

The UNIVO MBB Series gaging probes are spring-loaded AC LVDTs with excellent linearity, great precision and infinite resolution. Construction consists of stainless probe assembly and 8 mm diameter housing protected to IP-65. Designed for a wide range of position measurement and dimensional gaging applications, they are available in ranges ± 0.040 in (± 1.0 mm), ± 0.100 in (± 2.5 mm), and ± 0.200 in (± 5 mm). The MBB Series features high precision linear ball bearings for smooth probe movement without stiction and excellent repeatability.

Features

- Diameter available in .315 in (8 mm) and .375 in (9.5 mm)
- Extremely reliable with greater than 100 million cycles
- Measurement ranges ± 0.040 in (± 1.0 mm), ± 0.100 in (± 2.5 mm), and ± 0.200 in (± 5 mm).
- Linearity < .5% of Full Range
- Repeatability of 0.15 μ m
- Available with threaded sleeve and jam nuts (MBT-375)

Applications

- Dimensional Gaging
- Metal Component Gaging
- Materials Testing
- Roundness Measurements
- Automotive Testing

Electrical Specifications

Input Voltage:	3 Vrms (Nominal)
Input Frequency:	5kHz (nom)
Linearity:	< $\pm 0.5\%$ Full Range
Null Voltage:	0.5% Full Range
Hysteresis:	<0.01% of Full Range Typical
Repeatability:	<0.01% of Full Range Typical



Environmental Specifications

Operating Temperature:	15°F to 175°F (-10°C to 80°C)
Thermal Coefficient:	< -0.01%/°F (< -0.02%/°C)
Humidity:	90% R.H., 240 Hours

Materials Specifications

Housing:	Stainless Steel with Optional 3/8-40, UNS 2A External Thread (MBT Series)
Core:	Hi-permeability nickel-iron alloy
Magnet Wire:	Film insulated copper
Connector:	Cable With Lead Wires
Probe:	Tungsten Carbide Tip

**Univo Sensor Solution, LLC**

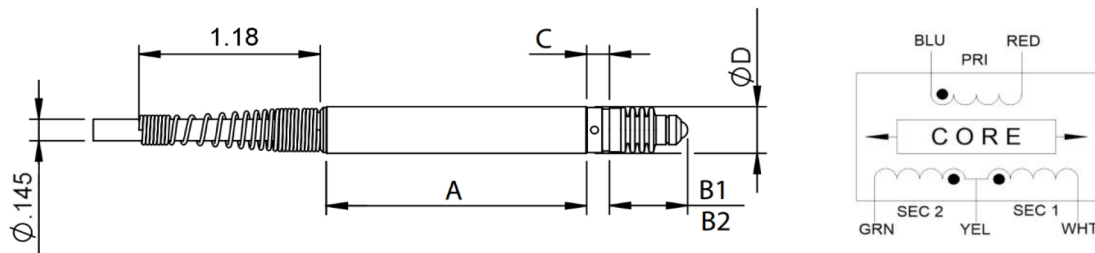
Pennsauken, NJ 08110-1541 USA

www.univotec.com

Specifications

Model	UMBB-315	UMBB-315	UMBB-315	UMBB-315	UMBB-315	UMBB-315
Parameter	040	100	200	040	100	200
Nominal Range (Inches)	± 0.040	± 0.100	± 0.200	± 0.040	± 0.100	± 0.200
Nominal Range (mm)	± 1.0	± 2.5	± 5.0	± 1.0	± 2.5	± 5.0
Sensitivity (mV/V/.001 Inch)	5.3	3.8	2.7	5.3	3.8	2.7
Sensitivity (mV/V/mm)	210	150	105	210	150	105
Tip Force at Mid-span (N)	0.7	0.7	0.7	0.7	0.7	0.7
Dimension "A" (Inches) [mm]	1.69 [43]	2.48 [63]	3.42 [87]	1.69 [43]	2.48 [63]	3.42 [87]
Dimension "B1" (Inches) [mm]	.55 [14]	.71 [18]	1.0 [25.4]	.55 [14]	.71 [18]	1.0 [25.4]
Dimension "B2" (Inches) [mm]	.43 [11]	.47 [12]	.57 [14.5]	.43 [11]	.47 [12]	.57 [14.5]
Dimension "C" (Inches) [mm]	.16 [4]	.18 [4.5]	.18 [4.5]	.16 [4]	.18 [4.5]	.18 [4.5]
Dimension "D" (Inches) [mm]	.315 [8]	.315 [8]	.315 [8]	.375 [9.5]	.375 [9.5]	.375 [9.5]

Dimensions and Wiring



Ordering Info

UMBB-315 XXX - XXX

B - Standard Case Outer Measuring Range
T - Threaded Case Diameter See Table

315 - 0.315 in

Notes

- Electrical specifications measured at 5 kHz excitation frequency.
- Specifications subject to change.

Warranty

UNIVO products are warrantied against defective materials and workmanship for a period of one year from the date of delivery to the original purchaser. UNIVO accepts no liability for damages in the misuse of our products.



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