

**EF**

Electric Torque Multiplier



## Applications

- **alkitronic® EF-S** electrical torque multipliers for torques of 430 to 42,000 Nm (315 to 30,980 ft.lbs).
- **Consistent torque accuracy** on all international power supplies.
- **Precise shut-off torque** also operates with voltage-controlled portable generators.
- Models **alkitronic® EF-A** in angled design with high operating comfort in confined spaces for torques of 430 to 9.800 Nm (315 to 7,230 ft.lbs).

## Advantages

- **Low running costs** due to maintenance-free, low-wear, brushless synchronous motor with excellent efficiency.
- **High motor speed:** Up to three times faster than conventional electrical torque multipliers.
- **Permanent higher joint quality** compared to ratchet torque tools by continuous rotation of the square drive.
- **Menu-guided intuitive operation**, with control and warning signals.
- **OLED-Display** anti-glare and high contrast - for perfect reading under all weather conditions.
- **Comfortable working** due to the 360° rotatable motor unit; in addition, hardly any reaction forces are transmitted to the user.

## alkitronic® specials

- **Quality bolting** with torque/angle method.
- **Innovative motor protection** with automatic shutdown to ensure bolting quality.
- **Intelligent processor-controlled shut-off electronics** for constant exact reproduction of the preselected torque.
- **Repeat shut-off accuracy  $\pm 2\%$**  for the same bolting application.
- **Exceptionally robust** motor housing (aluminum alloy).
- **For safe, comfortable tool guidance, model-specific operating and holding handles are included** in the scope of delivery. These can be mounted as required at several fastening points provided.

## Specifications

All **alkitronic®** electric torque multipliers have CE-certification. Universal AC input 100 V - 253 V, frequency 45 Hz - 66 Hz, power max. 1400 W. Protection category I.



## Bolting programs

For user-specific applications, modular software packages can be optionally purchased.

- Software suite 1:** Torque controlled bolting (standard)  
**Software suite 2:** Torque/angle procedure for high-quality bolting connections  
**Software suite 2 Premium:** Torque/angle procedure with adjustable min./max. torque limitation  
**Software suite 3:** Bolting with preset rotations and torque limit  
**Software suite 4:** Bolting parameters according to individual customer requirements  
**Software suite 5:** Bluetooth transmission via **alkitronic® APP**.  
 Documentation of the bolted joints (target-actual status, recording for each joint)

Software suite 1 is pre-installed in the basic equipment. The setting steps of the torque values are in increments of 10 Nm or 10 ft.lbs.

## Display views

Software suite 1 (mode 1) and software suite 2 (mode 2)

Mode 1 / M1 (Standard)

**M1**  
**1100 Nm**  
**-15°**

Bolting via torque.  
 Automatic release according to pre-set angle degrees.

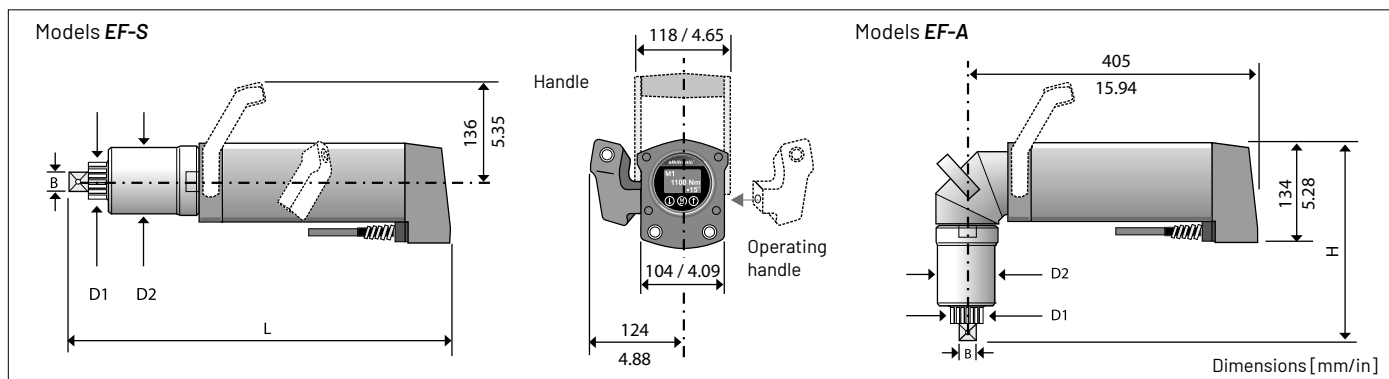
Mode 2 / M2 (Option)

**M2**  
**300 Nm**  
**150°, -15°**

Torque/angle procedure for high-quality bolting connections.  
 Display example of pre-torque, angle and release angle.

During the bolting process, the current torque value is shown in the display. Reaching the set value is indicated by an "OK". If the selected value cannot be achieved, the bolting operation is evaluated as "nOK".

