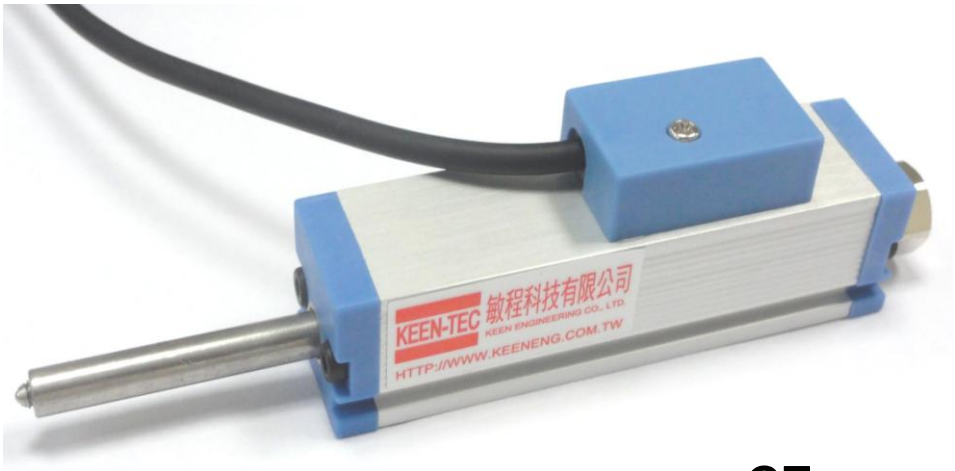
Position Transducers with Restoring Spring

KS series position sensors employing conductive-plastic resistance and collector tracks provide direct means of measuring position or profile, without the need of a solid mechanical coupling. The side connection creates a through-rod structure with double rod support, guaranteeing greater overall strength of the transducer.

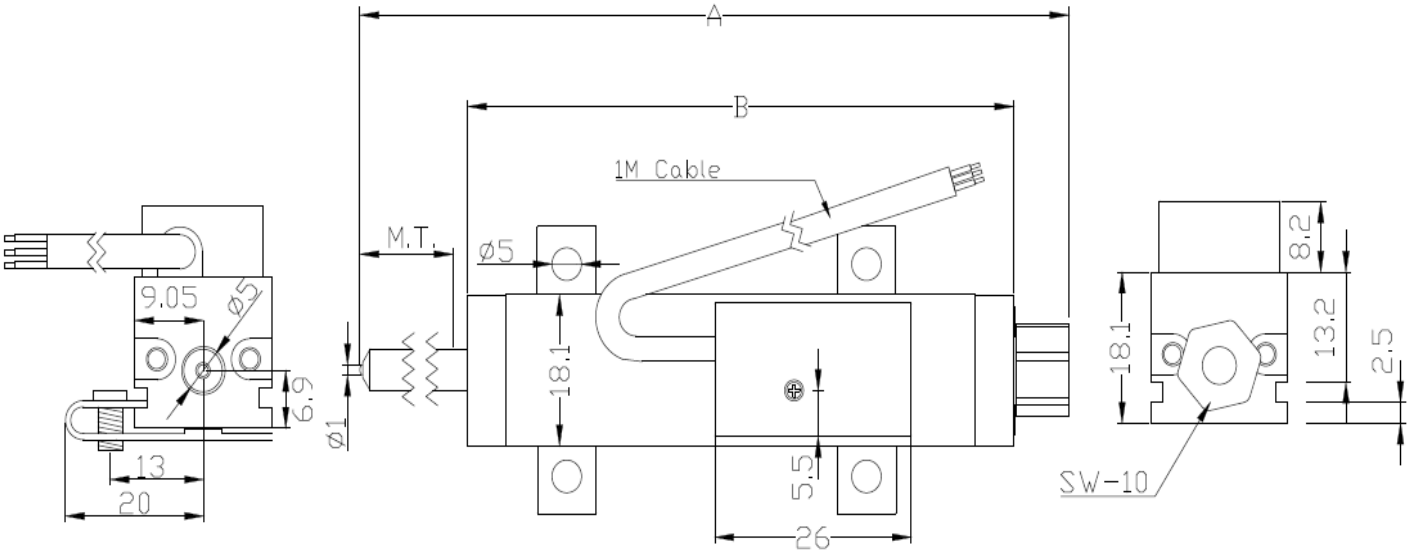
One important feature of the KS Series is the industry proven double-bearing systems on both actuator shaft and spring. This arrangement reduces side load errors that could occur in an application such as cam-following and is one of the design factors that enable the outstanding linearity of this series.

The return spring automatically returns the rod to zero position, making the transducer suitable for comparator applications. The tip with stainless steel ball is suitable for applications where the object to be measured is not subject to shifts transverse to the transducer axle.



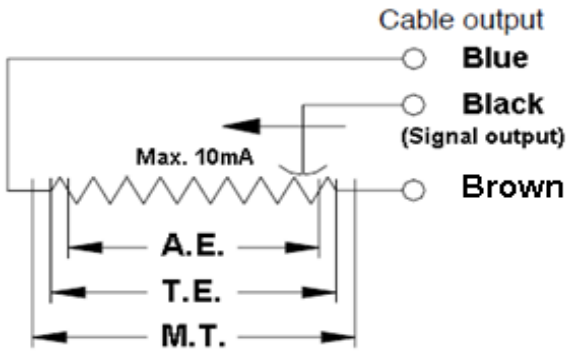
CE

MECHANICAL DIMENSIONS: (Unit : mm)



敏程科技有限公司 (Taiwan)
TEL: 886-2-29995186 FAX : 886-2-29994876

ELECTRICAL CONNECTIONS:



ACCESSORIES:

STANDARD:

KS mounting kit, 2 brackets, 4 screws

ELECTRICAL / MECHANICAL DATA:

KS series	model	10	25	50
Useful electrical stroke (A.E)	mm	10	25	50
Resistance (T.E) ±20%	KΩ	1.2	3.0	6.0
Independent linearity (within A.E.)	± %	0.1	0.1	0.1
Mechanical stroke (M.T.)±0.015	mm	12	27	52
Total length (A)	mm	81	113	166
Case length (B)	mm	55.1	72.3	100.3
Resolution		infinite		
Repeatability	mm	0.002		
Displacement speed	m/s	≤ 10 Standard		
Protection level		IP40		
Life		> $25x10^6$m strokes or $100x10^6$ operations		
Displacement force	N	4		
Vibrations		5 - 2000Hz, Amax =0.75 mm, amax. = 20 g		
Shock		50 g, 11ms		
Recommended cursor current	μA	< 1		
Max. cursor current	mA	10		
Maximum applicable voltage	V	12	30	60
Electrical isolation	MΩ	>100		
Dielectric strength	μA	< 100 @ 500V~ ,50Hz, 2s,1bar		
Dissipation at @70°C	W	0.2	0.6	1.2
Actual Temperature Coefficient ≤ 5ppm/°C typical of the output voltage			≤ 1 ppm/°C typical	
Working temperature	℃	-30~+100		
Storage temperature	℃	-50~+120		
Material for transducer case		Anodised aluminium Nylon 66 G 25		
Material for pull shaft		Stainless steel AISI 303		
Mounting		Brackets with adjustable distance with screw		

敏程科技有限公司 (Taiwan)
TEL: 886-2-29995186 FAX : 886-2-29994876