



THE BENEFITS OF CURRENT-CONTROLLED SCREWDRIVERS

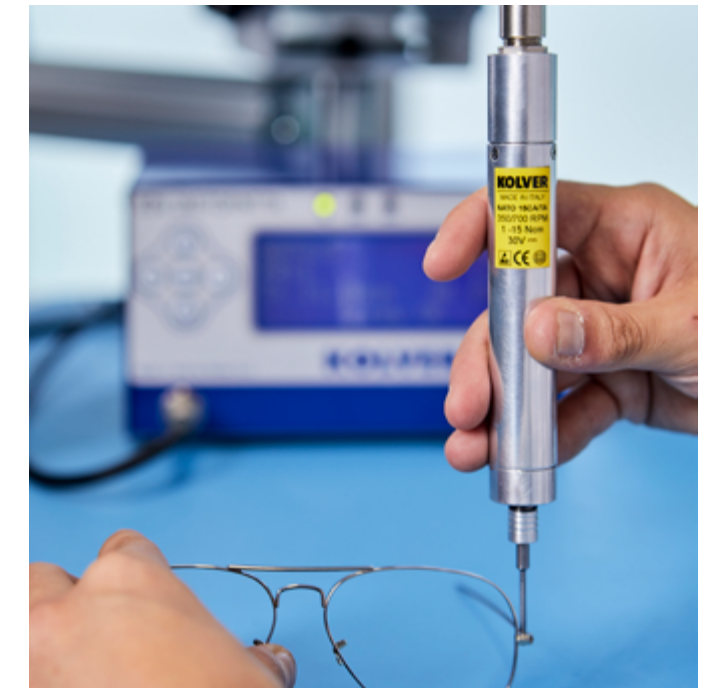
The PLUTO, MITO & NATO screwdriver family is the most advanced current-controlled tightening solution for torque applications up to 70 Nm and as low as 0.02 Nm. Extremely ergonomic, compact and full of functionalities, it is the right tool to boost productivity, resulting in high efficiency and cost reduction. Our current-controlled system is flexible and provides clear operator feedback. All PLUTO, MITO & NATO screwdrivers are ESD (electrostatic discharge) approved to guarantee the best quality, no matter the requirement of the surroundings.

KOLVER's Current-controlled solution means:

- High accuracy, normally better than $\pm 10\%$, Cmk always better than 1.66
- Torque & angle control and monitoring
- Ergonomic and lightweight design
- Multiple communication ports

Benefits of KOLVER's current-controlled tools:

- The best price-to-quality ratio
- Superior product quality
- Direct error detection and error proofing
- Reduction of incorrectly-tightened screws and stripped joints
- Improved process control and reduced setup time
- Industry 4.0 ready



PLUTO, MITO and NATO | Torque range 0.02 – 70 Nm

Our PLUTO, MITO and NATO screwdrivers offer high-precision at a competitive price, with a repeatability of $\pm 5\%$. Pick the one that best suits your application among the many current-controlled models ranging in torque from 0.02 Nm all the way up to 70 Nm.

Extremely versatile

Our PLUTO® Series screwdrivers feature a wide torque range: starting at 0.5 Nm with PLUTO3, they reach up to 70 Nm with PLUTO70ANG. Also, you can handle up to 8 different joints by connecting your PLUTO screwdriver to one of our EDU2AE/TOP multiprogram control units.

Precise low-torque screwdrivers

The NATO and MITO series are the ideal solution for high-precision low torques below 1.5 Nm. MITO tools operate within a torque range of 0.2 – 1.5 Nm, while NATO screwdrivers are designed for an even lower torque range of 0.01 – 0.5 Nm.

Long-lasting accuracy

PLUTO, MITO and NATO drivers feature an innovative coreless motor coupled with planetary gearboxes, producing extremely low inertia and minimal friction for long life and very accurate torque production.

