

GC-485

Ultra Precision Digital I/O Gage Head

DESCRIPTION

GC-485 DigiSense™ Gage Head is available in five bipolar measurement ranges, with standard strokes from $\pm .050$ inches to ± 1.0 inch. The single ended 8.5 to 30.0 volt dc. input and two-wire, addressable RS-485 output, make the GC-485 ideally suited to factory automation applications. Direct digital output eliminates the need for expensive and error prone analog to digital conversion. The sensor signal is scaled into calibrated engineering units, by the internal microprocessor, using factory computed conversion tables, thus providing a traceable measurement without need of an on-site calibration. A certificate of calibration is shipped with every sensor.



FEATURES

- ◆ .05% Linearity
- ◆ Up To 32 Sensors On One 2-Wire Network
- ◆ 100% Interchangeability Without Calibration
- ◆ Hermetically Sealed Design
- ◆ MOD-Bus ASCII & RTU Output
- ◆ Factory Calibrated English or Metric Output
- ◆ Programmable Filtering
- ◆ Velocity Output
- ◆ Built-in Tare & Un-Tare
- ◆ Built-in Min, Max & TIR
- ◆ Velocity Output

APPLICATIONS

- ◆ Roller Gap Control
- ◆ In-Process Wet Grinding
- ◆ Hand Held Gages
- ◆ X-Y Positional Feedback

OPTIONS

- ◆ Special Contact Tips
- ◆ Special OEM Protocols
- ◆ Mating Connector
- ◆ Air Extend

specifications

| | |
|--|--|
| Input Voltage | 8.5 to 30 V dc. |
| Input Current | 50 mA. nominal. |
| Operating Temp. | -13°F to 185°F (-25°C to 85°C) |
| Storage Temp. | -65°F to 200°F (-55°C to 95°C) |
| Native Protocols (RS-485) | ModBus RTU ModBus ASCII Omega I-Series |
| Output (units) | Metric & English |
| Linearity \leq | 0.05% full range |
| Resolution | 15-bit (minimum) |
| Repeatability \leq (subject to resolution) | 25 μ -inch |
| Stability | 0.1% full range |
| T/C of scale factor | 0.025% /F° max (0.05% /C° max) |
| Shock Survival | 250 g for 11 mS |
| Vibration Tolerance | 10 g up to 2 kHz. |
| Housing Construction | TIG welded 400 series stainless steel |
| Termination | 6-pin MS style hermetic connector |

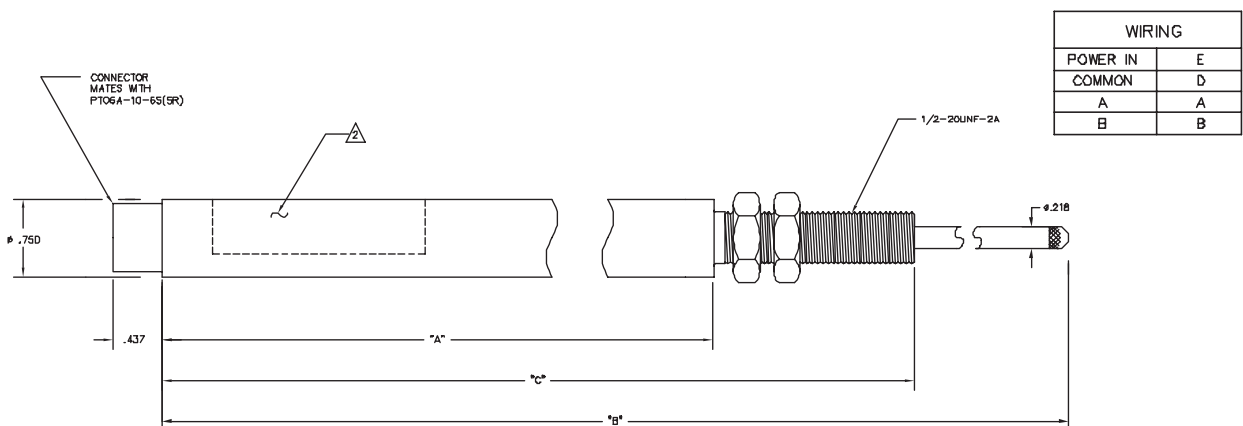
GC-485

GC-485 specifications

| Model Number | GC-485-050 | GC-485-125 | GC-485-250 | GC-485-500 | GC-485-1000 |
|--------------------------|-----------------|-----------------|-----------------|------------------|------------------|
| Gaging Range | +/-0.050" | +/-0.125" | +/-0.250" | +/-0.500" | +/-1.000" |
| | +/- (1.27mm) | +/- (3.175mm) | +/- (6.85mm) | +/- (12.7mm) | +/- (25.4mm) |
| Pretravel (Nominal) | 0.25" (6.35mm) | 0.28" (7.1mm) | 0.18" (4.5mm) | 0.20" (5.08mm) | 0.10" (2.5mm) |
| Overtravel (Min.) | 0.31" (7.87mm) | 0.29" (7.4mm) | 0.03" (0.8mm) | 0.35" (8.9mm) | 0.10" (2.5mm) |
| Dimensions | | | | | |
| A (± 0.01 "/0.25mm) | 4.06" (103.1mm) | 4.90" (124.5mm) | 5.76" (146.3mm) | 7.46" (189.5mm) | 9.42" (239.2mm) |
| B (± 0.03 "/0.76mm) | 6.48" (164.6mm) | 7.30" (185.4mm) | 8.16" (207.3mm) | 12.93" (328.4mm) | 14.87" (377.6mm) |
| C (± 0.02 "/0.50mm) | 5.42" (137.7mm) | 6.27" (159.3mm) | 7.13" (181.1mm) | 10.45" (265.4mm) | 12.41" (315.2mm) |

dimensions

in (mm)



ordering information

| Part Number | Model | Dimensions (in) | | | Pre Travel (Nominal) | Over Travel (Minimum) |
|--------------|-------------|-----------------|-------|-------|----------------------|-----------------------|
| | | A | B | C | | |
| 02351011-000 | GC-485-050 | 4.06 | 6.48 | 5.42 | 0.25 | 0.31 |
| 02351012-000 | GC-485-125 | 4.90 | 7.30 | 6.27 | 0.28 | 0.29 |
| 02351013-000 | GC-485-250 | 5.76 | 8.16 | 7.13 | 0.18 | 0.03 |
| 02351014-000 | GC-485-500 | 7.46 | 12.93 | 10.45 | 0.20 | 0.35 |
| 02351015-000 | GC-485-1000 | 9.42 | 14.87 | 12.41 | 0.10 | 0.10 |