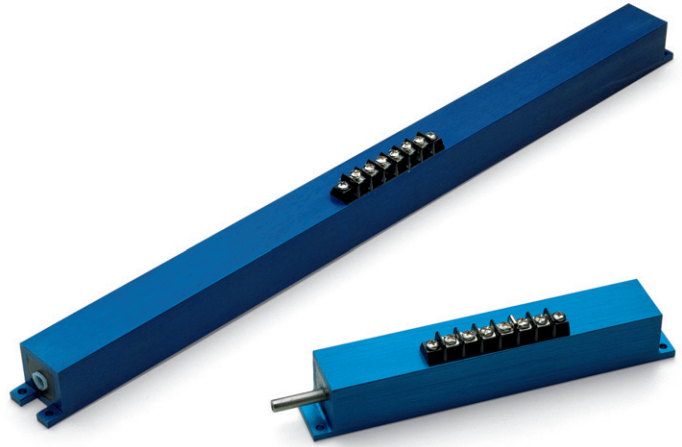


MP-Series

Hostile Industrial Environments LVDT

DESCRIPTION

The **MP Series** of LVDTs is suitable for heavy industrial use. Its coils are encapsulated in an anodized extruded aluminum housing, providing protection against electromagnetic and electrostatic interference. A heavy-duty terminal barrier strip replaces lead wires. A Teflon boreliner is standard equipment.



FEATURES

- ◆ Encapsulation Guards Against Harsh Industrial Conditions
- ◆ Mounting Flanges Permit Rapid Installation
- ◆ Screw Terminal Wiring
- ◆ Calibration Certificate Supplied with All Models
- ◆ Compatible with All Schaevitz® Signal Conditioners

APPLICATIONS

- ◆ Industrial

OPTIONS

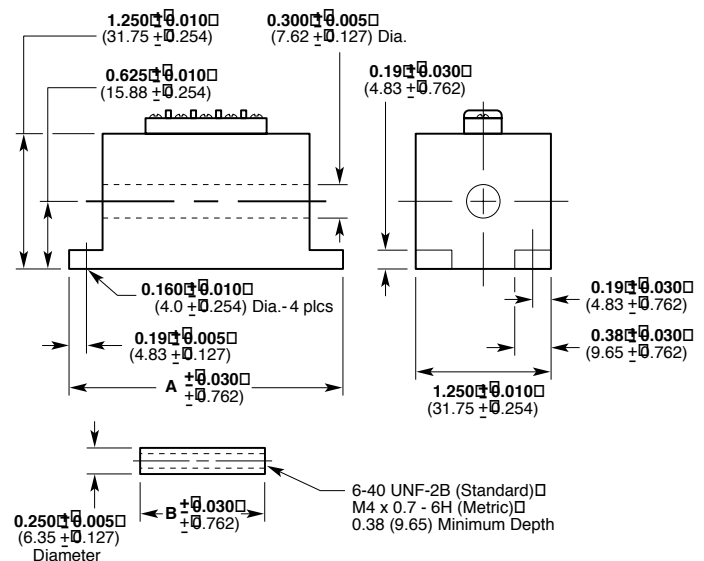
- ◆ 5.0 kHz Excitation Frequency Testing*
- ◆ Metric Thread Core
- ◆ Small Diameter/Low Mass Core

* Performance and electrical specifications for alternative frequencies will differ from the standard specifications listed below which are based on a 2.5 kHz excitation frequency. Consult factory for further information.

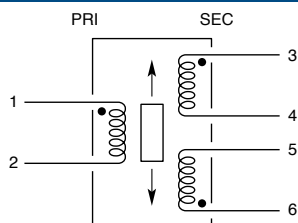
specifications

Input Voltage	3 V rms (nominal)
Frequency Range	400 Hz to 5 kHz
Operating Temperature	-65°F to 300°F
Range	(-55°C to 150°C)
Null Voltage	<0.5% full scale output
Shock Survival	1,000 g for 11 msec
Vibration Tolerance	20 g up to 2 kHz
Coil Form Material	High density, glass-filled polymer
Outer Housing Material	Anodized aluminum
Inner Housing Material	AISI 400 series stainless steel
Electrical Termination	6-terminal barrier strip

dimensions



wiring



Connect (4) to (5) for differential output



MP-Series

performance and electrical specifications @ 2.5 kHz¹

MP Series Model Number	Nominal Linear Range		Linearity (±% full range)				Sensitivity mV out/V in Per		Impedance Ohms		Phase Shift
	inches	mm	50	100	125	150	0.001 in	mm	Pri	Sec	Degrees
500 MP	±0.500	±12.70	0.15	0.25	0.35	0.75	0.7	25.6	460	375	-1
1000 MP	±1.00	±25.4	0.25	0.25	1.00	1.30*	0.39	14.2	460	320	-3
2000 MP	±2.00	±50.8	0.25	0.25	0.50*	1.00*	0.23	8.3	330	330	+5
3000 MP	±3.00	±76.2	0.15	0.25	0.50*	1.00*	0.25	9.1	315	830	+11
4000 MP	±4.00	±101.6	0.15	0.25	0.60*	1.00*	0.20	7.1	275	550	+1
5000 MP	±5.00	±127.0	0.15	0.25	1.00*	n/r	0.14	5.5	310	400	+3
10000 MP	±10.0	±254	0.15	0.25	1.00*	n/r	0.07	2.8	550	750	-5

* Requires special reduced core length

¹All calibration is performed at room ambient temperature.

mechanical specifications

MP Series Model Number	Body		Weight		Core		Dimensions A (Body)		B (Core)	
	oz	gm	oz	gm	oz	gm	in	mm	in	mm
500 MP	12.36	350	0.64	18	6.50	165.1	3.45	87.6		
1000 MP	16.59	470	0.74	21	7.64	194.1	4.00	101.6		
2000 MP	21.00	595	0.95	27	11.01	279.7	5.30	134.6		
3000 MP	26.12	740	0.99	28	13.85	351.8	5.60	142.2		
4000 MP	31.77	900	1.27	36	16.68	423.7	7.00	177.8		
5000 MP	36.18	1025	1.27	36	18.92	480.6	7.00	177.8		
10000 MP	60.89	1725	1.52	43	31.90	810.3	8.50	215.9		

ordering information

Specify the MP Model followed by the desired option number(s) added together.

Ordering Example:

Model Number 500 MP-028 is an MP Series LVDT with a ±0.500" range (500 MP), with 5 kHz testing (002), Metric thread core (006), and a small diameter core (020).

MP model

500 MP
1000 MP
2000 MP
3000 MP
4000 MP
5000 MP
10000 MP

options

Number	Description
002	5.0 kHz Linearity Test ¹
006	Metric Thread Core
020	Small Diameter/Low Mass Core1& ²

¹Available on model 500 MP only.

²Consult factory for mass, dimensions and thread size.