

# Industrial Series AC LVDT With M8 Rod End Bearings

#### **Main Features**

- Heavy duty stainless steel construction
- Magnetically shielded
- Radial exit
- Non-captive guided core & extension
- Mild steel M8 rod end bearings
- Sealed to IP65 or IP68
- 4 or 6 wire 2M PVC cable



## **Technical Specification**

Product Code	IER-M8			
Stroke	±0.5mm to ±550mm			
Input Voltage	5V RMS @ 3kHz (others available)			
Sensitivity	50 – 460mV/V/FRO (dependant on stroke)			
Non-Linearity	±0.5% of full range, (higher specification can be achieved at extra cost)			
Repeatability	Better than 0.1%			
Resolution	Infinite (dependent on measuring instrument)			
Frequency Response	3dB @ 180Hz (dependent on conditioning unit)			
Current Range	0.5mA – 8mA			
Temperature (standard)	-30° C to + 85° C			
Temperature (high)	-30° C to + 150° C			
Temperature (very high)	-30° C to + 200° C			
Vibration Resistance	20g up to 2kHz			
Shock Resistance	1000g for 10 milliseconds			
Coil Impedance	600Ω + 100Ω (3kHz)			
Insulation Resistance	Above $10M\Omega$ at $500VDC$ (between wires and case)			
Dielectric Strength	500V RMS for one minute (between wires and case)			
Magnetic Shielding	Internal magnetic shielding			
Construction Material	Stainless steel			
Sealing	IP65			





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## **Option Description**

J 4 wire device

G Extension rod wiper

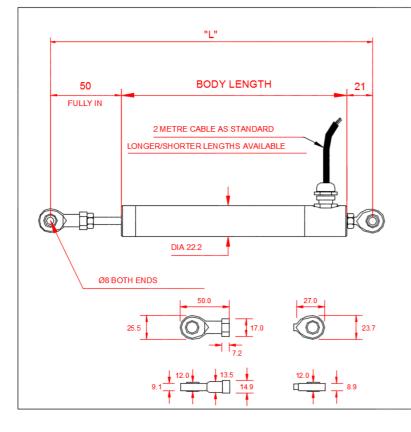
W Waterproof IP68, with stainless steel M8 rod end bearings

H High temperature 150°C, with PTFE cable and stainless steel M8 rod end bearings
VH Very high temperature 200°C, with PTFE cable and stainless steel M8 rod end bearings

Z Armoured hose

L Increased linearity, ±0.25%

## **Dimensions**



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+/-550	1410	1481	345	10	550	1530
+/-500	1410	1481	475	10	550	1530
+/-400	1150	1221	440	20	450	1010
+/-300	920	991	270	5	690	770
+/-250	810	881	310	10	290	560
+/-200	700	771	285	10	250	430
+/-175	615	686	260	2	230	360
+/-150	560	631	230	5	210	290
+/-125	500	571	300	2	180	320
+/-100	450	521	260	5	150	150
+/-75	390	461	405	20	260	460
+/-50	320	391	275	2	200	270
+/-25	235	306	230	5	130	210
+/-15	175	246	220	20	90	190
+/-12.5	160	231	200	15	120	190
+/-10	140	201	165	10	70	170
+/-5	120	191	140	5	100	110
+/-2.5	100	171	120	5	180	460
+/-0.5	80	151	120	20	40	1800
STROKE (mm)	BODY LENGTH (mm)	"L"	SENSITIVITY AT 3KHz WITH 50K LOAD (mVV FRO)	NULL (mV)	PRIMARY RESISTANCE (OHMS)	SECONDARY RESISTANCE (OHMS)





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### **Connection Details**

#### 4 Wires (PVC or PTFE, High Temperature 150°C)

Red : Primary +ve
Yellow : Primary -ve
Blue : Secondary +ve
Green : Secondary -ve

#### 6 Wires (PVC)

Yellow: Primary +ve Black: Primary -ve

Blue : Secondary 2 -ve (Centre Tap)

White: Secondary 2 +ve Green: Secondary 1 +ve

Red : Secondary 1 -ve (Centre Tap)

### 6 Wires (PTFE, High Temperature 150°C)

Yellow: Primary +ve Black: Primary -ve

Blue : Secondary 2 -ve (Centre Tap)

Brown : Secondary 2 +ve Green : Secondary 1 +ve

Red : Secondary 1 -ve (Centre Tap)

