Reserve the right to change the parameters of product selection. version：24/06

FOCUS ON QUALITY FOR INTELLIGENT MANUFACTURING

Provide reliable solutions & services for automation assembly

Danikor

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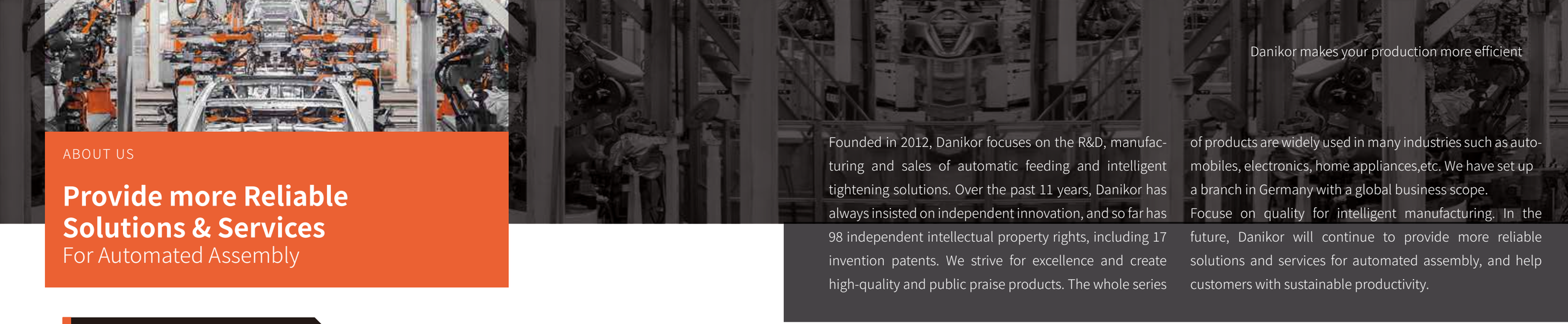
Danikor
Assembly Automation Technology

Intelligent Screw Driver



ABOUT US

Provide more Reliable Solutions & Services
For Automated Assembly

Danikor makes your production more efficient

Founded in 2012, Danikor focuses on the R&D, manufacturing and sales of automatic feeding and intelligent tightening solutions. Over the past 11 years, Danikor has always insisted on independent innovation, and so far has 98 independent intellectual property rights, including 17 invention patents. We strive for excellence and create high-quality and public praise products. The whole series of products are widely used in many industries such as automobiles, electronics, home appliances,etc. We have set up a branch in Germany with a global business scope.

Focuse on quality for intelligent manufacturing. In the future, Danikor will continue to provide more reliable solutions and services for automated assembly, and help customers with sustainable productivity.

INFLUENCE

100,000+ Accumulated sales

10+ years experience in automation technology application

96%+ coverage of automobiles and parts

300+ employees

Covering Whole China

A branch in Frankfurt, Germany

Focus on 「QUALITY」 for Intelligent Manufacturing

INNOVATION

98 items independent intellectual property rights

15% Proportion of annual R & D investment to sales

PRODUCTIVITY

High Quality Production Control

① **Material Quality**
Strictly control the quality of raw materials

② **Production process**
Independent and controllable core process

③ **Assembly Quality**
Process control

④ **Delivery inspection**
100% test

SERVICE

Full-cycle Service System

① **Pre-sales**
Professional sales and technical support team

② **In-sales**
Efficient information management system

③ **After-sales**
service network covers the whole world Respond quickly and efficiently to customer needs

PRODUCTS

products series →

Product Series

Transducer Intelligent ScrewDriver

Angle type
2 ~ 20
Nm

Straight type
0.14 ~ 20
Nm

High Torque
7 ~ 200
Nm

Current Intelligent ScrewDriver

Handheld type
0.05 ~ 11
Nm

Fixed type
0.1 ~ 200
Nm

Accuracy

Fast

Intelligent

Errorproofing

Convenient

0.14~20Nm

Transducer Tightening

Transducer tightening screw driver is powerful and can achieve high-precision tightening,which can also make sure the consistency of tightening torque.

Real-time feedback of relevant data and provide data traceability function, so as to provide users with higher quality products.

Screw Driver

Application Industry:

New energy vehicles

automotive electronics

automotive parts

3 C

Transducer tightening screw driver

Five Advantages

Accuracy

± 1.67 %

Standard deviation accuracy over the full torque range.

ISO 5393

Accuracy test of hard& Soft connection conforms to ISO5393 standard.

Self-developed high precision algorithm control.

Fast

15 STEP

More tightening steps
Flexibility to respond to applications with different requirements.

High-order tightening strategy
Guarantee tightening quality
Optional higher order strategy: clamping torque control.

50 PEST

More tightening Psets
Reduce setup time between different tightening requirements.

50 JOB

More tightening jobs
Automatically switch between different Psets.

Intelligent

Nm 275° 1~15 STEP

Record and monitor the data of full tightening process.

MES

Real-time data upload
Real-time docking with MES system.

Data storage
Controller local
50,000 tightening Result
50,000 warning message.

Data traceability
Multiple curves are superimposed to facilitate depth analysis.

Errorproofing

Monitoring of abnormal tightening process
All-round data monitoring, timely detection of floating locks, sliding teeth,wrong and missing, gasket missing and other unqualified tightening situation.

*****

Assembly process authority management
In the debugging interface, you need to enter the password to set the strategy and program.

JOB

Job planning and superposition protection
If Job batch is inconsistent, it is required to enter password for intervention.

Convenient

AI

Automatically learn
Automatically recommend the reference parameter range, and quickly build the tightening strategy.

Rapid expansion port
Threaded external connection for quick matching vacuum suction nozzle and a fixed structure.

Superior human-computer interaction
Visual OLED display screen, 3-color light (such as NG red), buzzer and front light is convenient for operators to use.

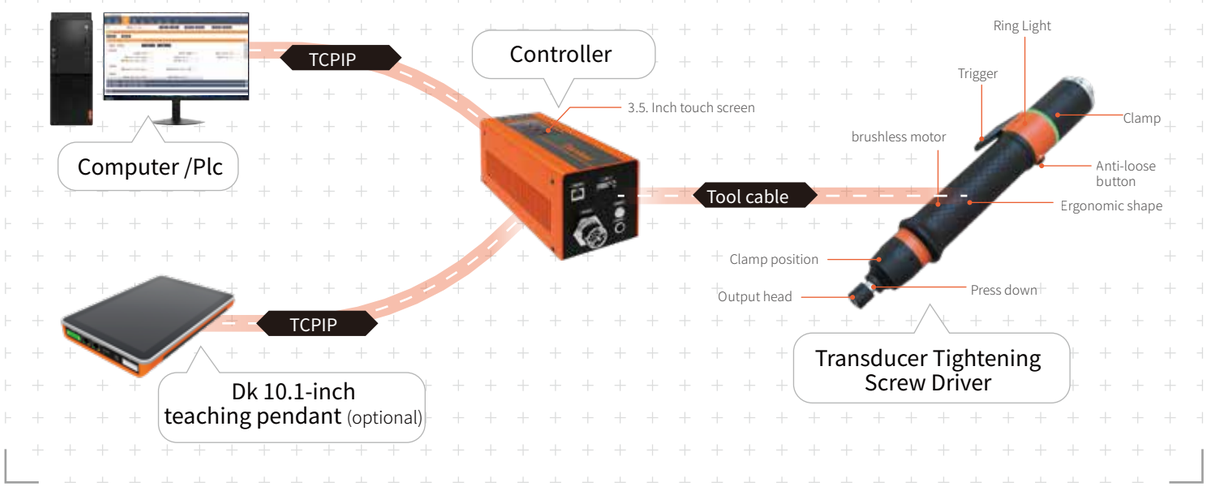
Multiple communication forms
RS485 RTU, TCP/IP open Protocol, extended digital I/O interface.

3 TYPE

Multiple startup forms
It can be handheld or fixed with machine, and handheld can be pressed down,triggered or remotely activated.

Multiple functions optional
Optional teaching pendant or communication module, real-time data viewing and parameter setting.

Product structure



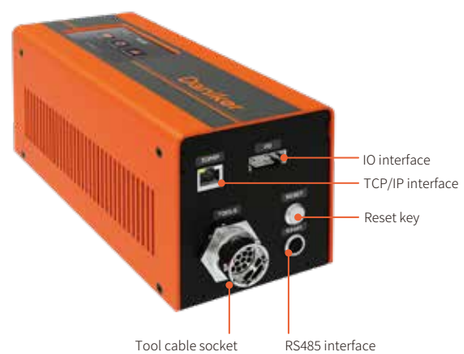
Screw driver Product System Parameters

Model	Max torque /Nm	Max speed /rpm	Grip diameter /mm	Weight /g	Design life	MTTF	Bit quick connector	Starting mode	Screw driver controller	Screw driver cable
PTT-DSH-7000M-34-H1D-000-G3	0.14-0.7	3000	34	667	>10 million	>1 million	HEX1/4"	Pushed/ Pressed/ Remote	OPT-STC-C1-DC1-V3-500W	OPT-SCT-00-V3-DC-05
PTT-DSH-0012N-34-H1D-000-G3	0.24-1.2	1500	34	710			HEX1/4"			
PTT-DSH-0020N-34-H1D-000-G3	0.4-2	1100	34	710			HEX1/4"			
PTT-DSH-0020N-37-H1D-000-G3	0.4-2	3000	37	920			HEX1/4"		OPT-STC-C1-DC2-V3-500W	
PTT-DSH-0040N-37-H1D-000-G3	0.8-4	1500	37	974			HEX1/4"			
PTT-DSH-0080N-37-H1D-000-G3	1.6-8	960	37	1023			HEX1/4"			
PTT-DSH-0120N-37-H1D-000-G3	2.4-12	700	37	1023			HEX1/4"			
PTT-DSH-0200N-37-S2D-000-G3	4-20	300	37	1158			S 3/8			

