

LDT—Linear Displacement Transducer

FEATURES



- Displacements 5, 10, 25, 50mm
- Strain gauge based—wheatstone bridge
- Nominal Sensitivity 2mV/V.
- Linearity $\pm 0.1\%$ FS.

APPLICATIONS

- Test Machines
- Process Control.
- R&D projects

DESCRIPTION

The S-LDT provides a simple measuring device for measuring displacements up to 50mm. This device will work on standard wheatstone bridge instrumentation using a 0-2mV/V range, or, there is an optional 0-5-5.5 analogue output option.

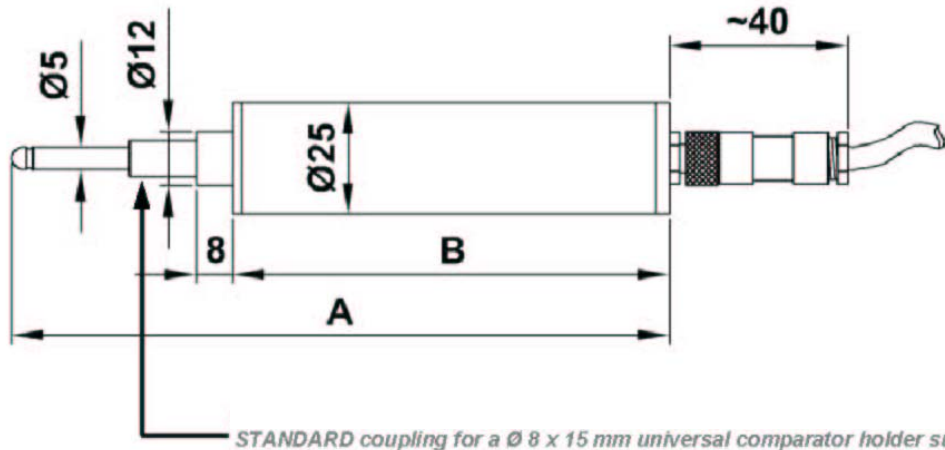
The S-LDT is produced from stainless steel material.

TYPICAL SPECIFICATION

PARAMETER	VALUE	UNITS
Nominal Displacement	5, 10, 25, 50	mm
Rated Output	2.0 nominal	mV/V
Linearity & non repeatability	0.1	$\pm\%$ of FS
Zero Return after 30 minutes	0.05	$\pm\%$ of Applied Load
Zero Balance	1.0	$\pm\%$ of Rated Output
Temperature Range: Operating Temperature Range: Compensated	-10 to +70 -10 to +70	$^{\circ}\text{C}$
Temperature Effect: On Output Temperature Effect: On zero	0.005 0.01	$\pm\%$ of Rated Output/ $^{\circ}\text{C}$ $\pm\%$ of Rated Load/ $^{\circ}\text{C}$
Safe Overload	NA	% of Rated Capacity
Ultimate Overload	NA	% of Rated Capacity
Excitation: Recommended Excitation: Maximum	10 18	Volts AC or DC
Input Impedance	350 nominal	ohm
Output Impedance	350 nominal	ohm
Insulation Resistance	>2	G Ω at 50VDC
Deflection at Rated Capacity	NA	mm
Weight (approximate) :	NA	kg
Construction	Stainless Steel	
Environmental Protection	IP40	
Cable	3m 4 core screened	

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OUTLINE DIMENSIONS in millimeters



CODE	Displacement	A	B
LDT5MM	5 mm	111	77
LDT10MM	10 mm	111	77
LDT25MM	25 mm	135	85
LDT50MM	50 mm	209	135

AMPLIFIER OPTION

Nominal Sensitivity	0.5—5.5 VDC
Supply	12-24VDC
Max Power Supply	28VDC
Max Current	20mA
Loading Resistance	Min. 3KΩ
Insulation Resistance	> 2 GΩ
Zero Balance	±0.5%
Frequency Response	150Hz
Electrical Connection	M8 Male

WIRING DETAIL

