

GEFRAN

LT67

RECTILINEAR DISPLACEMENT TRANSDUCER
WITH IP67 PROTECTION



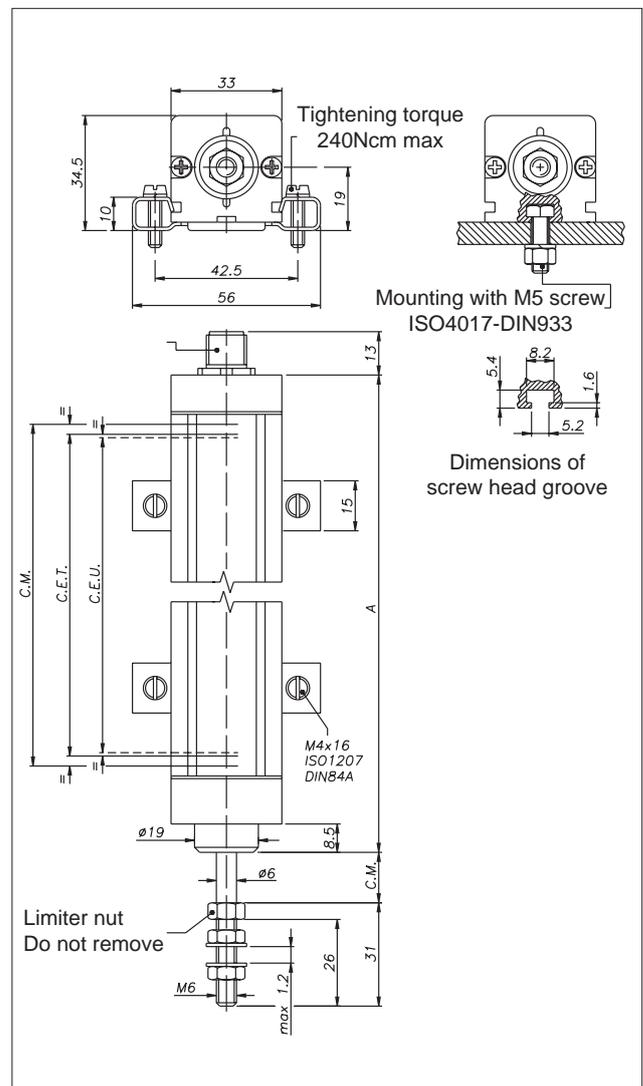
Main features

- This transducer is designed to guarantee a high protection level (IP67) in applications under harsh conditions and outdoors, where it may be necessary to work in the direct presence of dust, dirt, or liquids (not in prolonged immersion)
- The grooves on the profile provide an excellent alternative to the usual system of fastening with brackets
- Ideal for applications on plastic injection presses with installation at points that are highly exposed to lubricants
- Also indicated for processing machines on which the transducer cannot be protected by guards

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	± 0.075% for strokes ≤ 150mm
Repeatability	infinite
Electrical connection	0.01mm
Protection level	M12 4-pole connector
Life (NOT used in prolonged immersion)	IP67 (use M12 4-pole female connector with IP67 or higher protection level)
Displacement speed	> 25x10 ⁶ m strokes, or > 100x10 ⁶ maneuvers, whichever is less (within C.E.U.)
Displacement force	Standard ≤ 3 m/s max ≤ 5 m/s
Vibrations	≤ 20N
Shock	5...2000Hz, Amax = 0.75 mm amax. = 20 g
Acceleration	50 g, 11ms.
Tolerance on resistance	200 m/s ² max (20g)
Recommended cursor current	± 20%
Maximum cursor current	< 0,1 µA
Maximum applicable voltage	10mA
Electrical isolation	60V
Dielectric strength	>100MΩ at 500V=, 1bar, 2s
Dissipation at 40°C (0W at 120°C)	< 100 µA at 500V-, 50Hz, 2s, 1bar
Thermal coefficient of resistance	3W
Actual Temperature Coefficient of the output voltage	-200...+ 200 ppm/°C typical
Working temperature	≤ 5ppm/°C typical
Storage temperature	-30...+100°C
Material for transducer case	-50...+120°C
Material for pull shaft	Anodised aluminium Nylon 66 G 25
Mounting	C45 chrome steel 20µm
	Brackets with adjustable distance between centers or with M5 screw ISO4017-DIN933

DIMENSIONI MECCANICHE



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 $I_c \leq 0.1 \mu A$

ELECTRICAL / MECHANICAL DATA

MODELLO		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. + 71.5					C.E.U. + 72.5					423.5	448.5	474.5	525.5	580.5	681.5	733.5	834.5	986.5

Note: It is recommended to keep the sliding parts lubricated, at least every 6 months.

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.

Connector output

○ 4 nc
○ 3 (+)
○ 2
○ 1 (-)

Connection side

C.E.U.
C.E.T.
C.M.

ORDER CODE

Displacement transducer **LT67**

Model

No certificate attached	0
Linearity curve to be attached	L
Color of plastic heads (green)	0
Color of plastic heads (black)	N

0 0 0 X 0 0 0 X 0

Example: **LT67 - 0300 0000X000X00**
 LT67 displacement transducer, M12 4-pole connector output, useful electrical stroke (C.E.U.) 300mm., no certificate attached, green plastic components.

ACCESSORIES

STANDARD		Code
LT mounting kit, 2 brackets, screws		PKIT009
A RICHIESTA		Code
M12 4-pole axial female connector, IP67-IEC48B clamp for ø6-ø8mm cable		CON293
M12 4-pole 90° radial female connector, IP67		CON050
Ball connection joint		PKIT015

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