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 +/- 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: ± 0.50% Maximum Full Range

Null Voltage: 0.5% Maximum Full Scale Output

Repeatibility: 1.5 Microns (60 micro inches)



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specifications												
				SENSITIVITY MV± 5%/VOLT INPUT/		INPUT IMPEDANCE	OUTPUT IMPEDANCE				MIN SPRING	MAX SPRING
P/N	STROKE	DIM A	DIM B		PHASE SHIFT	± 20% (REF)	± 20% (REF)	PRE-TRAVEL	OVER-TRAVEL	WEIGHT	FORCE	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: 1.99 ¡A.030 SHIELD BRN-PRI FINISH YEL-PRI START BLU-SEC II FINISH BLU-SEC II FINISH GRN-SEC I FINISH HEAT SHRINK BOOT HEAT SHRINK BOOT

