



## MITO Screwdrivers | Torque range 0.35 – 1.5 Nm

MITO screwdrivers are the ideal solution for high-precision low torques. Their accurate and smooth torque control makes them perfect for the mobile, watchmaking and eyewear industry.

### Precise low-torque screwdrivers

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

### Long-lasting accuracy

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 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.

Foot pedals are available in cases where the operator would like the convenience of manual operation with the MITO/CA series.

### Available Housings



INLINE (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 (MITO..CA) – For automation, they can also be used with foot pedals for manual operations. Also available with flange mount.





## 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

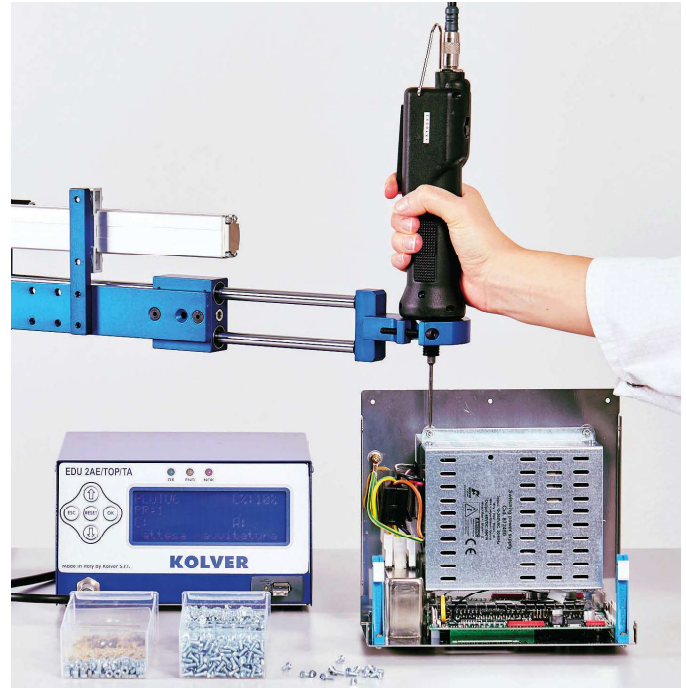
Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
170016	MITO15CA	0.35 - 1.5	450 - 850	193 x 32	0.36	Hex 1/4"
<b>Model with flange mount</b>						
170016/FN	MITO15CA/FN	0.35 - 1.5	450 - 850	271 x 33	1.3	Hex 1/4"

