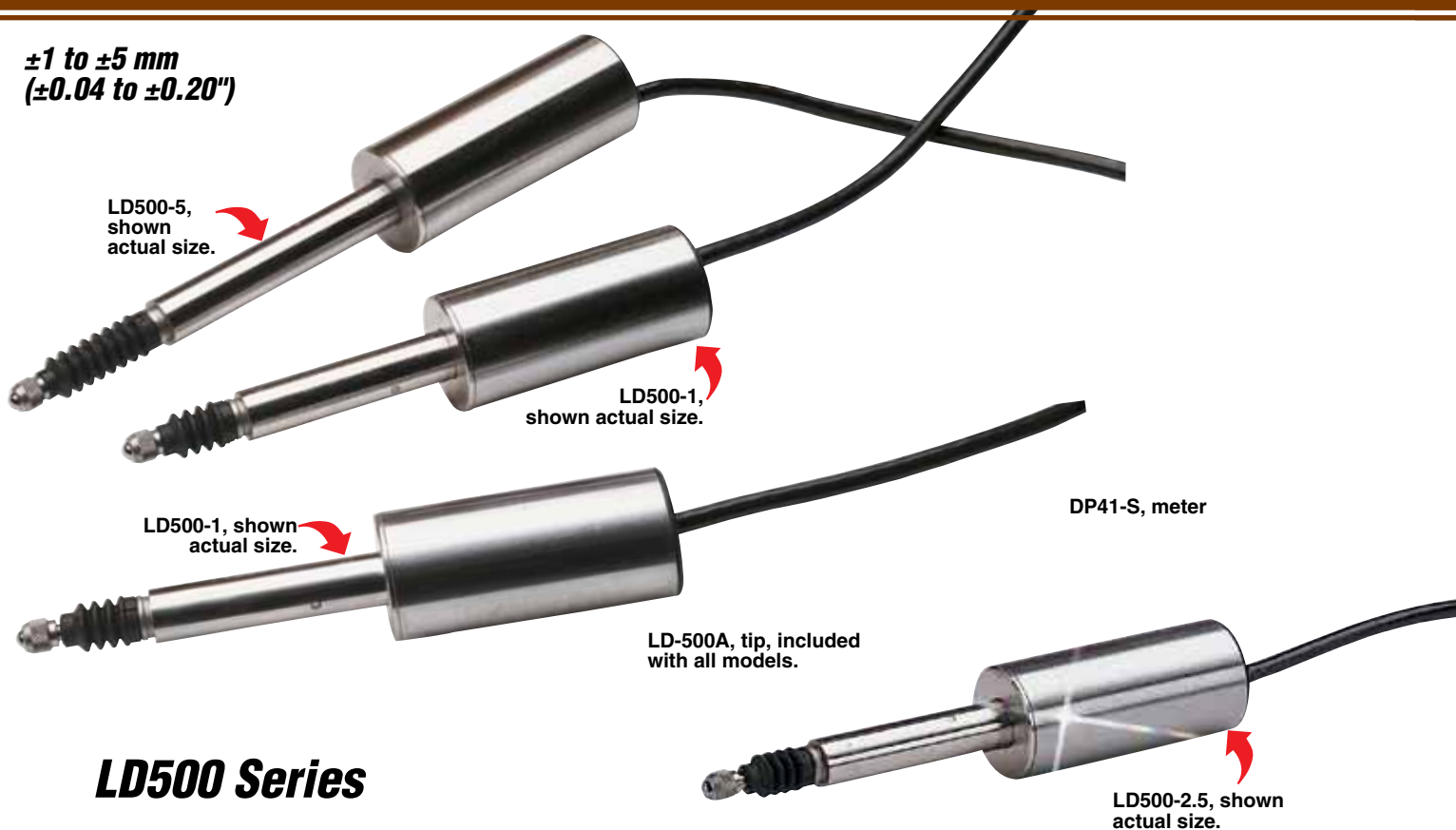


PRECISION DC GAGING TRANSDUCERS FOR QUALITY CONTROL OR AUTOMATION TOOLING

± 1 to ± 5 mm
(± 0.04 to ± 0.20 ")

