

alkitronic® X E-SERIES

EFCip

Electric Torque Multiplier



world's No. 1 choice

Applications

- **alkitronic® EFCip / ECWip** electric torque multipliers from 75 to 6,500 Nm (55 to 4,800 ft.lbs).
- Consistent torque accuracy on all international power supplies 100 - 253 V / 45 - 66 Hz.
- Precise shut-off with on-site voltage-controlled portable generators.
- Models **ECWip** angled tools, low height for difficult access applications.

Advantages

- Safe interruption-free work in any weather (moisture, rain) - thanks to protection class IP54.
- **Low running costs:**
Low-wear, maintenance-free, brushless synchronous motor.
- Permanent higher joint quality by continuous rotation of the square drive.
- Simple 1-finger trigger operation for forward and reverse.
- OLED-Display anti-glare and high contrast - for perfect reading under all weather conditions.
- Menu-driven operation, control or warning signals.
- **Ergonomic and comfortable operation:**
The 360 degree rotating handle prevents reaction forces being transferred to the operator.

alkitronic® specials

- High-quality bolting, according to torque/angle procedure.
- Highly innovative generation of electric torque multipliers with new sensorless control motor technology. Lower power consumption increases the service life of the electronic components.
- Repeat shut-off accuracy $\pm 2\%$ for the same bolting application. Precise reproduction of preselected torque through intelligent, processor-controlled motor with automatic shut-off.
- **Longer service life:** Low heat generation - thus highest reliability and almost no downtime.
- **Robust and long lasting:** Motor housing of cast aluminum.



Specifications

Bolting programs:

For user-specific applications, the manufacturer can activate optional modular software (**alkitronic® EFCip / ECWip** from serial number 712700).

Software suite 1:	Torque controlled bolting (pre-installed)
Software suite 2:	Torque/angle procedure for high-quality bolting connections
Software suite 2 Premium:	Torque/angle procedure with adjustable max. torque limit
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)

Remote control of single or multiple torque multiplier can be manual or fully automated.

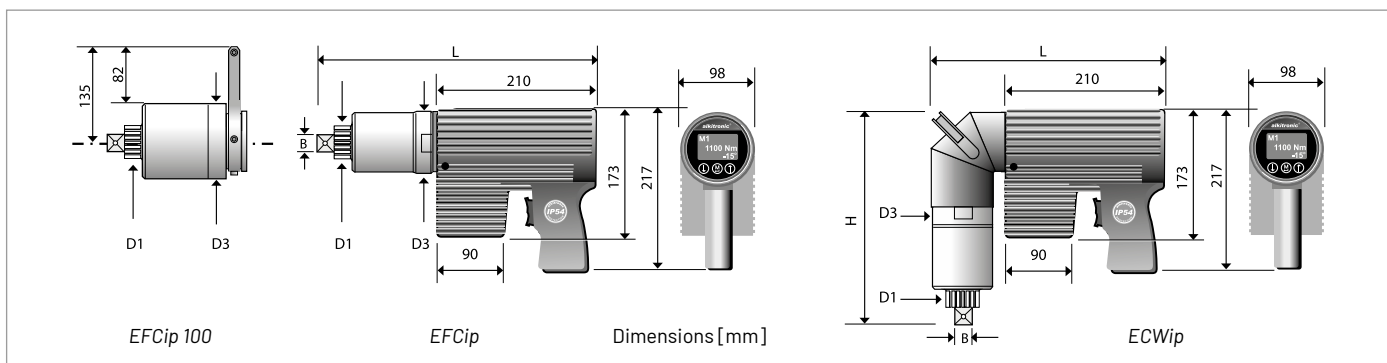
Special solution: Preset torque increment according to customer's requirement (5 Nm / 4 ft.lbs min.)
All **alkitronic®** torque multipliers with CE-certification.

Electrical data:

Universal AC input 100 V - 253 V, frequency 45 Hz - 66 Hz, power max. 1100 W, protection category I, protection class IP 54 (standard).



