

HEM16 Series

Linear Motion Conductive Plastic Potentiometer



- Shaftless - Magnetic Drag Cursor
- Completely Sealed (IP67)
- 250 bar (400 peak) working pressure
- In-Cylinder Applications
- 50mm to 1000mm Stroke Lengths
- Flange or Thread Mount

Electrical Data (Note 1)	HEM16 -	50	100	150	200	250	300	350	400	450	500	600	750	850	900	950	1000		
Electrical Stroke (mm ±1)		50	100	150	200	250	300	350	400	450	500	600	750	850	900	950	1000		
Resistance Value		5kΩ						10kΩ						20kΩ					
Resistance Tolerance		±20%																	
Independent Linearity Tolerance		±0.1%			±0.35														
Power (@ 40°C)		1W	2W	3W															
Max. Operating Voltage		40V			60V														
Resolution		Essentially infinite																	
Temperature Coefficient Resistance		400 ppm/°C																	
Temperature Coefficient Voltage Divider		≤ 5 ppm/°C																	
Insulation Resistance		> 100M Ω at 500VDC																	
Dielectric Strength		< 100 μA at 500V~, 50Hz, 2s, 1 bar																	
Maximum Wiper Current		10mA																	
Recommended Wiper Current		< 0.1μA (voltage divider circuit)																	

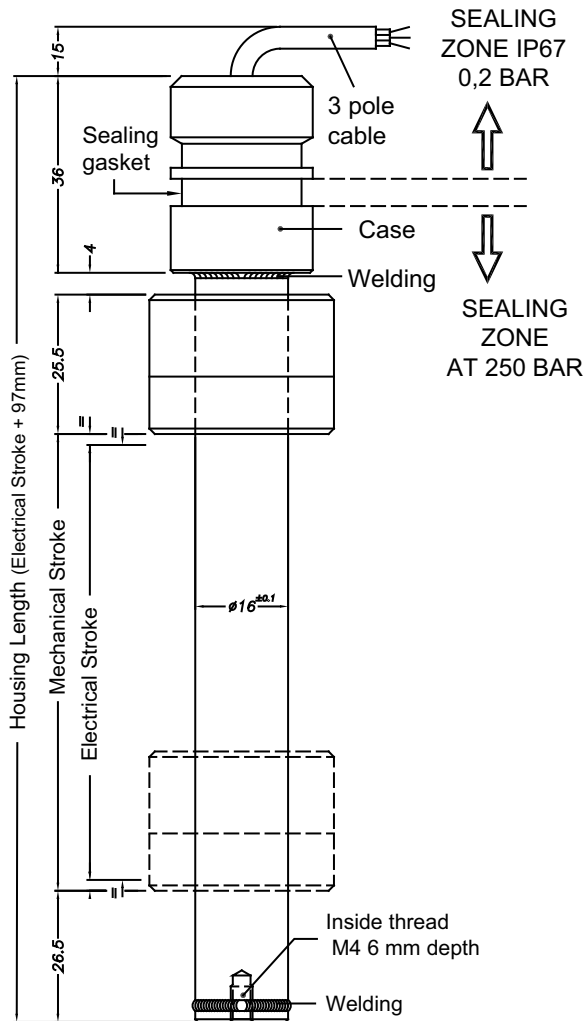
Mechanical Data (Note 1)	HEM16 -	50	100	150	200	250	300	350	400	450	500	600	750	850	900	950	1000		
Mechanical Stroke (mm ±1)		55	105	155	205	255	305	355	405	455	505	605	755	855	905	955	1005		
Cursor Drag Force		≤ 0.5N																	
Max. Displacement Speed		≤ 5 m/s																	
Life Expectancy		100,000,000 reciprocating motions																	
Operating Temperature		-30°C to +100°C																	
Storage Temperature		-45°C to +120°C																	
Vibration		5 to 2,000Hz. Amax = 0.75mm; amax = 20G																	
Shock		50G, 11ms																	
Protection Grade		IP67																	
Housing Material		Stainless Steel AISI 316																	
Mounting		Flange mount / Threaded mount																	

Customers should test and verify device performance in any given application. Specifications are subject to change without notice.

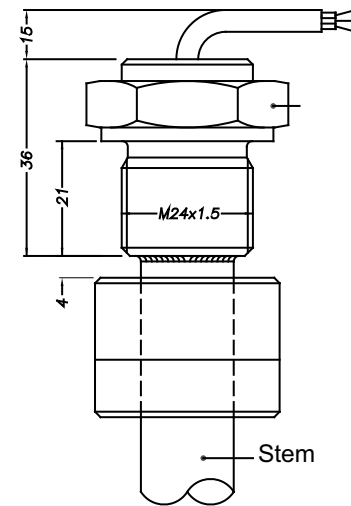
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Dimensions (mm)

