

CURRENT-CONTROLLED SCREWDRIVERS



NATO and MITO Screwdrivers | Torque range 0.02 – 1.5 Nm

NATO and MITO screwdrivers are the ideal solution for high-precision low torques.

Their accurate and smooth torque control makes them perfect for the electronics, mobile, watchmaking and eyewear industry.

Precise low-torque screwdrivers

Kolver's experience with current-controlled technology has led to the creation of the NATO and MITO series; truly accurate current-controlled torque drivers designed for applications in which torques below 1.5 Nm are required.

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

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

Compact ergonomic design

All NATO and MITO screwdrivers feature an ESD-safe housing, either in hand-held option or aluminium body for automation.

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 (NATO D & MITO D) – Inline versions available in lever start, current-controlled style.



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



ALUMINIUM BODY (NATO CA and MITO CA) – For automation, they can also be used with foot pedals for manual operations. MITO also available with flange mount.





Inline NATO 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"

NATO Series available in TA (torque & angle) only. Further information about TA series for manual use available on page 20.

Aluminium housing NATO 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"

NATO Series available in TA (torque & angle) only. Further information about TA series for automation available on page 24.

Control units for NATO Screwdrivers

Code	Model	Single Program	Torque Value in Nm	Serial Port	Multitorque (8 P-sets)	USB Port	PC Software	Weight kg	Dimensions mm
031000/TOP/NT/TA	EDU2AE/TOP/NT/TA	-	•	•	•	•	•	2.00	190 x 205 x 120

See page 19 for a complete list of features (see EDU2AE/TOP/TA).

Inline MITO 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"

Pistol grip MITO 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	163 x 195 x 45	0.50	Top connector

Aluminium housing MITO 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"
Model with flange mount						
170016/FN	MITO15CA/FN	0.35 - 1.5	450 - 850	271 x 33	1.3	Hex 1/4"

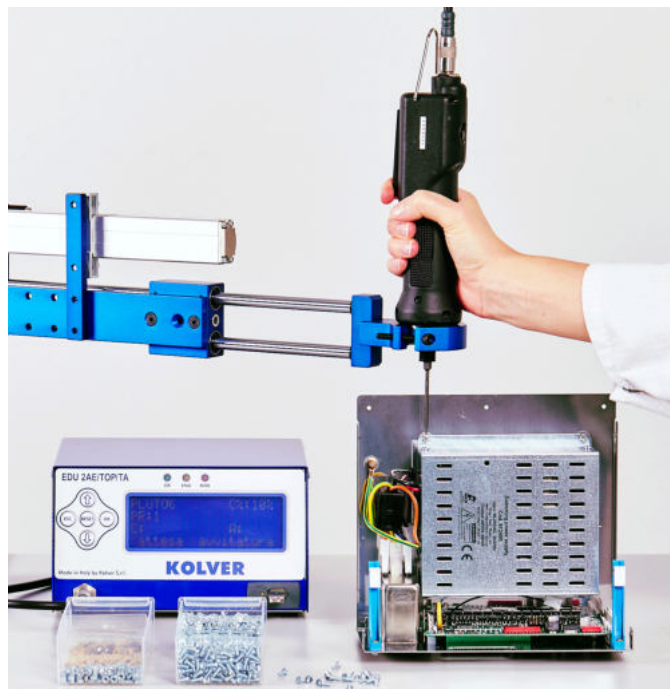
Control units for MITO Screwdrivers

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

See page 19 for a complete list of features.

2D and 3D drawings available on kolver.it

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



PLUTO Hand-held Screwdrivers | Torque range 0.5 – 70 Nm

PLUTO® (PLUs TORque) are among the most advanced DC tools in the assembly market. Priced at the same level as obsolete air tools, PLUTO® screwdrivers are available in plenty of options to meet any assembly requirement.

Extremely versatile

PLUTO® Series screwdrivers feature a wide torque range: starting at 0.5 Nm with PLUTO3, they reach up to 70 Nm with PLUTO70ANG. Pick the one that best suits your application among the many current-controlled models.

Also, you can handle up to 8 different joints by connecting your PLUTO screwdriver to one of our EDU2AE/TOP multiprogram control units (see page 19).

