

# EDELWEISS Actuators

## Electrical Explosion Proof actuators

Catalogue/price list 2012

### Series EXBE – on/off

- ✚ *No spring return*
- ✚ *Running time 60 sec.*
- ✚ *40 Nm*
- ✚ *Rotation 100°*
- ✚ *Control: 2 wire, ON/OFF.*
- ✚ *Power supply 230V ac, 24V ac, 24V dc*
- ✚ *In according to EN 60079-0, EN60079-1, EN 60079-31*
- ✚ *Zone 1, 2, 21, 22*

#### Applications

The EXBE actuators are intended for the operation of smoke extraction dampers in fire smoke extraction system.

#### Features

The actuator moves the damper to its working position until it is powered. If the power supply is interrupted the motor locks the damper position.

The actuator is overload protected and can be mechanically stopped in any position. The actuator can be mounted directly on the damper shaft if square, 12 x 12 mm or 10 x 10 mm (adaptor included); Several mounting brackets are available for applications where the actuator cannot be directly coupled to the damper shaft.

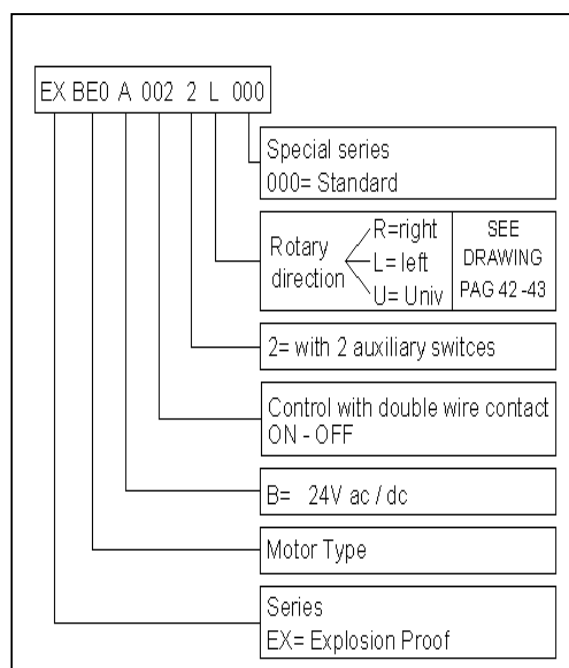
The cable glands are fit for cable diameters from 8 to 10,5 mm.

#### Products range

| ITEM                 | Belimo type | Auxiliary Switch |
|----------------------|-------------|------------------|
| EXBE 0 A 002 2 L 000 | BE230-12    | 2 x SPDT         |
| EXBE 0 B 002 2 L 000 | BE24 -12    | 2 x SPDT         |

#### Options available on request:

Different angle of rotation  
Different wiring length



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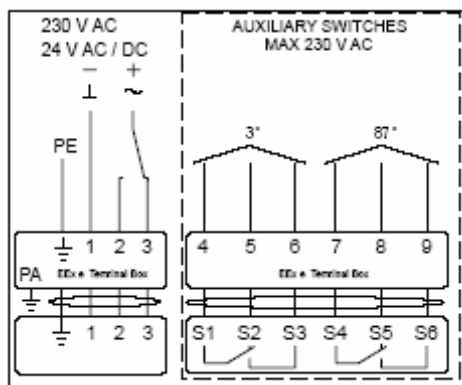
| Technical data           |                                                              |
|--------------------------|--------------------------------------------------------------|
| Torque                   | 40 Nm                                                        |
| Blocking torque:         | running 40 Nm                                                |
| Steady-state             | 50 Nm                                                        |
| Control Mode             | ON/OFF, 2 wire                                               |
| Rotation angle           | 100°                                                         |
| Running time             | 60 Sec. for 90°                                              |
| Ambient temperature      | -20°C + 50°C                                                 |
| Degree of protection     | IP66                                                         |
| Housing material         | Aluminium baked varnish                                      |
| Maintenance              | None                                                         |
| Fastening                | Terminal block in Ex e box                                   |
| Wiring length            | 1 m. cable                                                   |
| Weight                   | 7.5 kg                                                       |
| Auxiliary micro switches | 6A (3A) max 250 V ac<br>Switching point at 3° e 87° (±2)     |
| EMC                      | CE according to 2004/108/EC                                  |
| Low voltage directive    | CE according to 2006/95/EEC                                  |
| Halogen – Free wiring    | According to IEC 60332-1/3 and<br>According to IEC 60754-1/2 |