Torque/Angle Control

The main parameters to be controlled are the tightening torque and the rotation angle of the screw, either with torque or angle priority. The screwdriver stops automatically when the pre-set angle and torque value have been reached and an indication of OK cycle (green led turned on) is given, otherwise a red led turns on if the tightened screw doesn't match the pre-set parameters. The final torque and angle values are also displayed.

Compact ergonomic design

All PLUTO, MITO and NATO screwdrivers feature an ESD-safe housing, either in hand-held option or aluminium body for automation. PLUTO and MITO drivers are available in pistol or inline style, catering to operator preference and comfort. NATO drivers are inline style, with a lever start actuation. Foot pedals are available in cases where the operator would like the convenience of manual operation with the NATO/CA series.

Available Housings



INLINE (PLUTO D, MITO D & NATO D) – Inline versions available in lever start, current-controlled style. PLUTO D available with reduced front ring upon request.



PISTOL GRIP – Trigger start, pistol grip available with top connector (PLUTO P/U and MITO15P/U) or bottom connector (PLUTO P and MITO15P).



ALUMINIUM BODY (PLUTO CA/SR, MITO CA and NATO CA) – PLUTO with start and reverse buttons. MITO and NATO they can also be used with foot pedals for manual operations. MITO also available with flange mount



ANGLE MODELS (PLUTO..ANG) – Inline models with angle head attached. Current-controlled style. Wrench blade attachments available upon request.





Inline Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
170015	MITO15D	0.35 - 1.5	450 - 850	216 x 33	0.35	Hex 1/4"
130203	PLUTO3D	0.5 - 2.5	370 - 1300	226 x 40	0.55	Hex 1/4"
130206	PLUTO6D	0.85 - 6	200 - 850	226 x 40	0.55	Hex 1/4"
130211/N	PLUTO10D/N	1.5 - 10	110 - 600	226 x 40	0.55	Hex 1/4"
130216/N	PLUTO15D/N	2.0 - 15	60 - 320	226 x 40	0.60	Hex 1/4"

Pistol grip Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Connector Option
170014	MITO15P	0.35 - 1.5	450 - 850	159 x 195 x 45	0.50	Bottom connector
170014/U	MITO15P/U	0.35 - 1.5	450 - 850	159 x 195 x 45	0.50	Top connector
130204	PLUTO3P	0.5 - 2.5	370 - 1300	159 x 174 x 45	0.55	Bottom connector
130205	PLUTO3P/U	0.5 - 2.5	370 - 1300	163 x 174 x 45	0.55	Top connector
130207	PLUTO6P	0.85 - 6	200 - 850	159 x 174 x 45	0.55	Bottom connector
130207/U	PLUTO6P/U	0.85 - 6	200 - 850	163 x 174 x 45	0.55	Top connector
130210/N	PLUTO10P/N	1.5 - 10	110 - 600	159 x 174 x 45	0.55	Bottom connector
130210/U/N	PLUTO10P/U/N	1.5 - 10	110 - 600	163 x 174 x 45	0.55	Top connector
130215/N	PLUTO15P/N	2.0 - 15	60 - 320	159 x 174 x 45	0.55	Bottom connector
130215/U/N	PLUTO15P/U/N	2.0 - 15	60 - 320	163 x 174 x 45	0.55	Top connector

Aluminium body Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
170016	MITO15CA	0.35 - 1.5	450 - 850	193 x 32	0.36	Hex 1/4"
170016/FN	MITO15CA/FN	0.35 - 1.5	450 - 850	271 x 33	0.4	Hex 1/4"
133221/SR	PLUTO20CA/SR	3.0 - 20	50 - 200	232 x 53	1.10	Sq 3/8"
133236/SR	PLUTO35CA/SR	3.0 - 35	40 - 140	247 x 57	1.50	Sq 3/8"
133250/SR	PLUTO50CA/SR	5.0 - 50	20 - 90	252 x 57	1.50	Sq 1/2"