## 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 18 for a complete list of features.

**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 18).

### 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.



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

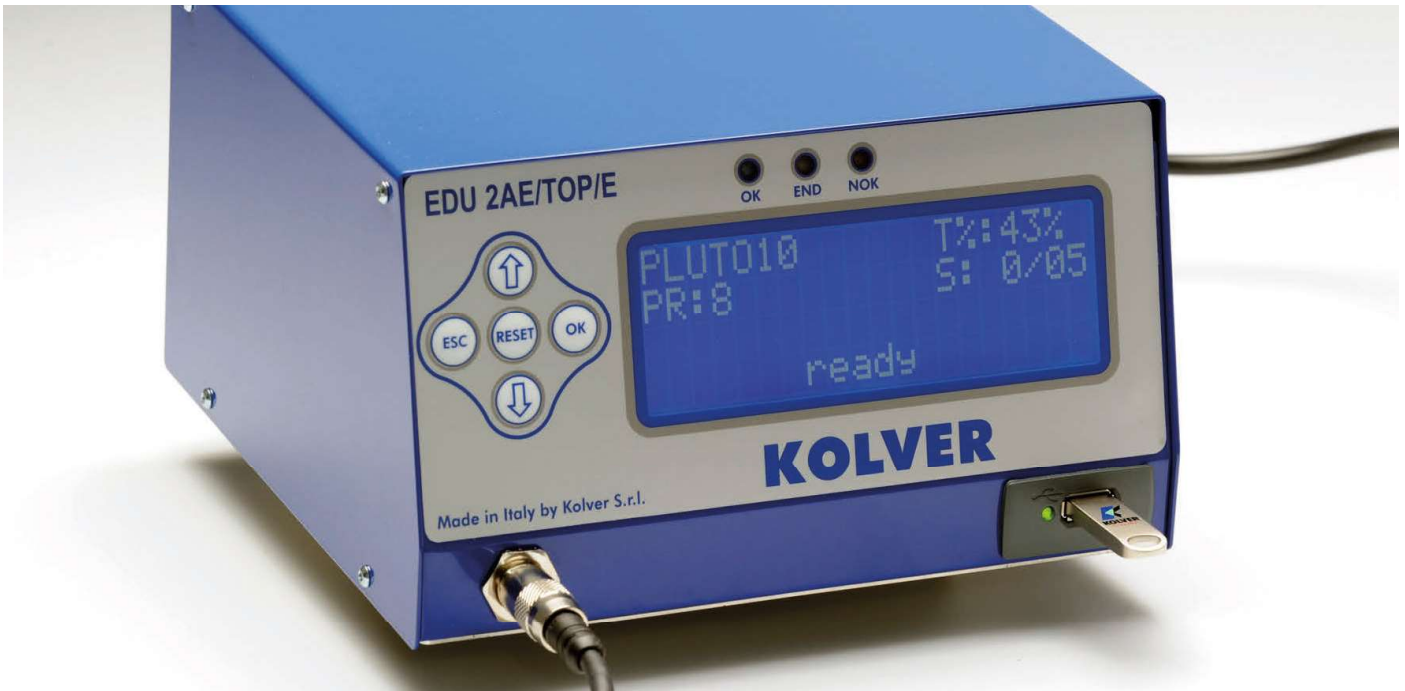
Code	Model	Torque Nm	RPM min-max	Dimensions mm	Bit Drive	Start Option
130203/A	PLUTO3ANG	0.5 - 2.5	370 - 1300	261 x 40	Hex 1/4"	Lever start
130206/A	PLUTO6ANG	1.0 - 6	200 - 850	261 x 40	Hex 1/4"	Lever start
130208	PLUTO8ANG	1.5 - 8	110 - 600	261 x 40	Hex 1/4"	Lever start
130216/A	PLUTO15ANG	2.0 - 13	100 - 320	286 x 40	Sq 3/8"	Lever start
133220	PLUTO20ANG	3.0 - 18	60 - 200	302 x 40	Sq 3/8"	Start/Reverse Buttons
133231	PLUTO30ANG	6.0 - 30	30 - 130	435 x 54	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 18 for a complete list of features.

**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.

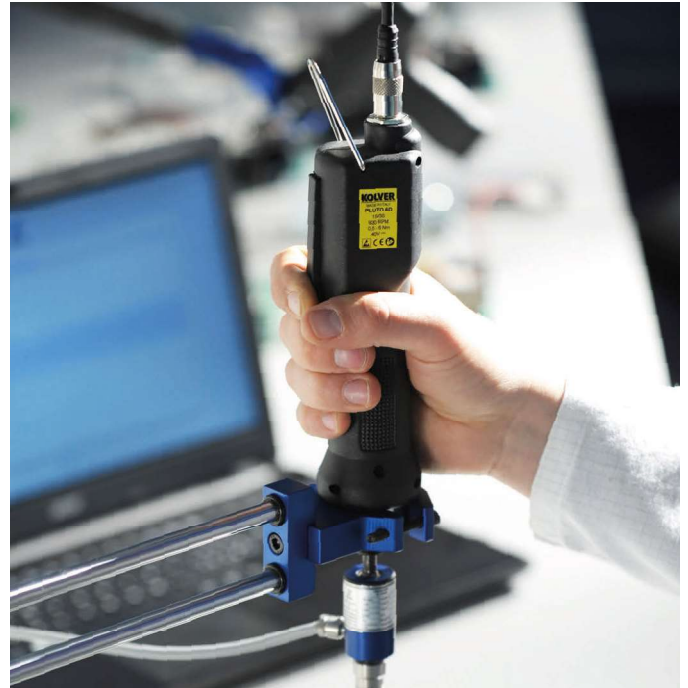
### EDU2AE & Screwdriver Series Combination

Control units	Screwdriver models	
	Hand-held	Automation
<b>EDU2AE</b> <b>EDU2AE/HPRO</b> <b>EDU2AE/TOP</b> <b>EDU2AE/TOPI/E</b>	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
<b>EDU2AE/TOPI/TA</b>	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



# 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 and 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 screwdriver connector on back panel		•	•			
Multilanguage	•	•	•	•	•	•
Use with DOCK04 double output connector				•	•	•
Use with PRNTR1 serial printer		•	•	•	•	•
Printing options for each program				•	•	•
Use with TLS1	•	•	•	•	•	•
>> w/ automatic program switch				•	•	•
PC programming (EDU EXPAND software)					•	•
USB flash drive & port					•	•



## PLUTO Clutch Screwdrivers | Torque range 0.5 – 7 Nm

PLUTO® (PLUs TORque) clutch screwdrivers combine the versatility of PLUTO tools with the precision of clutch screwdrivers.

