

KPZ Linear Potentiometer Position Sensor

FEATURE:

- Stroke lengths 100 mm
- Linear excellent and High speed
- Resolution rate is higher than 0.01mm
- Protection grade is IP65
- It can move freely within $\pm 12.5^\circ$ with rod end joint
- Can be used in harsh environments such as moisture, oil, dust, etc
- Optional signal converters available: 4–20 mA, 0–5 VDC, or 0–10 VDC outputs



APPLICATION :

WELLTEK products are widely applied in various industrial sectors, especially in the OEM market. These include industries such as:

- Plastics (Injection molding machines)
- Glass manufacturing
- Printing machinery
- Medical equipment
- Wood and coal mining machinery
- Multi-Axial Cutting Machine
- Position Control / Cylinder's Position Sensing
- Automation & Level Control
- Products can be integrated with **PLC industrial control systems, servo systems, frequency converters, and microcontrollers.**

TECHNICAL SPECIFICATION

Measuring stroke	10 to 100 mm					
Repeated	<0.01 mm					
Resolution	Infinity					
Resistance	1 KΩ / 5 KΩ					
Resistance Tolerance	± 20 %					
Load Resistance	100 KΩ					
Allow power supply voltage	28 V Max					
Resistance Output	Supply Voltage	5 V	10 V	12 V	15 V	24V
	Output	0-5 V	0-10V	0-12V	0-15V	0-24V
Special Converter (V/A)	Supply Voltage	12 – 24 VDC		Supply Voltage		12 – 24 VDC
	Output Voltage	0-5 V	0-10V	Output Current		4-20mA
Electrical Connections	Straight Out					
Displacement Speed	< 5 m/s					
Mechanical Life	>30x 10 ⁶					
Shell Size	Ø 12.7 mm					
Shell materials	Anodized Aluminium					
Rod materials	Stainless Steel					
Rod diameter	Ø 5 mm					
Mechanical Fixation	Adjustable Stand / fisheye connection one end					
IP Protection	IP 65					
Operating Temperature	-40 °C to 80°C					

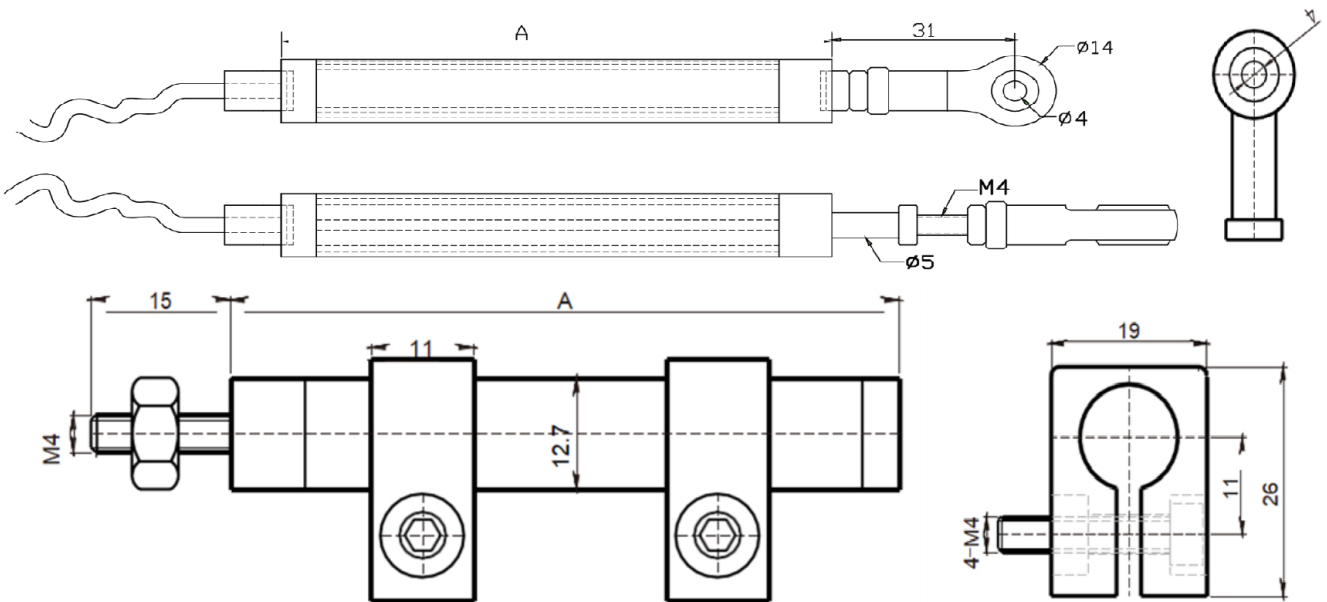
Specifications are subject to change. Please consult Welltek before placing an order.

