

Conductive Plastic Potentiometric Position Transducers

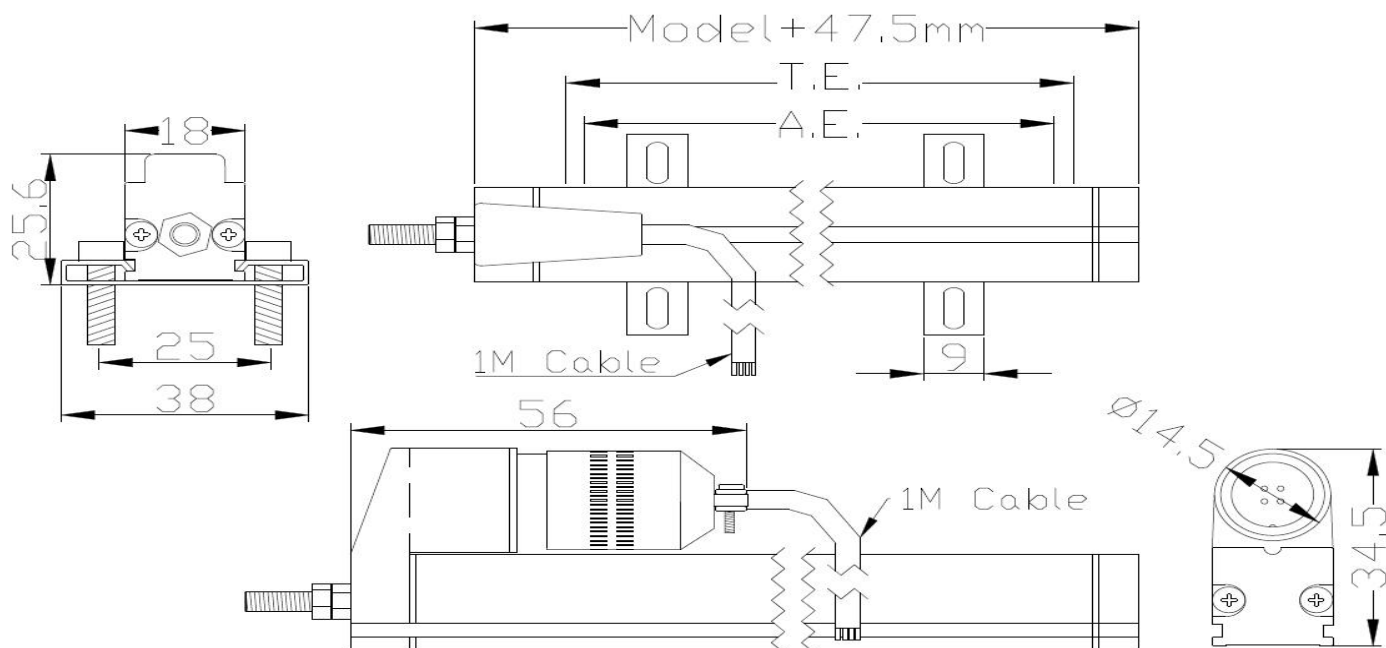
With a housing just 18 mm wide, the KPA1 Series is designed for measuring applications in limited space.

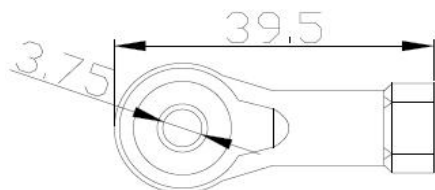
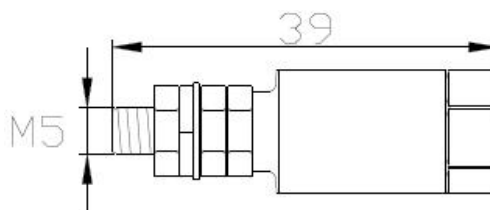
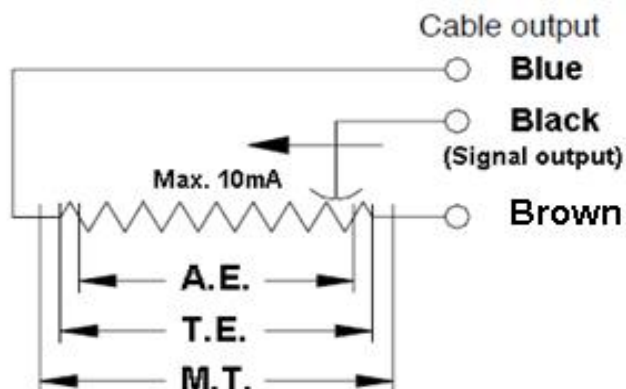
The joint with up-take of slack and M4 threading provides greater tolerances in movement. Careful selection of the materials and high-quality components used in KPA1 potentiometers ensure consistent measurement and reliable operation throughout the service life of the sensor. Special designs with better linearities are available on request.



CE

MECHANICAL DIMENSIONS: (Unit : mm)



COUPLING JOINT

Ball Joint-01

Link Ball-02
ELECTRICAL CONNECTIONS:

ACCESSORIES:

Mounting kit: 2 brackets, 4 screws

Ball connection joint: Ball Joint(01) or Link Ball(02)

4 pole PVC cable(F) or 4 pole connector output(C) 1M Cable.

Blue Wire (-) Brown Wire (+)

M
ELECTRICAL / MECHANICAL DATA

KPA1 series	Model	10	15	25	50	75	100	125	150	175	200	225	250	275	300
Useful electrical stroke (A.E.)	mm	10	15	25	50	75	100	125	150	175	200	225	250	275	300
Resistance (T.E.) $\pm 10\%$	K Ω	1	1	1	5	5	5	5	5	5	5	5	5	5	5
Independent linearity (within A.E.)	+ - %	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Mechanical stroke (M.T.)	mm	A.E.+3mm													
Resolution		infinite													
Repeatability	mm	0.01													
Electrical connections		3 pole PVC cable or 4 pole connector output													
Displacement speed	m/s	≤ 5 (Standard)													
Protection level		IP67													
Life		100×10^6 strokes													
Displacement force	N	1.2													
Vibrations		5 - 2000Hz, $A_{max} = 0.75$ mm, $a_{max} = 20$ g													
Shock		50 g, 11ms													
Recommended cursor current	μA	< 1													



Max. cursor current	<i>mA</i>	10	
Maximum applicable voltage	<i>V</i>	10	50
Electrical isolation	<i>MΩ</i>	>10 @ 500V, 2s, 1bar	
Dielectric strength	<i>μA</i>	< 100 @ 500V~, 50Hz, 2s, 1bar	
Actual Temperature Coefficient of the output voltage	<i>ppm/°C</i>	≤ 1.5 (typical)	
Working temperature	<i>°C</i>	-60~+150	
Material for transducer case		Anodized aluminum Nylon 66 G 25	
Material for pull shaft		Stainless steel AISI 303	
Mounting		Brackets with adjustable distance between centers or with M4 screw	