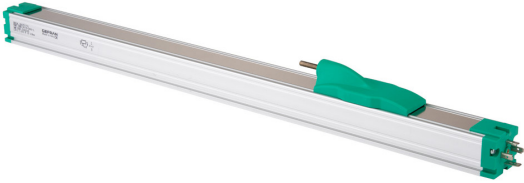


# PK Series Rodless Linear Potentiometers



## Features

- Excellent reliability under all conditions
- Mechanical linkage joint (M5 thread) takes up play
- 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
- Grade of protection: IP40
- All potentiometers are individually tested at the manufacturer, and an individualized Linearity Error Chart is included with each unit



## PK Series Rodless Linear Potentiometers Selection Chart

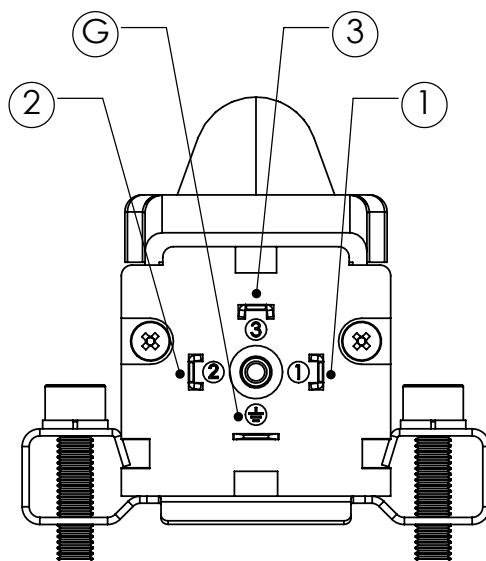
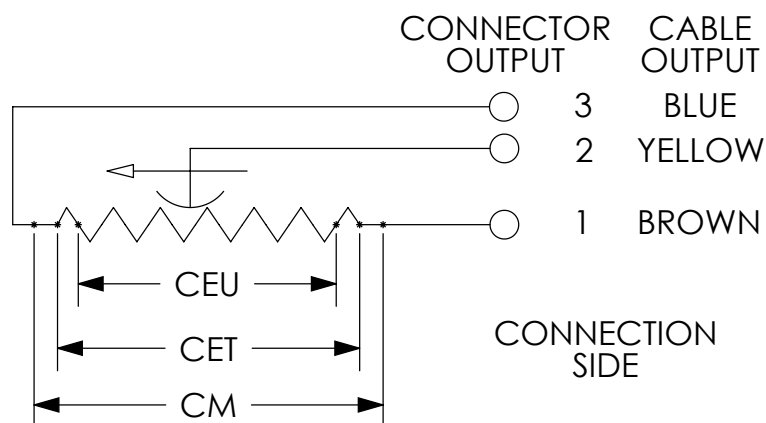
Part Number	Price	Drawing Link	Useful Electrical Stroke (CEU) mm [in]	Theoretical Electrical Stroke (CET) mm [in]	Resistance	Mechanical Stroke (CM) mm [in]	Case Length (A) mm [in]
<a href="#">PK-M-0400-L</a>	\$272.00	<a href="#">PDF</a>	400 [15.75]	406 [15.98]	10KΩ	416 [16.38]	556 [21.89]
<a href="#">PK-M-0500-L</a>	\$304.00	<a href="#">PDF</a>	500 [19.69]	509 [20.04]	10KΩ	519 [20.43]	659 [25.94]
<a href="#">PK-M-0600-L</a>	\$320.00	<a href="#">PDF</a>	600 [23.62]	611 [24.06]	10KΩ	621 [24.45]	761 [29.96]
<a href="#">PK-M-0700-L</a>	\$335.00	<a href="#">PDF</a>	700 [27.56]	713 [28.07]	10KΩ	723 [28.46]	863 [33.98]
<a href="#">PK-M-0800-L</a>	\$368.00	<a href="#">PDF</a>	800 [31.50]	815 [32.09]	10KΩ	825 [32.48]	965 [37.99]
<a href="#">PK-M-0900-L</a>	\$381.00	<a href="#">PDF</a>	900 [35.43]	915 [36.02]	10KΩ	925 [36.42]	1065 [41.93]
<a href="#">PK-M-1000-L</a>	\$484.00	<a href="#">PDF</a>	1000 [39.37]	1017 [40.04]	10KΩ	1027 [40.43]	1167 [45.94]

## PK Series Rodless 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	IP40
Life	—
Displacement Force	≤ 1.2 N
Vibrations	5-2000 Hz: Amax=0.75 mm [0.03 in], amax=20g
Shock	50g, 11ms
Acceleration	200 m/s <sup>2</sup> max (20g)
Tolerance on Resistance	±20%
Recommended Cursor Current	< 0.1 μA
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 variable longitudinal axis with M6 screw ISO4017-DIN933

# PK Series Rodless 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 ( $V_{out}=0$ ) and the electrical limit switch ( $V_{out}=V_s$ ), 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.

# Linear Potentiometer Accessories

## Connectors For Gefran Linear Potentiometers

Part Number	Price	Drawing Link	Description	Number of Poles
<a href="#"><u>CON006-1KJ</u></a>	\$8.00	<a href="#"><u>PDF</u></a>	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
<a href="#"><u>CON008-1KJ</u></a>	\$8.00	<a href="#"><u>PDF</u></a>	Gefran field wireable connector, 9.4mm DIN 43650 Form C, 90-degree cable entry, 4-pole. For use with Gefran PC series potentiometers.	4

[CON006-1KJ](#)

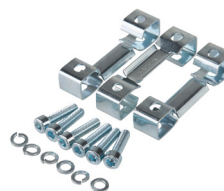
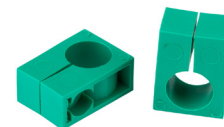
[CON008-1KJ](#)


## Mounting Brackets and Accessories For Gefran Linear Potentiometers

Part Number	Price	Description
<a href="#"><u>PKIT009-1KJ</u></a>	\$12.00	Gefran mounting brackets, for use with Gefran LT Series potentiometers.
<a href="#"><u>PKIT015-1KJ</u></a>	\$21.50	Gefran rod eye joint accessory, for use with Gefran LT Series potentiometers.
<a href="#"><u>PKIT059-1KJ</u></a>	\$12.00	Gefran mounting brackets, for use with 100 to 900mm Gefran PK Series potentiometers.
<a href="#"><u>PKIT061-1KJ</u></a>	\$13.50	Gefran mounting brackets, for use with 1000 to 2000mm Gefran PK Series potentiometers.
<a href="#"><u>STA074-1KJ</u></a>	\$5.50	Gefran mounting brackets, for use with Gefran PZ12-S Series potentiometers.


[PKIT009-1KJ](#)

[PKIT015-1KJ](#)

[PKIT059-1KJ](#)

[PKIT061-1KJ](#)

[STA074-1KJ](#)