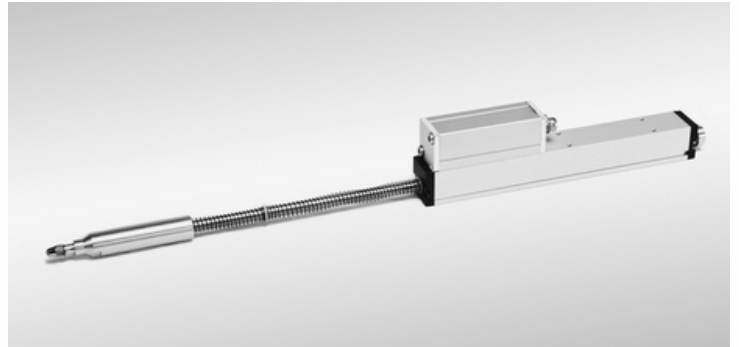


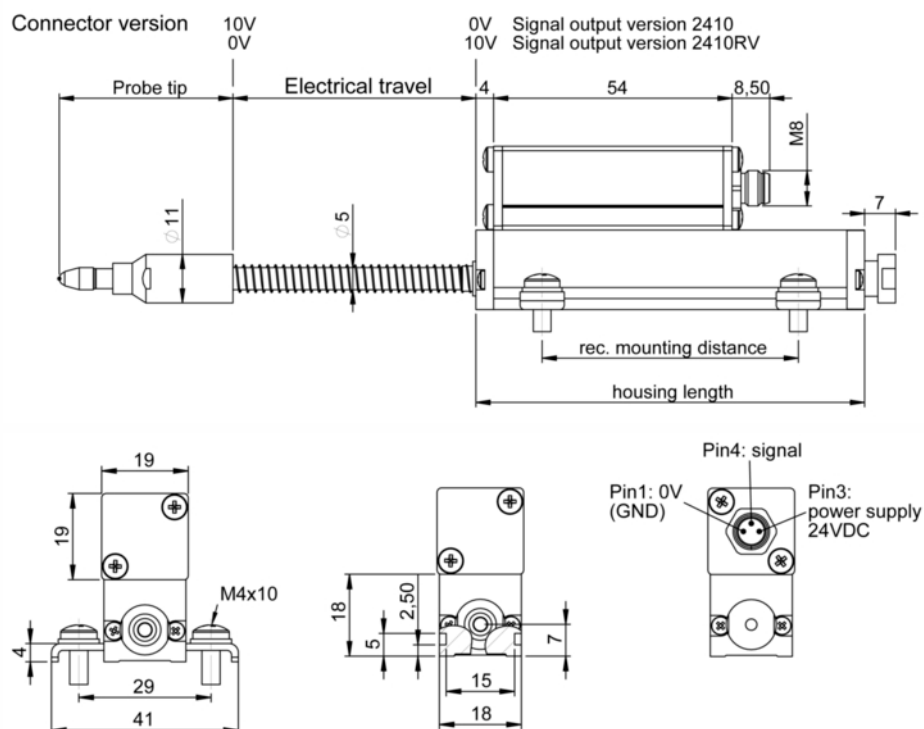
Serie SPR18E / Potentiometric Transducer With Integrated Amplifier

- Integrated Signal Converter
- Analog Output: 0..5/10V, 0/4..20mA
- Stroke: from 25 to bis 100 mm
- Housing 18x18 mm industrial standard



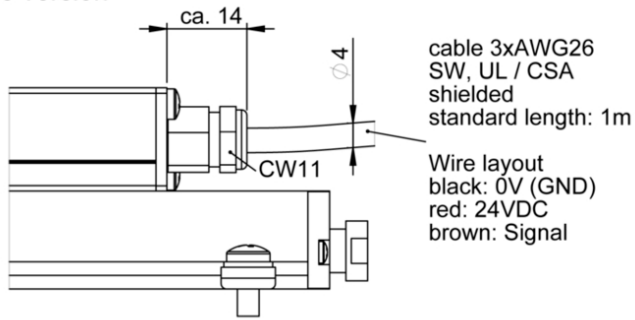
The SPR18E linear transducer is a potentiometric sensor with conductive plastic technology, spring return device and is equipped with an integrated signalconverter to provide the typical output signals 0...5/10V an 0/4...20mA (power supply 24V ± 20%). The compact and robust design with only 18x18mm in his profile allows applications in rough industrial conditions with small space.

