11.0 | 650~850 |
| BLF-L150L/P DPG | 80~150 | 8.0~15.0 | 400 |

Large Brushless Screwdriver Gun Type+ Foolproof Counter Management Power Supply

[Functions: Mis-Lock detection, Cross Thread detection, Float Screw detection, counting statistics, time detection, transfer data storage]



INDUSTRY USED: Auto parts, Electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat)

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|-----------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLF-L35L/P FPG | 15~35 | 1.5~3.5 | 3600 |
| BLF-L50L/P FPG | 20~50 | 2.0~5.0 | 2400 |
| BLF-L60L/P FPG | 25~60 | 2.5~6.0 | 2000 |
| BLF-L60L/P PG | 25~60 | 2.5~6.0 | 1300 |
| BLF-L90L/P PG | 40~90 | 4.0~9.0 | 700~1000 |
| BLF-L110L/P PG | 60~110 | 6.0~11.0 | 650~850 |
| BLF-L150L/P DPG | 80~150 | 8.0~15.0 | 400 |

3 BRUSH ELECTRIC SCREWDRIVER SERIES ▶

Medium-large Brush Electric Screwdriver

L: Level Start

P: Push Start



INDUSTRY USED: Precision assembly of communication products, Small home appliances, Precision instruments, clocks etc.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|-------------|--------------|---------|------------------------|
| | (kgf.cm) | N.m | |
| BF-M20L/P F | 5.0~20 | 0.5~2.0 | 1400~2000 |
| BF-M20L/P | 5.0~20 | 0.5~2.0 | 650~1100 |
| BF-M30L/P | 8.0~30 | 0.8~3.0 | 650~1100 |
| BF-M40L/P | 10~40 | 1.0~4.0 | 650~1100 |
| BF-M50L/P | 20~50 | 2.0~5.0 | 280~500 |

4 ECO-FRIENDLY BRUSHLESS SEMI-AUTO SERIES ▶

Medium ECO Brushless Semi-Auto Screwdriver

L: Level Start

P: Push Start



INDUSTRY USED: Automotive electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Industrial power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|--------------|--------------|---------|------------------------|
| | (kgf.cm) | N.m | |
| BLH-M20L/P F | 5.0~20 | 0.5~2.0 | 1400~2000 |
| BLH-M20L/P | 5.0~20 | 0.5~2.0 | 650~1100 |
| BLH-M30L/P | 8.0~30 | 0.8~3.0 | 650~1100 |
| BLH-M40L/P | 10~40 | 1.0~4.0 | 650~1100 |
| BLH-M50L/P | 20~50 | 2.0~5.0 | 280~500 |

Large ECO Brushless Semi-Auto Screwdriver

L: Level Start

P: Push Start



INDUSTRY USED: Auto parts, Electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Electric tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat) Automated assembly.

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|---------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLH-L35L/P F | 15~35 | 1.5~3.5 | 3600 |
| BLH-L50L/P F | 20~50 | 2.0~5.0 | 2400 |
| BLH-L60L/P F | 25~60 | 2.5~6.0 | 2000 |
| BLH-L60L/P | 25~60 | 2.5~6.0 | 1300 |
| BLH-L90L/P | 40~90 | 4.0~9.0 | 700~1000 |
| BLH-L110L/P | 60~110 | 6.0~11.0 | 650~850 |
| BLH-L150L/P D | 80~150 | 8.0~15.0 | 400 |

Large ECO Brushless Semi-Auto Gun Type

L: Level Start

P: Push Start



INDUSTRY USED: Automotive electrical equipment, Electric vehicle batteries, Car lights, Energy batteries, Office equipment, Air conditioners, Power tools, Gas appliances, Communication equipment, An alternative to oil pressure pneumatic screwdrivers (high RPM, large torque, low heat)

| MODEL NO. | TORQUE RANGE | | RPM SPEED (rpm)±10% |
|-----------------|--------------|----------|------------------------|
| | (kgf.cm) | N.m | |
| BLH-L35L/P FPG | 15~35 | 1.5~3.5 | 3600 |
| BLH-L50L/P FPG | 20~50 | 2.0~5.0 | 2400 |
| BLH-L60L/P FPG | 25~60 | 2.5~6.0 | 2000 |
| BLH-L60L/P PG | 25~60 | 2.5~6.0 | 1300 |
| BLH-L90L/P PG | 40~90 | 4.0~9.0 | 700~1000 |
| BLH-L110L/P PG | 60~110 | 6.0~11.0 | 650~850 |
| BLH-L150L/P DPG | 80~150 | 8.0~15.0 | 400 |

5 POWER SUPPLIES ▶

Fool-Proof Counter Management Power Supply



APPLICABLE USE: To ensure fastening quality and improve the operating management environment for screw efficiency.

| MODEL NO. | DESCRIPTION | FUNCTION |
|-----------|----------------------------|--------------------------|
| AMM-301A | Brushless Automatic Series | Mis-Lock Detection |
| AMS-301B | Brush Automatic Series | Cross Thread Detection |
| AML-301B | Brush Automatic Series | Float Screw Detection |
| AML-301A | Brushless Automatic Series | Fool-Proof Counter |
| AML-401A | Brushless Automatic Series | Counting Statistics |
| | | Fastening Time Detection |
| | | Transfer Data Storage |

Brush & Brushless Full-Range Power Supply



APPLICABLE USE: Ensure fastening quality and optimize job space.

| MODEL NO. | DESCRIPTION | FUNCTION |
|-----------|----------------------------------|----------------------|
| APS-201B | Input Voltage: | Stepless Control |
| APS-301B | 100-240V Universal Power Supply | Suspendible |
| APS-301A | Constant Output Voltage Function | Adjustable Speed |
| APM-302A | | Secondary Tightening |
| APL-301A | | |
| APM-301H | | |
| APL-401A | | |
| APL-401H | | |

Small Fool-Proof Counter Power Supply



APPLICABLE USE: To ensure fastening quality and improve the operating management environment for screw efficiency.

| MODEL NO. | DESCRIPTION | FUNCTION |
|-----------|----------------------------|------------------------|
| AD-40B | Brush Automatic Series | Mis-Lock Detection |
| AD-40A | Brushless Automatic Series | Cross Thread Detection |
| | | Float Screw Detection |
| | | Fool-Proof Counter |
| | | Visual Alert |
| | | Audio Alert |

6 ACCESSORIES

Manual Screw Feeder



APPLICABLE USE: For a variety of screws, Feeding speeds can be changed freely, Can adjust track freely, For use in general line assembly.

| MODEL NO. | DESCRIPTION |
|-----------|------------------|
| | APPLICABLE SCREW |
| AT-1017 | M1.0-M1.7 |
| AT-1017A | M1.0-M1.7 |
| AT-1050 | M1.0-M5.0 |
| AT-1050C | M1.0-M5.0 |
| AT-1060 | M1.0-M6.0 |
| AT-1060C | M1.0-M6.0 |
| AT-1030A | M1.0-M3.5 |
| AT-2560A | M1.0-M5.0 |

Automatic Screw Feeder



APPLICABLE USE: Suitable for a variety of screws, Feeding speeds can be changed freely, Automated locking equipment.

| MODEL NO. | DESCRIPTION |
|-----------|-----------------------------------|
| | APPLICABLE SCREW |
| AT-1017T | M1.0-M1.7 |
| AT-1030TC | M1.0-M3.5 |
| AT-2560TC | M1.0-M5.0 |
| AT-1030S | customized according to the screw |

Air-blow Automatic Screw Feeder



APPLICABLE USE: Two stage feeding push material, large bin capacity and stable performance. Mainly for large screws, long screws and special beads screws

| MODEL NO. | DESCRIPTION |
|-----------|------------------|
| | APPLICABLE SCREW |
| AT-10 | M3.0-M6.0 |

Manual Screw Counting Feeder



APPLICABLE USE: Screw feeder adopts a gear ring drum feeder for low noise. Automatically guided feeding with no jamming. Adjustable screw feeding speed, easy to operate. Compact size, frees up space

| MODEL NO. | DESCRIPTION |
|-----------|------------------|
| | APPLICABLE SCREW |
| AT-150D | M1.0-M5.0 |

Automated Vibration Disc Column Screw Feeder



APPLICABLE USE: Low noise, not easy to jam, reverse and fault alarm function, high repeat position accuracy. Signal output can be used with automated assembly, Feeding plate integration for stable screw feeding

| MODEL NO. | DESCRIPTION |
|-----------|------------------|
| | APPLICABLE SCREW |
| AT-0614V | M0.6-M1.4 |

Intelligent Dynamic Wireless-data-upload High-Precision Torque Tester

(Accurate to 4 decimal places)



APPLICABLE USE: Test tiny torque of electric, manual precision tools and various parts, which requires high-resolution, high-precision and high-speed sampling for torque measurement

| MODEL NO. | TORQUE RANGE | | Feature |
|-----------|---------------|---------------|------------------------------------------------------|
| | (kgf.cm) | N.m | |
| APT-02S | 0.0001~2.0000 | 0.0001~0.2000 | Data storage (1000 records of automatic calculation) |
| APT-10S | 0.001~10.000 | 0.0001~1.0000 | |
| APT-20S | 0.002~20.000 | 0.002~2.0000 | |
| APT-50M | 0.005~50.000 | 0.005~5.0000 | Maximum/Minimum/Average; |
| APT-100M | 0.01~100.00 | 0.001~10.000 | Automatic memory; |
| APT-300L | 0.03~300.00 | 0.003~30.000 | USB, RS-232C, MODBUS |
| APT-500L | 0.05~500.00 | 0.005~50.000 | available for computer data management |

Japanese Made High-Precision Torque Testing Machine

(Accurate to 3 decimal places)



APPLICABLE USE: Test automatic electric, pneumatic, automatic clutch electric, servo electric and clutch sensor electric screwdrivers torque tightening value.

| MODEL NO. | TORQUE RANGE | | Feature |
|-----------|--------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | (kgf.cm) | N.m | |
| DTM-15M | 0.040~15.00 | 0.004~1.50 | Original Japanese, W/ accurate torque, torque unit switching, zero reset time adjustment, torque data storage, USB output function and convenient data management. |
| DTM-150 | 1.0~150.0 | 0.1~15.0 | |

Precision Torque Tester



APPLICABLE USE: Test automatic electric, pneumatic, automatic clutch electric, servo electric and clutch sensor electric screwdrivers torque tightening value.

| MODEL NO. | TORQUE RANGE | | Feature |
|-----------|--------------|------------|-------------------------------------------------------|
| | (kgf.cm) | N.m | |
| AP-10 | 0.15~10.00 | 0.015~1.00 | Taiwan original, W/ accurate torque, easy to operate, |
| AP-50 | 1.0~50.0 | 0.1~5.00 | |
| AP-100 | 1.5~100.0 | 0.15~10.00 | torque unit switching and adjustable reset time. |
| AP-300 | 07~300 | 00.7~30.0 | |
| AP-500 | 08~500 | 00.8~50.0 | |

Small and Medium and Practical Torque Arms

APPLICABLE
USE:

Longer fastening durability, operation of tools with greater torque, higher quality requirements for fastening, workload set in a fixed position and assembly lines.

MODEL DESCRIPTION

TSS-150

Maximum Torque: 20kgf.cm

Maximum Load: 2.0kg



Small

TSS-100AT

Maximum Torque: 30kgf.cm

Maximum Load: 3.0kg



Medium

TSS-100W/T

Maximum Torque: 30kgf.cm

Maximum Load: 3.0kg



Practical

Large Torque Arms

APPLICABLE
USE:

Longer fastening durability, operation of tools with greater torque, higher quality requirements for fastening, workload set in a fixed position and assembly lines.

MODEL DESCRIPTION

STD-03110-OC

Maximum Torque: 110lbs-in

Maximum Load: 0~3Lbs

Vertical Movement: 30cm

STD-15110-AC

Maximum Torque: 110lbs-in

Maximum Load: 0~15Lbs

Vertical Movement: 30cm

PARA-03110-OC

Maximum Torque: 110lbs-in

Maximum Load: 0~3Lbs

Horizontal Movement: 120cm

PARA-15110-AC

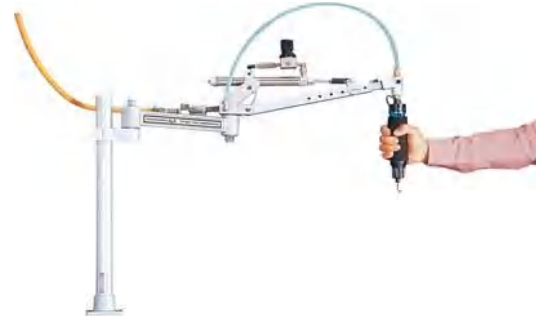
Maximum Torque: 110lbs-in

Maximum Load: 0~15Lbs

Horizontal Movement: 120cm



Hydraulic Arm



Pneumatic Arm

Accessories

APPLICABLE
USE:

additional functions to customize your screwdriver.

ACCESSORY DESCRIPTION



- | | |
|-------------------------------|---------------------------------|
| Automation mounting equipment | Industrial 90° Right Angle Head |
| Spring Balancer | Screw Sorting Tray |
| Screwdriver Bits | Screwdriver Holster Mount |
| Magnetic Rings | Pistol Grip attachment |
| DC Power Chord | 2 in 1 Power Supply + Pump |

SAS CURRENT CLIENTELE



Minimum breakaway torque calculation

The minimum breakaway torque calculation formula is as follows:

$$M_{Bmin} = \tau_{Bmin} \cdot W_{Pmin}$$

$$\text{formula } W_{Pmin} = \pi / 16 \cdot d^3 l_{min}$$

$$\tau_{Bmin} = X \cdot \sigma_{Bmin}$$

Terms M_{Bmin} —Minimum breakaway torque [See table 2]

τ_B —Torque strength

W_P —Torque section modulus

d_{min} —Minimum diameter of external thread

σ_B —Tensile strength

X —Intensity ratio τ / σ_B [See table 1]

Table 1 Intensity ratio X

| Performance level | 8.8 | 9.8 | 10.9 | 12.9 |
|-------------------|------|-------|------|------|
| Ratio X | 0.84 | 0.815 | 0.79 | 0.75 |

Table 2 Minimum breakaway torque

| Thread Specification | Pitch mm | Minimum breakaway torque ¹⁾ | | | |
|----------------------|----------|----------------------------------------|-------|-------|-------|
| | | $M_{Bmin}, N \cdot m$ | | | |
| | | Performance level | | | |
| | | 8.8 | 9.8 | 10.9 | 12.9 |
| M1 | 0.25 | 0.033 | 0.036 | 0.040 | 0.045 |
| M1.2 | 0.25 | 0.075 | 0.082 | 0.092 | 0.10 |
| M1.4 | 0.3 | 0.12 | 0.13 | 0.14 | 0.16 |
| M1.6 | 0.35 | 0.16 | 0.18 | 0.20 | 0.22 |
| M2 | 0.4 | 0.37 | 0.40 | 0.45 | 0.50 |
| M2.5 | 0.45 | 0.82 | 0.90 | 1.0 | 1.1 |
| M3 | 0.5 | 1.5 | 1.7 | 1.9 | 2.1 |
| M3.5 | 0.6 | 2.4 | 2.7 | 3.0 | 3.3 |
| M4 | 0.7 | 3.6 | 3.9 | 4.4 | 4.9 |

| Thread Specification | Pitch mm | Minimum breakaway torque ¹⁾ | | | |
|----------------------|----------|----------------------------------------|-----|------|------|
| | | $M_{Bmin}, N \cdot m$ | | | |
| | | Performance level | | | |
| | | 8.8 | 9.8 | 10.9 | 12.9 |
| M5 | 0.8 | 7.6 | 8.3 | 9.3 | 10 |
| M6 | 1 | 13 | 14 | 16 | 17 |
| M7 | 1 | 23 | 25 | 28 | 31 |
| M8 | 1.25 | 33 | 36 | 40 | 44 |
| M8 * 1 | - | 38 | 42 | 46 | 52 |
| M10 | 1.5 | 66 | 72 | 81 | 90 |
| M10 * 1 | - | 84 | 92 | 102 | 114 |
| M10 * 1.25 | - | 75 | 82 | 91 | 102 |

¹⁾ The minimum breakaway torque value is suitable for 6g, 6f and 6e threads.

Z-AXIS SCREWDRIVER

The only one in the industry that has been widely used by iPhone and iPad assembly plants

Patented Intellectual property, Copyright Infringement WILL BE PROSECUTED



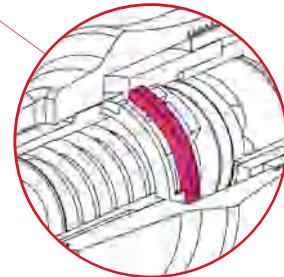
Swiss imported low inertia, low impact, low vibration motor
Effective for torque accuracy of small screws and prevent loose screws



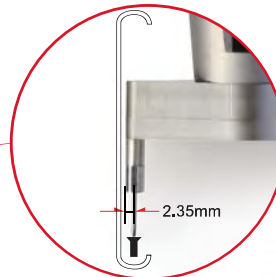
Customizable ESD anti-static design



Torsion foolproof design
Prevent manual adjustment and ensure high-quality fastening



10um gold break switch system
Extended life with over 10million times uses



Innovative patent

From screwdriver head radius to the forefront
Minimum distance 2.25mm



Designed with LED light

Specially designed for electric screwdriver head to penetrate into narrow spaces so the front end+LED light can be aligned with the screw holes.



Fool-Proof counting power supply

can be connected in the DC line control and can detect screw mix, floating, cross thread, mis-lock and other errors.

