

ErgoSpin – ergonomic, powerful, handy

The ErgoSpin is designed according to the latest findings in ergonomics and fits the user's hand like a glove. The ergonomics of the handle, its light weight, and the optimum arrangement of operating and display elements increase worker productivity. New: From now on, the angle compensation function can be activated by a license stick for all ErgoSpin hand-held nutrunners with an integrated measurement transducer.



- ▶ Fast commissioning
- ▶ Flexible stock-keeping: only 1 cable type for all variants
- ▶ Maximum precision thanks to digital data transfer

- ▶ Ergonomic handling due to a rubber-coated angle head with a safety flange
- ▶ Process reliability thanks to clearly arranged display elements
- ▶ CC-ErgoSpin variant for function-critical tightening jobs



VARIANT ESM

Pistolgrip nutrunner with integrated powerful LED for tightening position illumination



VARIANT GripLine

Right-angle nutrunner with plastic-covered angle head for protection against scratches and accidental contacts as well as a second grip



VARIANT SlimLine

Right-angle nutrunner with slim angle head for high accessibility



VARIANT VarioLine

Zero-play spur gearing for free connection of crowfoot wrenches and special output drives

Hand-held nutrunner

ESM ErgoSpin pistolgrip nutrunner for safety-critical tightening jobs



- ▶ With square tool mount, quick-change chuck, 1/4" or 3/8" square tool mount
- ▶ Working range 2.4 – 35 Nm
- ▶ Max. output drive speed 1,700 rpm
- ▶ With integrated measurement transducer
- ▶ Suitable for safety-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ Pistolgrip nutrunner, also suitable for hard-to-reach tightening positions
- ▶ With integrated powerful LED
- ▶ Standard tool mounts
- ▶ Tested for one million cycles under full load without maintenance



ESM WITH SQUARE TOOL MOUNT

- ▶ Working range 2.4 – 35 Nm
- ▶ Max. output drive speed 1,700 rpm

Working range Nm	Max. output drive speed rpm	Tool mount	Weight kg	Installation length mm	Code	Order-no.
2.4–12	1,090	1/4" square drive	1	190	ESM012SD-G	0608841254
5–25	1,700	3/8" square drive	1.4	223	ESM025SD-G	0608841256
7–35	1,025	3/8" square drive	1.4	223	ESM035SD-G	0608841258



ESM WITH QUICK-CHANGE CHUCK TOOL MOUNT

- ▶ Working range 2.4 – 12 Nm
- ▶ Max. output drive speed 1,090 rpm

Working range Nm	Max. output drive speed rpm	Tool mount	Weight kg	Installation length mm	Code	Order-no.
2.4–12	1,090	1/4" quick-change chuck	1	201	ESM012QD-G	0608841255



ESM WITH 3/8" SQUARE TOOL MOUNT

- ▶ Working range 5 – 25 Nm
- ▶ Max. output drive speed 1,700 rpm

Working range Nm	Max. output drive speed rpm	Tool mount	Weight kg	Installation length mm	Code	Order-no.
5–25	1,700	3/8" square drive and zero-play spur gearing for free connection of special output drives	1.4	223	ESM025HT-G	0608841257

Note: For special output drives and planetary gearboxes suitable for the ErgoSpin, see "Accessories for ErgoSpin / CC-ErgoSpin hand-held nutrunners" on page 94.

Hand-held nutrunner ErgoSpin GripLine for safety-critical tightening jobs



- ▶ Working range 1 – 75 Nm
- ▶ Max. output drive speed 1,000 rpm
- ▶ With integrated measurement transducer
- ▶ Suitable for safety-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ Standard tool mounts
- ▶ Integrated LEDs visible all around
- ▶ Tested for one million cycles under full load without maintenance

Working range	Max. output drive speed	Tool mount	Weight	Installation length	Code	Order no.
Nm	rpm		kg	mm		
1–5	1,000	1/4" square drive	1.3	385	ESA005G-G	0608841224
2.6–13	1,000	1/4" square drive	1.3	385	ESA013G-G	0608841225
6–30	800	3/8" square drive	1.6	423.5	ESA030G-G	0608841226
8–40	1,000	3/8" square drive	1.8	437	ESA040G-G	0608841227
11–56	710	3/8" square drive	1.9	453	ESA056G-G	0608841228
13–65	610	1/2" square drive	1.9	453	ESA065G-G	0608841229
15–75	530	1/2" square drive	2.1	454	ESA075G-G	0608841230

