

GCT-485 (Ultra Precision Digital I/O Gage Head)

GCT-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 and RTU Output
- Factory Calibrated English or Metric Units
- Programmable Filtering
- Tare and Un-Tare
- Min, Max, and TIR
- Velocity Output

APPLICATIONS

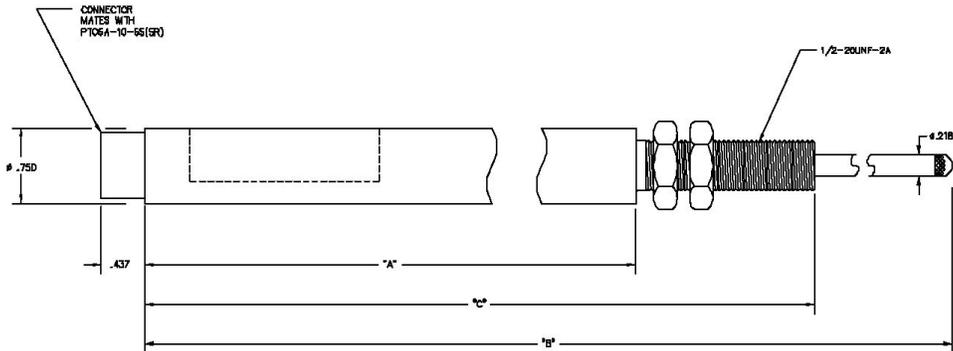
- Roller Gap Control
- In-Process Wet Grinding
- Handheld Gages
- X-Y Positional Feedback

OPTIONS

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

dimensions

in (mm)



wiring

WIRING	
POWER IN	E
COMMON	D
A	A
B	B

Specifications

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	+/- 3.175 mm	+/- 6.85 mm	+/- 12.7 mm	+/- 25.4 mm
Pretravel	0.25" (6.35 mm)	0.28" (7.1 mm)	0.18" (4.5 mm)	0.20" (5.08 mm)	0.10" (2.5 mm)
Overtravel	0.31" (7.87 mm)	0.29" (7.4 mm)	0.03" (0.8mm)	0.35" (8.9 mm)	0.10" (2.5mm)
Dimensions					
A					
Inches	4.06	4.90	5.76	7.46	9.42
Millimeters	103.1	124.5	146.3	189.5	239.2
B					
Inches	6.48	7.30	8.16	12.93	14.87
Millimeters	164.6	185.4	207.3	328.4	377.6
C					
Inches	5.42	6.27	7.13	10.45	12.41
Millimeters	137.7	159.3	181.1	265.4	315.2

Input Voltage	8.5 to 30 Vdc
Input Current	50 mA (Nominal)
Operating Temperature	-13F to 185F (-25C to 85C)
Storage Temperature	-65F to 200F (-55C to 95C)
Native Protocols	ModBus RTU
RS-485	Mod Bus ASCII
	Omega I-Series
Output (units)	Metric & English
Linearity	0.05% full range
Resolution	15-bit (minimum)
Repeatability	25 μ-in
Stability	0.1% at full range
T/C of Scale Factor	0.025% /F max (0.05% /C max)
Shock Survival	250g for 11 mS
Vibration Tolerance	10g up to 2 kHz
Housing Construction	TIG Welded (400 Series Stainless Steel)
Environmental Protection	IP-68 (To 68-BAR)
Termination	6-Pin MS Style Hermetic Connector

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ordering information

Part Number	Model
02351011-000	GC-485-050
02351012-000	GC-485-125
02351013-000	GC-485-250
02351014-000	GC-485-500
02351015-000	GC-485-1000