MINI (SWISS) DUST-FREE MOTOR ELECTRIC SCREWDRIVER

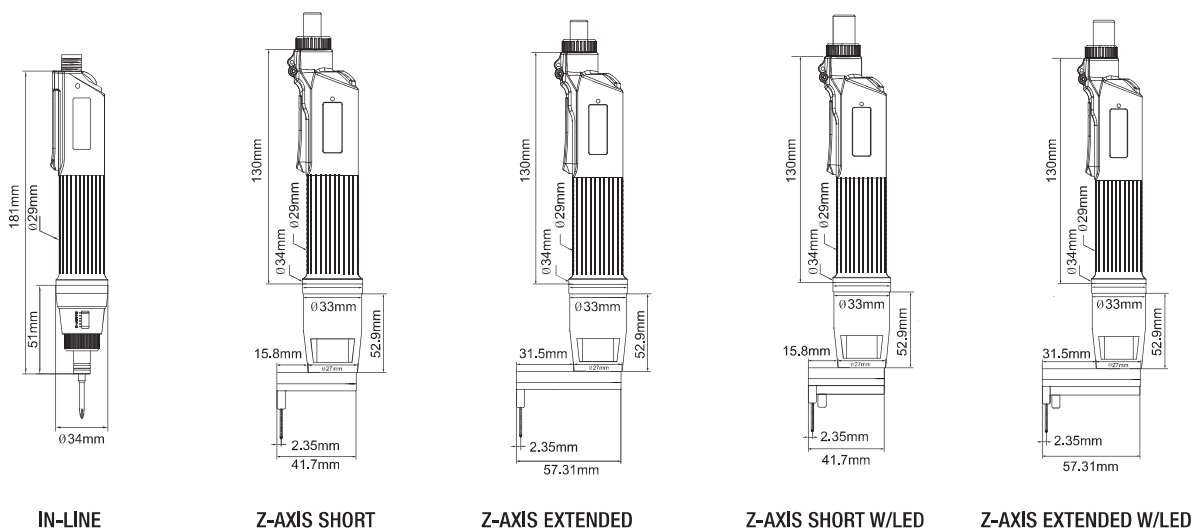
BF-X1.0L [DC TYPE]



Customizable ESD anti-static type

- low inertia, low impact, low vibration, extended life
- Patented Z-AXIS for narrow space fastening can be customized according to the center distance
- Screw counting, counting statistics, fool-proofing, can communicate with external I/O equipment, assist in improving high quality workpiece fastening (with fool-proof counting power supply manager)
- With a small fool-proof counter, can be operated on the DC line to detect screw mixing, floating, cross thread, mis-lock and other errors.
- With the serial port power supply, it can be connected to communication fixtures and second fastening (2 to 9 locks) can be customized.

Lever start



MINI (SWISS) DUST FREE MOTOR SCREWDRIVER SPECIFICATIONS

| MODEL NO. | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-----------|--------------|------------------|--------------|------------|----------------------|-------------|----------------|--------------|----------|----------------------------|---------|
| | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BF-X0.8LD | APS-201B | 9-19 | 0.15-0.8 | 0.015-0.08 | 80-180 | 250 | φ 29 | 186 | φ 4 | 1.0-1.8 | 0.6-1.4 |
| BF-X1.0LD | | 9-19 | 0.15-1.0 | 0.015-0.1 | 150-300 | 190 | φ 29 | 181 | φ 4 | 1.0-1.8 | 0.6-1.4 |
| BF-X1.0L | APS-301B | 20-30 | 0.15-1.0 | 0.015-0.1 | 650-1000 | 190 | φ 29 | 181 | φ 4 | 1.0-1.8 | 0.6-1.4 |
| BF-X2.0L | | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 190 | φ 29 | 181 | φ 4 | 1.0-2.2 | 1.0-2.0 |
| BF-X3.0L | | 20-30 | 0.4-3.0 | 0.04-0.3 | 450-700 | 190 | φ 29 | 181 | φ 4 | 1.0-2.6 | 1.0-2.0 |

MINI (SWISS) DUST FREE MOTOR Z-AXIS SPECIFICATIONS

| MODEL NO. | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|--------------|--------------|------------------|--------------|------------|----------------------|-------------|----------------|--------------|----------|----------------------------|---------|
| | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BF-X0.8LDZ | APS-201B | 9-19 | 0.15-0.8 | 0.015-0.08 | 80-180 | 290 | φ 29 | 216 | φ 2.49 | 1.0-1.8 | 0.6-1.4 |
| BF-X0.8LDZ-1 | | 9-19 | 0.15-0.8 | 0.015-0.08 | 80-180 | 310 | φ 29 | 216 | φ 2.49 | 1.0-1.8 | 0.6-1.4 |

MINI (SWISS) DUST FREE MOTOR Z-AXIS W/LED SPECIFICATIONS

| MODEL NO. | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|---------------|--------------|------------------|--------------|------------|----------------------|-------------|----------------|--------------|----------|----------------------------|---------|
| | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BF-X0.8LDZL | APS-201B | 9-19 | 0.15-0.8 | 0.015-0.08 | 80-180 | 310 | φ 29 | 216 | φ 2.49 | 1.0-1.8 | 0.6-1.4 |
| BF-X0.8LDZL-1 | | 9-19 | 0.15-0.8 | 0.015-0.08 | 80-180 | 330 | φ 29 | 216 | φ 2.49 | 1.0-1.8 | 0.6-1.4 |

MINI (SWISS) DUST FREE MOTOR SCREWDRIVER ACCESSORIES

Z-AXIS is Patented Intellectual property, Copyright Infringement WILL BE PROSECUTED

ELECTRIC SCREWDRIVER + Z-AXIS SHORT/EXTENDED VERSION

The center distance of the Z-axis electric screwdriver head is the minimum spacing from the front end.



Z-AXIS ELECTRIC SCREWDRIVER + LED light

Designed for electric screwdriver head to go deep into the narrow spaces to easily align the LED with the screw hole position.



VACUUM SUCTION TYPE

High-end assembly design, designed for precision pick-up of small screws, used in assembly lines, automation.



Extra small hidden screw type, Sleeve can slide back to reveal screw.



Z-axis air-suction (short type)



Z-axis air-suction (extended type)

INDUSTRIAL VERTICAL TORQUE ARM

Guarantees the electric screwdriver a precise vertical screw assembly.



Detailed reference on page 47

PRECISION TORQUE TESTER

SAS authorizes CEDAR OEM of Japan. Designed for high-precision three decimal place scale testing



Accurate to 3 decimal places

Detailed reference on page 45

Mini-series plus fool-proof counting power supply

Can detect screw mixing, floating, cross thread, missing screw and counting by assembly piece.



APS-201BTD
Secondary fastening power supply



83×38×24.5mm
Detailed reference on page 35

Vibration plate screw machine for automatic pickup of fine screws (Under 1.2mm)



Vibration plate screw machine

Detailed reference on page 43

SMALL BRUSHLESS ELECTRIC SCREWDRIVER

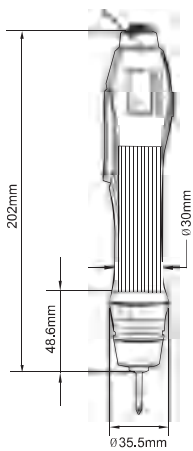
BLF-S1.0L [DC TYPE]



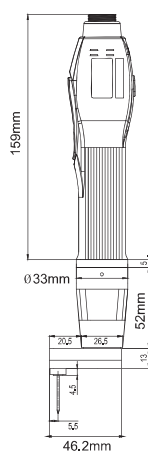
Customizable ESD anti-static type

- Low inertia, low impact, low vibration, extended life
- Patented Z-AXIS for narrow space fastening can be customized according to the center distance
- Screw counting, counting statistics, fool-proofing, can communicate with external I/O equipment, assist in improving high quality workpiece fastening (with fool-proof counting power supply manager)
- With a small fool-proof counter, can be operated on the DC line to detect screw mixing, floating, cross thread, mis-lock and other errors.
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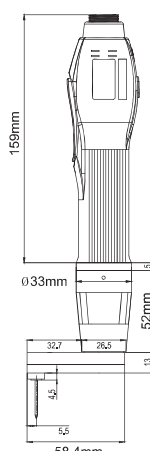
Lever start



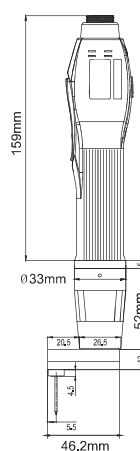
IN-LINE



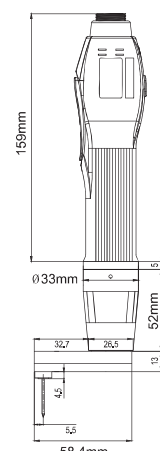
Z-AXIS SHORT



Z-AXIS EXTENDED



Z-AXIS SHORT W/LED



Z-AXIS EXTENDED W/LED

SMALL BRUSHLESS SCREWDRIVER SPECIFICATIONS

| MODEL NO. | POWER SUPPLY | VOLTAGE | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|--------------|---------|--------------|-----------|-----------|--------|----------|--------|-----------|----------------------------|---------|
| LEVER START | | (DCV) | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLF-S1.0LD | APS-201A | 9-19 | 0.15-1.0 | 0.015-0.1 | 100-200 | 304 | φ 30 | 202 | φ 4 SH1/4 | 0.7-1.8 | 0.6-1.4 |
| BLF-S1.0L | APS-301A | 20-30 | 0.15-1.0 | 0.015-0.1 | 350-500 | 304 | φ 30 | 202 | φ 4 SH1/4 | 0.7-1.8 | 0.6-1.4 |
| BLF-S2.0L | | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 304 | φ 30 | 202 | φ 4 SH1/4 | 1.0-2.2 | 1.0-2.0 |
| BLF-S3.0L | | 20-30 | 0.4-3.0 | 0.04-0.3 | 450-700 | 304 | φ 30 | 202 | φ 4 SH1/4 | 1.0-2.6 | 1.0-2.0 |
| BLF-S5.0L | | 20-30 | 0.5-5.0 | 0.05-0.5 | 650-1000 | 304 | φ 30 | 202 | φ 4 SH1/4 | 1.0-2.6 | 1.0-2.3 |
| BLF-S6.0L | | 20-30 | 1.0-6.0 | 0.1-0.6 | 650-1000 | 304 | φ 30 | 202 | φ 4 SH1/4 | 1.4-2.6 | 1.4-2.3 |
| BLF-S10L | | 20-30 | 1.5-10.0 | 0.15-1.0 | 650-1000 | 304 | φ 30 | 202 | φ 4 SH1/4 | 2.0-3.0 | 2.0-2.6 |

SMALL BRUSHLESS + Z-AXIS SPECIFICATIONS

| MODEL NO. | POWER SUPPLY | VOLTAGE | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|--------------|--------------|---------|--------------|-----------|-----------|--------|----------|--------|----------|----------------------------|---------|
| LEVER START | | (DCV) | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLF-S2.0LZ | APS-301A | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 380 | φ 30 | 235 | φ 4 | 1.0-2.2 | 1.0-2.0 |
| BLF-S2.0LZ-1 | | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 400 | φ 30 | 235 | φ 4 | 1.0-2.2 | 1.0-2.0 |
| BLF-S3.5LZ | | 20-30 | 0.5-3.5 | 0.05-0.35 | 650-1000 | 380 | φ 30 | 235 | φ 4 | 1.0-2.6 | 1.0-2.3 |
| BLF-S3.5LZ-1 | | 20-30 | 0.5-3.5 | 0.05-0.35 | 650-1000 | 400 | φ 30 | 235 | φ 4 | 1.0-2.6 | 1.0-2.3 |

SMALL BRUSHLESS + Z-AXIS W/LED SPECIFICATIONS

| MODEL NO. | POWER SUPPLY | VOLTAGE | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|---------------|--------------|---------|--------------|-----------|-----------|--------|----------|--------|----------|----------------------------|---------|
| LEVER START | | (DCV) | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLF-S2.0LZL | APS-301A | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 400 | φ 30 | 235 | φ 4 | 1.0-2.2 | 1.0-2.0 |
| BLF-S2.0LZL-1 | | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 420 | φ 30 | 235 | φ 4 | 1.0-2.2 | 1.0-2.0 |
| BLF-S3.5LZL | | 20-30 | 0.5-3.5 | 0.05-0.35 | 650-1000 | 400 | φ 30 | 235 | φ 4 | 1.0-2.6 | 1.0-2.3 |
| BLF-S3.5LZL-1 | | 20-30 | 0.5-3.5 | 0.05-0.35 | 650-1000 | 420 | φ 30 | 235 | φ 4 | 1.0-2.6 | 1.0-2.3 |

SMALL BRUSHLESS SCREWDRIVER ACCESSORIES

Z-AXIS is Patented Intellectual property, Copyright Infringement WILL BE PROSECUTED

ELECTRIC SCREWDRIVER + Z-AXIS SHORT/EXTENDED VERSION

The center distance of the Z-axis electric screwdriver head is the minimum spacing from the front end.



Z-AXIS ELECTRIC SCREWDRIVER + LED light

Designed for electric screwdriver head to go deep into the narrow spaces to easily align the LED with the screw hole position.



VACUUM SUCTION TYPE

High-end assembly design, designed for precision pick-up of small screws, used in assembly lines, automation.



Extra small hidden screw type, Sleeve can slide back to reveal screw.



Z-axis air-suction (short type)



Z-axis air-suction (extended type)

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Accurate to 3 decimal places

Detailed reference on page 45

Mini-series plus fool-proof counting power supply

Can detect screw mixing, floating, cross thread, missing screw and counting by assembly piece.



83×38×24.5mm

Detailed reference on page 35

Vibration plate screw machine for automatic pickup of fine screws (Under 1.2mm)



Vibration plate screw machine

Detailed reference on page 43

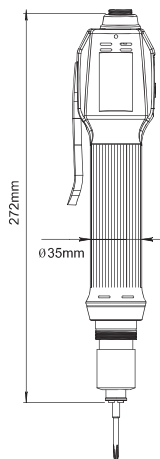
MEDIUM BRUSHLESS ELECTRIC SCREWDRIVER

BLF-M20L/P F [Standard Type] BLC-M20L/P F [Counter Type]

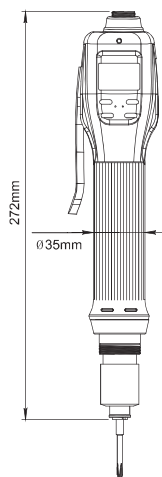
Error proof fastening (blc Series)

- /// The insulated body, non-slip design effectively reduces overall mechanical loss and the high-efficiency motor can enhance precision.
- /// Anti-aging clutch torque design to prevent clutch torque degrade.
- /// Pull-Out Bit Holder, Prevents Bit from Coming Loose or Falling Out.
- /// Screw counter integrated into the electric screwdriver to reduce cost and save space.
- /// Liquid LCD panel W/ three visual color prompts for OK/ NG/ PASS
- /// Built in alarm with adjustable volume setting (sound prompts)
- /// A variety of screw specification modules can be quickly used according to demand (5 groups)
- /// Power-off function upon workpiece completion (interval prompt)

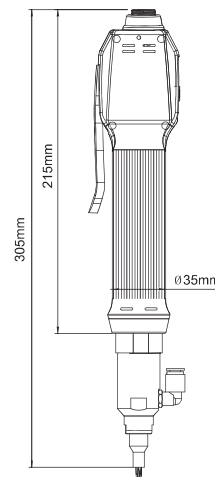
Lever start/ Push start



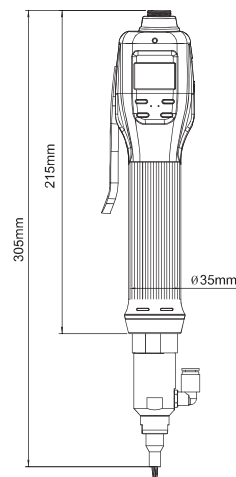
Standard P/L



Counter P/L



Standard Suction P/L



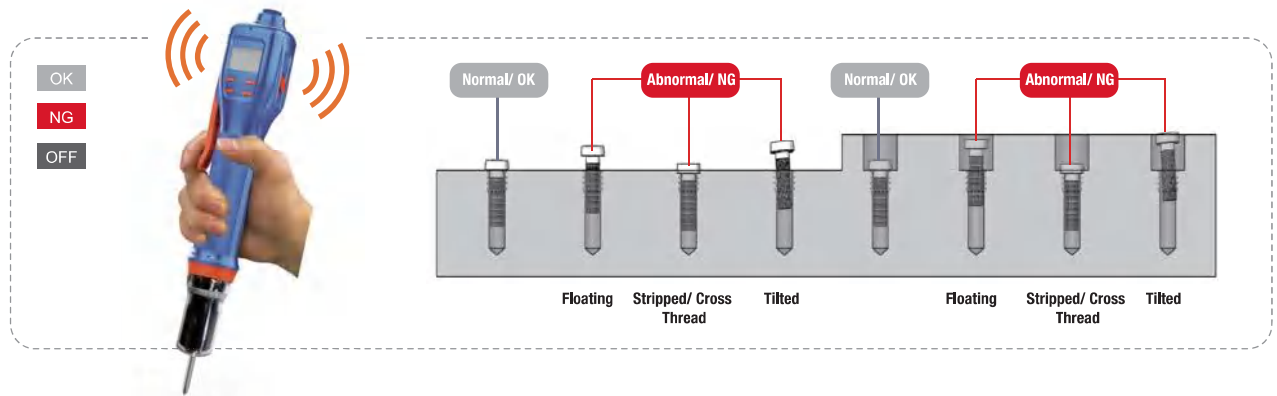
Counter Suction P/L

Medium Brushless Specifications

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|------------|--------------|------------------|--------------|---------|----------------------|-------------|----------------|--------------|---------------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLF-M20LF | BLF-M20PF | APM-302A | 20-30 | 5.0-20 | 0.5-2.0 | 1400-2000 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLF-M20L | BLF-M20P | | 20-30 | 5.0-20 | 0.5-2.0 | 650-1100 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLF-M30L | BLF-M30P | | 20-30 | 8.0-30 | 0.8-3.0 | 650-1100 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLF-M40L | BLF-M40P | APL-301A | 20-30 | 10-40 | 1.0-4.0 | 650-1100 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 3.5-5.0 | 3.0-4.0 |
| BLF-M50L | BLF-M50P | | 20-30 | 20-50 | 2.0-5.0 | 280-500 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |

Medium Brushless Counter Specifications

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|------------|--------------|------------------|--------------|---------|----------------------|-------------|----------------|--------------|---------------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLC-M20LF | BLC-M20PF | APM-302A | 20-30 | 5.0-20 | 0.5-2.0 | 1400-2000 | 570 | φ 35 | 272 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLC-M20L | BLC-M20P | | 20-30 | 5.0-20 | 0.5-2.0 | 650-1100 | 570 | φ 35 | 272 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLC-M30L | BLC-M30P | | 20-30 | 8.0-30 | 0.8-3.0 | 650-1100 | 570 | φ 35 | 272 | φ 5 SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLC-M40L | BLC-M40P | APL-301A | 20-30 | 10-40 | 1.0-4.0 | 650-1100 | 570 | φ 35 | 272 | φ 5 SH5 SH1/4 | 3.5-5.0 | 3.0-4.0 |
| BLC-M50L | BLC-M50P | | 20-30 | 20-50 | 2.0-5.0 | 280-500 | 570 | φ 35 | 272 | φ 5 SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |



Electric Screwdriver Built in Fool-Proof counter

Multiple screw specification module: settings can be stored and cycled (up to 5 groups)

Screw quantity setting: Can set workpiece screw number (up to 99 pieces) and will display the number of screws remaining increasing or decreasing.