Hand-held nutrunner ErgoSpin SlimLine for safety-critical tightening jobs



- ▶ Working range 1 – 220 Nm
- ▶ Max. output drive speed 1,000 rpm
- ▶ With integrated measurement transducer
- ▶ Suitable for safety-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ Angle head has a non-interchangeable code and can be turned and locked in 15-degree steps
- ▶ Integrated LEDs visible all around
- ▶ Tested for one million cycles under full load without maintenance

Working range	Max. output drive speed	Tool mount	Weight	Installation length	Code	Order no.
Nm	rpm		kg	mm		
1–5	1,000	1/4" square drive	1.3	382	ESA005S-G	0608841204
2.6–13	1,000	1/4" square drive	1.3	382	ESA013S-G	0608841205
6–30	800	3/8" square drive	1.6	416	ESA030S-G	0608841206
8–40	1,000	3/8" square drive	1.7	434	ESA040S-G	0608841207
11–56	710	3/8" square drive	1.9	446	ESA056S-G	0608841208
13–65	610	1/2" square drive	1.9	448	ESA065S-G	0608841209
15–75	530	1/2" square drive	2	450	ESA075S-G	0608841210
20–100	630	1/2" square drive	3.1	492	ESA100S-G	0608841211
30–150	380	1/2" square drive	3.8	531	ESA150S-G	0608841212
44–220	260	3/4" square drive	4	541	ESA220S-G	0608841213

Hand-held nutrunner ErgoSpin VarioLine for safety-critical tightening jobs



- ▶ Working range 1 – 146 Nm
- ▶ Max. output drive speed 1,700 rpm
- ▶ With integrated measurement transducer
- ▶ Suitable for safety-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ Extended application options in combination with handling devices and special output drives (e.g. crowfoot wrenches)
- ▶ Can be used as a tightening spindle with output drive adapters
- ▶ Fully suitable for robot use
- ▶ Tested for one million cycles under full load without maintenance

Working range	Max. output speed drive	Tool mount	Weight	Installation length	Code	Order no.
Nm	rpm		kg	mm		
1–5	1,090	Standard machine with an output with zero-play spur gearing for the attachment of special output drives	1.1	333	ESV005-G	0608841243
2.4–12	1,090		1.1	333	ESV012-G	0608841244
5–25	1,700		1.4	365	ESV025-G	0608841245
10–50	830		1.5	375	ESV050-G	0608841246
14–73	900		2.4	406	ESV073-G	0608841247
29–146	420		2.8	430	ESV146-G	0608841248

Hand-held nutrunner ESM CC-ErgoSpin pistolgrip nutrunner for function-critical tightening jobs



- ▶ Working range 2.4 – 25 Nm
- ▶ Max. output drive speed 1,700 rpm
- ▶ Current-controlled nutrunner
- ▶ Suitable for function-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ With integrated powerful LED
- ▶ Standard tool mounts
- ▶ Tested for one million cycles under full load without maintenance

Working range	Max. output speed drive	Tool mount	Weight	Installation length	Code	Order no.
Nm	1/min		kg	mm		
2.4 – 12	1,090	1/4" quick-change chuck	1	201	CC-ESM012QD	0608 841 089
5 – 25	1,700	3/8" square drive and zero-play spur gearing for free connection of special output drives	1.4	223	CC-ESM025HT	0608 841 094

Note: For special output drives and planetary gearboxes suitable for the ErgoSpin, see "Accessories for ErgoSpin / CC-ErgoSpin hand-held nutrunners" on page 94.

Hand-held nutrunner CC-ErgoSpin SlimLine for function-critical tightening jobs



- ▶ Working range 6–100 Nm
- ▶ Max. output drive speed 1,000 rpm
- ▶ Current-controlled nutrunner
- ▶ Suitable for function-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ Angle head has a non-interchangeable code and can be turned and locked in 15-degree steps
- ▶ Integrated LEDs visible all around
- ▶ Tested for one million cycles under full load without maintenance

Working range	Max. output drive speed	Tool mount	Weight	Installation length	Code	Order no.
Nm	1/min		kg	mm		
6–30	800	3/8" square drive	1.6	416	CC-ESA030S	0608841087
8–40	1,000	3/8" square drive	1.7	434	CC-ESA040S	0608841088
20–100	630	1/2" square drive	3.1	492	CC-ESA100S	0608841092