Tool Adaptor Controller OPT-STC-V3-DC

Transducer tightening screw driver

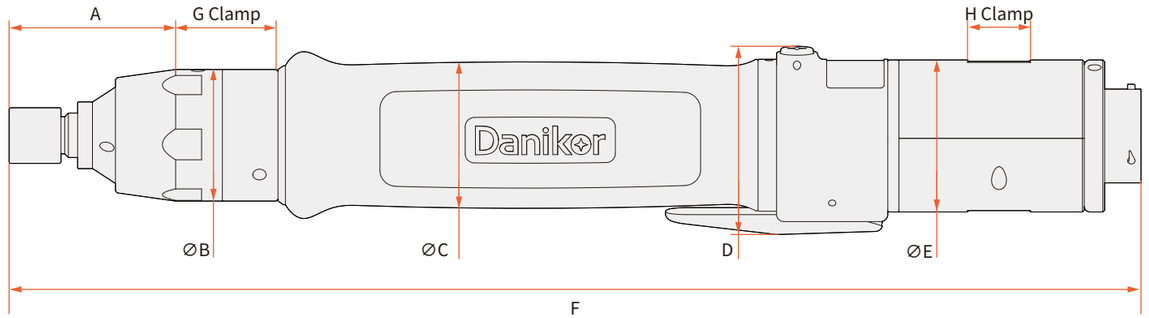
Product structure



Screw Driver controller parameters

Model	OPT-STC-DC1-V3-500W / OPT-STC-DC2-V3-500W
Dimension/mm	231.2*104.5*103
Voltage	24V
Accuracy	Standard deviation ± 1.67%
Controller screen	3.5 inch touch screen
Reset button	For some system alarms, the reset button can be pressed directly
Angle display min unit	0.1°
Communication form	RS485/TCPIP/IO interface
Data storage	50,000 data/50,000 alarms
Tighten management	50Job settings, 50 Pset
Tightening strategy	Angle control, torque control, speed control, angle/torque control, clamping torque control, self-learning strategy, and custom tightening strategy

Overall dimensions

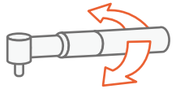


Unit:mm

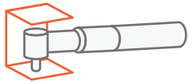
Model	A	B	C	D	E	F	G Clamp	H Clamp	Output head form
PTT-DSH-7000M-34-H1D-000-G3	49.5	34	33.5	57.9	41	280.4	15.1	16	HEX1/4"
PTT-DSH-0012N-34-H1D-000-G3	49.5	34	33.5	57.9	41	291.4	24.1	16	HEX1/4"
PTT-DSH-0020N-34-H1D-000-G3	49.5	34	33.5	57.9	41	291.4	24.1	16	HEX1/4"
PTT-DSH-0020N-37-H1D-000-G3	46.4	35.5	37.5	57.9	41	289.3	10	16	HEX1/4"
PTT-DSH-0040N-37-H1D-000-G3	46.8	35.5	37.5	57.9	41	298.4	19.07	16	HEX1/4"
PTT-DSH-0080N-37-H1D-000-G3	46.8	35.5	37.5	57.9	41	305.4	27.61	16	HEX1/4"
PTT-DSH-0120N-37-H1D-000-G3	46.8	35.5	37.5	57.9	41	305.4	27.61	-	HEX1/4"
PTT-DSH-0200N-37-S2D-000-G3	46.3	35.5	37.5	57.9	41	318.9	41.11	-	S 3/8

Angle Transducer Tightening Screw Driver

Product features:



Ergonomic design Save labor, improve efficiency, and make manual operation more comfortable

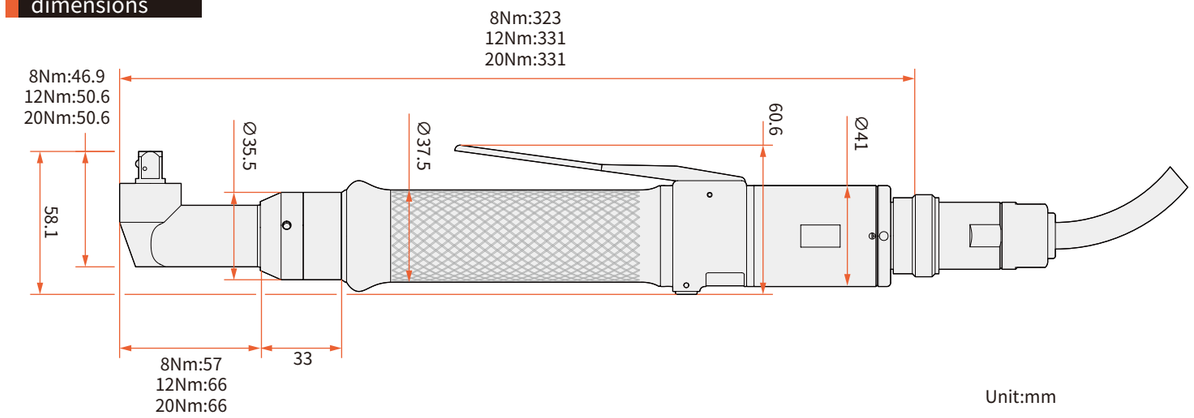


Suitable for narrow spaces or application scenarios where tightening in the vertical direction interferes.

Screw driver Product System Parameters

Model	Max torque /Nm	Max speed /rpm	Grip diameter /mm	Weight /g	Height /mm	Size L*D1	Screw driver controller
PTT-DAH-0080N-37-S2P-000-G3	2~8	903	37.5	1080	323	323*59	OPT-STC-DC2-V3-500W
PTT-DAH-0120N-37-S2P-000-G3	3~12	568	37.5	1174	332	331*59	
PTT-DAH-0200N-37-S2P-000-G3	5~20	414	37.5	1309	332	331*59	

Overall dimensions



Unit:mm

Teaching pendent and software

- The screwdriver demonstrator software is matched with the Transducer type tightening screwdriver to realize the quick setting of the tightening strategy, the real-time viewing of the tightening results, and the timely response to the station requirements.
- 10.1-inch capacitive touch screen design, sensitive touch, convenient humancomputer interaction, rich peripheral interfaces, supporting IO, RS485, TCPIP communication protocols.
- There are three versions of the demonstrator, including the premium version, the basic version and the arm force controller, to meet different automatic assembly application scenarios.

Premium versio OPT-SFP-C1-V2-DC1

Intuitive & convenient

- View tightening results and curves in real time.
- Real-time parameter setting, quick response to station demand.
- Job Task Management Graphical Guide.

Data analysis

- Store 500,000 sets of tightening results, 10,000 sets of curves, and read the historical data of the controller.
- Support the real-time view of tightening results, alarm information, NG and OK times, and support the superposition analysis of near curves.
- Data upload and interaction: seamlessly connect with MES system and support HTTP data transmission function.

Equipment expansion

- Support access to scanning equipment, sleeve selector, positioning arm.
- External device screwdriver via IO docking.

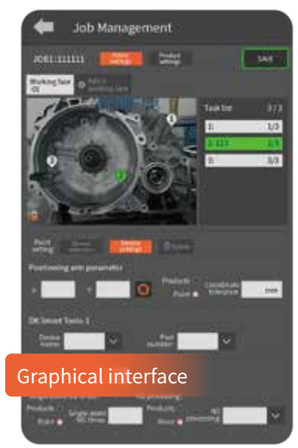
Auxiliary function

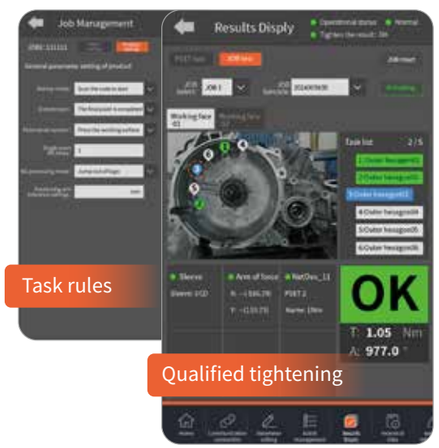
- Prompt for calibration cycle.
- Authority hierarchical management.
- Support switching between Chinese and English.

Graphical parameter configuration
Intuitive interface prompts.

Standardized process guidance
Tighten only if the tightening point rules are judged to be qualified.

Error-proof and quality control
When the tightening point is switched or reset, authorization is required to intervene. It can also cooperate with the positioning arm of force to realize the sequential tightening of screws and avoid the problem of wrong tightening and missing tightening.





Basic version OPT-SFP-C1-V1-DC1

The basic version can set tightening parameters, view tightening results such as torque, angle and time in real time, and support the storage of 500000 sets tightening data and 10000 sets tightening curve.

