

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.

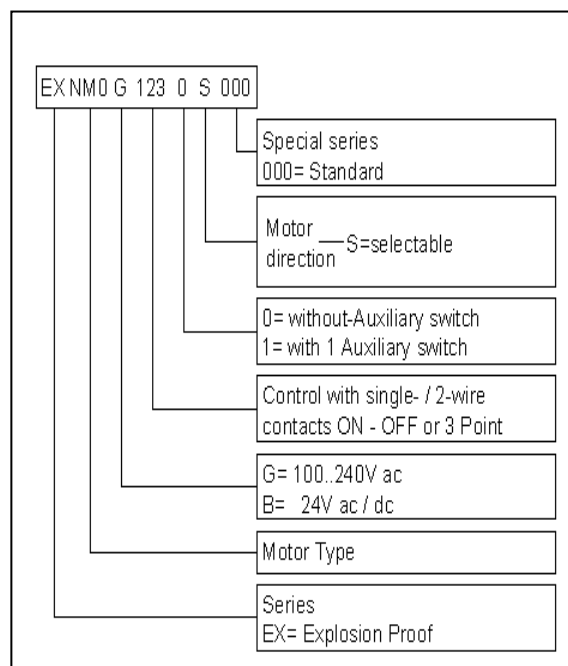
Products range

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



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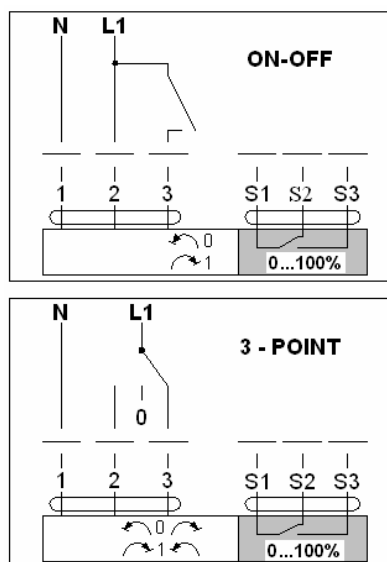
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Technical data	
Torque	10 Nm
Control Mode	ON/OFF, 3 point.
Rotation angle	95°
Running time	150 Sec.
Ambient temperature	-20°C + 50°C
Degree of protection	IP66
Housing material	Aluminium baked varnish
Maintenance	None
Fastening	Terminal block in Ex 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

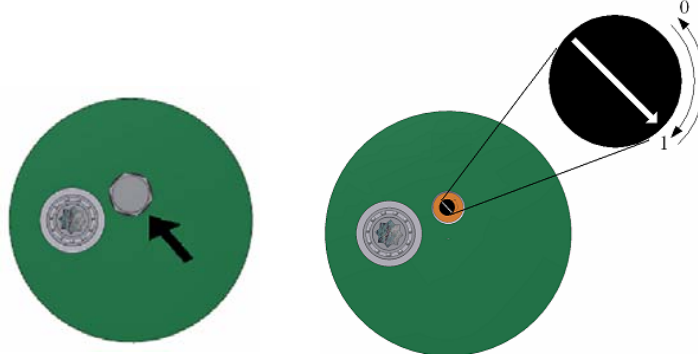
Electric diagram



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

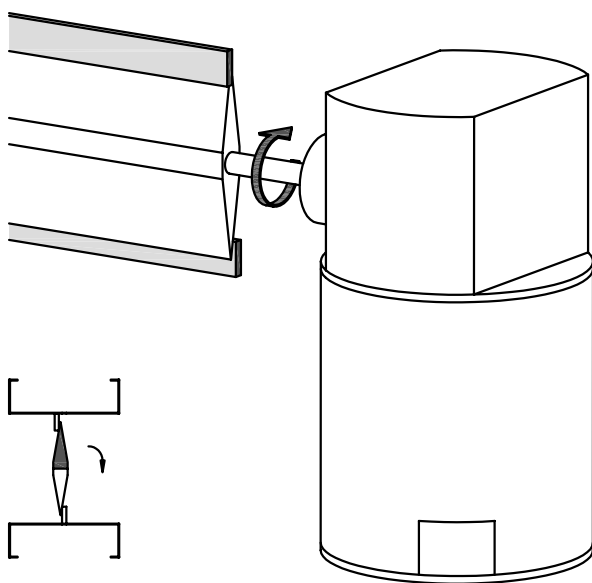
Rotary Direction "R" For Damper normally closed N.C.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

