



Technology that connects



Hand screw driver

Kolver

FAB & RAF Series

with up to 3.8 Nm torque

Electrical screw driver with mechanical shut-off clutch for industrial manufacturing

- low voltage with 18 - 30 V DC
- adjustable shut-off clutch (with optional protection sleeve)
- ergonomic housing
- ESD-proofed housing (certified using the SP Method 2472 (Ericsson))
- electrical drive consumes less energy (as opposed to a pneumatic drive)
- clockwise and anti-clockwise rotation
- noise level max. 55 dB (A)
- connection cable 2.5 m

Four designs:

- straight design with lever
- straight design with push start
- pistol shape with lever (power connection underneath)
- pistol shape with lever (power connection on top)



Order-no.	Model	Torque Nm	Screw size	Max. speed	Start option	Dimensions L x Ø and W x H x D mm	Weight kg	Design
H00006	FAB10RE/FR	0.05-0.8	M2.5	1000	lever	226x36	0.48	straight
H00007	FAB12RE/FR	0.2-1.2	M3	1000	lever	226x36	0.48	straight
H00004	FAB12PS/FR	0.2-1.2	M3	1000	push start	226x36	0.48	straight
H00016	FAB12PP/FR	0.2-1.2	M3	1000	lever	200x150x34	0.55	pistol grip
H00025	FAB12PP/FR/U	0.2-1.2	M3	1000	lever	200x150x34	0.55	pistol grip with top connector
H00008	FAB18RE/FR	0.3-1.8	M4	650	lever	226x36	0.48	straight
H00003	FAB18PS/FR	0.3-1.8	M4	650	push start	226x36	0.48	straight
H00017	FAB18PP/FR	0.3-1.8	M4	650	lever	200x150x34	0.55	pistol grip
H00026	FAB18PP/FR/U	0.3-1.8	M4	650	lever	200x150x34	0.55	pistol grip with top connector
H00009	RAF32NS/FR	0.7-3.2	M5	1000	lever	247x40	0.65	straight
H00002	RAF32PS/FR	0.7-3.2	M5	1000	push start	247x40	0.65	straight
H00018	RAF32PP/FR	0.7-3.2	M5	1000	lever	200x150x40	0.70	pistol grip
H00027	RAF32PP/FR/U	0.7-3.2	M5	1000	lever	200x150x40	0.70	pistol grip with top connector
H00010	RAF38NS/FR	0.9-3.8	M5	650	lever	247x40	0.65	straight
H00001	RAF38PS/FR	0.9-3.8	M5	650	push start	247x40	0.65	straight
H00019	RAF38PP/FR	0.9-3.8	M5	650	lever	200x150x40	0.70	pistol grip
H00028	RAF38PP/FR/U	0.9-3.8	M5	650	lever	200x150x40	0.70	pistol grip with top connector

FAB & RAF Series

Controls



All Kolver screw driver work with a control device, which supplies the screw mechanism with power, and the motor switches off when the manually selected torque setting for the cut-off clutch is reached.

Communication with other client controls is possible with the SG version.

Input: start signal as soon as screw direction is clockwise or anti-clockwise.

Output: cut-off signal via the cut-off clutch on the hand-held unit and the motor operating signal, which enables monitoring the cycle time.

Control features:

- operating range between 90 V and 250 V (50 / 60 Hz)
- variable speed reduction to 60%
- soft start of 0 - 2 sec. before selected speed is reached
- indicator lights for power supply and cut-off clutch
- light weight: 0.6 kg

Accessories

- ACE screw counter
- positioning arm with TLS screw position control
- ANG angle head attachment
- 5 m spiral cord
- connector box for two hand screw drivers in one control dock
annot operate both hand screw drivers at the same time.)



