

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXAF – Modulating

- ✚ *Spring Return torque: 20 Nm*
- ✚ *Motor torque: 20 Nm*
- ✚ *Spring running time $\pm$ 20 sec.*
- ✚ *Working Field 2...10V (Standard)*
- ✚ *Power supply 24V ac, 24V dc*
- ✚ *In according to EN 60079-0, EN60079-1, EN 60079-31*
- ✚ *Zone 1, 2, 21, 22*



Applications

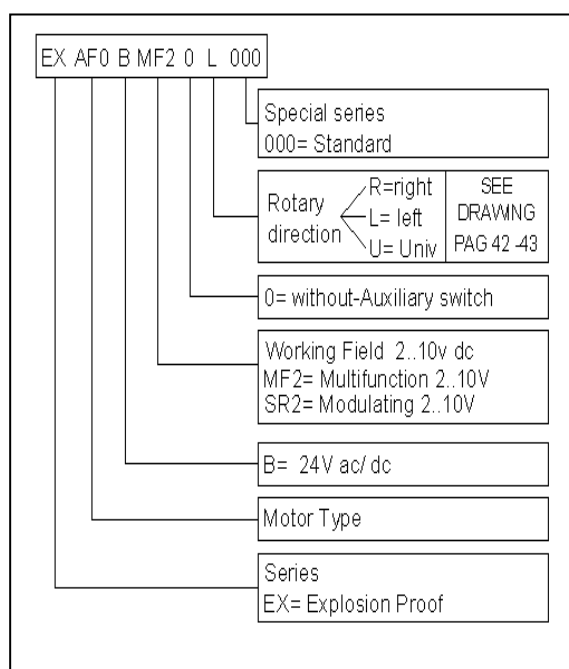
The EXAF spring return actuators are intended for the operation of air damper that perform safety functions (e.g. frost and smoke protection, hygiene, ect.) up to 3 m²

Features

The actuator moves the damper to its working position while tensioning the spring return until it is powered. If the power supply is interrupted the spring moves the damper back to its safe position. The actuator is overload protected. 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
EXAF 0 B MF2 0 L 000	SF24A-MF	None
EXAF 0 B MF2 0 R 000		
EXAF 0 B MF2 0 U 000		
EXAF 0 B SR2 2 L 000	SF24-SR-S2	2 x SPDT
EXAF 0 B SR2 2 R 000		
EXAF 0 B SR2 2 U 000		



Options available on request:

Different angle of rotation
Different wiring length

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

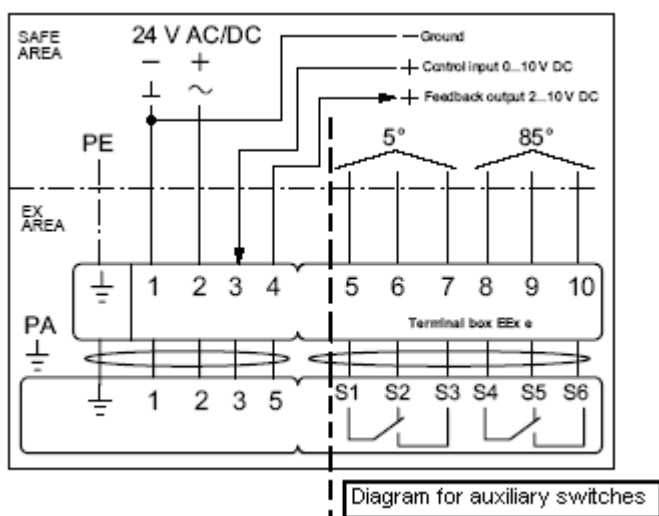
Series EXAF – Modulating

Technical data			
Motor and spring Return Torque	20 Nm	Power supply	AC 24V $\pm 20\%$ 50/60 Hz
Control Mode	DC 0...10v		DC 24V -10/+20%
Working Field	DC 2...10v	Power consumption: running	6,0 W
Feedback	DC 2...10v	At rest	1,5 W
Angle of rotation	95°	Sizing	10,0 VA
Running time motor	150 Sec.		
Running time spring return	± 16 sec		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	8,6 Kg		
Auxiliary switches	6A (3A) max 250V switching point 5° e 85°		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
Running time motor 150 s adjustable
Control DC 2...10 V, 0...32 V adjustable
Operating range DC 2...10 V, 0...32 V (adjustable)
Position feedback DC 2...10 V, 0...10V, (adjustable)

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXAF – on/off

- ✚ *Power supply Multivolt from 24V to 230V
AC 50/60 Hz or 24V to 125V DC*
- ✚ *Control ON/OFF – 1 wire*
- ✚ *Motor torque: 20 Nm*
- ✚ *Spring Return torque: 20 Nm*
- ✚ *Spring running time $\pm$ 20 sec.*
- ✚ *Power supply 230V ac, 24V ac, 24V dc*
- ✚ *In according to EN 60079-0, EN60079-1,
EN 60079-31*
- ✚ *Zones 1, 2, 21, 22*



0948

NEMKO 03 ATEX 1242X



II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may differ from the illustration

Applications

The EXAF spring return actuators are intended for the operation of air damper that perform safety functions (e.g. frost and smoke protection, hygiene, ect.) up to 4 m²

Features

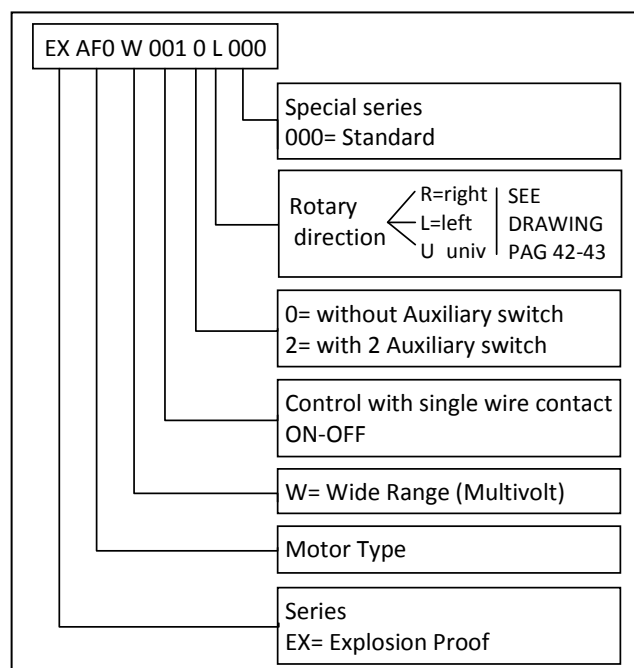
The actuator moves the damper to its working position while tensioning the spring return until it is powered. If the power supply is interrupted the spring moves the damper back to its safe position. The actuator is overload protected. The actuator can be mounted directly on the damper shaft if square, 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 Switches
EXAF 0 W 001 0 L 000	SFA	None
EXAF 0 W 001 0 R 000		
EXAF 0 W 001 0 U 000		
EXAF 0 W 001 2 L 000	SFA-S2	2 x SPDT
EXAF 0 W 001 2 R 000		
EXAF 0 W 001 2 U 000		

Options available on request:

Different angle of rotation
Different wiring length



EDELWEISS Actuators

Electrical Explosion Proof actuators

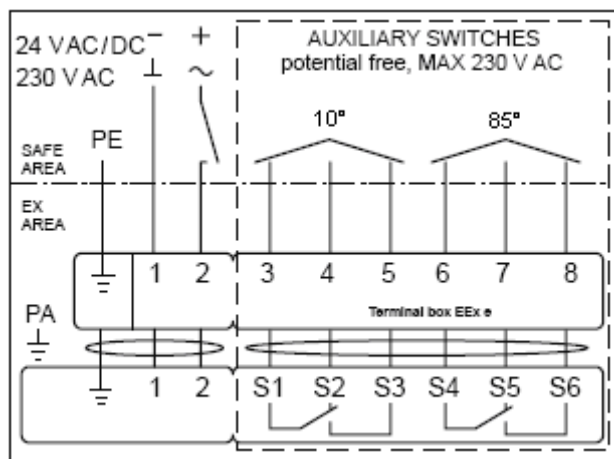
Catalogue 2012

Series EXAF – on/off

Technical data	
Torque	20 Nm
Control Mode	ON/OFF 1 wire
Rotation angle	95°
Running time: motor	75 Sec
Running time: spring return	± 20 sec.
Ambient temperature	-20°C + 50°C
Auxiliary micro switches	1mA..3 (0,5)A max 250V ac Switching point at 10° and 85°
EMC	CE according to 2004/108/EC
Low voltage directive	CE according to 2006/95/EEC
Halogen – Free wiring	According to CEI 20-37 and According to IEC 60754-1/2

Technical data	
EXAF W Version	
Power supply	24..240V AC ±10% 50/60Hz
	24..125V DC ±10%
Power consumption: running	7,0 W
	At rest 3,5 W
Sizing	18 VA

Electric diagram



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 you supplier.

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXAM – Modulating

-  *No spring return*
-  *Running time 150 sec*
-  *40 NM*
-  *Modulating 2...10 Vcc*
-  *Power supply 24V ac, 24V dc*
-  *In according to EN 60079-0, EN60079-1, EN 60079-31*
-  *Zone 1, 2, 21, 22*

Applications

The EXAM...GM actuators are intended for the operation of air control damper in ventilation and air condition systems up to approx 8 m²

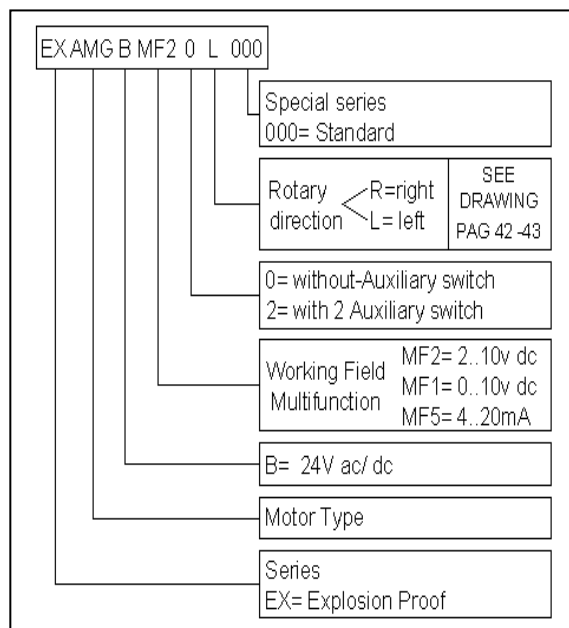
Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal. If the control signal is interrupted the motor locks the damper position.

The actuator is overload protected. 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
EXAM G B MF2 0 L 000	GM24A-MF	0
EXAM G B MF2 0 R 000		2 x SPDT
EXAM G B MF2 2 L 000		
EXAM G B MF2 2 R 000	GM24A-MF	0
EXAM G B MF1 0 L 000		2 x SPDT
EXAM G B MF1 0 R 000		
EXAM G B MF1 2 L 000	GM24A-MF	0
EXAM G B MF1 2 R 000		2 x SPDT
EXAM G B MF5 0 L 000		
EXAM G B MF5 0 R 000	GM24A-MF	0
EXAM G B MF5 2 L 000		2 x SPDT
EXAM G B MF5 2 R 000		



Options available on request:

Different angle of rotation
Different wiring length

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

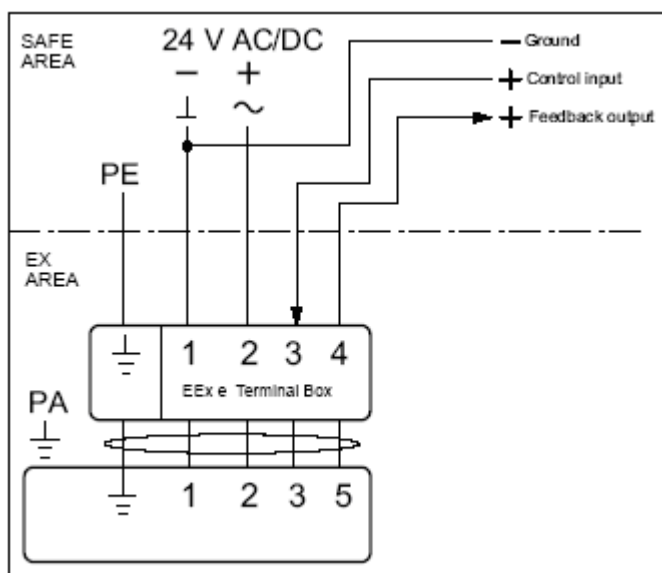
Series EXAM – Modulating

Technical data			
Power supply	AC 24V 50/60 Hz, DC 24V	Ambient temperature	-20°C + 50°C
Nominal voltage range	AC/DC 19,2...28,8 V	Degree of protection	IP66
Power consumption: running	5,0 W	Housing material	Aluminium baked varnish
At rest	2,0 W	Maintenance	None
Sizing	7,0 VA	Fastening	Terminal block in Ex e box
Torque	40 Nm	Wiring length	1 m. cable
Rotation angle	95°	Weight	6 kg
Running time	150 sec.		
Low voltage directive	CE according to 2006/95/EEC		
Halogen – Free wiring	According to IEC 60332-1/3 and According to IEC 60754-1/2		
EMC	CE according to 2004/108/EC		

Attention:

Only with MFT multifunction technology :
 Running time motor 150 s adjustable
 Control DC 2...10 V, 0...32 V adjustable
 Operating range DC 2...10 V, 0...32 V
 (adjustable)
 Position feedback DC 2...10 V, 0...10V,
 (adjustable)

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXAM – on/off

-  *No spring return*
-  *Running time 150 sec*
-  *40 Nm*
-  *Control 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 EXAM..GM actuators are intended for the operation of air control damper in ventilation and air condition systems.

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.

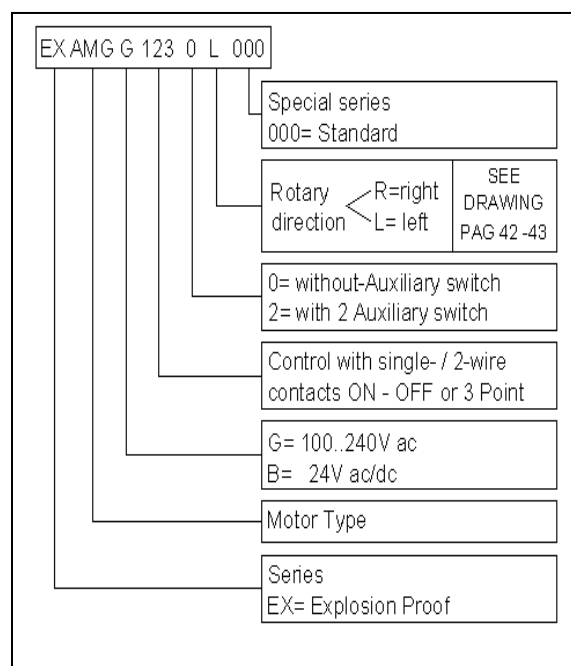
The actuator can be mounted directly on the damper shaft if square, 12 x 12 mm or 10 x 10 mm (adaptor included); Several mounting brackets are available for applications where the actuator cannot be directly coupled to the damper shaft. The cable glands are fit for cable diameters from 8 to 10,5 mm.