Angle head PLUTO Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Bit Drive	Start Option
130203/A	PLUTO3ANG	0.5 - 2.5	370 - 1300	261 x 40	Hex 1/4"	Lever start
130206/A	PLUTO6ANG	1.0 - 6	200 - 850	261 x 40	Hex 1/4"	Lever start
130208	PLUTO8ANG	1.5 - 8	110 - 600	261 x 40	Hex 1/4"	Lever start
130216/A	PLUTO15ANG	2.0 - 13	100 - 320	286 x 40	Sq 3/8"	Lever start
133220	PLUTO20ANG	3.0 - 18	60 - 200	433 x 54	Sq 3/8"	Start/Reverse Buttons
133231	PLUTO30ANG	6.0 - 30	30 - 130	435 x 47	Sq 3/8"	Start/Reverse Buttons
133245	PLUTO45ANG	10 - 45	20 - 90	445 x 57	Sq 1/2"	Start/Reverse Buttons
133270	PLUTO70ANG	15 - 70	20 - 50	458 x 57	Sq 1/2"	Start/Reverse Buttons

Control units

Code	Model	Single Program	Torque Value in Nm	Serial Port	Multitorque (8 P-sets)	USB Port	PC Software	Weight kg	Dimensions mm
032000/HPRO	EDU2AE/HPRO	•	•	•	-	-	-	2.40	195 x 170 x 110
032000/TOP/E	EDU2AE/TOP/E	-	•	•	•	•	•	2.50	190 x 205 x 120

See page 21 for a complete list of features.

2D and 3D drawings available on kolver.com

IMPORTANT: Continuous use over 80% of torque range is not recommended.



Inline TA Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
160015/TA	NATO15D/TA	0.02 - 0.27	100 - 700	210 x 33	0.25	Half moon 4 mm
160050/TA	NATO50D/TA	0.05 - 0.5	50 - 700	210 x 33	0.25	Hex 1/4"
170015/TA	MITO15D/TA	0.35 - 1.5	450 - 850	216 x 33	0.35	Hex 1/4"
134203/TA	PLUTO3D/TA	0.5 - 2.5	370 - 1300	251 x 40	0.55	Hex 1/4"
134206/TA	PLUTO6D/TA	0.85 - 6	200 - 850	251 x 40	0.55	Hex 1/4"
134211/TA	PLUTO10D/TA	1.5 - 10	110 - 600	251 x 40	0.55	Hex 1/4"
134216/TA	PLUTO15D/TA	2.0 - 15	60 - 320	251 x 40	0.55	Hex 1/4"

Models with LED light ring

134203/TA/LED	PLUTO3D/TA/LED	0.5 - 2.5	370 - 1300	226 x 40	0.55	Hex 1/4"
134206/TA/LED	PLUTO6D/TA/LED	0.85 - 6	200 - 850	226 x 40	0.55	Hex 1/4"
134211/TA/LED	PLUTO10D/TA/LED	1.5 - 10	110 - 600	226 x 40	0.55	Hex 1/4"
134216/TA/LED	PLUTO15D/TA/LED	2.0 - 15	60 - 320	226 x 40	0.55	Hex 1/4"

Pistol grip TA Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Connector Option
130204/TA	PLUTO3P/TA	0.5 - 2.5	370 - 1300	159 x 174 x 45	0.55	Bottom connector
130205/TA	PLUTO3P/U/TA	0.5 - 2.5	370 - 1300	163 x 174 x 45	0.55	Top connector
130207/TA	PLUTO6P/TA	0.85 - 6	200 - 850	159 x 174 x 45	0.55	Bottom connector
130207/U/TA	PLUTO6P/U/TA	0.85 - 6	200 - 850	163 x 174 x 45	0.55	Top connector
130210/TA	PLUTO10P/TA	1.5 - 10	110 - 600	159 x 174 x 45	0.55	Bottom connector
130210/U/TA	PLUTO10P/U/TA	1.5 - 10	110 - 600	163 x 174 x 45	0.55	Top connector
130215/TA	PLUTO15P/TA	2.0 - 15	60 - 320	159 x 174 x 45	0.60	Bottom connector
130215/U/TA	PLUTO15P/U/TA	2.0 - 15	60 - 320	163 x 174 x 45	0.60	Top connector

