# GEFRAN

## RECTILINEAR DISPLACEMENT TRANSDUCER



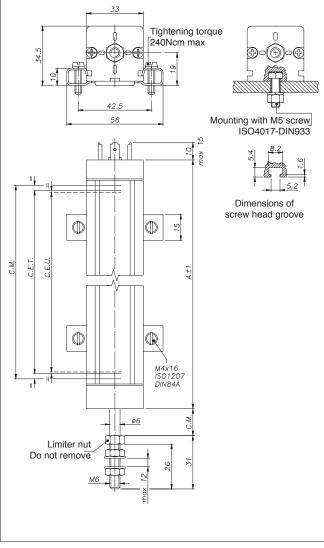
#### Main features

- 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**

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 (within C.E.U.)	± 0.05%							
Resolution	Infinite							
Repeatability	0.01 mm							
Electrical connections LTM	4-pole connector DIN43650							
LTH	3-pole connector							
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 <sup>6</sup> 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	$>$ 100M $\Omega$ 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	F ppm/9C typical							
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**

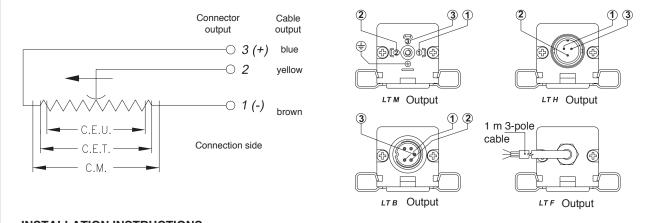


**Important**: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor lc  $\leq$  0.1  $\mu A$ 

## **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		

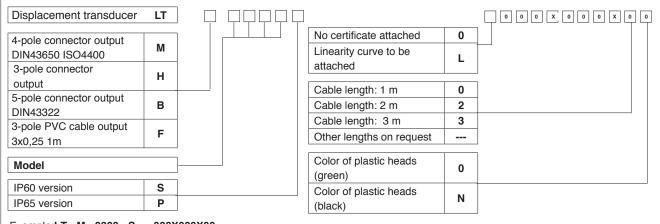
## **ELECTRICAL CONNECTIONS**



#### · 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.

#### **ORDER CODE**



#### 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**

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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