Products range

ITEM	Belimo type	Auxiliary Switch
EXAM G G 123 0 L 000	GM230A	None
EXAM G G 123 0 R 000		
EXAM G G 123 2 L 000		2 x SPDT
EXAM G G 123 2 R 000		
EXAM G B 123 0 L 000	GM24A	None
EXAM G B 123 0 R 000		
EXAM G B 123 2 L 000		2 x SPDT
EXAM G B 123 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



EDELWEISS Actuators

Electrical Explosion Proof actuators

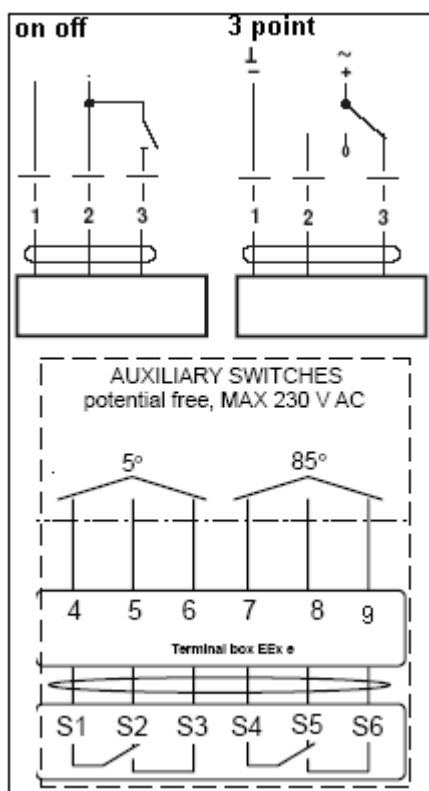
Catalogue/price list 2012

Series EXAM – on/off

Technical data	
Torque (nominal torque)	40 Nm (nominal voltage)
Control Mode	ON/OFF, 1 or 2 wire
Rotation angle	95°
Running time	150 Sec.
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	6 kg
Auxiliary micro switches	6A (3A) max 250 V ac Switching point at 5° e 85°
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 According to IEC 60754-1/2

Technical data	
EXAM G type	
Power supply	AC 100...240 V 50/60 Hz
Nominal voltage range	AC 85...265 V
Power consumption: running	5,0 W
At rest	2,0 W
For wire sizing	9,0 VA
EXAM B type	
Power supply	24 V AC 50/60 Hz
	24 V DC
Nominal voltage range	AC/DC 19.2 ... 28.8 V
Power consumption: running	5,0 W (nominal torque)
At rest	2,0 W
For wire sizing	7,0 VA

Electric diagram



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

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.

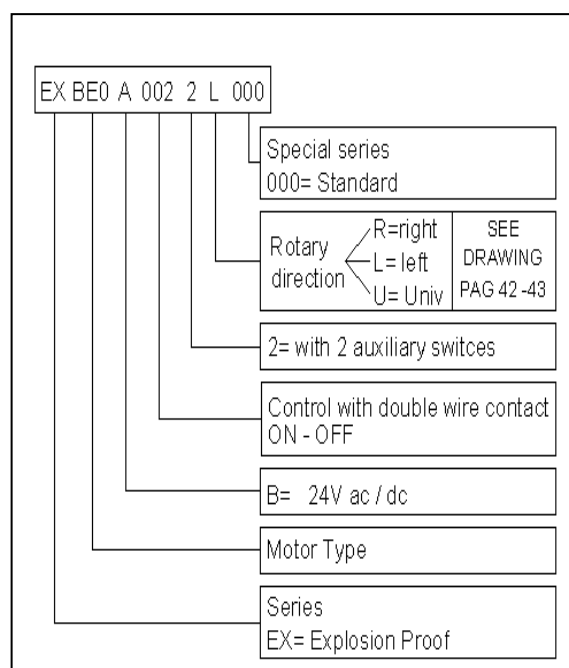
The cable glands are fit for cable diameters from 8 to 10,5 mm.

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



EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012 Series EXBE – on/off

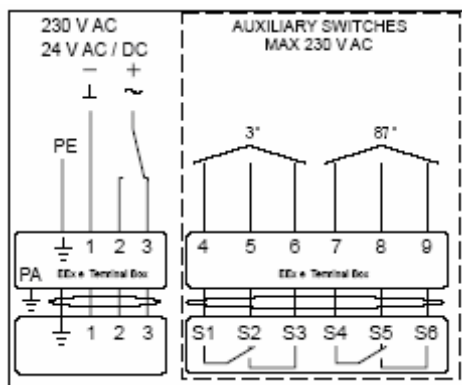
Technical data	
Torque	40 Nm
Blocking torque:	running 40 Nm
Steady-state	50 Nm
Control Mode	ON/OFF, 2 wire
Rotation angle	100°
Running time	60 Sec. for 90°
Ambient temperature	-20°C + 50°C
Degree of protection	IP66
Housing material	Aluminium baked varnish
Maintenance	None
Fastening	Terminal block in Ex e box
Wiring length	1 m. cable
Weight	7.5 kg
Auxiliary micro switches	6A (3A) max 250 V ac 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 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 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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXBF – on/off

- ✚ *Spring Return torque: 12 Nm*
- ✚ *Motor torque: 18 Nm*
- ✚ *Spring running time ± 16 sec*
- ✚ *Control 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

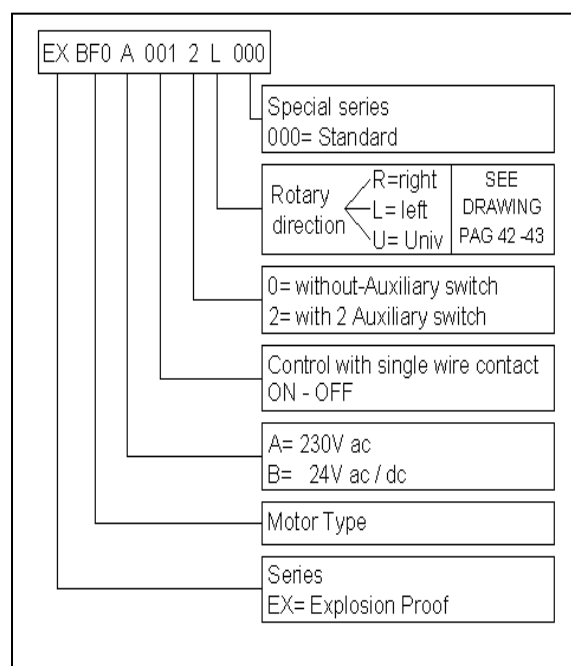
The EXBF spring return actuators are intended for the operation of fire and smoke dampers in ventilation and air-conditioning systems.

Features

The actuator moves the damper to its working position while tensioning the spring return until it is powered. If the power supply is interrupted the spring moves the damper back to its safe position. The actuator is overload protected. 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
EXBF 0 A 001 2 L 000	BF230	2 x SPDT
EXBF 0 A 001 2 R 000		
EXBF 0 A 001 2 U 000		
EXBF 0 B 001 2 L 000	BF24	
EXBF 0 B 001 2 R 000		
EXBF 0 B 001 2 U 000		



Options available on request:

Different angle of rotation
Different wiring length

EDELWEISS Actuators

Electrical Explosion Proof actuators

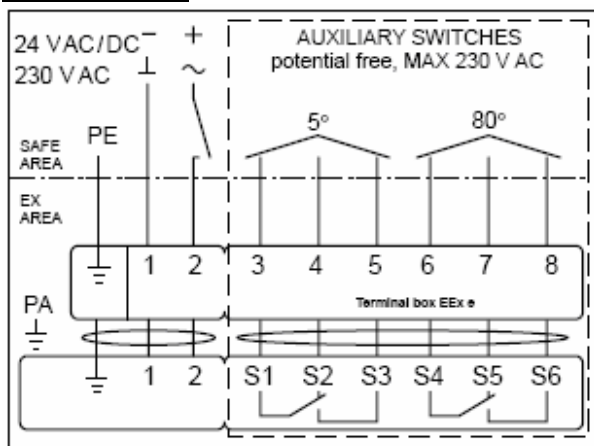
Catalogue 2012 Series EXBF – on/off

Technical data		
Torque	- motor	18 Nm
	- Spring	12 Nm
Rotation angle		95°
Running time		140 Sec
Running time spring return		± 16 sec
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		8.5 kg
Auxiliary micro switches		6A (3A) max 250 V ac Switching point at 5° e 80°
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 According to IEC 60754-1/2

Technical data	
EXBF A Version	
Power supply	230 V AC ±14% 50/60 Hz
Power consumption: running	8,0 W
	At rest 3,0 W
Sizing	12,5 VA

EXBF B Version	
Power supply	24 V AC ± 20% 50/60 Hz
	24 V DC -10% + 20%
Power consumption: running	7,0 W
	At rest 2,0 W
Sizing	10 VA

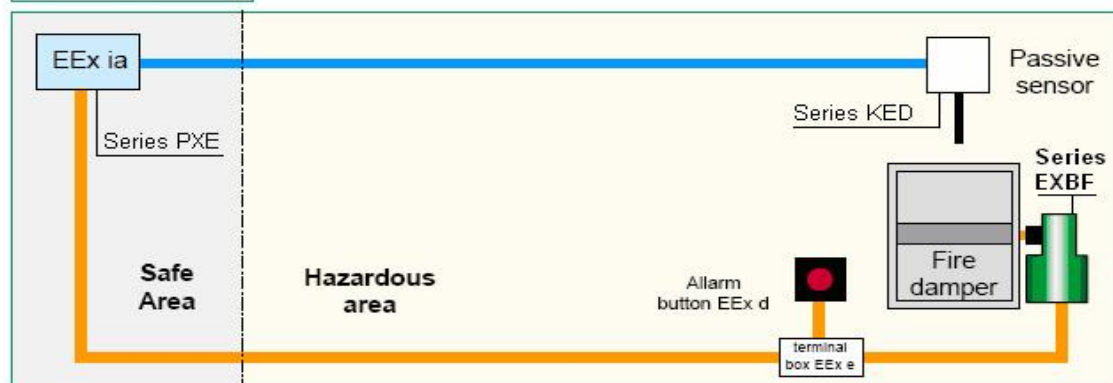
Electric diagram



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

Typical application



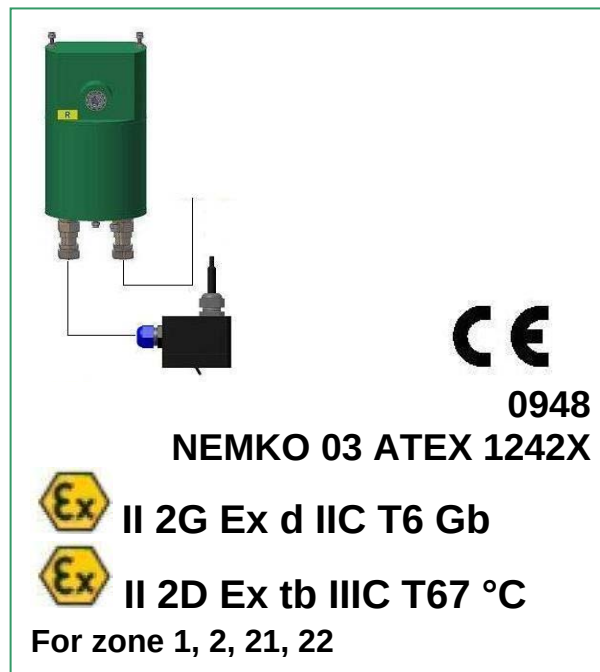
EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXBF – on/off

- ✚ *Spring Return torque: 12 Nm*
- ✚ *Motor torque: 18 Nm*
- ✚ *Spring running time ± 16 sec*
- ✚ *Control ON/OFF*
- ✚ *Power supply 230V ac, 24V ac, 24V dc*
- ✚ *Ex-I circuit integrated*
- ✚ *In according to EN 60079-0, EN60079-1, EN 60079-31*
- ✚ *Zone 1, 2, 21, 22*



Applications

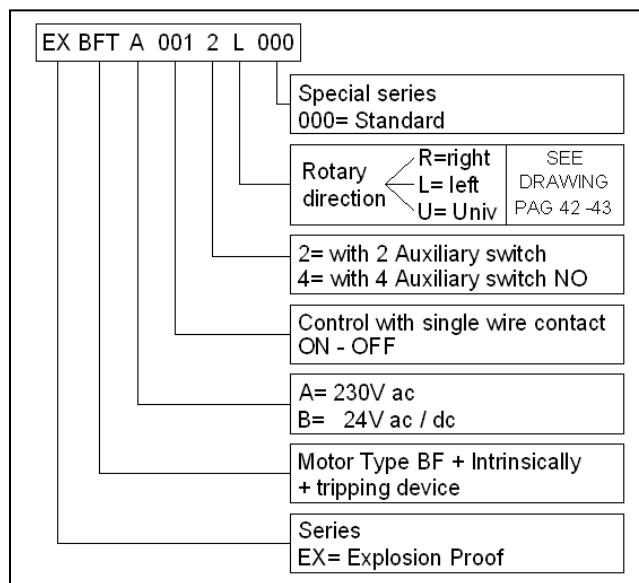
The EXBF... spring return actuator **combined with thermo-electric tripping device** (72° duct) are intended for the operation of fire and smoke dampers in ventilation and air-conditioning systems.

Features

The actuator moves the damper to its working position while tensioning the spring return until it is powered. If the power supply is interrupted the spring moves the damper back to its safe position. The actuator is overload protected. 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
EXBF T A 001 2 L 000	BF230	2 x SPDT
EXBF T A 001 2 R 000		
EXBF T A 001 2 U 000		
EXBF T B 001 2 L 000	BF24	
EXBF T B 001 2 R 000		
EXBF T B 001 2 U 000		



Options available on request:

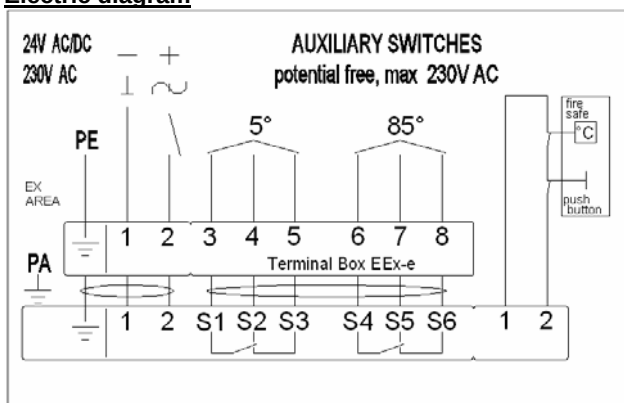
Different angle of rotation
Different wiring length

Technical data		
Torque	- motor	18 Nm
	- Spring	12 Nm
Rotation angle		95°
Running time		140 Sec
Running time spring return		± 16 sec
Intrinsic safe circuit	Additional Ex-I circuit to connect a passive potential free thermostat as a safety sensor, e.g. type fire safe	
Thermo-electric tripping device	KEDXTFDU0001 (72° duct)	
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	8.5 kg	
Auxiliary micro switches	6A (3A) max 250 V ac Switching point at 5° e 80°	
EMC	CE according to 2004/108/EC	
Low voltage directive	CE according to 2006/95/EEC	
Wiring	According to IEC 60332-1/3 and According to IEC 60754-1/2	

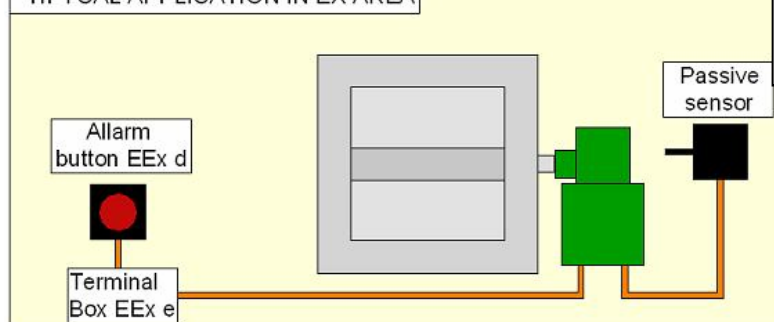
Technical data	
EXBF A Version	
Power supply	230 V AC ±14% 50/60 Hz
Power consumption: running	8,0 W
	At rest 3,0 W
Sizing	12,5 VA

EXBF B Version	
Power supply	24 V AC ± 20% 50/60 Hz
	24 V DC -10% + 20%
Power consumption: running	7,0 W
	At rest 2,0 W
Sizing	10 VA

Electric diagram



TYPICAL APPLICATION IN EX AREA



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.
- EEx 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 guarantee explosion proof and warranty.
- 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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXNMC – Modulating

-  **No spring return**
-  **Running time 35 sec**
-  **10 NM**
-  **Working field 2...10V (standard)**
-  **Power supply 24V ac, 24V dc**
-  **In according to EN 60079-0, EN60079-1, EN 60079-31**
-  **Zones 1, 2, 21, 22**

Applications

The EXNM actuators are intended for the operation of

- Modulating control ball valves
- Air control damper in ventilation and air conditioning system up to approx 2m²

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal. If the control signal is interrupted the motor will travel to its starting position.

