RECTILINEAR DISPLACEMENT TRANSDUCER



LT

### Main features

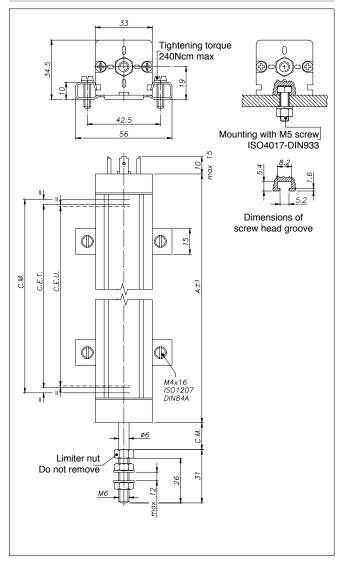
- The transducer has been improved in order to guarantee greater reliability under all conditions
- A sturdier structure makes the LT series even stronger for applications with heavy vibration
- Installation is made simpler by the absence of electrical signal variation in output, outside the Theoretical Electrical Stroke
- The new grooves provide an excellent alternative to the usual system of fastening with brackets
- Ideal for applications on plastic injection presses, vertical presses, and on many other processing machines

## **TECHNICAL DATA**

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Useful electrical stroke (C.E.U.)	50/75/100/130/150/175/200/225/275/300/ 350/375/400/450/500/600/650/750/900						
Independent linearity	± 0.05%						
(within C.E.U.)							
Resolution	Infinite						
Repeatability	0.01 mm						
Electrical connections LTM	4-pole connector DIN43650						
LTH							
LTB	5-pole connector DIN43322						
LTF	1 meter 3-pole shielded cable						
Displacement speed	Standard ≤ 10 m/s						
Protection level	IP60 (IP65 on request)						
	> 25x10 <sup>6</sup> m strokes, or						
Life	$> 100x10^6$ maneuvers, whichever is less						
	(within C.E.U.)						
Displacement force	3,5N (typical) IP60 version 15N (typical) IP65 version						
	52000Hz,						
Vibrations	Amax =0.75 mm						
	amax. = 20 g						
Shock	50 g, 11ms.						
Acceleration	200 m/s² max (20g)						
Tolerance on resistance	± 20%						
Recommended cursor current	< 0.1 µA						
Maximum cursor current	10mA						
Maximum applicable voltage	60V						
Electrical isolation	>100MΩ at 500V=, 1bar, 2s						
Dielectric strength	< 100µA at 500V~, 50Hz, 2s, 1bar						
Dissipation at 40°C (0W at 120°C)	3W						
Thermal coefficient of resistance	-200+ 200 ppm/°C typical						
Actual Temperature Coefficient							
of the output voltage	≤ 5 ppm/°C typical						
Working temperature	-30+100°C						
Storage temperature	-50+120°C						
Material for transducer case	Anodised aluminium Nylon 66 G						
Material for pull shaft	Stainless steel AISI 303						
Mounting	Brackets with adjustable distance betwe- en centers or with M5 screw ISO4017- DIN933						

## **MECHANICAL DIMENSIONS**

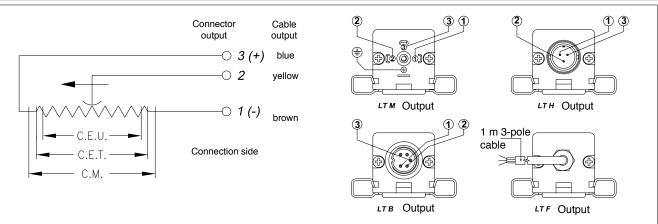


**Important**: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor lc  $\leq$  0.1  $\mu$ A

# **ELECTRICAL / MECHANICAL DATA**

MODEL		50	75	100	130	150	175	200	225	275	300	350	375	400	450	500	600	650	750	900
Useful electric stroke (C.E.U.) +3/-0	mm	50	75	100	130	150	175	200	225	275	300	350	375	400	450	500	600	650	750	900
Theoretical electrical stroke (C.E.T.) ±1	mm	C.E.U. + 3				C.E.U. + 4			355	380	406	457	508	609	660	762	914			
Resistance (C.E.T.)	kΩ		5					5			5	5	5	5	5	5	5	10	10	
Mechanical stroke (C.M.)	mm		C.E.U. + 9				C.E.U. + 10			361	386	412	463	518	619	670	772	924		
Case length (A)	mm		C.E.U. + 63					C.E.U	. + 64		415	440	466	517	572	673	725	826	978	

# **ELECTRICAL CONNECTIONS**



### INSTALLATION INSTRUCTIONS

- · Make the specified electrical connections (DO NOT use the transducer as a variable resistance)
- When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise above 99% of the voltage level.

Displacement transducer	LT	]		
4-pole connector output DIN43650 ISO4400	м	No certificate attached Linearity curve to be	0 L	
3-pole connector output	н	attached	0	
5-pole connector output DIN43322	В	Cable length: 2 m	2	-
3-pole PVC cable output 3x0,25 1m	F	Cable length: 3 m Other lengths on request		
Model		 Color of plastic heads		
IP60 version	S	(green)	0	
IP65 version	P			

### Example:LT - M - 0300 - S 000X000X00

LTdisplacement transducer, 4-pole connector output DIN43650 - ISO 4400, useful electrical stroke (C.E.U.) 300mm. IP60 protection, no certificate attached, green plastic components.

## ACCESSORIES

**ORDER CODE** 

STANDARD	Code
LT mounting kit, 2 brackets, screws	PKIT009
ON REQUEST	Code
LTM 4-pole 90° radial female connector DIN43650 IP65 PG9 clamp for ø6-ø8mm cable	CON006
LTH 3-pole axial female connector IP40 clamp for ø4-ø6mm cable	CON002
LTB 5-pole axial female connector DIN43322 IP40 clamp for ø4-ø6mm cable	CON011
LTB 5-pole axial female connector DIN43322IP65 PG7 clamp for ø4-ø6mm cable	CON012
LTB 5-pole 90° radial female connector DIN43322 IP40 clamp for ø4-ø6mm cable	CON013
Ball connection joint	PKIT015

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice

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