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% Stroke 25 mm: 1 KOhm ±20% Optional 5 KOhm				
▪ 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	Connector DIN EN61984 (VDE 0627) provided with female angled orientable connector				
▪ Connector position	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

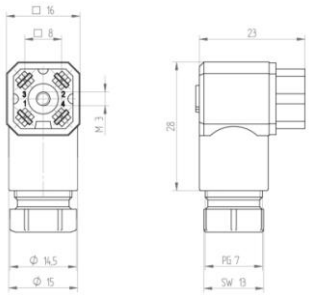
AVAILABLE STROKES

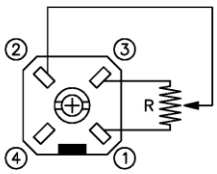
Series PM • PM2S					
NOMINAL STROKE mm	25 •	50 •	75 •	100 •	150
ELECTRICAL STROKE	Nominal stroke + 0.5 mm				
MECHANICAL STROKE	Nominal stroke + 2 mm				

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





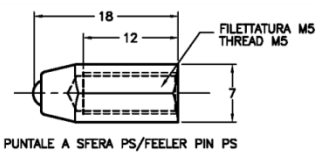
PIN 1 resistenza 0 Ohm con stelo inserito
resistance 0 Ohm with rod in

Male fixed connector

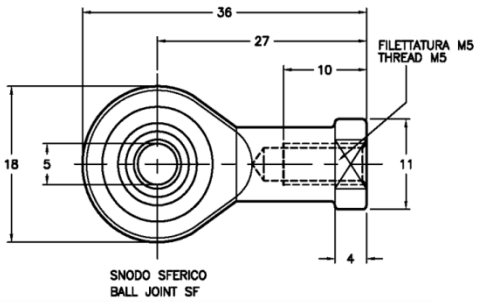
MOUNTING & OPTIONAL FITTINGS

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.

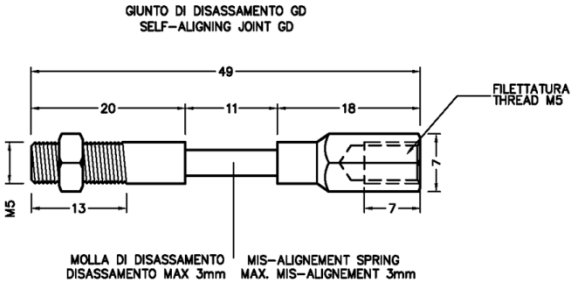
FEELER PIN



BALL JOINT



SELF-ALIGNING JOINT



REF. M1040/ M1041/M1039

ORDERING INFORMATION

PM

TYPE
PM
PM2S

50

STROKE
25 25 mm
50 50 mm
75 75 mm
100 100 mm
150 150 mm

5K

RESISTANCE VALUE
1K Resistenza 1KOhm*
5K Resistenza 5KOhm
**Sroke 25 mm*

PS

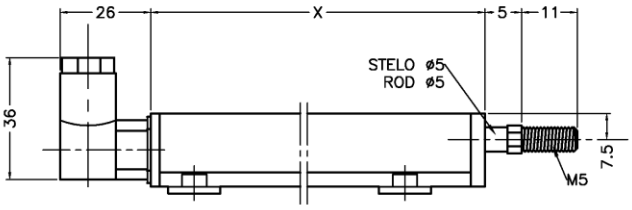
FITTINGS
(Type PM)
MR Inside return spring *(strokes up to 100 mm)*
MRE Out return spring *(strokes up to 100 mm)*
SF Ball joint
GD Self-aligning joint
PS Feeler pin

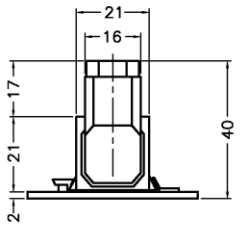
POTENTIOMETER PM WITH FEELER PIN

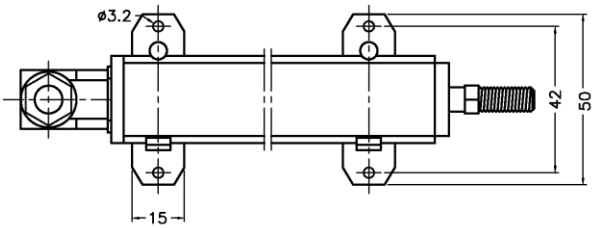
DIMENSIONS

Series PM

Ref M0772AV





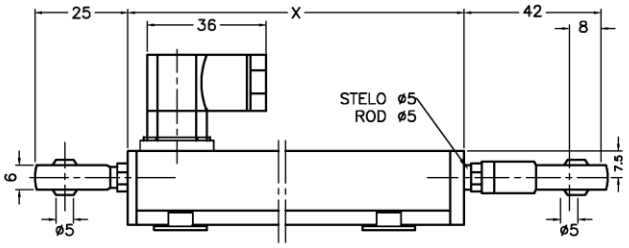


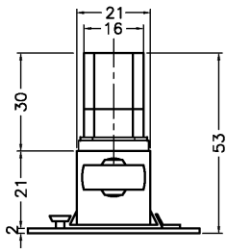
CORSA NOMINALE STROKE	X
25	74
50	99
75	124
100	149
150	199

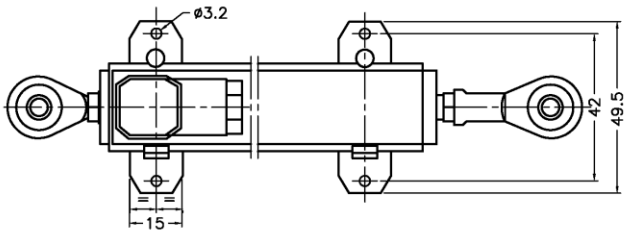
Note:
Connettore volante orientabile in 4 posizioni.
The flying connector can be oriented in four positions.

Series PM2S

Ref M1017







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

Note:
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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

ELAP VIA VITTORIO VENETO, 4 • I-20094 CORSICO (MI) • TEL. +39.02.4519561
FAX +39.02.45103406 • E-MAIL INFO@ELAP.IT • SITE WWW.ELAP.IT