The actuator is overload protected. 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
EXNM C B MF2 0 L 000	NMC24A-MF	0
EXNM C B MF1 0 L 000	NMC24A-MF	0
EXNM C B MF5 0 L 000	NMC24A-MF	0

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



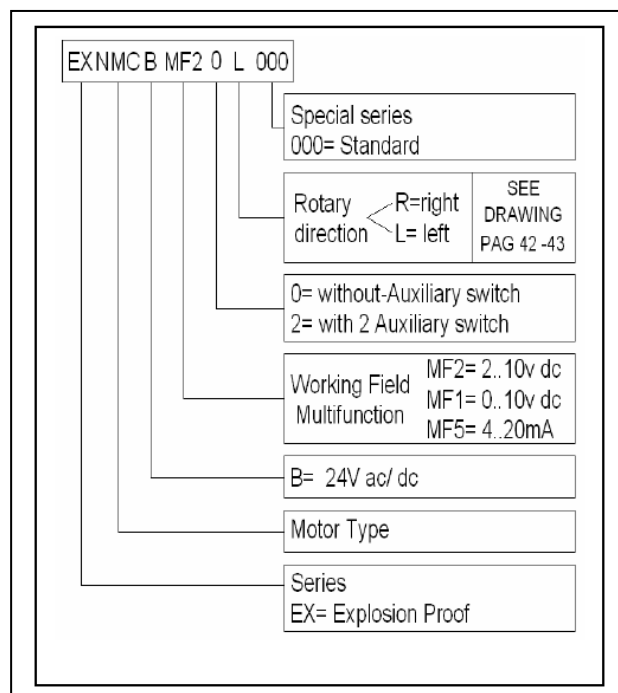
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may be differ from the illustration



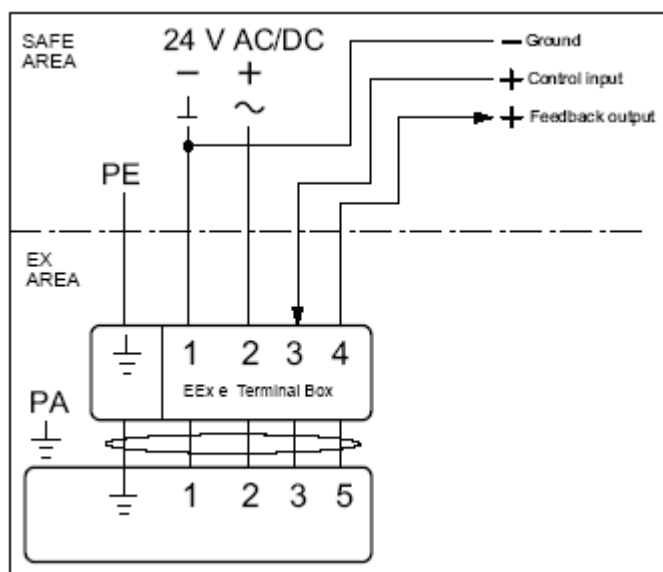
Technical data			
Torque	10 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC 19,2...28,8 V DC 21.6...28.8 V
Working Field	see table below	Power consumption: running	4,0 W
Feedback	see table below	At rest	1,5 W
Angle of rotation	95°	Sizing	7,0 VA
Running time	35 Sec.		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	none		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
 Running time motor adjustable
 Control DC 2...10 V, 0...32 V adjustable
 Operating range DC 2...10 V, 0...32 V
 (adjustable)
 Position feedback DC 2...10 V, 0...10V,
 (adjustable)

Table	MF1	MF2	MF5
Control Mode	DC 0...10V	DC 0...10V	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXNMC – Modulating

-  **No spring return**
-  **Running time 35 sec**
-  **10 NM**
-  **Working field 4...20mA**
-  **Power supply 24V AC, 24V DC**
-  **In according to EN 60079-0, EN60079-1, EN 60079-31**
-  **Zones 1, 2, 21, 22**

Applications

The EXNM actuators are intended for the operation of

- Modulating control ball valves
- Air control damper in ventilation and air conditioning system up to approx 2m²

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal. If the control signal is interrupted the motor will travel to its starting position.

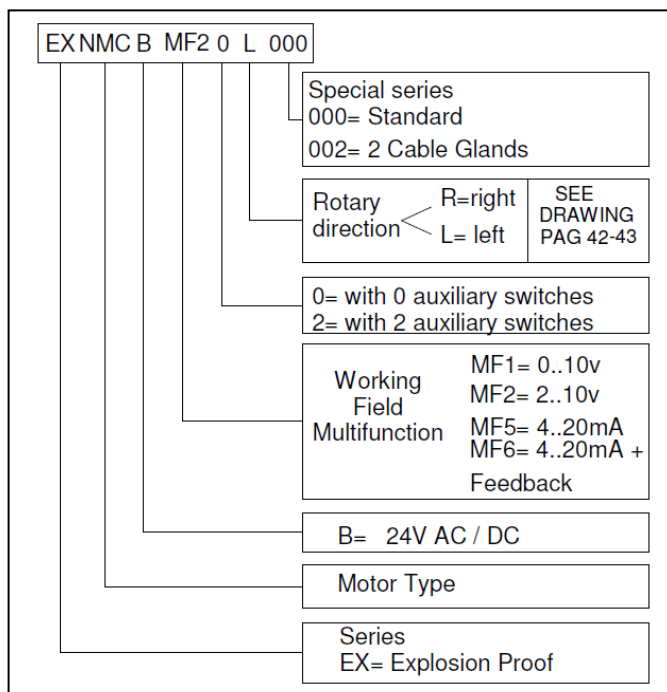
The actuator is overload protected. The actuator can be mounted directly on the damper shaft if square, 12 x 12 mm or 10 x 10 mm (adaptor included); Several mounting brackets are available for applications where the actuator cannot be directly coupled to the damper shaft. The cable glands are fit for cable diameters from 8 to 10,5 mm.

Products range

ITEM	Belimo type	Auxiliary Switch
EXNM C B MF6 0 L 002	NMC24A-MF	0

Options available on request:

Different angle of rotation



Electrical Explosion Proof actuators

Different wiring length

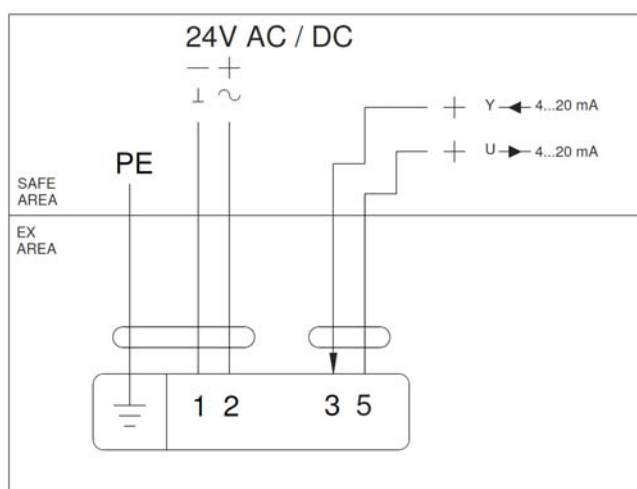
Catalogue/price list 2012

Series EXNMC – Modulating

Technical data			
Torque	10 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC 19,2...28,8 V DC 21.6...28.8 V
Working Field	see table below	Power consumption: running	4,0 W
Feedback	see table below	At rest	1,5 W
Angle of rotation	95°	Sizing	7,0 VA
Running time	35 Sec.	Attention: Only with MFT multifunction technology : Running time motor adjustable Control DC 2...10 V, 0...32 V adjustable Operating range DC 2...10 V, 0...32 V (adjustable) Position feedback DC 2...10 V, 0...10V, (adjustable)	
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	none		
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 According to IEC 60754-1/2		

Table	MF1	MF2	MF5	MF6
Control Mode	DC 0...10V	DC 0...10V	4...20mA	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V	4...20mA

Electric diagram control mode MF6 with two cable glands



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXNM – Mod – QUICK VERSION

-  **No spring return**
-  **Running time 4 sec.**
-  **8 Nm**
-  **Working field 2...10V (standard)**
-  **Power supply 24V AC, 24V DC**
-  **In according to EN 60079-0, EN60079-1, EN 60079-31**
-  **Zone 1, 2, 21, 22**

Applications

The EXNM actuators are intended for the operation of air control damper in ventilation and air conditioning system up to approx 1.5m²

Features

The actuator moves the damper to its working position until it is powered.

If the power supply is interrupted the motor will travel to its starting position. The actuator is overload protected.

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.

Products range

ITEM	Belimo type	Auxiliary Switch
EXNM Q B MF2 0 L 000	NMQ24A-MF	None
EXNM Q B MF2 0 R 000		
EXNM Q B MF2 2 L 000	NMQ24A-MF + S2A	2 x SPDT
EXNM Q B MF2 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



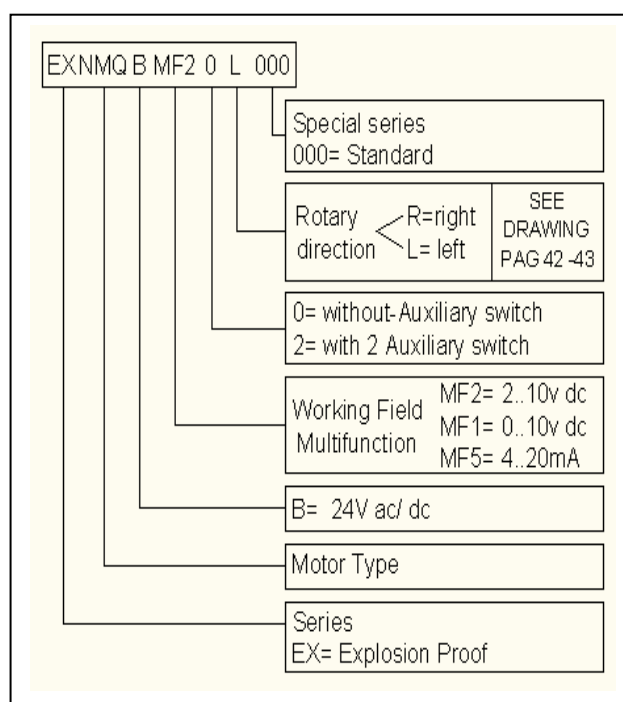
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may differ from the illustration



Series EXNM – Mod – QUICK VERSION

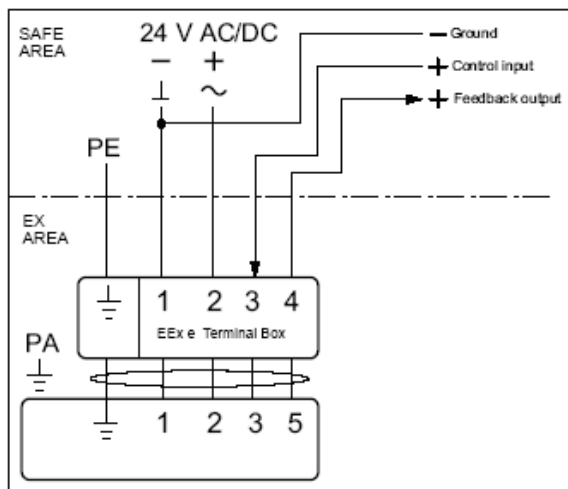
Technical data			
Torque	8 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC 19,2...28,8 V DC 21.6...28.8 V
Working Field	see table below	Power consumption: running	13 W
Feedback	see table below	At rest	2 W
Angle of rotation	95°	Sizing	23 VA
Running time	4 Sec.		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	none		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
 Running time motor 150 s adjustable
 Control DC 2...10 V, 0...32 V adjustable
 Operating range DC 2...10 V, 0...32 V (adjustable)
 Position feedback DC 2...10 V, 0...10V, (adjustable)

Table	MF1	MF2	MF5
Control Mode	DC 0...10V	DC 0...10V	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXNM – on/off – QUICK VERSION

- ✚ *No spring return*
- ✚ *Running time 4 sec.*
- ✚ *8 Nm*
- ✚ *Control 2 wire, ON/OFF*
- ✚ *Power supply 24V AC, 24V DC*
- ✚ *In according to EN 60079-0, EN60079-1, EN 60079-31*
- ✚ *Zone 1, 2, 21, 22*

Applications

The EXNM actuators are intended for the operation of:

- Modulating control ball valves
- Air control damper in ventilation and air conditioning system up to approx 1.5m²

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. 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.

