SCHISCHEK
EXPLOSIONPROOF

Damper actuator 15 Nm spring return <1 sec

Electrical, explosionproof spring return actuator for hazardous areas zone 1, 2, 21, 22 – torque 15 Nm, spring return <1 sec – tested acc. to ATEX

Type EXT-15...-F1

List 2.3 EX-TURN

APPLICATION

EXT-15...-F1 Spring return damper actuator with direct coupling to shaft. Explosionproofed in acc. with "flameproof enclosure" and dust ignition proof, PTB-tested. Installation in hazardous areas zones 1, 2, 21, 22. The actuator will stop on overload. On loss of power, the actuator returns the damper to its safety position within 1 second. Squared shaft connection 14 x 14 mm.
Application: For **industrial plant**. For **Offshore** applications we recommend the special types **EXT-15...-F1/CT and EXT-15...-F1/VA.**

Off-shore and industrial plant

Ⓔx II2G EEx d IIC T6
Zone 1, 2
Ⓔx II2D IP65 T95°C
Zone 21, 22

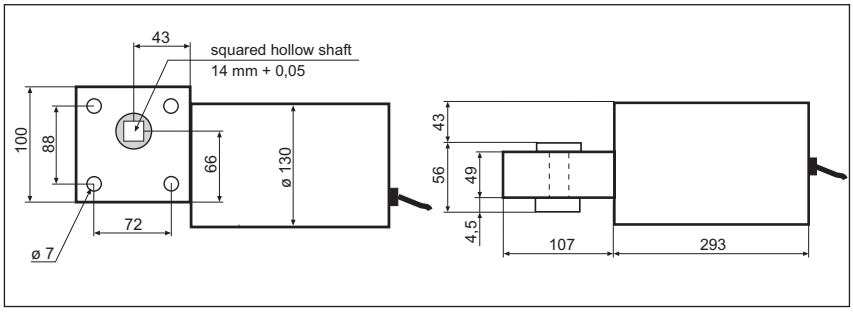
TECHNICAL DATA

Type	**EXT-15230-F1**	**EXT-1524-F1**
Supply voltage ±10%	230 VAC 50...60Hz	24 VAC 50...60Hz / 24 VDC
On request	48 VDC	
Power consumption	~25 VA	~25 VA
Starting current		capacitive load $I_{START} >> I_{TYP}$
Torque	**Actuator: 20 Nm, Spring return: 15 Nm at 90°; min. 10 Nm at 0°**	
Running time motor	~180 sec/90°	~180 sec/90°
Running time spring	<1 sec/90°	<1 sec/90°
Control mode	on-off	on-off
Angle of rotation	93°	93°
Safety operations	10.000, however depending on damper-design and operating conditions	
Shaft connection	squared hollow shaft 14 mm +0,05	
Endswitches	**no endswitches, actuator is overload protected up to the maximum nominal load +10%**	
Ambient temperature	0... 40 °C, non condensing	
Housing material	Aluminium baked varnish	
Weight	Al: ~10 kg / VA: ~17 kg	
Indication	CE Nr. 0158	
Permission	PTB-tested acc. to directive 94/9/EG (ATEX)	
Certificate	PTB 99 ATEX 1103	
Explosionproof	Ⓔx II2G EEx d IIC T6, CENELEC EN 50014/ EN 50018 Ⓔx II2D IP65 T95°C, CENELEC EN50281-1-1	
External PE-connector	Connectable lines: 4 mm² multiple-wire, 6 mm² single-wire	
Prot. in acc. with EN 60529	IP 65	
Operating mode	S3 80%ED acc. to EN60034-1	
Included	Actuator with 1 m cable	
Installation area	hazardous areas zone 1, 2, 21, 22	

ACCESSORIES

/K	Heater for uncontrolled storage atmosphere to prevent inside condensation. Power consumption of the heater ~16 W.
/CT	All housing parts aluminium with **Amercoat** varnish for **Offshore** application.
/VA	All housing parts in **stainless steel** AISI 316 for **Offshore** application.
/2EE	2 integral, potential free aux. switches, switching at ~5° and ~85°, max 250 V, 0,25 A/60 W.
EXC-K...	Different EEx e terminal boxes available.
EHA	External emergency manual operation.
EXC-DS1/VA	Trigger, temperature sensor for safety function, with glass bulb, housing in stainless steel.

