



PM



PM2S

LINEAR MOTION POTENTIOMETERS

Series PM • PM2S

- 25 to 150 mm
- Excellent linearity
- Infinite resolution

- Easy mounting method
- Several fittings
- IP64 protection degree

PM	PM2S
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	PM		PM2S		
▪ Sensor	Conductive plastic resistive element				
▪ Resistive value	5 KOhm ±20%				
▪ Strokes mm	Stroke 25 mm: 1 KOhm ±20% Optional 5 KOhm				
▪ Linearity	25 •	50 •	75 •	100 •	150
▪ Resolution	±0.2%	±0.15%	±0.1%	±0.075%	
▪ Permissible applied voltage	Infinite				
▪ Load resistance	28 Vdc				
▪ Recommended cursor current	1 MOhm min.				
▪ Mechanical life	< 1 µA				
▪ Ripetibility	100 milion cycles				
▪ Dissipation at 40°C	<0.01 mm				
▪ Insulation resistance	3 W				
▪ Connections	>100 MOhm at 500 Vdc				
▪ Connector position	Connector DIN EN61984 (VDE 0627) provided with female angled orientable connector				
	Axial			Radial	

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS			
Series	PM	•	PM2S
▪ 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

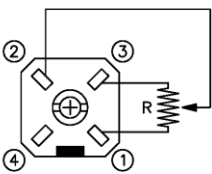
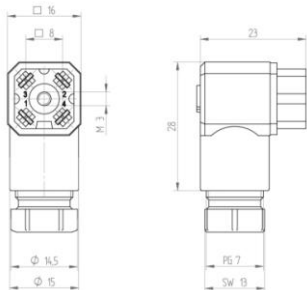
	Series PM • PM2S				
NOMINAL STROKE mm	25 •	50 •	75 •	100 •	150
ELECTRICAL STROKE	Nominal stroke + 0.5 mm				
MECHANICAL STROKE	Nominal stroke + 2 mm				

CONNECTIONS

The electrical connection is granted by means of 4-pin connector type DIN EN61984 (VDE 0627) provided with female connector orientable in four positions.



Female flying connector



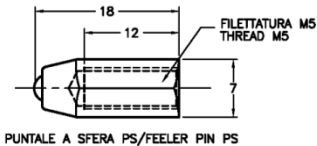
PIN 1 resistenza 0 Ohm con stelo inserito
resistance 0 Ohm with rod in

Male fixed connector

MOUNTING & OPTIONAL FITTINGS

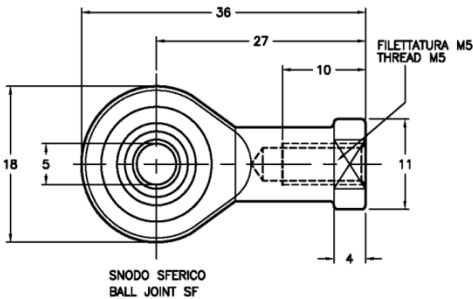
The potentiometers are easily fastened by means of the provided **brackets**, which can be placed **freely along the body**. **Ball joints and self-aligning articulated joints** can be used **for air-fixing**, allowing to compensate mounting mis-alignments. The potentiometer series **PM** can be provided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

FEELER PIN



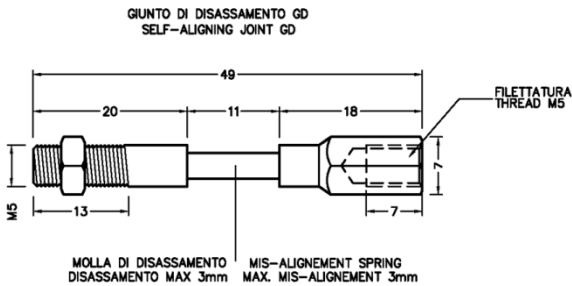
PUNTALE A SFERA PS/FEELER PIN PS

BALL JOINT



SNODO SFERICO
BALL JOINT SF

SELF-ALIGNING JOINT



MOLLA DI DISASSAMENTO
DISASSAMENTO MAX 3mm
MIS-ALIGNMENT SPRING
MAX. MIS-ALIGNMENT 3mm

REF. M1040/ M1041/M1039

ORDERING INFORMATION

PM	50	5K	PS
<u>TYPE</u>	<u>STROKE</u>	<u>RESISTANCE VALUE</u>	<u>FITTINGS</u>
PM	25 25 mm	1K Resistenza 1KOhm*	(Type PM)
PM2S	50 50 mm	5K Resistenza 5KOhm	MR Inside return spring (strokes up to 100 mm)
	75 75 mm	*Stroke 25 mm	MRE Out return spring (strokes up to 100 mm)
	100 100 mm		SF Ball joint
	150 150 mm		GD Self-aligning joint
			PS Feeler pin