Products range

ITEM	Belimo type	Auxiliary Switch
EXNM Q B 002 0 L 000	NMQ24A	None
EXNM Q B 002 0 R 000		
EXNM Q B 002 2 L 000	NMQ24A+S2A	2 x SPDT
EXNM Q B 002 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



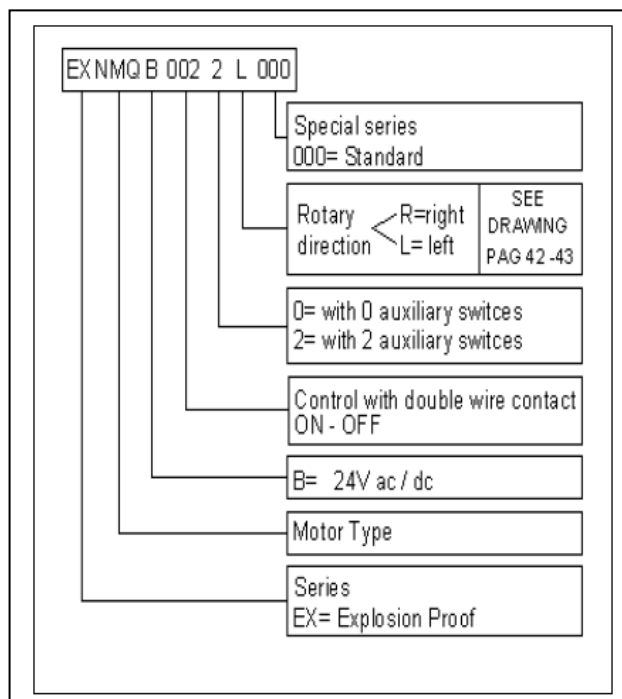
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may differ from the illustration



EDELWEISS Actuators

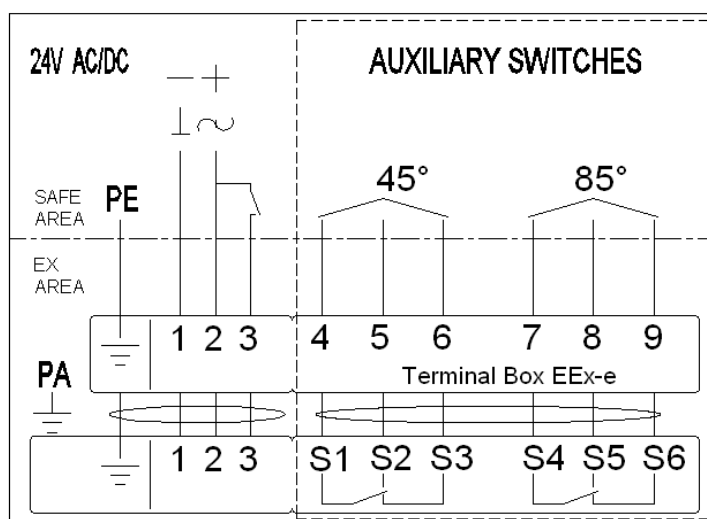
Electrical Explosion Proof actuators

Catalogue 2012

Series EXNM – on/off – QUICK VERSION

Technical data			
Torque	8 Nm	Power supply	AC/DC 24V 50/60 Hz
Control Mode	ON/OFF 2 Wire	Nominal voltage range	AC 19.2...28.8 V
Rotation angle	95°		DC 21.6...28.8 V
Running time	4 Sec.	Power consumption: running	13 W
		At rest	2 W
Ambient temperature	-20°C + 50°C	Sizing	23 VA
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box		
Wiring length	1 m. cable		
Weight	5.5 kg		
Auxiliary micro switches	3A (0,5A) max 250 V ac Switching point at 5° e 85°		
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 According to IEC 60754-1/2		

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXSM – Modulating

-  **No spring return**
-  **Running time 150 sec**
-  **20 NM**
-  **Working field 2...10V (standard)**
-  **Power supply 24V ac, 24V dc**
-  **In according to EN 60079-0, EN60079-1, EN 60079-31**
-  **Zones 1, 2, 21, 22**

Applications

The EXSM actuators are intended for the operation of air control Damper in ventilation and air condition system up to approx 4m².

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal. If the control signal is interrupted the motor will travel to its starting position.

The actuator is overload protected. 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
EXSM 0 B MF2 0 L 000	SM24A-MF	0
EXSM 0 B MF2 0 R 000		
EXSM 0 B MF2 2 L 000	SM24A-MF+ S2A	2
EXSM 0 B MF2 2 R 000		
EXSM 0 B MF1 0 L 000	SM24A-MF	0
EXSM 0 B MF1 0 R 000		
EXSM 0 B MF1 2 L 000	SM24A-MF+ S2A	2
EXSM 0 B MF1 2 R 000		
EXSM 0 B MF5 0 L 000	SM24A-MA	0
EXSM 0 B MF5 0 R 000		
EXSM 0 B MF5 2 L 000	SM24A-MA+ S2A	2
EXSM 0 B MF5 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



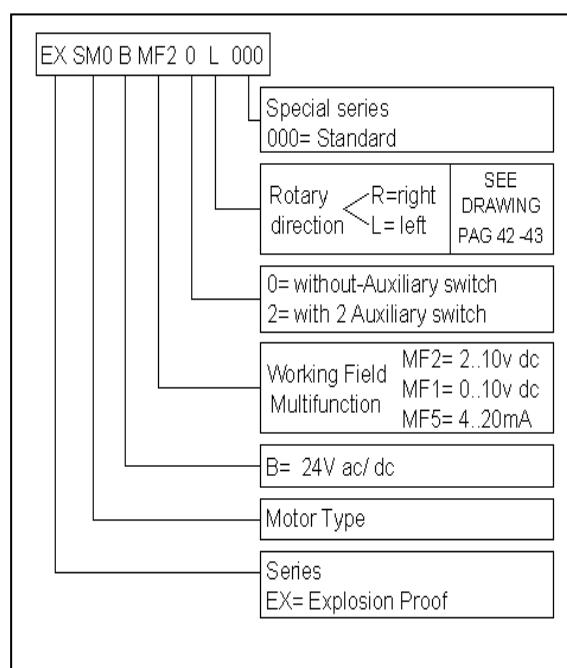
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may be differ from the illustration



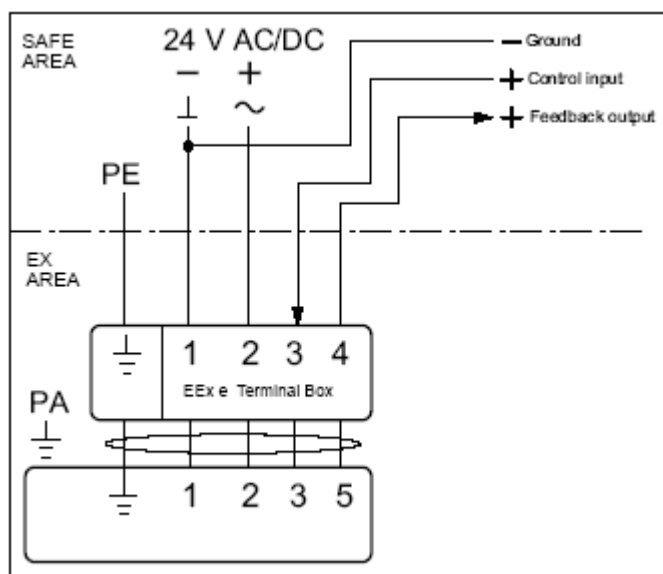
Technical data			
Torque	20 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC/DC 19,2...28,8 V
Working Field	see table below	Power consumption: running	2,0 W
Feedback	see table below	At rest	0,4 W
Angle of rotation	95°	Sizing	4,0 VA
Running time	150 Sec.		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	3A (0,5A) max 250V switching point 5° e 85°		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
Running time motor 150 s adjustable
Control DC 2...10 V, 0...32 V adjustable
Operating range DC 2...10 V, 0...32 V (adjustable)
Position feedback DC 2...10 V, 0...10V, (adjustable)

Table	MF1	MF2	MF5
Control Mode	DC 0...10V	DC 0...10V	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXSM – on/off 3 p.

-  *No spring return*
-  *Running time 150 sec.*
-  *20 Nm*
-  *Control ON/OFF, 3 point.*
-  *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 EXSM actuators are intended for the operation of air control damper in ventilation and air condition system up to approx 4m2.

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. 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.

Products range

ITEM	Belimo type	Auxiliary Switch
EXSM 0 G 123 0 L 000	SM230A	None
EXSM 0 G 123 0 R 000		
EXSM 0 G 123 2 L 000	SM230A+ S2A	2 x SPDT
EXSM 0 G 123 2 R 000		
EXSM 0 B 123 0 L 000	SM24A	None
EXSM 0 B 123 0 R 000		
EXSM 0 B 123 2 L 000	SM24A+ S2A	2 x SPDT
EXSM 0 B 123 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



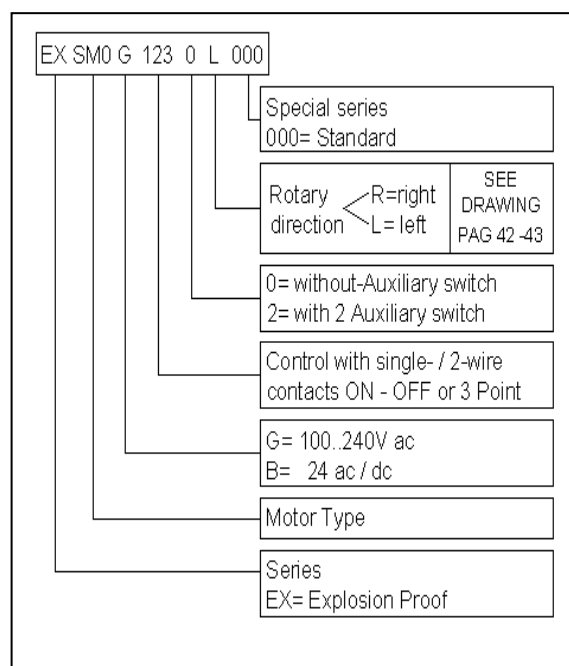
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may differ from the illustration



Electrical Explosion Proof actuators

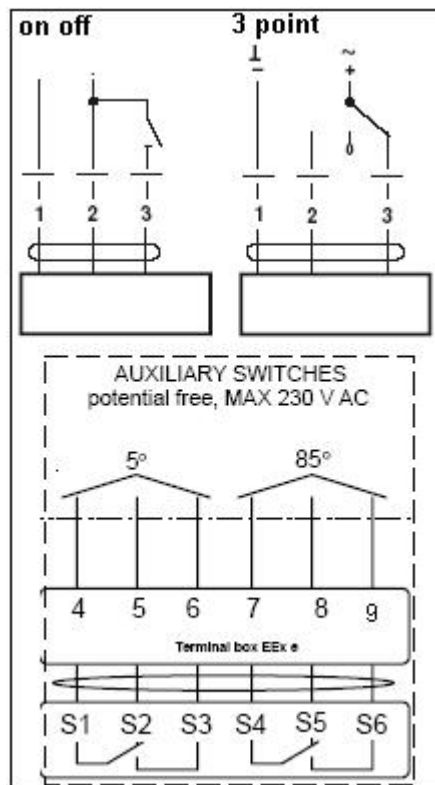
Catalogue 2012
Series EXSM – on/off 3 p.

Technical data	
Torque	20 Nm
Control Mode	ON/OFF, 3 point.
Rotation angle	95°
Running time	150 Sec.
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	5.5 kg
Auxiliary micro switches	3A (0,5A) max 250 V ac Switching point at 5° e 85°
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 According to IEC 60754-1/2

Technical data	
EXSM G Version	
Power supply	100..240 VAC ±15% 50/60Hz
Power consumption: running	2,5 W
At rest	0,6 W
Sizing	6.0 VA

EXSM B Version	
Power supply	24 V AC ± 20% 50/60 Hz 24 V DC ± 20%
Power consumption: running	2,0 W
At rest	0,2 W
Sizing	4 VA

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXSMC – Modulating

- ✚ No spring return
- ✚ Running time 35 sec
- ✚ 20 NM
- ✚ Working field 2...10V (standard)
- ✚ Power supply 24V ac, 24V dc
- ✚ In according to EN 60079-0, EN60079-1, EN 60079-31
- ✚ Zones 1, 2, 21, 22

Applications

The EXNM actuators are intended for the operation of

- Modulating control ball valves
- Air control damper in ventilation and air conditioning system up to approx 2m²

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal.

If the control signal is interrupted, the motor will travel to its starting position.

The actuator is overload protected. 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
EXSM C B MF2 0 L 000	SMC24A-MF	0
EXSM C B MF1 0 L 000	SMC24A-MF	0
EXSM C B MF5 0 L 000	SMC24A-MF	0
EXSM C B MF5 2 L 000	SMC24A-MF + S2A	2 x SPDT

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



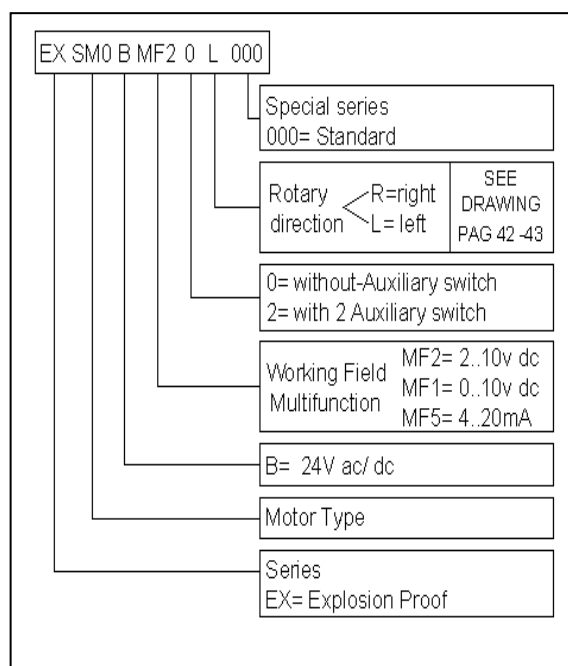
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may be differ from the illustration



EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXSMC – Modulating

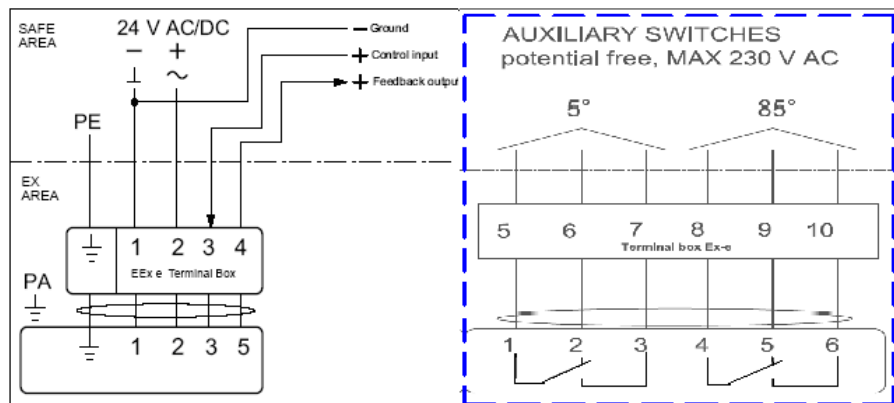
Technical data			
Torque	20 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC 19,2...28,8 V DC 21.6...28.8 V
Working Field	see table below	Power consumption: running	4,0 W
Feedback	see table below	At rest	1,5 W
Angle of rotation	95°	Sizing	7,0 VA
Running time	35 Sec.		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	none		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
Running time motor 150 s adjustable
Control DC 2...10 V, 0...32 V adjustable
Operating range DC 2...10 V, 0...32 V (adjustable)
Position feedback DC 2...10 V, 0...10V, (adjustable)

Table	MF1	MF2	MF5
Control Mode	DC 0...10V	DC 0...10V	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXSMC – Modulating

-  *No spring return*
-  *Running time 40 sec*
-  *20 NM*
-  *Working field 4...20mA*
-  *Power supply 24V ac, 24V dc*
-  *In according to EN 60079-0, EN60079-1, EN 60079-31*
-  *Zones 1, 2, 21, 22*

Applications

The EXNM actuators are intended for the operation of

- Modulating control ball valves
- Air control damper in ventilation and air conditioning system up to approx 2m²

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal.