DIMENSIONS

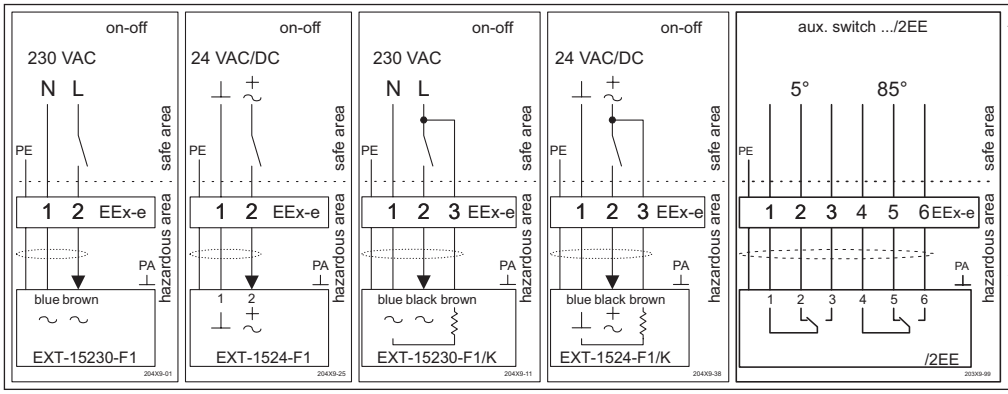


ATTENTION

- **Do not run the actuator without load. The minimum load on spring return should be > 3 Nm!**
- The cable of the actuator must be installed in a fixed position and protected against mechanical damage.
- For installation, use and maintenance the official standards and rules must be applied.
- **The EEx actuators may only be opened by the manufacturer to guarantee explosionproof and to avoid loss ofwarranty.**
- **Make sure the spring return force will not damagethe damper.**
- It is advised that a protective guard is used to protect against the sudden travel of the manual override lever.
- For outdoor installations a heater and a weather protective housing against rain, snow and sun is required.
- After installation all componetes must fullfil the protection class IP65 acc. EN60529.

ELECTRICAL CONNECTION

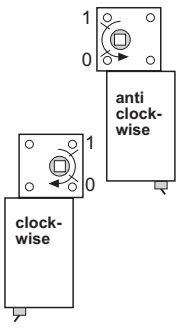
Attention : hollow shaft rotary direction on power on is from "0" to "1"



Additional information

1. Parallel mounting: for parallel mounting of two actuators on a single damper, a special wiring diagram will be supplied (synchronisation required). The combined torque of parallel actuators is less than the sum of the single torques.
2. EEx-e terminal boxes on request.
3. Cable feed through positions vary.

Direction of spring return



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subject to change

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Montageanleitung
Mounting instructions

EXT-15...-F1

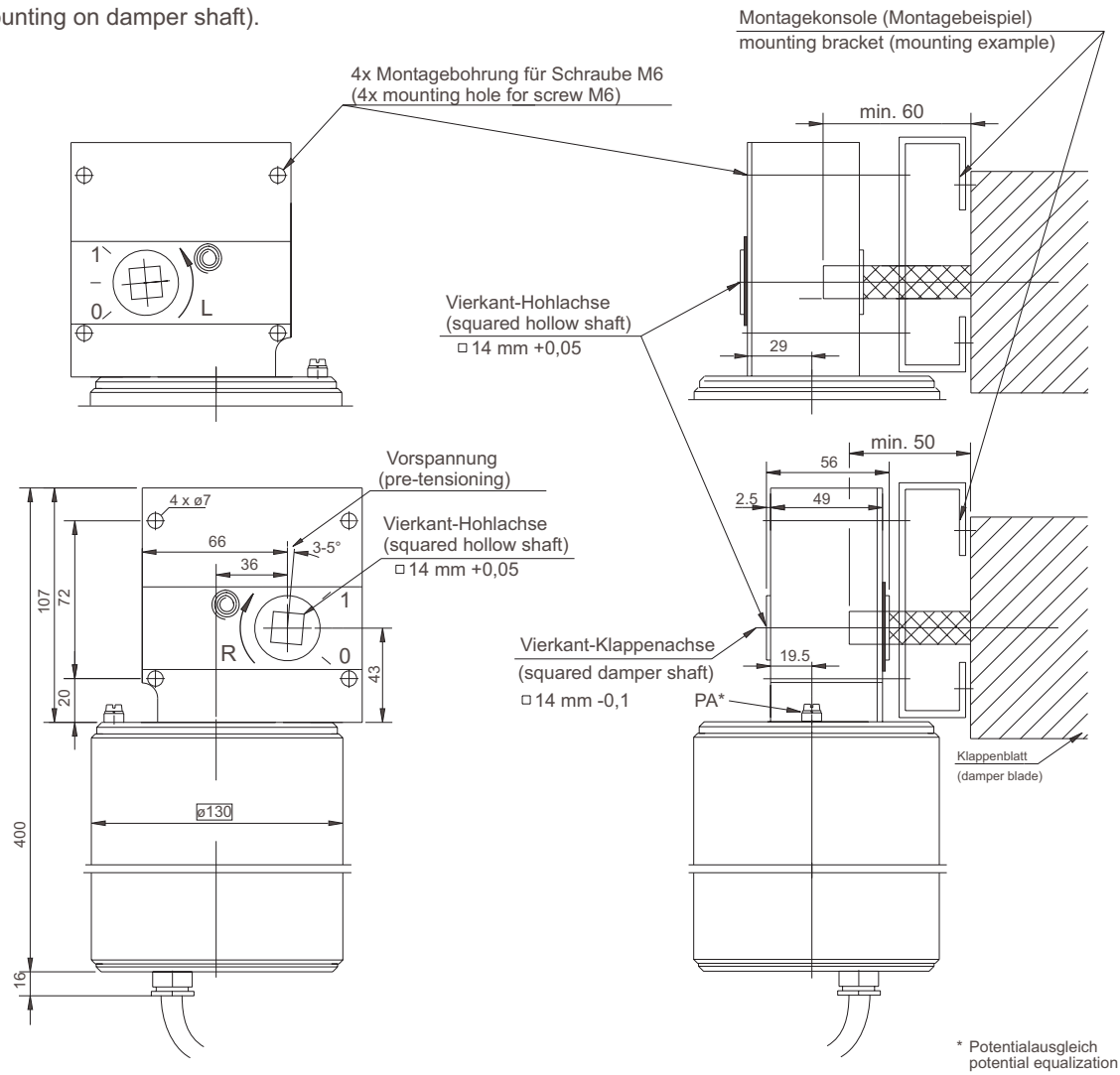
Steckmotore für direkte Montage auf Klappenachse.
(Actuator for direct mounting on damper shaft).

