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 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

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

For use in:
- Automotive and Aerospace test stands
- Dimensional Gaging Fixtures
- X-Y Stages or Tables
- Metrology Labs
DGP Series

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>MEASURING RANGE (Standard)</th>
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<tr>
<td></td>
<td>± 0.5mm</td>
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<td>A</td>
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<tr>
<td>B</td>
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<td>C</td>
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<td>D</td>
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 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 |

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