If the control signal is interrupted the motor will travel to its starting position.

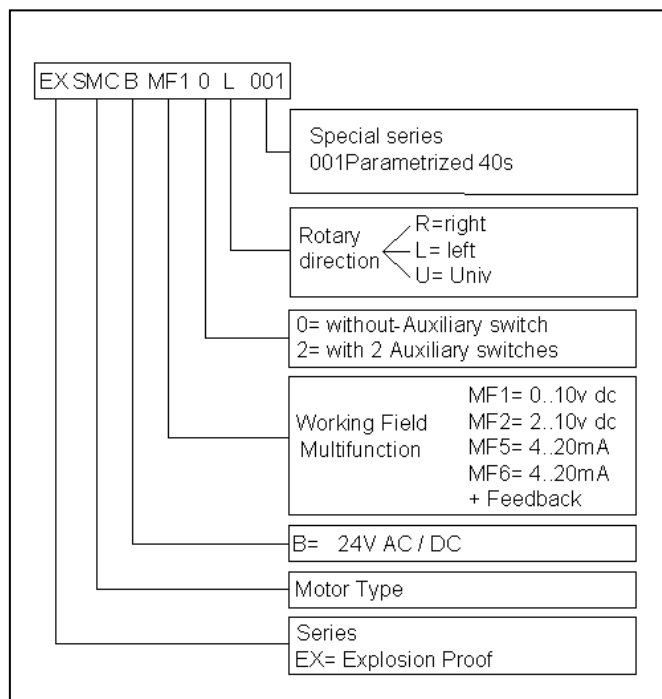
The actuator is overload protected. The actuator can be mounted directly on the damper shaft if square, 12 x 12 mm or 10 x 10 mm (adaptor included); Several mounting brackets are available for applications where the actuator cannot be directly coupled to the damper shaft. The cable glands are fit for cable diameters from 8 to 10,5 mm.

Products range

ITEM	Belimo type	Auxiliary Switch
EXSM C B MF5 2 L 001	SMC24A-MF + S2A	2 x SPDT
EXSM C B MF6 2 L 001	SMC24A-MF + S2A	2 x SPDT

Options available on request:

Different angle of rotation
Different wiring length



EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXSMC – Modulating

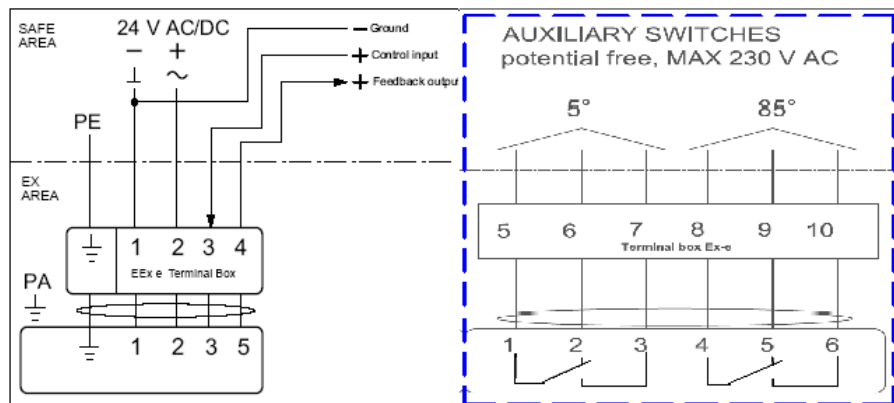
Technical data			
Torque	20 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC 19,2...28,8 V DC 21.6...28.8 V
Working Field	see table below	Power consumption: running	4,0 W
Feedback	see table below	At rest	1,5 W
Angle of rotation	95°	Sizing	7,0 VA
Running time	40 Sec.		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	none		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
Running time motor 35s...150s adjustable
Control DC 2...10 V, 0...32 V adjustable
Operating range DC 2...10 V, 0...32 V (adjustable)
Position feedback DC 2...10 V, 0...10V, (adjustable)

Table	MF1	MF2	MF5	MF6
Control Mode	DC 0...10V	DC 0...10V	4...20mA	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V	4...20mA

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXSM – Mod – QUICK VERSION

-  **No spring return**
-  **Running time 7 sec**
-  **16 NM**
-  **Working field 2...10V (standard)**
-  **Power supply 24V ac, 24V dc**
-  **In according to EN 60079-0, EN60079-1, EN 60079-31**
-  **Zones 1, 2, 21, 22**

Applications

The EXNM actuators are intended for the operation of air control damper in ventilation and air conditioning system up to approx 3.2 m²

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal.

If the control signal is interrupted the motor locks the damper position.

The actuator is overload protected. 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
EXSM Q B MF2 0 L 000	SMQ24A-MF	0
EXSM Q B MF2 0 R 000		
EXSM Q B MF2 2 L 000	SM2Q4A-MF+S2A	2xSPDT
EXSM Q B MF2 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



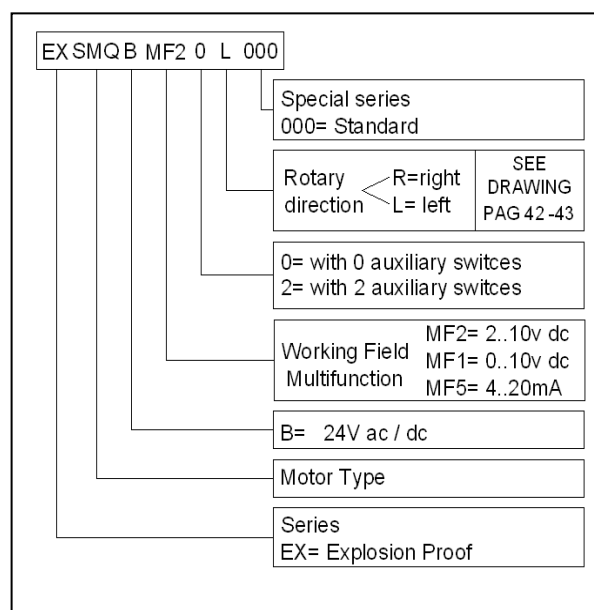
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may be differ from the illustration



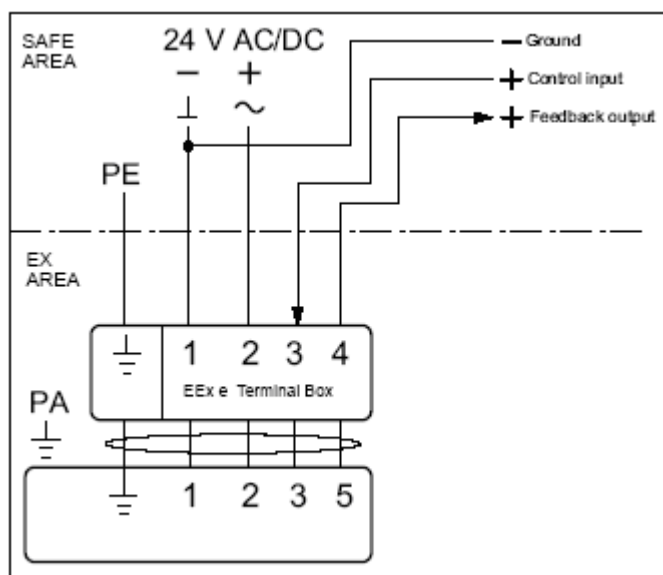
Technical data			
Torque	16 Nm	Power supply	AC 24V 50/60 Hz, DC 24V
Control Mode	see table below	Nominal voltage range	AC 19,2...28,8 V DC 21.6...28.8 V
Working Field	see table below	Power consumption: running	15 W
Feedback	see table below	At rest	2 W
Angle of rotation	95°	Sizing	26 VA
Running time	7 Sec.		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	5.5 Kg		
Auxiliary switches	none		
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 According to IEC 60754-1/2		

Attention:

Only with MFT multifunction technology :
 Running time motor 150 s adjustable
 Control DC 2...10 V, 0...32 V adjustable
 Operating range DC 2...10 V, 0...32 V (adjustable)
 Position feedback DC 2...10 V, 0...10V, (adjustable)

Table	MF1	MF2	MF5
Control Mode	DC 0...10V	DC 0...10V	4...20mA
Working Field	DC 0...10V	DC 2...10V	4...20mA
Feedback	DC 0...10V	DC 2...10V	DC 2...10V

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXSM – on/off – QUICK VERSION

- ✚ *No spring return*
- ✚ *Running time 7 sec.*
- ✚ *16 Nm*
- ✚ *Control 2 wire, ON/OFF*
- ✚ *Power supply 24V AC, 24V DC*
- ✚ *In according to EN 60079-0, EN60079-1, EN 60079-31*
- ✚ *Zone 1, 2, 21, 22*



Applications

The EXNM actuators are intended for the operation of:

- Modulating control ball valves
- Air control damper in ventilation and air conditioning system up to approx 3.2m²

Features

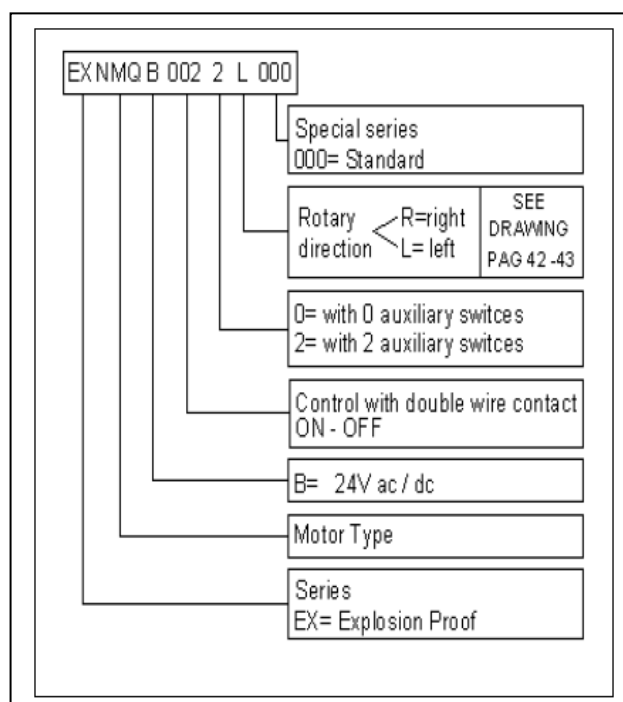
The actuator moves the damper to its working position until it is powered. If the power supply is interrupted the motor locks the damper position. The actuator is overload protected. The actuator can be mounted directly on the damper shaft if square, 12 x 12 mm or 10 x 10 mm (adaptor included); Several mounting brackets are available for applications where the actuator cannot be directly coupled to the damper shaft.

Products range

ITEM	Belimo type	Auxiliary Switch
EXSM Q B 002 0 L 000	SMQ24A	None
EXSM Q B 002 0 R 000		
EXSM Q B 002 2 L 000	SMQ24A+S2A	2 x SPDT
EXSM Q B 002 2 R 000		

Options available on request:

Different angle of rotation
Different wiring length



EDELWEISS Actuators

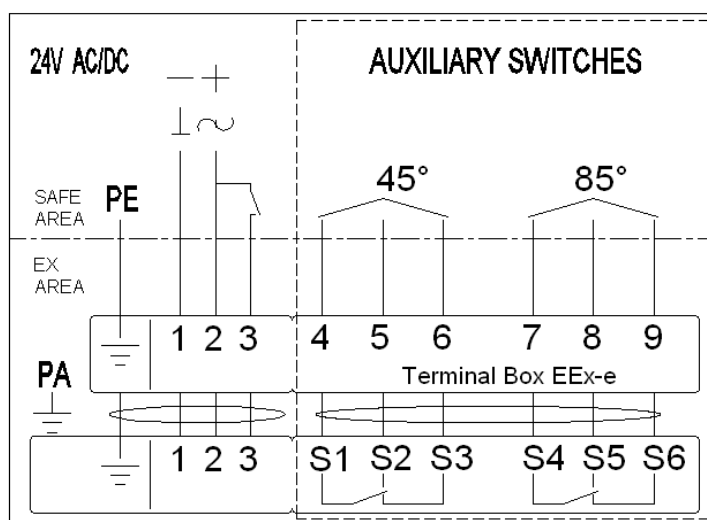
Electrical Explosion Proof actuators

Catalogue 2012

Series EXNM – on/off – QUICK VERSION

Technical data			
Torque	16 Nm	Power supply	AC/DC 24V 50/60 Hz
Control Mode	ON/OFF 2 Wire	Nominal voltage range	AC 19.2...28.8 V
Rotation angle	95°		DC 21.6...28.8 V
Running time	7 Sec.	Power consumption: running	15 W
		At rest	2 W
Ambient temperature	-20°C + 50°C	Sizing	26 VA
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box		
Wiring length	1 m. cable		
Weight	5.5 kg		
Auxiliary micro switches	3A (0,5A) max 250 V ac Switching point at 5° e 85°		
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 According to IEC 60754-1/2		

Electric diagram



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

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue/price list 2012

Series EXNM – Modulating

- ✚ No spring return
- ✚ Running time 150 sec
- ✚ 10 NM
- ✚ Modulating 2...10 Vcc
- ✚ 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 EXNM actuators are intended for the operation of air control damper in ventilation and air condition systems up to approx 2 m²

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal. If the control signal is interrupted the motor will travel to its starting position.

