

ECONOMICAL LVDT DISPLACEMENT TRANSDUCERS

AC POWERED

±1.25 TO ±10.0 MM
(±0.050 TO ±0.400")

LD200 Series
Starts at
\$115

- Low Cost—High Linearity
- Rugged Construction for Machine Tools and Vehicles
- Large Core Clearance for Easy Installation
- Compatible with Standard AC LVDT Instruments
- Cores are Reversible and Interchangeable

The LD200 Series AC-powered LVDT displacement transducers are ruggedly constructed, delivering high performance at a low cost. Along with a broad measurement range, from 1.25 to 10 mm (0.05 to 0.40"), these transducers have high resolution and repeatability.

The coils are wound on a rugged bobbin housed in a stainless steel case. Epoxy-bonded construction makes these devices suitable for applications involving wet or oily environments, or high levels of mechanical stress (vibration, shock, etc.). The armature assembly ensures friction-free movement within the sensor because of the large radial clearance of the bore.

These transducers offer excellent linearity, low levels of residual voltage, and good temperature coefficients. They are thus ideal for most industrial or general purpose displacement measurement applications.

SPECIFICATIONS

ELECTRICAL

Linearity: See chart

Sensitivity: See chart (mV/V/mm)

Excitation: 1 to 10 Vrms

Excitation Frequency: 1 to 10 kHz

Energizing Current: <40 mA

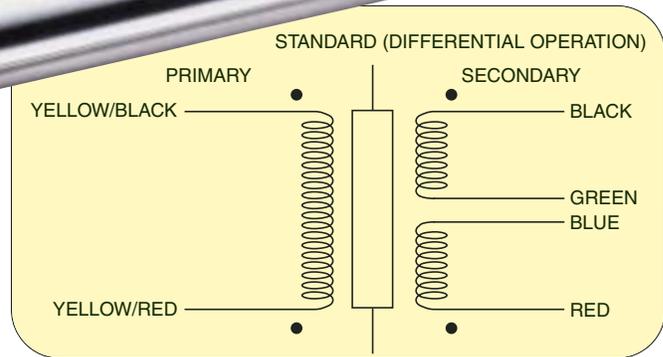
Frequency Response:

10% of excitation frequency

LD200-7.5, \$225, shown smaller than actual size.



LD200-10, \$260, shown smaller than actual size.



Zero Offset: 0.5% FS
Operating Temperature: -55 to 150°C (-67 to 302°F)
Compensated Temperature: -55 to 150°C (-67 to 302°F)

Thermal Effects:

Zero: 0.025%/°C

Sensitivity: 0.020%/°F

Electrical Termination:

0.3 m (12") leads

Electrical Connections:

Yellow/Black: Excitation

Yellow/Red: Excitation

Black: + Signal

Red: Signal ground; connect blue and green together

MECHANICAL

Core Mass:

LD200-1.25: 3.7 g (0.13 oz)

LD200-2.5: 6.2 g (0.22 oz)

LD200-5: 9.1 g (0.32 oz)

LD200-7.5: 11.3 g (0.40 oz)

LD200-10: 14.2 g (0.50 oz)

Core Thread: 6-40 UNF

Core Material: NiFe—Radio Metal 50

Radial Core Clearance: 1.6 mm (0.062")

Case Material: 400 Series SS

Case Weight:

LD200-1.25: 33 g (1.16 oz)

LD200-2.5: 43 g (1.52 oz)

LD200-5: 48 g (1.73 oz)

LD200-7.5: 71 g (2.50 oz)

LD200-10: 74 g (2.61 oz)

MODEL NO.	Nominal Range		Linearity—Typical 2.5 kHz % of Full Scale				Sensitivity @ 2.5 kHz—Nom.	
	mm	in	50%	100%	125%	150%	mV/V/mm	mV/V/0.001"
LD200-1.25	±1.55	±0.06	0.10	0.25	0.25	0.50	250	6.35
LD200-2.5	±2.50	±0.10	0.10	0.25	0.25	0.50	180	4.50
LD200-5	±5.00	±0.20	0.10	0.25	0.25	0.50	100	2.54
LD200-7.5	±7.50	±0.30	0.10	0.25	0.25	0.50	57	1.40
LD200-10	±10.0	±0.40	0.10	0.25	0.25	0.40	35	0.90

To Order (Specify Model Number)

MOST POPULAR MODELS HIGHLIGHTED!

MODEL NO.	PRICE	COMPATIBLE INSTRUMENTS*
LD200-1.25	\$115	DP-LVDT, LDX-2, LDX-3A, LDX-4
LD200-2.5	165	DP-LVDT, LDX-2, LDX-3A, LDX-4
LD200-5	205	DP-LVDT, LDX-2, LDX-3A, LDX-4
LD200-7.5	225	DP-LVDT, LDX-2, LDX-3A, LDX-4
LD200-10	260	DP-LVDT, LDX-2, LDX-3A, LDX-4

* See omega.com for compatible instruments.

Comes with complete operator's manual.

Ordering Example: LD200-5, LVDT displacement transducer with a range of ±5 mm (±0.20"), \$205.

AC-POWERED LVDT TRANSDUCERS



LDX-3A signal conditioner, \$480, see omega.com

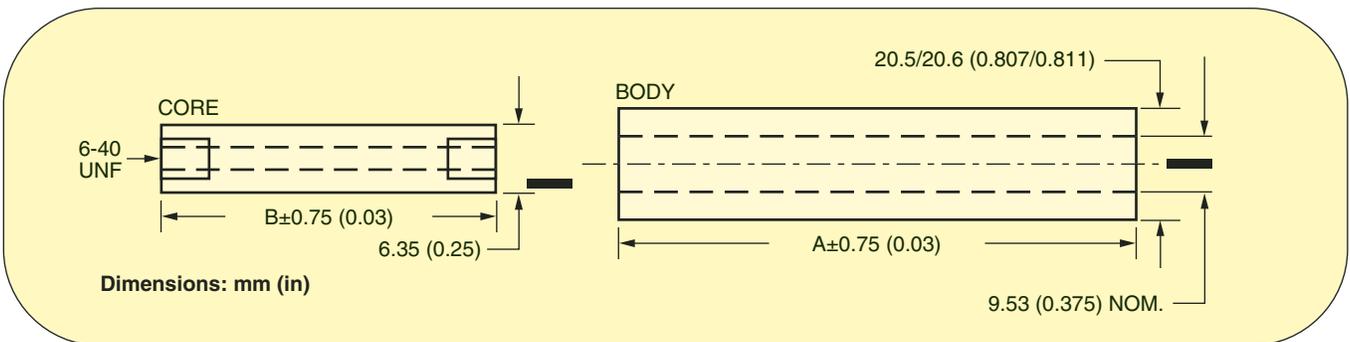


LD200-2.5, \$165, shown smaller than actual size with LDX-3A signal conditioner, \$480, and DP41-E meter, \$545, see omega.com



LD200-10, \$260, shown smaller than actual size.

LD200-7.5, \$225, shown smaller than actual size.



Dimensions: mm (in)

MODEL NO.	LINEAR STROKE \pm mm (in)	A	B
LD200-1.25	1.55 (0.06)	28.45 (1.12)	20.00 (0.80)
LD200-2.5	2.50 (0.10)	45.97 (1.81)	28.00 (1.10)
LD200-5	5.00 (0.20)	63.50 (2.50)	47.00 (1.85)
LD200-7.5	7.50 (0.30)	81.00 (3.19)	50.00 (1.97)
LD200-10	10.0 (0.40)	109.60 (4.31)	75.00 (2.95)

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