

PCA-116 Series Economy Gage Heads

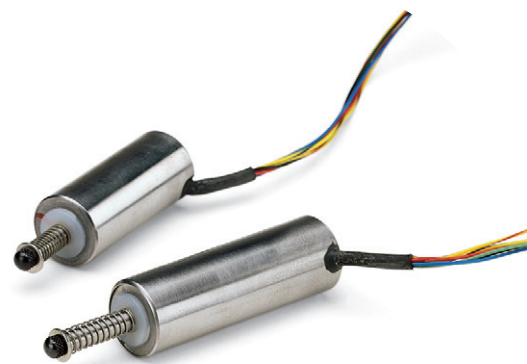
Cost-Effective Performance for $\pm 0.10"$ to $\pm 0.30"$ Range Measurement

DESCRIPTION

Our **PCA-116** family of gage heads was developed for less demanding applications where a balance between cost and performance is paramount.

PCA-116 gage heads incorporate a standardized LVDT with repeatability better than 0.0001" (0.0025 mm) and linearity within 0.5% of full range output. The probe shaft is externally sprung and is carried on low friction nylon sleeve bearings. The probe to bearing clearances are designed to minimize problems should contaminants get into the bore.

Units are supplied with replaceable hardened steel tips that thread to the probe with a 4-48 UNF-2 thread. Replacement or alternate tips are available (see page 100). Any 4-48 AGD dial indicator contact tip can also be used.



FEATURES

- ◆ Cost Effective Performance
- ◆ Good Reliability
- ◆ AC Operated
- ◆ Compatible with All Schaevitz® Signal Conditioners
- ◆ Special Contact Tips

APPLICATIONS

- ◆ Moderate Cost Units are Ideal for Less Demanding Applications

specifications

Excitation	3V rms (nom)
Null Voltage	1.0% FRO
Frequency Range	50 Hz to 10 kHz
Linearity	0.5% FRO
Repeatability	0.0001" (0.0025 mm)
Operating Temperature Range	-65°F to 200°F (-55°C to 95°C)
Probe Force	8 oz (22.6 g)
Lead Length	1 ft (0.3 m) 28 awg PTFE insulated
Housing Material	AISI 400 series stainless steel

specifications by model (@ 2.5 kHz)

Model Number	PCA-116-100	PCA-116-200	PCA-116-300		
Nominal Linear Range	$\pm 0.10"$ (± 2.5 mm)	$\pm 0.20"$ (± 5.0 mm)	$\pm 0.30"$ (± 7.5 mm)	Phase Shift	-3°
	-5°	-8.5°			
Sensitivity (mV/V/0.001")	2.4	1.57	1.2		
Impedance (Ohm)					
Primary	660	970	960	Secondary	960 1010 1005
Pretravel	0.10" (2.5 mm)	0.08" (2.0 mm)	0.02" (0.5 mm)		
Overtravel	0.03" (0.75 mm)	0.09" (22.9 mm)	0.08" (2.0 mm)		
Weight	1.5 oz (43 g)	1.7 oz (50 g)	2.01 oz (57 g)		
Dimensions					
A	1.75" (44.4 mm)	2.25" (57.1 mm)	2.77" (69.8 mm)		
B	2.54" (64.5 mm)	3.30" (83.8 mm)	4.10" (104.1 mm)		
C	0.44" (11.1 mm)	0.69" (17.5 mm)	0.88" (22.3 mm)		

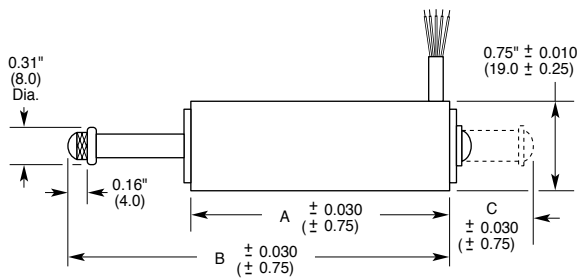
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GCD Specifications – DC-Operated Models

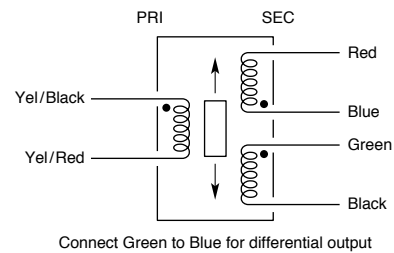
Model Number	PCA-116-100	PCA-116-200	PCA-116-300
Nominal Linear Range	±0.10" (±2.5 mm)	±0.20" (±5.0 mm)	±0.30" (±7.5 mm)
Phase Shift	-3°	-5°	-8.5°
Sensitivity (mV/V/0.001")	2.4	1.57	1.2
Impedance (Ohm)			
Primary	660	970	960
Secondary	960	1010	1005
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dimensions

in (mm)



wiring



ordering information

Specify the model number with the appropriate range. Special contact tips are also available and can be ordered separately.

Model Number	Range
PCA-116-100	±0.10" (2.5mm)
PCA-116-200	±0.20" (5.1mm)
PCA-116-300	±0.30" (7.6mm)