Hand-held nutrunner CC-ErgoSpin VarioLine for function-critical tightening jobs



- ▶ Working range 2.4 – 146 Nm
- ▶ Max. output drive speed 1,090 rpm
- ▶ Current-controlled nutrunner
- ▶ Suitable for function-critical tightening jobs in accordance with VDI/VDE 2862

FEATURES

- ▶ Extended application options in combination with handling devices and special output drives
- ▶ Can be used as a tightening spindle with output drive adapters
- ▶ Fully suitable for robot use
- ▶ Integrated LEDs visible all around
- ▶ Tested for one million cycles under full load without maintenance

Working range	Max. output drive speed	Tool mount	Weight	Installation length	Code	Order no.
Nm	1/min		kg	mm		
2.4–12	1,090	Standard machine with an output with zero-play spur gearing for the attachment of special output drives	1.1	333	CC-ESV012	0608841090
10–50	830		1.5	376	CC-ESV050	0608841093
29–146	420		2.8	430	CC-ESV146	0608841091

Output drives for ErgoSpin/CC-ErgoSpin VarioLine

In combination with handling devices and output adapters the hand-held nutrunner VarioLine becomes a tightening spindle. This offers extended application options and makes it fully suitable for robot use.

ANGLE HEADS

You can mount different angle heads on the ErgoSpin VarioLine. This makes your ErgoSpin hand-held nutrunner suitable for a variety of applications.

With an angle head for special output drives, you can e.g. mount a crowfoot wrench to the VarioLine.

VarioLine COMBINATION OPTIONS WITH ANGLE HEADS



ErgoSpin VarioLine Code	Code	Tool mount	Weight kg	Max. torque** Nm	Reduction	Avg. efficiency	Order no.
ESV005/ CC-ESV005	WH013S	1/4" square drive	0.2	13	1.1	0.95	3608876051
	WH013G*	1/4" square drive	0.2	13	1.1	0.95	3608876052
ESV012/ CC-ESV012	WH013S	1/4" square drive	0.2	13	1.1	0.95	3608876051
	WH013G*	1/4" square drive	0.2	13	1.1	0.95	3608876052
ESV025	WH040S	3/8" square drive	0.4	40	1.73	0.95	3608876055
	WH040G*	3/8" square drive	0.4	40	1.73	0.95	3608876056
ESV050/ CC-ESV050	WH056S	3/8" square drive	0.5	56	1.16	0.95	3608876057
	WH056G*	3/8" square drive	0.6	56	1.16	0.95	3608876058
	WH065S	1/2" square drive	0.5	65	1.35	0.95	3608876059
	WH065G*	1/2" square drive	0.7	65	1.35	0.95	3608876060
	WH075S	1/2" square drive	0.5	75	1.56	0.95	3608876061
	WH075G*	1/2" square drive	0.7	75	1.56	0.95	3608876062
ESV073	WH100S	1/2" square drive	0.7	100	1.42	0.95	3608876063
ESV0146/ CC-ESV146	WH150S	1/2" square drive	1.0	150	1.1	0.95	3608876064
	WH220S	3/4" square drive	1.3	220	1.59	0.95	3608876065



ErgoSpin VarioLine Code	Code	Tool mount	Weight kg	Max. torque** Nm	Reduction	Avg. efficiency	Order no.
ESV025	WHS040	3/8" square drive	0.5	40	1.73	0.95	3608876081
ESV050/ CC-ESV050	WHS075	1/2" square drive	0.7	75	1.56	0.95	3608876082
ESV073	WHS100	1/2" square drive	0.9	100	1.42	0.95	3608876083

* Plastic-covered titanium angle head as a second grip

** Value refers to angle head

STRAIGHT OUTPUT DRIVES

Straight output drives combined with the ErgoSpin VarioLine produce a straight nutrunner. The combination of VarioLine and straight output drives supplies an ergonomic

solution for tightening cases of up to 12 Nm: whether vertically suspended, as a hand-held straight nutrunner, a hand-held application, or in connection with handling devices.

VarioLine COMBINATION OPTIONS WITH STRAIGHT OUTPUT DRIVES*



ErgoSpin VarioLine Code	Working range Nm	Tool mount	Reduction	Avg. efficiency	Installation length mm	Weight kg	Code	Order no.
ESV005	1–5	1/4" square drive	1	1	31.5	0.1	ESISA012	0608810047
	1–5	1/4" quick-change chuck	1	1	31.5	0.1	ESIQA012	0608810048
ESV012/ CC- ESV012	2.4–12	1/4" square drive	1	1	31.5	0.1	ESISA012	0608810047
	2.4–12	1/4" quick-change chuck	1	1	31.5	0.1	ESIQA012	0608810048

OUTPUT DRIVE ADAPTERS

With the output drive adapters, you can combine the ErgoSpin VarioLine with output drives in sizes 2, 3, and 4 for tightening spindles and e.g. use it as a tightening spindle.