Aluminium body TA Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
163015/TA	NATO15CA/TA	0.02 - 0.27	100 - 700	150 x 25	0.18	Half moon 4 mm
163050/TA	NATO50CA/TA	0.05 - 0.5	50 - 700	150 x 25	0.18	Hex 1/4"
133221/SR/TA	PLUTO20CA/SR/TA	3.0 - 20	50 - 200	232 x 53	1.10	Sq 3/8"
133236/SR/TA	PLUTO35CA/SR/TA	3.0 - 35	40 - 140	247 x 57	1.50	Sq 3/8"
133250/SR/TA	PLUTO50CA/SR/TA	5.0 - 50	20 - 90	252 x 57	1.50	Sq 1/2"

Angle head TA Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Bit Drive	Start Option
130203/A/TA	PLUTO3ANG/TA	0.5 - 2.5	370 - 1300	286 x 40	Hex 1/4"	Lever start
130206/A/TA	PLUTO6ANG/TA	1.0 - 6	200 - 850	286 x 40	Hex 1/4"	Lever start
130208/TA	PLUTO8ANG/TA	1.5 - 8	110 - 600	286 x 40	Hex 1/4"	Lever start
130216/A/TA	PLUTO15ANG/TA	2.0 - 13	100 - 320	286 x 40	Hex 1/4"	Lever start

Control units for TA Screwdrivers

Code	Model	NATO TA Series	PLUTO, MITO TA Series	Serial Port	Multitorque (8 P-sets)	Computer Interface	Torque & Angle	Weight kg	Dimensions mm
034000/HPRO/TA	EDU2AE/HPRO/TA	-	•	•	-	-	•	2.40	195 x 170 x 110
031000/TOP/NT/TA	EDU2AE/TOP/NT/TA	•	-	•	•	•	•	2.00	190 x 205 x 120
034000/TOP/TA	EDU2AE/TOP/TA	-	•	•	•	•	•	2.50	190 x 205 x 120

See page 21 for a complete list of features.

2D and 3D drawings available on kolver.com

IMPORTANT: Continuous use over 80% of torque range is not recommended.



EDU2AE Control Units | For PLUTO, MITO and NATO Screwdrivers

EDU2AE control units are meant to be used in combination with Kolver® current controlled PLUTO, MITO and NATO screwdrivers. EDU2AE series switching controllers act as an AC to DC transformer and torque controller. The electronic control circuit cuts the power supply to the motor as soon as the pre-set torque has been reached.

Universal usage

All units are equipped with a high power switching transformer with 90-260 V AC power supply for universal usage. EDU2AE control units are multilanguage: you can choose among English, Italian, German, French, Portuguese or Spanish.

Single & Multi-Torque

Choose the control unit that best suits your requirements among our single-torque controllers or multi-torque. Multi-torque control units are designed to expand the functionality of current-controlled screwdrivers by enabling multiple torque settings (up to 8) using one controller and one driver.

Extremely accurate

Thanks to the latest state-of-the-art advanced software for torque controlling it is now possible to reach the most accurate results with CM / CMK values higher than ever. The combination of the software and switching transformer allows these screwdrivers to reach a +/- 5% precision all over the torque range.

Better endurance

All units comply to norms 61000-6-2 and 61000-6-3, and therefore have better endurance in environments with high noise and interference levels. Improved EMC features are guaranteed thanks to their solid steel base and back panel.