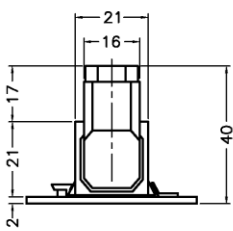
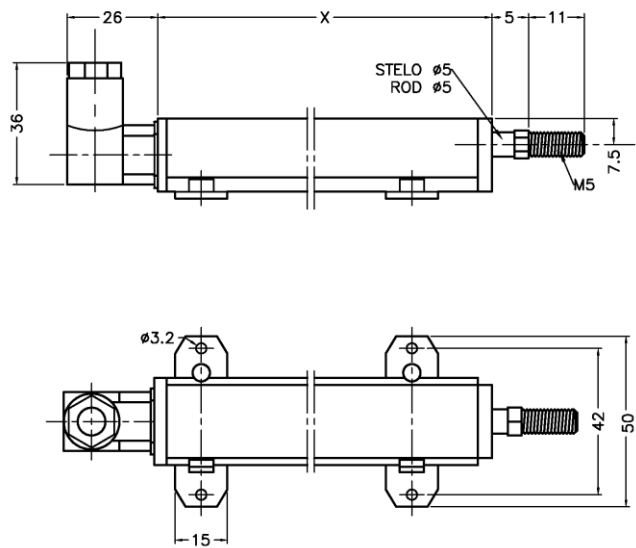


POTENTIOMETER PM WITH FEELER PIN

DIMENSIONS

Series PM

Ref M0772AV

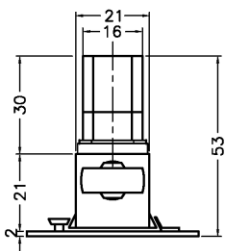
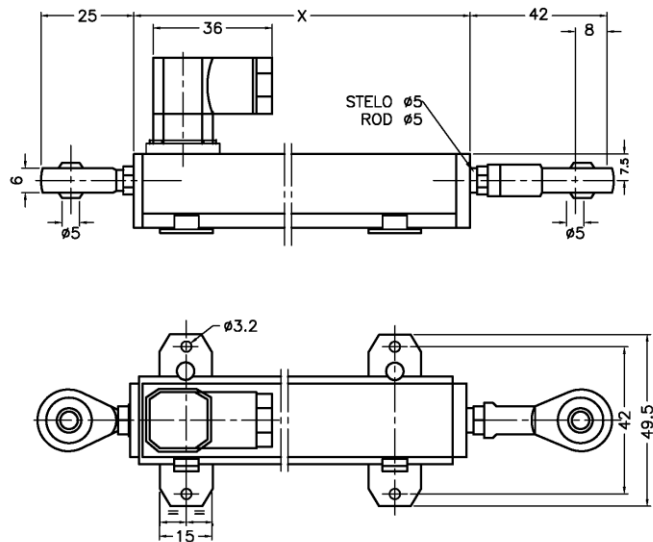


CORSA NOMINALE STROKE	X
25	74
50	99
75	124
100	149
150	199

Note:
Connettore volante
orientabile in 4 posizioni.
The flying connector can
be oriented in four positions.

Series PM2S

Ref M1017



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

Note:
Connettore volante
orientabile in 4 posizioni.
The flying connector can
be oriented in four positions.

REFERENCES

Further information at:

Linear Potentiometers

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

Potentiometer **PM**

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

Potentiometer **PM2S**

<https://www.elap.it/linear-potentiometers/pm2s-series/>



Linear Potentiometers



Potentiometer PM



Potentiometer PM2S



Potentiometers series PR/PR2S and PM/PM2S



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