soft start and speed control



ACE Screw counter



spiral cord



connector box for two hand screwdrivers

Order-no.	Model	Functions	Dimensions W x H x D mm	Weight kg	For screw driver model
H00034	EDU1FR	input: 90 – 260 V output: 18 – 30 V / 120 VA soft start (0-2 seconds) and speed reduction (60% to 100 %)	138x118x67	0.60	all FAB and RAF
H00035	EDU1FR/SG	additionally IO to customer PLC: input 24 V: signal for start and for direction (I / r) output 24 V: torque reached and lever signal	138x118x67	0.60	all FAB and RAF

Pluto Serie

With up to 19 Nm torque



Electrical screw driver PLUTO (PLUS TORque) with power control for industrial manufacturing

Low voltage at 30 V DC

- planetary gearing, torque precision
- light weight: 470 g
- electronic adjustment of the target torque via the control device (power torque) means wear-free torque switching
- ergonomic ESD-proofed housing
- suitable for clean room applications
- electrically operated drive (as opposed to a pneumatic drive) consumes less energy
- clockwise and anti-clockwise rotation
- low noise operation
- connecting cable 2.5 m
- Important: Continuous use over 80% of torque range is not recommended

Four designs, all with lever

- straight design
- pistol shape (power connection underneath)
- pistol shape (power connection on top)
- angle gearing system



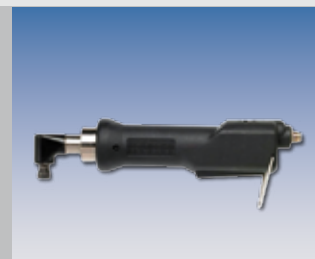
EDU2AE



U-Model



straight design



angle gearing system

Order-no.	Model	Torque Soft Nm	Torque Hard Nm	Speed min.	Speed max.	Output	Dimensions mm	Weight Kg	Design
H00011	PLUTO3D	0,3 - 2,0	0,3 - 3,0	370	1200	Hex 1/4"	216 x 40	0,55	—
H00020	PLUTO3P	0,3 - 2,0	0,3 - 3,0	370	1200	Hex 1/4"	150 x 150 x 45	0,55	pistol grip
H00013	PLUTO6D	0,5 - 6,0	0,5 - 6,0	200	920	Hex 1/4"	216 x 40	0,55	—
H00053	PLUTO6P	0,5 - 6,0	0,5 - 6,0	200	920	Hex 1/4"	150 x 150 x 45	0,55	pistol grip
H00069	PLUTO6P/U	0,5 - 6,0	0,5 - 6,0	200	920	Hex 1/4"	150 x 45 x 45	0,55	pistol grip with top connector
H00012	PLUTO10D/N	2,0 - 8,0	1,5 - 10,0	110	600	Hex 1/4"	216 x 40	0,55	—
H00021	PLUTO10P/N	2,0 - 8,0	1,5 - 10,0	110	600	Hex 1/4"	150 x 45 x 45	0,55	pistol grip
H00029	PLUTO10P/U/N	2,0 - 8,0	1,5 - 10,0	110	600	Hex 1/4"	150 x 150 x 45	0,55	pistol grip with top connector
H00014	PLUTO15D/N	2,0 - 15,0	2,0 - 15,0	60	320	Hex 1/4"	216 x 40	0,60	—
H00023	PLUTO15P/N	2,0 - 15,0	2,0 - 15,0	60	320	Hex 1/4"	150 x 150 x 45	0,60	pistol grip
H00031	PLUTO15P/U/N	2,0 - 15,0	2,0 - 15,0	60	320	Hex 1/4"	150 x 150 x 45	0,60	pistol grip with top connector
H00033	PLUTO08ANG	1,6 - 6,5	1,0 - 8,0	100	600	Hex 1/4"	260 x 40	0,75	angle gearing system
H00052	PLUTO15ANG	2,0 - 13,0	2,0 - 13,0	100	320	Sq 3/8"	350 x 54	1,1	angle gearing system
H00070	PLUTO20ANG/SR	2,0 - 17,0	2,0 - 19,0	60	210	Sq 3/8"	422 x 47	1,5	angle gearing system