Version function	Basic version	Premium version
Communication connection	○	○
Parameter setting	○	○
Task Management	—	○
Result display	○ (PSET test)	○ (PSET test and JOB test)
Historical data	○ (PSET)	○ (PSET and JOB)
Alarm information	○	○
Tool calibration	○	○
System configuration	○	○
Communication configuration	○	○
Permission configuration	○	○
Statistical analysis	○	○
Equipment management	—	○
External communication	Only Pset parameter part	○

Arm force controller OPT-MFP-C1-V1-DC1

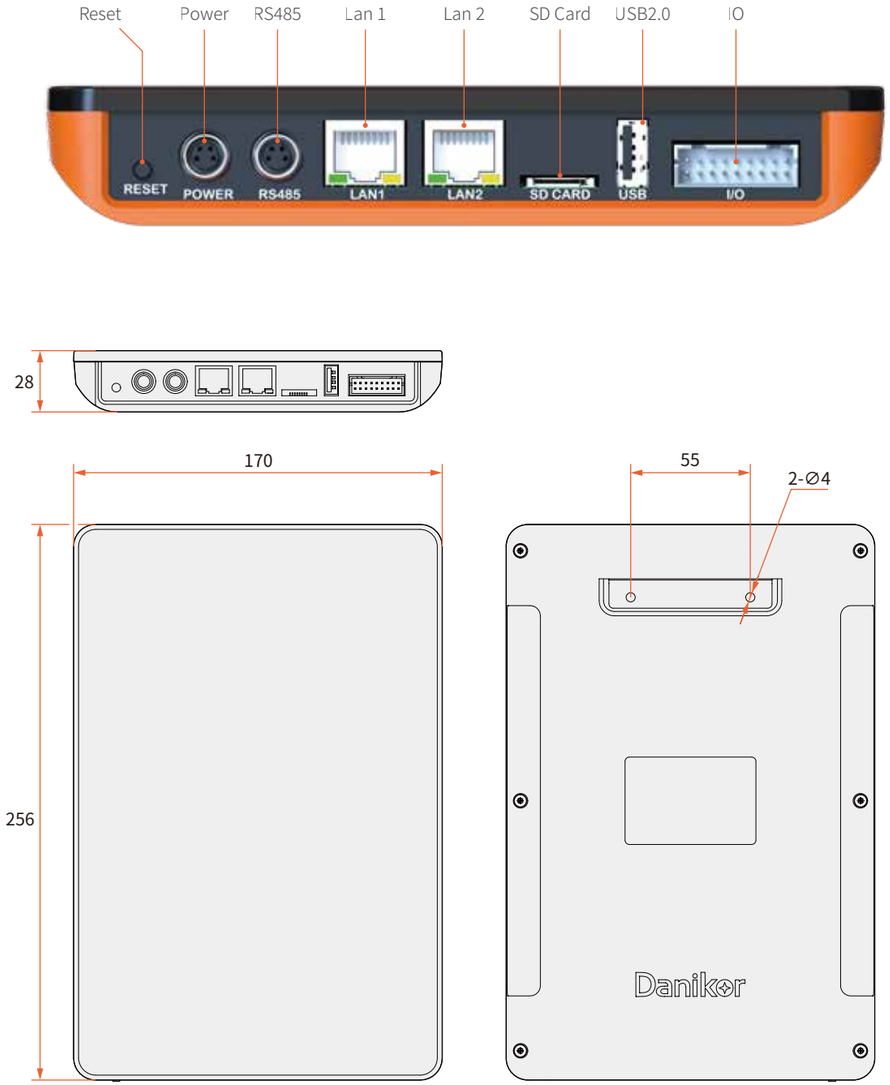
Tighten in an orderly manner to prevent mistakes and leakage

The external screwdriver is controlled by IO;

It has the function of graphical guidance task management, which can cooperate with the positioning arm to achieve sequential tightening;

As a positioning arm controller, the tightening position coordinates can be preset in advance to ensure sequential tightening and avoid wrong operations such as repeated tightening and missing tightening.

Overall dimensions



Unit:mm

7~200Nm

large torque Transducer Tightening Screw Driver

The large torque sensor screwdriver is stable and durable, and can achieve high-precision tightening. It provides a variety of tightening strategies, such as fitting point control, clamping torque control, slope control, rotation angle control and yield point control, to ensure that each screw achieves the best tightening state. At the same time, through multi-curve analysis of abnormal tightening problems, the efficiency and quality of production and assembly are effectively improved, which is suitable for tightening scenarios with large torque requirements such as automobile assembly, four doors and two covers, power assembly and so on.

Application Industry:

- Assembly of automobile
- Body-in-white (four doors and two covers)
- Powertrain
- Tire

Large torque transducer tightening screw driver

Five Advantages

Accuracy

± 1.67 %
Standard deviation accuracy over the full torque range.

ISO 5393
Accuracy test of hard& Soft connection conforms to ISO5393 standard.

Self-developed high precision algorithm control,
Under the process condition of ±5%,Satisfy CMK > 1.67

Fast

15 STEP
More tightening steps
Flexibility to respond to applications with different requirements.

Multiple tightening strategies
Guarantee tightening quality. One-step tightening, two-step tightening, multi-step tightening, torque/angle/torque angle/fitting point control, clamping torque control, slope control, rotation angle control, yield point control and other strategies.

64 PEST
More tightening Psets
Reduce setup time between different tightening requirements.

64 JOB
More tightening jobs
Graphical guidance of task management, intuitive and convenient; Adapts automatically to switch between different tightening procedures.

Intelligent

Nm, 275°, 1~15 STEP
Record and monitor the data of slope/torque/angle/step during tightening.

MES
Real-time data upload
Controller local
500000 group tightening result 10000 curve.

Data storage
Controller local
50,000 tightening Result
50,000 warning message.

Data traceability
NOK analysis, and a curve can be superimposed to facilitate depth analysis.

Errorproofing

Monitoring and repair of abnormal tightening process
All-round data monitoring, timely detection of abnormal tightening problems such as floating locks and sliding teeth, and further tightening repair.

*****
Assembly process authority management
In the debugging interface, you need to enter the password to set the strategy and program.

JOB
Job planning and superposition protection
If Job batch is inconsistent, it is required to enter password for intervention.

Insulation ability
Insulating material shall be used to ensure no conduction due to electric leakage, or no conduction with the shell when the live screw is tightened.

Convenient

AI
Automatically learn
Automatically recommend the reference parameter range, and quickly build the tightening strategy.

Superior human-computer interaction
Visual OLED display screen is convenient for operators to use.

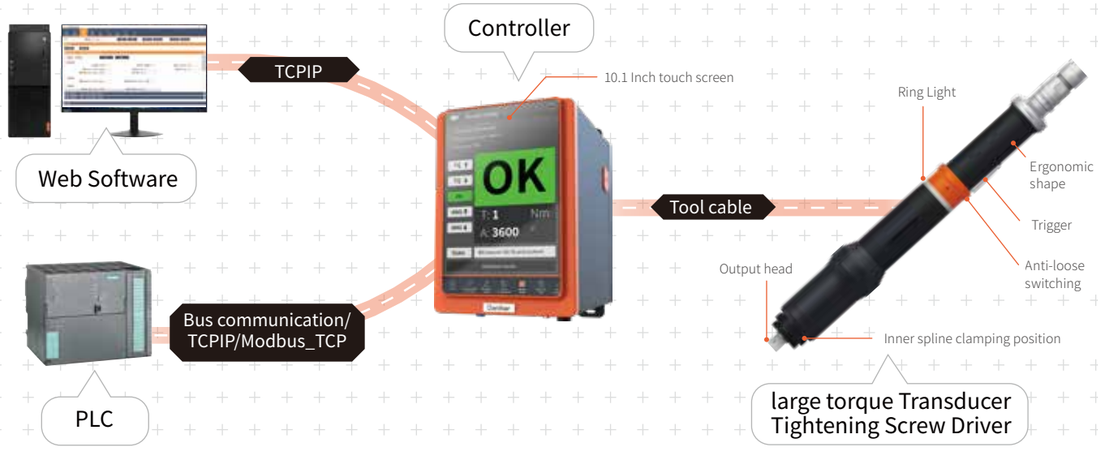
2 TYPE
Multiple startup forms
It can be handheld or fixed with machine, and handheld can be triggered or remotely activated.

Rapid expansion port
External modules such as internal spline external connection, fast external connection, special head, offset head, open and closed head, etc.

Multiple communication forms
Bus communication, TCPIP, Modbus _ TCP, RS/RS, Http communication protocol, extended digital I/O interface.

Simple peripheral connectivity
Flexible connection of scanner, sleeve selector, arm, alignment machine and other external equipment.

Product structure



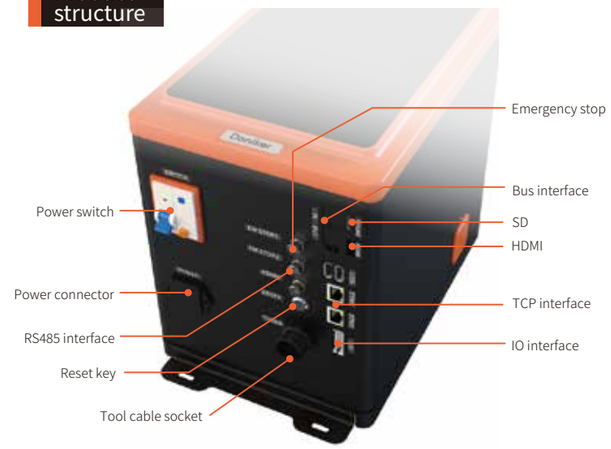
Screw driver Product System Parameters

	Model	Max torque /Nm	Max speed /rpm	Maximum diameter of output end /mm	Design life	MTTF	Bit quick connector	Starting mode
Straight type	PTT-DSH-0350N-57-S2P-000-G1	7-35	1480	28.5	>10 million	>1 million	S 3/8	Pushed/ Remote
	PTT-DSH-0550N-57-S3P-000-G1	15-55	727	28.5			S 1/2	
	PTT-DSH-0800N-57-S3P-000-G1	20-80	484	28.5				
	PTT-DSH-1300N-70-S3P-000-G1	30-130	245	35				
	PTT-DSH-2000N-70-S4P-000-G1	50-200	173	35			S 3/4	

	Model	Max torque /Nm	Max speed /rpm	Maximum diameter of output end /mm	Design life	MTTF	Bit quick connector	Starting mode
Angle type	PTT-DAH-0350N-46-S2P-000-G1	7-35	1170	46	>10 million	>1 million	S 3/8	Pushed/ Remote
	PTT-DAH-0550N-51-S3P-000-G1	15-55	969	51			S 1/2	
	PTT-DAH-0800N-60-S3P-000-G1	20-80	390	60				
	PTT-DAH-1300N-74-S3P-000-G1	30-130	205	74				

