

TYPE: PD13



PD13 Linear Potentiometric Displacement Transducer

Description

The PD13 replaces the PD20 range of displacement transducers, as previously manufactured by Pioden Controls (which is now part of LCM Systems). The PD13 offers many benefits over the PD20, including low noise, greater resolution and improved availability.

The PD13 covers a wide range of strokes, from 25mm to 200mm, and they are used in many applications, including research laboratories, winding machines, civil engineering and motorsport.

The simple circuit arrangement for this type of sensor makes them ideal for OEM applications as well as for lower volume special applications. A wide range of supporting instrumentation is available. Please consult LCM Systems for further details.

Specification

Electrical stroke (mm)	25	50	75	100	125	150	175	200
Resistance (k Ω)	1	2	3	4	5	6	7	8
Linearity (\pm %)	0.25	0.25	0.15	0.15	0.15	0.15	0.15	0.15
Power Dissipation (watts)	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
Maximum supply voltage (Vdc)	22	44	67	74	74	74	74	74
Electrical output	0.5% to 99.5% of supply voltage							
Resolution	Virtually infinite							
Hysteresis & repeatability	<0.01mm							
Operating temperature	-30 to +100°C							
Insulation resistance	>100M Ω at 500Vdc							
Wiper circuit impedance	100 time resistance or 500k Ω , which ever is greater							
Environmental sealing	IP66 (IP50 if spring return kit is required)							
Electrical connections	3 core PUR 19/0.5 cable, 1 metre long							

Available Options

- Extension cables
- Quick release ball joint
- Spring return (not available for IP66 or 200mm versions)
- Body clamp kit
- Dome nut
- Flange clamp kit

Features

- Body diameter \varnothing 13mm
- Simple voltage divider operation
- Life at 250mm per second is greater than 100 million operations
- 1 metre long cable (extension cable options are available)
- Sealing to IP66

Typical Applications

- Force/displacement test rigs
- Curtain walls
- Winding machines
- Hydraulic position control

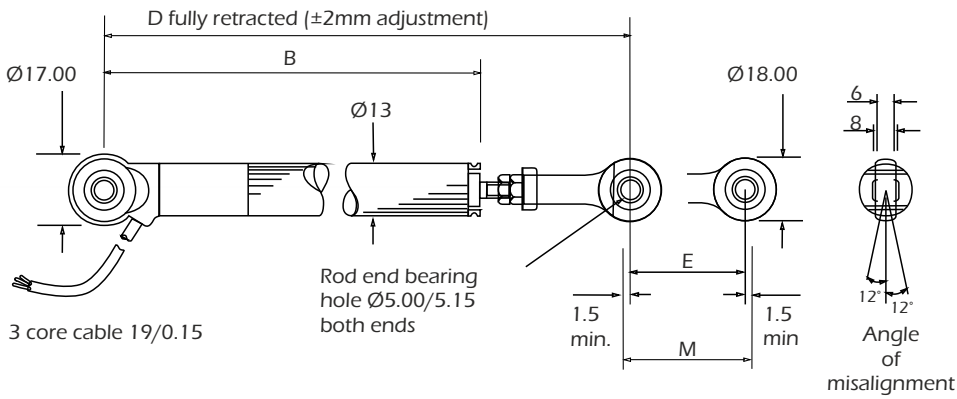
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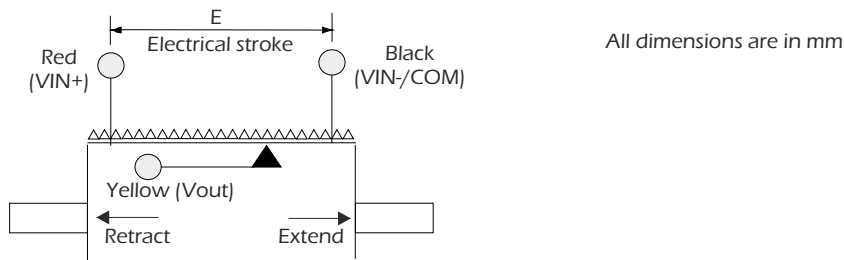
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Dimensions

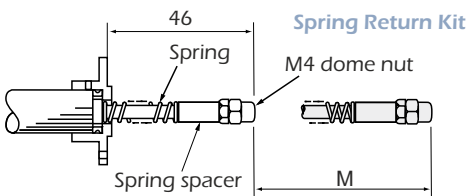


Wiring details

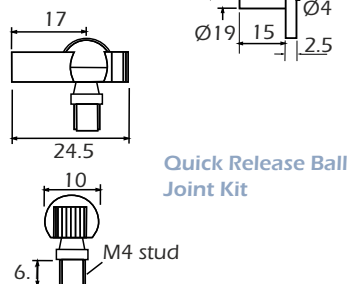
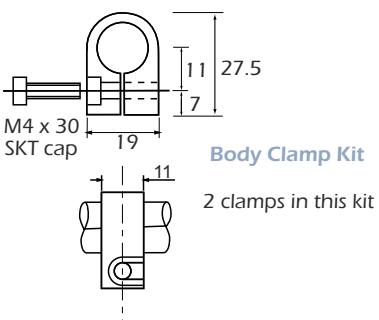
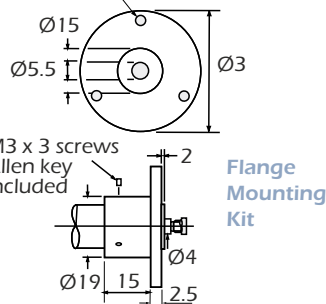


	Electrical Stroke Range							
	25mm	50mm	75mm	100mm	125mm	150mm	175mm	200mm
B	110.5	135.5	160.5	185.5	210.5	235.5	260.5	285.5
D	173.6	198.6	223.6	248.6	273.6	298.6	323.6	348.6
E	25	50	75	100	125	150	175	200
M	29	54	79	104	129	154	179	204
Weight (g)	60	67	74	81	88	95	102	109
Resolution	0.05	0.1	0.1	0.1	0.1	0.2	0.2	0.2

Accessories available



3 holes 3.2 dia equi-spaced on 28.05/27.95 PCD



Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.