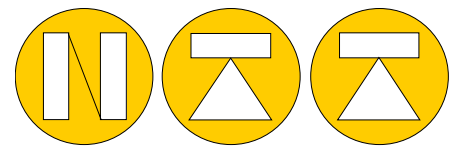


PA1 FS LINEAR MOTION POSITION TRANSDUCER

□ 18mm Standard stroke range: 10...450mm

Pulling Rod Type



NORDIC TRANSDUCER



This mini position transducer is designed for direct absolute measurement and available in stroke Length up to 450mm. The mini design is suitable for mounting in instruments or machines with limited space.

An improved technique for making connection to 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.

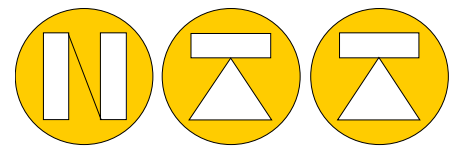
Unique Features

- Double slide and bearing
- Anodized Aluminium Housing
- Mini design for limited space
- Standard Coupling joints
- Very Long Life
 - >100 x 10⁶ cycles
 - > 25 x 10⁶ m
- Stroke 10....450mm
- Outstanding Linearity ±0.3% to ±0.05%
- High Resolution Infinite
- Excellent Repetability ± 0.01 mm
- Max operating speed 5m/s max.
- Fixed 3 wire connection 1m cable
- Sealing to IP40

Technical Specifications

Sealing- PA1 FS	IP40
Current Resistance	<10mA
Wiper	< 1 μA
Operating Force	<1.2N
Power Consumption	3W-10W
Output Smoothness	<± 0.1% against input voltage
input Voltage	60V Max
Insulation Voltage	500V-1min Residue <5 μA
Vibration	FC 68-2-6:1982 10g
Shock	FC 68-2-29:1968 40g

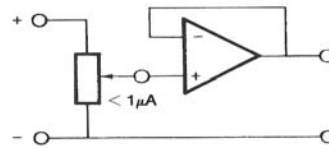
PA1 FS LINEAR MOTION POSITION TRANSDUCER



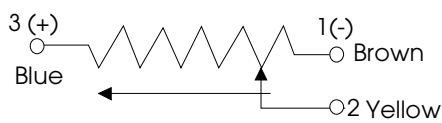
NORDIC TRANSDUCER

Important:

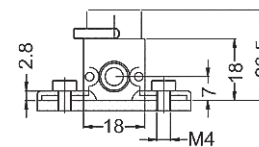
The published technical data are applicable only when the transducer is used correctly, and in accordance with the user manual / instructions. The PA1 linear Position transducers must be used as voltage dividers with a maximum current in the wiper contact of 1 μA ; should the system downstream require more current, further circuitry will be required.



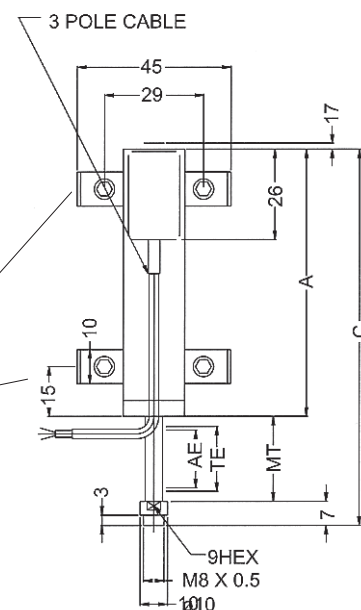
Electrical connections



Mechanical Dimensions



2 sets of mounting feet included in the delivery



PA1 series		10	25	50	75	100	125	150	175	200	225	250	275	300	350	375	400	425	450
Total Electrical Travel(T.E)	mm	11	26	51	76	101	126	151	177	202	227	252	277	302	353	378	403	428	453
Active Electrical Travel (A.E)	mm	10	25	50	75	100	125	150	176	201	226	251	276	301	352	347	402	427	452
Resistance $\pm 20\%$	k Ω	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Independent Linearity	$\pm\%$	0.3	0.2	0.1	0.1	0.1	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	15	30	55	80	105	130	155	180	205	230	255	280	305	355	380	405	430	455
Resolution		infinite																	
Recommended Cursor Current	μA	< 1																	
Temperature Range	$^{\circ}\text{C}$	-30 to +100																	
Dimensions (A)	mm	59.5	74.5	99.5	124.5	149.5	174.5	199.5	224.5	249.5	274.5	299.5	324.5	349.5	399.5	424.5	449.5	474.5	499.5
Dimensions (C)	mm	83.2	113.2	163.2	213.2	263.2	313.2	363.2	413.2	463.2	513.2	563.2	613.2	663.2	763.2	813.2	863.2	913.2	963.2