Precise and accurate

High performances are guaranteed on any type of joint. PLUTO® current-controlled tools can reach 70 Nm with a repeatability of +/-5% with a unique electronic torque control system.

Long-lasting quality

PLUTO® Screwdrivers feature an innovative coreless motor with low inertia and friction and absence of iron losses for extreme efficiency and extended life.

Planetary gearboxes are made of high-quality composite materials for excellent accuracy and repeatability throughout the wide 0.5 - 70 Nm torque range.

Highest environmental protection requirements

- Low energy consumption
- No polluting emissions
- Low noise level
- Minimal vibrations
- ESD-safe

Available Housings



INLINE (PLUTO..D) – Inline versions available in lever start. Current-controlled style. Bit Drive: 1/4" hex quick change chuck. Available with reduced front ring upon request.



PISTOL GRIP – Trigger start, pistol grip available with top connector (PLUTO..P/U) or bottom connector (PLUTO..P). Current-controlled style. Bit Drive: 1/4" hex quick change chuck



ALUMINIUM BODY (PLUTO..CA/SR) – For 20+ Nm torque models. Current-controlled style. With start and reverse buttons.



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



ESD-safe housing



Inline PLUTO Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
130203	PLUTO3D	0.5 - 3	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 PLUTO Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Connector Option
130204	PLUTO3P	0.5 - 3	370 - 1300	159 x 174 x 45	0.55	Bottom connector
130205	PLUTO3P/U	0.5 - 3	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 PLUTO Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
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 for PLUTO Screwdrivers

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

See page 19 for a complete list of features.

2D and 3D drawings available on kolver.it

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



EDU2AE Control Units | For PLUTO and MITO Screwdrivers

EDU2AE control units are meant to be used in combination with Kolver current controlled MITO and PLUTO and/or clutch PLUTO 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 PLUTO 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 the MITO & PLUTO 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/TOPI/E and EDU2AE/TOPI/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	
	Hand-held	Automation
EDU2AE EDU2AE/HPRO EDU2AE/TOPI EDU2AE/TOPI/E	MITO D	MITO CA
	MITO P	MITO CA/FN
	PLUTO D, D/N	PLUTO CA
	PLUTO P, P/N	PLUTO CA/FN
	PLUTO P/U, P/U/N	PLUTO CA/FN2
	PLUTO CA/SR	
	PLUTO ANG	
	PLUTO ANG/SR	
EDU2AE/TOPI/TA	Hand-held	Automation
	MITO D/TA	MITO CA/TA
	PLUTO D/TA	PLUTO CA/TA
	PLUTO D/TA/LED	PLUTO CA/FN/TA
	PLUTO P/TA	PLUTO CA/FN2/TA
	PLUTO CA/SR/TA	



Control Units for PLUTO & MITO Screwdrivers / **EDU2AE Series**

Features	EDU2AE	EDU2AE/FR	EDU2AE/HPRO	EDU2AE/TOP	EDU2AE/TOP/E	EDU2AE/TOP/TA
Switching power supply	•	•	•	•	•	•
Settable Torque percentage	•		•	•	•	•
Ramp and Speed settings	•	•	•	•	•	•
Speed 1 and Speed 2 settings	•		•	•	•	•
Min/max or infinite time settings	•	•	•	•	•	•
Auto reverse	•	•	•	•	•	•
Pre Reverse			•	•	•	•
Settable loosening speed	•	•	•	•	•	•
Settable loosening torque	•		•	•	•	•
Run time	•	•	•	•	•	•
Prevailing torque			•	•	•	•
Clockwise/anticlockwise tightening			•	•	•	•
Password protected		•	•	•	•	•
Calibration			•	•	•	•
Nm - lb/in - Kgf.cm selection			•	•	•	•
Settable Min/max torque			•	•	•	•
Screw count	•	•	•	•	•	•
End cycle signal		•	•	•	•	•
Screw reset				•	•	•
Program reset		•	•	•	•	•
Sequence reset			•	•	•	•
Multitorque				•	•	•
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	•	•	•	•	•	•
>> w/ automatic program switch				•	•	•
PC programming (EDU EXPAND)					•	•
USB flash drive & port					•	•



Torque & Angle Hand-held Screwdrivers | Torque range 0.02 – 50 Nm

Industrial tightening requires precise control strategies. TA systems feature Torque and Angle monitoring, making it possible to manage both torque and rotation angle of the screw.