Connectivity and Industry 4.0

All functions can be set and controlled via user interface screens or remotely via 15 input and 11 output connectors. A wide range of accessories for remote programming and PC interface is available for the complete EDU2AE series (see page 51). EDU2AE/TOP/E, EDU2AE/TOP/TA and EDU2AE/TOP/NT/TA come standard with the EXPAND software package to set, change and save all parameters via USB key & PC.

EDU2AE & Screwdriver Series Combination

Control units	Screwdriver models	
EDU2AE/HPRO EDU2AE/TOPE	Hand-held	Automation
	MITO D MITO P PLUTO D, D/N PLUTO P, P/N PLUTO P/U, P/U/N PLUTO CA/SR PLUTO ANG PLUTO ANG/SR	MITO CA MITO CA/FN PLUTO CA PLUTO CA/FN PLUTO CA/FN2
EDU2AE/TOP/TA	Hand-held	Automation
	MITO D/TA PLUTO D/TA PLUTO D/TA/LED PLUTO P/TA PLUTO CA/SR/TA	MITO CA/TA PLUTO CA/TA PLUTO CA/FN/TA PLUTO CA/FN2/TA
EDU2AE/TOP/NT/TA	Hand-held	Automation
	NATO D/TA	NATO CA/TA



Features	EDU2AE/HPRO	EDU2AE/TOPE	EDU2AE/HPRO/TA	EDU2AE/TOP/TA	EDU2AE/TOP/NT/TA
Torque & Angle			•	•	•
Multiple Programs and Sequences		•		•	•
Time, Ramp & Speed settings	•	•	•	•	•
Settable loosening speed & torque	•	•	•	•	•
Prevailing torque	•	•	•	•	•
Clockwise/anticlockwise tightening	•	•	•	•	•
Password protection	•	•	•	•	•
Calibration	•	•	•	•	•
Nm - lb/in - Kgf.cm selection	•	•	•	•	•
Screw count	•	•	•	•	•
Auto and pre reverse	•	•	•	•	•
End cycle signal	•	•	•	•	•
Screw, Program & Sequence reset		•		•	•
Lever error	•	•	•	•	•
Enable/Disable loosening		•		•	•
Barcode	•	•	•	•	•
Serial print	•	•	•	•	•
Error, motor on and correct screw signals	•	•	•	•	•
Optional back driver connector			•		
Use with DOCK04 double connector		•		•	•
Use with PRNTR1 serial printer	•	•	•	•	•
Printing options for each program		•		•	•
Use with TLS1	•	•	•	•	•
PC programming (EDU EXPAND)		•		•	•
USB data collection		•		•	•



Current-controlled Screwdrivers for Automation | Torque range 0.02 – 50 Nm

Kolver's CA screwdrivers are designed for automated and fixtured applications. Whether you're working with a robot or adapting your assembly line to Industry 4.0 standards, we have the right solution for automation in all its forms.

Perfect for automatic machines

Our CA screwdrivers are supplied in an aluminium body for a quick and easy integration with automatic machines and screwfeeding systems. PLUTO and MITO tools in CA/FN version are equipped with a flange mount and reciprocating spindle for high volume/high duty applications.

Robotic applications

Our CA screwdrivers can be easily interfaced with robots. The controller connects to robots to determine screw speed, torque and time out, and sends a signal to the robot when the screw reaches the specified torque.

The Torque/Angle Models

Automation requires accurate torque controlling techniques. TA automated systems feature advanced monitoring strategies such as torque and rotation angle of the screw, for precise torque and angle control on all automated operations.