| Technical data             |                        |
|----------------------------|------------------------|
| EXBE A Version             |                        |
| Power supply               | 230 V AC ±14% 50/60 Hz |
| Power consumption: running | 8,0 W                  |
| At end position            | 0,5 W                  |
| Sizing                     | 15 VA                  |

|                            |                                            |
|----------------------------|--------------------------------------------|
| EXBE B Version             |                                            |
| Power supply               | 24 V AC ± 20% 50/60 Hz<br>24 V DC -10/+20% |
| Power consumption: running | 12 W                                       |
| At end position            | 0,5 W                                      |
| Sizing                     | 18 VA                                      |

### Electric diagram

### Direction of rotation



#### NOTE:

- Read the note about the use and torque requirements of the damper manufacturer
- All electrical wirings must be according to local standards.
- Electrical connections by power off only.
- Ex e junction box must not be opened under any circumstances when the power is on.
- Actuator cable must be installed in a fixed position and protected against damage.
- Avoid excessive vibrations.
- Before switching-on, check that no other equipment is damaged and make sure that supply voltage corresponds with the Actuator's specification.
- Before switching-off check for possible effects on other equipments.
- The Actuator cannot and is not to be opened to guarantee explosion proof and warranty.
- For any problem contact Edelweiss Actuators.
- The equipment shall be marked "X" since flameproof joint is other than the relevant minimum or maximum according to CEI EN 60079-1. information on dimension of flameproof joints available at Edelweiss Actuators.srl

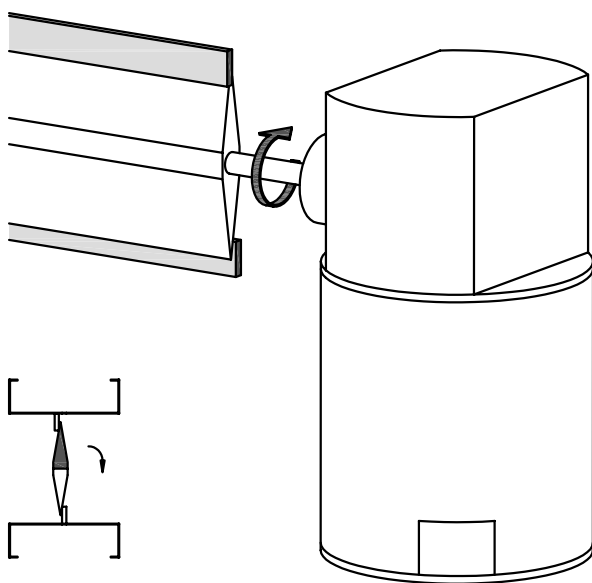
### Rotary Direction "R" For Damper normally closed N.C.

#### MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

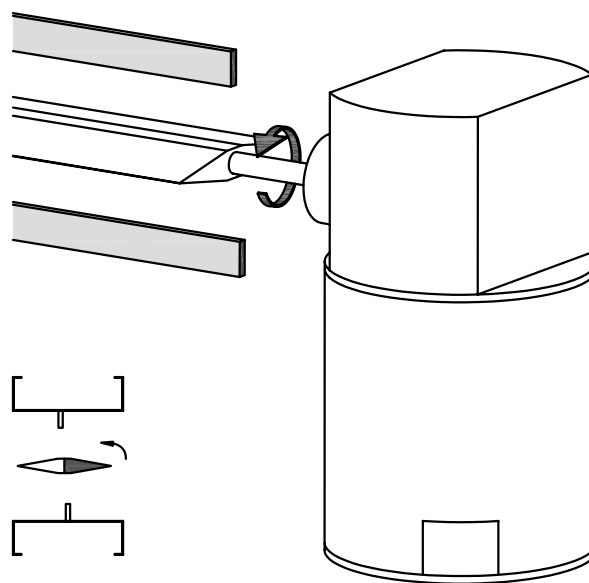


#### MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



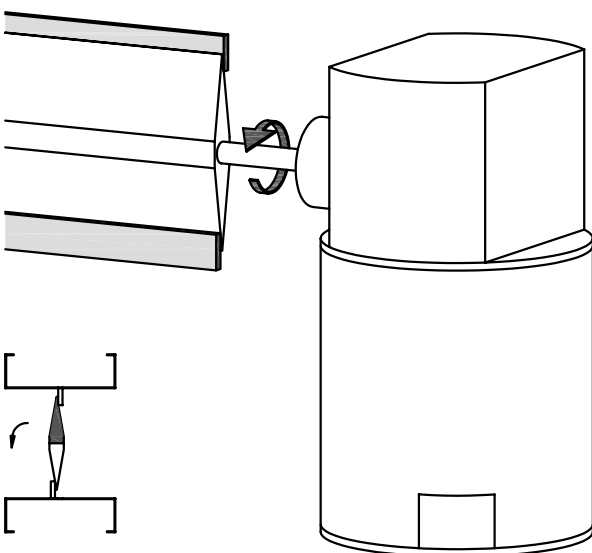
### Rotary Direction "L" For Damper normally closed N.C.

#### MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

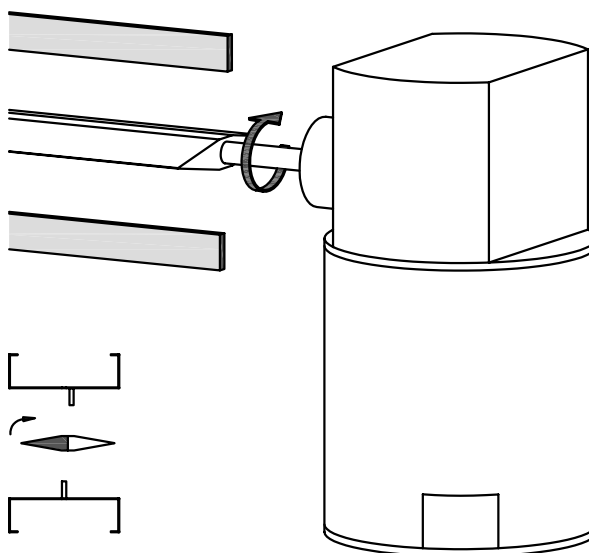


#### MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



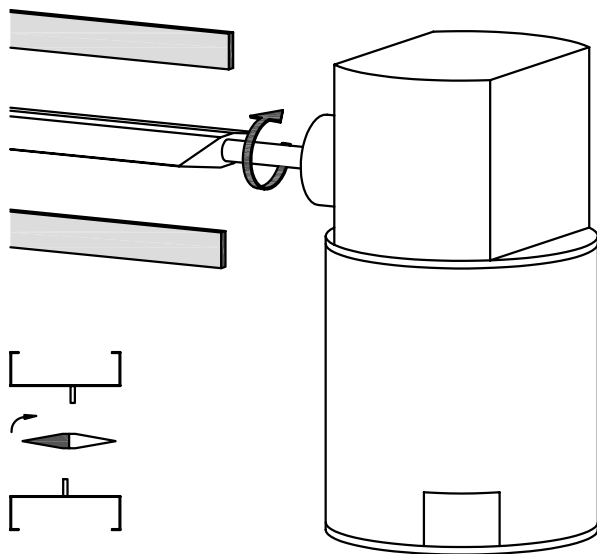
### Rotary Direction "R" For Damper normally open N.O.

#### MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

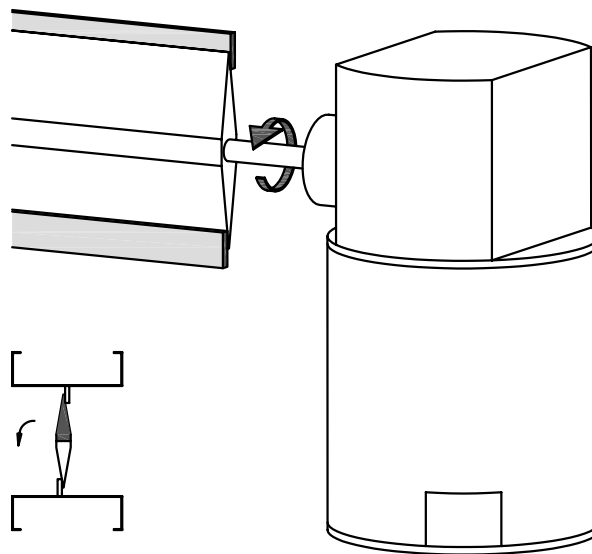


#### MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



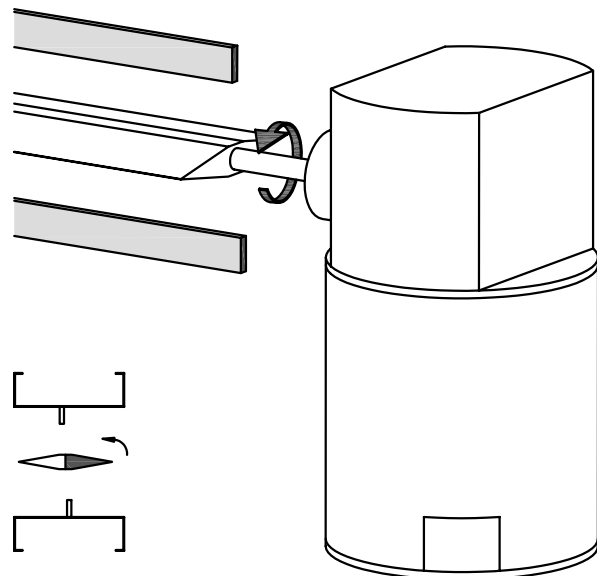
### Rotary Direction "L" For Damper normally open N.O.

#### MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

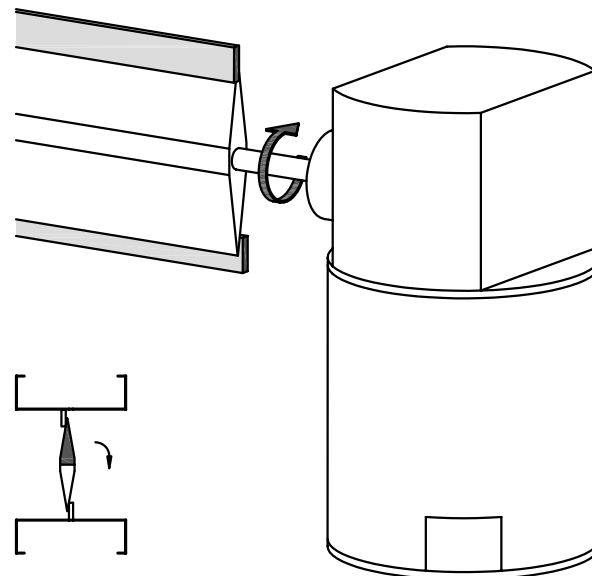


#### MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



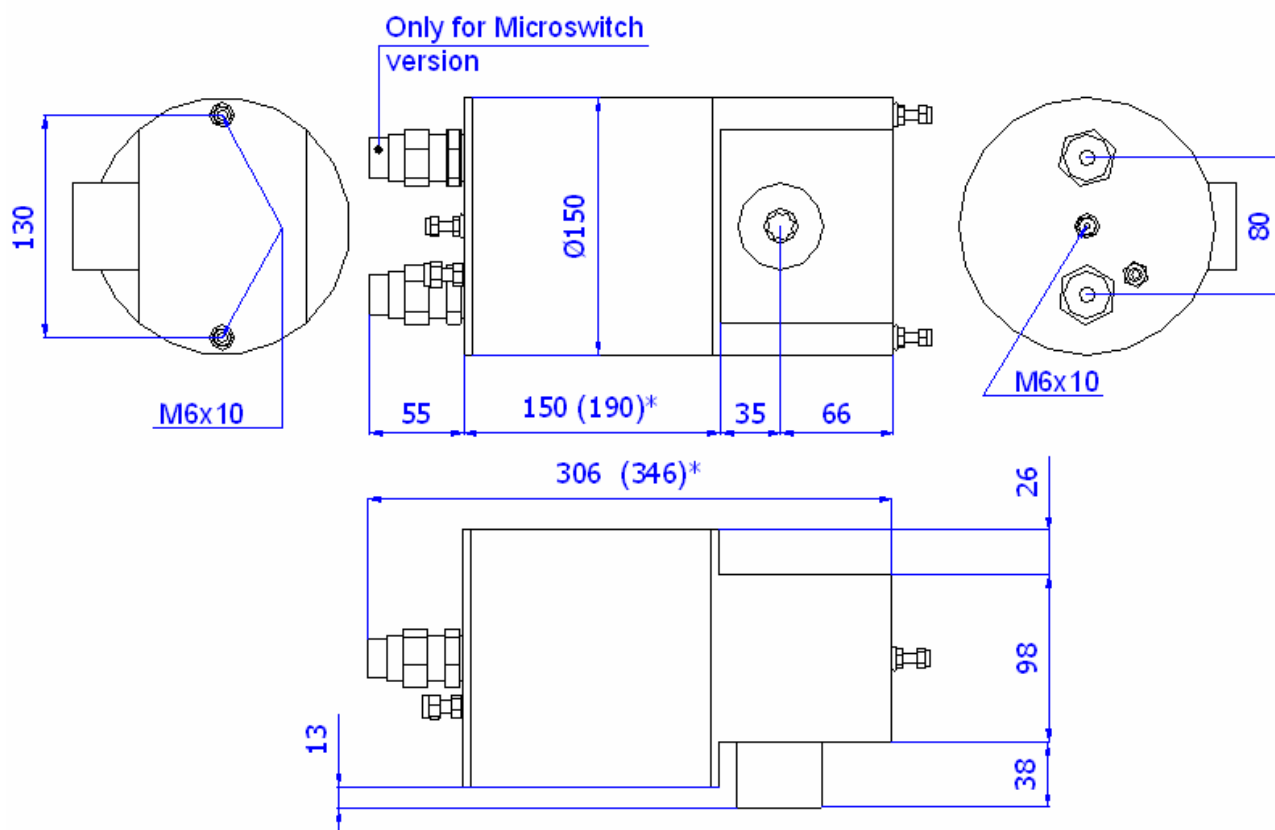
# EDELWEISS *Actuators*

Electrical Explosion Proof actuators

Catalogue 2012

Dimensions and Mounting instructions

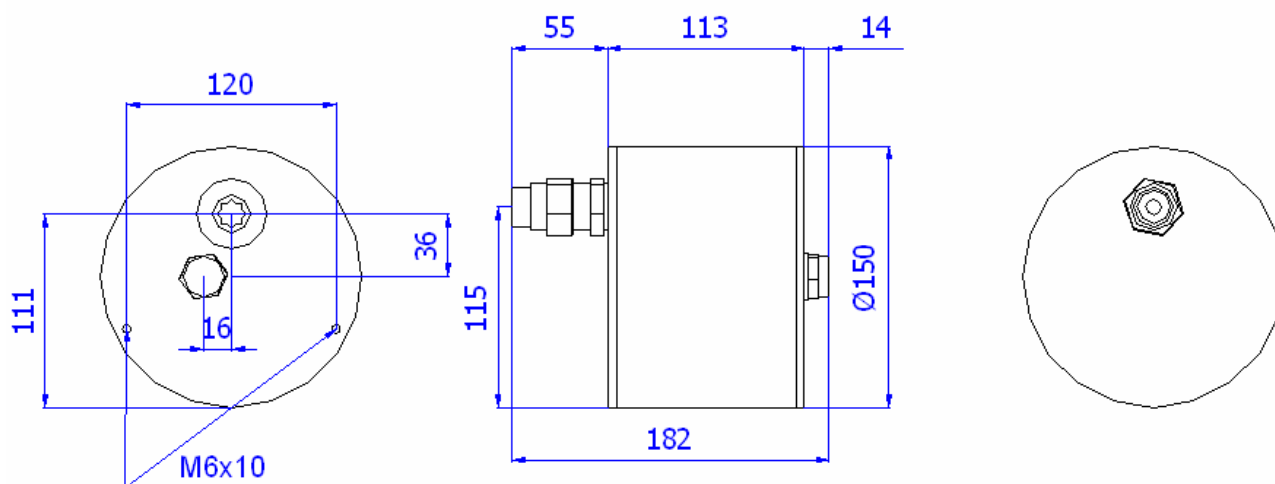
**EXAF - EXBF - EXBE - EXBG - EXSM - EXAM**