Alarm function: When a screw is fastened, a beeping sound is emitted, together with the LED to notify the operator of a pass/fail fastening result.

Screw fastening completion notification: When the screw is fastened, a beep will alert the operator that the piece is complete, the screw setting will reset to the next workpiece.

Fastening Error: Prevent incorrect fastening caused by confirmed fastening, multiple fastening and secondary fastening.

Operation reset time: Can preset the time of each workpiece from picking the screw to completion of fastening. If the fastening fails to finish in the preset time, an alert will notify the operator which can help more productivity and improve work efficiency. Can be set from 0.1s to 99.0s.

Reverse recovery ON/OFF: Reverse recovery can be turned on or off and can be set to 0.1s to 5.0s. If the workpiece has a fastening error and the screw needs to be recovered, the reverse recovery time must exceed the set seconds, then the counter will subtract 1.

Secondary fastening time: Fastening confirmation within the set time without judging OK/NG, can set for 0.1s to 9.9s

Error detection: do not detect, detect lower limit, detect upper limit, detect upper and lower limit can be set.

Multi-Fastening loop mode: Can store multiple group settings to be placed on a loop after the value for each group has been stored.

Counter: Counter can be disabled and can be used as an ordinary electric screwdriver, can also be connected to external counter.

Special Design: Fastening for each screw can be a single lock or a secondary lock to ensure fastening quality. (time can be set)

ACCESSORIES



AM Series Vacuum Type

The screw is picked up by suction which saves time.
Can pick up stainless steel and non-magnetic screws.
Can remove dust from screws, higher efficiency.

Purchasing guide:

First, select the model and bit size ($\Phi 4$, $\Phi 5$, $\frac{1}{4}$) then provide screw samples or drawings of length, head, and depth of the object being fastened.



Weight and inertia reducing spring balancer W/ vertical torque Arm

The spring balancer and torque arm combination will keep the screwdriver vertical to increase precision and quality of fastening while reducing fatigue for the operator and improve work efficiency.

For medium torque range

Detailed reference on page 47

Multifunctional Power Supply

Can be connected in series with Screwdrivers, screw machines and more. Can be set so that no screw fastening errors occur.



Standard automation port
172×84×61mm

Detailed reference on page 31

90° right angle head

Industrial grade right angle head with built in needle roller bearings can increase torque by 30%



Max load 14N.m

Use: lever start Standard and Counter type

Gun Type

For vertical operation, double ring design, ensures operating convenience.



For medium torque range

LARGE BRUSHLESS ELECTRIC SCREWDRIVER

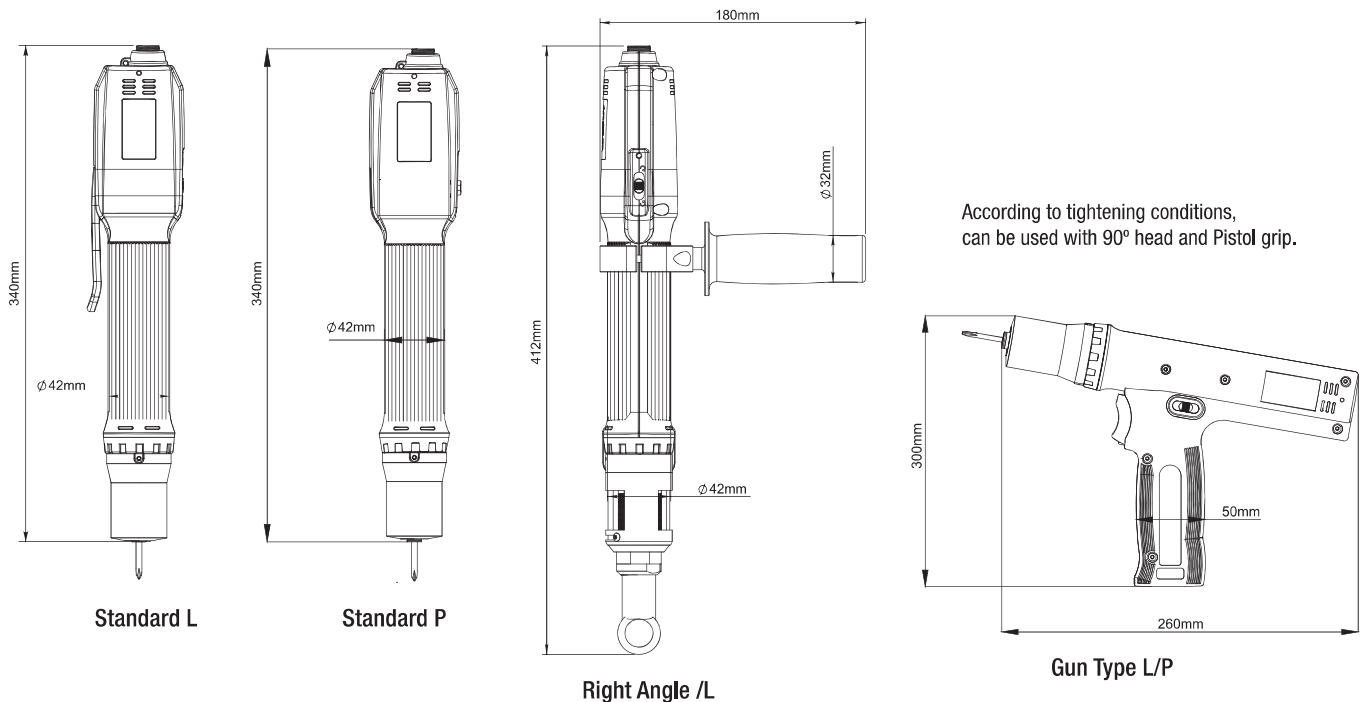
BLF-L50L/P F [Standard Type]

BLC-L150L/P [Counter Type]

Error proof fastening (blc Series)

- ✓ The insulated body, non-slip design effectively reduces overall mechanical loss and the high-efficiency motor can enhance precision.
- ✓ Anti-aging clutch torque design to prevent clutch torque degrade.
- ✓ Pull-Out Bit Holder, Prevents Bit from Coming Loose or Falling Out.
- ✓ Screw counter integrated into the electric screwdriver to reduce cost and save space.
- ✓ Liquid LCD panel displays the number of locked OK and NG, or standard tightening time and actual tightening time, which can be switched freely
- ✓ I/O communication with external equipments available to assist in improving the quality of workpiece screw locking.

Lever start/ Push start

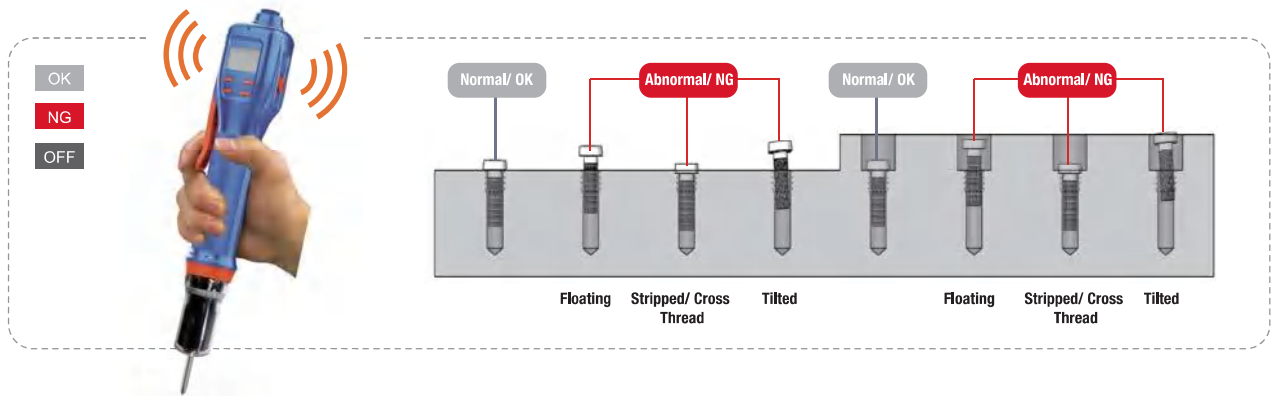


Large Brushless Specifications

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|------------|--------------|------------------|--------------|----------|----------------------|-------------|----------------|--------------|-----------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLF-L35L F | BLF-L35P F | APL-401A | 40 | 15-35 | 1.5-3.5 | 3600 | 1070 | φ 42 | 340 | SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLF-L50L F | BLF-L50P F | | 40 | 20-50 | 2.0-5.0 | 2400 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L F | BLF-L60P F | | 40 | 25-60 | 2.5-6.0 | 2000 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L | BLF-L60P | | 40 | 25-60 | 2.5-6.0 | 1300 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L90L | BLF-L90P | | 30-40 | 40-90 | 4.0-9.0 | 700-1000 | 1070 | φ 42 | 340 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLF-L110L | BLF-L110P | | 30-40 | 60-110 | 6.0-11.0 | 650-850 | 1070 | φ 42 | 340 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLF-L150L | BLF-L150P | | 40 | 80-150 | 8.0-15.0 | 400 | 1070 | φ 42 | 340 | SH1/4 | 6.0-9.0 | 5.0-8.0 |

Large Brushless Counter Specifications

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|------------|--------------|------------------|--------------|----------|----------------------|-------------|----------------|--------------|-----------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLF-L35L F | BLF-L35P F | AML-401A | 40 | 15-35 | 1.5-3.5 | 3600 | 1070 | φ 42 | 340 | SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLF-L50L F | BLF-L50P F | | 40 | 20-50 | 2.0-5.0 | 2400 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L F | BLF-L60P F | | 40 | 25-60 | 2.5-6.0 | 2000 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L | BLF-L60P | | 40 | 25-60 | 2.5-6.0 | 1300 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L90L | BLF-L90P | | 30-40 | 40-90 | 4.0-9.0 | 700-1000 | 1070 | φ 42 | 340 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLF-L110L | BLF-L110P | | 30-40 | 60-110 | 6.0-11.0 | 650-850 | 1070 | φ 42 | 340 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLF-L150L | BLF-L150P | | 40 | 80-150 | 8.0-15.0 | 400 | 1070 | φ 42 | 340 | SH1/4 | 6.0-9.0 | 5.0-8.0 |



Electric Screwdriver Built in Fool-Proof counter

Multiple screw specification module: settings can be stored and cycled (up to 5 groups)

Screw quantity setting: Can set workpiece screw number (up to 99 pieces) and will display the number of screws remaining increasing or decreasing.

Alarm function: When a screw is fastened, a beeping sound is emitted, together with the LED to notify the operator of a pass/fail fastening result.

Screw fastening completion notification: When the screw is fastened, a beep will alert the operator that the piece is complete, the screw setting will reset to the next workpiece.

Fastening Error: Prevent incorrect fastening caused by confirmed fastening, multiple fastening and secondary fastening.

Operation reset time: Can preset the time of each workpiece from picking the screw to completion of fastening. If the fastening fails to finish in the preset time, an alert will notify the operator which can help more productivity and improve work efficiency. Can be set from 0.1s to 99.0s.

Reverse recovery ON/OFF: Reverse recovery can be turned on or off and can be set to 0.1s to 5.0s. If the workpiece has a fastening error and the screw needs to be recovered, the reverse recovery time must exceed the set seconds, then the counter will subtract 1.

Secondary fastening time: Fastening confirmation within the set time without judging OK/NG, can set for 0.1s to 9.9s

Error detection: do not detect, detect lower limit, detect upper limit, detect upper and lower limit can be set.

Multi-Fastening loop mode: Can store multiple group settings to be placed on a loop after the value for each group has been stored.

Counter: Counter can be disabled and can be used as an ordinary electric screwdriver, can also be connected to external counter.

Special Design: Fastening for each screw can be a single lock or a secondary lock to ensure fastening quality. (time can be set)

ACCESSORIES



AM Series Vacuum Type

The screw is picked up by suction which saves time.
Can pick up stainless steel and non-magnetic screws.
Can remove dust from screws, higher efficiency.

Purchasing guide:

First, select the model and bit size ($\Phi 4$, $\Phi 5$, $\frac{1}{4}$) then provide screw samples or drawings of length, head, and depth of the object being fastened.



Weight and inertia reducing spring balancer W/ vertical torque Arm

The spring balancer and torque arm combination will keep the screwdriver vertical to increase precision and quality of fastening while reducing fatigue for the operator and improve work efficiency.

For medium and large torque range

Detailed reference on page 47

Multifunctional Power Supply

Can be connected in series with Screwdrivers, screw machines and more. Can be set so that no screw fastening errors occur.



Standard automation port

172×84×61mm

Detailed reference on page 31

90° right angle head

Industrial grade right angle head with built in needle roller bearings can increase torque by 30%



Max load 14N.m

Use: lever start Standard and Counter type

Gun Type

For vertical operation, double ring design, ensures operating convenience.



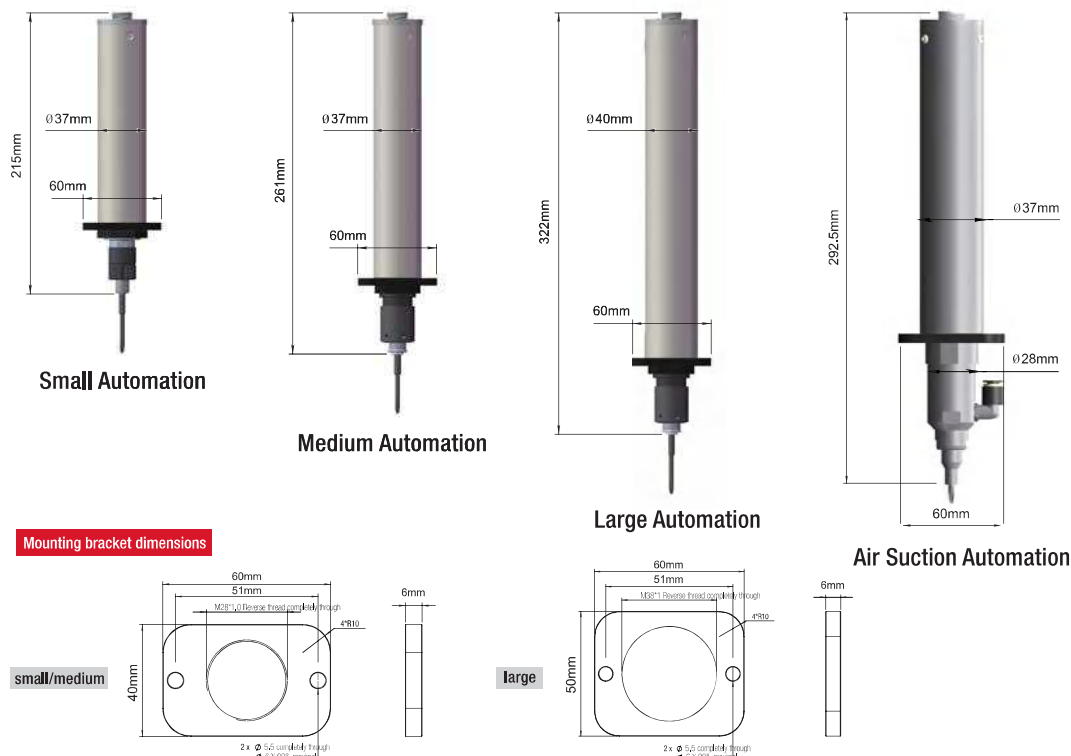
For large torque range (integrated)

BRUSHLESS ELECTRIC SCREWDRIVER FOR AUTOMATION

BLF-S1.0LT BLF-M20LFT BLF-L50LFT

Practical, Durable, Simplistic

- ✓ Accurate and stable torque, maintaining the durability of screw fastening.
- ✓ Dedicated Automated machine (T) and (TA) can be air suction type.
- ✓ Can pick up screws using a hidden sleeve, suitable for fastening deep hole screws.
- ✓ Special power supply for automated machines which can drive reverse electric screwdrivers.
- ✓ With a multifunctional power supply, can better meet the quality and fastening requirements.



