

- Rodless Type
- Durable bearing and slider
- Ø 38 Section, Standard 50-3000 mm
- Anodised Aluminium Housing
- Long Life, High Resolution
- Excellent Repeatability
- Smooth Low Noise Output from Conductive Plastic Track



KTF standard linear transducers are designed for direct absolute measurement and are available in stroke lengths up to 3000 mm. The rodless design allows the actuator to be driven from side and along the whole length. A magnetically restrained stainless steel band covering all the openings through which the actuator operates.

The KTF series is a rodless version which provides minimum installation length. The slider has a ball coupling which reduces the effects of misalignment with the actuating part and eliminates forces generated by angular off-sets transmitting to the bearing surfaces.

An improved technique for making a connection to the resistance track (Double Trimming Technique) ensures the higher degrees of reliability and linearity, while multi-fingers wipers stabilize output signals, even in the most adverse working conditions. The fixing feet are adjustable to the desired positions.

Specifications

Mechanical

Typical Life Cycle > 100 x 10⁶ cycles, > 25 x 10⁶ m

Stroke > 50 - 3000 mm

Linearity up to
± 0.07 % (50-375 mm)
± 0.05 % (400-3000 mm)

High Resolution Infinite

Repeatability ± 0.01 mm

Max. operating speed 10 m/s

Environmental

Housing Anodised Aluminium Housing

Operating Temperature -30... +100° C

Storage Temperature -50...+120° C

Vibration IEC 68-2-6:1982 10g

Shock IEC 68-2-29:1968 40g

Rating IP50

Misc DIN 43650 ISO 4400 Connector
Fuse Protected optional

Electrical

Current resistance ≤ 10mA

Current wiper ≤ 1 mA

Operating Force ≤ 2N

Power Consumption 3W - 10W

Output Smoothness <± 0.1% against input voltage

Input Voltage 60 V max

Insulation Voltage 500V - 1min Residue < 5 µ A

Ordering information

(Please use the characters in the chart below to construct your product code)

Sample Code: **KTF - 400**

Series	Length					
KTF	50	200	375	600	1000	2500
	75	225	400	650	1250	2750
	100	250	425	700	1500	3000
	130	275	450	750	1750	
	150	300	500	800	2000	
	175	350	550	900	2250	

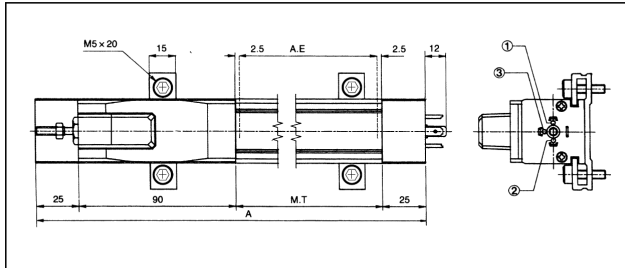
Ordering information cont.

KTF series		50	75	100	130	150	175	200	225	250	275	300	350	375	400	425	450	500	550	600	650	700	750	800	900	1000	1250	1500	1750	2000	2250	2500	2750	3000			
Total Electrical Travel (T,E)	mm	53	78	103	133	153	178	204	229	254	279	304	354	380	406	432	457	508	558	609	659	710	762	812	914	1017	1271	1521	1771	2021	2273	2526	2778	3030			
Active Electrical Travel (A,E)	mm	51	76	101	131	151	176	202	227	252	277	302	352	378	404	430	455	506	556	607	657	708	760	810	912	1015	1269	1519	1769	2019	2271	2524	2776	3028			
Resistance ±20%	kΩ	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	10	10	10	10	10	10	20	20	20	20	20	20	20	20			
Independent Linearity	±%	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05			
Mechanical Travel (M,T)	mm	63	88	113	143	163	188	214	239	264	289	314	364	390	416	442	467	518	568	619	669	720	772	822	924	1027	1281	1531	1781	2031	2283	2536	2788	3040			
Resolution		infinite																																			
Recommended Cursor Current	μA	< 1																																			
Temperature Range	°C	-30 to +100																																			
Dimensions (A)	mm	198	223	248	278	298	323	349	374	399	424	449	499	525	551	577	602	653	703	754	804	855	907	957	1059	1162	1416	1666	1916	2166	2418	2671	2923	3175			

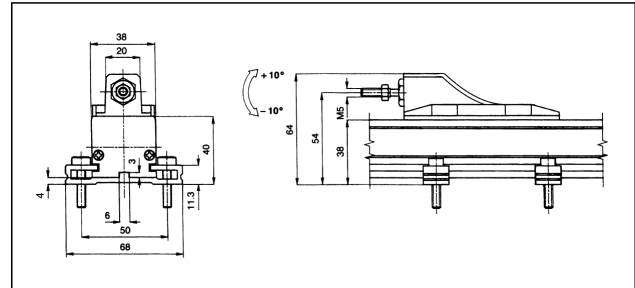
* Dimensions for reference only

Dimensions

MECHANICAL DIMENSIONS KTF

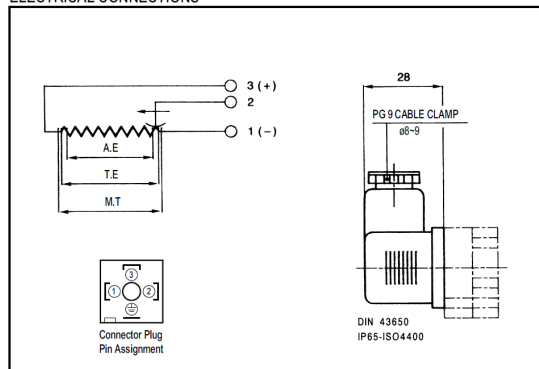


COUPLING JOINT



Electrical Connections

ELECTRICAL CONNECTIONS



RECOMMENDED MEASUREMENT CIRCUIT