The Torque/Angle Control

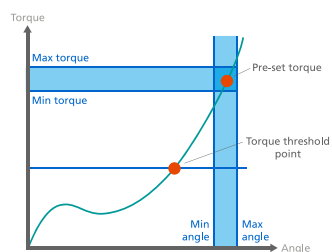
The main parameters to be controlled are the tightening torque and the rotation angle of the screw, either with torque or angle priority. The screwdriver stops automatically when the pre-set angle and torque value have been reached and an indication of OK cycle (green led turned on) is given, otherwise 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.

Main features

- Latest generation ergonomic ESD-safe housing.
- Automatic model recognition.
- 'EDU Expand' software for remote programming via USB port and PC.
- USB port on front panel for uploading and downloading programs.
- Easy to program user interface screens.
- Password protected.
- Torque value in Nm, lbf.in and kgf.cm.
- Angle value in degrees.
- Precision comparable to class 'A' torque scatter performance class (as defined in ISO5393-2017, between 25% to 75% of the torque range)..
- 8 independent programs including the options:
 - Min/Max torque value.
 - Min/Max angle value.
 - Rundown speed.
 - Slow start/Soft stop.
 - Hard/soft joint.
 - Min/Max rundown time.
 - Prevailing torque (threadcutting).
 - Auto reverse if required.
- 6 Torque & Angle strategies:
 - Torque priority: angle count from torque threshold (T) or from remote input (T/I) or from lever input (T/L).
 - Angle priority: driver stops when angle is reached from threshold torque (A) or from remote input (A/I) or from lever (A/L).

EDU2AE/TOP/TA Torque and Angle Functionalities

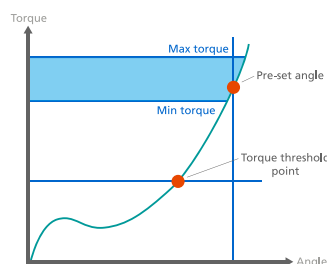
Torque Mode



It's the most common mode. If the final torque and angle values are within the pre-set minimum and maximum values, the screw is tightened correctly and the controller will give an OK message.

If the torque and/or angle are outside the pre-set values, the screw will be considered incorrectly tightened and the controller will give an error message.

Angle Mode



This mode gives priority to the angle to be reached. Starting from the pre-set threshold torque, the system will start counting the degrees and when the pre-set angle is reached the screwdriver will stop.

The control unit will give an OK or NOK message depending on whether the screw is tightened correctly or not. It is also possible to set minimum and maximum values within which the set angle must be reached.





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 - 3	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						
130203/TA/LED	PLUTO3D/TA/LED	0.5 - 3	370 - 1300	226 x 40	0.55	Hex 1/4"
130206/TA/LED	PLUTO6D/TA/LED	0.85 - 6	200 - 850	226 x 40	0.55	Hex 1/4"
130211/TA/LED	PLUTO10D/TA/LED	1.5 - 10	110 - 600	226 x 40	0.55	Hex 1/4"
130216/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 - 3	370 - 1300	159 x 174 x 45	0.55	Bottom connector
130205/TA	PLUTO3P/U/TA	0.5 - 3	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	0.55	Bottom connector
130215/U/TA	PLUTO15P/U/TA	2.0 - 15	60 - 320	163 x 174 x 45	0.55	Top connector

Aluminium body TA Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
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
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 19 for a complete list of features.

2D and 3D drawings available on kolver.it

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



PLUTO Screwdrivers for Automation | Torque range 0.5 – 50 Nm

PLUTO 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.

Long-lasting quality

PLUTO® Screwdrivers feature an innovative coreless motor with low inertia and friction and absence of iron losses for extreme efficiency and extended life.

Planetary gearboxes are made of high-quality composite materials for excellent accuracy and repeatability throughout the wide 0.5 - 50 Nm torque range.

