

E (PG)

Electric Torque Multiplier



Applications

- **alkitronic® E**, 2-speed torque multiplier for torques from 370 Nm to 10,000 Nm (270 ft.lbs- 7,375 ft.lbs).
- The indestructible workaday torque tool is used to loosen or tighten heavy-duty bolted connections with high **on-the-job safety** and **short assembly times**.
- **Permanently higher joint quality**, compared to ratchet torque tools or tools with impact mechanism, by continuous rotation of the square drive.
- Efficient operation with short fastening cycles: Fast gear for run down and power gear for highest torques and precision.

Advantages

- **Ease of operation**: Fast switching direction of rotation as well as speed-changes. **Wide torque range**, choice from seven torque values pro gear.
- **Operator convenience and health-consideration**: Lightweight ergonomically designed tool. The 360 degree rotating handle ensures convenient working. None of the reaction forces are transferred to the operator.
- Smart processor-controlled, switch-off electronics for consistently **precise reproduction of the pre-selected torque**.

alkitronic® Specials

- **Break-proof, impact-proof and resistant to corrosion**: Robust Motor housing made of special polymer.
- **Proven modular high-performance gears**, produced in a chip-free high-precision process.

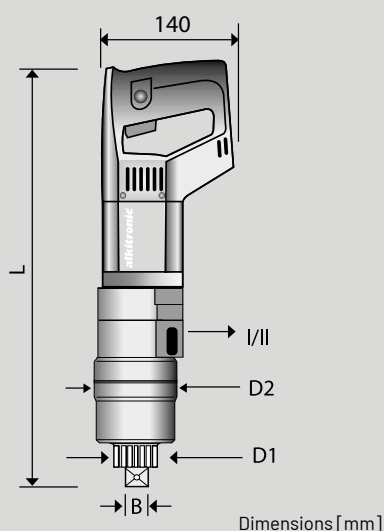


Technical Data: Models **alkitronic® E**

Type		PG 2 / 80	PG 2 / 150	PG 2 / 250	PG 2 / 350	PG 2 / 600	PG 2 / 800	PG 2 / 1000
Torque range (approx.) gear 2 *	Nm	370 - 580	540 - 915	600 - 1100	650 - 1230	800 - 2330	900 - 2960	960 - 3580
Torque range (approx.) gear 1 *	Nm	480 - 890	735 - 1500	1000 - 2500	1180 - 3500	2000 - 6000	2370 - 8000	2900 - 10000
Torque range (approx.) gear 2 *	ft.lbs	270 - 425	400 - 675	440 - 810	480 - 910	590 - 1720	665 - 2185	710 - 2640
Torque range (approx.) gear 1 *	ft.lbs	355 - 655	540 - 1105	735 - 1845	870 - 2580	1475 - 4425	1750 - 5900	2140 - 7375
Square drive	B	3/4 "	3/4 "	1 "	1 1/2 "	1 1/2 "	1 1/2 "	1 1/2 "
Diameter (approx.)	D ₁	mm	41	41	54	72	72	91
Diameter (approx.)	D ₂	mm	88	88	88	98	109	173
Length (approx.)	L	mm	480	480	530	550	560	590
Weight without DMA (approx.) **	kg	6,5	6,5	8	9,5	12	14,5	24,5
Idle speed gear 2	r/min	46	20	9	6	4	3,4	2,6
Idle speed gear 1	r/min	15	7	3	1,8	1,3	1,1	0,9

*) 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

Dimensions



Technical informations



Electrical data: Mains supply 230V/50Hz.
Repeat shut-off accuracy $\pm 4\%$ for the same bolting application.
Housing: Protection category II, protection class IP 20.

alkitronic®
HOME OF TORQUE POWER

alkitronic® products
Made in Germany by

alki TECHNIK GmbH
Development, Production and
Distribution of Bolting Systems

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www.alkitronic.com



Electric Torque Multiplier



world's No. 1 choice

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
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.

