

KTF Slider Displacement Sensor

FEATURE:

- Stroke lengths available from 50 to 2500 mm
- No pole designs
- Spherical hinge could avoid lateral force
- Long service life: up to 30 million cycles
- Resolution Rate is Higher than 0.01 mm
- Din 43650 Standard Plug and Socket
- Non-Linearity Smaller
- 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
- 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 2500 mm					
Repeated	<0.01 mm					
Resolution	Infinity					
Resistance	5 KΩ / 10 KΩ / 20 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	Hessman plug					
Displacement Speed	< 1.5 m/s					
Mechanical Life	>30x 10 ⁶					
Shell Size	32 mm x 32 mm					
Shell materials	Anodized Aluminium					
Rod materials	Stainless Steel					
Rod diameter	Ø 6 mm					
Mechanical Fixation	Adjustable Clamp					
IP Protection	IP 50					
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

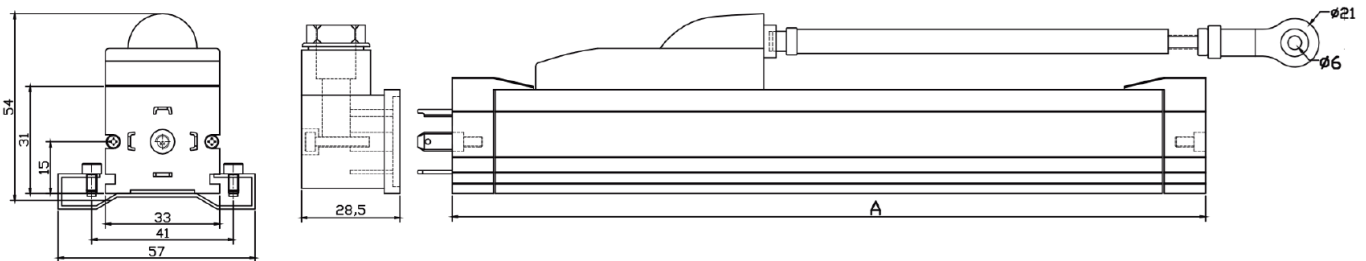
Working range (mm)	50	75	100	125	130	150	175	200	225
Electrical Stroke (± 0.5 mm)	51	76	101	126	131	151	177	202	227
Standard Resistance (K Ω)	5								
Independent Linearity ($\pm$ %)	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.08	0.08
Shell Length (dimension A) ± 2 mm	169	192	217	243	249	268	293	319	344
Mechanical stroke (size MT) ± 2 mm	59	82	108	133	139	158	183	208	233
Weight (Without accessories) g	123	143	165	186	191	208	229	250	272

Working range (mm)	250	275	300	325	350	375	400	425	450
Electrical Stroke (± 0.5 mm)	252	277	302	327	352	378	403	428	453
Standard Resistance (K Ω)	5								
Independent Linearity ($\pm$ %)	0.08	0.08	0.1	0.1	0.1	0.05	0.05	0.1	0.1
Shell Length (dimension A) ± 2 mm	369	394	421	446	471	496	521	546	572
Mechanical stroke (size MT) ± 2 mm	258	283	309	334	359	384	409	434	460
Weight (Without accessories) g	294	316	336	358	380	402	424	446	467

Working range (mm)	475	500	550	600	650	700	750	800	850
Electrical Stroke (± 0.5 mm)	478	504	554	604	654	704	755	805	854
Standard Resistance (K Ω)	5				10				
Independent Linearity ($\pm$ %)	0.1	0.05	0.1	0.1	0.1	0.1	0.04	0.04	0.04
Shell Length (dimension A) ± 2 mm	597	623	698	724	775	826	875	925	975
Mechanical stroke (size MT) ± 2 mm	485	510	585	611	636	661	761	811	861
Weight (Without accessories) g	487	511	533	556	577	598	624	664	714

Working range (mm)	900	1000	1100	1250	1500	1600	1800	2000	2500
Electrical Stroke (± 0.5 mm)	906	1006	1107	1259	1511	1612	1813	2013	2514
Standard Resistance (K Ω)	10	20							
Independent Linearity ($\pm$ %)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Shell Length (dimension A) ± 2 mm	1027	1128	1229	1381	1683	1784	1935	2135	2636
Mechanical stroke (size MT) ± 2 mm	912	1013	1114	1266	1518	1619	1820	2020	2521
Weight (Without accessories) g	720	789	874	962	1136	1237	1344	1518	1830

DRAWING



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CONVERTER



0-5 VDC / 0-10 VDC
Voltage Converter

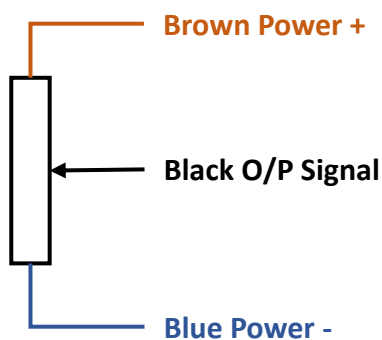


4-20mA
Current Converter

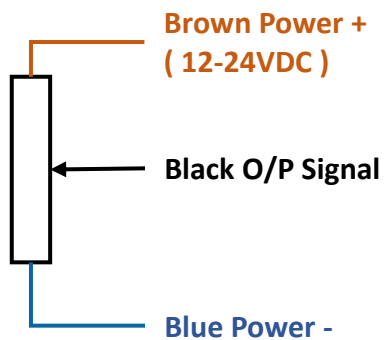


OUTPUT WIRING DIAGRAM

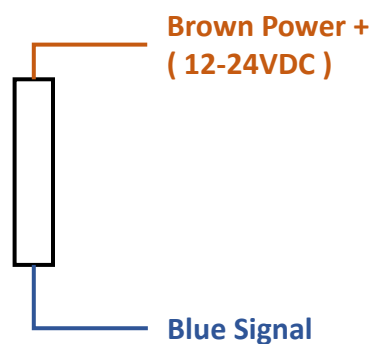
Resistance Wiring



Voltage Converter Wiring



Current Converter Wiring



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ORDER CODE

Scale type	OUTPUT Type	Stroke Length (mm)	Cable Length (meter)
KTF	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

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

ACCESSORIES

STANDARD

- KTF mounting kit (1 Pull rod with Fisheye ball, 2 brackets, 4 screws)

ON REQUEST

- Digital Indicator for Linear Position



Digital Indicator for Linear Position