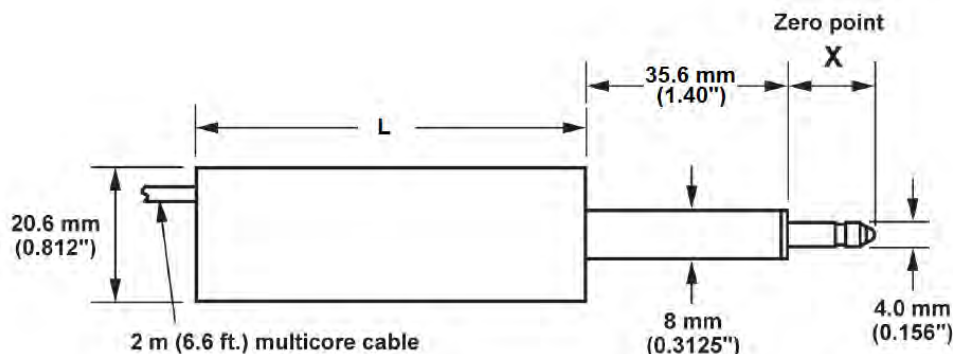




DC "SE5" HIGH-VOLTAGE LVDT SERIES

These DC-EXCITED SHORTSTROKE LVDT models with SPRING-EXTENDED ARMATURE operate from a simple unregulated power supply to generate two highlevel output signals: ± 5 V-DC and 0-10 V-DC. For standard-output versions, see the DC "SE" LVDT Series.

Each model includes high-quality electronics for energization and signal conditioning. Encapsulated, integrated electronics are suitable for operation in harsh industrial environments. All models are fitted with 2 meters (6.6 ft.) of shielded cable.



Model	Range \pm	L	X (nom)	Total weight	Spring force at X	Spring rate	Inward over-travel	Outward over-travel
DSD200SE5	2.5mm (0.1")	2.52"	0.5"	2.9oz	4oz.	9oz/inch	0.09"	0.05"
DSD400SE5	5.0mm (0.2")	2.52"	0.5"	2.9oz	4oz.	7oz/inch	0.01"	0.05"
DSD600SE5	7.5mm (0.3")	2.52"	0.7"	2.9oz	5oz.	6oz/inch	0.06"	0.05"
DSD800SE5	10mm (0.4")	2.52"	0.9"	2.9oz	6oz.	7oz/inch	0.05"	0.05"

LVDT

DC, SHORT-STROKE, SPRING EXTENDED
[SE5 SERIES]

SPECIFICATIONS

Excitation:

Supply voltage (dual): $\pm 12\text{V}$ to $\pm 20\text{V}$ 30mA

Supply voltage (single, must be floating): 24V to 40V 30mA

Change in output for change in supply: 5 mV/V

Armature: Spring-extended

Linearity: $\pm 0.5\%$ of full scale**

Outputs:

Voltage:

Output 1: 0 to 10 V-DC (+0%, -5%)

Output 2: -5 to +5 V-DC (+0%, -5%)

Load (minimum):

Output 1: 2 k Ω ***

Output 2: 2 k Ω

Ripple: 30 mV peak-to-peak

Bandwidth: 200 Hz (flat)

Impedance: 2 Ω

Zero Temperature Coefficient: 0.01% of full scale/ $^{\circ}\text{C}$ (0.005% of full scale/ $^{\circ}\text{F}$)

Span Temperature Coefficient: 0.03% of full scale/ $^{\circ}\text{C}$ (0.015% of full scale/ $^{\circ}\text{F}$)

Operating Temperature Range: -50°C to $+80^{\circ}\text{C}$ (-58°F to $+176^{\circ}\text{F}$)

* Must be floating with respect to output. Factory calibration is at $\pm 15\text{ V-DC}$.

** $\pm 0.25\%$ and $\pm 0.1\%$ linearity are available as options for some models (contact the factory for details).

*** 10 k Ω when power supply is less than 26 V.

Wiring Connections

Dual Supply		Single Supply*
+12 to +20V Input	← RED →	+24 to +40V Input
-12 to -20V Input	← BLUE →	Supply Common
0V Common i/p, o/p	← BLACK →	Output Common**
Output 1: 0 to 10V	← YELLOW →	Output 1: 0 to 10V
Output 2: (+/-) 5V	← GREEN →	Output 2: (+/-) 5V
Instrument Ground	← SHIELD →	Instrument Ground
	O/P 1 -FS 0V +FS 0V +5V +10V	* Supply MUST be fully floating
	O/P 2 -5V 0V +5V	** Output common floats @ $V_s/2$