ACHTUNG

- Die Klappenachse muss mit der Achse des Antriebes fluchten.
- Die Montagekonsole muss eine ausreichende Langzeitstabilität garantieren und darf sich nicht verformen.

ATTENTION

- The damper axis must be in alignment with the axis of the actuator.
- The mounting bracket must have a sufficiently largely long-term stability to avoid any deformation.



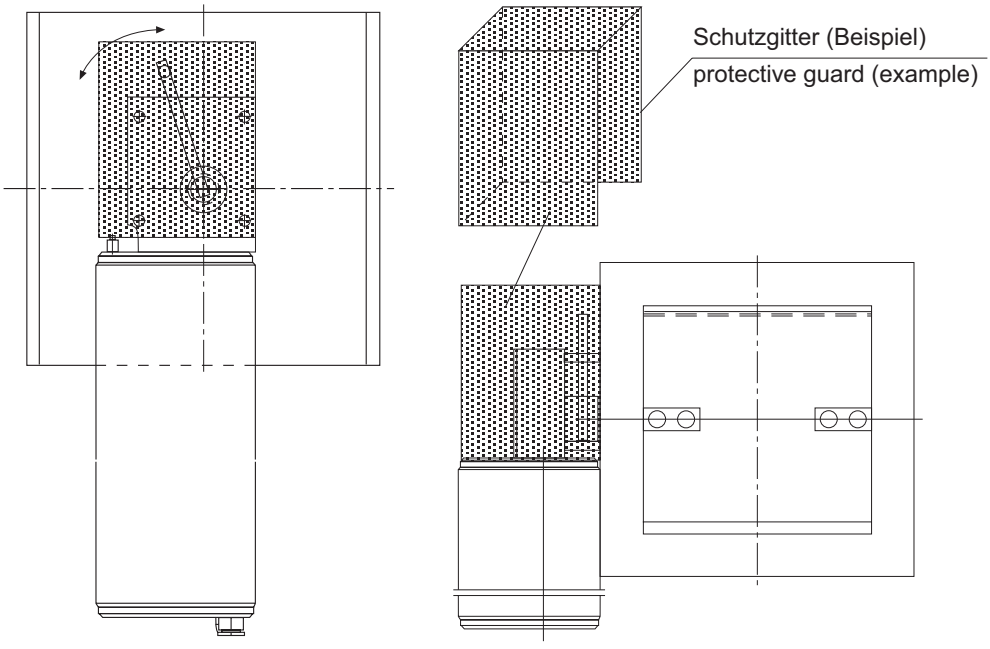
Handnotverstellung
Manual Override

ACHTUNG!

- Um Verletzungen durch den Hebel der Handnotbetätigung zu vermeiden, wird ein Schutzgehäuse empfohlen.
- Die Handnotbetätigung darf nur im stromlosen Zustand des Antriebes betätigt werden, d.h. die Feder muss entspannt sein, der Hebel ist auf 0!

ATTENTION!

- It is advised that a protective guard is used to protect against the sudden travel of the manual override lever.
- Cut power before using the manual override and be sure that the spring has closed the damper, lever is at 0!



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