The actuator is overload protected. 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
EXNM 0 B SR2 0 S 000	NM24A-SR	None

Options available on request:

Different angle of rotation
Different wiring length



0948

NEMKO 03 ATEX 1242X



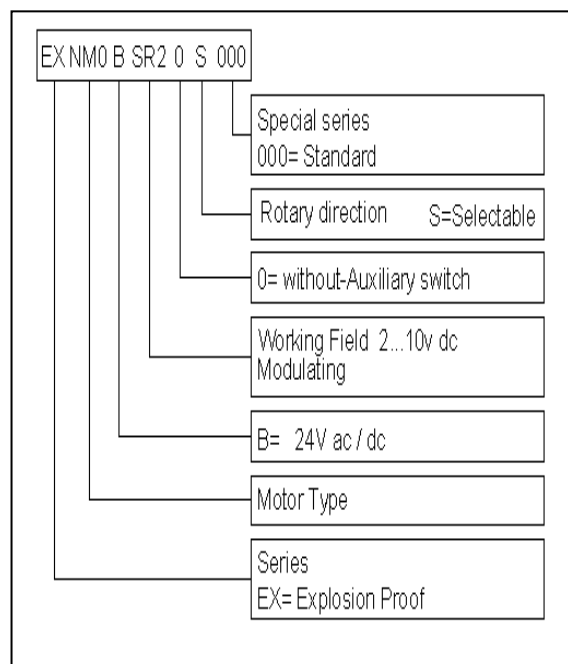
II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may differ from the illustration



EDELWEISS Actuators

Electrical Explosion Proof actuators

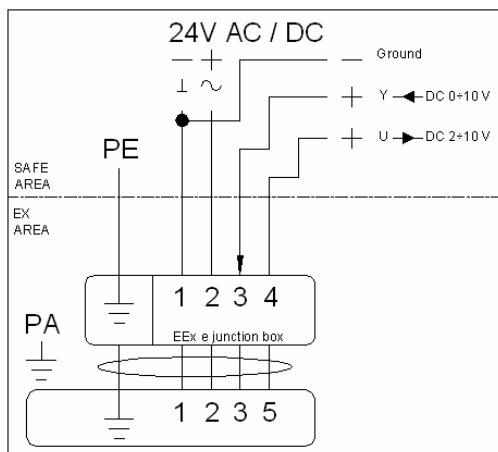
Catalogue/price list 2012

Series EXNM – Modulating

Technical data			
Torque	10 Nm	Power supply	AC 24V $\pm 20\%$ 50/60 Hz
Control Mode	DC 0...10V		DC 24V $\pm 20\%$
Working Field	DC 2...10V	Power consumption: running	2,0 W
Feedback	DC 2...10V	At rest	0,4 W
Angle of rotation	95°	Sizing	4,0 VA
Running time	150 Sec.		
Rotary direction	selectable with switch 0/1		
Ambient temperature	-20°C + 50°C		
Degree of protection	IP66		
Housing material	Aluminium baked varnish		
Maintenance	None		
Fastening	Terminal block in Ex e box (optional)		
Wiring length	1m. cable		
Weight	4,0 Kg		
Auxiliary switches	6A (3A) max 250V		
	switching point 5° e 85°		
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 According to IEC 60754-1/2		

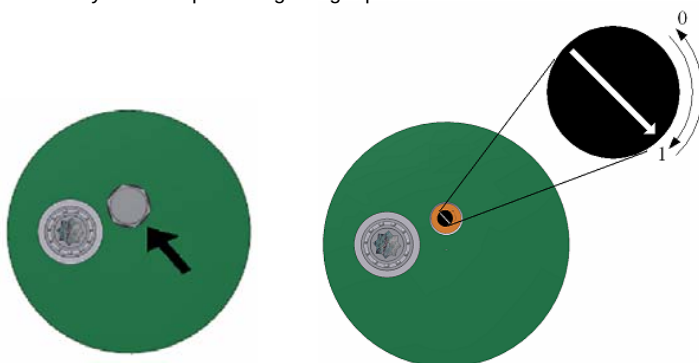
Electric diagram

Rotary direction with Y = 0V



In order to change the rotary direction it is necessary to:

- Unscrew cap indicated by the arrow
- Rotate the switch as per drawing
- Carefully screw cap exerting a slight pressure at the end of the 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

ATTENTION:

The above instructions must be carefully and strictly followed. Edelweiss disclaims any liability whatsoever for any loss occasioned by the incorrect following of the above instruction. The Actuator cannot and is not to be opened to guarantee explosion proof and warranty. For any problem contact Edelweiss Actuators. Information about flameproof joints available at Edelweiss Actuators.srl

EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

Series EXNM – on/off 3 p.

- ✚ *No spring return*
- ✚ *Running time 150 sec.*
- ✚ *10 Nm*
- ✚ *Control ON/OFF, 3 point.*
- ✚ *Power supply 230V ac, 24V ac, 24V dc*
- ✚ *In according to EN 60079-0, EN60079-1, EN 60079-31*
- ✚ *Zones 1, 2, 21, 22*

Applications

The EXNM actuators are intended for the operation of air control damper in ventilation and air condition systems up to approx 2 m²



0948

NEMKO 03 ATEX 1242X



II 2G Ex d IIC T6 Gb



II 2D Ex tb IIIC T67 °C

For zone 1, 2, 21, 22

The product may differ from the illustration

Features

Just powered, the actuator moves the damper to its start position, then it moves to the position set by the control signal. If the control signal is interrupted the motor locks the damper position.

The actuator is overload protected. 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.

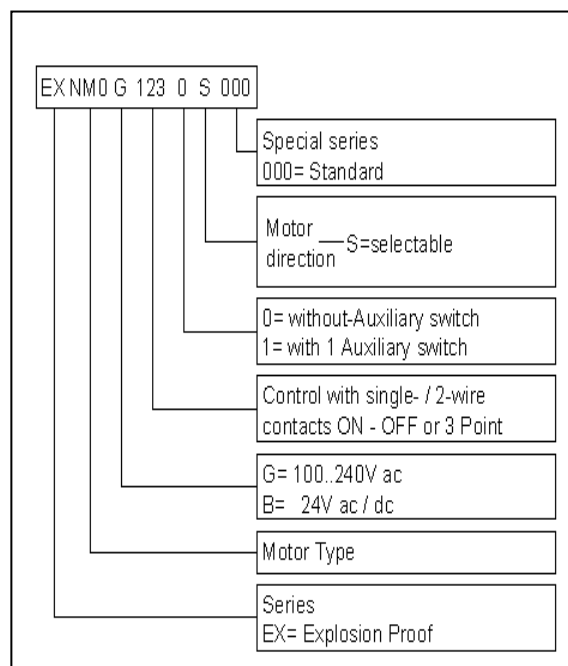
Products range

ITEM	Belimo type	Auxiliary Switch
EXNM 0 G 123 0 S 000	NM230A	None
EXNM 0 G 123 1 S 000	NM230A-S	1 x SPDT
EXNM 0 B 123 0 S 000	NM24A	None
EXNM 0 B 123 1 S 000	NM24A-S	1 x SPDT

Micro Switch: 1mA...3A (0,5A) max 250V ac
Switching point at 85° if ROTARY direction is "L"

Options available on request:

Different angle of rotation
Different wiring length



EDELWEISS Actuators

Electrical Explosion Proof actuators

Catalogue 2012

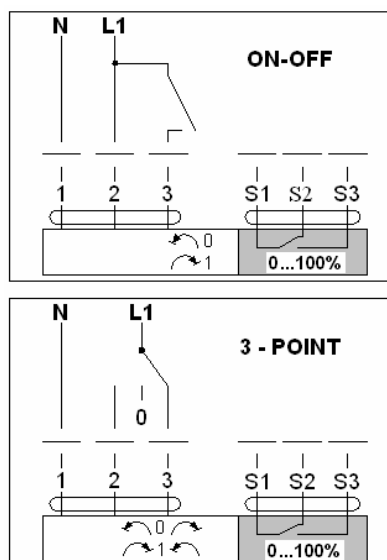
Series EXNM – on/off 3 p.

Technical data	
Torque	10 Nm
Control Mode	ON/OFF, 3 point.
Rotation angle	95°
Running time	150 Sec.
Ambient temperature	-20°C + 50°C
Degree of protection	IP66
Housing material	Aluminium baked varnish
Maintenance	None
Fastening	Terminal block in Ex e box (Optional)
Wiring length	1 m. cable
Weight	4 kg
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 According to IEC 60754-1/2

Technical data	
EXNM G Version	
Power supply	100..240 VAC ±15% 50/60Hz
Power consumption: running	2,5 W
At rest	0,6 W
Sizing	6 VA

EXNM B Version	
Power supply	24 V AC ± 20% 50/60 Hz
	24 V DC ± 20%
Power consumption: running	1.5 W
At rest	0,2 W
Sizing	3.5 VA

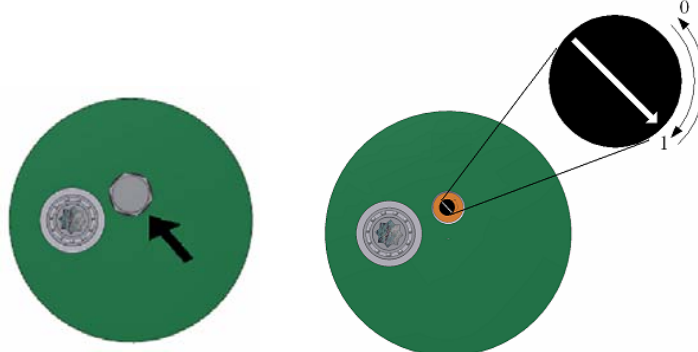
Electric diagram



Rotary direction

In order to change the rotary direction it is necessary to:

- Unscrew cap indicated by the arrow
- Rotate the switch as per drawing
- Carefully screw cap exerting a slight pressure at the end of the 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

ATTENTION:

The above instructions must be carefully and strictly followed. Edelweiss disclaims any liability whatsoever for any loss occasioned by the incorrect following of the above instruction.

The Actuator cannot and is not to be opened to guarantee explosion proof and warranty. For any problem contact Edelweiss Actuators. Information about flameproof joints available at Edelweiss Actuators.srl

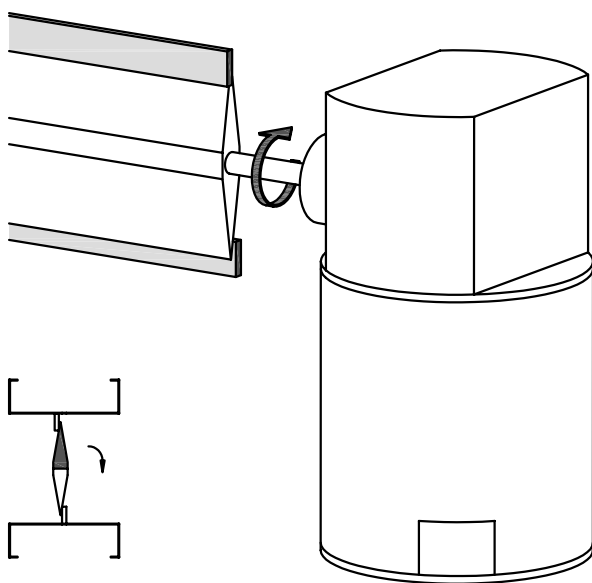
Rotary Direction "R" For Damper normally closed N.C.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

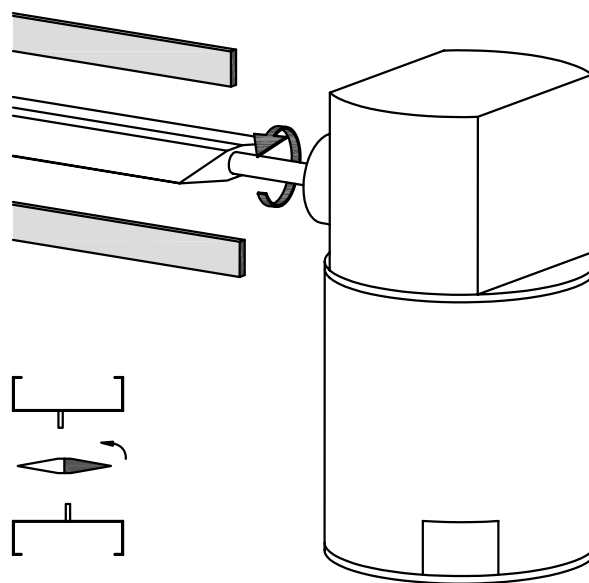


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



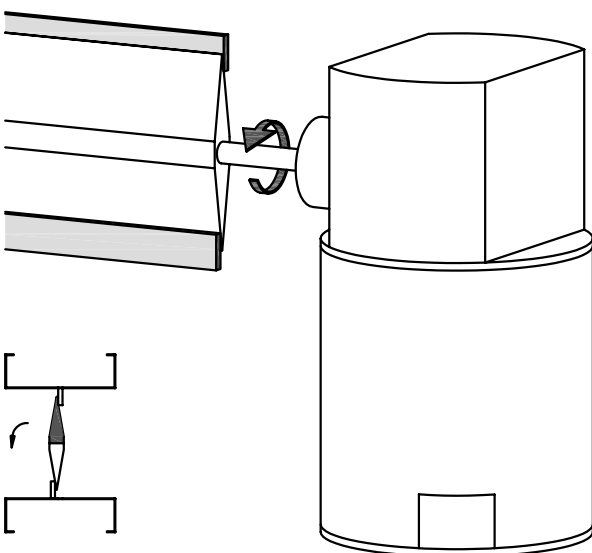
Rotary Direction "L" For Damper normally closed N.C.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

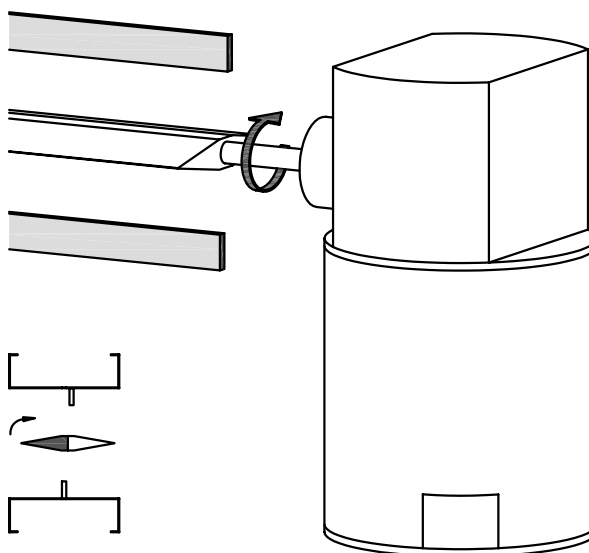


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



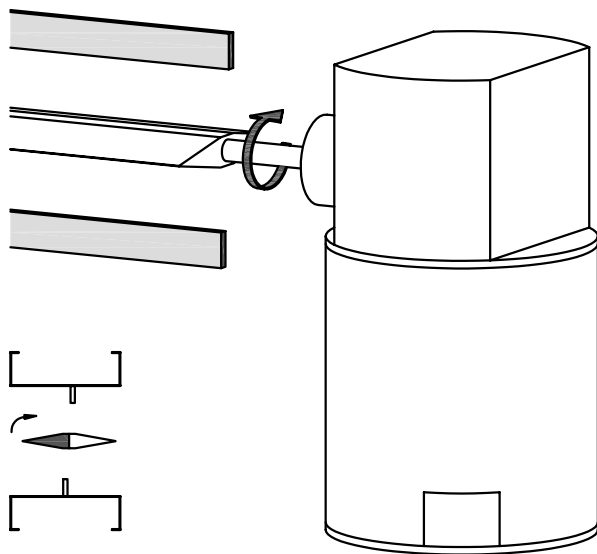
Rotary Direction "R" For Damper normally open N.O.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

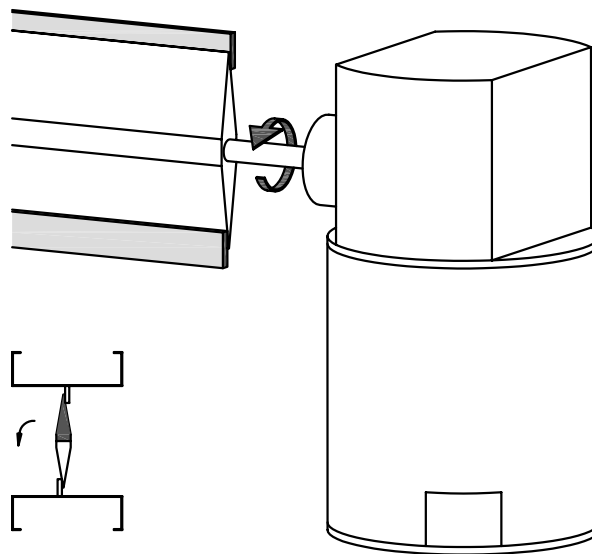


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



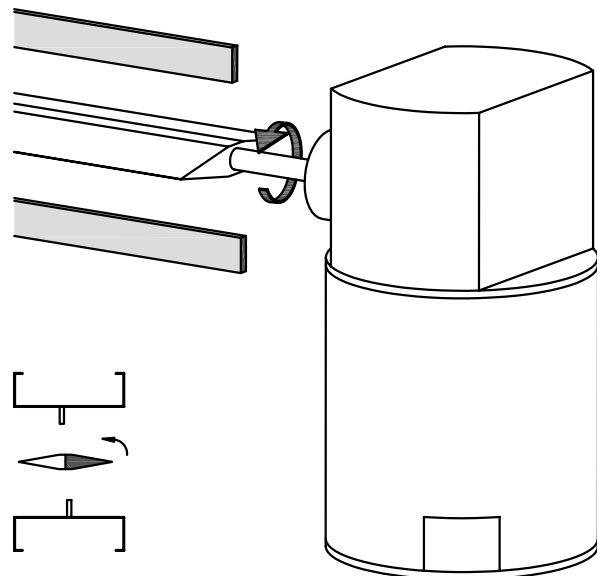
Rotary Direction "L" For Damper normally open N.O.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