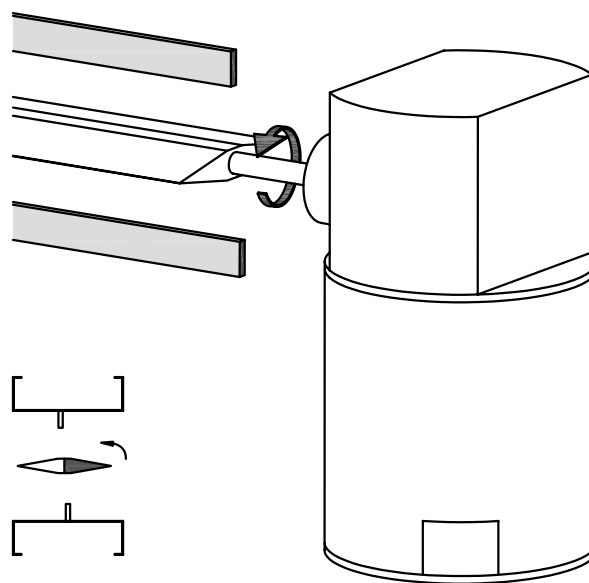


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



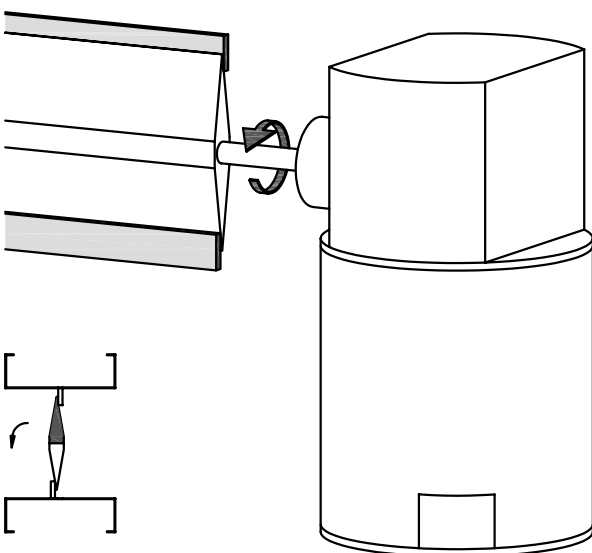
Rotary Direction "L" For Damper normally closed N.C.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