SMALL AUTOMATED BRUSHLESS SCREWDRIVER

| MODEL NO. | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|--------------|------------------|--------------|-----------|-----------|--------|----------|--------|-----------|----------------------------|---------|
| LEVER START | | | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLF-S1.0LDT | APS-201AT | 9-19 | 0.15-1.0 | 0.015-0.1 | 100-200 | 520 | φ 37 | 215 | φ 4 SH1/4 | 0.7-1.8 | 0.6-1.4 |
| BLF-S1.0LT | APS-301AT | 20-30 | 0.15-1.0 | 0.015-0.1 | 350-500 | 520 | φ 37 | 215 | φ 4 SH1/4 | 0.7-1.8 | 0.6-1.4 |
| BLF-S2.0LT | | 20-30 | 0.3-2.0 | 0.03-0.2 | 650-1000 | 520 | φ 37 | 215 | φ 4 SH1/4 | 1.0-2.2 | 1.0-2.0 |
| BLF-S3.0LT | | 20-30 | 0.4-3.0 | 0.04-0.3 | 450-700 | 520 | φ 37 | 215 | φ 4 SH1/4 | 1.0-2.6 | 1.0-2.0 |
| BLF-S5.0LT | | 20-30 | 0.5-5.0 | 0.05-0.5 | 650-1000 | 520 | φ 37 | 215 | φ 4 SH1/4 | 1.0-2.6 | 1.0-2.3 |
| BLF-S6.0LT | | 20-30 | 1.0-6.0 | 0.1-0.6 | 650-1000 | 520 | φ 37 | 215 | φ 4 SH1/4 | 1.4-2.6 | 1.4-2.3 |
| BLF-S10LT | | 20-30 | 1.5-10.0 | 0.15-1.0 | 650-1000 | 520 | φ 37 | 215 | φ 4 SH1/4 | 2.0-3.0 | 2.0-2.6 |

MEDIUM AUTOMATED BRUSHLESS SCREWDRIVER

| MODEL NO. | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|--------------|------------------|--------------|---------|-----------|--------|----------|--------|---------------|----------------------------|---------|
| LEVER START | | | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLF-M20LFT | APM-302AT | 20-30 | 5.0-20 | 0.5-2.0 | 1400-2000 | 950 | φ 37 | 261 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLF-M20LT | | 20-30 | 5.0-20 | 0.5-2.0 | 650-1100 | 950 | φ 37 | 261 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLF-M30LT | | 20-30 | 8.0-30 | 0.8-3.0 | 650-1100 | 950 | φ 37 | 261 | φ 5 SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLF-M40LT | APL-301AT | 20-30 | 10-40 | 1.0-4.0 | 650-1100 | 950 | φ 37 | 261 | φ 5 SH5 SH1/4 | 3.5-5.0 | 3.0-4.0 |
| BLF-M50LT | | 20-30 | 20-50 | 2.0-5.0 | 280-500 | 950 | φ 37 | 261 | φ 5 SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |

LARGE AUTOMATED BRUSHLESS SCREWDRIVER

| MODEL NO. | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|--------------|------------------|--------------|----------|-----------|--------|----------|--------|-----------|----------------------------|---------|
| LEVER START | | | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLF-L60LFT | APL-401AT | 40 | 25-60 | 2.5-6.0 | 2000 | 1300 | φ 40 | 322 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60LT | | 40 | 25-60 | 2.5-6.0 | 1000 | 1300 | φ 40 | 322 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L90LT | | 40 | 40-90 | 4.0-9.0 | 1000 | 1300 | φ 40 | 322 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLF-L120LT | | 40 | 60-120 | 6.0-12.0 | 880 | 1300 | φ 40 | 322 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLF-L150LT | | 40 | 65-150 | 6.5-15.0 | 250 | 1300 | φ 40 | 322 | SH1/4 | 6.0-9.0 | 5.0-8.0 |

VACUUM SUCTION BLF-S1.0LTA SERIES

Through reverse vacuum suction, stainless steel and other non-magnetic screws are easily picked up. The automatic built in suction catheter around the head allows for quick vertical assembly.



Purchasing guide:

- First, select the applicable screwdriver (A) (B) (C)
- Provide bit size (medium 4, $\Phi 5$, $\frac{1}{4}$) and then provide screw samples or drawings of length, head, and depth of the object being fastened.
- M1.2 – M3.5 design, built in guide sleeve, when the screw is in position, the sleeve will slide back as the screw is guided into position.

Vacuum suction specifications

Suction source



Standard
APM-302A

Air suction components
Driver bit
Mounting bracket
Nozzle

Built-in Nozzle
catheter position



| A | B | C |
|--------------|------------|-------------|
| Type | Type | Type |
| BLF-S1.0LTDA | BLF-M20LFT | BLF-L60LFTA |
| BLF-S1.0LTA | BLF-M20LT | BLF-L60LTA |
| BLF-S2.0LTA | BLF-M30LT | BLF-L80LTA |
| BLF-S3.0LTA | BLF-M40LT | BLF-L100LTA |
| BLF-S5.0LTA | BLF-M50LT | BLF-L120LTA |
| BLF-S6.0LTA | | BLF-L150LTA |
| BLF-S10LTA | | |

Power Supply for Automation

Standard automation port
172×84×46mm



APM-302AT

Multifunctional Power Supply

Can be connected in series with Screwdrivers, screw machines and more. Can be set so that no screw fastening errors occur.

Standard automation port
172×84×61mm



AMM-301AT

Detailed reference on page 31

Automation Screw Feeder

You can connect automated screwdriver with screw feeder to work in combination.



AT-1030TC

Detailed reference on page 42

DC high flexible Anti-interference chord



Heavy spring coil chord



| Standard 2M anti-interference cable | | | | |
|-------------------------------------|--------|--------|---------------------------------------|----|
| Style | 5P | 6P | 5P | 6P |
| Length | 2M | 2M | 5M | 5M |
| Model No. | P2W092 | P2W093 | Specific length can be custom ordered | |

| Heavy spring coil chord (optional) | | | | |
|------------------------------------|--------|--------|---------------------------------------|----|
| Style | 5P | 6P | 5P | 6P |
| Length | 2M | 2M | 5M | 5M |
| Model No. | 2W2210 | P2W053 | Specific length can be custom ordered | |

Separated Torque Tester

(Used for Automation platform fasten testing)



Detailed reference on page 45

Precision Torque Tester



Designed for high-precision three decimal place scale testing

LARGE GUN TYPE BRUSHLESS ELECTRIC SCREWDRIVER

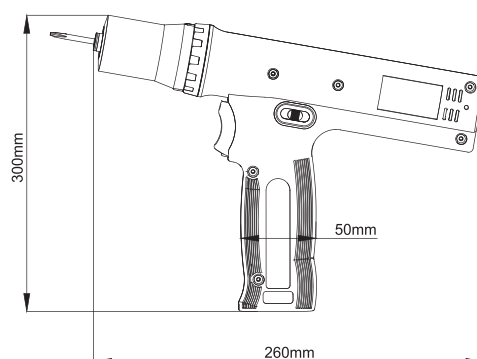
BLF-L50L/P FPG [Standard]

Precise high- durability in a compact structure

- ✓ Simplified control circuit, improved durability convenient maintenance.
- ✓ Torque accuracy is stable and screw fastening quality is maintained
- ✓ The body structure is exquisite and durable, lightweight and suitable for long term operation.
- ✓ Integrated fool-proof counter
- ✓ Can add with multifunctional fool-proof counter power supply and can be connected in series with Screwdrivers, screw machines and more. Can be set so that no screw fastening errors occur.

Lever start/ Push start

Large brushless Gun Type BLF-L50L/P FPG



Standard Power Supply

Standard Automation port
225×112×70mm

Detailed reference on page 33



APL-301A

Multifunctional power Supply

Can be connected in series with Screwdrivers, screw machines and more. Can be set so that no screw fastening errors occur.

Standard Automation port
225×112×70mm

Detailed reference on page 31



AML-301A

Large brushless Gun Type

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|---------------|---------------|--------------|------------------|--------------|----------|----------------------|-------------|----------------|--------------|-----------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLF-L35L FPG | BLF-L35P FPG | APL-401A | 40 | 15-35 | 1.5-3.5 | 3600 | 1070 | 50 | 300 | SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLF-L50L FPG | BLF-L50P FPG | | 40 | 20-50 | 2.0-5.0 | 2400 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L FPG | BLF-L60P FPG | | 40 | 25-60 | 2.5-6.0 | 2000 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L PG | BLF-L60P PG | | 40 | 25-60 | 2.5-6.0 | 1300 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L90L PG | BLF-L90P PG | | 30-40 | 40-90 | 4.0-9.0 | 700-1000 | 1070 | 50 | 300 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLF-L110L PG | BLF-L110P PG | | 30-40 | 60-110 | 6.0-11.0 | 650-850 | 1070 | 50 | 300 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLF-L150L DPG | BLF-L150P DPG | | 40 | 80-150 | 8.0-15.0 | 400 | 1070 | 50 | 300 | SH1/4 | 6.0-9.0 | 5.0-8.0 |

Large brushless Gun W/counter

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|---------------|---------------|--------------|------------------|--------------|----------|----------------------|-------------|----------------|--------------|-----------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLF-L35L FPG | BLF-L35P FPG | AML-401A | 40 | 15-35 | 1.5-3.5 | 3600 | 1070 | 50 | 300 | SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLF-L50L FPG | BLF-L50P FPG | | 40 | 20-50 | 2.0-5.0 | 2400 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L FPG | BLF-L60P FPG | | 40 | 25-60 | 2.5-6.0 | 2000 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L60L PG | BLF-L60P PG | | 40 | 25-60 | 2.5-6.0 | 1300 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLF-L90L PG | BLF-L90P PG | | 30-40 | 40-90 | 4.0-9.0 | 700-1000 | 1070 | 50 | 300 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLF-L110L PG | BLF-L110P PG | | 30-40 | 60-110 | 6.0-11.0 | 650-850 | 1070 | 50 | 300 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLF-L150L DPG | BLF-L150P DPG | | 40 | 80-150 | 8.0-15.0 | 400 | 1070 | 50 | 300 | SH1/4 | 6.0-9.0 | 5.0-8.0 |

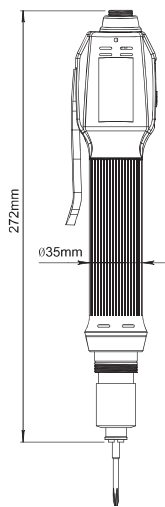
BRUSH ELECTRIC SCREWDRIVER SERIES

BF-M50L/P [Medium-large]

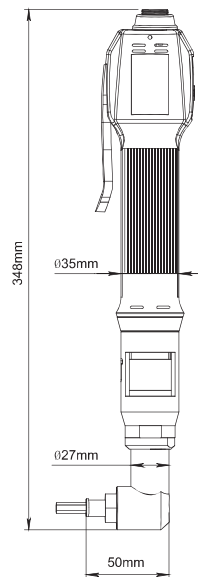
Practical efficiency in fastening screws at low torque

- ✓ Suitable for general size screws, accurate torque, practical and economical.
- ✓ Low-voltage DC design makes it safe to use.
- ✓ Small and light makes it suitable for long operation times.

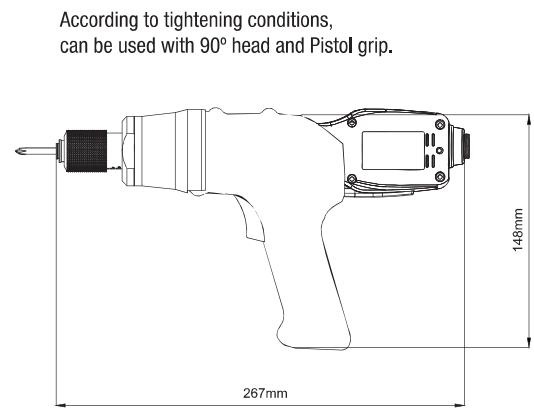
Lever start/ Push start



Medium-large L/P



L right angle head



L/P pistol grip

Medium-large Brush Electric Screwdriver

| MODEL NO. | | POWER SUPPLY | VOLTAGE | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|------------|--------------|---------|--------------|---------|-----------|--------|----------|--------|---------------|----------------------------|---------|
| LEVER START | PUSH START | | (DCV) | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BF-M20LF | BF-M20PF | APM-301B | 20-30 | 5.0-20 | 0.5-2.0 | 1400-2000 | 720 | φ 37 | 261 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BF-M20L | BF-M20P | | 20-30 | 5.0-20 | 0.5-2.0 | 650-1100 | 720 | φ 37 | 261 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BF-M30L | BF-M30P | | 20-30 | 8.0-30 | 0.8-3.0 | 650-1100 | 720 | φ 37 | 261 | φ 5 SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BF-M40L | BF-M40P | | 20-30 | 10-40 | 1.0-4.0 | 650-1100 | 720 | φ 37 | 261 | φ 5 SH5 SH1/4 | 3.5-5.0 | 3.0-4.0 |
| BF-M50L | BF-M50P | | 20-30 | 20-50 | 2.0-5.0 | 280-500 | 720 | φ 37 | 261 | φ 5 SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |

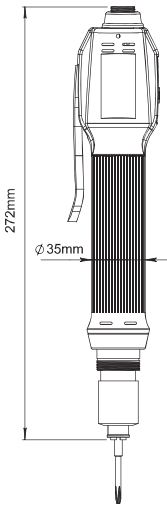
MEDIUM BRUSHLESS ECO-FRIENDLY
SEMI-AUTO ELECTRIC SCREWDRIVER

BLH-M20L/P F [DC Type]

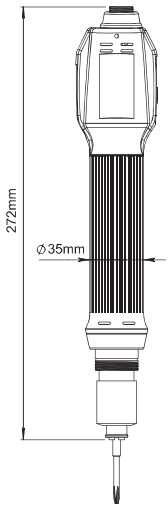
Environmentally friendly, No pollution, No noise, High efficiency and durability. Replaces high voltage electric screwdrivers, pneumatic screwdrivers and hydraulic screwdrivers.

- Extended life warranty: The service life is several times higher than high voltage electric screwdrivers.
- Solves the problem of pneumatic and hydraulic screwdrivers need to add other components such as air compressors and pipelines. Low maintenance and low energy use will save you on your annual costs.
- Meets environmental protection standards, no pollution, no dust and can improve workplace quality.

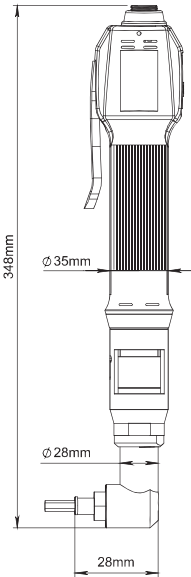
Lever start/ Push start



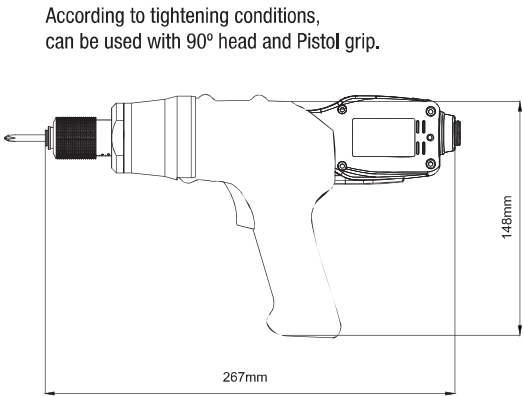
Standard L



Standard P



L right angle head



L/P pistol grip

Medium Brushless ECO-friendly Semi-Auto

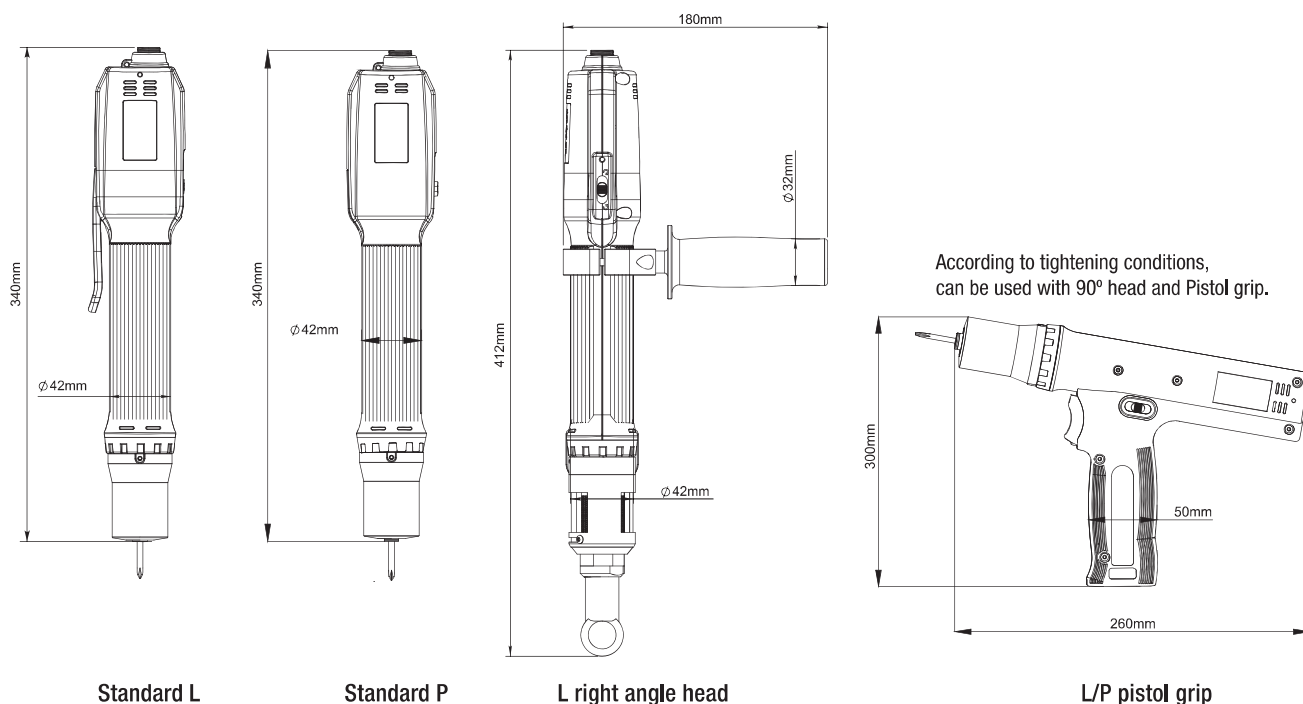
| MODEL NO. | | POWER SUPPLY | VOLTAGE | TORQUE RANGE | | RPM SPEED | WEIGHT | DIAMETER | LENGTH | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|------------|--------------|---------|--------------|---------|-----------|--------|----------|--------|---------------|----------------------------|---------|
| LEVER START | PUSH START | | (DCV) | kgf.cm | N.m | rpm±10% | g | mm | mm | | MACHINE | TAPPING |
| BLH-M20LF | BLH-M20PF | APM-301H | 20-30 | 5.0-20 | 0.5-2.0 | 1400-2000 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLH-M20L | BLH-M20P | | 20-30 | 5.0-20 | 0.5-2.0 | 650-1100 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 2.4-4.0 | 2.0-3.0 |
| BLH-M30L | BLH-M30P | | 20-30 | 8.0-30 | 0.8-3.0 | 650-1100 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLH-M40L | BLH-M40P | APL-401H | 20-30 | 10-40 | 1.0-4.0 | 650-1100 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 3.5-5.0 | 3.0-4.0 |
| BLH-M50L | BLH-M50P | | 20-30 | 20-50 | 2.0-5.0 | 280-500 | 546 | φ 35 | 272 | φ 5 SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |

BLH-L50L/P F [DC Type]

Environmentally friendly, No pollution, No noise, High efficiency and durability. Replaces high voltage electric screwdrivers, pneumatic screwdrivers and hydraulic screwdrivers.

