

M-12 Series - Layer wound LVDT

PERFORMANCE SPECIFICATIONS

ELECTRICAL SPECIFICATIONS					
Parameter	M12-10	M12-20	M12-30	M12-50	M12-100
Stroke range	±0.39 [±10]	±0.79 [±20]	±1.18 [±30]	±1.97 [±50]	±3.94 [±100]
Sensitivity mV/V/0.001in [mV/V/mm]	1.07 [42.0]	0.54 [21.2]	0.25 [10.0]	0.25 [9.9]	0.18 [7.1]
Output at stroke ends (*)	420mV/V	424mV/V	300mV/V	495mV/V	710mV/V
Phase shift	+3°	+2°	+2°	+3°	-3°
Input impedance (PRIMARY)	570Ω	1100Ω	1540Ω	780Ω	1000Ω
Output impedance (SECONDARY)	540Ω	400Ω	600Ω	825Ω	1700Ω
Linearity	±0.25% of FS, maximum				
Input voltage	3Vrms sine wave				
Test input frequency	2.5KHz				
Null voltage	0.5% of FSO, maximum				

ENVIRONMENTAL SPECIFICATIONS & MATERIALS	
Operating temperature	-65°F to +300°F [-55°C to 150°C]
Temp coefficient of sensitivity	0.018% per degree F [0.01% per degree C]
Shock survival	500 g (11ms half-sine)
Vibration tolerance	20 g up to 2KHz
Housing material	AISI 304 Series stainless steel
Lead type/length	Six lead-wires, 26 AWG, PTFE insulated, 1 foot [0.3m] long

Notes:

Dimensions are in inch [mm]

All values are nominal unless otherwise noted

Electrical specifications are for the test frequency indicated in the table

(): Unit for output at stroke ends is millivolt per volt of excitation*

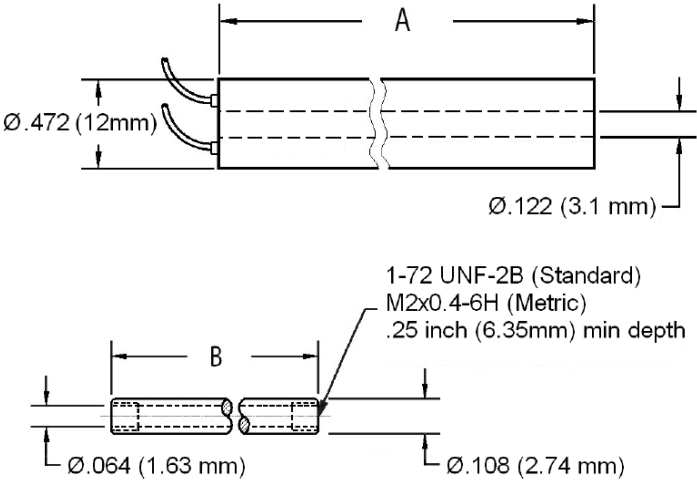
FS: Full Scale is 2X for ±X stroke

FSO: Full Scale Output is the output at X position for ±X stroke

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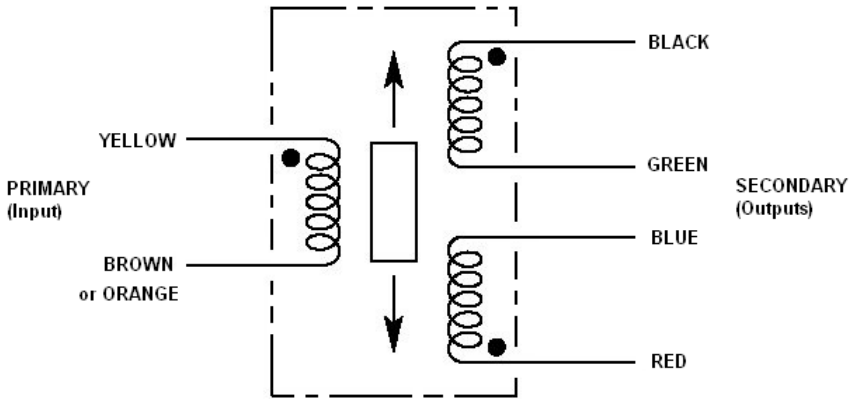
MECHANICAL SPECIFICATIONS

Parameter	M12-10	M12-20	M12-30	M12-50	M12-100
Main body length "A"	2.64 [67]	3.82 [97]	4.61 [117]	6.10 [155]	11.22 [285]
Core length "B"	1.42 [36]	1.81 [46]	1.81 [46]	1.81 [46]	2.95 [75]



Dimensions are in inches (mm)

WIRING SCHEMATIC



Connect Green to Blue for differential output

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ORDERING INFORMATION

Description	Model	Part Number
±10mm	M12-10	02561036-000
±20mm	M12-20	02561037-000
±30mm	M12-30	02561038-000
±50mm	M12-50	02561039-000
±100mm	M12-100	02561040-000
<i>Consult factory for other ranges</i>		
Options		
5.0 KHz calibration	All	XXXXXXXX-002
Metric threaded core option (M2x0.4-6H threads)	All	XXXXXXXX-006
5.0 KHz calibration AND metric threaded core option	All	XXXXXXXX-008
Accessories		
Core connecting rod, 6 inches long, 1-72 threads		05282945-006
Core connecting rod, 12 inches long, 1-72 threads		05282945-012
Core connecting rod, 24 inches long, 1-72 threads		05282945-024
Core connecting rod, 36 inches long, 1-72 threads		05282945-036
Core connecting rod, 6 inches long, M2x0.4 metric threads		05282976-006
Core connecting rod, 12 inches long, M2x0.4 metric threads		05282976-012
Mounting block		04560956-000

Note:

Refer to our "[Accessories for LVDT's](#)" brochure for our LVDT signal conditioning instrumentation and other accessories