

Feedback potentiometer for damper actuators and rotary actuators

- Nominal resistance 140  $\Omega$
- add-on


**Technical data**

|                              |                                   |   |
|------------------------------|-----------------------------------|---|
| <b>Electrical data</b>       | Nominal resistance                | 140 $\Omega$  |
|                              | Tolerance                         | $\pm 5\%$   |
|                              | Loading capacity                  | Max. 1 W  |
|                              | Linearity                         | $\pm 2\%$   |
|                              | Resolution                        | Min. 1%   |
|                              | Residual resistance               | Max. 5% on both sides   |
|                              | Connection feedback potentiometer | Cable 1 m, 3 x 0.75 mm <sup>2</sup> halogen-free                      |
|                              | <b>Safety</b>                     | Protection class IEC/EN   |
| Protection class UL          |                                   | UL Class 2 Supply   |
| Degree of protection IEC/EN  |                                   | IP54  |
| Degree of protection NEMA/UL |                                   | NEMA 2, UL Enclosure Type 2   |
| EMC                          |                                   | CE according to 2014/30/EU  |
| Certification IEC/EN         |                                   | IEC/EN 60730-1 and IEC/EN 60730-2-14                                  |
| Certification UL             |                                   | cULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1:02 |
| Mode of operation            |                                   | Type 1  |
| Rated impulse voltage supply |                                   | 0.8 kV  |
| Control pollution degree     |                                   | 3   |
| <b>Weight</b>                | Ambient temperature               | -30...50 °C   |
|                              | Non-operating temperature         | -40...80 °C   |
|                              | Ambient humidity                  | 95% r.h., non-condensing  |
|                              | Maintenance                       | Maintenance-free  |
|                              | Weight                            | 0.19 kg   |

**Safety notes**

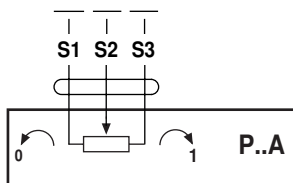

- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- Cables must not be removed from the device.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Product features**

- Mode of operation** A carrier plate uses adaption to make a positive fit on the spindle clamp (damper actuators) or on the position indication (rotary actuators) and transfers the position directly to the feedback potentiometer.
- Application** The feedback potentiometer unit is used for modulating damper control in connection with controllers with fixed feedback. The feedback potentiometers can also be used in conjunction with commercially available systems for damper position indication or as positioners for parallel running actuators.
- Simple direct mounting** The feedback potentiometers are attached directly by the spindle clamp (damper actuators) or on the position indication (rotary actuators). The guiding grooves between the housing and the switch ensure a tightly sealing fit.

**Electrical installation**

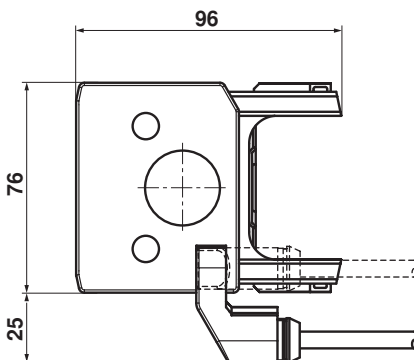
**Wiring diagrams**



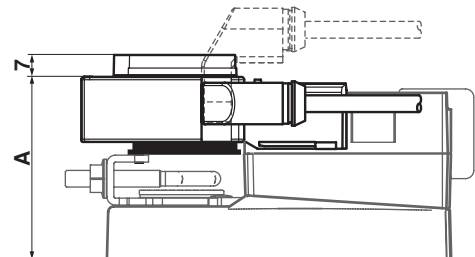
Cable colours:  
 S1 = violet  
 S2 = red  
 S3 = white

**Dimensions [mm]**

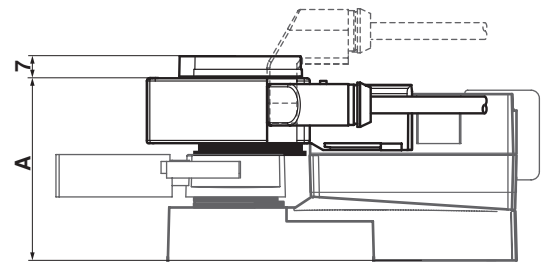
**Dimensional drawings**



|                 | A  | A           |
|-----------------|----|-------------|
| TM..A., LM..A.. | 66 | LMQ..A.. 80 |
| NM..A..         | 69 | NMQ..A.. 83 |
| SM..A..         | 71 | SMQ..A.. 89 |
| SMD..A..        | 71 | NKQ..A.. 87 |
| GM..A..         | 78 | GK..A.. 94  |



|                 | A  | A           |
|-----------------|----|-------------|
| TR..A., LR..A.. | 66 | LRQ..A.. 80 |
| NR..A..         | 69 | NRQ..A.. 83 |
| SR..A..         | 71 | GRK..A.. 94 |
| GR..A..         | 78 |             |



|         | A  |
|---------|----|
| DR..A.. | 78 |