- Extended life warranty: The service life is several times higher than high voltage electric screwdrivers.
- Solves the problem of pneumatic and hydraulic screwdrivers need to add other components such as air compressors and pipelines. Low maintenance and low energy use will save you on your annual costs.
- Meets environmental protection standards, no pollution, no dust and can improve workplace quality.

Lever start/ Push start



Large Brushless ECO-friendly Semi-Auto

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED rpm±10% | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|-------------|-------------|--------------|------------------|--------------|----------|----------------------|-------------|----------------|--------------|-----------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLH-L35L F | BLH-L35P F | APL-401H | 40 | 15-35 | 1.5-3.5 | 3600 | 1070 | φ 42 | 340 | SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLH-L50L F | BLH-L50P F | | 40 | 20-50 | 2.0-5.0 | 2400 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLH-L60L F | BLH-L60P F | | 40 | 25-60 | 2.5-6.0 | 2000 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLH-L60L | BLH-L60P | | 40 | 25-60 | 2.5-6.0 | 1300 | 1070 | φ 42 | 340 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLH-L90L | BLH-L90P | | 30-40 | 40-90 | 4.0-9.0 | 700-1000 | 1070 | φ 42 | 340 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLH-L110L | BLH-L110P | | 30-40 | 60-110 | 6.0-11.0 | 650-850 | 1070 | φ 42 | 340 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLH-L150L D | BLH-L150P D | | 40 | 80-150 | 8.0-15.0 | 400 | 1070 | φ 42 | 340 | SH1/4 | 6.0-9.0 | 5.0-8.0 |

LARGE BRUSHLESS ECO-FRIENDLY SEMI-AUTO GUN TYPE ELECTRIC SCREWDRIVER

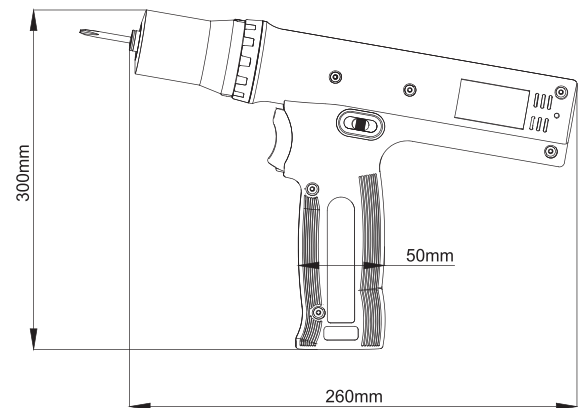
BLH-L50L/P FPG [DC Type]

Environmentally friendly, No pollution, No noise, High efficiency and durability. Replaces high voltage electric screwdrivers, pneumatic screwdrivers and hydraulic screwdrivers.

- Extended life warranty: The service life is several times higher than high voltage electric screwdrivers.
- Solves the problem of pneumatic and hydraulic screwdrivers need to add other components such as air compressors and pipelines. Low maintenance and low energy use will save you on your annual costs.
- Meets environmental protection standards, no pollution, no dust and can improve workplace quality.

Lever start/ Push start

**Large Brushless Gun Type
BLH-L50L FPG**



Large Brushless ECO-friendly Semi-Auto Gun Type

| MODEL NO. | | POWER SUPPLY | VOLTAGE (DCV) | TORQUE RANGE | | RPM SPEED | WEIGHT g | DIAMETER mm | LENGTH mm | BIT TYPE | SCREW THREAD DIAMETER (mm) | |
|---------------|---------------|--------------|------------------|--------------|----------|-----------|-------------|----------------|--------------|-----------|----------------------------|---------|
| LEVER START | PUSH START | | | kgf.cm | N.m | | | | | | MACHINE | TAPPING |
| BLH-L35L FPG | BLH-L35P FPG | APL-401H | 40 | 15-35 | 1.5-3.5 | 3600 | 1070 | 50 | 300 | SH5 SH1/4 | 3.0-4.0 | 2.0-3.5 |
| BLH-L50L FPG | BLH-L50P FPG | | 40 | 20-50 | 2.0-5.0 | 2400 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLH-L60L FPG | BLH-L60P FPG | | 40 | 25-60 | 2.5-6.0 | 2000 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLH-L60L PG | BLH-L60P PG | | 40 | 25-60 | 2.5-6.0 | 1300 | 1070 | 50 | 300 | SH5 SH1/4 | 4.0-6.0 | 3.0-5.0 |
| BLH-L90L PG | BLH-L90P PG | | 30-40 | 40-90 | 4.0-9.0 | 700-1000 | 1070 | 50 | 300 | SH1/4 | 4.1-7.0 | 3.3-6.0 |
| BLH-L110L PG | BLH-L110P PG | | 30-40 | 60-110 | 6.0-11.0 | 650-850 | 1070 | 50 | 300 | SH1/4 | 5.0-8.0 | 4.0-7.0 |
| BLH-L150L DPG | BLH-L150P DPG | | 40 | 80-150 | 8.0-15.0 | 400 | 1070 | 50 | 300 | SH1/4 | 6.0-9.0 | 5.0-8.0 |

FOOLPROOF COUNTER MANAGEMENT POWER SUPPLY

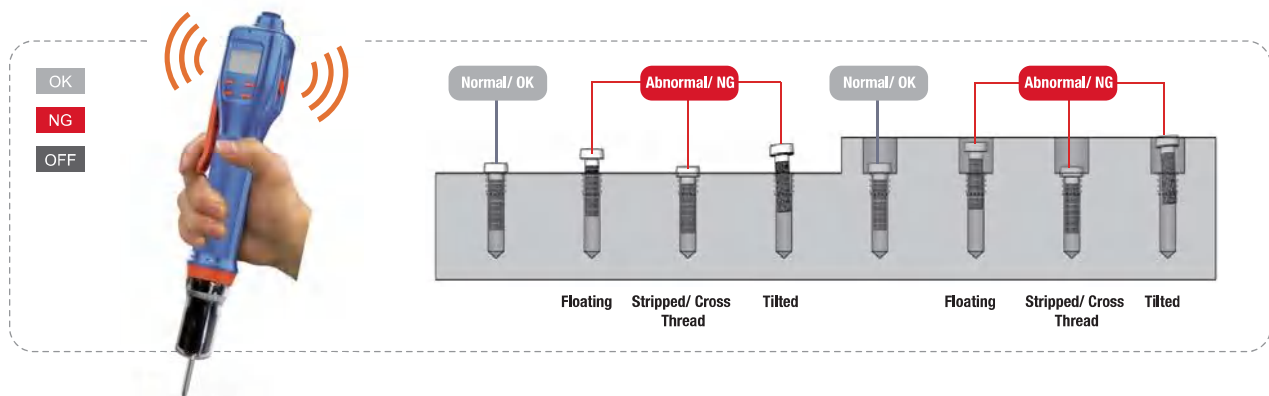
AM SERIES [DC Type]



AM Series controller

Safe output voltage, Unique quantity statistics, Time monitoring, floating inspection, multiple functions including detection of various screw errors.






- Up to 99 fastening samples can be obtained, and judgement criteria is more accurate. Can fine tune sampling according to the actual judgement data.
- Permissions password function to prevent improper settings and a LOCK button to prevent short term leave distortion of recorded data caused by improper operation with a memory of up to 10 sets of set values. Can save time of repeated settings and quickly change different fastening needs while on the assembly line.
- The main screen displays the locked OK and NG quality or standard fastening time and actual fastening, two kinds of fixed time. Can be switched at will.
- With the quantity accumulation or unit quantity accumulation function, you can choose at will. The quantity accumulation can be up to 60,000 and the unit quantity can reach up to 99.
- Passive multi-node and non-directional dry contact (Switch value) I/O port can facilitate the aid of external equipment.
- Can communicate with external equipment I/O to assist in improving the fastening quality of the workpiece.



FOOLPROOF COUNTER MANAGEMENT POWER SUPPLY FUNCTION

| | |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-Fastening loop mode | Can store multiple group settings (up to 10) to be placed on a loop after the value for each group has been stored. |
| Screw Quantity setting | Can set workpiece screw number (up to 99 pieces) and will display the number of screws remaining increasing or decreasing. |
| Alarm function | When a screw is fastened, a beeping sound is emitted, together with the LED to notify the operator of an OK/NG (pass/fail) fastening result. |
| Fastening Error | Prevent incorrect fastening caused by confirmed fastening, multiple fastening and secondary fastening. |
| Reverse recovery ON/OFF | Reverse recovery can be turned on or off and can be set to 0.1s to 5.0s. If the workpiece has a fastening error and the screw needs to be recovered, the reverse recovery time must exceed the set seconds, then the counter will subtract 1. |
| Secondary fastening time | Fastening confirmation within the set time without judging OK/NG, can set for 0.1s to 9.9s |
| Detection mode | Detect floating and cross thread function switch |
| Workpiece power-off function | Power off function when detect Floating screw, cross thread or completed fastening. |
| I/O signal output function | Can output start, break, OK, NG and workpiece completion signal. |
| Can support automated external control | |

FOOLPROOF COUNTER MANAGEMENT POWER SUPPLY SPECIFICATIONS

| Functions | Screw Fastening digital management system | | | | |
|--------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |  |
| Model Number | AMM-301A | AMS-301B | AML-301B | AML-301A | AML-401A |
| Workpiece fastening count range | 1-60000 Pieces | 1-60000 Pieces | 1-60000 Pieces | 1-60000 Pieces | 1-60000 Pieces |
| | 1-99 Pieces | 1-99 Pieces | 1-99 Pieces | 1-99 Pieces | 1-99 Pieces |
| Fastening time and number of workpieces | 1-99 Pieces | 1-99 Pieces | 1-99 Pieces | 1-99 Pieces | 1-99 Pieces |
| Fastening value memory/module range | 10-10 Group | 10-10 Group | 10-10 Group | 10-10 Group | 10-10 Group |
| Fastening sample time range | 0.01-9.99seconds | 0.01-9.99seconds | 0.01-9.99seconds | 0.01-9.99seconds | 0.01-9.99seconds |
| Fastening error time value | ±1-99% | ±1-99% | ±1-99% | ±1-99% | ±1-99% |
| Determination | OK alarm and LCD green light display NG alarm and LCD red light display | | | | |
| Signal output method | No-voltage contact signal (dry contact) | | | | |
| Input voltage (VAC) | 100-240 | | | | |
| Output voltage (VDC) | 20-30 | | | 20-30 | 40 |
| Power (including electric screwdriver) (W) | 75 | | | 150 | 150 |
| Plug | (5P)/(6P) | | | | |
| Dimensions (mm) | 172x84x61 | | | 225x112x70 | |
| Weight (g) | 450 | | | 570 | 600 |
| Applicable models | Medium brush-less power supply | Mini power supply Brush power supply | Large brush power supply | Medium brush-less power supply [40-50kgf.cm] | Large brushless power supply |

INDUSTRIAL GRADE BRUSH AND BRUSHLESS POWER SUPPLY

APS Series [DC Type]





APM Series [DC Type]

APL Series [DC Type]

Leading the industry for more than 40 years, low-voltage variable frequency power supply, low voltage electric screwdriver design and continuous improvement, our products are more precise, durable and made to perfection.

- Universal power supply: Universal power source for 100-240VAC 50/60Hz, global voltage source, variable frequency, constant pressure function, more stable torque, temperature and speed.
- Output stepless control: Output stepless control and constant voltage function, most suitable for the electronics technology industry. Light, thin, short and small assembly operation. The smaller the screw, the higher the requirements for screw fastening. Either longer or shorter screws, we can meet the requirements of high precision and low penetration.
- Equipped with an output terminal signal which can be connected with an external controller to achieve control integration function.

Industrial brush/brushless power specifications

| | | | | | | | | | |
|-------------------------|-----------------------------------------------------------------------------------|-------------|-----------------|-----------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Functions |  | | |  | |  |  |  |  |
| Model Number | APS-201B | APS-301B | APS-301A | APM-301B | APM-302A | APM-301H | APL-301A | APL-401A | APL-401H |
| Operating voltage (ACV) | 100-240 | | | | | | | | |
| Output voltage (DCV) | 9-19 | 20-30 | 20-30 | 20-30 | 20-30 | 20-30 | 20-30 | 40 | 40 |
| Power (W) | 38 | 60 | 60 | 75 | 75 | 75 | 150 | 150 | 150 |
| Plug | 5P | 5P | 5P | 6P | 5P | 5P | 5P | 5P | 5P |
| Dimensions (mm) | 164x64x42 | | | 172x84x46 | | 110x63x32 | 172x84x61 | 225x112x70 | 225x112x70 |
| Weight (g) | 300 | | | 380 | | 500 | 570 | 600 | 600 |
| Load current (A) | AMX2.0 | | | | | | | | |
| Applicable models | Mini | Small brush | Small brushless | Medium brush | Medium brushless | Medium brushless semi-auto | Medium brushless Large brushless | Large brushless | Large brushless semi-auto |

APS-201B (brush power supply)

Applicable screwdriver model

Mini Series

BF-X0.8LD BF-X0.8LDZ-1
 BF-X1.0LD BF-X0.8LDZL
 BF-X0.8LDZ BF-0.8LDZL-1

Operating voltage: 100-240ACV
 Output voltage: 9-19DCV
 Power: 38W
 Dimensions: 164x64x42mm
 Weight: 300g
 Load current: MAX2.0A
 Plug: 5P



APS-301B (brush power supply)

Applicable screwdriver model

Mini Series

BF-X1.0L BF-S2.0L
 BF-X2.0L BF-S5.0L
 BF-X3.0L BF-S6.0L
 BF-S10.0L

Operating voltage: 100-240ACV
 Output voltage: 20-30DCV
 Power: 60W
 Dimensions: 164x64x42mm
 Weight: 300g
 Load current: MAX2.0A
 Plug: 5P



FOOLPROOF COUNTER MANAGEMENT SPECIFICATIONS

APS-301A

Applicable screwdriver model

Small brushless series

BLF-S1.0LD
BLF-S1.0L
BLF-S2.0L
BLF-S3.0L
BLF-S5.0L
BLF-S6.0L
BLF-S10L
BLF-S2.0LZ
BLF-S3.5LZ

Operating voltage: 100-240ACV
Output voltage: 20-30DCV
Power: 60W
Dimensions: 164x64x42mm
Weight: 300g
Load current: MAX2.0A
Plug: 5P



APM-302A

Applicable screwdriver model

Medium brushless series

BLF-M20L/P F
BLF-M20L/P
BLF-M30L/P
BLC-M20L/P F
BLC-M20L/P
BLC-M30L/P

Operating voltage: 100-240ACV
Output voltage: 20-30DCV
Power: 75W
Dimensions: 164x84x46mm
Weight: 380g
Load current: MAX2.0A
Plug: 5P



APL-301A

Applicable screwdriver model

Medium brushless series

BLF-M40L/P
BLF-M50L/P
BLC-M40L/P
BLC-M50L/P

Operating voltage: 100-240ACV
Output voltage: 20-30DCV
Power: 150W
Dimensions: 172x84x61mm
Weight: 570g
Load current: MAX2.0A
Plug: 5P



APM-301H

Applicable screwdriver model

Brushless Semi-auto

BLH-M20L/P F
BLH-M20L/P
BLH-M30L/P

Operating voltage: 100-240ACV
Output voltage: 20-30DCV
Power: 75W
Dimensions: 110x63x32mm
Weight: 500g
Load current: MAX2.0A
Plug: 5P



APL-401A

Applicable screwdriver model

Large brushless series

BLF-L35L/P F BLF-L50L/P F
BLF-L60L/P F BLF-L60L/P
BLF-L90L/P BLF-L110L/P
BLF-L150L/P D

Operating voltage: 100-240ACV
Output voltage: 40DCV
Power: 150W
Dimensions: 225x112x70mm
Weight: 600g
Load current: MAX2.0A
Plug: 5P



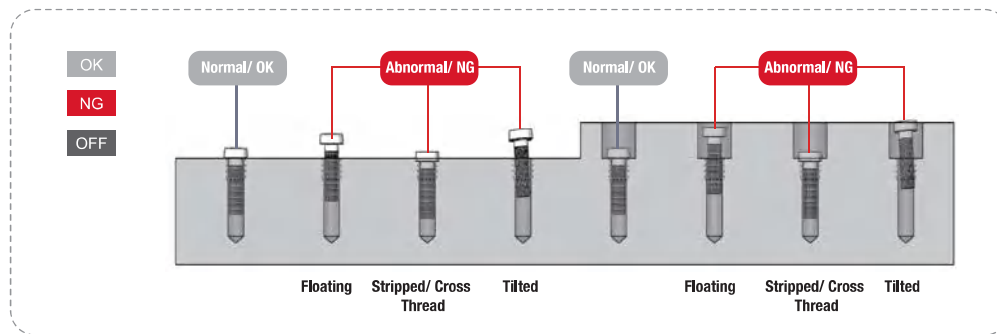
SMALL FOOLPROOF COUNTER

AD Series



Set the number of screws that can be fastened to the workpiece from 1-99, each when each screw is fastened, the display of the number of screws remaining can set to increase or decrease.