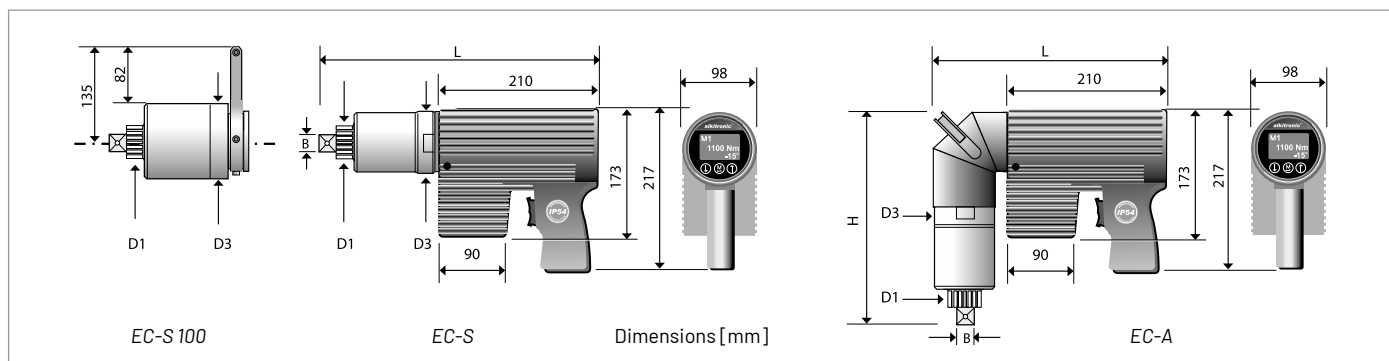
Special solution: Preset torque increment according to customer's requirement (10 Nm / 10 ft.lbs min). All **alkitronic®** torque multipliers with CE-certification.

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).



Technical Data



Models EC-S

Type		EC-S 10	EC-S 20	EC-S 30	EC-S 35	EC-S 40	EC-S 50	EC-S 60	EC-S 65	EC-S 70	EC-S 80	EC-S 90	EC-S 100
Torque range (approx.) *	Nm	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	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 EC-A

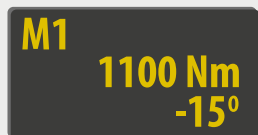
Type		EC-A 50	EC-A 60	EC-A 65	EC-A 70	EC-A 80	EC-A 90	EC-A 100
Torque range (approx.) *	Nm	190-1870	250-2340	290-2930	350-3470	440-4400	500-5300	650-6530
	ft.lbs	140-1340	185-1725	215-2135	260-2540	325-3205	370-3730	480-4800
Square drive	B	1"	1"	1"	1 / 1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D ₁ mm	54	54	54	72	72	72	72
Diameter (approx.)	D ₃ mm	88	88	88	98	98	109	109
Length (approx.)	L mm	310	310	310	318	318	326	315
Height (approx.)	H mm	300	305	305	315	315	345	350
Weight without DMA (approx.)	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

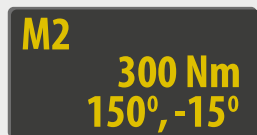
Software suite 1 (mode 1) and software suite 2 (mode 2)

Mode 1 / M1 (Standard)



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

Mode 2 / M2 (Option)

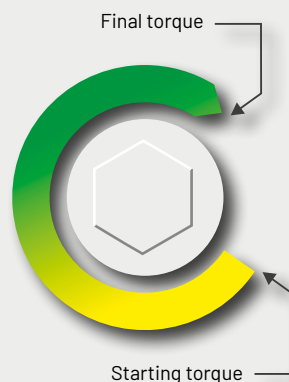


Torque/angle procedure for high-
quality bolting connections. Display
example of pre-torque, angle and
loosening angle.

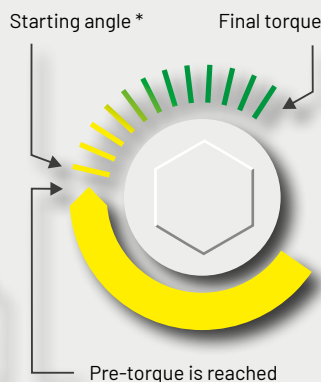
During the bolting process, the current torque value is shown in the display. Reaching the set value is indicated by an "OK". If the selected value cannot be achieved, the bolting operation is evaluated as "nOK".

