



## 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 potentiometer	cable 3 ft. [1 m], 3 x 0.75 mm <sup>2</sup> halogen-free
<b>Safety data</b>	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Power source 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
	UL Approval	cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1
	Type of action	Type 1
	Rated impulse voltage supply	0.8 kV
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Servicing	maintenance-free
<b>Weight</b>	Weight	0.40 lb [0.19 kg]
<b>Housing colours</b>	Housing cover	gray
	Housing base	gray

## 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, insulation or aggressive gases interfere directly with the actuator and that is ensured that the ambient conditions remain at any time within the thresholds according to the data sheet.
- Only authorized 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

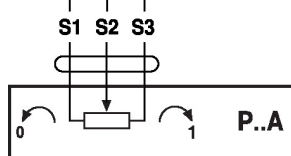
<b>Mode of operation</b>	A carrier plate uses adaptation to make a positive fit on the shaft clamp (damper actuators) or on the position indication (rotary actuators) and transfers the position directly to the feedback potentiometer.
<b>Application</b>	The feedback potentiometer unit is used for modulating 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.
<b>Simple direct mounting</b>	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 colors:

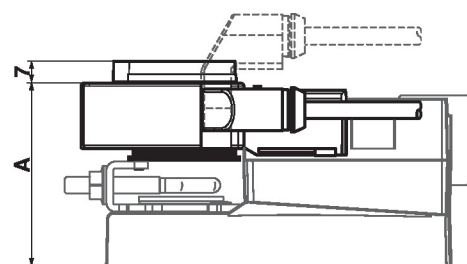
S1 = violet

S2 = red

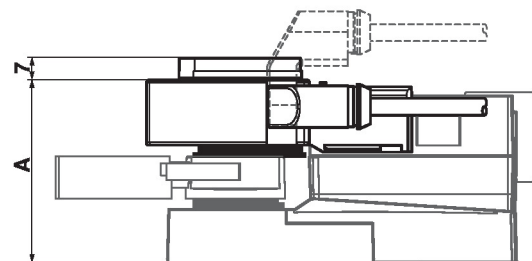
S3 = white

## Dimensions

	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
DRK..A..	94