Perfect for automatic machines

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

Robotic applications

Our PLUTO CA screwdrivers can be easily interfaced with robots. The EDU2AE screwdriver controller connects to robots to determine screw speed, torque and time out. The controller sends a signal to the robot when the screw reaches the specified torque.

Industry 4.0 ready

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.

Available Housings



ALUMINIUM BODY (PLUTO CA and PLUTO CA/N) – Specifically designed for automation. Easy to install on any machine or robot.



ALUMINIUM BODY WITH FLANGE MOUNT (PLUTO CA/FN and PLUTO CA/FN2) – Ideal for automated high volume/high duty applications. Flange and telescopic spindle available together or separately.



Robotic application
SCAN TO WATCH





Aluminium housing PLUTO Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
130303	PLUTO3CA	0.5 - 3	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 PLUTO Screwdrivers with flange mount

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
130303/FN2	PLUTO3CA/FN2	0.5 - 3	370 - 1300	268 x 40	0.70	Sq 3/8"
130303/FN2/1-4	PLUTO3CA/FN2/1-4	0.5 - 3	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"

Control units for PLUTO Screwdrivers

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

See page 19 for a complete list of features.

2D and 3D drawings available on kolver.it

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



Torque & Angle Screwdrivers for Automation | Torque range 0.02 – 50 Nm

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.

The 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.

Easy interface

TA Screwdrivers work in combination with EDU2AE/TOP/TA control units, which allow to set, change and save all parameters via PC, USB key and a wide range of I/O connections for an easy interface with your PLC, robot or machine.

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.

TA automated screwdrivers give you total control over automated applications.

Industry 4.0

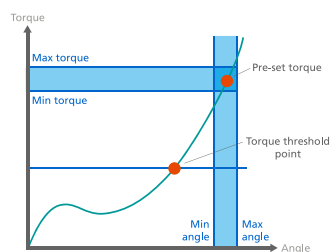
Interconnection, automatic control and continuous monitoring are fundamental aspects of Industry 4.0.

Through EDU2AE/TOP/TA control units you can easily manage input and output signals such as start, stop, error and more.

You can also get data reports of the full tightening procedure on PC, USB key or serial connection.

EDU2AE/TOP/TA Torque and Angle Functionalities

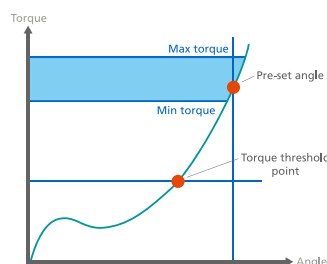
Torque Mode



It's the most common mode. If the final torque and angle values are within the pre-set minimum and maximum values, the screw is tightened correctly and the controller will give an OK message.

If the torque and/or angle are outside the pre-set values, the screw will be considered incorrectly tightened and the controller will give an error message.

Angle Mode



This mode gives priority to the angle to be reached. Starting from the pre-set threshold torque, the system will start counting the degrees and when the pre-set angle is reached the screwdriver will stop.

The control unit will give an OK or NOK message depending on whether the screw is tightened correctly or not. It is also possible to set minimum and maximum values within which the set angle must be reached.





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 - 3	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 - 3	370 - 1300	268 x 40	0.70	Sq 3/8"
130303/FN2/TA/1-4	PLUTO3CA/FN2/TA/1-4	0.5 - 3	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 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
031000/TOP/NT/TA	EDU2AE/TOP/NT/TA	•	-	•	•	•	•	2.00	190 x 205 x 120
032000/TOP/TA	EDU2AE/TOP/TA	-	•	•	•	•	•	2.50	190 x 205 x 120

See page 19 for a complete list of features.

2D and 3D drawings available on kolver.it

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



THE BENEFITS OF CURRENT-CONTROLLED SCREWDRIVERS

The MITO & PLUTO screwdriver range is the most advanced current-controlled tightening solution for torque applications up to 70 Nm. Extremely ergonomic, compact and full of functionalities, it is the right tool to boost productivity, resulting in high efficiency and cost reduction.

The MITO & PLUTO system is flexible and provides clear operator feedback. All MITO & PLUTO 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 and angle control and monitoring
- Ergonomic and lightweight design
- Multiple communication ports

Benefits of KOLVER's current-controlled tools:

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