Scheme bolting programs

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 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
Documentation 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

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EXTRACT FROM OUR PRODUCT RANGE



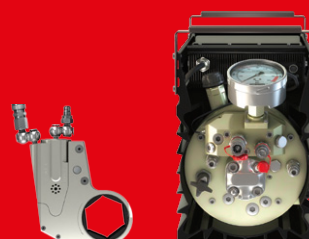
alkitronic XE-SERIES

THE ELECTRICS



alkitronic XP-SERIES

THE PNEUMATICS



alkitronic XH-SERIES

THE HYDRAULICS



alkitronic XM-SERIES

THE MANUALS

R/SG

for Plate Heat Exchanger



designed for your needs

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 torque multipliers: 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.



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

Product information Remote Control

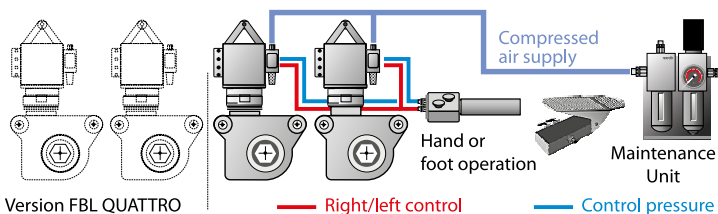
alkitronic® CLV-R or CLV-SG

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.

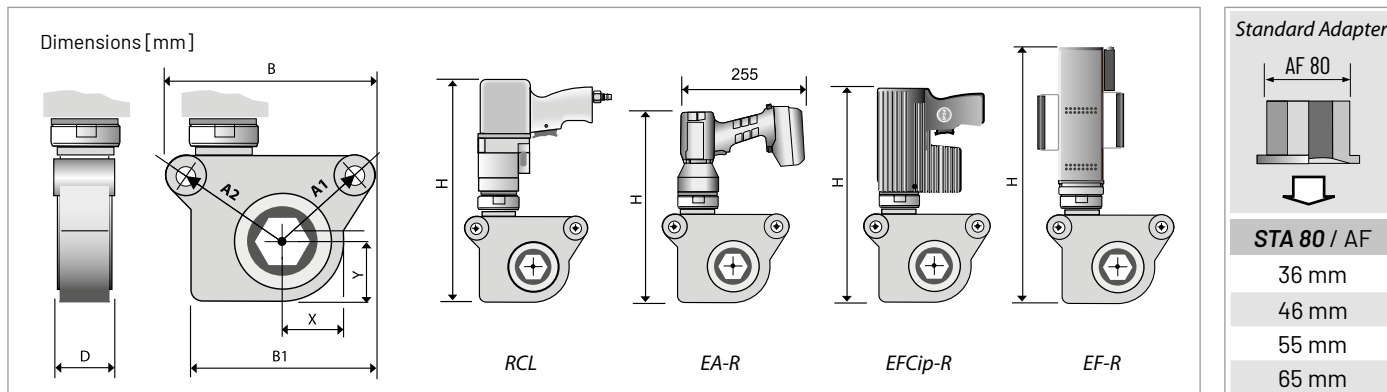
For highly efficient bolting connections with one or up to four **alkitronic® CLV** torque multipliers, preconfigured **alkitronic® Remote Systems** are already available.

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



Technical Data

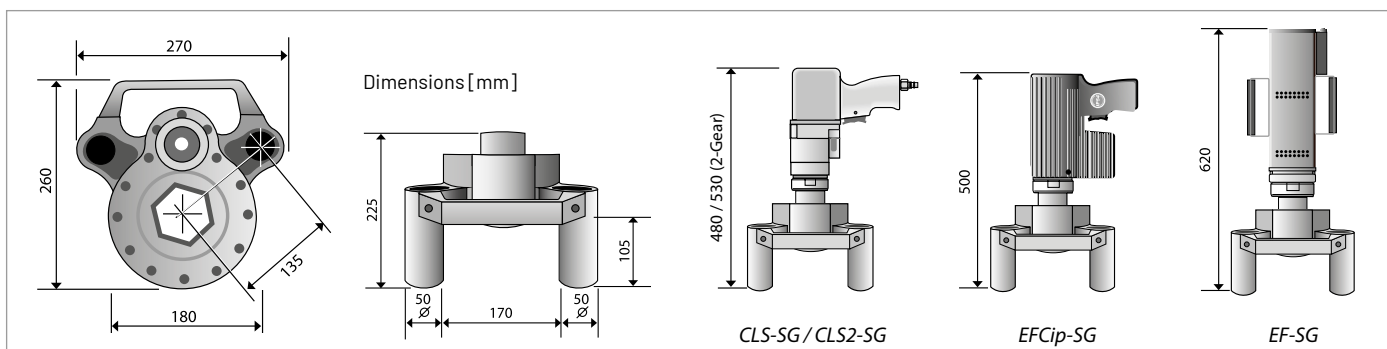
alkitronic® Radial Gearing (R)



