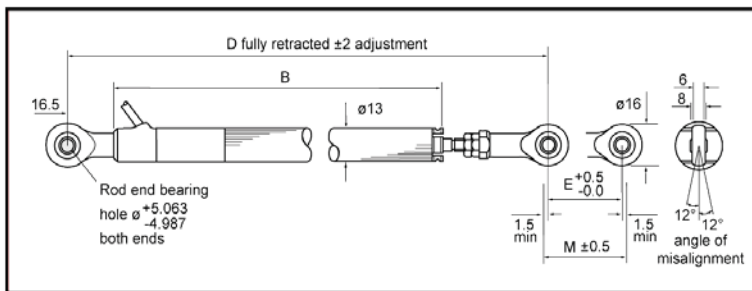


PCS Shock Sensor User Guide

Performance

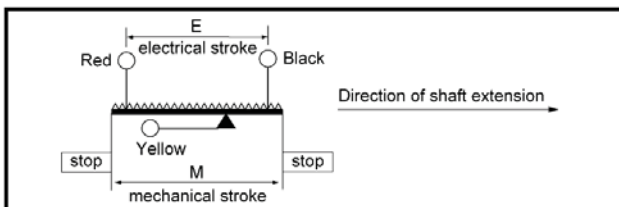
Electrical Stroke E	200mm
Resistance ± 10%	8 kΩ
Independent linearity	guaranteed ±0.15%
	typical ±0.07%
Power dissipation at 20°C	4.0W
Applied voltage maximum	74Vdc
Electrical output	Minimum of 0.5% to 99.5% applied volts
Resolution	Virtually infinite
Hysteresis (repeatability)	Less than 0.01mm
Operational temperature	-30 to +100 °C (tested to +130 for 12 hours duration)
Output smoothness	To MIL-R-39023 grade C 0.1%
Insulation Resistance	Greater than 100MΩ at 500Vdc
Operating mode	Voltage divider only
Wiper circuit impedance	Minimum of 100 x track resistance or 0.5 MΩ (whichever is greater)
Operating force maximum	500gf in horizontal plane
Sealing	IP66
Shaft seal life (replaceable)	20 million operations (10 x 10 ⁶ cycles)
Sensor track life at 0.25m/s	Greater than 100 million operations (50 x 10 ⁶ cycles) at 25mm stroke length
Sensor track dither life	200 Million operations (100 x 10 ⁶ cycles) at ±0.5mm, 60Hz
Shaft velocity maximum	10m/s
Vibration	RTCA 160D 10Hz to 2kHz (random) @ 12.6g (rms) - all axes
Shock	Less than 0.04% output change @ 2500g - all axes

Dimensions and Mounting Options



Electrical stroke E	200mm
Mechanical stroke M	204mm
Body length B	285.8mm
Between centres D	339.5mm
Between centres G	328.6mm
Sleeve length F	252mm
Weight approximate	129g

Electrical Connections



Pin	Sensor Color	Harness Color	Function
A	Red	Red/White	+5V Reference
B	Yellow	Yellow/Black	Sensor Output
C	Black	Black/White	Signal Ground

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