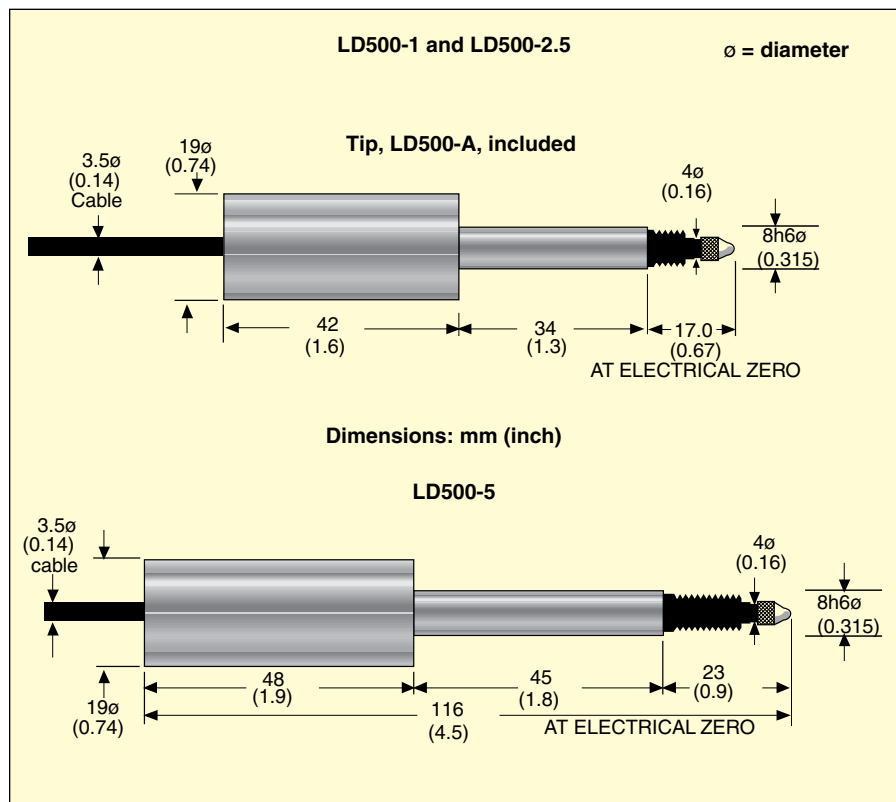


LD500 Series



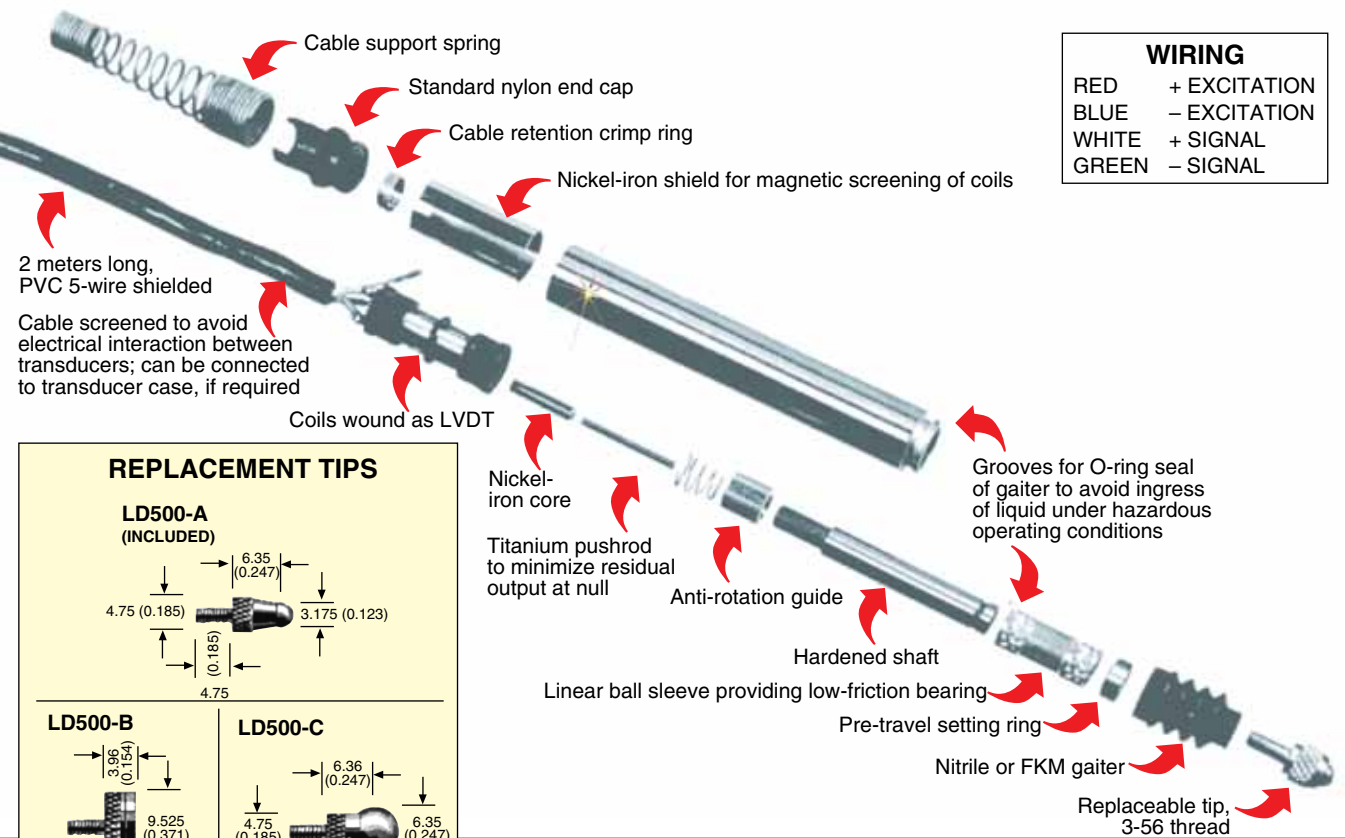
- ✓ High Accuracy and Repeatability
- ✓ Rugged Industrial Construction
- ✓ Replaceable Tips
- ✓ Repeatability Better Than $0.15 \mu\text{m}$
- ✓ Linear Ball-Bearing Actuator

