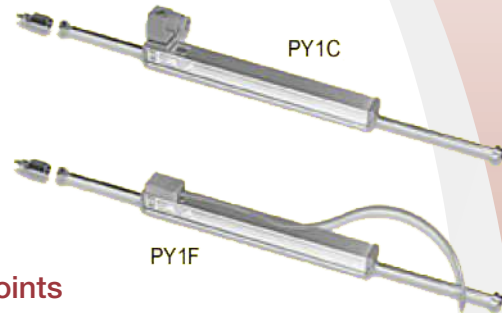


- Pull & Push Rod Type
- Mini design for limited space
- Ø 18 Section, Standard 10-450 mm
- Anodised Aluminium Housing
- Long Life, High Resolution
- Excellent Repeatability
- Double slide and bearing, Standard Coupling Joints



This mini position transducer is designed for direct absolute measurement and available in stroke length up to 450 mm. The mini design is suitable for mounting in instruments or machines with limited space. 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 position. The pull & push rod mounting in 2 way directions enables more stable movement and extra low operating forces.

## Specifications

### Mechanical

Typical Life Cycle	> 100 x 10 <sup>6</sup> cycles, > 25 x 10 <sup>6</sup> m
Stroke	10 - 450 mm
Linearity up to	± 0.05 %
High Resolution	Infinite
Repeatability	± 0.01 mm
Max. operating speed	5 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	IP60, optional IP65
Misc	Fuse Protected optional

### Electrical

Current resistance	≤ 10mA
Current wiper	≤ 1 mA
Operating Force	≤ 0.5N (IP60) ≤ 5N (IP65)
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:

**PY1 - C - 250 - P - 3M**

Series	Connection	Length	Rating	Cable length
PY1	C - C193 4-Pin Connector FS - Cable	10    125    250    400	P = Water Proof IP65 S = Standard IP40	blank = 1 m standard cable 3M = 3 m screened cable
		25    150    275    425		
		50    175    300    450		
		75    200    350		
		100    225    375		

## Ordering information cont.

PY1 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	175	201	226	251	276	301	352	377	402	427	452	
Resistance $\pm 20\%$	k $\Omega$	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	$\mu\text{A}$	< 1																		
Temperature Range	$^{\circ}\text{C}$	-30 to +100																		
Dimensions (A)	mm	48	63	88	113	138	163	183	213	238	263	288	313	338	388	413	438	463	488	
Dimensions (C)	mm	77	107	157	207	257	307	357	407	457	507	557	607	657	757	807	857	905	957	

\* Dimensions for reference only

## Dimensions and Electrical connections