Pluto Serie

Controls



EDU2AE



EDU2AE/TOP



bitbox



program selection box

EDU2AE controller:

- controls for all series from 0.3 - 19 Nm
- microprocessor calculates torque based on parameter voltage, frequency and current
- operating range between 90 V and 250 V (50 / 60 Hz)
- control options easily selected using the plain text display (available in several languages)
- rotational speed can be continuously reduced and allows operation of the hand screw driver with low torque and low rotational speed
- soft start until operating at set variable rotation speed
- adjustable joint application: hard joint or soft joint
- HP model: screw counter, max torque time, autoreverse, torque value display (Nm or in.lbs)

EDU2AE /TOP Controller - additional functions:

- 8 screw programs via externally selected interfaces (Bit box, Client PLC, Program selection box)
- password protected access
- statistics of last screw fastening activity
- timer control allows deep screw fastening
- counts or display of the OK / NOK fastenings
- 15 inputs and 11 outputs: The unit can be controlled by external PLC
- TA version with torque / angle combined control functions (special version of Pluto needed)

Accessories:

- bit box with activation of various programs (TOP only; application for bits not included)
- program selection box (TOP only)
- positioning arm with TLS screw position control

PLUTO series with clutch

Order-no.	Model	Torque Nm	Speed	Output	Dimensions mm	Design
H00071	PLUTO3FR	0,5 - 3,2	800 - 1300	Hex 1/4"	273 x 40	—
H00072	PLUTO3FR/P	0,5 - 3,2	800 - 1300	Hex 1/4"	200 x 150 x 40	pistol grip
H00073	PLUTO5FR	0,7 - 5,0	600 - 1000	Hex 1/4"	273 x 40	—
H00074	PLUTO5FR/P	0,7 - 5,0	600 - 1000	Hex 1/4"	200 x 150 x 40	pistol grip
H00075	PLUTO7FR	1,0 - 7,0	350 - 600	Hex 1/4"	273 x 40	—
H00076	PLUTO7FR/P	1,0 - 7,0	350 - 600	Hex 1/4"	200 x 150 x 40	pistol grip

PLUTO controller

Order-no.	Model	Features	Dimensions W x H x D mm	Weight kg
H00036	EDU2AE	parameter setting using clear text display	195 x 170 x 110	3,7
H00038	EDU2AE/HP	screw counter and torque value display	195 x 170 x 110	3,7
H00077	EDU2AE/TOP	programmable system with 8 screw programs	190 x 205 x 120	4,0
H00078	EDU2AE/TOP/TA	programmable system with 8 screw programs and angle control	190 x 205 x 120	4,0

Accessories

TLS Positioning arm



The TLS Positioning arm is an "intelligent" system that ensures that every screw is fastened in the right place with the right torque. The fastening ranges with the relevant X-Y coordinated can be easily programmed using the teach function. The programmed settings do not need a PC, because all the necessary settings can be made easily using the unit itself.

Even so, screw programs can be selected, which are relayed to the relevant Kolver screw controls.

The TLS arm consists of a torque release arm, which is supplemented by an extraction sensor and an angle sensor.

Scope of delivery:

- positioning arm
- control unit
- cable for Kolver EDU2AE or EDU1FR/SG control

Functions

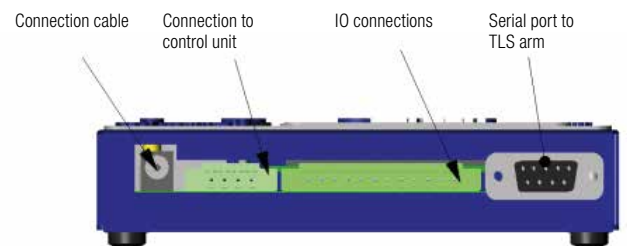
- 3 programmable assembly pattern
- 6 programs per assembly group
- up to 93 screws per assembly group
- screw positions are determined by length and angle
- programmable positioning tolerance
- manual reset for individual steps within each program
- password protected
- unites of measurement: mm and inches
- language select option on menu
- accuracy: ± 1 mm on extension length
 $\pm 1^\circ$ angle
- minimum distance between two screws at max. extension of the arm: 7 mm