- // A variety of screw specification modules can quickly be called according to demand (5 groups)
- // Screw fastening time sample: Set the upper/lower limit of fastening time
- // Detect floating and cross thread errors function
- // Three color LCD display: The three colors indicate OK/NG and workpiece complete (visual cues)
- // And alarm sounds to let the user know if OK/NG or workpiece complete. (audio cues)
- // Workpiece complete power off function. (interval cue)



SMALL FOOLPROOF COUNTER FUNCTIONS

| | |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variety of screw specifications module | Module group storage setting (up to 5 groups can be stored) and module code can be selected in a loop. |
| Screw Quantity setting | Set the total number of screws for the workpiece (up to 99 can be set) as each screw is fastened, the remaining number can be displayed as increasing or decreasing in number. |
| Alarm function | Every time a screw is tightened, an alarm will sound that will notify the operator the fastening results through an LED (Pass/Fail) |
| Notification of complete fastening | The alarm will sound when screws are fastened and the number of fastened screws will be recirculated. |
| Fastening error prevention | To prevent fastening errors like over tightening, multi-tightening and twice tightening. |
| Job reset time | The time required for fastening each screw can be preset. When the time is reached and the fastening is not complete, an alarm will sound to notify the operator. This function can help to improve work efficiency. Can be set from 0-99 seconds. |
| Reverse recovery ON/OFF | Set reverse recover ON/OFF. When the last screw is fastened OK the reverse operation, the counter will subtract 1. Can set the number 0.1-5.0 seconds. |
| Second fastening time | Confirm the fastening angle within the set time range and not judge NG/OK. Can be set from 0.1-9.9 seconds. |
| Detection mode | Do not detect upper and lower limits, only detect lower limit errors, upper limit errors or upper and lower limit errors. |
| Multi-group cycle mode | Multi-group cycle mode must be stored in each group before use. |
| Counter ON/OFF | Disable the counter function, can be used as a normal screwdriver or can connect with an existing counter. |
| Special design | Fasten each screw, you can fasten twice at a time to ensure a quality fastening (time can be set) |

SMALL FOOLPROOF COUNTER SPECIFICATIONS

| Functions | Screw fastening foolproof power supply | |
|--------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|
| |  | |
| Model Number | AD-40A | AD-40B |
| Workpiece fastening count range | 1-60000 Pieces | 1-60000 Pieces |
| Single fastening range setting | 1-99 Pieces | 1-99 Pieces |
| Fastening time and number of workpieces | 1-99 Pieces | 1-99 Pieces |
| Fastening value memory/module range | 5 Group | 5 Group |
| Fastening sample time range | 0.01-9.99 seconds | 0.01-9.99 seconds |
| Fastening error time value | ±1-99% | ±1-99% |
| Determination | OK alarm and LCD green light display NG alarm and LCD red light display | |
| Signal output method | No | |
| Input voltage | 20-30VDC (6P) | 20-30VDC (5P) |
| Output voltage | 20-30VDC | |
| Power (including electric screwdriver) (W) | 75W | |
| Dimensions | 172x84x61mm | |
| Weight | 450g | |
| Applicable models | Brushless Series | Mini Series Brush Series |

MANUAL SCREW FEEDER

One screw feeder is suitable for multiple specifications of screw sizes (M1.0-M5.0) A simple adjustment of the track can produce fast and stable screw feeding. Greatly reduce production time and cost, Simple operation and convenient to use.

- Separate track design: Patented design lets you freely adjust the track for fast, stable feeding without screws getting jammed.
- The feed and vibration drive are independently controlled and the delay stop time can be set as desired. If an abnormal situation occurs, the feeder will alert the operator.
- The stacking and feeding speed can be adjusted according to work needs.
- AT-1030TC fixed rail, fixed piece type is suitable for any shape of M1.0-M3.5 screws. Automatic feeding and no screw jamming.
- There are standard types, Counting types, Special types for small screws, Special automation types and more to meet the demand in the assembly industry.



AT-1050

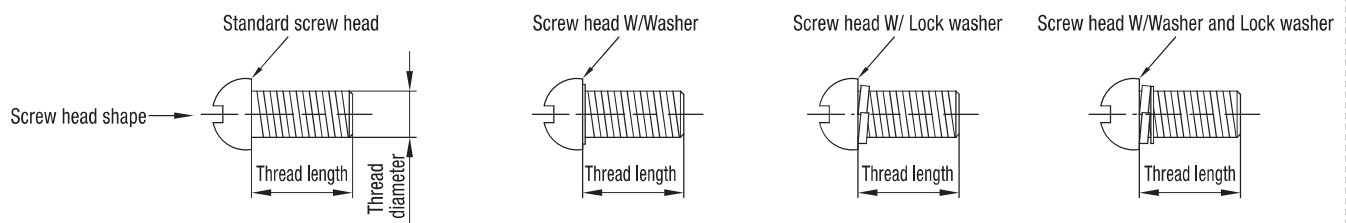


AT-1030TC



AT-1060

Applicable screw types



| Model Number | | AT-1050 AT-1050C | AT-1030TC | AT-1060 AT-1060C |
|----------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Applicable screw | Screw thread diameter | M1.0/1.2/1.4/1.7/2.0/2.3mm M2.6/3.0/3.5/4.0/5.0mm | M1.0–3.5 mm | M1.0–6.0 mm |
| | Screw Head type | JIS: Cone, Button, Umbrella, Round, countersunk, WH, with lock washer, lock washer plus washer; JCIS: 1, 2, 3 and countersunk cone shaped heads | JIS: Flat head, Binding, Pressure, UH single head (countersunk or oval countersunk) with or without washer JCIS: 1, 2, 3, flathead type. | |
| | Screw head material | Iron or magnetic attracted material | | |
| | Screw length (maximum) | 20mm | 10mm | 20mm |
| | Screw length (minimum) | Single diameter x1.0; with lock washer: diameter + (0.5x diameter); With lock washer and washer: direct + (1.1x diameter) | | |
| Output speed | | About 2 pieces per second | About 1 second/ ±0.3 seconds | About 2 pieces per second |
| Protection/recovery | | Overload protection circuit, reverse polarity prevention circuit | | |
| Input voltage | | 100-240V 50/60Hz | | |
| Output voltage | | DC12V 550mA | DC15V 1.5A | DC12V 550mA |
| Dimensions | | 180×125×150 mm | 202.5×126×149 mm | 232×162×169 mm |
| Weight | | 2.5kg | 3.0kg | 4.3kg |
| Accessories included | | User manual, universal AC power adapter, Allen wrench | | |



- ✓ Screw feeder adopts a gear ring drum feeder for low noise
- ✓ Automatically guided feeding with no jamming
- ✓ Adjustable screw feeding speed, easy to operate
- ✓ Compact size, Frees up space

Product Specifications

| | |
|----------------------|-----------------------------------------|
| Model Number | AT-1050C |
| Applicable screws | M1.0~M5.0 (track adjustable) |
| Screw length | ≤ 20mm |
| Input voltage | AC100~240V 50/60Hz |
| Output voltage | DC12V 550mA |
| Output speed | 2 PCS/S |
| Dimensions | 180×125×150mm |
| Weight | User manual, Power supply, Allen wrench |
| Accessories included | About 2.14kg |



- ✓ Adjustable track, by replacing the turntable, upper plate and adjusting the guiderail, can be applied to M1.0~M3.5
- ✓ Low noise, not easy to jam, reverse and fault alarm function
- ✓ Small size can free up space, feeding and vibration can be controlled separately
- ✓ High repeat position accuracy, up to ± 0.02mm
- ✓ One feeder can be used for multi-specific screws or special screws, 1:1 short screws
- ✓ Guide grooves are added to the track to make it easier and more accurate to load the screws and is not easy to jam.

Product Specifications

| | |
|----------------------|-----------------------------------------|
| Model Number | AT-1030A |
| Applicable screws | M1.0~M3.5 |
| Screw length | ≤ 10mm |
| Output speed | About 1 second/± 0.3 seconds |
| Input voltage | AC100~240V |
| Output voltage | DC15V 1.5A |
| Dimensions | 202.5mm×126mm×149mm |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 3.5kg |

MANUAL SCREW FEEDER



- Adjustable track, by replacing the turntable, upper plate and adjusting the guiderail, can be applied to M1.0~M5.0
- Low noise, not easy to jam, reverse and fault alarm function
- Small size can free up space, feeding and vibration can be controlled separately
- High repeat position accuracy, up to $\pm 0.02\text{mm}$
- Prevent screw count errors with counter function

Product Specifications

| | |
|----------------------|-----------------------------------------|
| Model Number | AT-2560A |
| Applicable screws | M1.0~M5.0 |
| Screw length | $\leq 20\text{mm}$ |
| Output speed | About 1 second/ ± 0.3 seconds |
| Input voltage | AC100~240V |
| Output voltage | DC15V 1.5A |
| Dimensions | 263.5mm \times 162.4mm \times 169mm |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 4.2kg |

Air Blow Automatic Screw Feeder Machine



- Two stage feeding push material, large bin capacity and stable performance
- Mainly for large screws, long screws and special beads screws
- Lack of material and alarm and counting display function
- One by one or one by two out functions can be customized, default is one by one out

Working Description

Turn on power, Automatic machine gives a material demand command and the feeder will immediately provide the material after receiving the material command demand. The material is divided through the material distribution mechanism and the ring sensor detects that the screw is in place (ring sensor must be placed at the end of the pipeline, 30mm away from the clamping nozzle) after the screws are in place will send a pulse signal, the automation can fasten the screw after receiving the signal. Avoid damage to the workpiece, if the feeder does not detect the position after feeding, the feeding mechanism will divide the material again and an alarm will report if the screw is not detected 3 consecutive times. Avoid jams with the Anti-screw jamming guide. Built in sensor on the rail. If no material is sensed for 5 seconds, the hopper needs to be filled.

Product Specifications

| | |
|-------------------|---------------------------------|
| Model Number | AT-10 (blow type) |
| Applicable screws | M3.0~M6.0 (special screws) |
| Screw length | $\leq 55\text{mm}$ |
| Output speed | 60~120PCS/minute |
| Dimensions | 428 \times 221 \times 360mm |
| Power supply | 220V |
| Weight | About 20kg |
| Pipeline length | About 3m |
| Vibration method | Electromagnetic |
| Feeding method | Recommended two-stage feeding |

MANUAL SCREW COUNTING FEEDER

Manual Screw Counting Feeder



- ✓ Screw feeder adopts a gear ring drum feeder for low noise
- ✓ Automatically guided feeding with no jamming
- ✓ Adjustable screw feeding speed, easy to operate
- ✓ Compact size, Frees up space

Product Specifications

| | |
|----------------------|----------------------------------------------------------------|
| Model Number | AT-150D |
| Screw length | M1.0~M5.0 suitable for 10mm screws, 1050T no more than 20mm |
| Output speed | 0.8~1.2S/piece |
| Input voltage | AC 220V-240V/50HZ |
| Output voltage | DC 15V/1200mA |
| Dimensions | 163×325.49×169mm |
| Accessories included | User manual, Power supply, Allen wrench |

Working Description

- 1, Adjust the height of the pressure plate and brush.**
The gap between the pressure plate and brush is between 0.2~1.0mm, if the gap is too small, the screw can not come out. If the gap is too large, the screw will be stacked together and the material will not be loaded well.
Brush height adjustment: The principal of brush adjusting the height of the brush is that it can be dropped horizontally. If too high or low, it will affect the movement of the screws.
- 2, Adjustment of the turntable and guide rail**
First, make sure the screws that you are using match with the track of the turntable. Second, check whether the opening of the turntable is inline with the guide rail. If it is aligned, tighten the fastening screw on the turntable. The gap between the turntable and guide rail is 0.3~0.5mm;
- 3, Some parts need to be properly lubricated to keep parts moving normally**

PRECISION SMALL SCREW FEEDERS

One screw feeder is suitable for multiple specifications of screw sizes (M1.0-M1.7) A simple adjustment of the track can produce fast and stable screw feeding. Greatly reduce production time and cost, Simple operation and convenient to use.

- ✓ Separate track design: Patented design lets you freely adjust the track for fast, stable feeding without screws getting jammed.
- ✓ The feed and vibration drive are independently controlled and the delay stop time can be set as desired. If an abnormal situation occurs, the feeder will alert the operator.
- ✓ The stacking and feeding speed can be adjusted according to work needs.



AT-1017

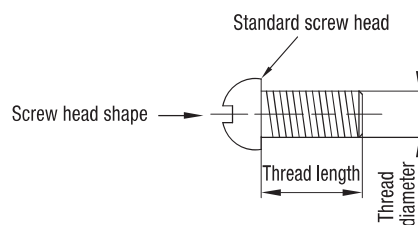


AT-1017A



AT-1017T

Applicable screw types



| Model Number | | AT-1017 | AT-1017A | AT-1017T |
|----------------------|------------------------|------------------------------------------------------------------|----------|----------|
| Applicable screw | Screw thread diameter | M1.0-M1.7 | | |
| | Screw Head type | Flat head, round head type | | |
| | Screw head material | Iron or magnetic attracted material | | |
| | Screw length (maximum) | 8mm | | |
| Output speed | | About 1.2 seconds/ ± 0.3 seconds | | |
| Protection/recovery | | Overload protection circuit, reverse polarity prevention circuit | | |
| Input voltage | | 100-240V 50/60Hz | | |
| Output voltage | | DC15V 1.2A | | |
| Dimensions | | 160×76.4×124mm | | |
| Weight | | About 1.7kg | | |
| Accessories included | | User manual, universal AC power adapter, Allen wrench | | |

AUTOMATED SCREW FEEDER



- Adjustable track, by replacing the turntable, upper plate and adjusting the guiderail, can be applied to M1.0~M4.0
- Low noise, not easy to jam, reverse and fault alarm function
- Small size can free up space, feeding and vibration can be controlled separately
- High repeat position accuracy, up to $\pm 0.02\text{mm}$
- Signal output can be used with automated assembly

Product Specifications

| | |
|----------------------|-----------------------------------------|
| Model Number | AT-1030TC |
| Applicable screws | M1.0~M4.0 |
| Screw length | $\leq 10\text{mm}$ |
| Output speed | About 1 second/ ± 0.3 seconds |
| Input voltage | AC220V~240V |
| Output voltage | DC15V 1.2A |
| Dimensions | 202.5mm \times 126mm \times 149mm |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 3.0kg |



- Adjustable track, by replacing the turntable, upper plate and adjusting the guiderail, can be applied to M1.0~M5.0, Screw length can reach up to 12mm (customized)
- Low noise, not easy to jam, reverse and fault alarm function
- Small size can free up space, feeding and vibration can be controlled separately
- High repeat position accuracy, up to $\pm 0.02\text{mm}$
- Signal output can be used with automated assembly

Product Specifications

| | |
|----------------------|-----------------------------------------|
| Model Number | AT-2560TC |
| Applicable screws | M1.0~M5.0 |
| Screw length | $\leq 20\text{mm}$ |
| Output speed | About 1 second/ ± 0.3 seconds |
| Input voltage | AC220V~240V |
| Output voltage | DC15V 1.5A |
| Dimensions | 263.5mm \times 162.4mm \times 169mm |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 4.2kg |



- Small size, Turntable screw feeder
- With display and automatic control buttons
- Specially made for short screws, signal terminal for convenient signal communication.