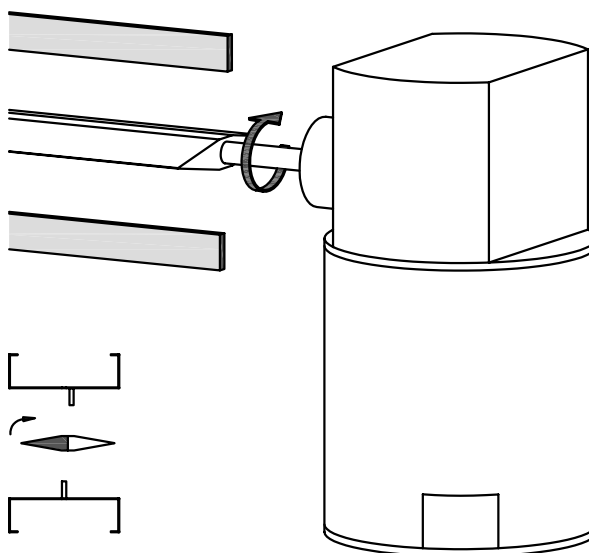


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



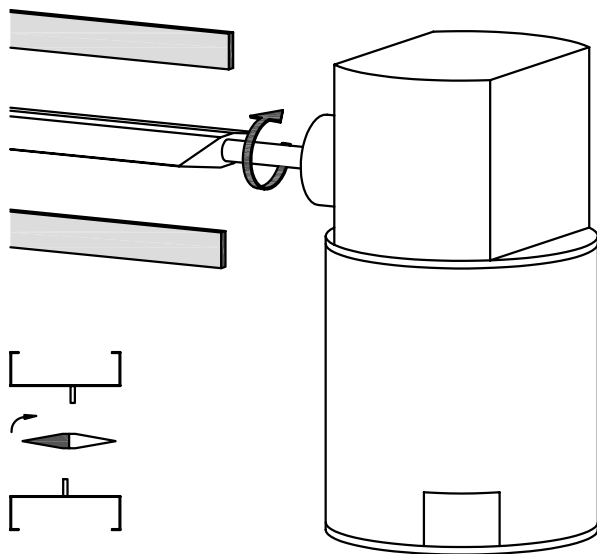
Rotary Direction "R" For Damper normally open N.O.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

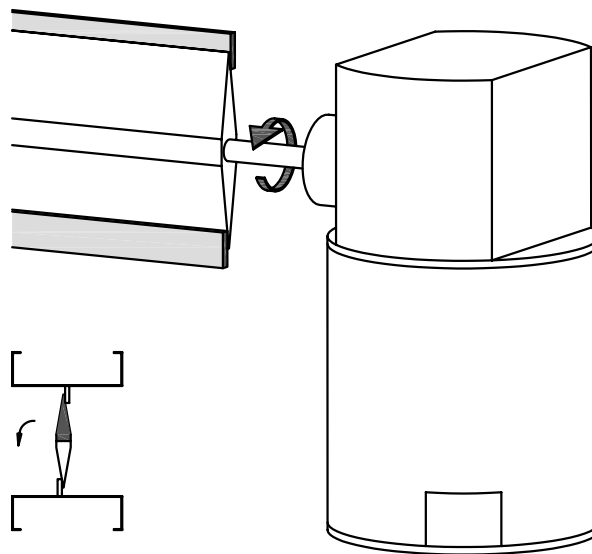


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



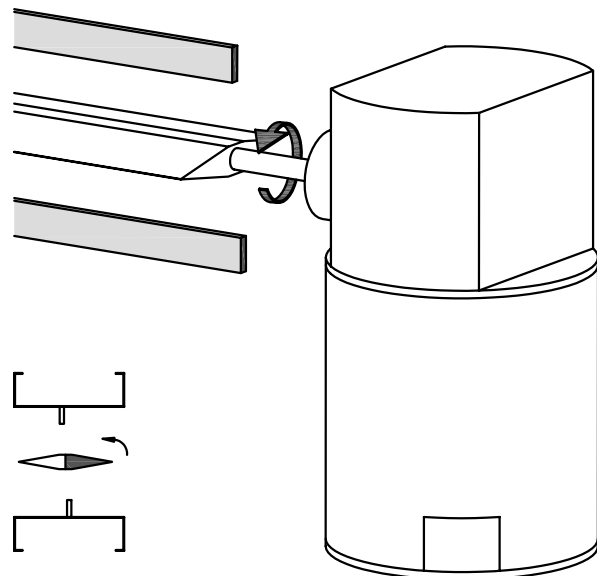
Rotary Direction "L" For Damper normally open N.O.