Radial Gearing Models			Pneumatic drive			Electric drive					
			RCL (2-Gear)			EA-R (2-Gear)		EFCip-R			EF-R
Type			RCL 36	RCL 46	RCL 80	EA-R 36	EA-R 46	EFCip-R 36	EFCip-R 46	EFCip-R 80	EF-R 80
Torque range 2nd gear (approx.)		Nm	160-470	250-780	670-1975	150-450	250-730	-	-	-	-
Torque range 1st gear (approx.)		Nm	500-1500	800-2500	1645-4840	500-1500	750-2500	150-1590	250-2530	480-3840	560-3780
Width across flat (AF)		mm	36	46	80	36	46	36	46	80	80
Height (approx.)		H mm	400	435	450	400	450	385	425	475	600
Width (approx.)		B/B1 mm	230/190	252/215	325/240	230/190	252/215	230/190	252/215	325/240	325/240
Bolt distance (approx.)		A1/A2 mm	100/128	112/145	156/194	100/128	112/145	100/128	112/145	156/194	156/194
Dimensions (approx.)		X/Y mm	56/56	75/75	98/98	56/56	75/75	56/56	75/75	98/98	98/98
Dimension (approx.)		D mm	90	94	94	90	94	90	94	94	94
Weight (approx.)		kg	11	13.5	21	11	13.5	12	14.5	21	24.5
Idle speed 1st gear (approx.)		rpm	5	4.5	4	3	3	8	7	7	9
Idle speed 2nd gear (approx.)		rpm	15	14	12	10	10	-	-	-	-

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

alkitronic® Tangential Gearing (SG)



Tangential Gearing Models		Pneumatic drive		Electric drive	
		CLS-SG	CLS2-SG (2-Gear)	EFCip-SG	EF-SG
Type		CLS-SG 80	CLS2-SG 80	EFCip-SG 80	EF-SG 80
Torque range 2nd gear (approx.)	Nm	-	440-1330	-	-
Torque range 1st gear (approx.)	Nm	1330-3780	1400-3780	560-3780	560-3780
Width across flat (AF)	mm	80	80	80	80
Weight (approx.)	kg	17	17	19	22
Idle speed 1st gear (approx.)	rpm	3,5	3,5	6	10
Idle speed 2nd gear (approx.)	rpm	-	10	-	-



YOUR PLUS FOR MORE PERFORMANCE

Increased quality

- Premium production
- Highest quality materials
- Long product life cycles
- Since 1984 experience in bolting technology
- 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

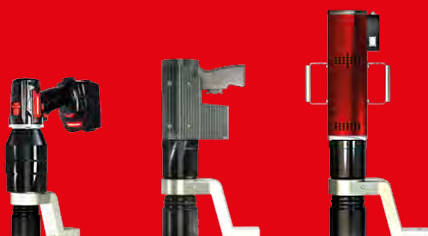
- Technical advice on site
- Training offers
- Manufacturer's calibration and certification
- Lifecycle support
- Spare part and repair service

alki TECHNIK GmbH

Development, Production and Distribution of Bolting Systems

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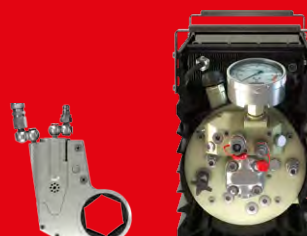
EXTRACT FROM OUR PRODUCT RANGE



Electric Torque Multiplier



Pneumatic Torque Multiplier



Hydraulic Wrenches and Pumps



Manual Torque Multiplier

EC

Electric Torque Multiplier



world's No. 1 choice

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- **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.

