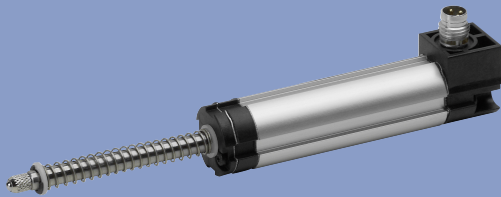


**Position Transducers
with restoring spring
potentiometric
up to 200 mm, IP 67**

Series TEX



Special features

- compact dimensions
- protection class up to IP67
- Position transducer with restoring spring
- very long life (depending on application) up to 50 million movements
- resolution better than 0.01 mm
- outstanding linearity up to $\pm 0.05\%$
- variable mechanical customer interfaces
- usable under harsh environmental conditions (humidity, oil, dust)
- DIN standard gauging end
- cable or plug connection optional

Highest protection class and very compact dimensions characterize this inexpensive transducer.

Mounting clamps, central threads or flange plates allow an optimum adaption to the particular environmental conditions.

The transducers with outside restoring spring enables the direct measurement without form-fit positioning.

The electrical connection is made by radial plug connector or radial or axial cable.

Transducers without restoring spring and mountable with pivot heads see separate data sheets.

Description	
Housing	aluminium, anodized
Fixings	see drawing
Actuating rod	stainless steel, rotatable
Bearings	sleeve bearing
Resistance element	conductive plastic
Wiper assembly	precious metal multi-finger wiper
Electrical connections	3-pin round connector M8x1 3-pin cable, shielded 2 m long

Type designations	TEX 0010*	TEX 0025	TEX 0050	TEX 0075*	TEX 0100	TEX 0125*	TEX 0150	TEX 0175*	TEX 0200	
Electrical Data										
Defined electrical range	10	25	50	75	100	125	150	175	200	mm
Electrical range	12	27	52	77	102	130	155	180	205	mm
Nominal resistance	1	1	2	3	4	5	6	7	8	k Ω
Resistance tolerance	20									\pm %
Independent linearity	0.25	0.2	0.1	0.1	0.1	0.05	0.05	0.05	0.05	\pm %
Repeatability	0,01 (without side loads)									mm
Recommended operating wiper current	\leq 1									μ A
Max. wiper current in case of malfunction	10									mA
Max. permissible applied voltage	42									V
Effective temperature coefficient of the output-to-applied voltage ration	typical 5									ppm/K
Insulation resistance (500 VDC, 1 bar, 2 s)	\geq 10									M Ω
Dielectric strength (50 Hz, 2 s, 1 bar, 500 VAC)	\leq 100									μ A
Mechanical Data										
Body length (dimension A)	63	78	103	128	153	194	219	244	269	\pm 2 mm
Mechanical stroke (dimension B)	14	29	54	79	104	132	157	182	207	\pm 2 mm
Dimension C	41	56	106	156	201	233	265	298	331	\pm 2 mm
Dimension D	57	72	106	156	201	233	265	298	331	\pm 2 mm
Weight	n/a									g
Weight actuator with wiper	n/a									g
Operating force horizontal	n/a									N
Operating frequency max. in center position (IP40)	49	43	35	28	24	21	20	20	20	Hz
in center position (IP65)	44	39	32	26	21	18	16	15	15	Hz
Environmental Data										
Temperature range	-40 ... +85 (-40...+100 on request)									$^{\circ}$ C
Vibration	5...2000 A_{max} = 0.75 a_{max} = 20									Hz mm g
Shock	50 6									g ms
Life	$>$ 50 x 10 ⁶ typ.									movements
Operating speed	5									m/s max.
Protection class	up to IP67 DIN 40500 / IEC 529									

*) = on request