MOTOR

Power: ON

Power: on WIRE 2

Control: 2...10V

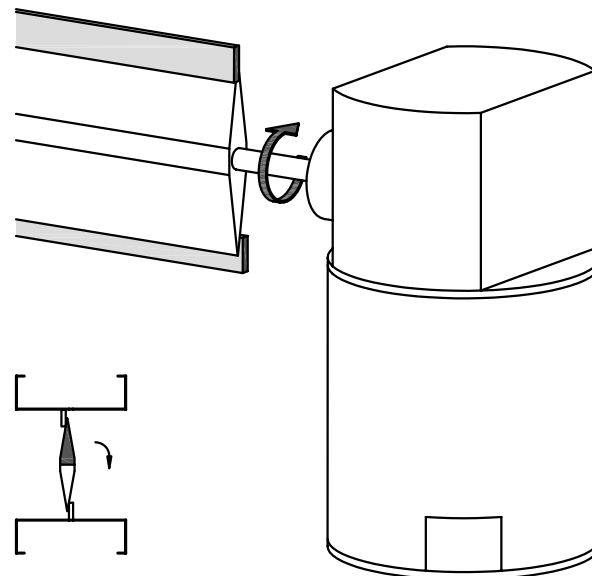


MOTOR or SPRING RETURN

Power: OFF

Power: on WIRE 3

Control: 10...2V



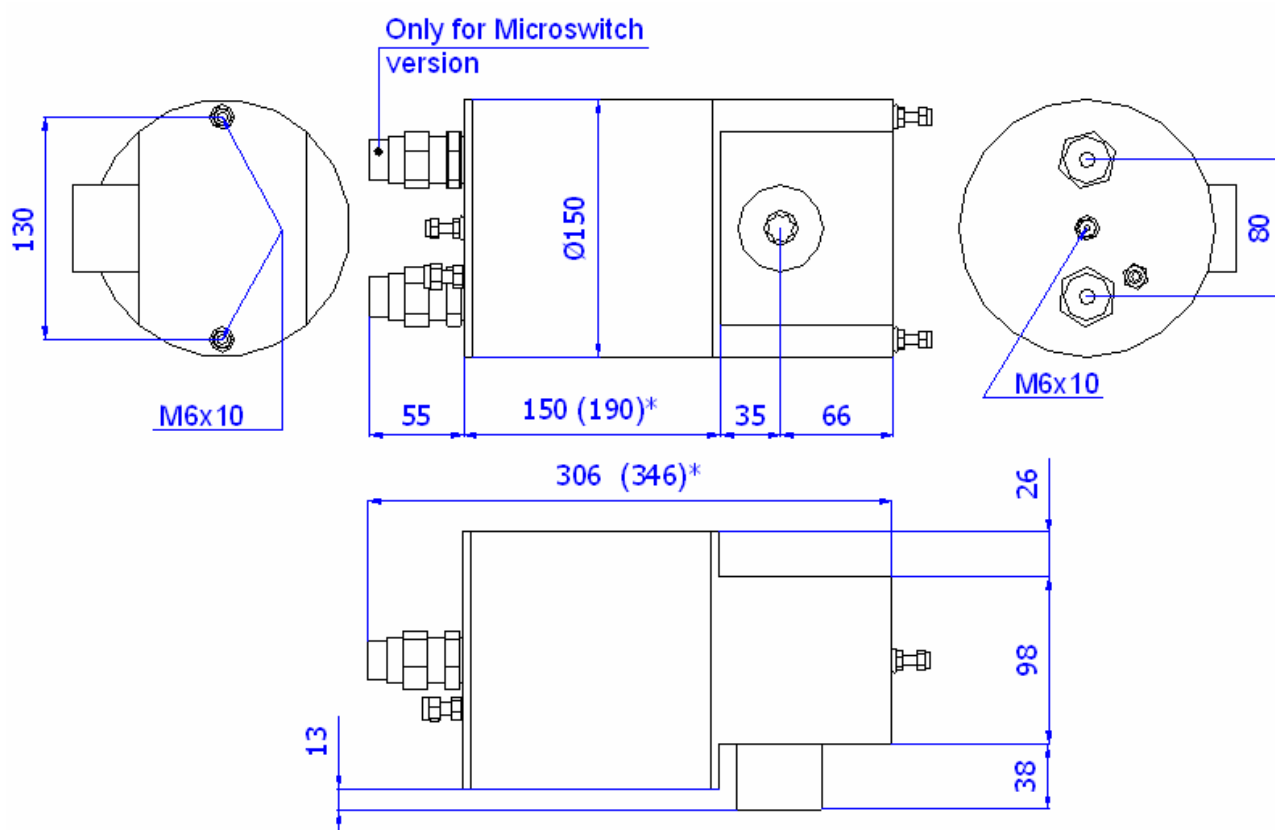
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Dimensions and Mounting instructions

