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

MECHANICAL DIMENSIONS



TECHNICAL DATA

GEFRAN

Useful electrical	50/75/100/130/150/175/200/225/
stroke (C.E.U.)	275/300/350/375/400/450/500/
	600/650/750/900
Independent linearity	± 0.05%
(within C.E.U.)	
Resolution	infinite
Repeatability	0.01mm
Electrical connection	M12 4-pole connector
Protection level	IP67 (use M12 4-pole
	female connector with IP67
	or higher protection level)
Life	> 25x10°m strokes. or
(NOT used in	> 100x10 ⁶ maneuvers, whichever
prolonged immersion)	is less (within C.E.U.)
Displacement speed	Standard $\leq 3 \text{ m/s max} \leq 5 \text{ m/s}$
Displacement force	< 20N
Vibrations	5 2000Hz Amax = 0.75 mm
	amax = 20 g
Shock	50 g 11ms
Acceleration	$200 \text{ m/s}^2 \text{ max} (200)$
Tolerance on resistance	+ 20%
Becommended cursor	
current	< 0,1 μΑ
Maximum cursor current	10mA
Maximum applicable voltage	60V
Electrical isolation	>100MΩ at 500V=. 1bar. 2s
Dielectric strength	$< 100 \text{ µA at } 500 \text{ V} \sim 50 \text{ Hz}$ 2s 1bar
Dissipation at 40°C	2)W
(0W at 120°C)	300
Thermal coefficient	-200 + 200 ppm/°C typical
of resistance	
Actual Temperature Coefficient	< Epom/°C typical
of the output voltage	s 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 null shaft	C45 chrome steel 20um
Mounting	Brackets with adjustable distance
	between centers or with M5 screw
	ISO4017-DIN933

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 μ 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.	J. + 3	3			C.E.l	J. + 4		355	380	406	457	508	609	660	762	914
Resistance (C.E.T.)	kΩ				5				5	5		5	5	5	5	5	5	5	10	10
Mechanical stroke (C.M.)	mm			C.E.	J. + 9	9		(C.E.U	. + 1()	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 lubrificated, with a lubricant general purpose 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.

ORDER CODE

Displacement transducer LT67	No certificate attached 0 Linearity curve to be attached L							
	Color of plastic heads (green) 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
ON REQUEST	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



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