Tool Adaptor Controller

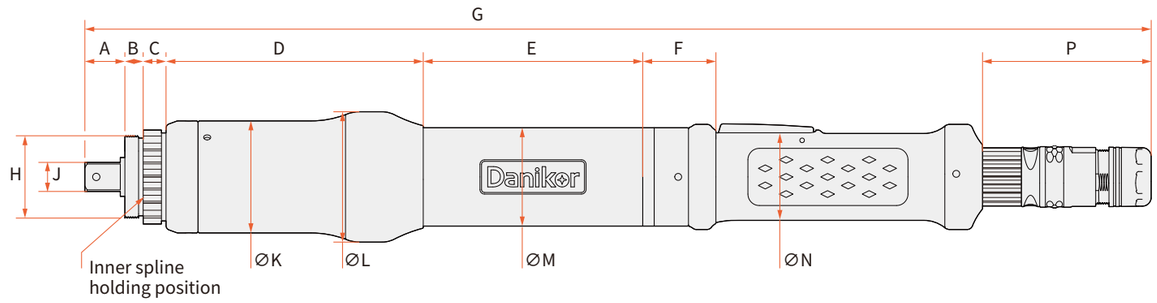
Product structure



Screw Driver controller parameters

Model	OPT-STC-C1-DC1-V1-1500W
Dimension/mm	200 * 280 * 256
Voltage	24V
Accuracy	Standard deviation ±1.67%
Controller screen	10.1 inch touch screen
Reset button	For some system alarms, the reset button can be pressed directly
Angle display min unit	0.1°
Communication form	Bus communication / TCPIP / Modbus_TCP / IO interface
Data storage Tighten	500,000 data/10,000 curve
management	64 Job, 64 Pset，15 Step
Tightening strategy	One-step tightening, two-step tightening, multi-step tightening, torque/angle/torque angle/fitting point control, clamping torque control, slope control, rotation angle control, yield point control
Breakpoint resume	The controller is disconnected from the external equipment. After the network is restored, it supports the breakpoint resume function to prevent information loss.

Overall dimensions



Unit:mm

Model	A	B	C	D	E	F	G	H	J	ØK	ØL	ØM	ØN	P
PTT-DSH-0350N-57-S2P-000-G1	17.5	8	10	112.5	96	32	466.4	M36x1 left-handed	12.7	49	57	43	38	73.8
PTT-DSH-0550N-57-S3P-000-G1	17.5	8	10	131	96	32	484.9		12.7	49	57	43	38	73.8
PTT-DSH-0800N-57-S3P-000-G1	17.5	8	10	131	96	32	484.9		12.7	49	57	43	38	73.8
PTT-DSH-1300N-70-S3P-000-G1	16.5	12.5	10.5	161.2	91.5	32	514.6	M55x1 left-handed	19	66	70	43	38	73.8
PTT-DSH-2000N-70-S4P-000-G1	16.5	12.5	10.5	172.2	91.5	32	525.6		19	66	70	43	38	73.8

* For detailed specifications, please contact us. The attached drawings are for reference only

0.05~11Nm

Handheld Screw Driver

Application Industry:

New energy vehicles | automotive electronics | automotive parts | 3 C | Communication | Home appliances | medical care

Intelligent handheld screw driver

Five Advantages

Accuracy

±2.5% — Standard deviation accuracy over the full torque range.

ISO 5393 — Accuracy test of hard& Soft connection conforms to ISO5393 standard.

Self-developed high precision algorithm control.

Fast

More tightening steps
Flexibility to respond to applications with different requirements.

More tightening strategies
Guarantee tightening quality.

More tightening Psets
Reduce setup time between different tightening requirements.

More tightening jobs
Automatically switch between different Psets

Intelligent

Record and monitor the data of full tightening process.

Real-time data upload
Real-time docking with MES system.

Data storage
You can hold more quantities and filter the number of results that are analyzed for a given program or time period.

Data traceability
Multiple curves are superimposed to facilitate depth analysis.

Errorproofing

Monitoring of abnormal tightening process
All-round data monitoring, timely detection of floating locks, sliding teeth,wrong and missing, gasket missing and other unqualified tightening situation.

Assembly process authority management
In the debugging interface, you need to enter the password to set the strategy and program.

Job planning and superposition protection
If Job batch is inconsistent, it is required to enter password for intervention.

Convenient

Automatically learn
Automatically recommend the reference parameter range, and quickly build the tightening strategy.

Rapid expansion port
Threaded external connection for quick matching vacuum suction nozzle and a fixed structure.

Superior human-computer interaction
Visual OLED display screen, 3-color light (such as NG red), buzzer and front light is convenient for operators to use.

Multiple communication forms
RS485 RTU, TCP/IP open Protocol, extended digital I/O interface.

Multiple startup forms
It can be handheld or fixed with machine, and handheld can be pressed down,triggered or remotely activated.

Product structure

Screw driver product model description

PTC ---- DSH ---- 0040N ---- 32 ---- H1P ---- 000 ---- G2

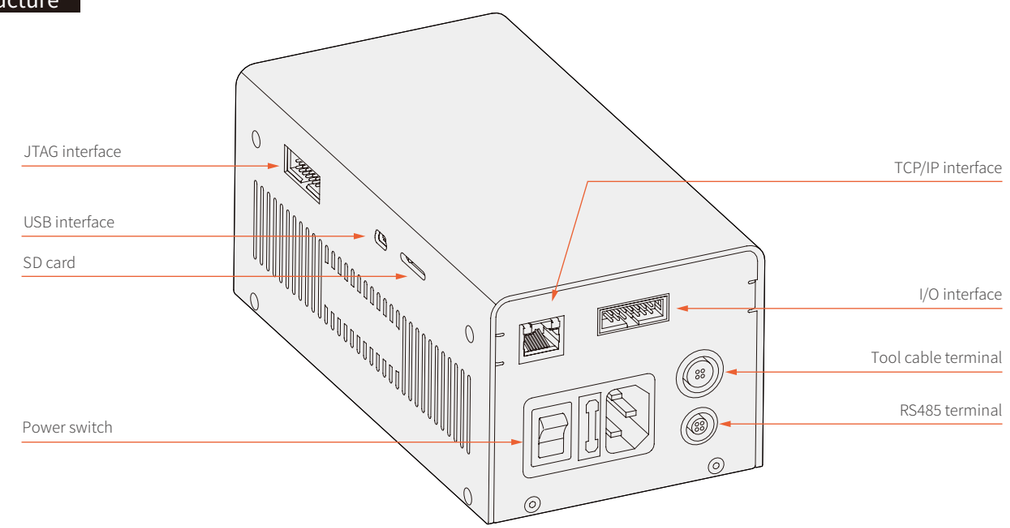
- PTC
  - Torque form: C:Current; T:Torque Sensor
  - PT:Power Tool
- DSH
  - Installation mode: H:Handheld
  - Nozzle type: S:Straight type
  - Motor type: A:AC; D:DC
- 0040N
  - Maximum torque: N-Nm;M-mNm; 1800M:0.18Nm; 5000M:0.7Nm; 0020N:2Nm; 0040N:4Nm; 0070N:7Nm; 0110N:11Nm
- 32
  - Grip diameter: 32mm; 39mm
- H1P
  - Starting mode: P:Pushed; D:Pressed
  - Output head type: H1:Hex ¼"; HM:HM4 crescent
- 000
  - Stretch length of Spring: 000:no scaling
- G2
  - Product Generation: G1:Generation 1; G2:Generation 2

Screw driver Product System Parameters

	Model	Max torque /Nm	Max speed /rpm	Dimension L*D1	Grip diameter /mm	Weight /g	Design life	MTTF	Bit quick connector	Starting mode	Screw driver controller	Screw driver cable
Pushed	PTC-DSH-1800M-32-HMP-000-G2	0.05-0.18	1500	238*36	32	436	>10 million	>1 million	HM4	Pushed/ Remote	OPT-STC-DC1-V2-500W	OPT-SCT-V2-DC1-05
	PTC-DSH-5000M-32-H1P-000-G2	0.1-0.7	1500	241*36	32	466			Hex 1/4"			
	PTC-DSH-0020N-32-H1P-000-G2	0.7-2	950	241*36	32	486						
	PTC-DSH-0040N-39- H1P-000-G2	1-4	900	266.3*46	39	632						
	PTC-DSH-0070N-39-H1P-000-G2	1.6-7	900	266.3*46	39	717					OPT-STC-DC2-V2-500W	OPT-SCT-V2-DC2-05
	PTC-DSH-0110N-39-H1P-000-G2	2-11	700	266.3*46	39	827						
Pressed	PTC-DSH-1800M-32-HMD-000-G2	0.05-0.18	1500	242.2*36	32	465	>10 million	>1 million	HM4	Pushed/ Pressed/ Remote	OPT-STC-DC1-V2-500W	OPT-SCT-V2-DC1-05
	PTC-DSH-5000M-32-H1D-000-G2	0.1-0.7	1500	246.9*36	32	495			Hex 1/4"			
	PTC-DSH-0020N-32-H1D-000-G2	0.7-2	950	246.9*36	32	515						
	PTC-DSH-0040N-39- H1D-000-G2	1-4	900	279.5*46	39	765						
	PTC-DSH-0070N-39-H1D-000-G2	1.6-7	900	279.5*46	39	850					OPT-STC-DC2-V2-500W	OPT-SCT-V2-DC2-05
	PTC-DSH-0110N-39-H1D-000-G2	2-11	700	279.5*46	39	960						