\*= Only series EXAF, EXBF, EXBG, EXBE

Note: dimension are specified in millimeters

**EXNM**



Note: dimension are specified in millimeters

# EDELWEISS *Actuators*

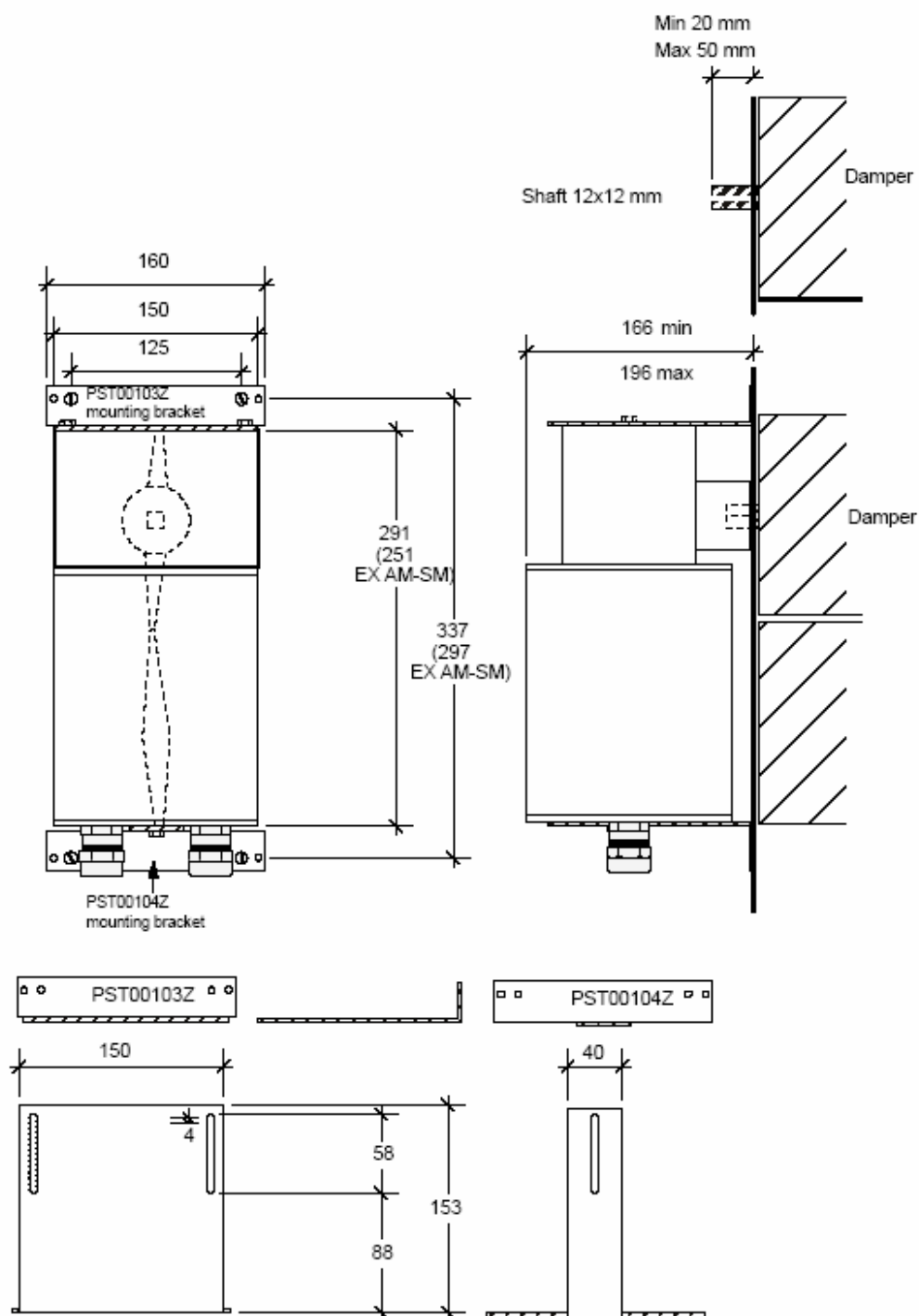
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**EXAF - EXBF - EXBE - EXBG – EXSM - EXAM**