Drawing

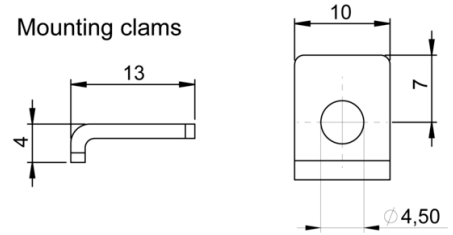


Serie SPR18E / Potentiometric Transducer With Integrated Amplifier

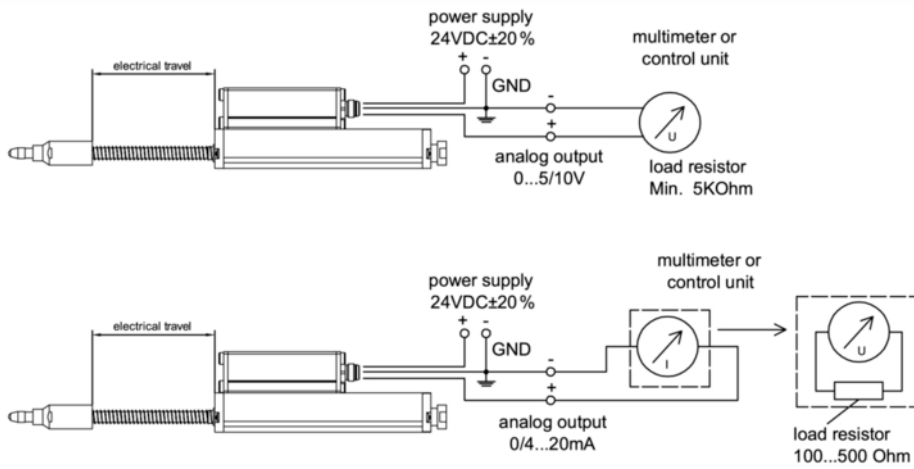
Cable version



Mounting clams



Wiring Diagram



Dimensions in mm

Type	SPR18E-25	SPR18E-50	SPR18E-75	SPR18E-100
Electrical Stroke ± 1mm *	25	50	75	100
Mechanical Stroke	30	55	80	105
Housing Length	63	88	113	138
Probe Length	32	40	45	50
Mounting Space L	33	58	83	108

* At the start of the measured displacement (0...2%FS) and at the end (98...100%FS) the linearity can deviate from the data sheet specifications.

Serie SPR18E / Potentiometric Transducer With Integrated Amplifier

Electrical Data	SPR18E-25	SPR18E-50	SPR18E-75	SPR18E-100
Independent Linearity Tolerance	±0,4%	±0,2%		
Resolution [mm]	quasi infinite (integrated electronic works analog)			
Sampling Rate	> 1 kHz max. (integrated electronic works analog)			
Operating Voltage	12V - 30V			
Max. Power Consumption	Voltage Output: 0..5/10 V: 5 mA Current Output: 0/4..20 mA: 25 mA			
Load Resistance Voltage Output	3 kOhm min.			
Load Resistance Current Output	100 - 500 Ohm			
Load Capability	0 - 500 µF			
Signal Coefficient	150 ppm/K Voltage Output: typical 50 ppm/K Current Output: typical 100 ppm/K			

Mechanical Data	SPR18E -25	SPR18E -50	SPR18E -75	SPR18E -100
Friction	3 N max.			
Weight ≈	100 g	150 g	200 g	250 g
Rod Bearing	precision sleeve bearing			
Max. Acceleration	5 m/s			
Middle Life	40 Mio. axis movements			
Housing Material	anodized Aluminium			
Rod Material	stainless Steel			

Ambient Conditions	
Operating Temperature	-30 ... +80 °C
Storage Temperature	-30 ... +100 °C
Protection Class	IP40

Options	Accessories
<ul style="list-style-type: none"> Cable on request 	<ul style="list-style-type: none"> Sensor cable with 3-pole socket M8x1 straight, 2 meter. Part No. 125303 Mounting clamps (1 Set = 4 pcs. included in delivery)

Serie SPR18E / Potentiometric Transducer With Integrated Amplifier

Order Code

Series	Version	Stroke	Signal
SPR18E	S (Connector) K (Cable 1m) K2 (Cable 2m) K3 (Cable 3m)...	50	2410 = 0..10V (extended Rod = 10V) 2405 = 0..5V 2420 = 0..20mA 2442 = 4..20mA 2410RV = 10..0V (extended Rod = 0V) 2405RV = 5..0V 2420RV = 20..0mA 2442RV = 20..4mA

Example: SPR18E S 50 2410

Version with connector (pls. order plug separately), Stroke 50 mm, Signal 2410 = supply 12-30V/output 0..10V (extended Rod = 10V)

Note: For smallest strokes and vibrations we recommend our inductive transducers with integrated amplifiers, with DC-input and -output.

The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.

25. October 2010. All specifications are subject to change without notice.