### Precise and accurate

High performances are guaranteed on any type of joint. PLUTO® clutch models ensure an excellent accuracy on the whole torque range.

### 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 and clutches are made of high-quality composite materials for excellent accuracy and repeatability throughout the whole torque range.

### Hand-held and fixture mount models

PLUTO FR are available in inline or pistol grip ESD-safe housing. Angle attachments for hand-held tools are also available. PLUTO FR/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.

### Specific control unit

Any PLUTO FR operates with a specific control unit, model EDU2AE/FR. It is designed to best run PLUTO FR screwdrivers, with the addition of some high-end features such as password protection and serial print.

### Highest environmental protection requirements

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

### Available Housings



INLINE (PLUTO..FR) – Inline versions available in lever start. Clutch style.

Bit Drive: 1/4" hex quick change chuck



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

Clutch style.  
Bit Drive: 1/4" hex quick change chuck



ANGLE MODELS (PLUTO FR/ANG) – Inline models with angle head attached. Clutch style.



ALUMINIUM BODY (PLUTO FR/CA and PLUTO FR/CA/FN) – Specifically designed for automation. Easy to install on any machine or robot. Flange and telescopic spindle for automated high volume/high duty applications available together or separately.



ESD-safe housing



## Inline PLUTO Clutch Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Output
131203/HS	PLUTO3FR/HS	0.5 - 2.8	1550 - 2400	259 x 40	0.55	Hex 1/4"
131205	PLUTO5FR	1 - 5	600 - 1000	274 x 40	0.55	Hex 1/4"
131207	PLUTO7FR	1.5 - 7	350 - 600	274 x 40	0.55	Hex 1/4"

## Pistol grip PLUTO Clutch Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Connector Option
131204/HS	PLUTO3FR/P/HS	0.5 - 2.8	1550 - 2400	158 x 224 x 45	0.55	Bottom connector
131204/U/HS	PLUTO3FR/P/U/HS	0.5 - 2.8	1550 - 2400	163 x 232 x 45	0.55	Top connector
131206	PLUTO5FR/P	1 - 5	600 - 1000	158 x 224 x 45	0.55	Bottom connector
131206/U	PLUTO5FR/P/U	1 - 5	600 - 1000	163 x 232 x 45	0.55	Top connector
131208	PLUTO7FR/P	1.5 - 7	350 - 600	158 x 224 x 45	0.55	Bottom connector
131208/U	PLUTO7FR/P/U	1.5 - 7	350 - 600	163 x 232 x 45	0.55	Top connector

## Angle head PLUTO Clutch Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Output	Start Option
131205/A	PLUTO5FR/ANG	1 - 5	600 - 1000	336 x 40	Hex 1/4"	Lever start
131207/A	PLUTO7FR/ANG	1.5 - 7	350 - 600	336 x 40	Hex 1/4"	Lever start

## Aluminium housing PLUTO Clutch Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Output
133203/HS	PLUTO3FR/CA/HS	0.5 - 2.8	1550 - 2400	252 x 40	0.75	Hex 1/4"
133205	PLUTO5FR/CA	1 - 5	600 - 1000	252 x 40	0.75	Hex 1/4"
133207	PLUTO7FR/CA	1.5 - 7	350 - 600	252 x 40	0.75	Hex 1/4"

## Aluminium housing PLUTO Clutch Screwdrivers with Flange Mount

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Output
133205/FN	PLUTO5FR/CA/FN	1 - 5	600 - 1000	328 x 40	0.80	Hex 1/4"
133207/FN	PLUTO7FR/CA/FN	1.5 - 7	350 - 600	328 x 40	0.80	Hex 1/4"

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

*PLUTO Screwdrivers work in combination with EDU2AE/FR controllers. See page 18 for further information.*