



PR



PR2S

# LINEAR MOTION POTENTIOMETERS

## Series PR • PR2S

- 25 to 150 mm
- Round section
- Infinite resolution
- Easy mounting method
- Several fittings
- IP64 protection degree

PR	PR2S
Strokes: 25 to 150 mm • rod Ø 5 mm • radial connector	Strokes: 25 to 150 mm • rod Ø 5 mm • radial connector • two ball joints Ø 5 mm

ELECTRICAL & OPERATING SPECIFICATIONS				
Series	PR		PR2S	
▪ Sensor	Conductive plastic resistive element			
▪ Resistive value	5 KOhm ±20%			
▪ Strokes mm	25 •	50 •	75 •	100 • 150
▪ Linearity	±0.2%	±0.15%	±0.1%	±0.075%
▪ Resolution	Infinite			
▪ Permissible applied voltage	28 Vdc			
▪ Load resistance	1 MOhm min.			
▪ Recommended cursor current	< 1 µA			
▪ Mechanical life	100 million cycles			
▪ Ripetibility	<0.01 mm			
▪ Dissipation at 40°C	3 W			
▪ Insulation resistance	>100 MOhm at 500 Vdc			
▪ Connections	4-pin connector form C equipped with female connector			
▪ Connector position	Radial		Radial	

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS				
Series	PR		PR2S	
▪ Dimensions	See the drawing			
▪ Materials: housing rod	Anodised aluminium with glass-filled nylon flanges Stainless steel on self-lubricating bearings – free rotation			
▪ Rod Ø	5 mm			
▪ Fixing	Freely movable clamping brackets or ball joints			
▪ Stem max linear speed	5 m/sec			
▪ Sliding friction	0.1 Kg – with return spring: 0.5 Kg			
▪ Vibration resistance (10÷2000 Hz)	15 g			
▪ Shock resistance (11 ms)	50 g			
▪ Operating temperature	-20 ÷ 80°C			
▪ Stocking temperature	-30 ÷ 90°C			
▪ Protection degree	IP65			

### AVAILABLE STROKES

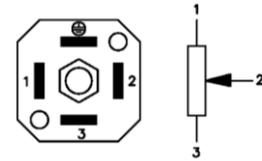
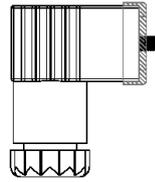
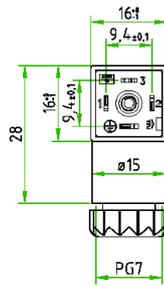
	Series PR		PR2S	
NOMINAL STROKE mm	25 •	50 •	75 •	100 • 150
ELECTRICAL STROKE	Nominal stroke + 0.5 mm			
MECHANICAL STROKE	Nominal stroke + 2 mm			

## CONNECTIONS

The electrical connection is granted by means of 4-pin connector form C provided with female connector.



Female flying connector



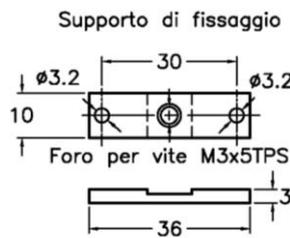
PIN 1 resistenza 0 Ohm con stelo inserito  
resistance 0 Ohm with rod in

Male fixed connector

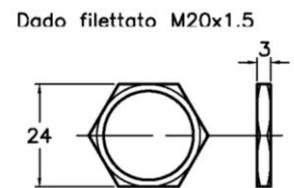
## MOUNTING & OPTIONAL FITTINGS

The potentiometers are easily fastened by means of the provided **brackets**, which can be placed **freely along the body** or, for the type **PR**, by means of the front thread, with the fixing nut, which can be supplied on request. The series **PR2S** is provided with ball joints at both ends.

**Ball joints and self-aligning articulated joints** can be used for **air-fixing**, allowing to compensate mounting misalignments. They are also available in option for the type **PR**. The potentiometer series **PR** can be provided with **feeler pin**.

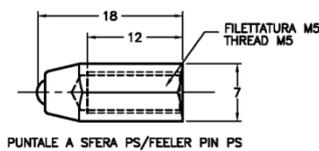


Fixing bracket

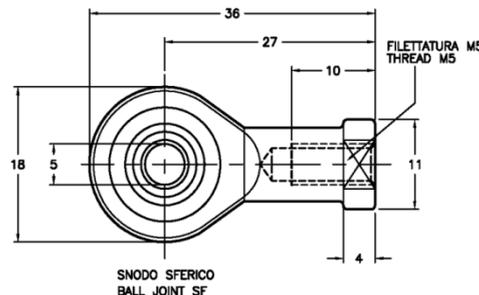


Fixing nut M20x1.5

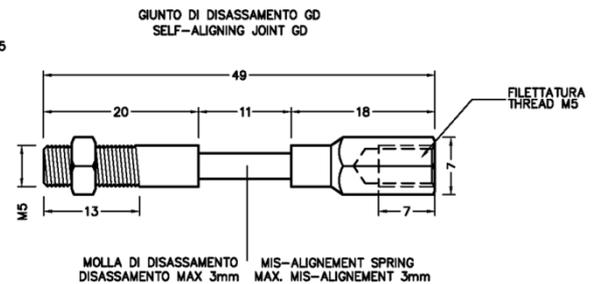
### FEELER PIN



### BALL JOINT



### SELF-ALIGNING JOINT



RIF. M1040/ M1041/M1039

## ORDERING INFORMATION

PR	50	5K	SF
<b>TYPE</b>	<b>STROKE</b>	<b>RESISTANCE VALUE</b>	<b>FITTINGS</b>
PR	25 25 mm	1K Resistenza 1KOhm*	(Type PR)
PR2S	50 50 mm	5K Resistenza 5KOhm	SF Ball joint
	75 75 mm	*Stroke 25 mm	GD Self-aligning joint
	100 100 mm		PS Feeler pin
	150 150 mm		