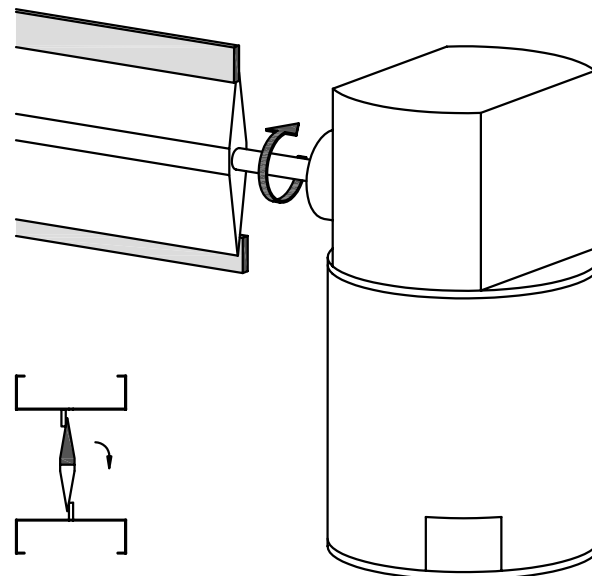


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



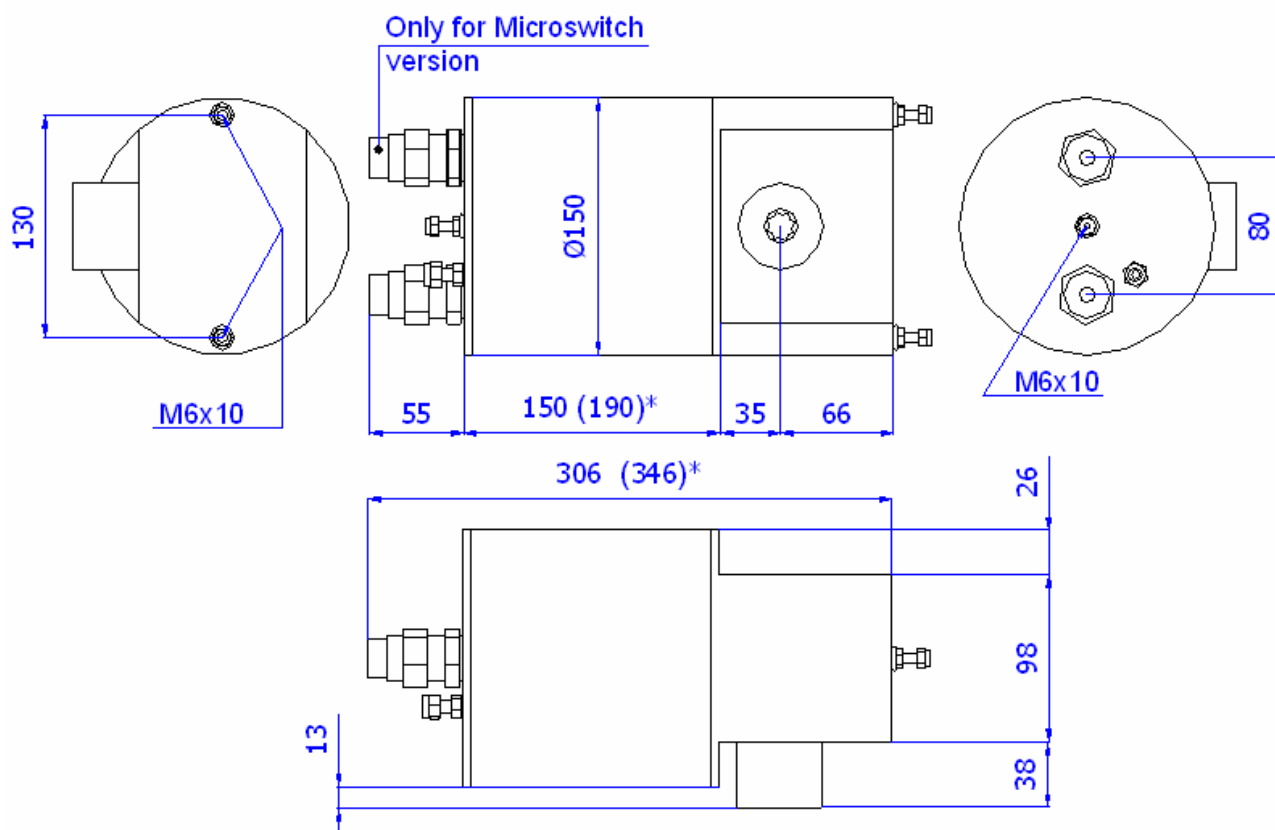
EDELWEISS *Actuators*

Electrical Explosion Proof actuators

Catalogue 2012

Dimensions and Mounting instructions

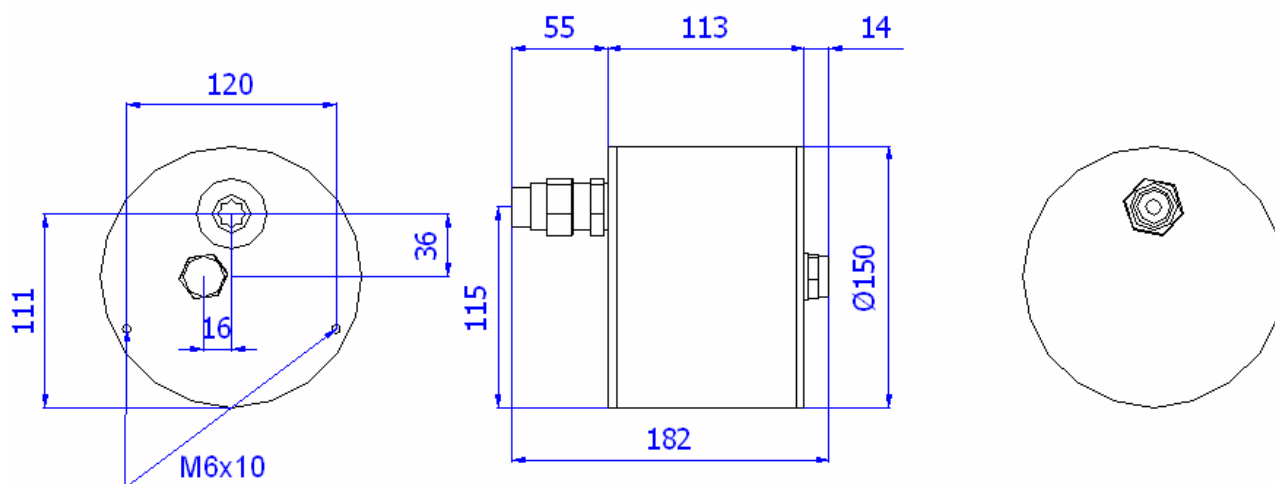
EXAF - EXBF - EXBE - EXBG - EXSM - EXAM - EXNMC - EXNMQ-



*= Only series EXAF, EXBF, EXBG, EXBE

Note: dimension are specified in millimeters

EXNM



Note: dimension are specified in millimeters

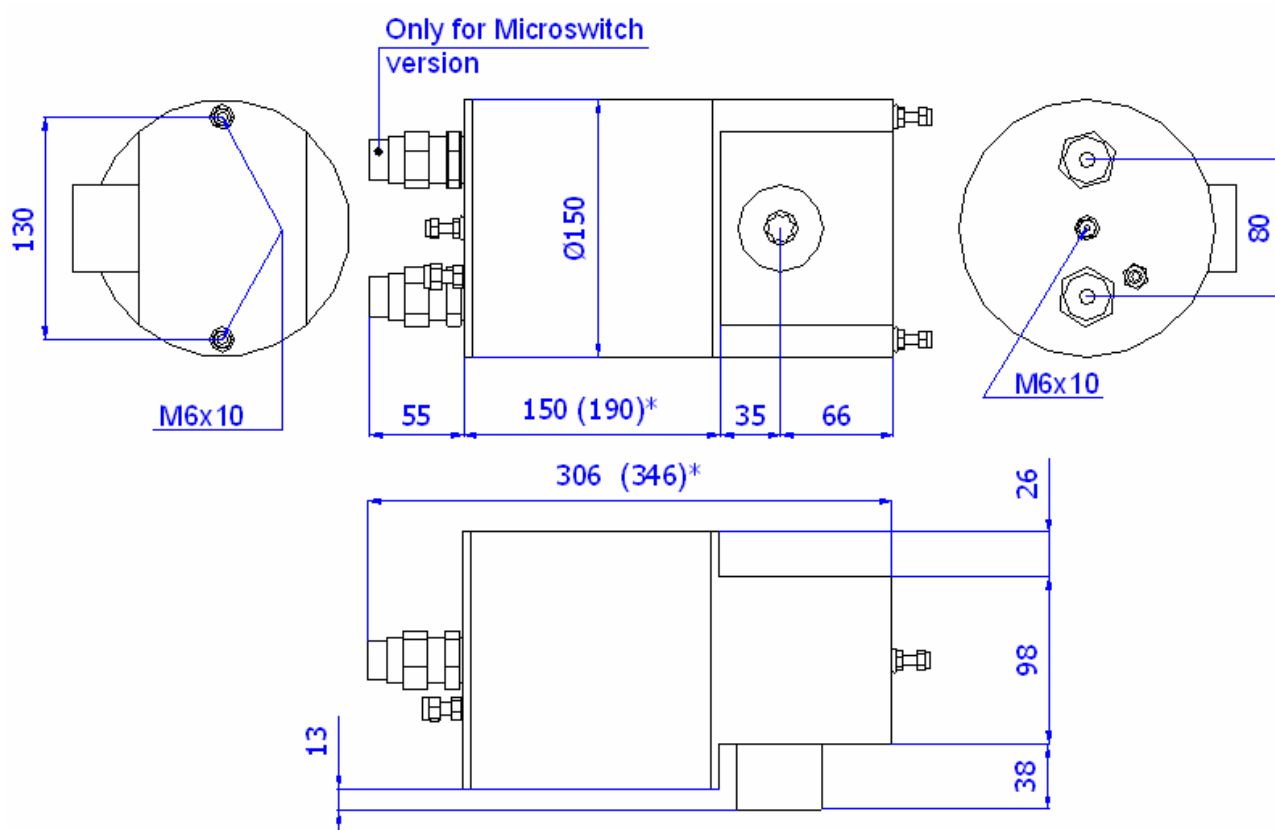
EDELWEISS *Actuators*

Electrical Explosion Proof actuators

Catalogue 2012

Dimensions and Mounting instructions

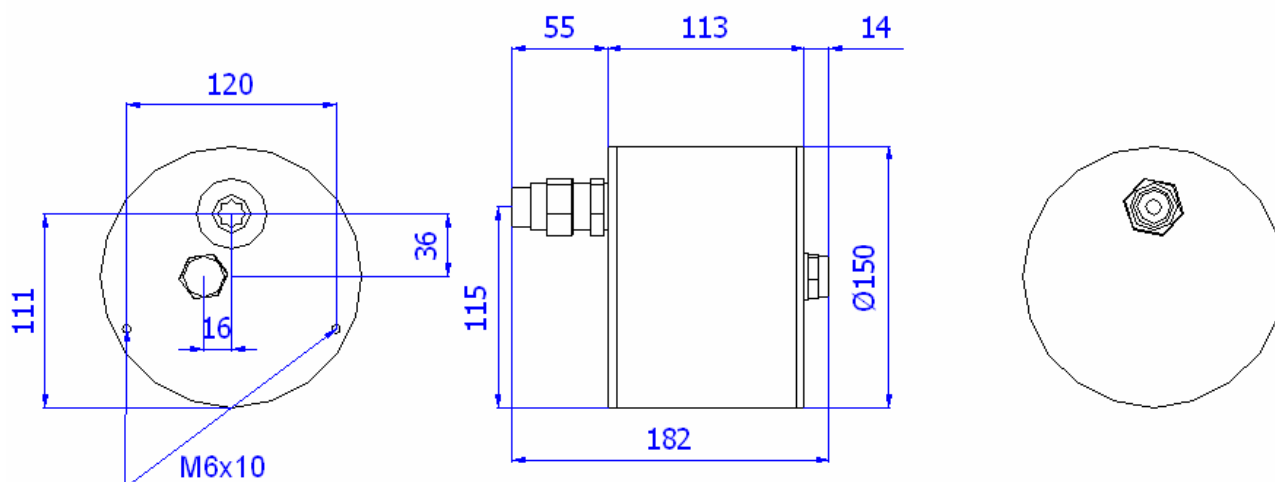
EXAF - EXBF - EXBE - EXBG - EXSM - EXAM - EXSMC - EXSMQ-