These precision-manufactured displacement transducers can be mounted to most production lines to perform automatic gaging for quality, sorting, or go/no-go applications. The hardened steel shaft, O-ring seals, and titanium pushrod can withstand most industrial conditions. The hybrid IC module produces a linear mV/V/mm (or inch) output that will interface with most standard DC input meters, recorders, data interfaces, and industrial controllers.



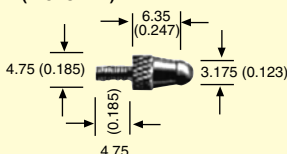
DC GAGING TRANSDUCERS

DISPLACEMENT

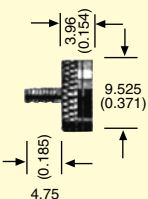


REPLACEMENT TIPS

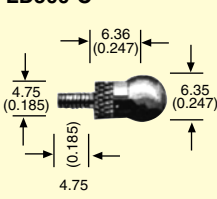
LD500-A (INCLUDED)



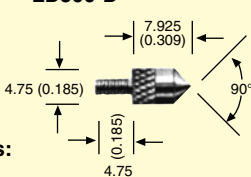
LD500-B



LD500-C



LD500-D



Dimensions:
mm (inch)

To Order

MODEL NO.	STROKE, ±mm (inch)	COMPATIBLE METERS
LD500-1	±1.0 (0.04)	DP41-S, DP25B-S
LD500-2.5	±2.5 (0.10)	DP41-S, DP25B-S
LD500-5	±5.0 (0.20)	DP41-S, DP25B-S

Ordering Example: LD500-2.5, DC gaging probe with a range of ±2.5 mm (0.10") and LD500-A tip included.

SPECIFICATIONS: MECHANICAL

MODEL NO.	LINEAR STROKE mm (inch)**	SPRING RATE	REPEATABILITY	TEMPERATURE RANGE	TEMP COEFFICIENTS		LINEARITY
					ZERO	SENSITIVITY	
LD500-1	±1.0 (0.04)	13 g/mm	<0.15 µm (6 µin)	-20 to 80°C	<0.01%/°C	<0.01%/°C	0.25%
LD500-2.5	±2.5 (0.10)	13 g/mm	<0.15 µm (6 µin)	-20 to 80°C	<0.005%/°C	<0.01%/°C	0.25%
LD500-5	±5.0 (0.20)	10 g/mm	<0.10 µm (4 µin)	-20 to 80°C	<0.005%/°C	<0.01%/°C	0.25%

** Output nulls in mechanical middle.

SPECIFICATIONS: ELECTRICAL

MODEL NO.	CURRENT	INPUT VOLTAGE	OUTPUT RIPPLE (TYPICAL)	TIME	FREQUENCY RESPONSE	SENSITIVITY†	CABLE
LD500-1	10 mA	10 to 24 Vdc	<1% FS	1.5 ms	100 Hz for - 3 dB	78 mV/V/mm (1.98 mV/V/0.001 inch)	2 m (6') long, PVC 5-wire shielded
LD500-2.5	10 mA	10 to 24 Vdc	<1% FS	1.5 ms	100 Hz for - 3 dB	78 mV/V/mm (1.98 mV/V/0.001 inch)	2 m (6') long, PVC 5-wire shielded
LD500-5	13 mA	10 to 24 Vdc	<1% FS	1.5 ms	100 Hz for - 3 dB	56 mV/V/mm (1.98 mV/V/0.001 inch)	2 m (6') long, PVC 5-wire shielded

† Actual output supplied with each unit.