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- 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
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.

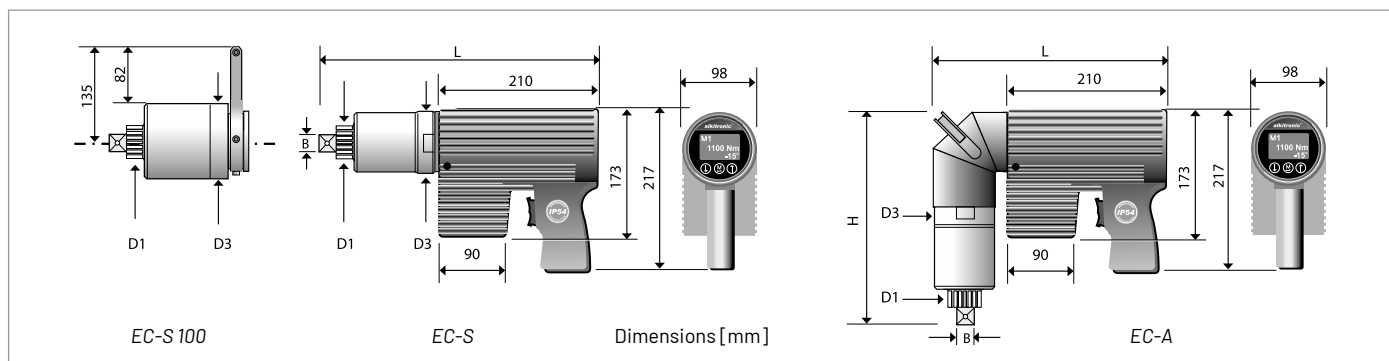
Special solution: Preset torque increment according to customer's requirement (10 Nm / 10 ft.lbs min). All **alkitronic®** torque multipliers with CE-certification.

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).



Technical Data



Models EC-S

Type		EC-S 10	EC-S 20	EC-S 30	EC-S 35	EC-S 40	EC-S 50	EC-S 60	EC-S 65	EC-S 70	EC-S 80	EC-S 90	EC-S 100
Torque range (approx.) *	Nm	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	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 EC-A

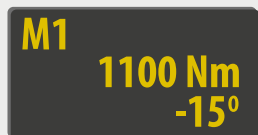
Type		EC-A 50	EC-A 60	EC-A 65	EC-A 70	EC-A 80	EC-A 90	EC-A 100
Torque range (approx.) *	Nm	190-1870	250-2340	290-2930	350-3470	440-4400	500-5300	650-6530
	ft.lbs	140-1340	185-1725	215-2135	260-2540	325-3205	370-3730	480-4800
Square drive	B	1"	1"	1"	1 / 1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D ₁ mm	54	54	54	72	72	72	72
Diameter (approx.)	D ₃ mm	88	88	88	98	98	109	109
Length (approx.)	L mm	310	310	310	318	318	326	315
Height (approx.)	H mm	300	305	305	315	315	345	350
Weight without DMA (approx.)	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

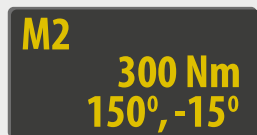
Software suite 1 (mode 1) and software suite 2 (mode 2)

Mode 1 / M1 (Standard)



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

Mode 2 / M2 (Option)

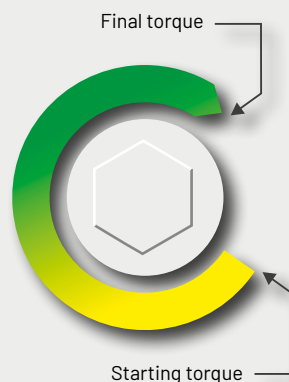


Torque/angle procedure for high-
quality bolting connections. Display
example of pre-torque, angle and
loosening angle.

