

PCA-375 PR-020 Series Gage Heads

Ultra-Compact Design for $\pm 0.020''$ Range Measurement

DESCRIPTION

The New PCA-375 PR-020 Series Gage Head is an ultra-compact device that provides accurate measurement in areas with limited space. Designed with a radial cable exit, the gage head easily fits within miniature fixtures and small inside diameters. AC-operated, this ultra-compact gage head is compatible with all Schaevitz® signal conditioning.

A spring-loaded probe with 2.5oz (70.8g) of force maintains constant contact with the part under measurement.

The ultra-compact gage head provides excellent stroke-to-size ratio due to its compact design. A permanently lubricated, bronze bearing and plunger assembly provides long-term transducer repeatability.

With an LVDT as the heart of the sensor, resolution is only limited by the repeatability of the bearing system. An interchangeable 4-48 ADG standard dial gage contact tip is used.



FEATURES

- ◆ Compact Design
- ◆ Rugged Polyurethane Cable
- ◆ 90° Cable Exit
- ◆ Calibration Certificate Supplied With Every Gage Head
- ◆ Compatible With All Schaevitz® Signal Conditioners
- ◆ 7 Connector Options and Special Contact Tips Available

APPLICATIONS

- ◆ Bore Gages
- ◆ Fixture Gages
- ◆ Limited Space
- ◆ Small Inside Diameters

electrical specifications

Linearity:	Better than $\pm 0.5\%$ FRO
Excitation Voltage:	3.5 V rms (maximum)
Excitation Frequency:	5 kHz. (2.5 to 10 kHz. OK)
Sensitivity:	4.75 mV/V/0.001" at 5 kHz (min)
Phase Shift:	+60° (nominal)
Primary Impedance:	94.5 ohms (nominal)
Secondary Impedance:	214 ohms (nominal)

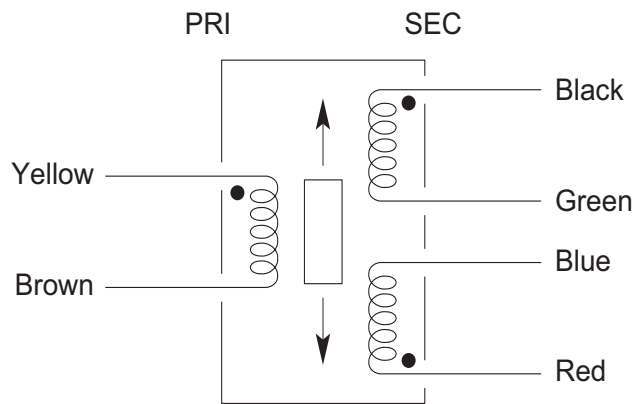
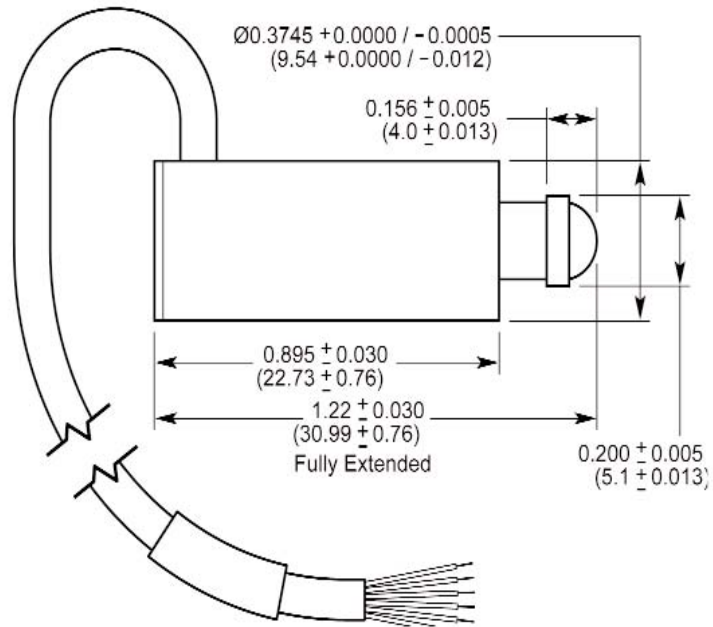
mechanical specifications

Linear Range	$\pm 0.020''$ (± 0.51 mm)
Pre-travel:	0.002" to 0.005" (0.05 to 0.13 mm)
Total Mechanical	
Stroke:	0.060" nom (1.52 mm)
Temperature Range:	0°F to 250°F (-18°C to 121°C)
Repeatability:	0.00004" (0.01" mm)
Cable Length:	6.5 ft (2 m)
Housing Material:	304 stainless steel
Probe Force:	2.57 oz (72.8 g) at null
Contact Tip:	4-48 ADG

measurement
SPECIALTIES

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Dimensions in (mm)



Connect Green to Blue for differential output