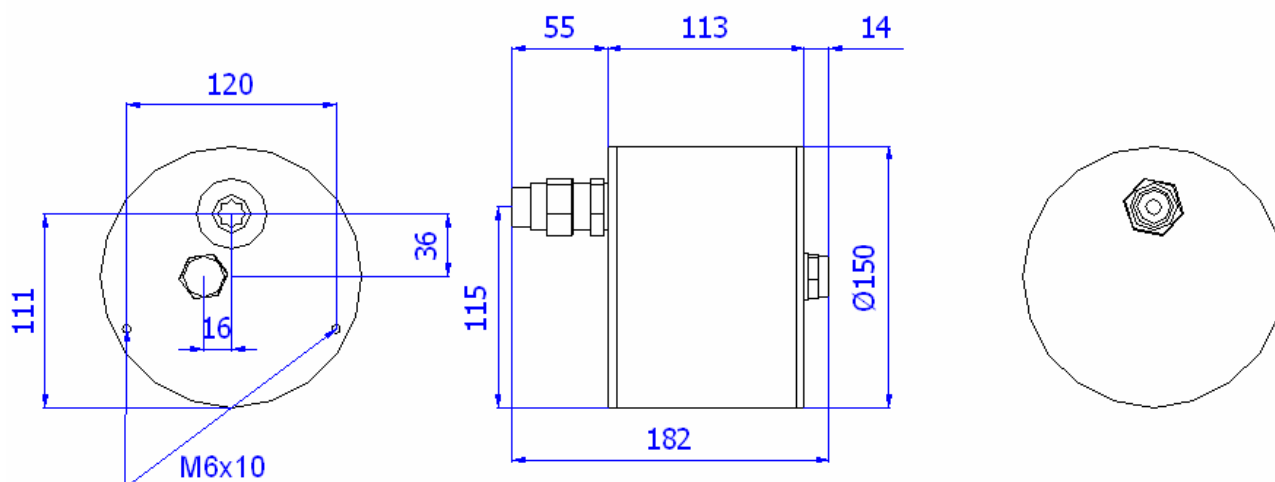
EXAF - EXBF - EXBE - EXBG - EXSM - EXAM



*= Only series EXAF, EXBF, EXBG, EXBE

Note: dimension are specified in millimeters

EXNM



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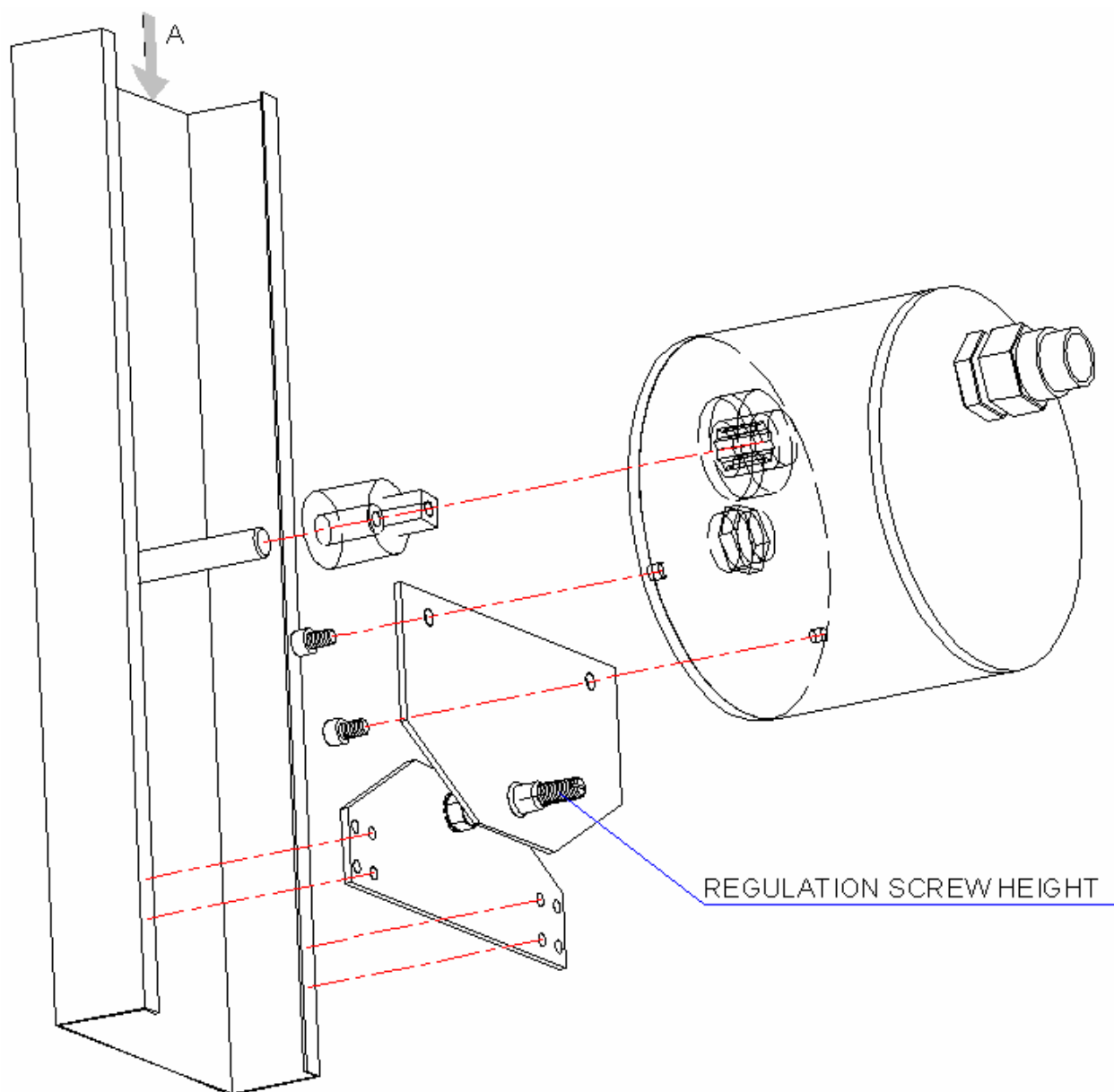
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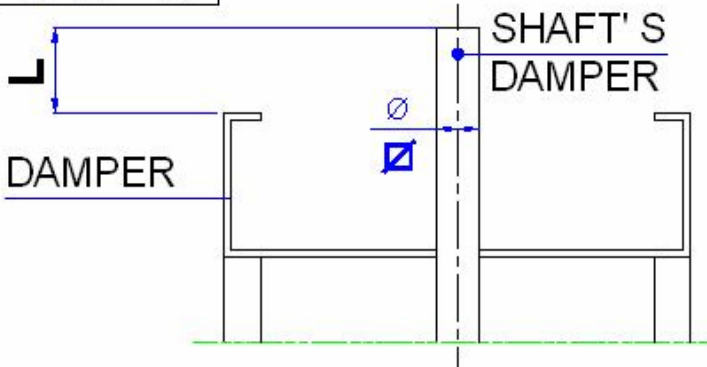
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Mounting instructions

EXNM



VIEW "A"



For cross section area shaft's damper:

Round: $L_{min}=24mm$

$L_{max}=40mm$

Square: $L_{min}=40mm$

$L_{max}=56mm$