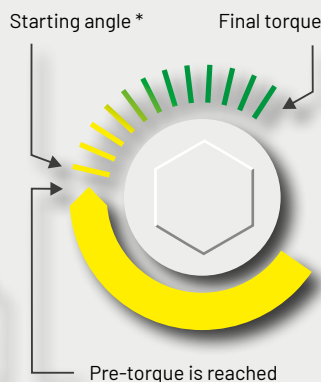
During the bolting process, the current torque value is shown in the display. Reaching the set value is indicated by an "OK". If the selected value cannot be achieved, the bolting operation is evaluated as "nOK".

Scheme bolting programs

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 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

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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
Documentation of tightening results
Automatic shut-off

Increased productivity

Quicker tightening without reworking
No environmentally caused failures (IP54, ATEX)
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Easy to use: clear, simple instructions
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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

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EXTRACT FROM OUR PRODUCT RANGE



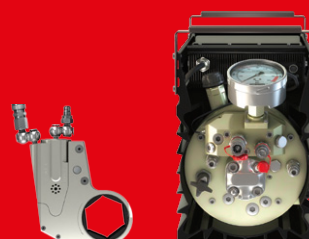
alkitronic XE-SERIES

THE ELECTRICS



alkitronic XP-SERIES

THE PNEUMATICS



alkitronic XH-SERIES

THE HYDRAULICS



alkitronic XM-SERIES

THE MANUALS

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 500 to 9,800 Nm (370 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 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.

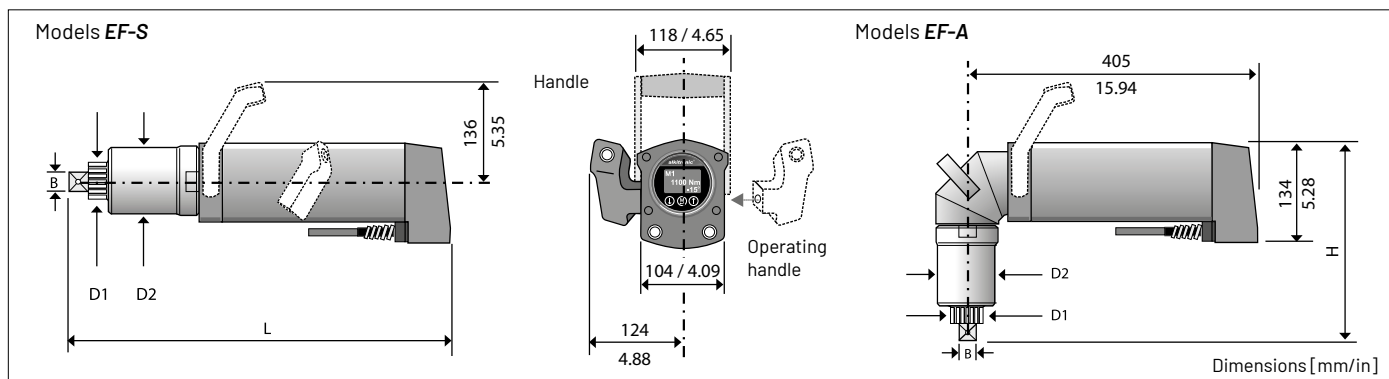
Mode 2 / M2 (Option)

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	500-4250	1150-6200	2000-7800	2050-9800	3500-20600	6200-42000
	ft.lbs	315-1990	370-2285	370-3135	850-4575	1475-5755	1510-7230	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 ₁	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 ₂	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

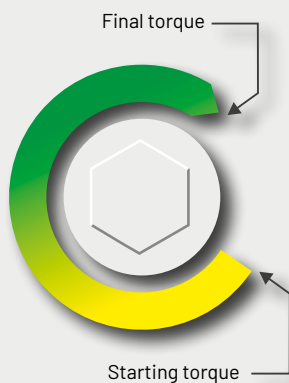
Models EF-A

Type		EF-A 400	EF-A 600	EF-A 800	EF-A 1000
Torque range (approx.) *	Nm	500-4250	1150-6200	1060-8000	2050-9800
	ft.lbs	370-3135	850-4575	780-5900	1510-7230
Square drive	B	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D ₁	mm / in	72 / 2.83	72 / 2.83	91 / 3.58
Diameter (approx.)	D ₂	mm / in	98 / 3.86	109 / 4.29	133 / 5.24
Height (approx.)	H	mm / in	320 / 12.6	350 / 13.8	350 / 13.8
Weight without DMA** (approx.)	kg / lbs	15.5 / 34	17.5 / 38.6	20 / 44	29 / 64
Idle speed	rpm	5	4	3	2