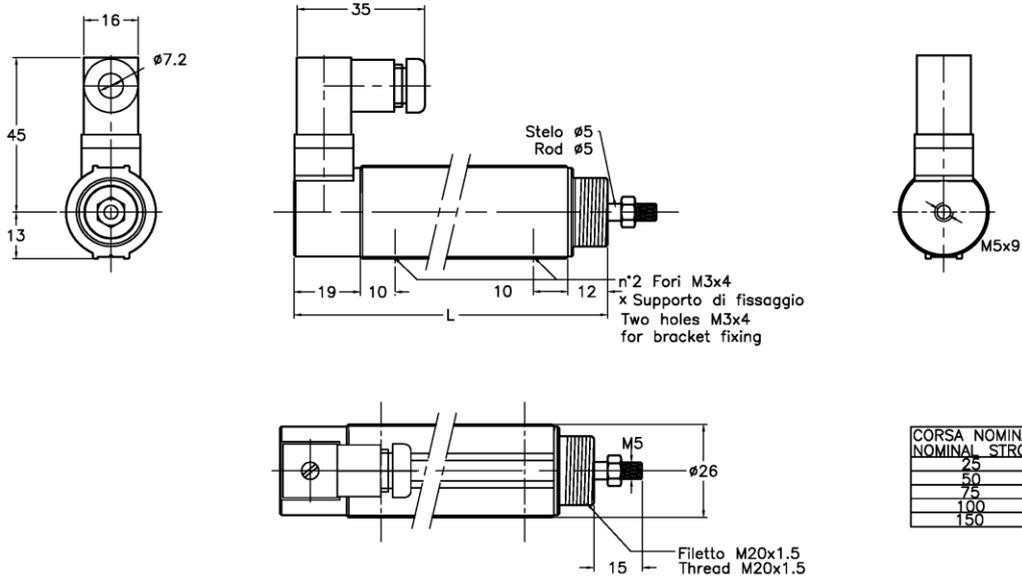


POTENTIOMETER PR WIT BALL JOINT

# DIMENSIONS

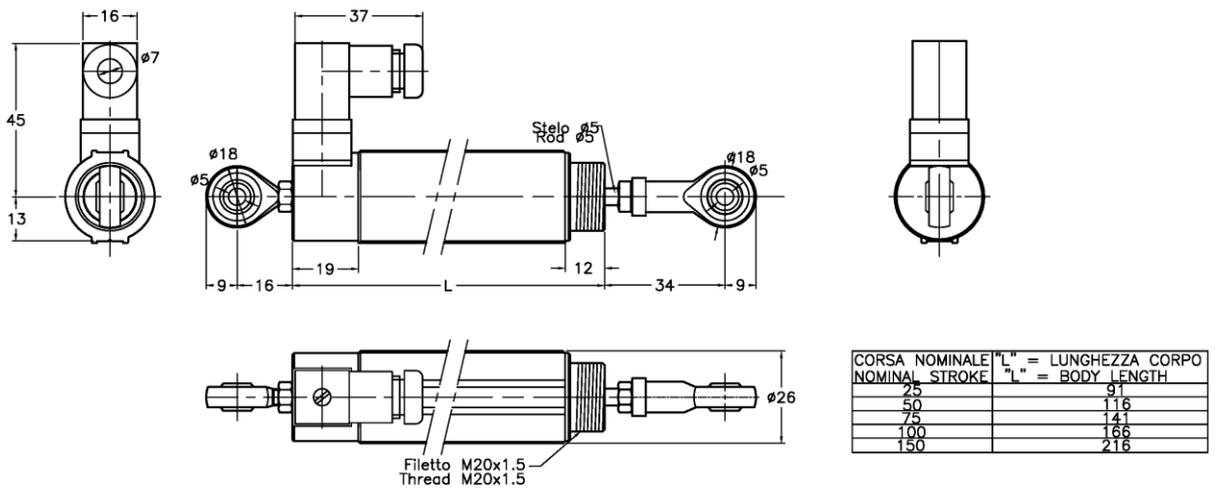
## Series PR

Ref M1373VA



## Series PR2S

Ref M1374VB



## REFERENCES

Further information at:

### Linear Potentiometers

<https://www.elap.it/linear-potentiometers/>

### Potentiometer PR

<https://www.elap.it/linear-potentiometers/pr-series/>

### Potentiometer PR2S

<https://www.elap.it/linear-potentiometers/pr2s-series/>



Linear Potentiometers

Potentiometers PR

Potentiometers PR2S



Potentiometers series PR/PR2S and PM/PM2S



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