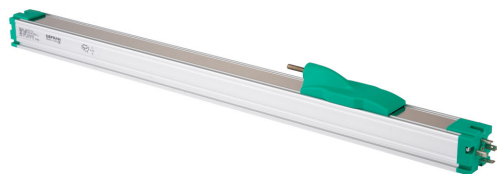


PK Series Rodless Linear Potentiometers

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

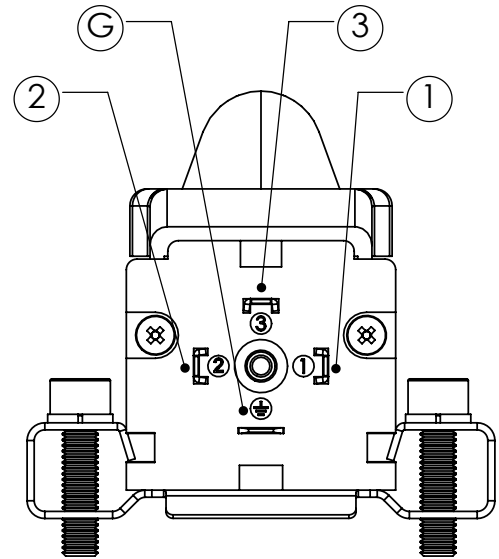
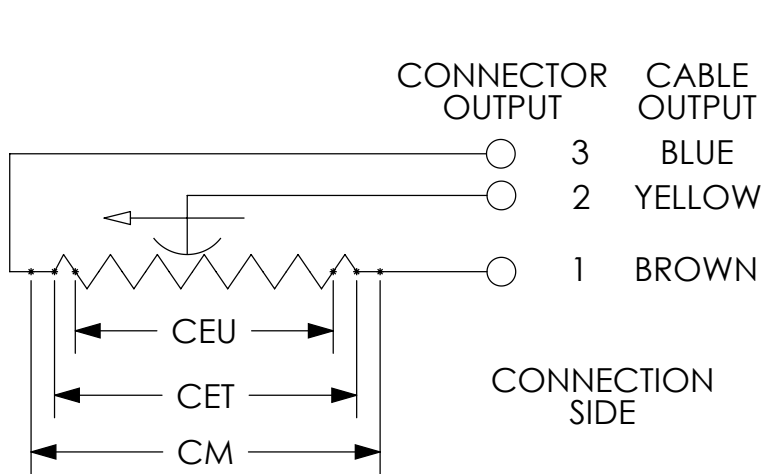
| Part Number | Price | Drawing Link | Useful Electrical Stroke (CEU) mm [in] | Theoretical Electrical Stroke (CET) mm [in] | Resistance | Mechanical Stroke (CM) mm [in] | Case Length (A) mm [in] |
|-----------------------------|----------|---------------------|--|---|------------|--------------------------------|-------------------------|
| PK-M-0400-L | \$253.00 | PDF | 400 [15.75] | 406 [15.98] | 10KΩ | 416 [16.38] | 556 [21.89] |
| PK-M-0500-L | \$283.00 | PDF | 500 [19.69] | 509 [20.04] | 10KΩ | 519 [20.43] | 659 [25.94] |
| PK-M-0600-L | \$298.00 | PDF | 600 [23.62] | 611 [24.06] | 10KΩ | 621 [24.45] | 761 [29.96] |
| PK-M-0700-L | \$312.00 | PDF | 700 [27.56] | 713 [28.07] | 10KΩ | 723 [28.46] | 863 [33.98] |
| PK-M-0800-L | \$342.00 | PDF | 800 [31.50] | 815 [32.09] | 10KΩ | 825 [32.48] | 965 [37.99] |
| PK-M-0900-L | \$355.00 | PDF | 900 [35.43] | 915 [36.02] | 10KΩ | 925 [36.42] | 1065 [41.93] |
| PK-M-1000-L | \$450.00 | PDF | 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 ² 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.

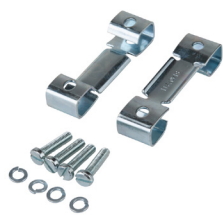
Therefore, when designing an application, you should choose a transducer with a useful electrical stroke that is equal to or greater than the maximum displacement carried out by the moving part.

Linear Potentiometer Accessories

| Connectors For Gefran Linear Potentiometers | | | | |
|---|--------|---------------------|---|-----------------|
| Part Number | Price | Drawing Link | Description | Number of Poles |
| CON006-1KJ | \$7.50 | 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 | \$7.50 | 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 |



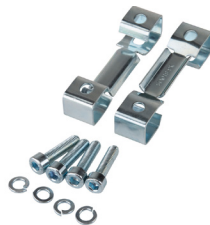
| Mounting Brackets and Accessories For Gefran Linear Potentiometers | | |
|--|---------|---|
| Part Number | Price | Description |
| PKIT009-1KJ | \$11.00 | Gefran mounting brackets, for use with Gefran LT Series potentiometers |
| PKIT015-1KJ | \$20.00 | Gefran rod eye joint accessory, for use with Gefran LT Series potentiometers |
| PKIT059-1KJ | \$11.00 | Gefran mounting brackets, for use with 100 to 900mm Gefran PK Series potentiometers |
| PKIT061-1KJ | \$14.00 | Gefran mounting brackets, for use with 1000 to 2000mm Gefran PK Series potentiometers |
| STA074-1KJ | \$5.00 | Gefran mounting brackets, for use with Gefran PZ12-S Series potentiometers |



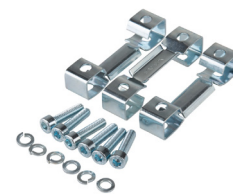
PKIT009-1KJ



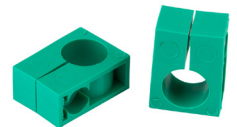
PKIT015-1KJ



PKIT059-1KJ



PKIT061-1KJ



STA074-1KJ