Product Specifications

| | |
|----------------------|------------------------------------------------------|
| Model Number | AT-1017T |
| Applicable screws | Suitable for M1.7 screws and below, Max length L=8mm |
| Screw length | $\leq 8\text{mm}$ |
| Output speed | 1.2 second/ ± 0.3 seconds |
| Input voltage | 180-220V DC15V 1.2A |
| Dimensions | 160mm \times 76.4mm \times 124mm |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 1.7kg |

AUTOMATED SCREW FEEDER



- // Stainless-steel body, surface not easy to scratch or rust
- // Low noise, not easy to jam, reverse and fault alarm function
- // Small size can free up space, feeding and vibration can be controlled separately
- // High repeat position accuracy, up to $\pm 0.02\text{mm}$

Product Specifications

| | |
|------------------------|-----------------------------------------|
| Model Number | AT-1030S (square gasket) |
| Applicable screws | customized according to the screw |
| Input voltage | AC100~240V DC15V 1.2A |
| Dimensions | 202mm×126mm×149mm |
| Reclaiming port height | 76mm (may slightly differ) |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 4.0kg |

AUTOMATED VIBRATION DISC COLUMN SCREW FEEDER



- // Low noise, not easy to jam, reverse and fault alarm function
- // Stainless-steel body, surface not easy to scratch or rust
- // High repeat position accuracy, up to $\pm 0.02\text{mm}$
- // Signal output can be used with automated assembly
- // Feeding plate integration for stable screw feeding
- // Optimized spiral design consistent with the shape of the conveying screw
- // Computer controlled digital display parameters at a glance

Product Specifications

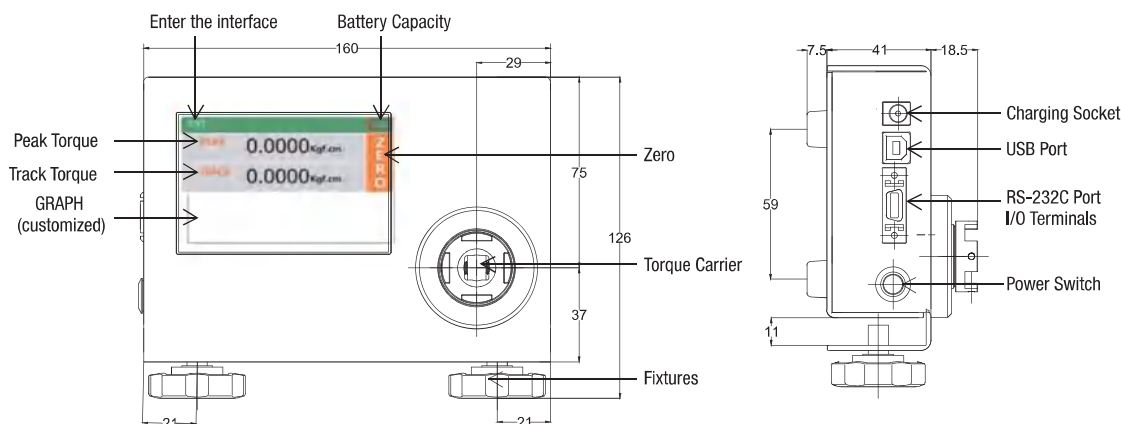
| | |
|------------------------|---------------------------------------------------------------|
| Model Number (mini) | AT-0614V |
| Applicable screws | M0.6~1.4mm (fixed rail, not adjustable, need to replace rail) |
| Screw length | $\leq 4\text{mm}$ |
| Input voltage | AC100~240V DC15V ~1.5A (50/60HZ) |
| Output speed | 60~75PCS/min |
| Dimensions | 183mm×102mm×128mm |
| Reclaiming port height | 115mm (may slightly differ) |
| Accessories included | User manual, Power supply, Allen wrench |
| Weight | About 6.5kg |

INTELLIGENT DYNAMIC WIRELESS-DATA-UPLOAD HIGH-PRECISION TORQUE TESTER

Accurate to 4 decimal places



- Offer TRACK, PEAK, GRAPH (customized) and other measurement modes
- Can store up to 1000 data values, automatically calculate the maximum, minimum, average value, and count times
- Automatically clear the measured value and peak value
- Automatically memorize the measured value and automatically upload each peak value
- USB, RS-232C, MODBUS protocol available to choose for computer data management
- Can set automatic shutdown time
- Can work on battery power or charging status



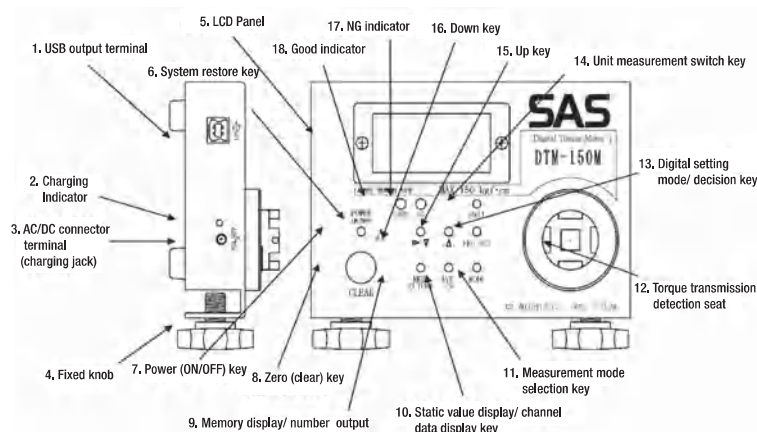
Product Specifications

| Model Number | | APT-02S | APT-10S | APT-20S | APT-50M | APT-100M | APT-300L | APT-500L |
|-------------------------------------------------|----------|-------------------------------------------------------------------------------|---------------|--------------|--------------|--------------|-------------|--------------|
| Torque range | (kgf.cm) | 0.0001~2.0000 | 0.001~10.000 | 0.002~20.000 | 0.005~50.000 | 0.01~100.00 | 0.03~300.00 | 0.05~500.00 |
| | (N.m) | 0.0001~0.2000 | 0.0001~1.0000 | 0.002~2.0000 | 0.005~5.0000 | 0.001~10.000 | 0.003~30.00 | 0.005~50.000 |
| | (lbf.in) | 0.0001~1.8000 | 0.001~9.000 | 0.002~18.000 | 0.005~45.000 | 0.01~90.00 | 0.03~27.00 | 0.05~450.00 |
| Torque accuracy | | ±0.3% (2.0000 kgf.cm or less than ±0.005kgf.cm) | | | | | | |
| Display | | 4.2 Touch display color screen | | | | | | |
| Rotational direction | | Clockwise-Counterclockwise | | | | | | |
| Measurement Mode | PEAK | Max. Torque kept on the screen | | | | | | |
| | TRACK | Instantaneous torque | | | | | | |
| | GRAPH | Display the graphics of the whole measurement result process | | | | | | |
| Upper and Lower Limit Judgment | | Can set the highest and lowest torques measured | | | | | | |
| Judgment Results | | Conclude result(OK,NG) within the set range | | | | | | |
| Max. Value, Min. Value, Average Value and Times | | Display the maximum, minimum, average value and measurement times | | | | | | |
| Storage Capacity | | 1000 data | | | | | | |
| Instant Output | | Real-time automatic output of measurement data | | | | | | |
| Auto Clear Time | | Can be set (1, 2, 3, 5, 10S) to automatically clear the measured value | | | | | | |
| Zero to Clear Key | | Manually reset to zero | | | | | | |
| Data Output | | RS-232C, USB, MODBUS protocol | | | | | | |
| Battery | | Ni-MH 1.2V*6 rechargeable battery (3000mAh)/ rechargeable more than 500 times | | | | | | |
| Charge time / Full Charge Use Time | | Within 5 hours / approximately 8 hours of continuous use | | | | | | |
| Charger and USB | | AC adapter (input: AC100~240V (50/60Hz), output: DC9V) USB cable | | | | | | |
| Torque Carrier Size | | 12 corners or 20mm ² | | | | | | |
| Dimensions | | 160x126x41mm | | | | | | |
| Weight | | 1kg | | | | | | |

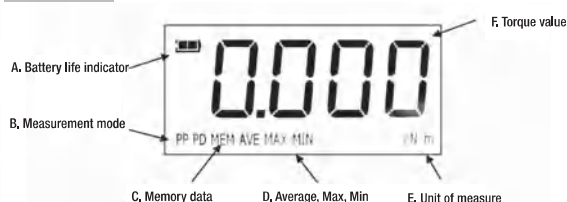
Accurate to 3 decimal places



- Can store up to 800 data values
- Convenient setting functions such as measurement start value
- Display measured torque data in real time (About 1/180 seconds)
- Rechargeable battery drive
- Automatic shutoff function can avoid having to shut off manually
- USB output function can use with a computer to manage data
- Zero adjustment function
- Automatically clear displayed measurement value
- SAS authorizes CEDAR of Japan to conduct high-precision 3 digit decimal tests



Display



Product Specifications

| Model Number | | DTM-150M | DTM-15M |
|-----------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Torque Range | | 1.0~150.0 kgf-cm | 0.040~15.00 kgf-cm |
| | | 0.10~15.0 N-m | 4.0~1500 mN-m |
| | | 1.0~135.0 lbf-in | 0.040~13.50 lbf-in |
| Accuracy | | ± 0.5% (19.9kgf.cm < ±0.1kfg.cm) | ± 0.5% (1.200kgf.cm < ±0.006kgf.cm) |
| Display | | LCD3.5 digital display | LCD3.5 digital display |
| | | | 0~7.998 0.002 increments 8.00~ 0.01 increments |
| Rotational Direction | | Clockwise-Counterclockwise (with side and left) | |
| Measurement Mode | Maximum P-P | Fixed display with the maximum torque value | |
| | Random Value T-R | When the torque load changes, the displayed value will change | |
| | Spike-Down P-D | Shows the instantaneous torque load change from spike to drop | |
| | Instant Data Output C | Every 1/180 second output torque load | |
| Upper and Lower Limit Judgment Function | | Can be set to measure the highest and lowest values in the restricted range, can store 5 value sets | |
| Instant Output | | Every 1/180second, the load torque value is output via USB | |
| Judgment Results | | Judgment can be performed within the set range (P-P mode) (confirmed by light or sound notification) | |
| Max. Value, Min. Value, Average Value | | Displays the maximum, minimum and average value (instead of max. 800 data) | |
| Instant Output | | The torque load value is output every 1/180 second (possible to change to 1/12second) | |
| Auto Clear Time | | Can be set every .05 between 0.1~3.0 seconds. The display will reset automatically to zero according to the set time. | |
| Zero to Clear Key | | If set to 0.0 seconds, it means to reset to zero manually | |
| Data Memory | | By pressing the clear key, zero adjustment is completed | |
| Data Output | | Can store 800 measurement data, 10 values can be stored | |
| Battery | | ASCII format (transfer rate 19200) | |
| Auto-Shutdown | | Ni-cd (wire-coded) 1.2V x5 Rechargeable battery (700mAh) can recharge over 300x | |
| Charge Time/ Cont. Use Time | | Automatic shutdown after 10 min of non-use | |
| Slot Size | | Within 3 hours, about 12 hours of continuous use with a full charge | |
| Weight/ Dimensions | | □20mm / □9.5mm | |
| Accessories Included (1 of each) | | 1kg 155 width x 125 length x 55 height | |
| | | ASJ-50/ASJ-10K Torque Transmitter | ASJ-10K/ ASJ-1.5 Torque Transmitter |
| | | USB parallel cable *1PC, Driver CD (for windows) *1PC | |
| | | Hex head screwdriver bit 6mm *4PC | |
| | | AC (100~240VAC)/DC converter (choose 100VAC American flat plug or 240VAC German national plug) | |
| | | Special case | |
| | | Calibration result, Calibration certificate, Traceable system diagram | |

INDUSTRIAL GRADE HIGH-PRECISION TORQUE TESTER

- Large torque test range, High accuracy, Complete model
- Clockwise and counter clockwise direction, both tension and tightening torque can be used, no need to replace screwdriver head, can be directly attached to the torque test transmitter. Automatic torque calibration value display.
- Two torque units kgf.cm/N.m. and measurement mode. PEAK/TRAK/F.PEAK optional modes available
- which can choose the numerical output method
- Maximum and average torque can be calculated
- Built in output terminal can be connected to a computer for recording torque, editing and calculation.
- Portable and rechargeable design, small size, light weight and easy to use
- Separated torque tester is exclusively for automation



Separated torque tester (applicable platform fastening)

Product Specifications

| Model Number | | AP-10 | AP-50 | AP-100 | AP-300 | AP-500 |
|-------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|-----------|
| Torque range | (kgf.cm) | 0.15~10.00 | 1.0~50.0 | 1.5~100.0 | 07~300 | 08~500 |
| | (N.m) | 0.015~1.00 | 0.10~5.00 | 0.15~10.00 | 00.7~30.0 | 00.8~50.0 |
| | (lbf.in) | 0.15~9.0 | 1.0~45.0 | 1.5~90.0 | 07~270 | 08~450 |
| Torque accuracy | | Within $\pm 1\%$ range (scale) | | | | |
| Display | | LCD digital display | | | | |
| Rotational direction | | Both clockwise and counter clockwise directions, tension and torque can be tested | | | | |
| Measurement mode | PEAK | Peak mode: Displayed at maximum torque | | | | |
| | TRACK | Change value mode: Show value with torque changes | | | | |
| | F.PEAK | Initial peak mode: Display locks when torque reaches initial peak | | | | |
| Zero-point adjustment | | In TRACK mode, press SET ▲ at the same time for 2 seconds to reset the data to zero | | | | |
| Electrical source | | 5 1.2v Ni-MH rechargeable batteries 1000mA | | | | |
| Charge time | | About 6 hours | | | | |
| Full charge usage time | | 8 hours | | | | |
| Battery life | | Rechargeable over 300x | | | | |
| Charger | | Input: AC100~240V, 60/50 Hz Input: DC7.3~8V, 0.5A | | | | |
| Torque transmission seat size | | 12corner or 20mm ² | | | | |
| Dimensions | | 230×120×60 | | | | |
| Weight | | 1.8 kg | | | | |
| Precautions | | DO NOT continuously test impact, semi-automatic and pneumatic tools; DO NOT test beyond the maximum torque testing range of the torque tester. | | | | |

SMALL, MEDIUM AND PRACTICAL TORQUE ARMS



TSS-150



TSS-200AS

- Reduce operator fatigue, improve efficiency and fastening accuracy
- Simple assembly, Suitable for various assembly environments
- Rocker arm and bottom plate are made from aluminum alloy and anodized, good material strength and light weight
- The column is made of stainless steel with high strength and no risk of the coat peeling
- The spring balancer is made of stainless steel, durable and will not rust
- Torque arm has a no gap design, press fit assembly, excellent stability
- The rotating joint has built in double bearings which make it flexible to rotate
- Standard configuration adjustable spring balancer, flexible and light up and down movement
- Lower limit stroke and horizontal 180-degree free rotation of the torque arm can be adjusted freely
- Maximum working radius 350mm



TSS-50S

Accessories [optional]

Screwdriver holders and fixture accessories can be added according to operation and assembly model.

(standard configuration is a wall stop) and desktop fixture clip is optional

Mini mount



ED-0612

Small brushless mount



P4H125

Medium brushless mount



P4H126

Medium mount



P4A023

Large fixed mount





P4A024

Table Fixture clip



EAA-02

TSS-50 simple Screwdriver mount

| | | |
|------------|--------|-------------------------------------------------------------------------------------|
| Medium (R) | P4A023 |  |
| Large (S) | P4A024 |  |

Small, Medium and practical torque arm specifications

| Model | Fixture type | Applicable model | Operating range | Max. Torque | Max. Load | Weight |
|-----------------|----------------------------|------------------|-----------------------------------------|-------------|-----------|--------|
| TSS-100W/100T | W- wall type T- table type | All models | Up and down 17cm, Horizontal 50cm | 50 kgf.cm | 1.5kg | 1.8kg |
| TSS-100AT/200AS | Desktop | All models | Up and down 20cm, Horizontal 60cm | 50 kgf.cm | 1.5kg | 4.0kg |
| TSS-150 | Desktop | Mini/Small | Up and down adjustable, Horizontal 30cm | 50 kgf.cm | 1.5kg | 10.0kg |
| TSS-50R/50S | Desktop | Medium/Large | Up and down adjustable, Horizontal 30cm | 150 kgf.cm | 1.5kg | 8.0kg |

LARGE TORQUE ARM

Hydraulic cylinder double arm type

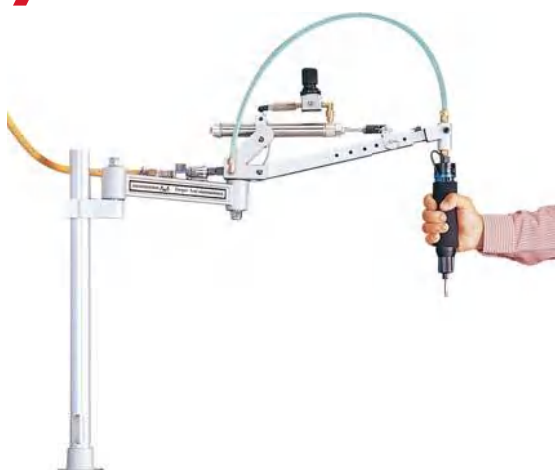


- ✓ Suitable for large torque models effectively reducing the reactive force of fastening
- ✓ Suitable for all series of pneumatic and electric screwdrivers
- ✓ Sturdy structure, can withstand high torque fastening and work without operator fatigue
- ✓ Hydraulic cylinder is easy to assemble and lightweight, the pneumatic cylinder is suitable for heavy models
- ✓ The front part of the single arm can rotate flexibly and the double arm can meet the requirements of horizontal fastening
- ✓ The body is made of anodized aluminum alloy material which is strong and light weight
- ✓ At the end of the forearm is an adjustable stretchable structure which greatly improves fastening range
- ✓ Two-piece combined forearm can move more freely during the fastening process

Accessories [Optional]

Screwdriver mounts and fixture accessories can be selected according to the operating piece

Pneumatic cylinder single arm type



Gun type mount



EAA-21

90 ° right angle mount



EAA-21

Single arm electric mount



EAP-202ED

Double arm electric mount



EAP-202

Double arm pneumatic fixed mount



EAP-203

Wall mount



EA-001

Table clamp



EAA-02

Large Torque are specifications

| Type | | Model Number | Screwdriver type | Operating range | Max. Torque | Max. Load | Weight |
|-----------------|--------------------|-----------------|------------------|------------------|-------------|-----------|--------|
| Single arm type | Hydraulic cylinder | STD-03110-OC | Pneumatic | Up and down 30cm | 110 lbs-in | 0~3 Lbs | 3.0kg |
| | | STD-03110-OC/E | Electric | Up and down 30cm | 110 lbs-in | 0~3 Lbs | 3.0kg |
| | Pneumatic cylinder | STD-15110-AC | Pneumatic | Up and down 30cm | 110 lbs-in | 0~15 Lbs | 3.2kg |
| | | STD-15110-AC/E | Electric | Up and down 30cm | 110 lbs-in | 0~15 Lbs | 3.2kg |
| Double arm type | Hydraulic cylinder | PARA-03110-OC | Pneumatic | Horizontal 120cm | 110 lbs-in | 0~3 Lbs | 3.5kg |
| | | PARA-03110-OC/E | Electric | Horizontal 120cm | 110 lbs-in | 0~3 Lbs | 3.5kg |
| | Pneumatic cylinder | PARA-15110-AC | Pneumatic | Horizontal 120cm | 110 lbs-in | 0~15 Lbs | 3.8kg |
| | | PARA-15110-AC/E | Electric | Horizontal 120cm | 110 lbs-in | 0~15 Lbs | 3.8kg |

ACCESSORIES

Manual Torque Screwdriver



2 in 1 Suction power supply



Combined suction pump
Applicable air suction screwdriver

Industrial Grade 90 ° right angle head



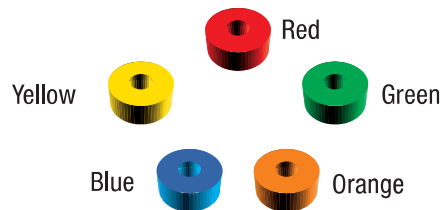
RL-30 **Max. Torque**

RL-150 **Max. Torque**

Special lock to improve efficiency.
Suitable for lever start screwdrivers.

