## 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 may 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 (kΩ)	1	2	3	4	5	6	7	8	
Linearity (±%)	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 residence	>100MΩ at 500Vdc								
Wiper circuit impedance	100 time resistance or 500kΩ, 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								

## **Features**

- Body diameter Ø13mm
- Simple voltage divider operation
- Life at 250mm per second is greater than 100 million operations
- 1 metre long cable (extension cable options are available)
- O Sealing to IP66

## **Typical Applications**

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

## **Available Options**

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





# SCIGATE AUTOMATION (S) PTE LTD

No 1 Bukit Batok Street 22 #01-01 Singapore 659592
Tel: (65) 6561 0488
Email: sales@scigate.com.sg
Fax: (65) 6561 0588
Web: https://scigate.com.sg/

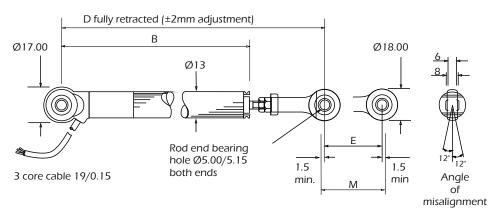
Business Hours: Monday - Friday 8:30AM - 6:15PM



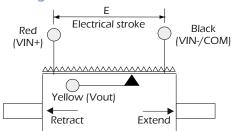
# www.lcmsystems.con

# **PD13 Linear Potentiometric Displacement Transducer**

## **Dimensions**



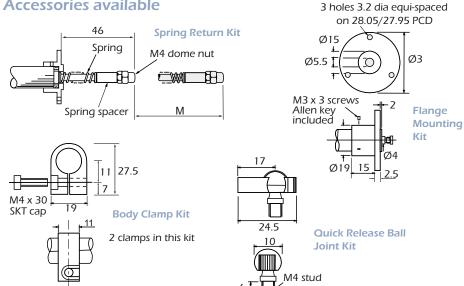
## Wiring details



All dimensions are in mm

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	Electrical Stroke Range												
	25mm	50mm	75mm	100mm	125mm	150mm	175mm	200mm					
В	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					
Е	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



## LCM Systems (România)

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