



For use in:

Automotive and Aerospace Test
Stands
Dimensional Gaging Fixtures
X-Y Stages or Tables
Metrology Labs

DGP Series

Spring-Loaded LVDT Gaging Probes

Specifically Designed for Dimensional Gaging and Metrology

The DGP Series Dimensional Gaging Probes by Alliance Sensors Group are AC-LVDT based, spring-loaded linear position sensors designed for high precision dimensional gaging applications. Widely used in the automotive, aerospace, and medical industries for machined parts manufacture, Gage R&R, and CpK data. The DGP Series has the precision necessary to make measurements to uphold Six Sigma programs.

Available in three ranges, the DGP Series spring-loaded LVDT has an 8 mm diameter, IP-65 rated housing that is slightly shorter than most competitive units. A light spring force of less than 1.25 lbs./inch holds the DGP probe in contact with the part, but is light enough not to deform the product. Precision ground bearings and an anti-rotation pin allow the DGP to hold submicron repeatability and resolution. A rubber boot over the probe shaft keeps contaminants out of the linear bearing.

Alliance Sensors Group offers the SC-200 DIN-rail-mountable signal conditioner for use with the DGP series, permitting the user very easy push-button calibration. The SC-200 excites a DGP with the proper AC voltage and frequency, then demodulates and amplifies the DGP's AC output to produce the user's choice of several analog DC voltages or 4-20 mA current output signal.

Features:

- Units available from stock in 3 measuring ranges:
 - ± 0.5 mm, ± 1.0 mm and ± 2.5 mm
- 8 mm diameter plain (unthreaded) body is standard
- Adjustable probe pre-travel
- Optional 0.375 inch threaded adapter sleeves for plain body models available from stock
- Better than 0.5 micron resolution and repeatability
- 2 m cable with Right Angle Exit Adapter included — meets EMC standards—directive 89/336/EEC

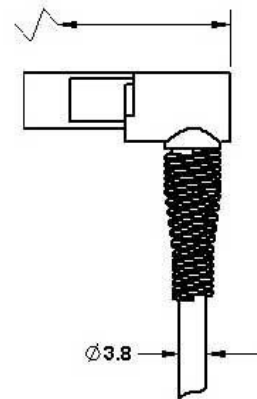
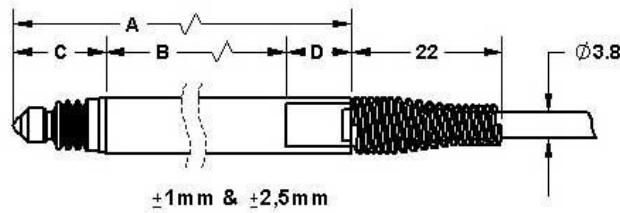
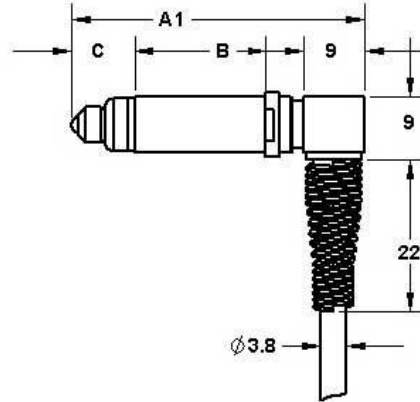
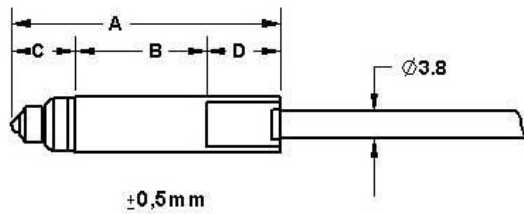
Specifications:

Excitation Voltage: 3.5 Vrms
Excitation Frequency: 7.5 kHz
Max Current: 9 mA rms
Phase Shift: <10 deg
Operating Temperature: -10 to 65 C

All specifications are subject to change without notice.

ALLIANCE SENSORS GROUP
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DGP Series



DIMENSIONS	Measuring Range (Standard)		
	± 0.5 mm	± 1 mm	± 2.5 mm
A	39.2	80	92.5
A1	42.8	-	-
B	19.2	57	68
C	9.2	13.5	15
D	10.8	9.5	9.5

Probe Stroke	±5 mm	±1.0 mm	±2.5 mm
Probe Part Number	2915-0005	2915-0001	2915-0002
Probe Model Number	DGP-05	DGP-10	DGP-25
Pre-travel	.65 mm	1.15 mm	2.65 mm
Over Travel	>.65 mm	>1.5 mm	>3 mm
Repeatability	.15 micron	.15 micron	.2 micron
Linearity	0.30%	0.25%	0.50%
Sensitivity (mV/V/mm)	230	230	115

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