## **GEFRAN**

# RECTILINEAR DISPLACEMENT TRANSDUCER



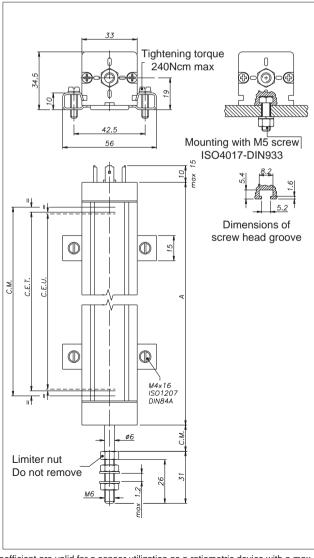
#### Main features

- 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/								
In dependent lineauts.	600/650/750/900								
Independent linearity (within C.E.U.)	± 0.05%								
Resolution	infinite								
Repeatability	0.01mm								
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 ≤ 10m/s								
Protection level	IP60 (IP65 on request)								
I ife	>25x10 <sup>6</sup> m strokes, or								
	100x106 maneuvers, whichever								
	is less (within C.E.U.)								
Displacement force	≤ 2N IP60 version								
Ziopiacomenticio	≤ 10N IP65 version								
Vibrations	52000Hz, Amax =0.75 mm								
Visitationio	amax. = 20 g								
Shock	50 g, 11ms.								
Acceleration	200 m/s² max (20g)								
Tolerance on resistance	± 20%								
Recommended cursor									
current	< 0,1 μΑ								
Maximu									
cursor	10mA								
current	10111/1								
Maximum applicable voltage	60V								
Electrical isolation	>100MΩ at 500V=, 1bar, 2s								
Dielectric strength	< 100 μA at 500V~ ,50Hz, 2s,								
1bar	γου μεται σου ν ,σοι 12, 25,								
Dissipation at 40°C	3W								
(0W at 120°C)	300								
Thermal coefficient	-200+ 200 ppm/°C typical								
of resistance	200 m 200 pp 0 typica.								
Actual Temperature Coefficient	≤ 5ppm/°C typical								
of the output voltage	Sppm/°C typical								
Working temperature	-30+100°C								
Storage temperature	-50+120°C								
Material for transducer case	Anodised aluminium Nylon 66 G 25								
	-								
Material for pull shaft	Stainless steel AISI 303								
Mounting	Brackets with adjustable distance								
	between centers or with M5 screw								
	ISO4017-DIN933								

### **MECHANICAL DIMENSIONS**

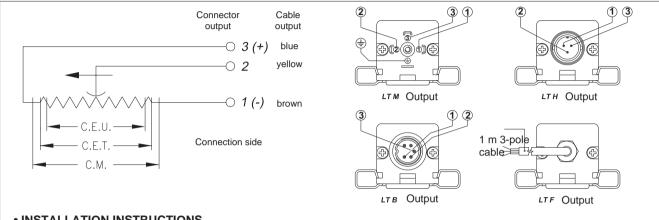


Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor Ic  $\leq$  0.1  $\mu$ A

#### **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		

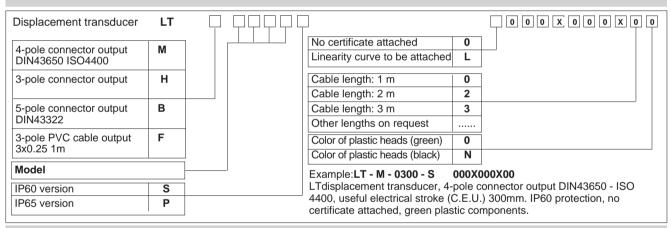
#### **ELECTRICAL CONNECTIONS**



#### • 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**



#### **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



Internet: http://www.gefran.com