

KTC Bar Linear Sensor

FEATURE:

- Stroke lengths available: 50 mm to 1250 mm
- Long service life: up to 30 million cycles
- High linearity and high-speed operation
- Resolution: better than 0.01 mm
- Standard DIN 43650 plug and socket
- Protection grade: IP65
- 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	50 to 1250 mm					
Repeated	<0.01 mm					
Resolution	Infinity					
Resistance	5 K Ω / 10 K Ω					
Resistance Tolerance	$\pm$ 20 %					
Load Resistance	100 K Ω					
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	Hessman plug					
Displacement Speed	< 5 m/s					
Mechanical Life	>30x 10 ⁶					
Shell Size	32 mm x 32 mm					
Shell materials	Anodized Aluminium					
Rod materials	Stainless Steel					
Rod diameter	$\varnothing$ 6 mm					
Mechanical Fixation	Adjustable Clamp					
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

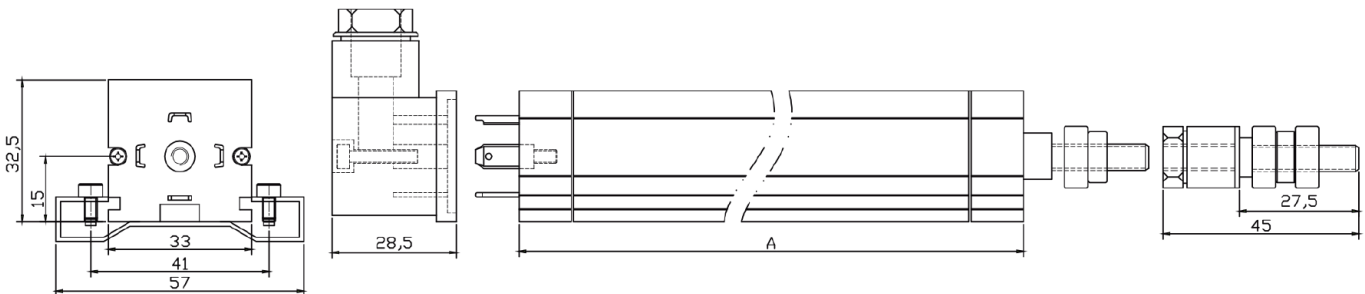
Working range (mm)	50	75	100	125	150	175	200	225	250
Electrical Stroke (± 0.5 mm)	50.5	75.5	101	126	151	176.5	201.5	226.5	252
Standard Resistance (K Ω)	5								
Independent Linearity ($\pm$ %)	0.15	0.15	0.15	0.15	0.1	0.1	0.08	0.08	0.05
Shell Length (dimension A) ± 2 mm	117	142	167	193	218	242	267	292	318
Mechanical stroke (size MT) ± 2 mm	58	82.5	108	133	158	184	209	234	259
Weight (Without accessories) g	148	168	190	210	230	250	272	292	312

Working range (mm)	275	300	325	350	375	400	425	450	475
Electrical Stroke (± 0.5 mm)	277	302	327.5	352.5	377.5	403	428	453.5	478.5
Standard Resistance (K Ω)	5								
Independent Linearity ($\pm$ %)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Shell Length (dimension A) ± 2 mm	343	369	394	419	444	470	495	520	545
Mechanical stroke (size MT) ± 2 mm	284	309	335	360	385	410	436	461	487
Weight (Without accessories) g	332	354	376	398	418	438	459	480	501

Working range (mm)	500	525	550	575	600	650	700	750	800
Electrical Stroke (± 0.5 mm)	503.5	528.5	554	579	604	654	704.5	754.5	805
Standard Resistance (K Ω)	5					10			
Independent Linearity ($\pm$ %)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04
Shell Length (dimension A) ± 2 mm	571	597	623	649	672	723	773	825	874
Mechanical stroke (size MT) ± 2 mm	511	536	562	587	611	661	712	763	812
Weight (Without accessories) g	522	543	564	585	606	648	690	732	772

Working range (mm)	850	900	950	1000	1150	1250			
Electrical Stroke (± 0.5 mm)	850.5	905.5	955.5	1006	1156	1256			
Standard Resistance (K Ω)	10					20			
Independent Linearity ($\pm$ %)	0.04	0.04	0.04	0.04	0.04	0.04			
Shell Length (dimension A) ± 2 mm	925	976	1027	1076	1228	1329			
Mechanical stroke (size MT) ± 2 mm	863	913	964	1013	1165	1266			
Weight (Without accessories) g	814	856	898	936	975	988			

DRAWING



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CONVERTER



0-5 VDC / 0-10 VDC
Voltage Converter

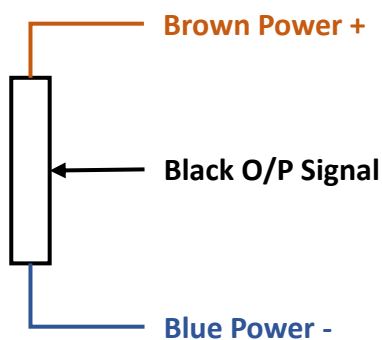


4-20mA
Current Converter

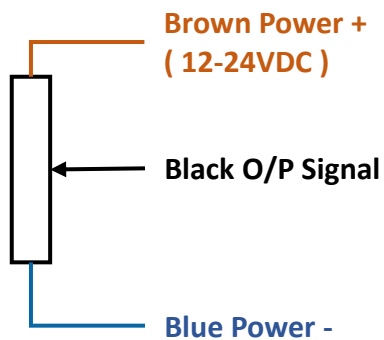


OUTPUT WIRING DIAGRAM

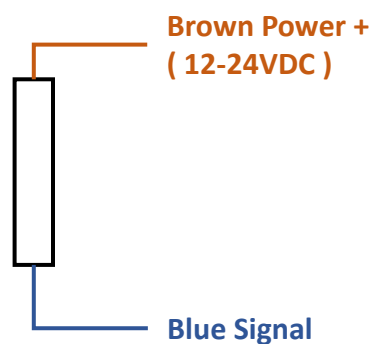
Resistance Wiring



Voltage Converter Wiring



Current Converter Wiring



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ORDER CODE

Scale type	OUTPUT Type	Stroke Length (mm)	Cable Length (meter)
KTC	R: Resistive	XXX	01: 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

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

ACESSORIES

STANDARD

- KTC mounting kit (1 Pull rod ball joint, 2 brackets, 4 screws)

ON REQUEST

- Digital Indicator for Linear Position
- Magnetic Mounting Stand



Digital Indicator for Linear Position



Magnetic Mounting Stand