



Technical data

Electrical data	Nominal resistance	10 k Ω
	Tolerance	$\pm 5\%$
	Loading capacity	Max. 1 W
	Linearity	$\pm 2\%$
	Resolution	Min. 1%
	Residual resistance	Max. 5% on both sides
	Connection potentiometer	Cable 1 m, {237} x 0.75 mm ² halogen-free
Safety data	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54
	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 UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1:02
	Mode of operation	Type 1
	Rated impulse voltage supply	0.8 kV
	Control pollution degree	3
	Ambient temperature	-30...50°C
	Storage temperature	-40...80°C
	Ambient humidity	Max. 95% r.H., non-condensing
Servicing	maintenance-free	
Weight	Weight	0.19 kg
Housing colours	Housing cover	grey
	Housing base	grey

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.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or aggressive gases interfere directly with the device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- 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

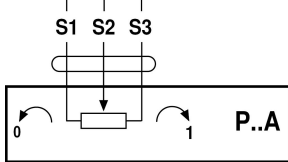
- Mode of operation** A carrier plate uses adaption to make a positive fit on the shaft clamp (damper actuators) or on the position indication (rotary actuators) and transfers the position directly to the feedback potentiometer.
- Application** The feedback potentiometer unit is used for modulating damper 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 shaft clamp (damper actuators) or on the position indication (rotary actuators). The guiding grooves between the housing and the switch ensure a tightly sealing fit.

Accessories

Mechanical accessories	Description	Type
	Adapter for auxiliary switch and feedback potentiometer	Z-SPA

Electrical installation

Wiring diagrams

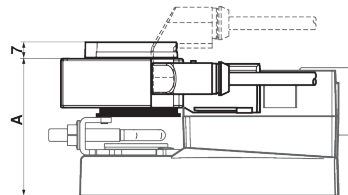


Cable colours:
 S1 = violet
 S2 = red
 S3 = white

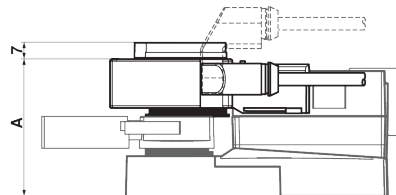
Dimensions

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

