- No spring return
- Running time 150 sec
- 20 Nm
- Modulating 2...10Vcc?
- Power supply 24 V ac, 24 V dc
- According to EN 60079-0,EN60079-1,
- EN 60079-31
- Zones 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 $4 \mathrm{~m}^{2}$.

## 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.


0948

NEMKO 03 ATEX 1242X
(囚) II $2 \mathrm{G} \mathrm{Ex} \mathrm{d} \mathrm{IIC} \mathrm{T6} \mathrm{~Gb}$

* © II 2D Ex tb IIIC $767^{\circ} \mathrm{C}$

For zone 1, 2, 21, 22

The product may differ from the illustration

The actuator is overload protected. The actuator can be mounted directly on the damper shaft if square, $12 \times 12$ mm or $10 \times 10 \mathrm{~mm}$ (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 $10,5 \mathrm{~mm}$.

## Product range

| ITEM | Auxiliary Switch |
| :---: | :---: |
| EXSM 0 B MF2 0 L 000 | 0 |
| EXSM 0 B MF2 0 R 000 |  |
| EXSM 0 B MF2 2 L 000 | 2 |
| EXSM 0 B MF2 2 R 000 |  |
| EXSM 0 B MF1 0 L 000 | 0 |
| EXSM 0 B MF1 0 R 000 |  |
| EXSM 0 B MF1 2 L 000 | 2 |
| EXSM 0 B MF1 2 R 000 |  |
| EXSM 0 B MF5 0 L 000 | 0 |
| EXSM 0 B MF5 0 R 000 |  |
| EXSM 0 B MF5 2 L 000 | 2 |
| EXSM 0 B MF5 2 R 000 |  |



Options available on request:

- Different angle of rotation
- Different wiring length


## Technical data

| Torque | 40 Nm |
| :--- | :--- |
| Control mode | see table below |
| Working Field | see table below |
| Feedback | see table below |
| Rotation angle | $95^{\circ}$ |
| Running time | 150 Sec. |
| Ambient temperature | $-20^{\circ} \mathrm{C}+50^{\circ} \mathrm{C}$ |
| Degree of protection | IP66 |
| Housing material | Aluminium baked varnish |
| Maintenance | None |
| Fastening | Terminal block in Ex e box <br> (optional) |
|  | 1 m cable |
| Weight | 5.5 kg |
| Auxiliary switches | $3 \mathrm{~A} \mathrm{(0,5A)} \mathrm{max} \mathrm{250V}$ |
|  | switching point $5^{\circ}$ e 85 |


| Table | MF1 | MF2 | MF5 |
| :--- | :---: | :---: | :---: |
| Control <br> Mode | DC $0 \ldots 10 \mathrm{~V}$ | DC $0 \ldots 10 \mathrm{~V}$ | $4 \ldots 20 \mathrm{~mA}$ |
| Working <br> Field | DC $0 \ldots 10 \mathrm{~V}$ | DC $2 \ldots 10 \mathrm{~V}$ | $4 \ldots 20 \mathrm{~mA}$ |
| Feed- <br> back | DC $0 \ldots 10 \mathrm{~V}$ | DC $2 \ldots 10 \mathrm{~V}$ | DC $2 \ldots 10 \mathrm{~V}$ |



| Power supply | AC $24 \mathrm{~V} 50 / 60 \mathrm{~Hz}, \mathrm{DC} 24 \mathrm{~V}$ |
| :--- | :--- |
| Nominal voltage range | AC/DC $19,2 \ldots 28,8 \mathrm{~V}$ |
| Power consumption: running | 2.0 W |
| At rest | 0.4 W |
| Sizing | 4.0 VA |

## Attention:

Only with MFT multifunction technology:

- Running time motor 150 s adjustable
- Control DC $2 \ldots 10 \mathrm{~V}, 0 \ldots 32 \mathrm{~V}$ adjustable
- Operating range DC $2 . . .10 \mathrm{~V}, 0 . .32 \mathrm{~V}$
- (adjustable)
- Position feedback DC $2 \ldots 10 \mathrm{~V}, 0 . .10 \mathrm{~V}$,
- (adjustable)


## 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 Automatikprodukter.
- 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 Automatikprodukter.


Subject to technical changes without notice. Rev. 00


Subject to technical changes without notice. Rev. 00

Dimensions and Mounting Instructions
EXAF - EXBF - EXBE - EXBG - EXSM - EXAM

*= Only series EXAF, EXBF,
EXBG, EXBE

Note: Dimensions are specified in millimeters

EXNM



Note: Dimensions are specified in millimeters

Dimensions and Mounting Instructions
EXAF - EXBF - EXBE - EXBG - EXSM - EXAM

Direct mount on square shaft, $12 \times 12 \mathrm{~mm}$


## Dimensions and Mounting Instructions <br> EXAF - EXBF - EXBE - EXBG - EXSM - EXAM



| $n^{*}$ | Code description |
| :--- | :--- |
| 1 | PST00103Z |
| 2 | PST00104Z |
| 3 | TDE M6 $\times 10$ |
| 4 | Flat washer |

Mount the bracket as shown in the picture above.
Threaded hole depth: 8 mm . Do not replace standard screws with other one; or ensure that screws does not penetrate more than 7 mm into the enclosure.
Flat washer dimension : $\mathrm{Di}=6,4 \mathrm{~mm}$ De=12mm h=1,6mm