Tool Adaptor Controller

Product structure



Screw Driver controller parameters

Model	OPT-STC-DC1-V2-500W / OPT-STC-DC2-V2-500W
Dimension/mm	197*86.25*104.5
Weight	≈1.75kg
Voltage	DC 24V
Accuracy	Standard deviation±2.5%
Angle displaymin unit	0.1°
Communication form	RS485/TCPIP/IO interface
Data storage	10,000 group of local tightening results, supporting data upload 16 Job settings, 16 Pset
Tightening strategy	Angle control, torque control, speed control, angle/torque control,self-learning strategy, custom strategy

Teaching pendant and software

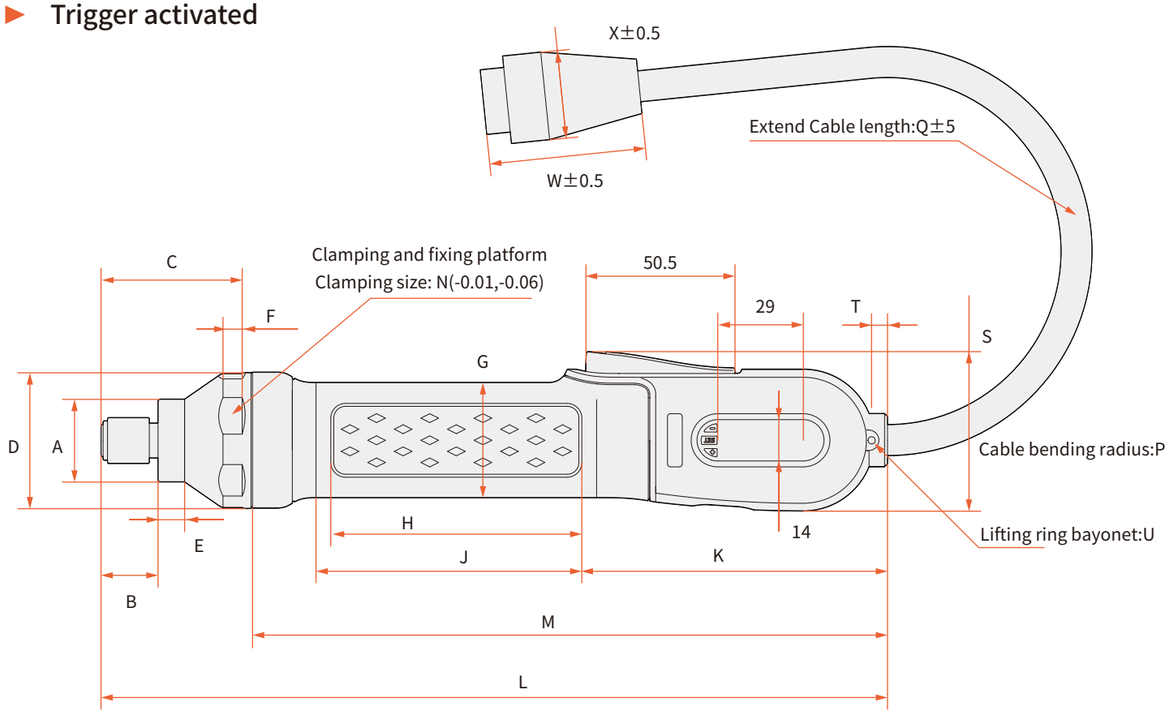
- A simple task is set through that display screen on the intelligent tighten tool body, which is convenient and quick.
- Teaching pendant or software can be selected for detailed parameter setting and programming to meet the needs of different tightening applications, and relevant data can be checked in real time to find quality problems in time and reduce losses.

Host computer interface

Display screen

Overall Dimensions

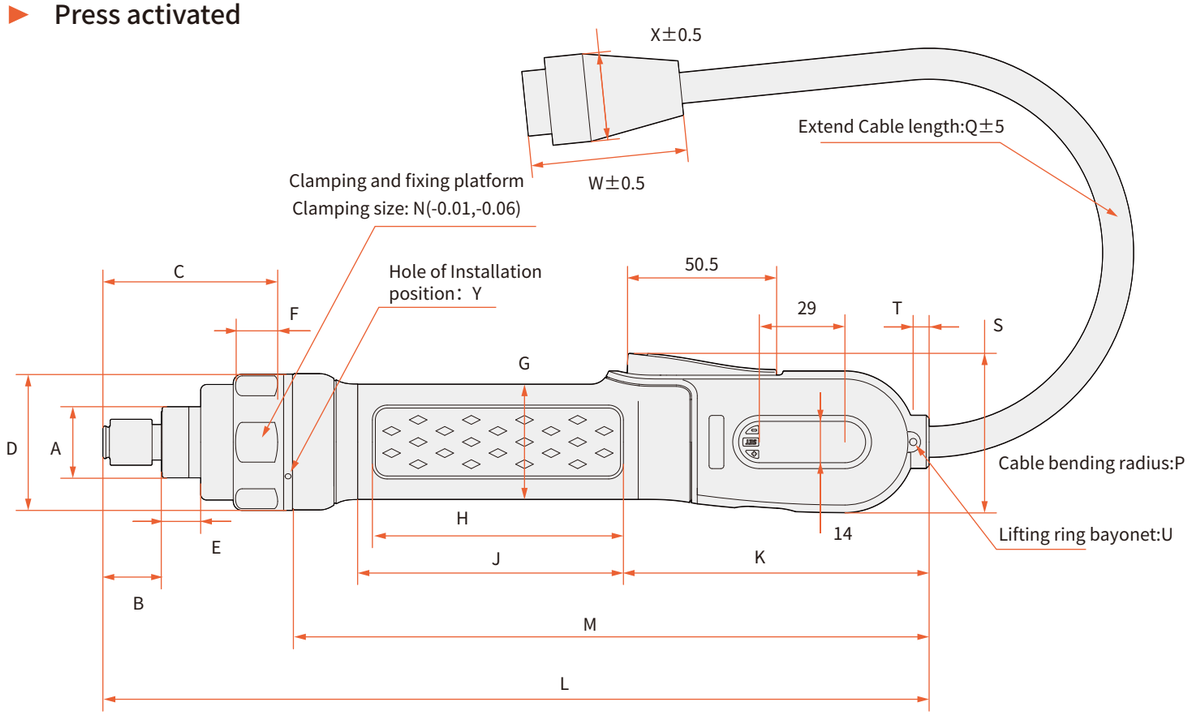
▶ Trigger activated



Unit:mm

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	S	T	U	W	X
PTC-DSH-1800M-32-HMP-000-G2	∅22	8.3	37.3	∅36	9	7	∅32	83	87.1	94.1	238	191.7	∅35	⩾51	285	44.5	4.5	∅2	49.3	∅26
PTC-DSH-5000M-32-H1P-000-G2	∅22	10.3	39.3	∅36	9	7	∅32	83	87.1	94.1	241	191.7	∅35	⩾51	285	44.5	4.5	∅2	49.3	∅26
PTC-DSH-0020N-32-H1P-000-G2																				
PTC-DSH-0040N-39- H1P-000-G2	∅28	19.3	47.8	∅46	9	6.5	∅39	85	90	103.5	266.3	215	∅44	⩾64	280	54	5.4	∅2.5	53	∅29.8
PTC-DSH-0070N-39-H1P-000-G2																				
PTC-DSH-0110N-39-H1P-000-G2																				

▶ Press activated



Unit:mm

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	S	T	U	W	X	Y
PTC-DSH-1800M-32-HMD-000-G2	∅25	7	41	∅36	9	6	∅32	83	87.1	94.1	242.2	191.7	∅34	⩾51	285	44.5	4.5	∅2	49.3	∅26	∅3
PTC-DSH-5000M-32-H1D-000-G2	∅25	12	46.2	∅36	9	6	∅32	83	87.1	94.1	246.9	191.7	∅34	⩾51	285	44.5	4.5	∅2	49.3	∅26	∅3
PTC-DSH-0020N-32-H1D-000-G2																					
PTC-DSH-0040N-39- H1D-000-G2	∅24	20	58	∅46	13.3	14	∅39	85	90	103.5	279.5	215	∅44	⩾64	280	54	5.4	∅2.5	53	∅29.8	∅2
PTC-DSH-0070N-39-H1D-000-G2																					
PTC-DSH-0110N-39-H1D-000-G2																					

0.1~200Nm

Fixed Screw Driver

Designed for economical applications, it combines high performance and compact design, realizes intelligent and digital screw tightening, and efficiently meets the needs of cost control, which is a truly cost-effective choice.

Application Industry:

Automobile and parts, Electronics,Home appliances, etc.

Five Advantages

Accuracy

±2.5%

Standard deviation accuracy over the full torque range.

ISO 5393

Accuracy test of hard& Soft connection conforms to ISO5393 standard.

Self-developed high precision algorithm control.

Fast

15 STEP

More tightening steps
Flexibility to respond to applications with different requirements.

More tightening strategies
Support angle control, torque control, speed control, angle/ torque control;
Self-learning strategy, automatic generation of tightening strategy for setting parameters.

50 PSET

More tightening Psets
Reduce setup time between different tightening requirements.

Intelligent

Nm 275° 1~15 STEP

Monitor the whole process
Tightening data such as torque, angle and speed, including OK/NG number, times and qualification rate.

MES

Real-time data upload
Real-time display of tightening results and realtime docking with MES system.

Data storage
200 thousand sets of tightening results can be stored and filter the number of results that are analyzed for a given program or time period.

Data traceability
Supports 14 curve overlay analysis and tightening data CP/CPK analysis.

Errorproofing

Monitoring of abnormal tightening process
All-round data monitoring, timely detection of floating locks, sliding teeth,wrong and missing, gasket missing and other unqualified tightening situation.