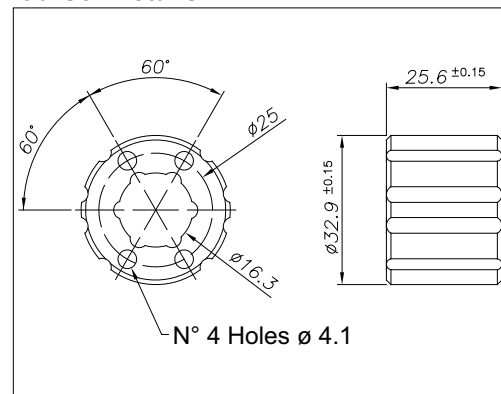
Flange Mount



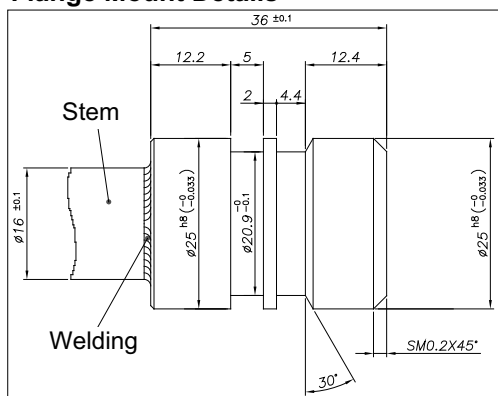
Thread Mount
M24 x 1.5 Thread



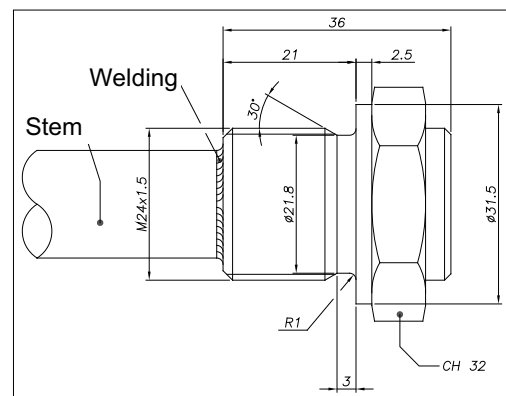
Cursor Details



Flange Mount Details



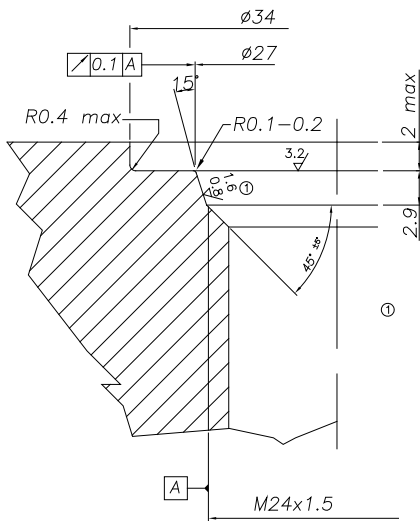
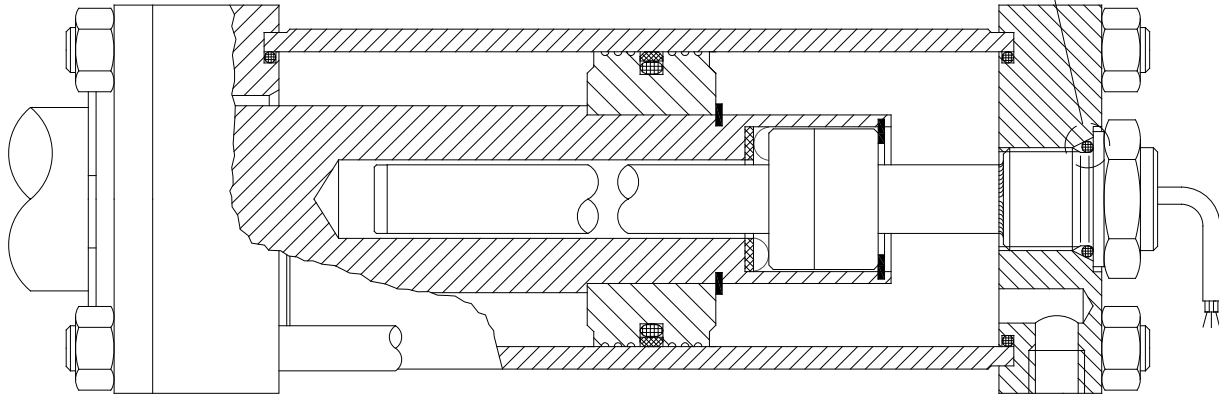
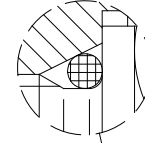
Thread Mount Details



Cylinder Mounting

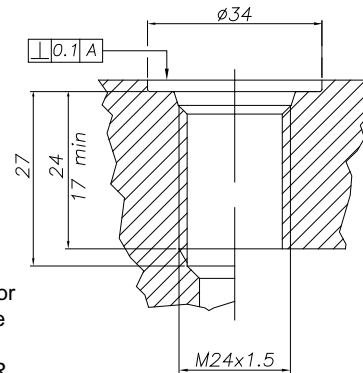
Thread Mounting (M24x1.5)