Technical Data



Models EFCip

Type		EFCip 10	EFCip 20	EFCip 30	EFCip 35	EFCip 40	EFCip 50	EFCip 60	EFCip 65	EFCip 70	EFCip 80	EFCip 90	EFCip 100
Torque range (approx.)* Nm		75-420	80-620	100-940	150-1300	150-1500	190-1850	250-2350	290-2900	350-3500	440-4300	500-5000	650-6500
Torque range (approx.)* ft.lbs		55-305	60-540	75-690	110-960	110-1100	140-1360	185-1660	215-2135	260-2580	325-3170	370-3690	480-4800
Square drive	B	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"	1 / 1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D ₁ mm	41	41	41	41	54	54	54	54	72	72	72	72
Diameter (approx.)	D ₃ mm	88	88	88	88	88	88	88	88	98	98	109	109
Length (approx.)	L mm	330	330	330	352	382	382	388	388	406	406	405	430
Weight without DMA (approx.)	kg	9	9	9	9	10	10	11	11	13	13	14.5	15.5
Idle speed	rpm	70	40	30	22	15	14	11	8	7	5	4	3

Models ECWip

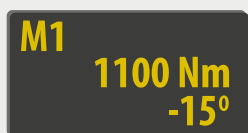
Type		ECWip 10	ECWip 20	ECWip 30	ECWip 35	ECWip 40	ECWip 50	ECWip 60	ECWip 65	ECWip 70	ECWip 80	ECWip 90	ECWip 100
Torque range (approx.)* Nm		75-420	80-620	100-940	150-1300	150-1500	190-1850	250-2350	290-2900	350-3500	440-4300	500-5000	650-6500
Torque range (approx.)* ft.lbs		55-305	60-540	75-690	110-960	110-1100	140-1360	185-1660	215-2135	260-2580	325-3170	370-3690	480-4800
Square drive	B	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"	1 / 1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D ₁ mm	41	41	41	41	54	54	54	54	72	72	72	72
Diameter (approx.)	D ₃ mm	88	88	88	88	88	88	88	88	98	98	109	109
Length (approx.)	L mm	310	310	310	310	310	310	310	310	318	318	326	315
Height (approx.)	H mm	249	249	249	271	300	300	305	305	315	315	345	350
Weight without DMA (approx.)	kg	12	12	12	12	13	14	14	14	16	16	17	18
Idle speed	rpm	70	40	30	22	15	14	11	8	7	5	4	3

*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you in detail.

OLED Display EFCip / ECWip

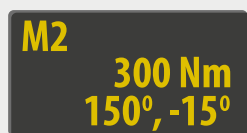
Display bolting programs mode 1 and mode 2

Mode 1 (standard)



Mode 1
Bolting via torque.
Automatic relief according to pre-set angle degrees.

Mode 2 (option)

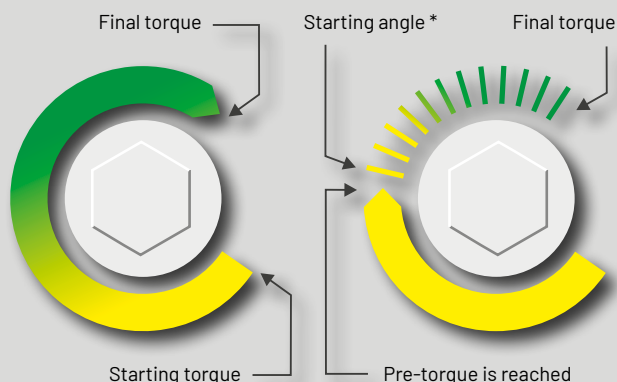


Mode 2
Torque/angle procedure for high-quality bolting connections. Display example of pre-torque, angle and loosening angle.

Software mode 1 is pre-installed in the basic version.

For user-specific bolting applications or settings, other software is available (see left side "bolting programs").

Chart Mode 1 and Mode 2



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

- The angle of rotation is specified specifically 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.

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

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