*****

Assembly process authority management
The debugging interface needs to input the password to set the strategy and program, and if you do not operate within the set time, you will automatically log out.

Convenient

Superior human-computer interaction
Large screen version
Support policy parameter setting and real-time view of tightening curve; support permission configuration.
Small screen version
View the tightening result in real time; support the modification of password setting.

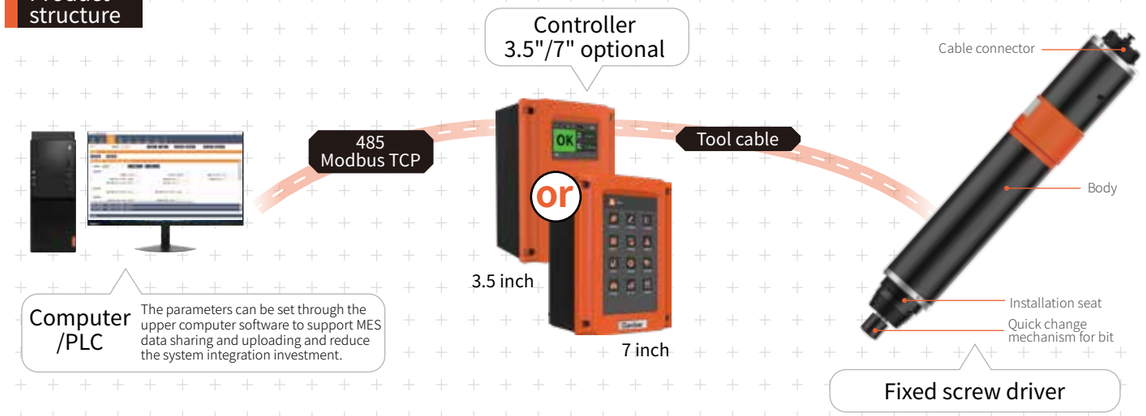
Multiple communication forms
One network port is extended to three ports, two TCPIP ports and 1-channel Modbus _ TCP, IO, supporting controller,PLC and MES are connected in series simultaneously.

Statistics of calibration information
Support the import of sensor calibration data and automatic calculation of K value.

中 A

Switch between Chinese and English systems.

Product structure



Screw driver product model description

PTC ASF 0030N 0 H10 000 G3

- **PTC**
  - Torque form: C:Current
  - PT:Power Tool
- **ASF**
  - Installation mode: F:Fixed
  - Nozzle type: S:Straight type
  - Motor type: A:AC; D:DC
- **0030N**: Maximum torque N-Nm;M-mNm. Example: 4500M:0.45Nm, 0009N:0.9Nm, 0030N:3Nm, 0065N:6.5Nm, 0180N:18Nm
- **0**: 0:Part model of the screw driver body; TC05:Contains controller and 5m cable; TC00:Controller
- **H10**
  - Starting mode: 0:external control
  - Output head type: H1:Hex ¼"; HM:HM4; S2:3/8"square head; S3:1/2"square head; S4:3/4"square head
- **000**: Stretch length of spring: 000:no scaling; 015:15mm; 030:30mm; 050:50mm
- **G3**: G3:Version 3

Screw driver Product System Parameters

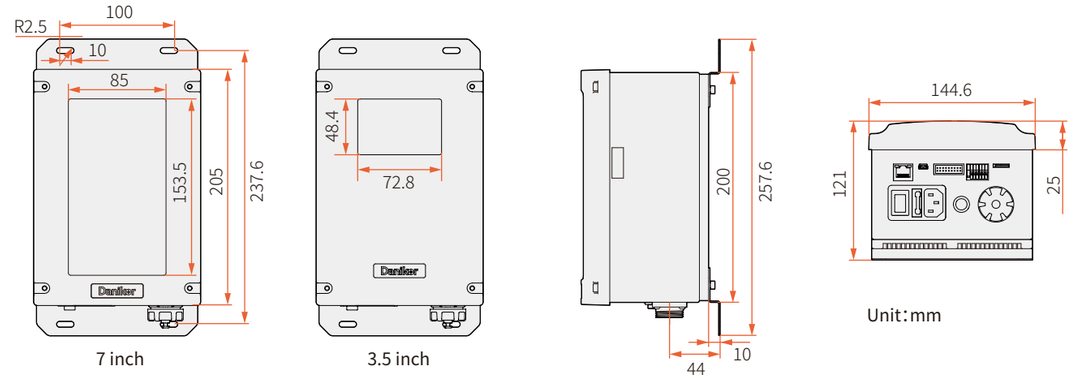
Model	Max torque /Nm	Max speed /rpm	Accuracy	Dimension /mm	Weight /kg	Free range of head/mm	Bit quick connector	Screw driver controller	Screw driver cable
PTC-ASF-5000M-0-H10-000-G3	0.1~0.5	3000	Standard deviation ±2.5%	239.9*45	-	-	Hex 1/4"	OPT-STC-C1-V3-40W OPT-HTC-C1-V3-40W	5m/10m/15m Straight or Angle optional
PTC-ASF-0014N-0-H10-000-G3	0.3~1.4	3000		239.9*45	-	-	Hex 1/4"	OPT-STC-C1-V3-130W OPT-HTC-C1-V3-130W	
PTC-ASF-0045N-0-H10-000-G3	1~4.5	1500		280.7*45	-	-	Hex 1/4"		
PTC-ASF-0070N-0-H10-000-G3	1.5~7	1200		287.7*45	-	-	Hex 1/4"		
PTC-ASF-0120N-0-H10-000-G3	5~12	545		301.2*4	-	-	Hex 1/4"		
PTC-ASF-0200N-0-S20-000-G3	6~20	1870		334.1*61	-	-	Square 3/8"	OPT-STC-C1-V3-800W OPT-HTC-C1-V3-800W	
PTC-ASF-0500N-0-S30-000-G3	16~50	555		349.9*61	-	-	Square 1/2"		
PTC-ASF-0800N-0-S30-000-G3	30~80	555		365.9*81	-	-	Square 1/2"	OPT-STC-C1-V3-1300W OPT-HTC-C1-V3-1300W	
PTC-ASF-1300N-0-S30-000-G3	40~130	444		385.9*81	-	-	Square 1/2"		
PTC-ASF-2000N-0-S40-000-G3	80~200	293		383.6*81	-	-	Square 3/4"		

Screw Driver Controller Model Description

OPT STC C1 V3 40W

- **OPT**
  - PT:Power Tool
  - O:Optional Part
- **STC**
  - TC:Tools Controller
  - S:Standard
- **C1**: C1:One to one match
- **V3**: V3:Version 3
- **40W**: Power 40w; 130w; 800w; 1300w

Overall dimensions



Screw Driver controller parameters

Model	OPT-STC-C1-V3-40W OPT-HTC-C1-V3-40W	OPT-STC-C1-V3-130W OPT-HTC-C1-V3-130W	OPT-STC-C1-V3-800W OPT-HTC-C1-V3-800W	OPT-STC-C1-V3-1300W OPT-HTC-C1-V3-1300W
Dimension/mm	145*205*111			
Weight/kg	1.9			
Voltage	220V AC			
Power/W	40	130	800	1300
Accuracy	Standard deviation ±2.5%			
Angle display min unit	0.1°			
Communication form	TCPIP、Modbus_TCP、IO			
Data storage	50 sets of Pset, 200000 sets of tightening results, 7" version with 5 historical curves			
Tightening strategy	Angle control, torque control, speed control, angle/torque control,self-learning strategy			

Tool cable

Tool cable model description

OPT — **PT**:Power Tool; **O**:Optional Part

SCT — **CT**:Cable for Tools; **CI**: Cable for Io IO; **S**:Standard

C1 — **C1**:One to one match

V3 — **V1**:Version 3

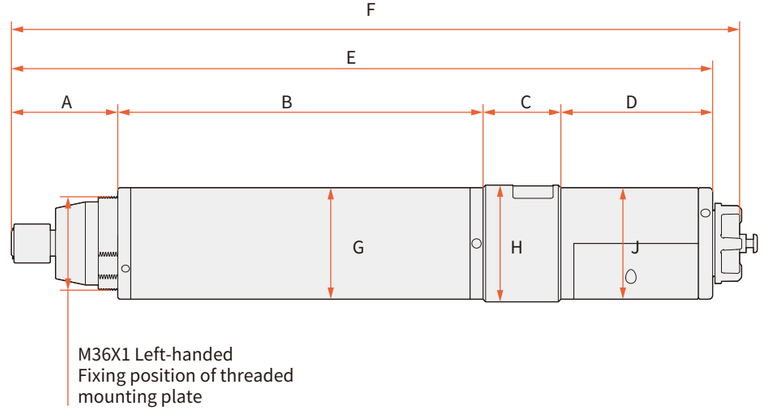
05 — Cable length: **05**:5m; **10**:10m; **15**:15m

A — Cable type: **Null**:standard straight shank; **A**:Angle cable

Tool cable parameters

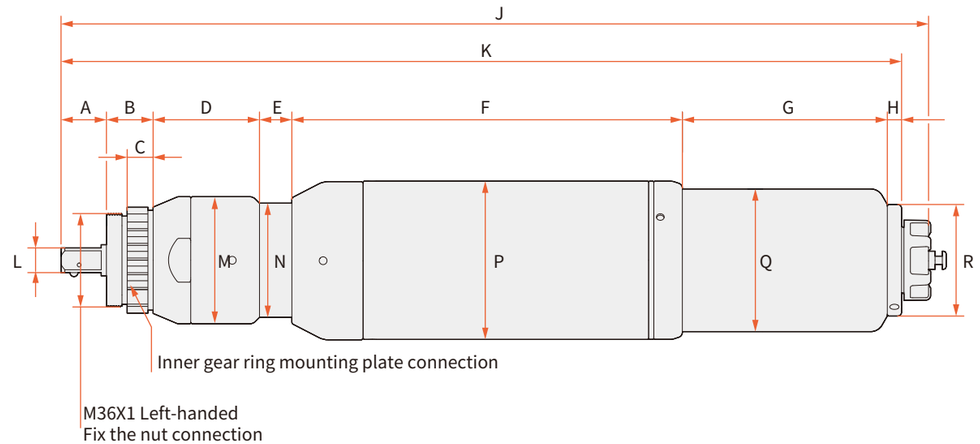
Model	OPT-SCT-00-V3-05	OPT-SCT-00-V3-10	OPT-SCT-00-V3-15	OPT-SCT-00-V3-20	OPT-SCT-00-V3-05-A	OPT-SCT-00-V3-10-A	OPT-SCT-00-V3-15-A	OPT-SCI-C1-V3-05
Category	Tool cable							IO cable
Cable head type	Straight handle				Angle			-
Length/m	5	10	15	20	5	10	15	5