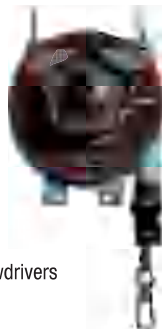
Cobalt magnetic rings

convenient to remove screws with high efficiency
Suitable for any screwdriver head



| Size | SH1/4 | φ 5 | φ 4 |
|----------------|--------|--------|--------|
| Inner diameter | 7mm | 5mm | 4mm |
| Outer Diameter | 17.5mm | 17.5mm | 17.5mm |
| Thickness | 10mm | 10mm | 10mm |

Spring Balancer [SB-1.2、SB-2.0、SB-3.0]



Suspend screwdriver for easy
operation Suitable for all screwdrivers

Multifunctional screw sorting tray



Patented design to pick up and sort material in an efficient manner.
Screw size; M 1.0~ M 2.4 mm

Screwdriver Holsters



Wall holster
P4H067



Z-axis holster
P4H071



Large holster
Upright type: P4H129
Gun type: P4H130

DC high flexible Anti-interference chord



Not easy to break, very durable
Suitable for all screwdrivers

Note: 2m standard length
Different lengths can be customized

Detailed reference on page 25

DC High flexibility chain spring chord



High flexibility and bending resistance.
Suitable for automation assembly.

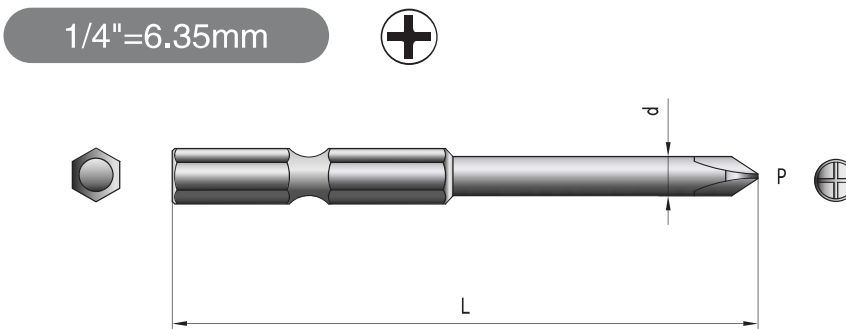
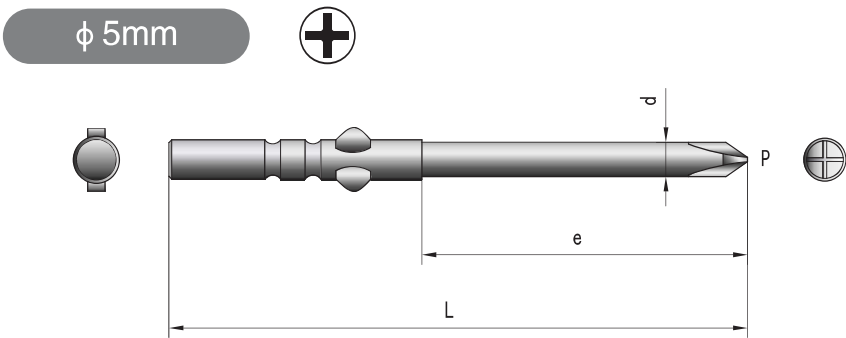
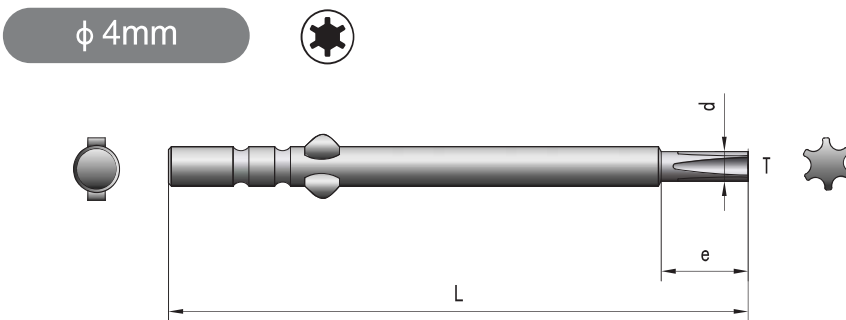
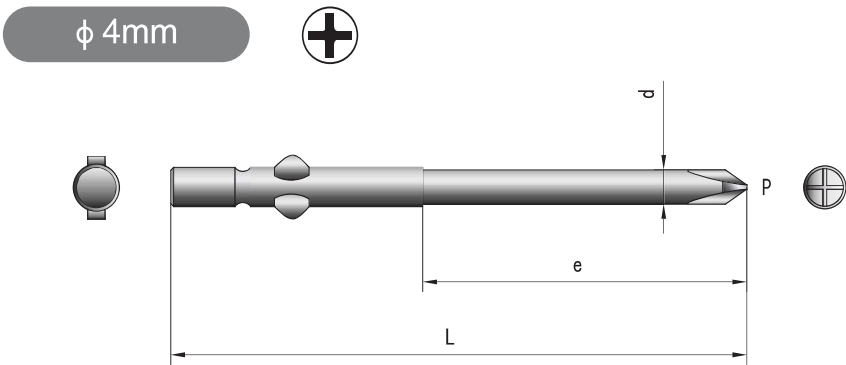
Detailed reference on page 25

AC Power chord



SCREWDRIVER BITS

If you need screwdriver bits of different specifications, you can customize the screwdriver bit according to the specifications of the screw.



| Model | D×L×d×e×P# |
|--------|---------------------------------|
| 7W1421 | ϕ 4×40× ϕ 2.0×20×0# |
| 7W1642 | ϕ 4×40× ϕ 3.0×20×1# |
| 7W1742 | ϕ 4×40× × ×1# |
| 7W1762 | ϕ 4×40× × ×2# |
| P7W199 | ϕ 4×70× ϕ 1.2×22×000# |
| P7W098 | ϕ 4×70× ϕ 1.2×22×00# |
| P7W286 | ϕ 4×70× ϕ 1.4×20×00# |
| P7W088 | ϕ 4×70× ϕ 1.7×30×00# |
| P7W189 | ϕ 4×70× ϕ 1.4×20×0# |
| P7W114 | ϕ 4×70× ϕ 1.7×22×0# |
| 7W1750 | ϕ 4×80× × ×1# |
| 7W1770 | ϕ 4×80× × ×2# |
| P7W406 | ϕ 4×80× ϕ 2.5×20×1# |
| 7W1650 | ϕ 4×80× ϕ 3.0×20×1# |
| 7W1439 | ϕ 4×81× ϕ 2.0×20×0# |
| 7W1459 | ϕ 4×81× ϕ 2.0×20×1# |
| P7W089 | ϕ 4×81× ϕ 2.0×40×1# |
| P7W195 | ϕ 4×80× ϕ 1.2×20×00# |

| Model | D×L×d×e×T |
|--------|-------------------------------|
| P7W229 | ϕ 4×80× ϕ 1.4×30×T2 |
| P7W231 | ϕ 4×70× ϕ 1.4×30×T3 |
| P7W226 | ϕ 4×80× ϕ 2.0×30×T4 |
| P7W232 | ϕ 4×80× ϕ 2.0×20×T5 |
| P7W234 | ϕ 4×80× ϕ 2.0×30×T6 |
| P7W235 | ϕ 4×80× ϕ 2.5×30×T7 |

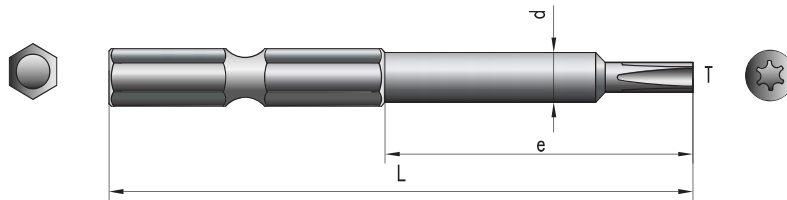
| Model | D×L×d×e×P# |
|--------|-------------------------------|
| 7W3644 | ϕ 5×50× ϕ 3.0×20×1# |
| 7W3844 | ϕ 5×50× × ×1# |
| 7W3864 | ϕ 5×50× × ×2# |
| P7W033 | ϕ 5×60× × ×1# |
| P7W035 | ϕ 5×75× × ×1# |
| P7W075 | ϕ 5×80× × ×1# |
| P7W237 | ϕ 5×80× ϕ 2.0×20×1# |
| P7W214 | ϕ 5×80× ϕ 3.0×25×1# |
| P7W036 | ϕ 5×75× × ×2# |
| P7W076 | ϕ 5×80× × ×2# |
| 7W3770 | ϕ 5×50× ϕ 4.0×55×2# |

| Model | D×L×d×e×P# |
|--------|-----------------------------|
| 7W6521 | SH1/4×25× ϕ 2.5×12×0# |
| 7W6641 | SH1/4×25× ϕ 3.0×12×1# |
| 7W6204 | SH1/4×50× ϕ 1.7×25×00# |
| 7W6404 | SH1/4×50× ϕ 2.0×25×0# |
| 7W6524 | SH1/4×50× ϕ 2.5×25×0# |
| 7W6644 | SH1/4×50× ϕ 3.0×25×1# |
| 7W6744 | SH1/4×50× ϕ 4.5×25×1# |
| 7W6764 | SH1/4×50× ϕ 4.5×25×2# |
| 7W6924 | SH1/4×50× ϕ 6.0×25×1# |
| 7W6964 | SH1/4×50× ϕ 6.0×25×2# |

SCREWDRIVER BITS

If you need screwdriver bits of different specifications, you can customize the screwdriver bit according to the specifications of the screw.

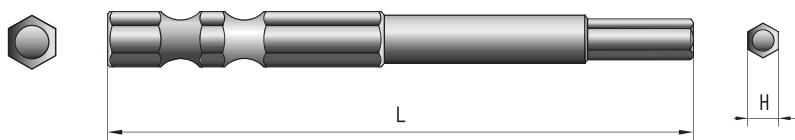
1/4"=6.35mm



Model D×L×d×e×T

| | |
|--------|------------------------|
| P7W316 | SH1/4×50×φ 4.5×20×T15 |
| P7W317 | SH1/4×75×φ 4.5×50×T15 |
| P7W297 | SH1/4×150×φ 5.5×50×T15 |

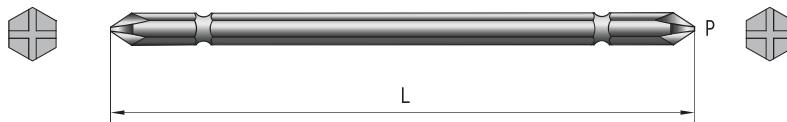
1/4"=6.35mm



Model D×L×d×e×H

| | |
|---------|-----------------|
| 7W45061 | SH1/4×25× × ×H3 |
| P7W211 | SH1/4×50× × ×H5 |
| P7W212 | SH1/4×50× × ×H6 |
| 7W45147 | SH1/4×50× × ×H7 |

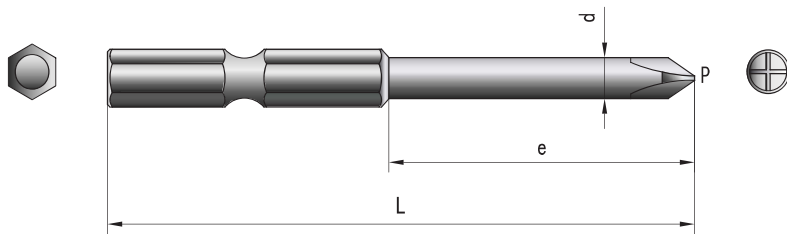
1/4"=6.35mm



Model D×L×P#

| | |
|--------|--------------|
| 7W7147 | SSH1/4×65×1# |
| 7W7167 | SSH1/4×65×2# |
| 7W7169 | SSH1/4×75×2# |

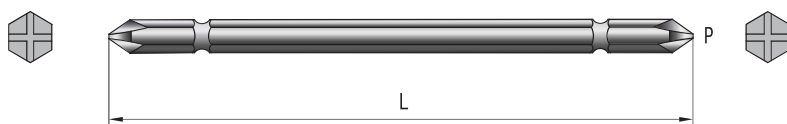
5mm



Model D×L×d×e×P#

| | |
|--------|---------------|
| P7W006 | SH5×50× × ×2# |
| P7W403 | SH5×60× × ×2# |

5mm



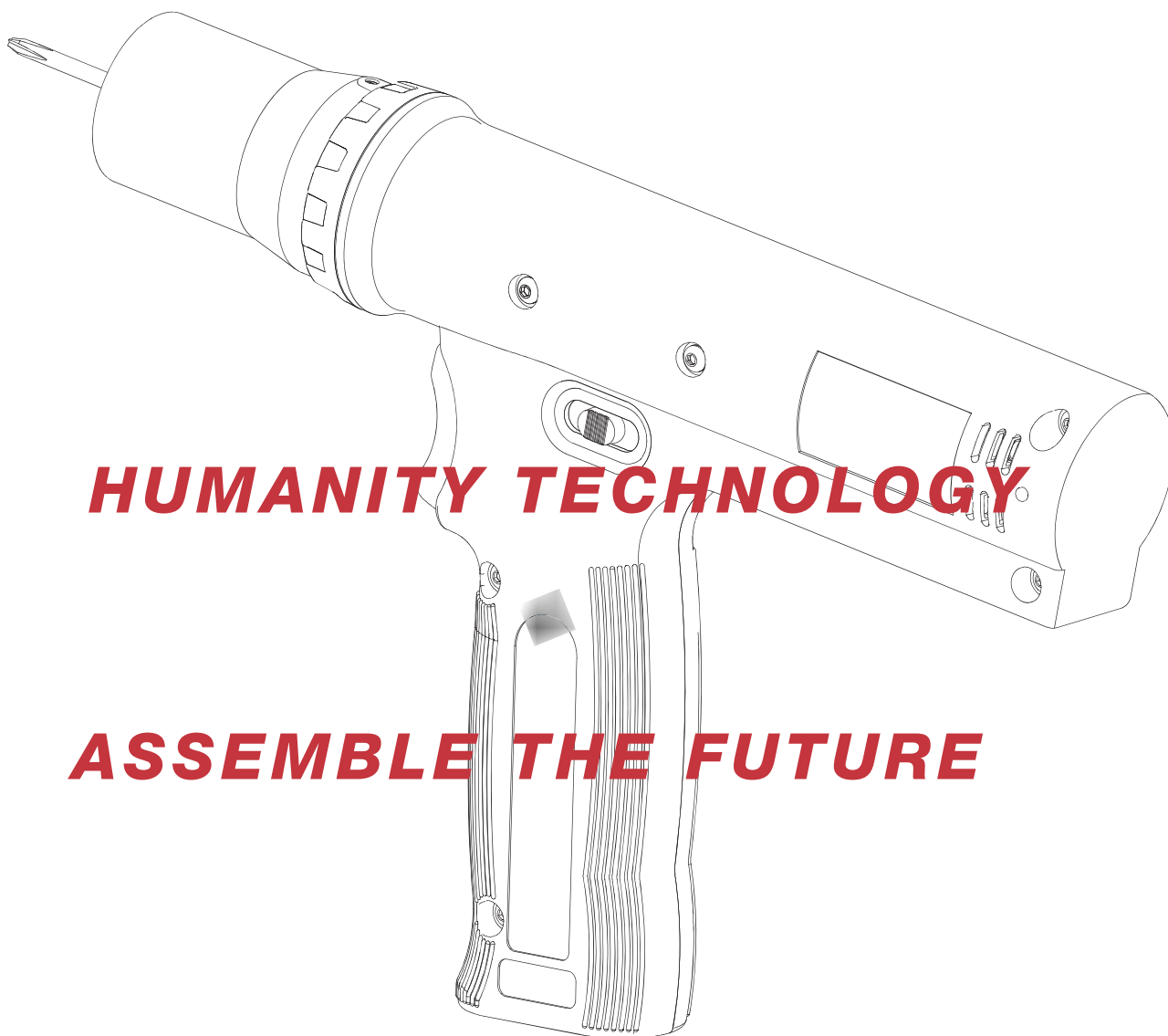
Model D×L×P#

| | |
|--------|------------|
| P7W073 | SSH5×60×2# |
| P7W045 | SSH5×70×2# |



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