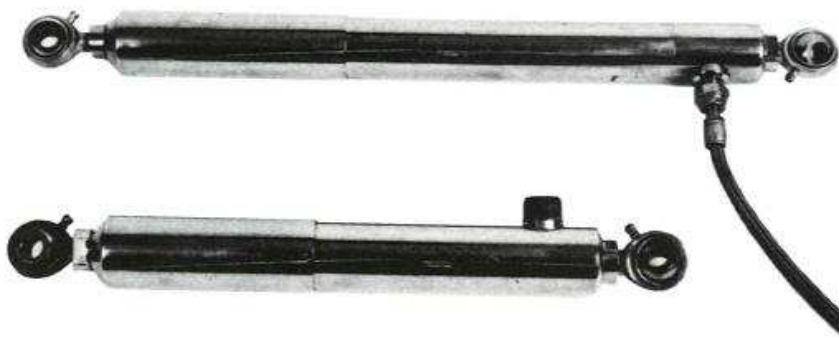


# HI SERIES LVDT DISPLACEMENT TRANSDUCER

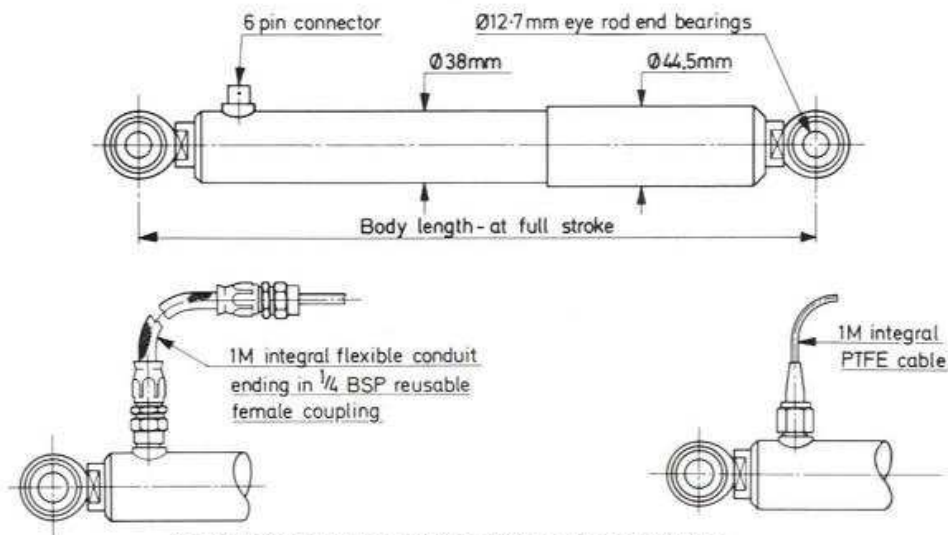


- HEAVY INDUSTRIAL
- STAINLESS STEEL CONSTRUCTION
- CONNECTOR OR INTEGRAL CABLE
- UP TO 180° OPERATION

The HI Heavy Industrial LVDT displacement transducer consists of a standard linear variable differential transformer housed within a robust stainless steel body. The concentric tubes of the telescopic assembly are guided by means of a linear bearing and are retained by rigid end stops within the body. The fixed and moving ends of the transducer are fitted with rod end bearings for mounting purposes.

The rugged and reliable construction of this series makes it particularly suited to Heavy Industrial applications and 'uncomfortable' environments. Of conventional LVDT principle these transducers are designed for use on low voltage AC supplies at frequencies between 50Hz and 5KHz.

The rod end bearings are screwed into the two body end sections and are fitted with lock nuts. The length of thread on one end bearing permits an adjustment of  $\pm 6\text{mm}$  ( $\pm 0.25$  inches) to provide a fine control of mechanical zero position.



Note: Other cable and conduit lengths available.

### SPECIFICATION

Input voltage .....	From less than 1V to 10V RMS
Input frequency .....	5Hz to 5KHz
Max. recommended primary current .....	20mA
Working temperature range .....	- 40°C to + 150°C (180°C integral cable)
Survival temperature range .....	- 50°C to + 150°C (180°C integral cable)
Linearity .....	Better than 0.5% full scale
Repeatability .....	Better than 0.02% reading
Body material .....	EN 56 AM (Non magnetic stainless)
Core material .....	EN 56 AM (Magnetic stainless)
Calibration I/P signal .....	5V RMS @ 3KHz

TRANSDUCER TYPE-	HI25	HI50	HI100	HI150
TOTAL DISPLACEMENT RANGE	25	50	100	150
OUTPUT AT FULL RANGE mv/v@ 3KHz	350	460	720	780
NULL VOLTAGE (% F.R.D.)	0.6	0.4	1.2	1.6
PRIMARY IMPEDANCE at 3KHz	540	200	550	550
PRIMARY RESISTANCE (OHMS)	120	120	180	260
SECONDARY IMPEDANCE	240	200	350	560
SECONDARY RESISTANCE TOTAL (OHMS)	160	190	340	470
ZERO PHASE FREQUENCY (KHz)	2.4	3.8	3.75	4.0
WEIGHT (EXC. CABLE) GRMS.	1.9	2.4	3.0	3.3
BODY LENGTH (mm)	351	474	661	834

### OPTIONS

Cable length      PTFE oversheath on flexible conduit

We reserve the right to alter the specification without notification.

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