Overall Dimensions



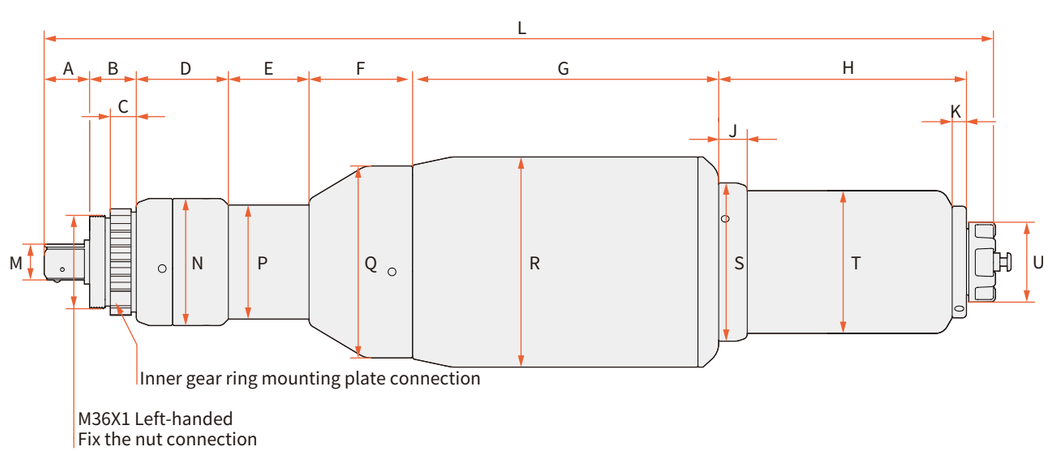
Unit：mm

Model	A	B	C	D	E	F	G	H	J
PTC-ASF-5000M-0-H10-000-G3	41.5	99.5	30	58.5	229.5	239.9	43	45	43
PTC-ASF-0014N-0-H10-000-G3	41.5	99.5			229.5	239.9			
PTC-ASF-0045N-0-H10-000-G3	41	140.8			270.3	280.7			
PTC-ASF-0070N-0-H10-000-G3	42	146.8			277.3	287.7			
PTC-ASF-0120N-0-H10-000-G3	43.5	158.8			290.8	301.2			



Unit：mm

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
PTC-ASF-0200N-0-S20-000-G3	17.5	18	10	41	12.5	150.4	79	5.5	334.4	324	9.52	49	44	61	55	43
PTC-ASF-0500N-0-S30-000-G3				35.5	29	155			349.9	339.5	12.7					



Unit：mm

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
PTC-ASF-0800N-0-S30-000-G3	17.5	18	10	35.5	31.1	39.9		95.5	11		365.9	13.8	49	44					
PTC-ASF-1300N-0-S30-000-G3	18.5	20.5	12.5	43	42.3	37.3	118	95.5	11	5.5	385.9	12.7	66	56	74	81	61	55	43
PTC-ASF-2000N-0-S40-000-G3	16.5	23	10.5	40.5	42.3	37.3		95.2	10.7		383.6	19.1	66	56					

Accessory

Torque Arms

Bit

Bit selector

External control grip

Torque Arms

Model description

OPT — **DLP** — **010** — **15** — **V1** — **X**

- **OPT**
  - PT:Power Tool
  - O:Optional Part
- **DLP**
  - Position Type
    - P: Position
    - N:No Positon
  - Arms Type
    - L: Linear Arms
    - S:Swivel Arms
    - C: Carbon Arms
    - F:Frame Arms
- **010**
  - Anti-torque
    - 010:10Nm
    - 025:25Nm
    - 050:50NM
    - 100:100NM
    - Add "AB"for Carbon Arms
- **15**
  - Length of Cable
    - 5:5m
    - 3:3m
    - 0:None
  - Position encoder description
    - 0:No positioning
    - 1:Analog output 0-10V
    - 2:RS485
    - X:Customize communication requirements
- **V1**
  - V2:Version 2
- **X**
  - Customize

Linear Arms

Suitable for work benches or stations with sufficient space Maximum Anti-torque: Vertical-50N, Horizontal-35Nm
Simple and light structure and easy to use

Configurable:
1 digital angle sensor
1 displacement sensor(conversion module as standard, Analog signal converted into RS485) to accurately locate the tightening position

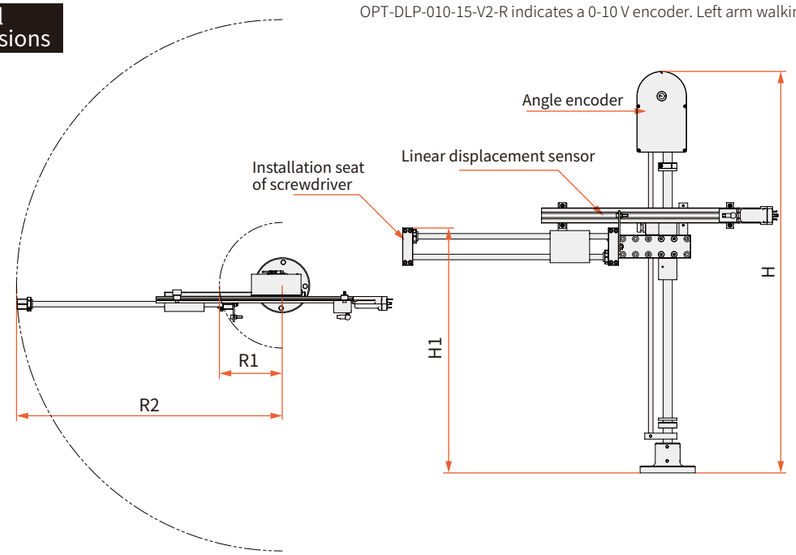
*Fixture are ordered separately.

Parameters of Linear Arms

Model	OPT-DLN-010-00-V2-R	OPT-DLN-025-00-V2-R	OPT-DLN-050-00-V2-R	OPT-DLP-010-25-V2-R/ OPT-DLP-010-15-V2-R	OPT-DLP-025-25-V2-R/ OPT-DLP-025-15-V2-R	OPT-DLP-050-25-V2-R/ OPT-DLP-050-15-V2-R
Position Type	No-position	No-position	No-position	position	position	position
Encoder Type	-	-	-	RS485/0-10V	RS485/0-10V	RS485/0-10V
Encoder cable length-m	-	-	-	5	5	5
Distinguishable Screw spacing- mm	-	-	-	⩾5	⩾5	⩾5
Max. vertical torque-Nm	10	25	50	10	25	50
Max. horizontal torque-Nm	8	20	35	8	20	35
Max. effective load-kg	0~1	1~3	3~5	0~1	1~3	3~5
Vertical distance-mm	400	400	500	400	400	500
Horizontal distance-mm	300	300	400	300	300	400
Min. working radius R1-mm	200	210	290	200	210	290
Max. working radius R2-mm	600	700	850	600	700	850
Max. height of installation H1-mm	625	625	735	625	625	735
Total Height H-mm	875	875	1021	875	875	1021

* Note: Model OPT-DLP-010-25-V2-R indicates that the encoder is an RS485 encoder; Right Arm/Model OPT-DLP-010-15-V2-R indicates a 0-10 V encoder. Left arm walking engineering design.

Overall Dimensions



Swivel Arms

Suitable for work stations with limited space
Maximum Anti-torque:
Vertical-50N, Horizontal-35Nm
Simple and light structure and easy to use

Configurable:
2 digital angle sensor to accurately locate the tightening position

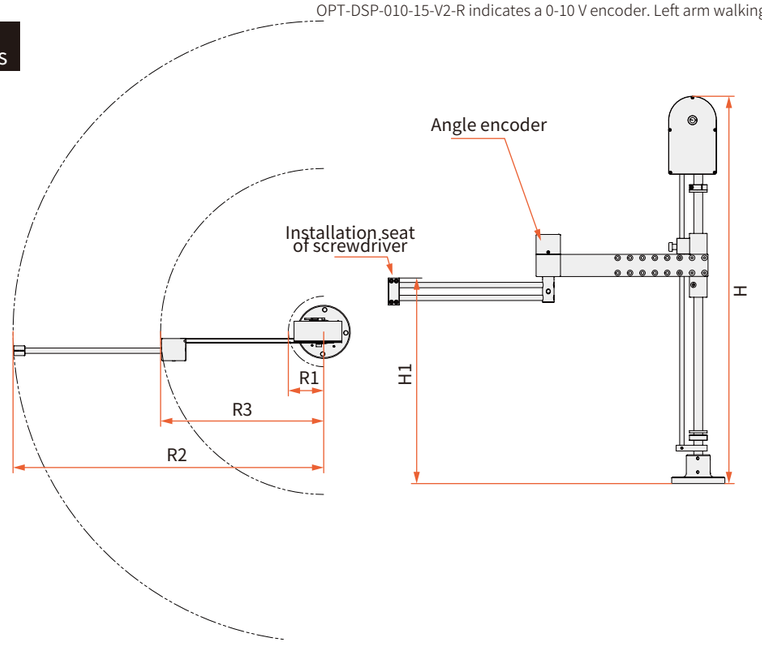
*Fixture are ordered separately.