## Technical Data



### Models EF-S

Type		EF-S 250	EF-S 300	EF-S 400	EF-S 600	EF-S 800	EF-S 1000	EF-S 2000	EF-S 4000
Torque range (approx.) *	Nm	430-2700	500-3100	900-4300	1150-6200	2000-7800	2050-9500	3500-20600	6200-42000
	ft.lbs	315-1990	370-2285	665-3170	850-4575	1475-5755	1510-7010	2580-15195	4575-30980
Square drive	B	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/2"	2 1/2"
Diameter (approx.)	D <sub>1</sub>	mm / in	54 / 2.13	72 / 2.83	72 / 2.83	72 / 2.83	91 / 3.58	SW 120 / A/F 4.7	SW 120 / A/F 4.7
Diameter (approx.)	D <sub>2</sub>	mm / in	85 / 3.35	98 / 3.86	98 / 3.86	109 / 4.29	133 / 5.24	173 / 6.8	275 / 10.83
Length (approx.)	L	mm / in	515 / 20.3	535 / 21	535 / 21	550 / 21.6	550 / 21.6	565 / 22.2	760 / 30
Weight without DMA** (approx.)	kg / lbs	13 / 29	14 / 31	14.5 / 32	16 / 35	19.5 / 43	27 / 59.5	60 / 132	62 / 137
Idle speed	rpm	10	8	6	5	4	3	1	0.7

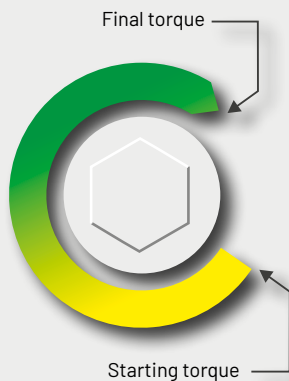
### Models EF-A

Type		EF-A 250	EF-A 300	EF-A 400	EF-A 600	EF-A 800	EF-A 1000
Torque range (approx.) *	Nm	430-2700	500-3100	900-4300	1150-6200	1060-8000	2050-9800
	ft.lbs	315-1990	370-2285	665-3170	850-4575	780-5900	1510-7230
Square drive	B	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D <sub>1</sub>	mm / in	54 / 2.13	72 / 2.83	72 / 2.83	72 / 2.83	91 / 3.58
Diameter (approx.)	D <sub>2</sub>	mm / in	85 / 3.35	98 / 3.86	98 / 3.86	109 / 4.29	133 / 5.24
Height (approx.)	H	mm / in	285 / 11.2	305 / 12	320 / 12.6	350 / 13.8	350 / 13.8
Weight without DMA** (approx.)	kg / lbs	13.5 / 29.8	13.5 / 29.8	15.5 / 34	17.5 / 38.6	20 / 44	29 / 64
Idle speed	rpm	9	7	5	4	3	2

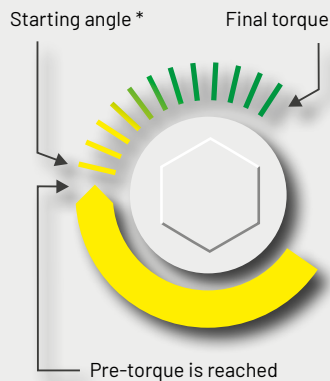
\*) When loosening bolts, a higher torque (up to 20 %) may be necessary (release torque). We will be pleased to help you with your choice. \*\*) Torque reaction arm

### Scheme bolting programs

#### Torque controlled bolting mode 1



#### Torque/angle procedure mode 2



#### \* Information on rotational angle setting for torque/angle method.

- The angle of rotation is specified by the design for the bolting connection.
- The angle of rotation can be determined individually and easily with **alkitronic® HSD**. We will gladly provide you with detailed product information.

### Accessories: Remote control with operating handles



#### The **alkitronic® EF** bolting system.

Extremely flexible with the **alkitronic®** remote control as an accessory: **alkitronic® FB - EF** - cable length 5 m or 10 m

## YOUR PLUS FOR MORE PERFORMANCE

### Increased quality

Premium production  
Highest quality materials  
Long product life cycles  
Experience in bolting technology since 1984  
Made in Germany – international patents

### Increased precision

Precise, customer-specific torques  
High repeatability  
Reliability in permanent operation  
Dokumentation of tightening results  
Automatic shut-off

### Increased productivity

Quicker tightening without reworking  
No environmentally caused failures (IP54, ATEX)  
High work safety  
Easy to use: clear, simple instructions  
Low maintenance and cost efficient

### Better service

Technical advice on site  
Training offers  
Manufacturer's calibration and certification  
Lifecycle support  
Spare part and repair service

alki TECHNIK GmbH  
Development, Production and Distribution of Bolting Systems

Unterlettenweg 4 – 85051 Ingolstadt/Germany – fon +49 841 97499-0 – fax +49 841 97499-90  
info@alkitronic.com – www.alkitronic.com

## EXTRACT FROM OUR PRODUCT RANGE



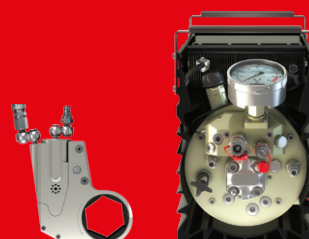
**alkitronic XE-SERIES**

THE ELECTRICS



**alkitronic XP-SERIES**

THE PNEUMATICS



**alkitronic XH-SERIES**

THE HYDRAULICS



**alkitronic XM-SERIES**

THE MANUALS