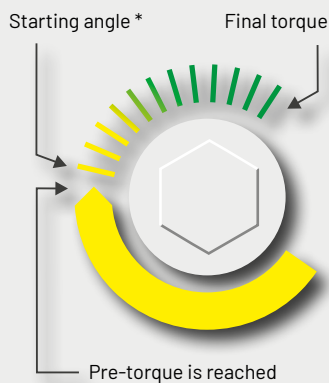
*) When loosening bolts, a higher torque (up to 20 %) may be necessary (release torque). We will be pleased to help you with your choice. **) Torque reaction arm

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.
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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
Documentation of tightening results
Automatic shut-off

Increased productivity

Quicker tightening without reworking
No environmentally caused failures (IP54, ATEX)
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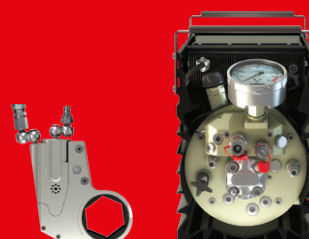
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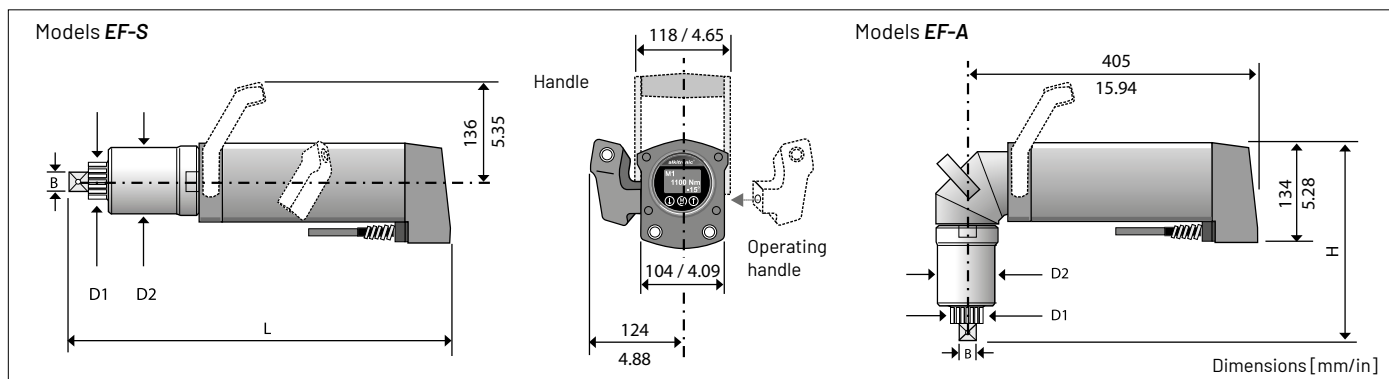
Mode 2 / M2 (Option)

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".

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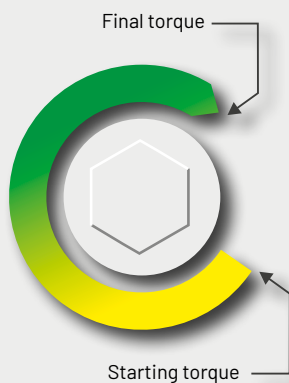
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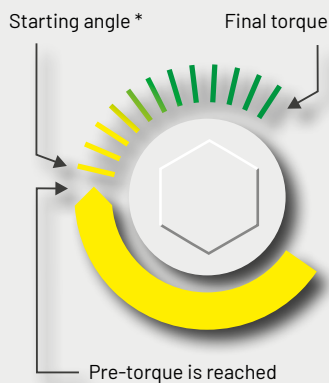
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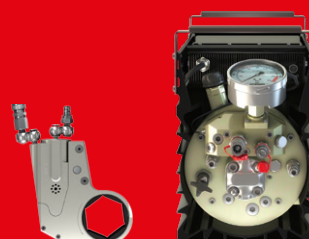
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