Parameters of Swivel Arms

Model	OPT-DSN-010-00-V2-R	OPT-DSN-025-00-V2-R	OPT-DSN-050-00-V2-R	OPT-DSP-010-25-V2-R/ OPT-DSP-010-15-V2-R	OPT-DSP-025-25-V2-R/ OPT-DSP-025-15-V2-R	OPT-DSP-050-25-V2-R/ OPT-DSP-050-15-V2-R
Position Type	No-position	No-position	No-position	position	position	position
Encoder Type	-	-	-	RS485/0-10V	RS485/0-10V	RS485/0-10V
Encoder cable length-m	-	-	-	5	5	5
Distinguishable Screw spacing- mm	-	-	-	⩾5	⩾5	⩾5
Max. vertical torque-Nm	10	25	50	10	25	50
Max. horizontal torque-Nm	8	20	35	8	20	35
Max. effective load-kg	0~1	1~3	3~5	0~1	1~3	3~5
Vertical distance-mm	400	400	500	400	400	500
Horizontal distance-mm	-	-	-	-	-	-
Min. working radius R1-mm	100	100	100	100	100	100
Max. working radius R2-mm	600	700	830	600	700	830
Max. height of installation H1-mm	560	560	670	560	560	670
Total Height H-mm	875	875	1021	875	875	1021

* Note: Model OPT-DSP-010-25-V2-R indicates that the encoder is an RS485 encoder; Right Arm/Model OPT-DSP-010-15-V2-R indicates a 0-10 V encoder. Left arm walking engineering design.

Overall Dimensions



Carbon Arms

Accessory

Telescopic structure, easy to use,
Wider work scope
Maximum Anti-torque: 200Nm
New carbon material, lighter, move smoothly, strong torque resistance

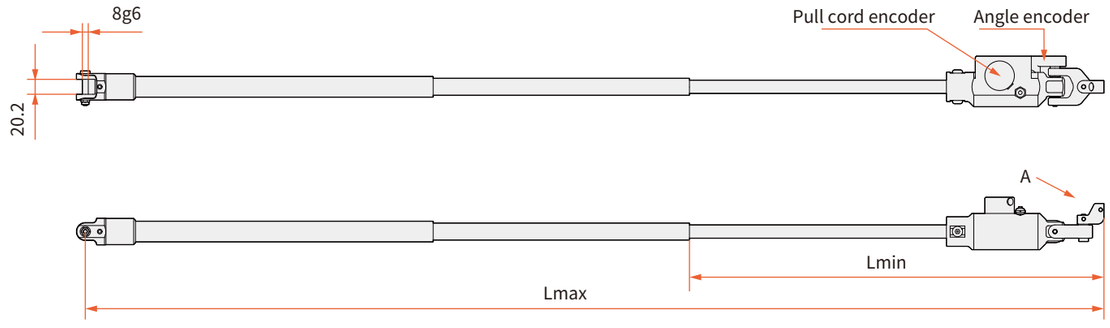
Configurable:
1 angle encoder
1 pull cord encoder

*Fixture and positioning controller and balancer ordered separately.

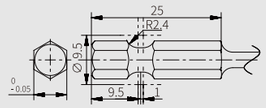
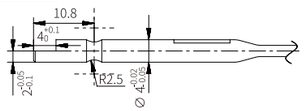
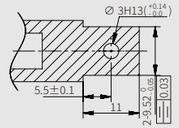
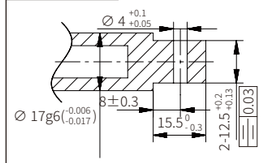
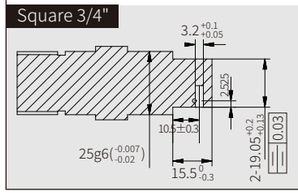
Parameters of Carbon Arms

Model	OPT-BCN-020A-00-V1-0	OPT-BCN-020B-00-V1-0	OPT-BCN-055A-00-V1-0	OPT-BCN-055B-00-V1-0	OPT-BCP-020A-15-V1-0	OPT-BCP-020B-15-V1-0	OPT-BCP-055A-15-V1-0	OPT-BCP-055B-15-V1-0
Position Type	No-position	No-position	No-position	No-position	Position	Position	Position	Position
Encoder Type	-	-	-	-	1 angle encoder and 1 pull cord encoder, both are outputting 0-10V			
Encoder cable length-m	-	-	-	-	5	5	5	5
Distinguishable Screw spacing-mm	-	-	-	-	⩾20	⩾20	⩾20	⩾20
Max. vertical torque-Nm	20	20	55	55	20	20	55	55
Lmax mm	460	627	559	743	587	809	688	872
Lmin mm	1000	1500	1250	1800	1127	1682	1379	1929
Extension Stroke distance-mm	540	873	691	1057	540	873	691	1057

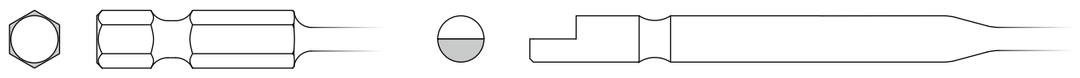
Overall Dimensions



Bit

Model	Intelligent fixed screw driver	Intelligent handheld screw driver	Transducer tightening screw driver	Large torque transducer tightening screw driver
Hex 1/4" 	PTC-ASF-5000M-0-H10-000-G3 PTC-ASF-0014N-0-H10-000-G3 PTC-ASF-0045N-0-H10-000-G3 PTC-ASF-0070N-0-H10-000-G3 PTC-ASF-0120N-0-H10-000-G3	PTC-DSH-5000M 32-H1P-000-G2 PTC-DSH-0020N-32-H1P-000-G2 PTC-DSH-0040N-39-H1P-000-G2 PTC-DSH-0070N-39-H1P-000-G2 PTC-DSH-0110N-39-H1P-000-G2 PTC-DSH-5000M-32-H1D-000-G2 PTC-DSH-0020N-32-H1D-000-G2 PTC-DSH-0040N-39-H1D-000-G2 PTC-DSH-0070N-39-H1D-000-G2 PTC-DSH-0110N-39-H1D-000-G2	PTT-DSH-7000M-34-H1D-000-G3 PTT-DSH-0012N-34-H1D-000-G3 PTT-DSH-0020N-37-H1D-000-G3 PTT-DSH-0040N-37-H1D-000-G3 PTT-DSH-0080N-37-H1D-000-G3 PTT-DSH-0120N-37-H1D-000-G3	
HM4 		PTC-DSH-1800M-32-HMP-000-G2 PTC-DSH-1800M-32-HMD-000-G2		
Square 3/8" 	PTC-ASF-0200N-0-S20-000-G3		PTT-DAH-0080N-37-S2P-000-G3 PTT-DAH-0120N-37-S2P-000-G3 PTT-DAH-0200N-37-S2P-000-G3 PTT-DSH-0200N-37-S2D-000-G3	PTT-DSH-0350N-57-S2P-000-G1 PTT-DAH-0350N-46-S2P-000-G1
Square 1/2" 	PTC-ASF-0500N-0-S30-000-G3 PTC-ASF-0800N-0-S30-000-G3 PTC-ASF-1300N-0-S30-000-G3			PTT-DSH-0550N-57-S3P-000-G1 PTT-DSH-0800N-57-S3P-000-G1 PTT-DSH-1300N-70-S3P-000-G1 PTT-DAH-0550N-51-S3P-000-G1 PTT-DAH-0800N-60-S3P-000-G1 PTT-DAH-1300N-74-S3P-000-G1
Square 3/4" 	PTC-ASF-2000N-0-S40-000-G3			PTT-DSH-2000N-70-S4P-000-G1

Type	Graphics	Drive size	Drive type	Length	Specification	Scope of application
Internal Torx		1/4" E 6.3 3/8" E 9.5 1/2" E 12.7 1/4" E19.05	Hex、HM、Square	50-300	TX8,TX10,TX15,TX20,TX25,TX30,TX40	Torx screw
Hexagon socket					HEX2,2.5,3,4,5,6,8,10	Hex screw
Philips Type H					PH0,PH1,PH2,PH3	Philips screw



Bit selector

Model	Category	Amount of bits	Cable length-m
OPT-B005-04SIO-05M	Bit program selector	4	5
OPT-B005-08SIO-05M	Bit program selector	8	5
OPT-B005-04BIO-05M	Nut program selector	4	5
OPT-B005-04BIO-05M	Nut program selector	8	5

External control grip

OPT-HVS1

OPT-HTS1

Model	Power	Push button switch	Reverse Switch	Station signal-OK	Screen	Installation method
OPT-HVS1	DC24V	1 NO	1 NO	YES	NO	Vertically，2 threaded holes with 30mm distance
OPT-HTS1	DC24V	1 NO	1 NO	YES	NO	∅35mm Ball joint installation, Tool installation part are ordered separately

Pistol grip

It is suitable for tightening in the horizontal direction, improving the comfort of manual operation, stable grip, and ensuring more accurate tightening.

For large torque tightening, with the auxiliary handle, holding is more stable.

Pistol grip

Auxiliary handle

Model	Type	Torque range	Grip diameter/mm	Applicable screwdriver
OPT-PGP-C1-V1-DC1	Pistol grip	0.14~2Nm	34	Transducer screwdriver
OPT-PGP-C1-V1-DC2		2~20Nm	37	
OPT-SGP-C1-V1-DC2	Auxiliary handle	2~20Nm	37	