

The UNIVO M Series AC LVDTs are specially designed for applications demanding the highest levels of reliability while performing in the rugged environments that are required for industrial equipment. These transducers consist of a coil assembly potted into a 3/8" diameter housing with a separate moveable core. The M Series are available from ± 0.025 inch (± 0.63 mm) to ± 2.0 inch (± 50 mm) and offer high sensitivity, high resolution and excellent linearity.

Features

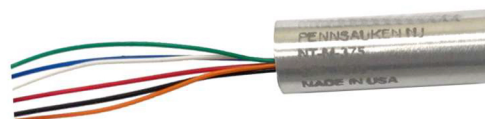
- Rugged 3/8 inch stainless steel housing
- Measurement ranges from ± 0.025 to ± 2 inches
- Linearity $\pm 0.15\%$ of Full Range Typical
- Shock and vibration tolerant
- Operating temperature range: -65°F to 275°F (Standard)
or extended temperature range: -65°F to 400°F (optional)
- Choice of imperial or metric threaded core
- Standard and custom models available

Applications

- Factory automation
- Medical equipment
- Valve position monitoring
- Materials testing
- Dimensional gaging

Electrical Specifications

Input Voltage:	3 Vrms (Nominal)
Input Frequency:	400Hz to 10KHz
Linearity:	$< \pm 0.15\%$ Full Range Typical
Extended Operating Range:	1.5 X Linear Range
Null Voltage:	0.5% Full Range
Hysteresis:	$< 0.01\%$ of Full Range Typ
Repeatability:	$< 0.01\%$ of Full Range Typical



Environmental Specifications

Operating Temp.;	Standard: -65°F to 275° F (-55°C to 135°C)
Operating Temp.;	400° Option: -65°F to 400° F (-55°C to 204°C)
Thermal Coefficient:	$< -0.01\%/^{\circ}\text{F}$ ($< -0.02\%/^{\circ}\text{C}$) of Full Range
Humidity:	90% R.H., 240 Hours
Shock Survival:	1000 g, 11 ms
Vibration:	20 g to 2 KHz

Materials Specifications

Housing:	Corrosion-resistant nickel-iron alloy
Core:	Hi-permeability nickel-iron alloy
Coil Form:	Ceramic/Plastic
Magnet Wire:	Film insulated copper
Lead Wires:	# 32 AWG Teflon insulated, 12" long



Univo Sensor Solution, LLC

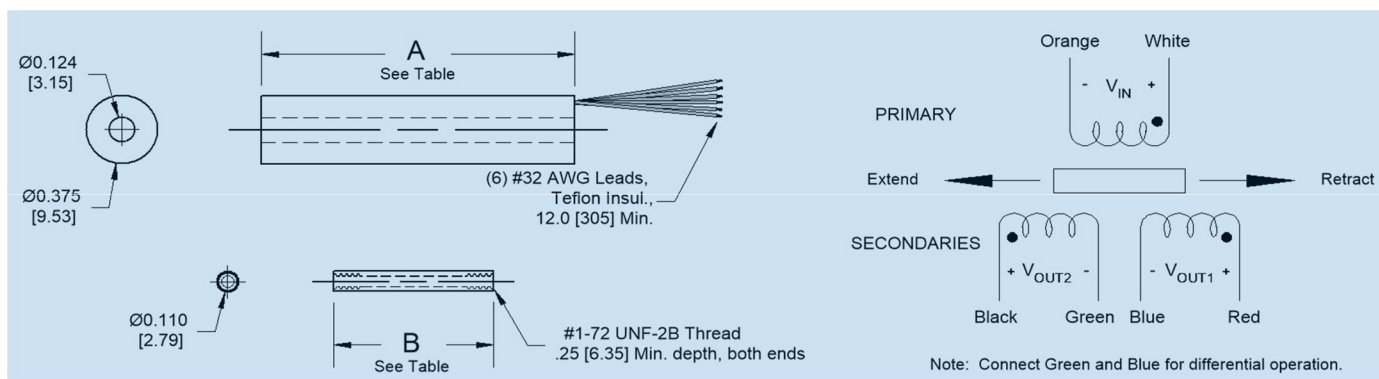
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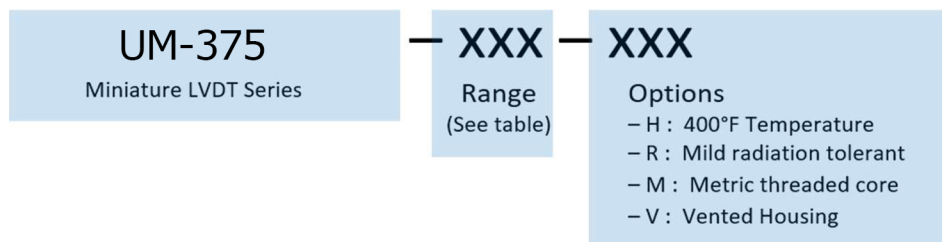
Specifications

Model	UM-375	UM-375	UM-375	UM-375	UM-375	UM-375	UM-375
Parameter	025	050	100	250	500	1000	2000
Nominal Range (Inches)	± 0.025	± 0.050	± 0.100	± 0.250	± 0.500	± 1.00	± 2.00
Nominal Range (mm)	± 0.63	± 1.25	± 2.50	± 6.25	± 12.5	± 25.4	± 50.8
Sensitivity (mV/V/.001 Inch)	3.5	1.7	1.8	2.5	1.7	0.75	0.50
Sensitivity (mV/V/mm)	138	67	71	98	67	30	19.7
Primary Impedance (Ω)	95	345	345	505	130	240	540
Dimension "A" (Inches)	0.45	0.75	1.00	1.75	3.30	5.50	9.95
Dimension "B" (Inches)	0.40	0.60	0.65	1.15	2.00	3.00	5.50
Body Weight (grams)	3.0	6.0	6.0	11.5	18.0	28.0	56
Core Weight (grams)	0.3	0.5	0.5	1.0	1.6	2.6	5.2

Dimensions and Wiring



Ordering Info



Notes

- Electrical specifications measured at 3KHz excitation frequency.
- Additional options are available. Please consult factory for custom designs.
- 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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