



HC485 Digisense series RS-485 Multi-drop Displacement Sensor

- Up To 32 Sensors On One 2-Wire Network
- Interchangeability Without Calibration
- 8.5 to 30 Vdc. Operation
- Hermetically Sealed Design
- MOD-Bus ASC II & RTU Output
- Factory Calibrated Inch or Millimeter
- User Selectable Output
- Digital Programmable Filtering
- Built-in Tare & Un-Tare
- Built-in Min / Max Function
- Velocity Output Inches/mm per sec.



The HC485 sensor is available in seven bipolar measurement ranges, with standard strokes from $\pm .050$ inches to ± 3.0 inches. Operating on a single ended 8.5 to 30.0 volt dc. input and a two-wire addressable RS-485 output, the HC 485 is ideally suited to factory automation applications.

Direct digital output eliminates the need for expensive and error prone analog to digital conversion. The analog sensor output 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.

Internal MIN , MAX and TIR functions store peak and valley readings at a maximum up-date rate of 600 samples per second to deliver the information to the host, on demand. An internal tare or zero function allows unipolar or bipolar output, as the application dictates. The HC 485 digital output LVDT is packaged in a rugged hermetically sealed stainless steel tube, suitable for use in the most demanding factory floor environments. A six-pin MS style bayonet connector is welded to the lead side of the LVDT, for ease of termination. Mating connectors are supplied upon request.

Applications

- Process Control
- Valve Position Feedback
- Roller Gap
- Automated Test Systems

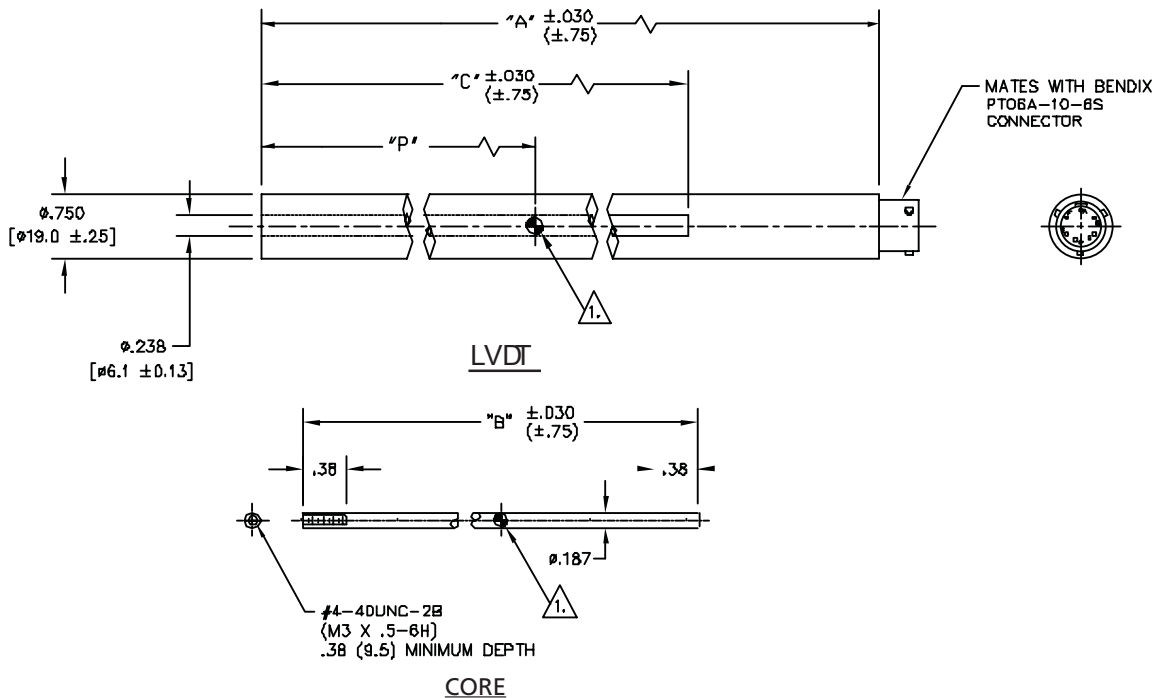
Options

- Captive Core
- Metric Core
- Guided Core
- EAC alibration Provides 150% Stroke and 0.05% Linearity
- Special OEM Protocols
- Mating Connector

■ Specifications

Input Voltage	8.5to30 Vdc
Input Current	50 mA nominal
Operating Temperature Range	-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 ASC II Omega I-Series
Output (units)	Metric & Inches
Linearity	0.25% full range 0.05% optional
Resolution	15-bit (minimum)
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 gupto2 kHz
Housing Construction	TIG welded 400 series stainless steel
Termination	6-pin MS style hermetic connector
Environmental Protection	IP-68(to 68-BAR)

■ Dimensions



■ Mechanical specifications

Dimensions ± .03 in (mm)

HC485 Series Model Number	Weight A (Body)	B (Core)	Dimensions C	P	Linear Range ± IN (MM)
050	3.34 (84.8)	.585 (14.86)	1.17 (29.7)	.54 (13.72)	.050 (1.25) .075 (1.91)
125	4.39 (111.5)	1.100 (27.94)	2.01 (51.1)	.96 (24.38)	.125 (3.0) .188 (4.76)
250	5.51 (140.0)	1.800 (45.72)	2.87 (72.9)	1.38 (35.05)	.250 (6.0) .375 (9.53)
500	6.92 (175.8)	3.000 (76.20)	4.56 (115.8)	2.23 (56.64)	.500 (12.5) .750 (19.05)
1000	9.18 (233.2)	3.800 (96.52)	6.82 (173.2)	3.22 (81.79)	1.000 (25.0) 1.500 (38.1)
2000	12.66 321.6)	5.300 (134.62)	10.30 (261.5)	4.91 (124.71)	2.000 (50.0) 3.000 (76.2)
3000	17.63 (447.8)	6.200 (157.48)	15.27 (387.9)	7.59 (192.79)	3.000 (75.0) 4.500 (114.3)

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