

EXCLUSIVE DISTRIBUTOR OF







ELECTRIC TORQUE MULTIPLIER

alkitronic

EC SERIES

Applications

- alkitronic® EC-S / EC-A electric torque multipliers from 75 to 6,530 Nm (55 to 4,815 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 alkitronic® EC-A 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-guided intuitive operation, with control and 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® EC-S / EC-A from serial number 712700).

Software suite 1:	Torque controlled bolting (pre-installed)
Software suite 2:	Torque/angle procedure for high-quality bolting connections
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 requirement
Software suite 5:	Bluetooth transmission via alkitronic® APP
	Documentation of the bolted joints (target-actual status, recording for each joint)

Special solution: Preset torque increment according to customer's requirement (10 Nm /10 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).





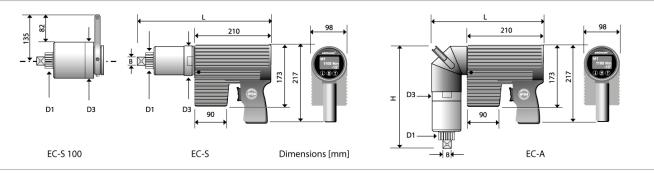
ELECTRIC SERIES



EC-A & EC-S SERIES



TECHNICAL DATA



Models EC-S

Туре			EC-S10	EC-S20	EC-S30	EC-S35	EC-S40	EC-S50	EC-S60	EC-S65	EC-S70	EC-S80	EC-S90	EC-S100
Torque range (approx	<.) *		75-420	80-680	100-940	150-1300	150-1590	190-1870	250-2340	290-2930	350-3470	440-4400	500-5300	650-6530
ft.lbs			55-305	60-500	75-690	110-960	110-1170	140-1380	185-1725	215-2160	260-2560	325-3245	370-3910	480-4815
Square drive			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.)	D1		41	41	41	41	54	54	54	54	72	72	72	72
Diameter (approx.)	D3		88	88	88	88	88	88	88	88	98	98	109	109
Length (approx.)			330	330	330	352	382	382	388	388	406	406	405	430
Weight without DMA	(appro	x.) 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 FC-A

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Туре			EC-A 50	EC-A 60	EC-A 65	EC-A 70	EC-A 80	EC-A 90	EC-A 100
Torque range (appro	ox.) *	Nm	190-1870	250-2340	290-2930	350-3470	440-4400	500-5300	650-6530
ft.lbs			140-1340	185-1725	215-2135	260-2540	325-3205	370-3730	480-4800
Square drive			1"	1"	1"	1 / 1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D1	mm	54	54	54	72	72	72	72
Diameter (approx.)	D3	mm	88	88	88	98	98	109	109
Length (approx.)		mm	310	310	310	318	318	326	315
Height (approx.)		mm	300	305	305	315	315	345	350
Weight without DMA	(appro	x.) kg	14	14	14	16	16	17	18
Idle speed		rpm	14	11	8	7	5	4	3

*(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

Display views

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

Mode 1 / M1 (Standard)



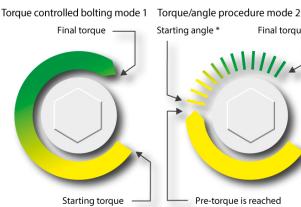
Bolting via torque. Automatic relief according to pre-set angle degrees.



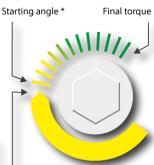


Torque/angle procedure for highquality bolting connections. Display example of pre-torque, angle and loosening angle.

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".



Scheme bolting programs



Pre-torque is reached

* 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.



ELECTRIC TORQUE MULTIPLIER

alkitronic®

EC-R & EC-SG SERIES

Applications

- These tools are ideally specialized for bolting connections on plate heat exchangers, e.g. in the food and beverage sector, the paper industry, and the chemical industry. They save much time when tightening and loosening plate packs where perfect retention and absolute tightness are essential.
- Reliable, low-wear operation due to continuous rotation when bolting with spindles or long threaded bolts.
- Depending on the application, electrical or pneumatic driven torquemultipliers: torque up to 4,800 Nm.