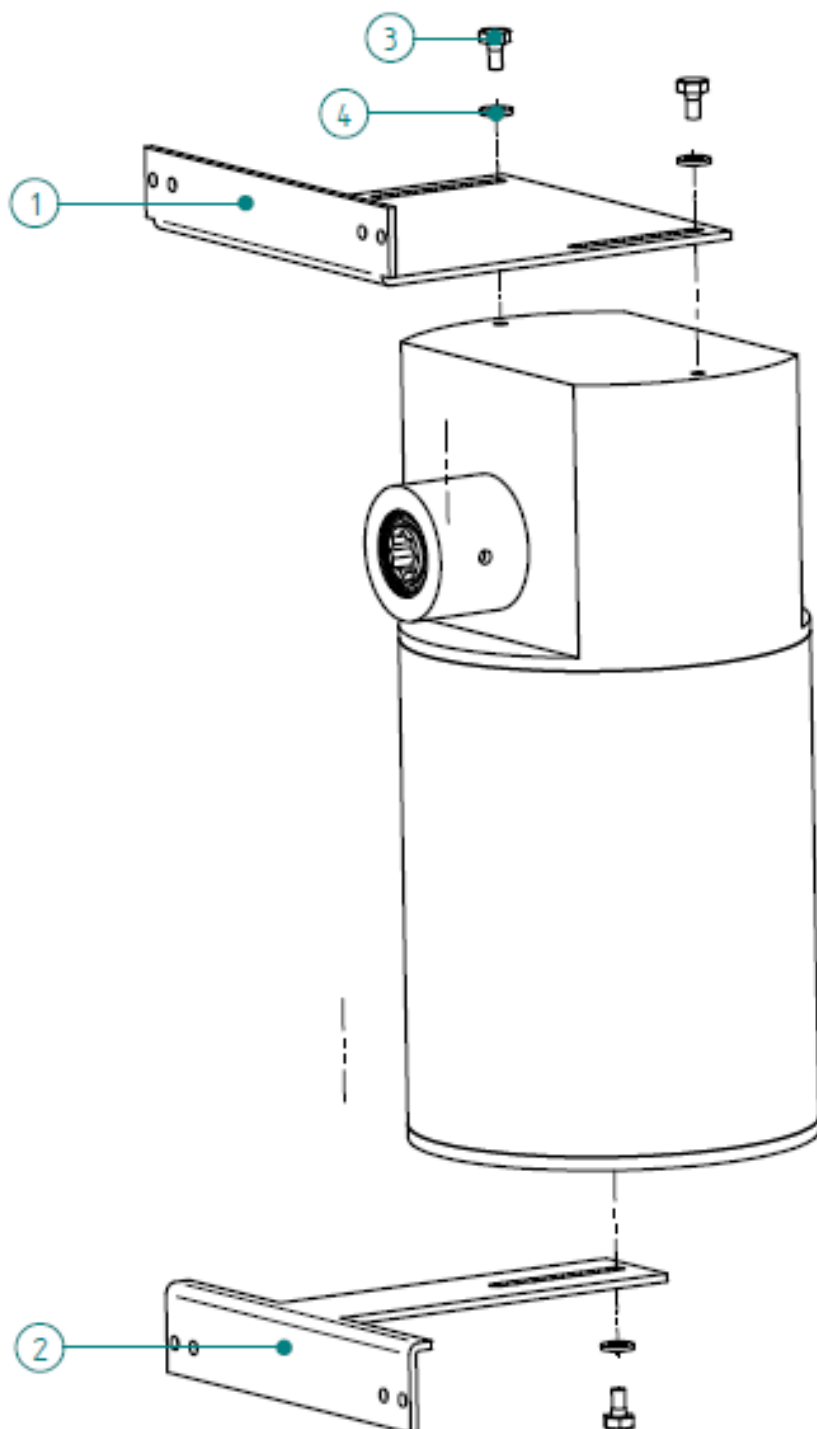
Direct mount on square shaft, 12 x 12 mm



# EDELWEISS *Actuators*

## Electrical Explosion Proof actuators Dimensions and Mounting instructions

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| n° | Code-Description |
|----|------------------|
| 1  | PST00103Z        |
| 2  | PST00104Z        |
| 3  | TDE M6X10        |
| 4  | Flat washer      |

Mount the bracket as shown in the picture above.

Threaded hole depth: 8mm. Do not replace standard screws with other one; or ensure that screws does not penetrate more than 7mm into the enclosure.

Flat washer dimension : Di= 6,4mm De=12mm h=1,6mm