

**F A B & R A F S E R I E S**

## FAB & RAF Screwdrivers

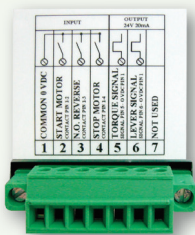
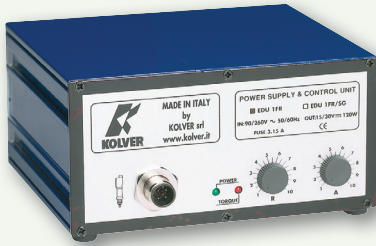
**TORQUE UP TO 5,0 Nm**


FAB series electric screwdrivers are our "best sellers" for the electronic industry. RAF series screwdrivers are designed to meet higher torque applications. Their advanced ergonomic design, ease of use, high accuracy and durability have made these drivers the standard by which all others are measured. They are lightweight, compact, powerful and come standard with ESD-safe housing certified to SP method 2472 (Ericsson approved). These screwdrivers are available in an inline body style with either a lever start or push to start or in a pistol grip with a trigger start (also available with the cord coming out from the top - U option) and different speeds, for different assembly requirements. The torque is set externally: an adjusting nut controls output torque by changing the clutch spring compression. A reference scale will indicate the torque setting. The low voltage 30 VDC rare earth motors combine high performances and long life. Replacing their carbon brushes once a year is all you need for maintenance. The motor works in combination with a control unit. The electronic control circuit cuts the power supply to the motor in response to the clutch action, as soon as the pre-set torque has been reached. In addition the controller can be supplied with torque reached signal, lever signal, remote start and reverse (see page of control units for all the details) and with ACE screw counter unit. All FAB and RAF drivers come standard with ESD-safe body, suspension bail and 2,5 m connection cable. Spiral cable available on request. The new heavy duty cables and connectors, developed for robotic applications, are made of antistatic dissipative material for safe use in an EPA environment.


**ANGLE HEAD**

Model	Code	Torque Nm	RPM min-max	Start option	Weight kg	Dimensions mm	Style
FAB03SS/FR	110003/FR	0,05-0,3	450-650	Lever	0,48	237x33	Inline
FAB10RE/FR	110010/FR	0,05-0,8	600-1000	Lever	0,48	237x33	Inline
FAB12RE/FR	110012/FR	0,2-1,2	600-1000	Lever	0,48	237x33	Inline
FAB12PS/FR	112012/FR	0,2-1,2	600-1000	Push start	0,48	249x33	Inline
FAB12PP/FR	110013/FR	0,2-1,2	600-1000	Lever	0,55	220x159x44	Pistol
FAB12PP/FR/U	110013/FR/U	0,2-1,2	600-1000	Lever	0,55	220x163x44	Pistol grip with top connector
FAB18RE/FR	110618/FR	0,3-1,8	450-650	Lever	0,48	237x33	Inline
FAB18PS/FR	112618/FR	0,3-1,8	450-650	Push start	0,48	249x33	Inline
FAB18PP/FR	110619/FR	0,3-1,8	450-650	Lever	0,55	220x159x44	Pistol
FAB18PP/FR/U	110619/FR/U	0,3-1,8	450-650	Lever	0,55	220x163x44	Pistol grip with top connector
RAF32NS/FR	120032/FR	0,7-3,2	600-1000	Lever	0,65	259x40	Inline
RAF32PS/FR	122032/FR	0,7-3,2	600-1000	Push start	0,65	269x40	Inline
RAF32PP/FR	120033/FR	0,7-3,2	600-1000	Lever	0,70	220x159x44	Pistol
RAF32PP/FR/U	120033/FR/U	0,7-3,2	600-1000	Lever	0,70	220x163x44	Pistol grip with top connector
RAF38NS/FR	120638/FR	0,9-3,8	450-650	Lever	0,65	259x40	Inline
RAF38PS/FR	122638/FR	0,9-3,8	450-650	Push start	0,65	269x40	Inline
RAF38PP/FR	120639/FR	0,9-3,8	450-650	Lever	0,70	220x159x44	Pistol
RAF38PP/FR/U	120639/FR/U	0,9-3,8	450-650	Lever	0,70	220x163x44	Pistol grip with top connector
RAF50NS/FR	120650/FR	0,9-5,0	400-700	Lever	0,65	259x40	Inline
RAF50PS/FR	122650/FR	0,9-4,5	400-700	Push start	0,65	269x40	Inline
RAF50PP/FR	120651/FR	0,9-5,0	400-700	Lever	0,70	220x159x44	Pistol
RAF50PP/FR/U	120651/FR/U	0,9-5,0	400-700	Lever	0,70	220x163x44	Pistol grip with top connector

## FAB & RAF Control Units



BACK CONNECTOR  
(EDU1FR/SG ONLY)

All Kolver screwdrivers work in combination with a control unit acting 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. The EDU1FR control units for FAB and RAF screwdrivers feature a maintenance free state-of-the-art electronics, with no wearing components with a circuit design suitable to both lever start and push start drivers with protection against current overload up to 10A. This design results in very low current to the driver's start switch and clutch switch to extend their life indefinitely. Additional features:

- Suitable to universal supply from 90 to 260 V ac 50/60 hz.
- Slow start (0-2 seconds) and RPM (60% to 100%).
- Visual indicators (green-red) for power on/off and clutch action.
- Reduced weight (0,6 kg) and compact size for easy placement.
- M12 waterproof connector with silver and gold contacts for perfect conductivity.

The EDU1FR/SG controller features additional circuits wired to one connector in the back panel: output 24V for torque reached and lever signals; input start and reverse contacts. A double output connector (DOCK01) is also available for operators using two screwdrivers on the same working area (only FAB and RAF series). One end of this device is to be connected to the controller (cable included), the other end to the drivers. The screwdrivers are not to be used at the same time.

FAB and RAF screwdrivers can be used with the new switching EDU2AE/FR as well! This means they can benefit from all of the 2AE features (screw counting option, autoreverse, run time etc).



ACE SCREW COUNTER  
(see page 24)



DOUBLE OUTPUT DEVICE  
Model DOCK 01



SPIRAL CABLE



SOFT START AND SPEED  
REGULATION

Model	Code	Features	Dimensions mm	Weight kg	Screwdriver
EDU1FR	010010/FR	In: 90-260Vca Out: 18-30 Vcc power 120VA slow start and adjustable speed	138x118x67	0,6	FAB & RAF Series
EDU1FR/SG	010010/FR/SG	Input: start and reverse contacts Output: torque reached and lever signal	138x118x67	0,6	FAB & RAF Series
EDU2AE/FR	032000/FR	Run time, Additional signals, Serial Port, Optional screwdriver connector on back panel	195x170x110	2,4	PLUTO and FAB&RAF Series (see pages 5 and 12)