LT Series LVDT

LINEAR VARIABLE DIFFERENTIAL TRANSFORMER

Displacement Sensor

Shinko Electric supplies highly-advanced displacement sensors based on its abundant experience and excellent results.

LVDTs play an important role in various industrial fields

Slim, short sensor with excellent cost performance

This sensor guarantees the detection of displacement with high precision and reliability.

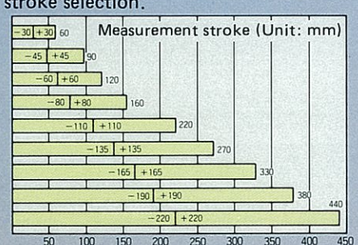
The LVDT, as a high-performance displacement sensor, exhibits high resolution, long service life, wide measurement stroke, and high linearity.
The LT series improved structural reliability by extending the measurement range, and upgrading linearity and temperature stability, thus satisfying the needs of a wider range of consumers.

LT Series LVDT

Characteristics

Wide measurement stroke

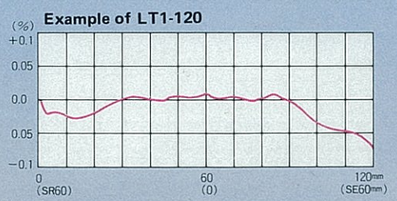
LVDT offers measurement stroke of from 60mm ~ 440mm to facilitate stroke selection.



*Nine measurement strokes cover nearly the entire range of wide measurement stroke.

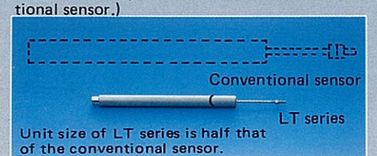
Excellent improvement of linearity

Owing to the successful application of a highly-advanced winding system, it guarantees linearity of ±0.2% for the entire stroke.



Short and slim

This model has been successfully made compact, with an increase in the ratio of measurement stroke against the entire length. (Approximately double that of our conventional sensor.)



Highly reliable construction

Application of stainless pipe both for external and internal diameter and sealing processing by TIG welding and epoxy resin, etc. makes the sensor drip-proof.
Two types of stainless mounting flanges are provided.

Model identification

LT1-□□□□

- L: lead wire type
- R: connector type
- C: cable type

Measurement stroke

Series

Specifications

Excitation	
Voltage	5Vrms
Frequency	5KHz

Linearity: ±0.2% for the entire stroke

Range of working temperature: −20°C ~ +125°C

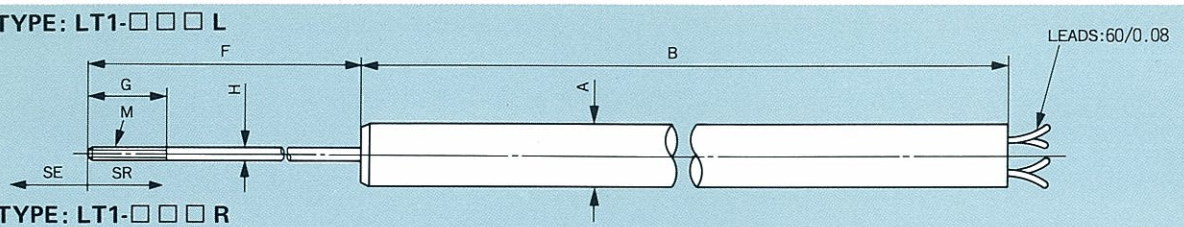
Characteristics

Measurement stroke mm	Output (TYP.) V*	Impedance ohms		Phase angle (lag) deg.	Temperature coefficient ppm/°C
		Primary	Secondary		
60(± 30)	1.02	190	14	6.5	±100
90(± 45)	1.02	170	14	7.0	± 50
120(± 60)	1.01	175	17	8.5	± 50
160(± 80)	0.99	220	20	10.0	± 50
220(±110)	1.02	175	20	10.5	± 50
270(±135)	1.02	180	24	12.0	± 50
330(±165)	1.00	220	28	13.0	± 50
380(±190)	0.99	235	31	13.5	± 50
440(±220)	1.02	235	37	14.0	± 50

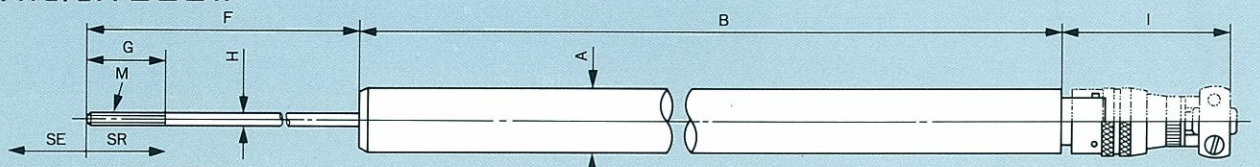
*Output voltage for one half of each measurement stroke.

