

PLS-V

PL2S-V

PL231-V

LINEAR TRANSDUCERS with analogue output Series PLS-V · PL2S-V · PL231-V

- 50 to 950 mm strokes
- Excellent linearity
- Infinite resolution
- Easy mounting method
- Several fittings
- IP65 protection degree

PLS-V	PL2S-V	PL231-V
Strokes: 50 to 950 mm	Strokes: 50 to 500 mm	Strokes: 50 to 750 mm
• rod Ø 6 mm	• rod Ø 6 mm	• rod Ø 8 mm
• radial connector	• radial connector	• radial connector
	• two ball joints Ø 5 mm	• two ball joints Ø 8 mm

ELECTRICAL & OPERATING SPECIFICATIONS	
Series	PLS-V · PL2S-V · PL231-V
▪ Output signal	0÷10 V voltage output proportional to the position
▪ Supply voltage	18÷30 Vdc
▪ Strokes mm	50 · 100 · 150 · 200 · 250 · 300 · 400 · 500 · 750* · 950*
▪ Linearity	±0.075% ±0.1%
▪ Resotution	Infinite
▪ Mechanical life	100 milion
▪ Ripetibility	<0.01 mm
▪ Connections	Connector DIN EN61984 (VDE 0627) provided with female angled orientable connector
▪ Connector position	Radial Radial Radial

*Stroke mm 750 available for series PLS-V, PL231V - Stroke mm 950 available for series PLS-V

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS	
Series	PLS-V PL2S-V PL231-V
▪ Dimensions	See the drawing
▪ Materials: housing rod	Anodised aluminium with glass-filled nylon flanges Stainless steel on self-lubricating bearings – free rotation
▪ Rod Ø	6 mm 6 mm 8 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

STROKES

Series PLS-V • PL2S-V • PL231-V

NOMINAL STROKE mm	50 • 100 • 150 • 200 • 250 • 300 • 400 • 500 • 750* • 950*
ELECTRICAL STROKE	Nominal stroke + 1 mm
MECHANICAL STROKE	Nominal stroke + 3 mm

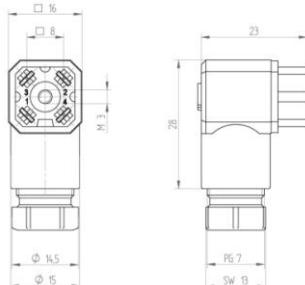
**Stroke mm 750 available for series PLS-V, PL231V - Stroke mm 950 available for series PLS-V*

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



Male fixed connector

CONNECTION DIAGRAM	
PIN 1	= + OUT 0 : 10V
PIN 2	= - OUT 0 : 10V
PIN 3	= 0V
PIN 4	= + 18V : 30VDC

SUPPLY

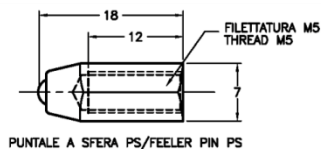
MOUNTING & OPTIONAL FITTINGS

The transducers are easily fastened by means of the provided **brackets**, which can be placed **freely along the body**.

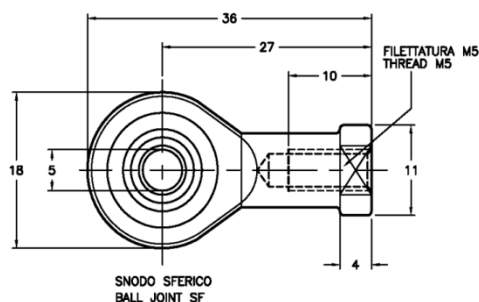
Ball joints and self-aligning articulated joints can be used for **air-fixing**, allowing to compensate mounting mis-alignments.

The transducer series **PLS** can be provided with **feeler pin** and **external return spring** (for strokes up to 150 mm) for applications as comparator.

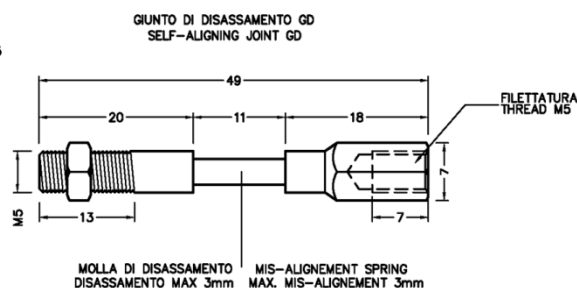
FEELER PIN



BALL JOINT



SELF-ALIGNING JOINT



REF. M1040/ M1041/M1039

ORDERING INFORMATION

PLS-V	50	MR
TYPE	STROKE	FITTINGS
PLS-V	50 50 mm	(series PLS-V)
PL2S-V	100 100 mm	MRE Out return spring (Strokes up to 150 mm)
PL231-V	150 150 mm	SF Ball joint
	200 200 mm	GD Self-aligning joint
	250 250 mm	PS Feeler pin
	300 300 mm	
	400 400 mm	
	500 500 mm	
	750 750 mm *	
	950 950 mm *	