O-Ring recommended
 PARKER 2-117 20,29x2,62
 Material NBR 90 Shore-A
 Compound PARKER N552-90



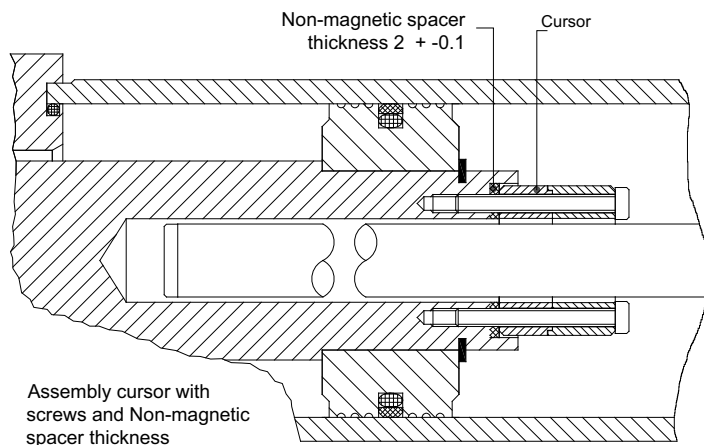
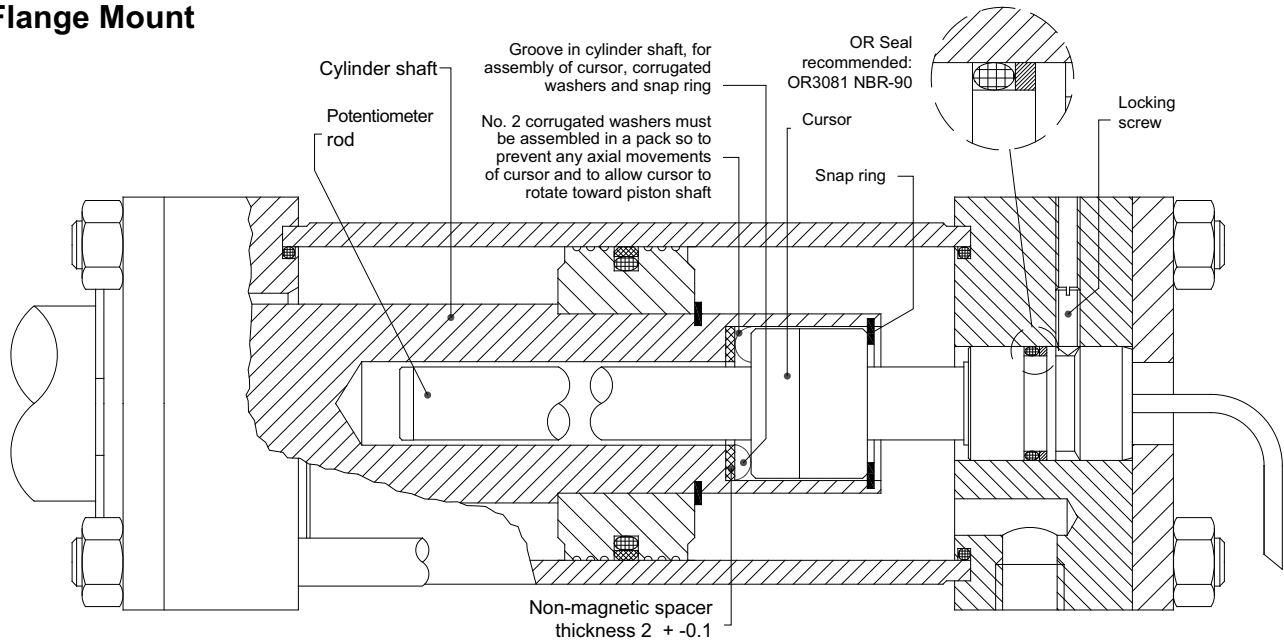
O-ring surface must be free of spiral or longitudinal scratches
 Ro 1,6 μ m for O-rings with NOT PULSING pressure
 Ro 0,8 μ m for O-rings with PULSING pressure

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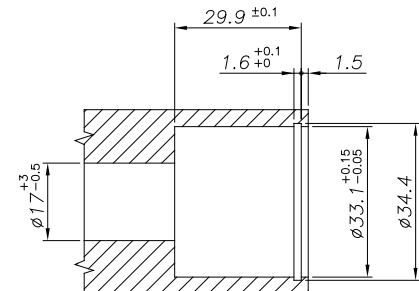


Cylinder Mounting

Flange Mount



Assembly cursor with screws and Non-magnetic spacer thickness



Cursor housing size assembly with corrugated washers and non-magnetic spacer thickness 2+-0.1

