

# PCA-375 Series Gage Heads

## DESCRIPTION

**The New PCA-375 Series Gage Head** is based on the MHR series of LVDTs. The modified MHR has an extended case and spring-loaded plunger.

The design goals were simplicity and high reliability with low cost. This goal was met by implementing a plain bronze bearing and one-piece plunger.

The entire gage head consist of the addition of four extra parts, to the basic LVDT.

The result is a new family of economy gage heads with measurement ranges from  $\pm 0.1$ -inch to  $\pm 1.0$ -inches.

The 3/8th. Inch diameter is ideal for high density gaging applications. The PCA-375 series can be installed in your application with standard dial indicator mounting hardware.

Typically, LVDT gage heads with  $\pm 1$  inch measuring ranges are large in diameter, (0.75"), and expensive.

The PCA-375 series fills the gap between the low cost economy devices, such as the PCA-116 series and the high-end, hermetically sealed GCA, precision series.

The PCA-375 series gage head is suitable for most in process and factory floor SPC applications.



## FEATURES

- ◆ Small Diameter 0.375" Form Factor
- ◆ IP-65 Cable Exit
- ◆ Heavy Duty Return Spring
- ◆ Accepts Industry Standard Contact Tips
- ◆ 2.5 to 10.0 kHz Excitation

## APPLICATIONS

- ◆ High Density Gaging Fixtures
- ◆ Resistance Weld Verification
- ◆ Pressing Applications
- ◆ X-Y Stage Position Feedback
- ◆ Rough Casting Inspection

## OPTIONS

- ◆ 4-48 AGD Contact Tips
- ◆ Connector Options Available Upon Request

## general specifications

Excitation:	3.0 Volts (RMS) @ 10.0 kHz
Linearity:	$\pm 0.50\%$ Maximum Full Range
Null Voltage:	0.5% Maximum Full Scale Output
Repeatability:	1.5 Microns (60 micro inches)

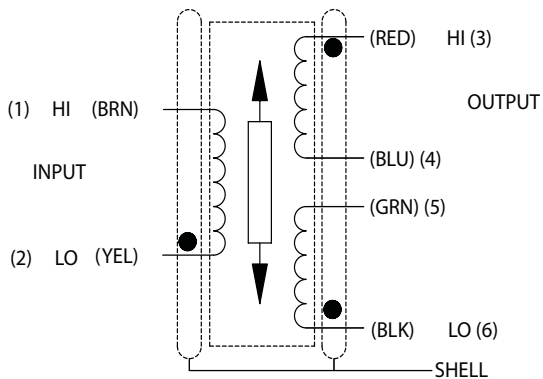
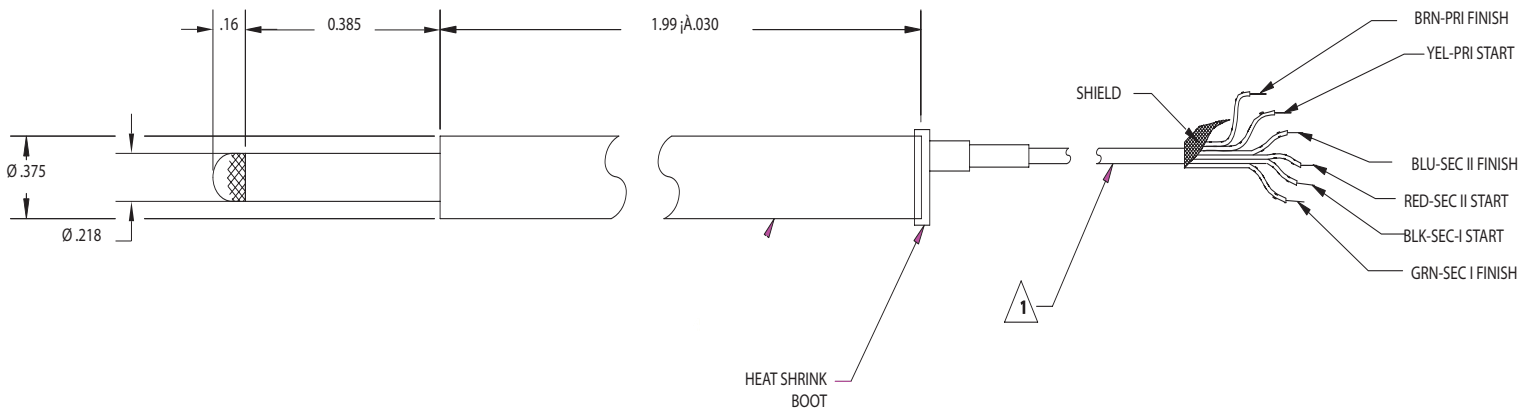
**measurement**  
SPECIALTIES

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## specifications

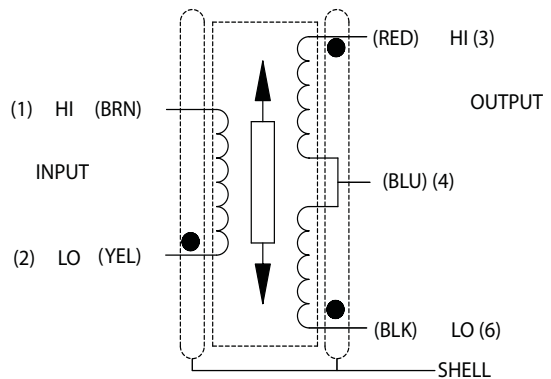
P/N	STROKE	DIM A	DIM B	SENSITIVITY MV± 5%/VOLT INPUT/ .001 INCH	PHASE SHIFT	INPUT IMPEDANCE ± 20% (REF)	OUTPUT IMPEDANCE ± 20% (REF)	PRE-TRAVEL	OVER-TRAVEL	WEIGHT	MIN SPRING FORCE	MAX SPRING FORCE
72350004-000	± 0.100	0.385	1.99	2.80	5.0 ± 5°	400 OHMS	200 OHMS	0.050 (MIN)	0.050 (MIN)	50 GRAMS	TBD	TBD
72350005-000	± 0.250	0.75	3.26	2.07	7.0 ± 5°	345 OHMS	420 OHMS	0.070 (MIN)	0.070 (MIN)	56 GRAMS	TBD	TBD
72350006-000	± 0.500	1.150	5.25	1.84	3.8 ± 5°	264 OHMS	810 OHMS	0.040 (MIN)	0.040 (MIN)	72 GRAMS	TBD	TBD
72350007-000	± 1.000	2.285	8.95	0.77	-1.0 ± 5°	155 OHMS	450 OHMS	0.050 (MIN)	0.050 (MIN)	92 GRAMS	TBD	TBD

MAX SPRING FORCE:



WIRING SCHEMATIC

OR



WIRING SCHEMATIC