



PT



PT2S

# LINEAR MOTION POTENTIOMETERS

## Series PT • PT2S

- 25 to 150 mm
- Excellent linearity
- Infinite resolution

- Easy mounting method
- M12 Connector
- IP64 protection degree

PT	PT2S
Strokes: 25 to 150 mm • rod Ø 5 mm • axial connector	Strokes: 25 to 150 mm • rod Ø 5 mm • radial connector • two ball joints Ø 5 mm

ELECTRICAL & OPERATING SPECIFICATIONS				
Series	PT • PT2S			
▪ 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 milion cycles			
▪ Ripetibility	<0.01 mm			
▪ Dissipation at 40°C	3 W			
▪ Insulation resistance	>100 MOhm at 500 Vdc			
▪ Connections	4-pin M12 male connector			
▪ Connector position	Axial		Radial	

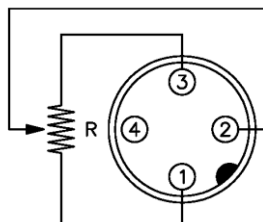
MECHANICAL & ENVIRONMENTAL SPECIFICATIONS				
Series	PT • PT2S			
▪ Dimensions	See the drawing			
▪ Materials: housing rod	Anodised aluminium with glass-filled nylon flanges Stainless steel on self-lubricating bearings – free rotation			
▪ Rod Ø	5 mm			
▪ Fixing	Freely movable clamping brackets or ball 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	IP64			

## AVAILABLE STROKES

	Series PT		PT2S		
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 M12 male connector. Flying part not included.

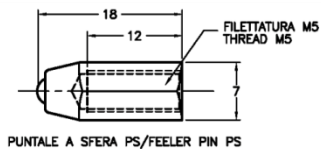


PIN 1 resistenza 0 Ohm con stelo inserito  
resistance 0 Ohm with rod in

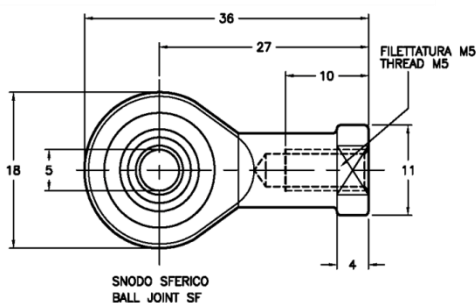
## MOUNTING & OPTIONAL FITTINGS

The potentiometers are easily fastened by means of the provided **brackets**, which can be placed **freely along the body**. **Ball joints and self-aligning articulated joints** can be used for **air-fixing**, allowing to compensate mounting mis-alignments. The potentiometer series **PT** can be provided with **feeler pin** and **return spring** (for strokes up to 100 mm) for applications as comparator.

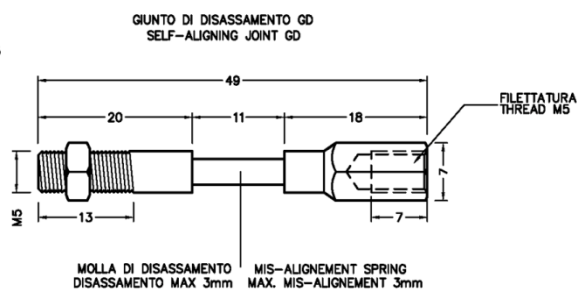
### FEELER PIN



### BALL JOINT



### SELF-ALIGNING JOINT



REF. M1040/ M1041/M1039

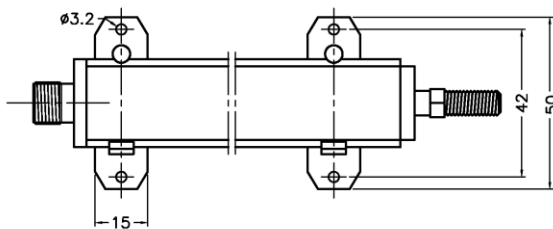
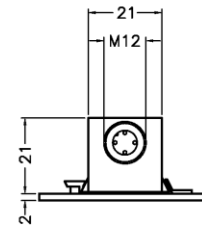
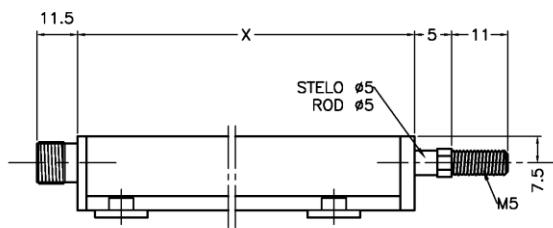
## ORDERING INFORMATION

PT	50	5K	GD
<b>TYPE</b>	<b>STROKE</b>	<b>RESISTANCE VALUE</b>	<b>FITTINGS</b>
PT	25 25 mm	1K Resistenza 1KOhm*	(Type PT)
PT2S	50 50 mm	5K Resistenza 5KOhm	MR Return spring (strokes up to 100 mm)
	75 75 mm	*Stroke 25 mm	SF Ball joint
	100 100 mm		GD Self-aligning joint
	150 150 mm		PS Feeler pin

# DIMENSIONS

## Series PT

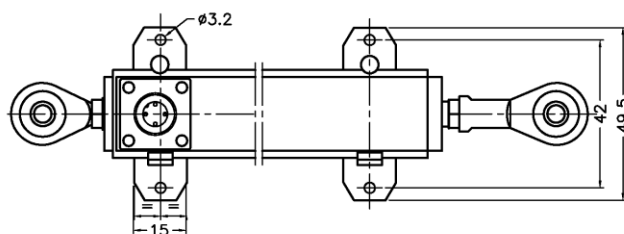
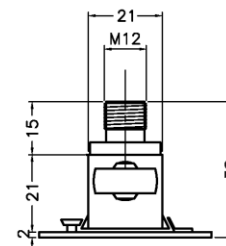
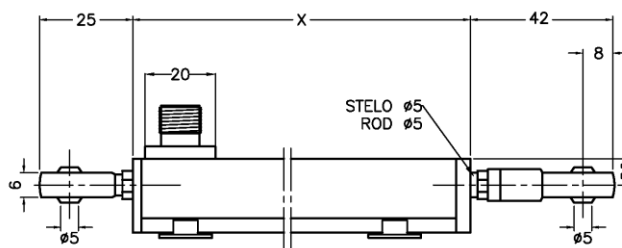
Ref M2172V



CORSA NOMINALE STROKE	X
25	74
50	99
75	124
100	149
150	199

## Series PT2S

Ref M2173V



CORSA NOMINALE STROKE	X
25	74
50	99
75	124
100	149
150	199

## REFERENCES

Further information at:

### Linear Potentiometers

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

### Potentiometer PT

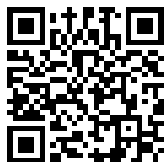
<https://www.elap.it/linear-potentiometers/pt-series/>

### Potentiometer PT2S

<https://www.elap.it/linear-potentiometers/pt2s-series/>



Linear Potentiometers



Potentiometer PT



Potentiometer PT2S



Potentiometers series PT/PT2S



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