Plenty of options

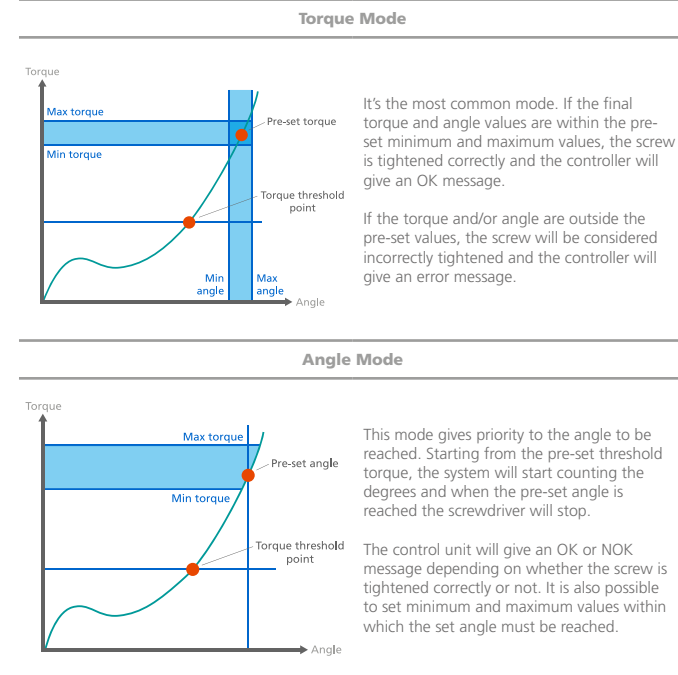
PLUTO, MITO and NATO automated torque & angle screwdrivers cover a wide torque range of 0.1-50 Nm: choose the tool that best suits your application and set the desired working cycle through TOP/TA control units. You can set 8 independent programs either directly on control unit or remotely.

Industry 4.0

Interconnection, automatic control and continuous monitoring are fundamental aspects of Industry 4.0. Simply connect the screwdriver controller to your PLC, robot or machine through the proper connectors to manage input/output signals such as start, stop, error and more.

You can also get data reports of the full tightening procedure on advanced control units like EDU2AE/TOP/E and EDU2AE/TOP/TA.

Torque and Angle Functionality



Aluminium housing Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
130303	PLUTO3CA	0.5 - 2.5	370 - 1300	168 x 40	0.50	Hex 1/4"
133206	PLUTO6CA	0.85 - 6	200 - 850	168 x 40	0.50	Hex 1/4"
133211/N	PLUTO10CA/N	1.5 - 10	110 - 600	168 x 40	0.50	Hex 1/4"
133216/N	PLUTO15CA/N	2.0 - 15	60 - 320	168 x 40	0.50	Hex 1/4"
133221	PLUTO20CA	3.0 - 20	50 - 200	232 x 47	1.10	Sq 3/8"
133236	PLUTO35CA	3.0 - 35	40 - 140	247 x 57	1.50	Sq 3/8"
133250	PLUTO50CA	5.0 - 50	20 - 90	252 x 57	1.50	Sq 1/2"

Aluminium housing Screwdrivers with flange mount

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
130303/FN2	PLUTO3CA/FN2	0.5 - 2.5	370 - 1300	268 x 40	0.70	Sq 3/8"
130303/FN2/1-4	PLUTO3CA/FN2/1-4	0.5 - 2.5	370 - 1300	247 x 40	0.70	Hex 1/4"
133206/FN2	PLUTO6CA/FN2	0.85 - 6	200 - 850	268 x 40	0.70	Sq 3/8"
133206/FN2/1-4	PLUTO6CA/FN2/1-4	0.85 - 6	200 - 850	247 x 40	0.70	Hex 1/4"
133211/FN2	PLUTO10CA/FN2	1.5 - 10	110 - 600	268 x 40	0.70	Sq 3/8"
133211/FN2/1-4	PLUTO10CA/FN2/1-4	1.5 - 10	110 - 600	247 x 40	0.70	Hex 1/4"
133216/FN2	PLUTO15CA/FN2	2.0 - 15	60 - 320	268 x 40	0.70	Sq 3/8"
133221/FN	PLUTO20CA/FN	3.0 - 20	50 - 200	323 x 47	1.35	Sq 3/8"
133236/FN	PLUTO35CA/FN	3.0 - 35	40 - 140	338 x 57	1.95	Sq 3/8"
133250/FN	PLUTO50CA/FN	5.0 - 50	20 - 90	351 x 57	1.95	Sq 1/2"