*= Only series EXAF, EXBF, EXBG, EXBE

Note: dimension are specified in millimeters

EXNM



Note: dimension are specified in millimeters

EDELWEISS *Actuators*

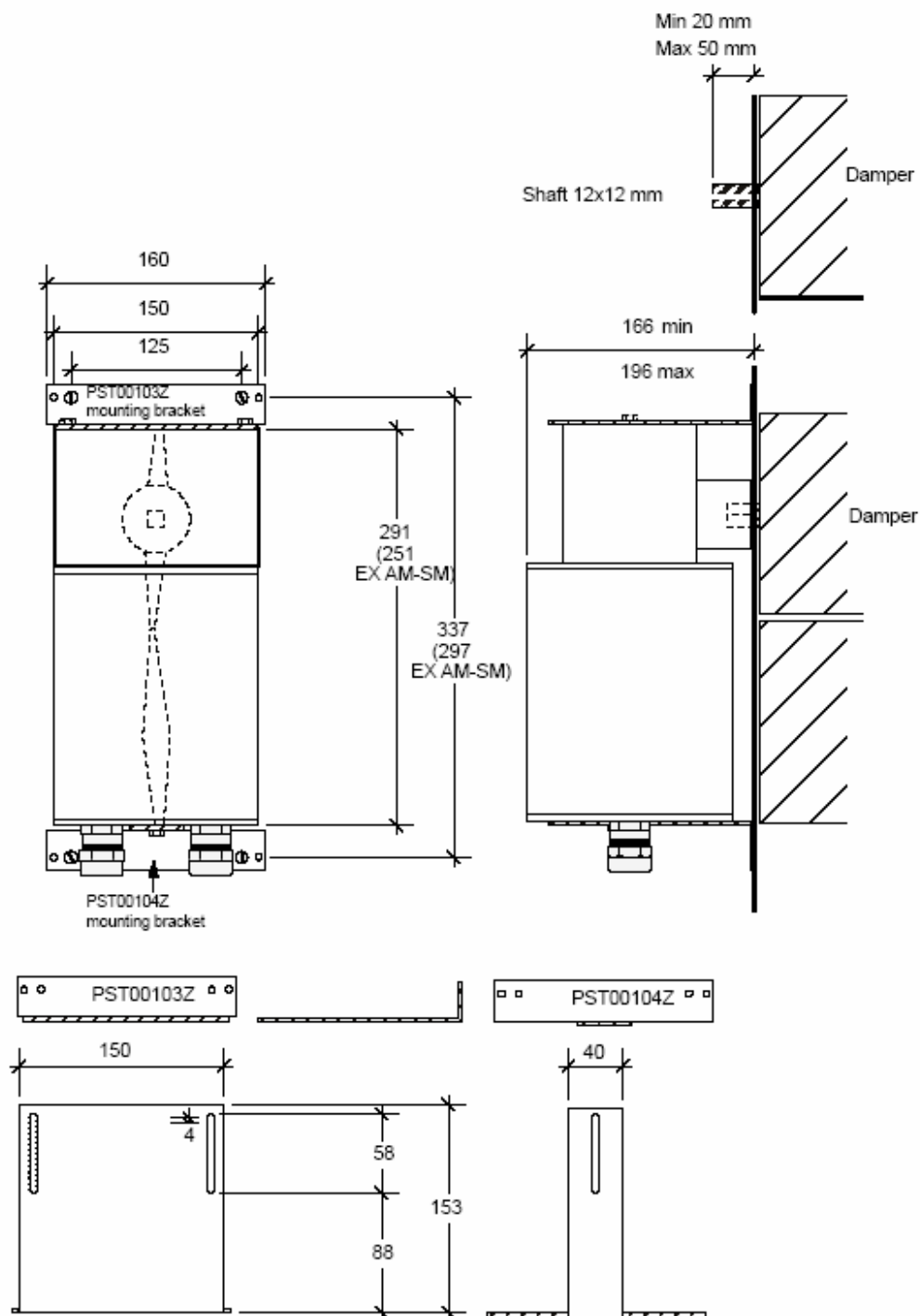
Electrical Explosion Proof actuators

Catalogue 2012

Dimensions and Mounting instructions

EXAF - EXBF - EXBE - EXBG – EXSM - EXAM - EXSMC - EXSMQ

Direct mount on square shaft, 12 x 12 mm



EDELWEISS *Actuators*

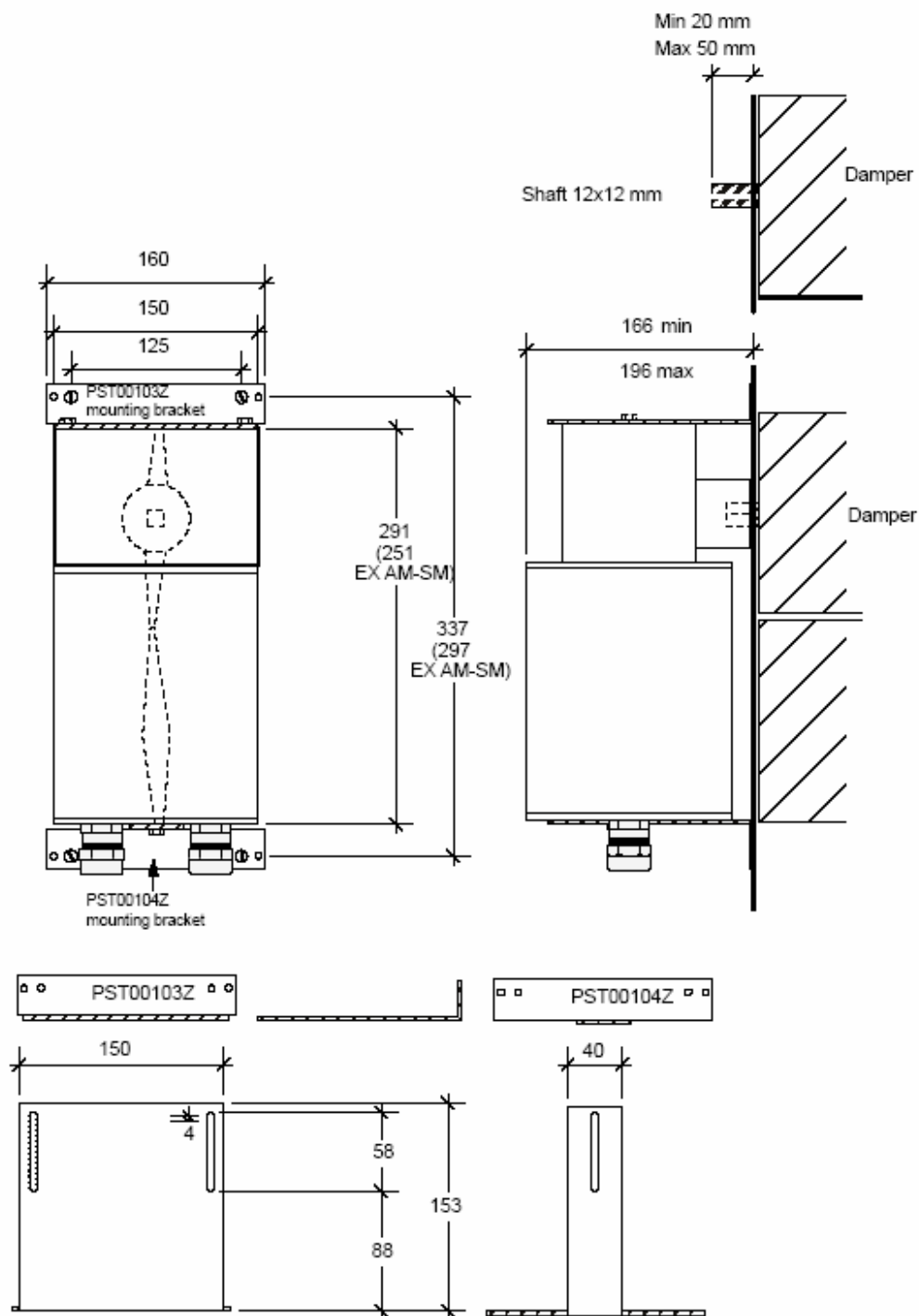
Electrical Explosion Proof actuators

Catalogue 2012

Dimensions and Mounting instructions

EXAF - EXBF - EXBE - EXBG – EXSM - EXAM - EXNMC - EXNMQ

Direct mount on square shaft, 12 x 12 mm



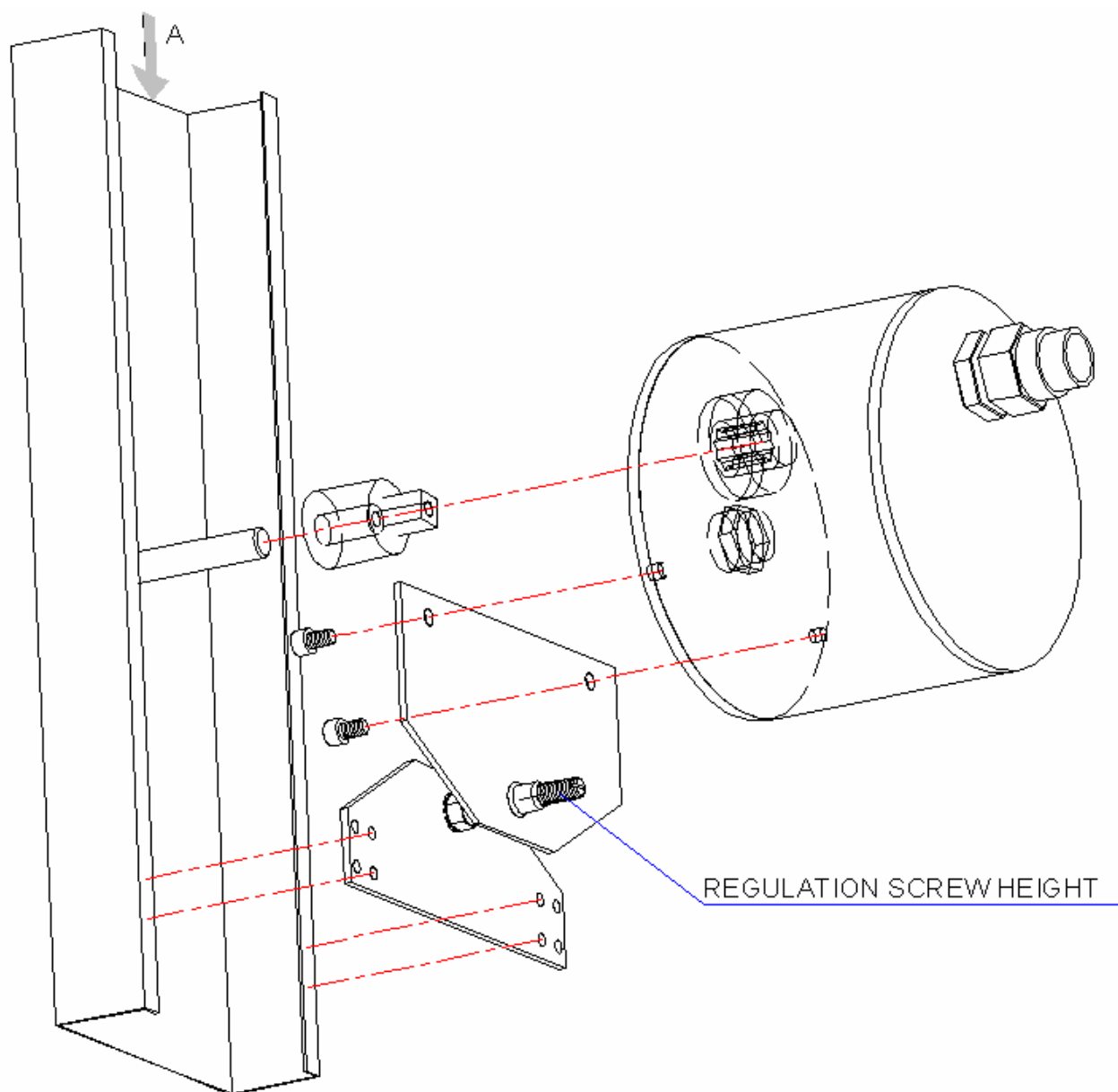
EDELWEISS *Actuators*

Electrical Explosion Proof actuators

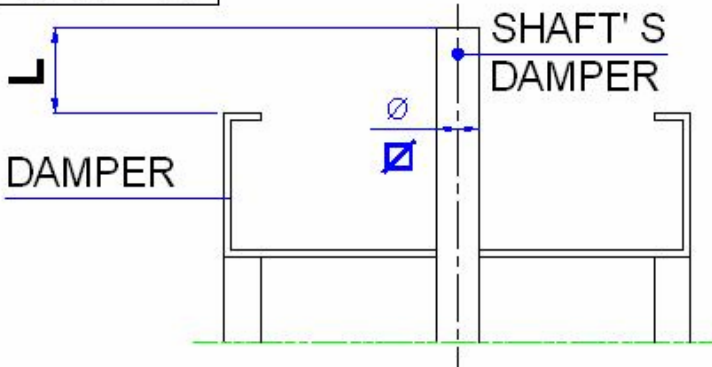
Catalogue 2012

Mounting instructions

EXNM



VIEW "A"



For cross section area shaft's damper:

Round: $L_{min}=24mm$

$L_{max}=40mm$

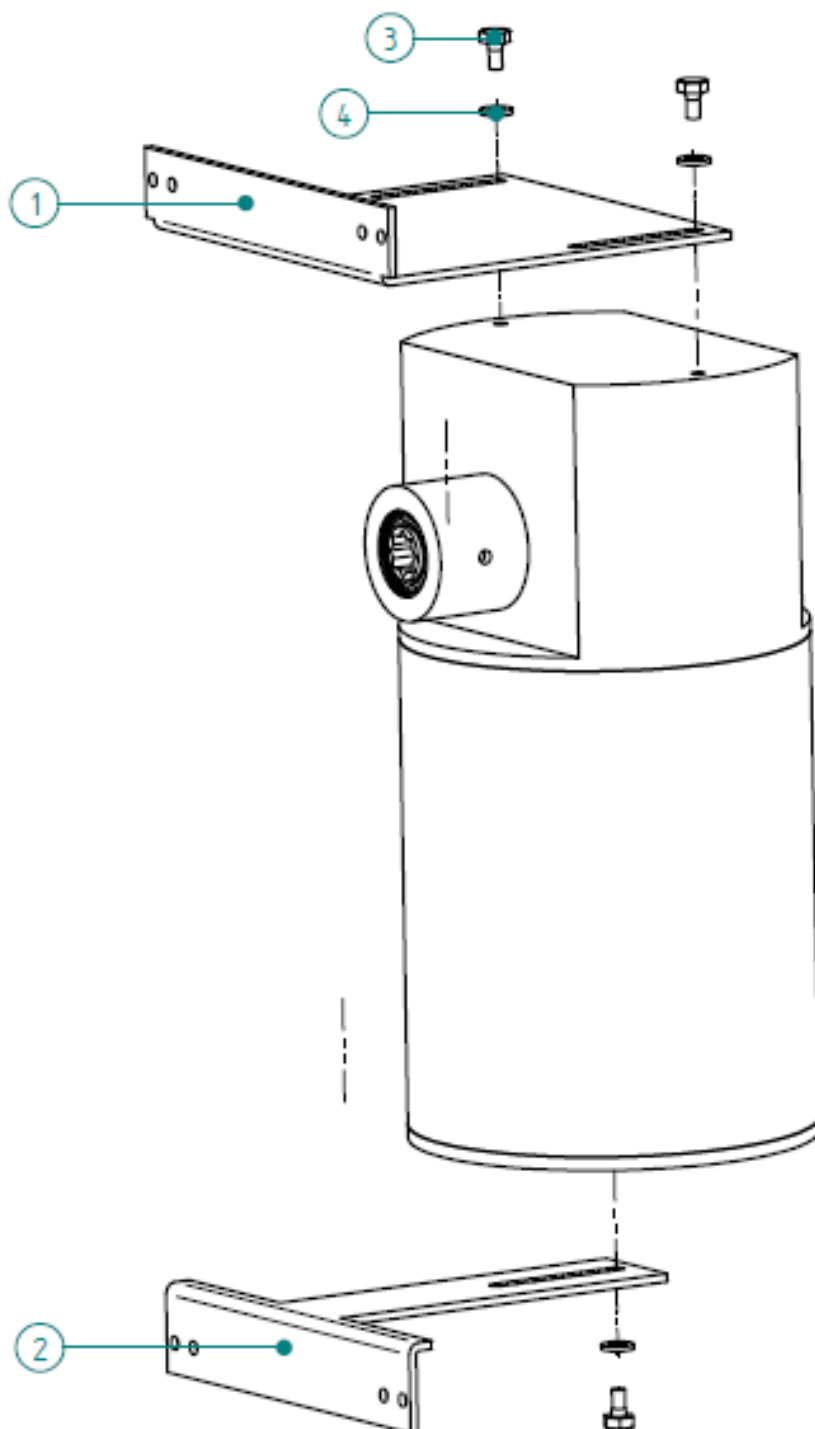
Square: $L_{min}=40mm$

$L_{max}=56mm$

EDELWEISS *Actuators*

Electrical Explosion Proof actuators Dimensions and Mounting instructions

Catalogue 2012



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