VarioLine COMBINATION OPTIONS WITH OUTPUT DRIVE ADAPTERS*



ErgoSpin VarioLine Code	Working range Nm	Tool mount	Reduction	Avg. efficiency	Installation length mm	Weight kg	Code	Order no.
ESV005	1–5	Size 2	1	1	41.4	0.1	ESOA012	0608810049
ESV012/ CC-ESV012	2.4–12	Size 2	1	1	41.4	0.1	ESOA012	0608810049
ESV025	5–25	Size 3	1	1	40.3	0.1	ESOA025	0608810050
ESV050/ CC-ESV050	10–50	Size 3	1	1	41.2	0.2	ESOA050	0608810051
ESV073	14–73	Size 4	1	1	44.5	0.3	ESOA073	0608810052
ESV146/ CC-ESV146	29–146	Size 4	1	1	44	0.3	ESOA146	0608810053

* Special output drives on request

Accessories for ErgoSpin / CC-ErgoSpin hand-held nutrunners



HOLDER FOR RIGHT-ANGLE NUTRUNNER AND STRAIGHT NUTRUNNER

Code	Order no.
ESAT	3608876626

PRESENCE DETECTION SENSORS

On request



HOLDER FOR ESM PISTOLGRIP NUTRUNNER

Code	Order no.
ESMT	3608877433

PRESENCE DETECTION SENSORS

On request



TURNING SUSPENSION

Code	Ø mm	ErgoSpin	Order no.	Weight g
ESMH1	50	ESA005-075	3608875426	100
		ESV005-050		
ESMH2	63	ESA100-220	3608875921	145
		ESV073-146		

TURNING SUSPENSION WITH EXTENSION

On request



SUSPENSION FOR ERGOSPIN PISTOLGRIP NUTRUNNER

Code	Order no.
ESMB	3608876767



EXTENSION

Code	Installation length mm	ErgoSpin	Order no.
ESET040	200	ESA040 / ESV025	On request
ESET056	250	ESA056 / ESV050	
ESET065	250	ESA065 / ESV050	
ESET075	250	ESA075 / ESV050	
ESET100	250	ESA100 / ESV073	



EXTRA GRIP

Code	ErgoSpin	Order no.
ESMH12	ESM012SD, ESM012QD	3 608 877 111
ESMH25	ESM025SD, ESM025HT, ESM035SD	3 608 877 112



VERTICAL SUSPENSION

Code	ErgoSpin	Order no.	Weight g
ESMV	ESA / ESV	3 608 875 435	180

START LEVER EXTENSION FOR STRAIGHT NUTRUNNERS INCL. VERTICAL SUSPENSION

Code	ErgoSpin	Order no.	Weight g
ESTE	ESA005-075 ESV005-050	3 608 876 175	235

Accessories for ErgoSpin / CC-ErgoSpin hand-held nutrunners



STROKE EXTENSION

Code	Order no.
ESSE	3608876746



ADAPTER WITH HOLES FOR HANDLING DEVICES

Code	ErgoSpin	Order no.
ESCU1B	ESA005-075, ESV005-050	3608876459
ESCU2B	ESA100-220, ESV073-146	3608876409



ADAPTER WITHOUT HOLES FOR HANDLING DEVICES

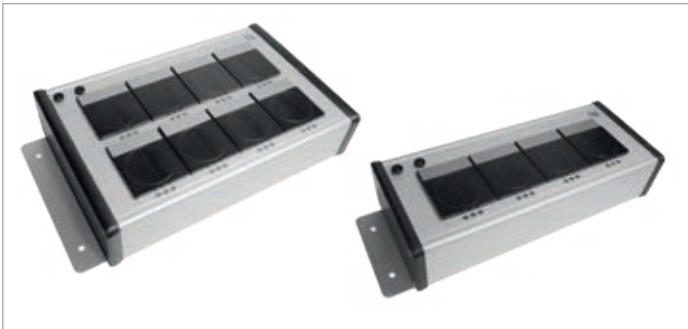
Code	ErgoSpin	Order no.
ESCU1F	ESA005-075, ESV005-050	3608876751
ESCU2F	ESA100-220, ESV073-146	3608876749



TORQUE SUPPORT WITH OR WITHOUT TOOL BALANCER

On request

You can choose from a large number of variants. The torque supports differ in drive direction (vertical/horizontal), extension length and torque range.