Aluminium housing TA Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
163015/TA	NATO15CA/TA	0.02 - 0.27	100 - 700	150 x 25	0.18	Half moon 4 mm
163050/TA	NATO50CA/TA	0.05 - 0.5	50 - 700	150 x 25	0.18	Hex 1/4"
170016/TA	MITO15CA/TA	0.35 - 1.5	450 - 850	193 x 32	0.36	Hex 1/4"
130303/TA	PLUTO3CA/TA	0.5 - 2.5	370 - 1300	168 x 40	0.50	Hex 1/4"
133206/TA	PLUTO6CA/TA	0.85 - 6	200 - 850	168 x 40	0.50	Hex 1/4"
133211/TA	PLUTO10CA/TA	1.5 - 10	110 - 600	168 x 40	0.50	Hex 1/4"
133216/TA	PLUTO15CA/TA	2.0 - 15	60 - 320	168 x 40	0.50	Hex 1/4"
133221/TA	PLUTO20CA/TA	3.0 - 20	50 - 200	232 x 47	1.10	Sq 3/8"
133236/TA	PLUTO35CA/TA	3.0 - 35	40 - 140	247 x 57	1.50	Sq 3/8"
133250/TA	PLUTO50CA/TA	5.0 - 50	20 - 90	252 x 57	1.50	Sq 1/2"

Aluminium housing TA Screwdrivers with flange mount

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
170016/FN/TA	MITO15CA/FN/TA	0.35 - 1.5	450 - 850	271 x 32	0.40	Hex 1/4"
130303/FN2/TA	PLUTO3CA/FN2/TA	0.5 - 2.5	370 - 1300	268 x 40	0.70	Sq 3/8"
130303/FN2/TA/1-4	PLUTO3CA/FN2/TA/1-4	0.5 - 2.5	370 - 1300	247 x 40	0.70	Hex 1/4"
133206/FN2/TA	PLUTO6CA/FN2/TA	0.85 - 6	200 - 850	268 x 40	0.70	Sq 3/8"
133206/FN2/TA/1-4	PLUTO6CA/FN2/TA/1-4	0.85 - 6	200 - 850	247 x 40	0.70	Hex 1/4"
133211/FN2/TA	PLUTO10CA/FN2/TA	1.5 - 10	110 - 600	268 x 40	0.70	Sq 3/8"
133211/FN2/TA/1-4	PLUTO10CA/FN2/TA/1-4	1.5 - 10	110 - 600	247 x 40	0.70	Hex 1/4"
133216/FN2/TA	PLUTO15CA/FN2/TA	2.0 - 15	60 - 320	268 x 40	0.70	Sq 3/8"
133221/FN/TA	PLUTO20CA/FN/TA	3.0 - 20	50 - 200	323 x 47	1.35	Sq 3/8"
133236/FN/TA	PLUTO35CA/FN/TA	3.0 - 35	40 - 140	338 x 57	1.95	Sq 3/8"
133250/FN/TA	PLUTO50CA/FN/TA	5.0 - 50	20 - 90	351 x 57	1.95	Sq 1/2"

Control units

Code	Model	Torque & Angle	Single Program	Multitorque	Serial Port	USB Port	PC Software	Weight kg	Dimensions mm
032000/HPRO	EDU2AE/HPRO		•		•			2.40	195 x 170 x 110
032000/TOP/E	EDU2AE/TOP/E			•		•	•	2.50	190 x 205 x 120
034000/HPRO/TA	EDU2AE/HPRO/TA	•	•		•			2.40	195 x 170 x 110
031000/TOP/NT/TA	EDU2AE/TOP/NT/TA	•		•		•	•	2.00	190 x 205 x 120
034000/TOP/TA	EDU2AE/TOP/TA	•		•		•	•	2.50	190 x 205 x 120