Advantages

- Load-free operation, with short assembly time.
- Fast simultaneous tightening of large plate packs when using two or more torque multipliers diagonally.
- alkitronic® RCL, CL2-SG and battery driven torque multiplier EA with fast gear for turning in and simple, quick switching to power gear.

alkitronic® specials

- Targeted types for convenient working in every tightening situation: among other options between radial gearing (R) with high-performance worm drive; tangential gearing (SG) with highly efficient spur gear.
- Long lifetime due to extremely robust motor housing made of cast aluminum or break-proof polymer.

Specifications

- Pneumatic driven models: Prerequisites for best work with the indicated torques are an operating pressure of 2-7 bar at a volume flow of approx. 10-15 l/s. The torque accuracy depends on the stability of the supply system.
- Electric driven models: Universal AC input 100 V 253 V, frequency 45 Hz – 66 Hz, power max. 2000 W, protection category I, EFCip with protection class IP 54 (EF optional). EA models with two lithium-ion battery packs 18 V, 5.2 Ah, and battery charger.

Product information Remote Control

alkitronic® CLV-R or CLV-SG Model range with convenient remote control and individual pneumatic drive. When using several torque multipliers with radial (R) or tangential (SG) gearing, large packs can be tightened fast, simultaneously, and evenly.

- Operation of up to four torque multipliers simultaneously. Especially effective for multiple bolting connections and serial assemblies in semi-automatic operations.
- Low-level sound emission due to integrated sound reduction.

For highly efficient bolting connections with one or up to four alkitronic® CLV torque multipliers, preconfigured alkitronic® Remote Systems are already available.







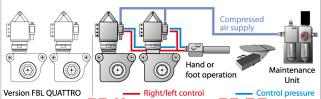
Image above: alkitronic® RCL pneumatic torque multiplier in operation on a plate heat exchanger. Image below: alkitronic® CLV-R

Image above: alkitronic® EFCip-SG in operation on a plate heat exchanger. Image below:PHE of Alfa Laval





FBL DUO for two CLV torque multiplier, FBL QUATTRO available on request .



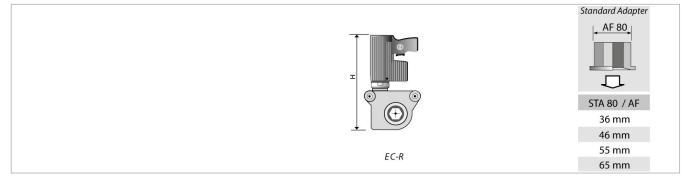
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EC-R & EC-SG SERIES



TECHNICAL DATA alkitronic® Radial Gearing (R)



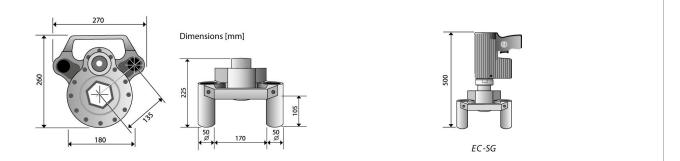
Models EC-R

ELECTRIC SERIES

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Radial Gearing Models	EC-R
Туре	EC-R 80
Torque range 2nd gear (approx.) Nm	- ·
Torque range 1st gear (approx.) Nm	480-3840
Width across flat (AF) mm	80
Height (approx.) H mm	475
Width (approx.) B/B1 mm	325/240
Bolt distance (approx.) A1/A2 mm	156/194
Dimensions (approx.) X/Y mm	98/98
Dimension (approx.) D mm	94
Weight (approx.) kg	21
Idle speed 1st gear (approx.) rpm	7

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

TECHNICAL DATA alkitronic® Tangential Gearing (SG)



Models EC-SG

Tangantial Capuing Medale	Electric drive						
Tangential Gearing Models	EC-SG						
Туре	EC-SG 80						
Torque range 2nd gear (approx.) Nm	•						
Torque range 1st gear (approx.) Nm	560-3780						
Width across flat (AF) mm	80						
Weight (approx.) kg	19						
Idle speed 1st gear (approx.) rpm	6						
Idle speed 2nd gear (approx.) rpm	-						