GEFRAN BEYOND TECHNOLOGY

LT Series Linear Potentiometers



Features

- Excellent reliability under all conditions
- Suitable for use in applications with heavy vibration
- Designed for easy installation thanks to an absence of electrical signal variation in output
- Mounting grooves provide a good alternative to fastening with brackets
- Typical applications include plastic injection presses, vertical presses, and many other types of processing machinery
- All potentiometers are individually tested at the manufacturer, and an individualized Linearity Error Chart is included with each unit

LT Series Linear Potentiometers Selection Chart							
Part Number	Price	Drawing Link	Useful Electrical Stroke (CEU) mm [in]	Theoretical Electrical Stroke (CET) mm [in]	Resistance	Mechanical Stroke (CM) mm [in]	Case Length (A) mm [in]
LT-M-0050-S-L	\$160.00	PDF	50 [1.97]	53 [2.09]	5ΚΩ	59 [2.32]	113 [4.45]
LT-M-0075-S-L	\$169.00	PDF	75 [2.95]	78 [3.07]	5ΚΩ	84 [3.31]	138 [5.43]
LT-M-0100-S-L	\$172.00	PDF	100 [3.94]	103 [4.06]	5ΚΩ	109 [4.29]	163 [6.42]
LT-M-0130-S-L	\$180.00	PDF	130 [5.12]	133 [5.24]	5ΚΩ	139 [5.47]	193 [7.60]
LT-M-0150-S-L	\$188.00	PDF	150 [5.91]	153 [6.02]	5ΚΩ	159 [6.26]	213 [8.39]
LT-M-0175-S-L	\$193.00	PDF	175 [6.89]	178 [7.01]	5ΚΩ	184 [7.24]	238 [9.37]
LT-M-0200-S-L	\$196.00	PDF	200 [7.87]	204 [8.03]	5ΚΩ	210 [8.27]	264 [10.39]
<u>LT-M-0250-S-L</u>	\$219.00	PDF	250 [9.84]	254 [10.00]	5ΚΩ	260 [10.24]	314 [12.36]
LT-M-0300-S-L	\$222.00	PDF	300 [11.81]	304 [11.97]	5ΚΩ	310 [12.20]	364 [14.33]
LT-M-0400-S-L	\$311.00	PDF	400 [15.75]	406 [15.98]	5ΚΩ	412 [16.22]	466 [18.35]

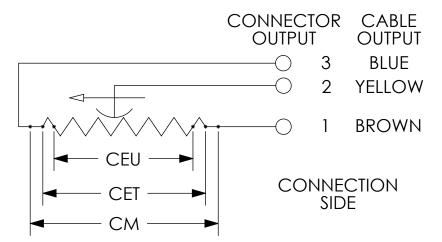
LT Series Linear Potentiometers Specifications					
Independent Linearity (Within CEU)	± 0.05%				
Resolution	Infinite				
Repeatability	0.01 mm [0.0004 in]				
Electrical Connections	4 pole connector DIN43650				
Displacement Speed	Standard ≤ 10 m/s [32.81 ft/s]				
Protection Level	IP60				
Life	> 25x106 strokes or > 100x106 maneuvers, whichever is less (within CEU)				
Displacement Force	3.5 N (typical) IP60 version, 15N (typical) IP65 version				
Vibrations	5-2000 Hz: Amax=0.75 mm [0.03 in], amax=20g				
Shock	50g, 11ms				
Acceleration	200 m/s2 max (20g)				
Tolerance on Resistance	±20%				
Recommended Cursor Current	< 0.1 μΑ				
Maximum Cursor Current	10mA				
Maximum Applicable Voltage	60V				
Electrical Isolation	> 100MΩ at 500V=, 1bar, 2s				
Dielectric Strength	< 100µA at 500V∼, 50Hz, 2s, 1bar				
Dissipation at 40 °C [104 °F] (0W at 120 °C [248 °F])	3W				
Thermal Coefficient of Resistance	-200 to +200 ppm/°C typical				
Actual Temperature Coefficient of Output Voltage	≤ 5 ppm/°C typical				
Working Temperature	-30 to +100°C [-22 to +212°F]				
Storage Temperature	-50 to +120°C [-58 to 248°F]				
Case Material	Anodized aluminum, Nylon 66				
Shaft Material	Stainless steel AISI 303				
Mounting	Brackets with adjustable distance between centers, or with M5 screw ISO4017-DIN933				

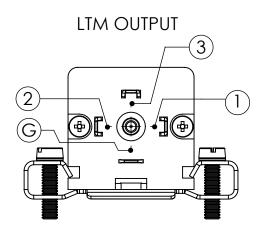
www.automationdirect.com Linear Position Sensors tLPS-11



EFRAN LT Series Linear Potentiometers

Electrical Connections





When choosing a transducer, it is important to remember that three different strokes exist:
• Mechanical Stroke (CM): The actual shift that the transducer's cursor (wiper) is able to make.

- Useful Electrical Stroke (CEU): The part of the mechanical stroke in which transducer linearity is guaranteed.
- Theoretical Electrical Stroke (CET): Stroke expressed in mm or angular degrees between the electrical zero (Vout=0) and the electrical limit switch (Vout=Vs), which physically is equal to the distance between the silver pitches at the ends of the resistive track.

Therefore, when designing an application, you should choose a transducer with a useful electrical stroke that is equal to or greater than the maximum displacement carried out by the moving part.

www.automationdirect.com **Linear Position Sensors** tLPS-12



GEFRAN Linear Potentiometer Accessories

Connectors For Gefran Linear Potentiometers							
Part Number	Price	Drawing Link	rawing Link Description Number of				
CON006-1KJ	\$8.00	PDF	Gefran field wireable connector, 18mm DIN 43650 Form A, 90-degree cable entry, 4-pole. For use with Gefran LT, PK and WPG linear position sensors.	4			
CON008-1KJ	\$8.00	PDF	Gefran field wireable connector, 9.4mm DIN 43650 Form C, 90-degree cable entry, 4-pole. For use with Gefran PC series potentiometers.	4			



CON008-1KJ



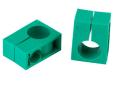
Mounting Brackets and Accessories For Gefran Linear Potentiometers					
Part Number	Price	Description			
PKIT009-1KJ	\$12.00	Gefran mounting brackets, for use with Gefran LT Series potentiometers.			
PKIT015-1KJ	\$21.50	Gefran rod eye joint accessory, for use with Gefran LT Series potentiometers.			
PKIT059-1KJ	\$12.00	Gefran mounting brackets, for use with 100 to 900mm Gefran PK Series potentiometers.			
PKIT061-1KJ	\$13.50	Gefran mounting brackets, for use with 1000 to 2000mm Gefran PK Series potentiometers.			
STA074-1KJ	\$5.50	Gefran mounting brackets, for use with Gefran PZ12-S Series potentiometers.			











PKIT015-1KJ PKIT059-1KJ

PKIT061-1KJ

STA074-1KJ

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