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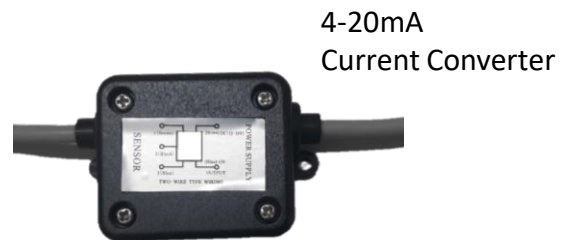
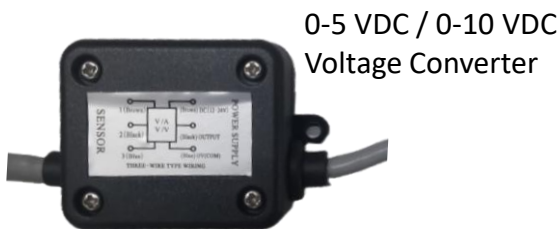
MODEL PARAMETERS

Working range (mm)	10	25	38	50	75	100
Electrical Stroke (± 0.5 mm)	10.5	25.5	38.5	50.5	75.5	101
Standard Resistance (K Ω)	1		5			
Independent Linearity ($\pm$ %)	0.3	0.3	0.3	0.3	0.2	0.15
Shell Length (dimension A) $\pm$ 2 mm	53	68	81	93	118	143
Mechanical stroke (size MT) $\pm$ 2 mm	14	29	42	54.5	79.5	105
Weight (Without accessories) g	59	60	63	125	140	160

DRAWING



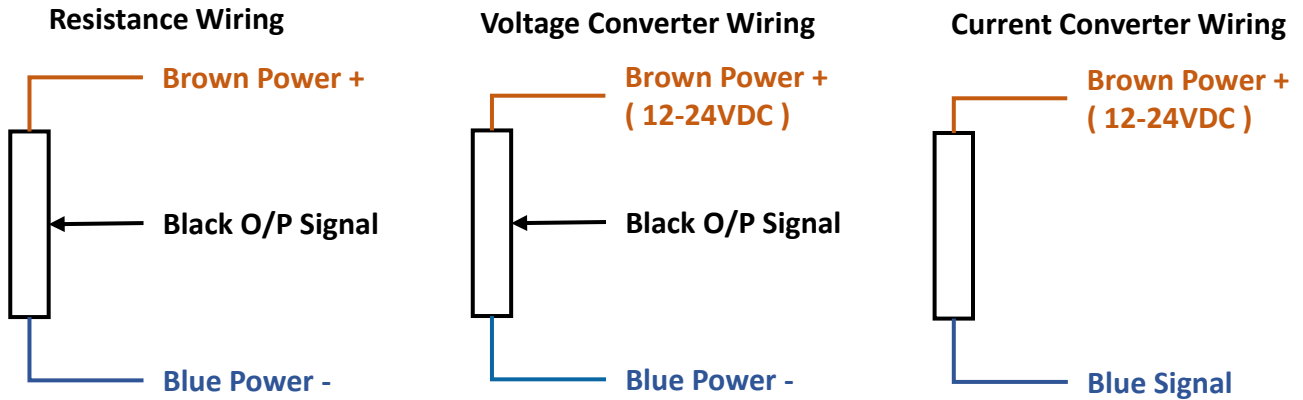
CONVERTER



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OUTPUT WIRING DIAGRAM



ORDER CODE

Scale type	OUTPUT Type	Stroke Length (mm)	Cable Length (meter)
KPZ	R: Resistive	XXX	Omit: Cable length: 1 m
	A2: 4 to 20 mA		02: Cable length: 2 m
	V1: 0 to 5 V DC		03: Cable length: 3 m
	V2: 0 to 10 V DC		04: Cable length: 4 m

Example

- **KPZ-R-25** :KPZ-25 Model with resistive output, 1 meter cable length
- **KPZ-A2-50-02** : KPZ-50 Model with 4 to 20 mA OUTPUT, 2 Meter cable

ACCESSORIES

STANDARD

- KPZ mounting kit (1 Fisheye ball, 2 brackets, 2 screws)

ON REQUEST

- Digital Indicator for Linear Position



Digital Indicator for Linear Position

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