# MP Series (Mill Duty LVDT)

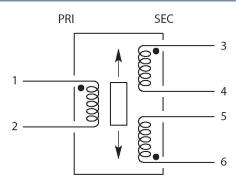


The MP Series of LVDT is suitable for use in harsh industrial applications. LVDT coils are epoxy encapsulated and encased in an anodized, extruded aluminum housing, proving a high level of mechanical integrity as well as protection against EMI and RFI. A heavy-duty terminal strip replaces lead wires, simplifying electrical connection. A standard Teflon® bore liner provides a bearing surface for the core while reducing diametrical clearance within the bore.

### **FEATURES**

- Epoxy Encapsulation Guards Against Harsh Industrial Conditions
- Mounting Flanges for Easy Installation
- Screw Terminal Wiring
- Calibration Certificate Supplied with Each LVDT
- Compatible with all Schaevitz Signal Conditioners

## wiring



Connect (4) to (5) for differential output

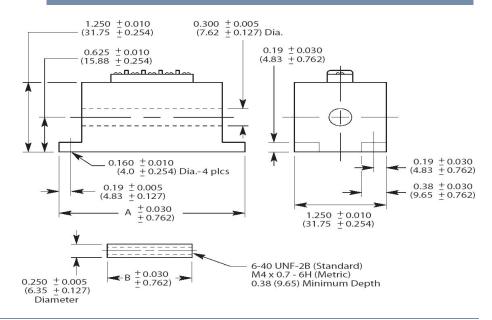
### **APPLICATIONS**

- Rolling Mills
- Power Turbines
- Paper Mill Head Boxes

### **OPTIONS**

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

### dimensions





### **Specifications**

### **Input Voltage**

Frequency Range
Operating Temperature Range
Null Voltage
Shock Survival
Vibration Tolerance
Coil Form Material
Outer Housing Material
Inner Housing Material
Electrical Termination

### 3 V rms (nominal)

400 Hz to 5kHz
-65F to 300F (-55C to 150C)
<0.5% full scale output
1,000 g for 11 msec
20 g up to 2 kHz
High Density, glass-filled Polymer
Anodized aluminum
AISI 400 Series Stainless Steel
6-Terminal Barrier Strip

#### **Electrical**

MP Series Model	Nominal Linear Range		Linearity				Sensitivity		Impedance (Ohms)		Phase Shift
Number	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/v	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

Note: \* indicates special reduced length core required. Please consult factory for additional information.

### Mechanical

MP Series Model	Weight					Dimensions				
Number	Body		Core		A (Body)			B (Core)		
	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		

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ordering information	MP model	options
Specify the MP Model followed by the desired option number(s) added together.	500 MP 1000 MP 2000 MP	Number Description 002 5.0 kHz Linearity Test <sup>1</sup> 006 Metric Thread Core
Ordering Example: Model Number 500MP-008 is an MP Series LVDT with a ±0.500-Inch range (500 MP), with 5 kHz testing (002), Metric thread core (006).	3000 MP 4000 MP 5000 MP 10000 MP	O20 Small Diameter/Low Mass Core <sup>2</sup> Available on model 500 MP only Consult factory for mass, dimensions and thread size