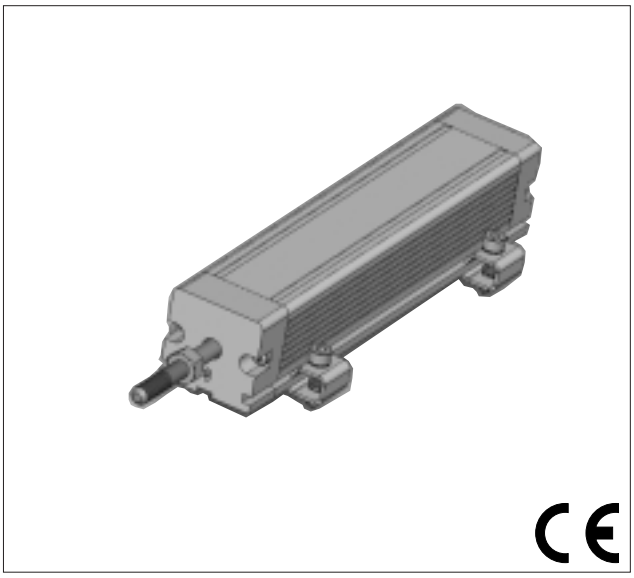
GEFRAN

LTC

RECTILINEAR DISPLACEMENT TRANSDUCER



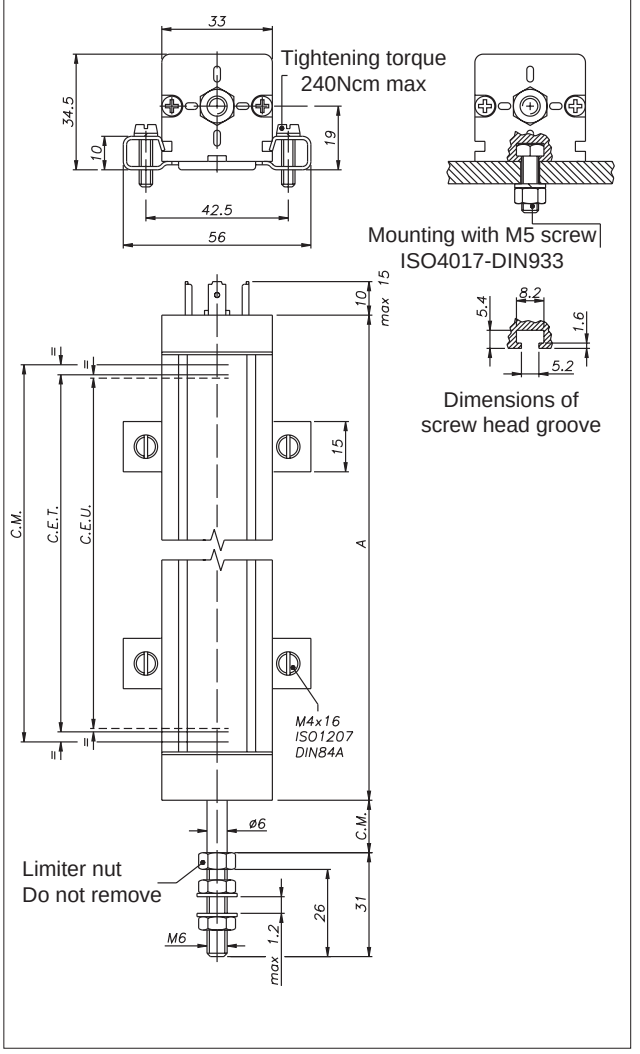
Main features

- *The transducer guarantees greater reliability under all conditions*
- *The mechanical structure makes the LTC suitable for applications with heavy vibration*
- *Installation is made simpler by the absence of electrical signal variation in output, outside the Theoretical Electrical Stroke*
- *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	0.01mm
Electrical connections LTC-M	4-pole connector DIN43650
Displacement speed	Standard ≤ 10m/s
Protection level	IP60
Life	>25x10⁶m strokes, or 100x10⁶ maneuvers, whichever is less (within C.E.U.)
Displacement force	≤ 2N
Vibrations	5...2000Hz, 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
Maximu cursor current	10mA
Maximum applicable voltage	60V
Electrical isolation	>100MΩ at 500V=, 1bar, 2s
Dielectric strength 1bar	< 100 µA at 500V~ ,50Hz, 2s,
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	≤ 5ppm/°C typical
Working temperature	-30...+100°C
Storage temperature	-50...+120°C
Material for transducer case	Painted aluminium, Nylon 66 G 25
Material for pull shaft	C45 CHROME STEEL 20µm
Mounting	Brackets with adjustable distance between centers or with M5 screw ISO4017-DIN933

MECHANICAL DIMENSIONS

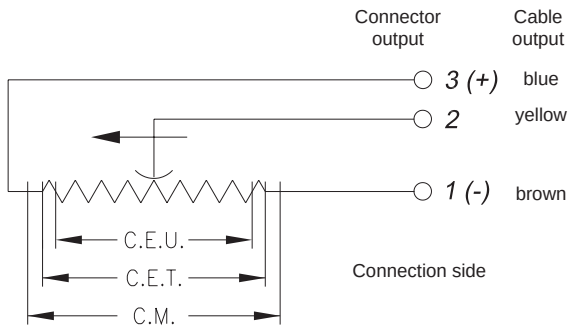


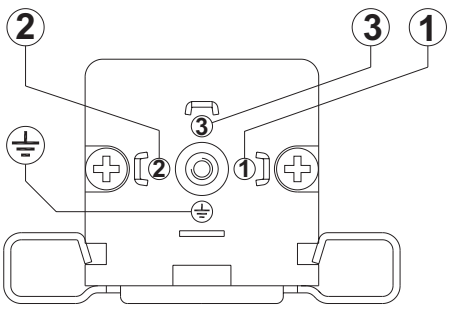
Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor Ic ≤ 0.1 µA

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

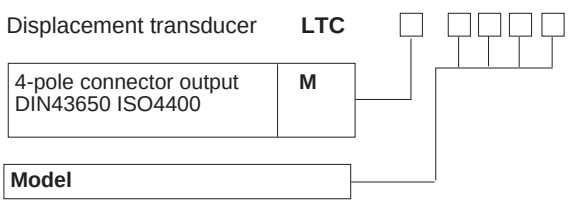




LTC-M Output

- **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: **LTC-M-0300**

LTC displacement transducer, 4-pole connector output DIN43650 - ISO 4400, useful electrical stroke (C.E.U.) 300mm.

ACCESSORIES

INCLUDED IN THE PACKAGE	**Code**
LTC mounting kit, 2 brackets, screws	**PKIT009**
ON REQUEST	**Code**
LTC-M 4-pole 90° radial female connector DIN43650 IP65 PG9 clamp for ø6-ø8mm cable	**CON006**
Ball connection joint	**PKIT015**

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

GEFRAN spa
via Sebina, 74
25050 PROVAGLIO D'ISEO (BS) - ITALIA
tel. 0309888.1 - fax. 0309839063
Internet: http://www.gefran.com