SOCKET TRAY

On request

You can choose from a large number of variants. The socket trays are available with four or eight slots and can be expanded to up to 32 slots with additional modules. The following connection variants are available: fieldbus connections (PROFIBUS, PROFINET, Ethernet/Open Modbus UDP/TCP), 24V I/O, Open Protocol and WiFi.



ERGOSPIN WITH INTEGRATED SCANNER

On request



PLANETARY GEARBOXES FOR HIGH TORQUES UP TO 1,000 NM

On request



CROWFOOT WRENCH FOR ERGOSPIN NUTRUNNERS

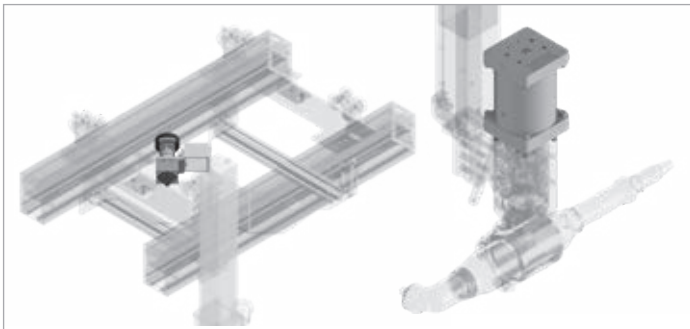
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Accessories for ErgoSpin / CC-ErgoSpin hand-held nutrunners



PROGRAM SELECTOR SWITCH

On request



BRAKES

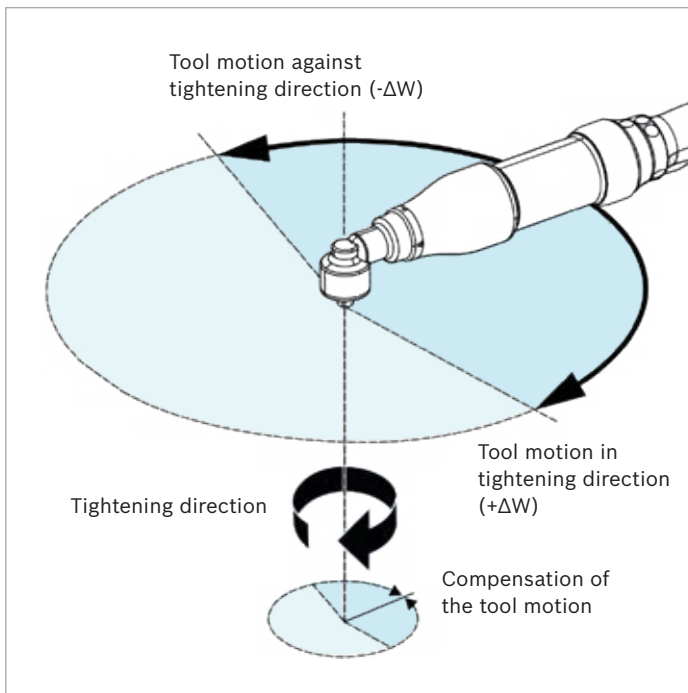
On request



HANDLING DEVICES

On request

Angle compensation function



FUNCTIONALITY

- ▶ Functionality available for all new ErgoSpin hand-held nutrunners
- ▶ Compensation of worker movement with triaxial sensors in real-time
- ▶ Measurement and output of the programmed actual angle of turn values
- ▶ Improvement of the joint quality especially in connection with angle-controlled target functions
- ▶ No alignment of the Bosch gyro sensor required thanks to triaxial sensor system



LICENSE STICK

The angle compensation function is available for the Rexroth Tightening System 350 from software version V2.500 upwards. Activating the angle compensation function requires a license, which is available on a license stick. Each license stick contains exactly one license for a tightening channel. The license stick must be plugged into the corresponding control unit (interface X3U1, X3U2) for the function to be executed.

FREE DEMO PERIOD

The angle compensation function can be tested for a maximum period of 30 days without licensing. Activation is only possible once for each channel on each controller.

NOTE

It is possible to make changes to the angle head setting. Information on this can be found in the configuration description.

LICENSE STICK

Code		Order no.
LS-ESG	1 x License	0 608 830 307