TLS ARM



TLS BOX



Order-no.	Model	For control system	Dimensions W x H x D mm		Weight kg
H00058	TLS	EDU1FR/SG	box	137x113x30	0.55
			arm min	535x183x96	1.40
			arm max	1025x183x96	
H00059	TLS	EDU1AE	box	137x113x30	0.55
			arm min	535x183x96	1.40
			arm max	1025x183x96	

Accessories

ACE Screw Counter and Angle Head



The ACE screw counter allows control of the tightening of screws on an assembly.

It analyses the OK / NOK results on the Kolver screw control unit connected and thus determined whether all screws provided for a component have been fastened OK.

The individual programmes can be linked in a sequence for complex projects. Only when all screws for the relevant programs are OK, does it give a "good" result for the entire component.

Features

- 8 programs
- up to 99 screws for each program
- up to 4 programs which can be set to run sequentially
- min. and max. screw time (accuracy: 0.01 sec)
- two displays: simple programming via plain text display, and display showing number of screws
- OK and NOK indicator lights
- statistics: Number of OK or NOK screws, number of fastenings made, number of sequences
- password protected settings
- optional wall mounting
- optional results output on superordinate control unit
- RS232 interface
- connection to EDU1FR/SG control unit
- cable included for connection to control unit
- input signal 24 V: OK button, ESC button, Reset button and Stop button
- output signal 24 V: OK torque reached
- motor start, end of cycle.

Order-no.	Model	For control System	Dimensions W x H x D mm	Weight kg
H00056	ACE	EDU1FR/SG	137x113x30	0.55

Angle heads

For screw joints in awkward places, the FAB and RAF Series hand screw drivers can be fitted with angle heads at a very reasonable price. (Note: Models with lever only.)

The Pluto series includes screw drivers with a built-in angle head.



Accessories

K Series Torque Testers



Technology that connects

Mini KE

The Mini KE system consisted of a 9 V battery-operated torque display unit and an external torque sensor.

The rotational torque sensor is mounted between the hand screw driver and the screw bit chuck, allowing the effective torque to be measured directly on the fastening assembly, i.e. without any losses in gearing or drive.

Accuracy: 0.5 % on readings from 10% to 100%.

Accuracy: 1.0 % on readings from 1% to 10%.



Order-no.	Model	Torque Nm	Dimensions W x H x D mm	Weight kg
H00054	Mini KE 5	0.5-5 Nm external rotary transducer	150x70x45	0.50 (without transducer)
H00055	Mini KE 25	2-25 Nm external rotary transducer	150x70x45	0.50 (without transducer)

Germany

Weber Schraubautomaten GmbH

Hans-Urmiller-Ring 56
D-82515 Wolfratshausen
Tel. +49 8171 406-0
Fax +49 8171 406-111

info@weber-online.com

www.weber-online.com

www.weber-schraubautomaten.com

France

Weber Assemblages Automatiques S.A.R.L

Tel. +33 450 68 59 90

weber@weberaa.com

www.weberaa.com

Czech/Poland/Hungary/ Slovakia

Weber Automation s.r.o.

Tel. +420 5 492 409-65

weber.cz@weber-online.com

www.weber-online.cz

www.weber-online.pl

USA

Weber Screwdriving Systems, Inc.

Phone +1 914 962-5775

marketing@weberusa.com

www.weberusa.com

China

Weber Schraubautomaten GmbH

China Representative Office

Tel. +86 21 64731879

weber.asia@weber-online.com

www.weber-online.asia