

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. Widey 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 8mm 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 sub-micron repeatability and resolution. A rubber boot over the probe shaft keeps contamination out of the linear bearing.

Alliance Sensors Group offers the SC-100 DIN-rail signal conditioner for use with the DGP Series LVDT probes, permitting the user very easy push button calibration. The SC-100 excites a DGP with the proper AC voltage and frequency, and 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:

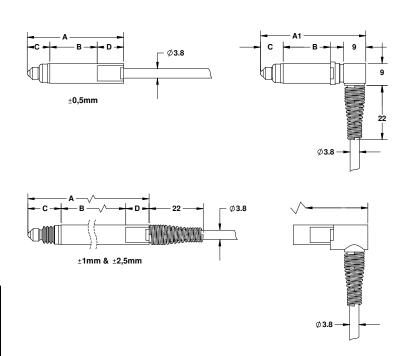
- Units available from stock in 3 measuring ranges: ±0.5 mm, ±1.0 mm, and ±2.5 mm
- 8 mm diameter plain (unthreaded) body is standard
- Optional 0.375 inch threaded adapter sleeves for plain body models available from stock
- Better than 0.5 micron resolution and repeatability
- Adjustable probe pre-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

#### Specifications:

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

## **DGP Series**





DIMENSIONS	MEASURING RANGE (Standard)			
	± 0,5mm	± 1mm	± 2,5mm	
А	39,2	80	92,5	
A1	42,8			
В	19,2	57	68	
С	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 micro	.15 micron	.2 micron
Linearity	0.30%	0.25%	0.50%
Sensitivity (mV/V/mm)	230	230	115

### ALLIANCE SENSORS GROUP

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