Appearance and Dimensions

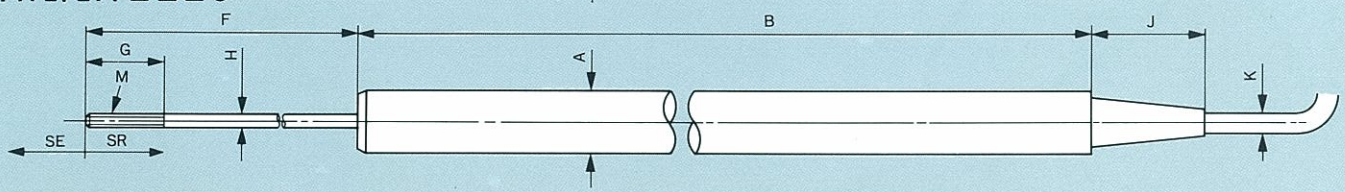
TYPE: LT1-□□□L



TYPE: LT1-□□□R



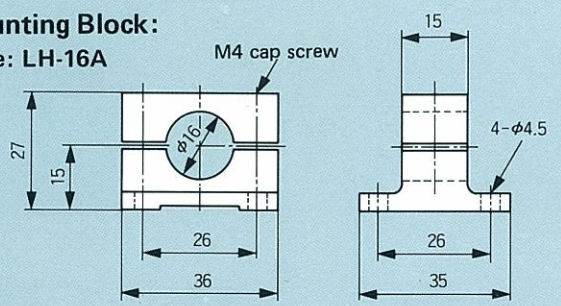
TYPE: LT1-□□□C



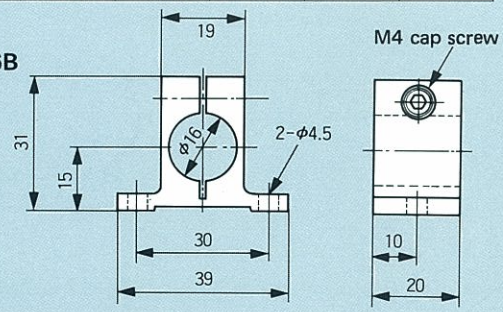
TYPE	L	R	C					L	R & C			
LINEAR STROKE(±mm)	B			A	M	H	G	F		I	J	K
60(± 30)	111	127	136					60	68			
90(± 45)	146	162	171					75	87			
120(± 60)	176	195	204					90	105			
160(± 80)	222	246	255					110	130			
220(±110)	288	320	329	$16_{-0.02}^{0}$	M3	3.0	20	140	168	43	35	5.2
270(±135)	340	378	387					165	199			
330(±165)	408	454	463					195	237			
380(±190)	462	513	522					220	268			
440(±220)	524	582	591					250	305			

■ Mounting Block:

Type: LH-16A

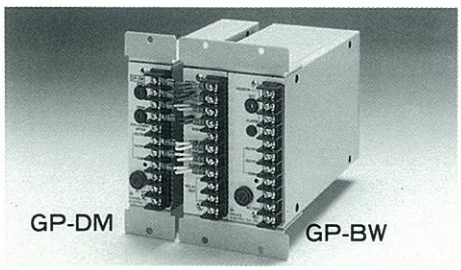


Type: LH-16B

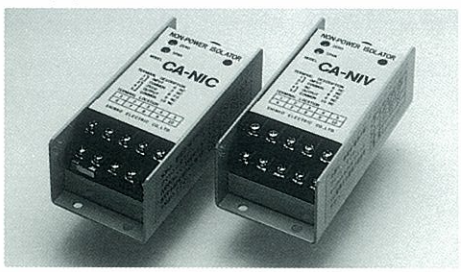


Related Products

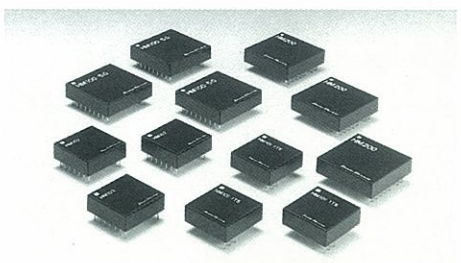
GP-DM series • GP-BW series
Displacement meter Disconnection detection unit



CA-NIC·NIV series
Roop-powered Isolator



HM series
Modules for sensor and signal processing



*The specifications in this catalogue may be changed without notice.