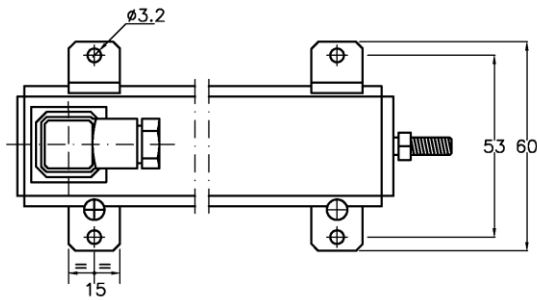
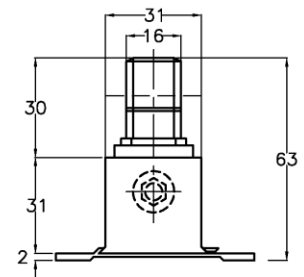
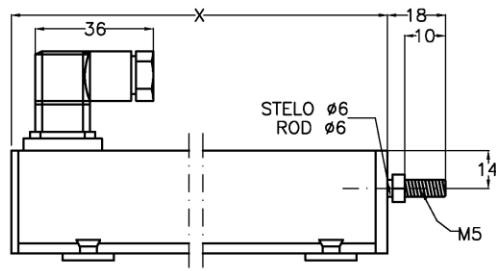
*750 mm: PLS-V and PL231V

*950 mm: PLS-V

DIMENSIONS

Series PLS-V

Ref M1398

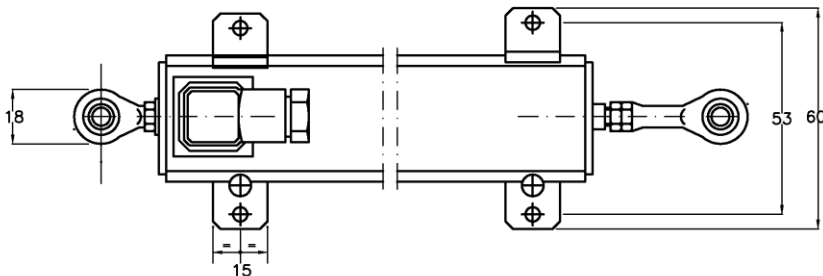
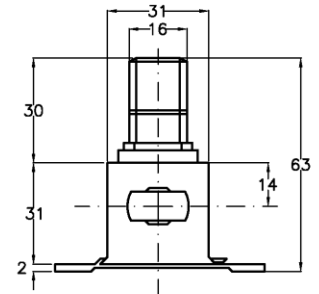
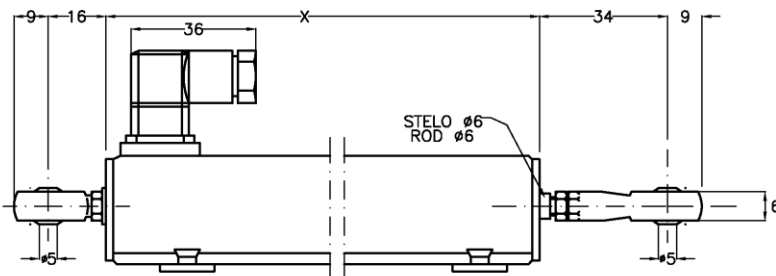


CORSA NOMINALE STROKE	X
50	190
100	240
150	290
200	340
250	390
300	440
400	540
500	640
750	890
950	1090

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

Series PL2S-V

Ref M1397



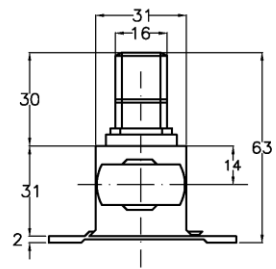
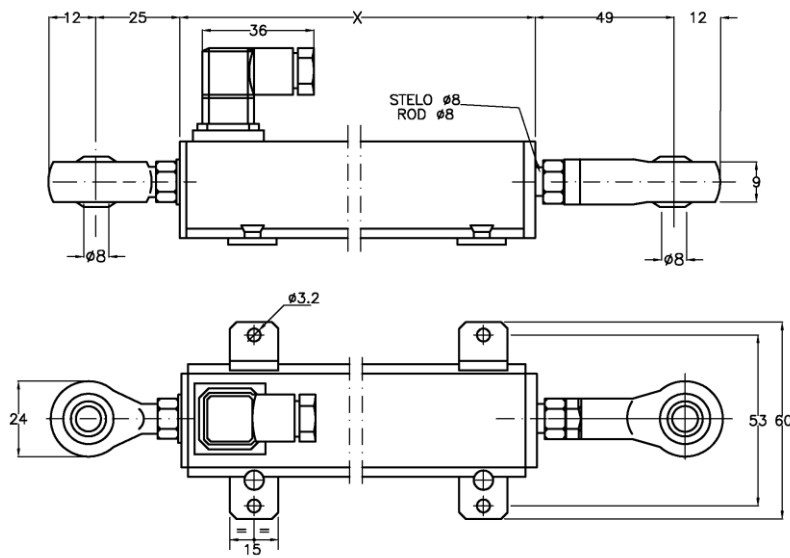
CORSA NOMINALE STROKE	X
50	187
100	237
150	287
200	337
250	387
300	437
400	537
500	637

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

DIMENSIONS

Series PL231-V

Ref M1399



CORSA NOMINALE STROKE	X
50	247
100	297
150	347
200	397
250	447
300	497
400	597
500	697
750	945

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



REFERENCES

Further information at:

Transducers PLS-V – PL2S-V, PL231-V
<https://www.elap.it/linear-potentiometers/pls-v-series/>



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