



LINEAR DISPLACEMENT TRANSDUCER Series PSy

APPLICATION

Linear displacement transducers series PSy are based on differential transformer principles. They are equipped with return springs which enable a touch method of measurement without a fixed core. They are used for static and dynamic measurements of displacement, thickness and bending distortion of machines and constructions.

FEATURES

- return spring
- high stability
- weatherproof
- very high repeatability

CONSTRUCTION

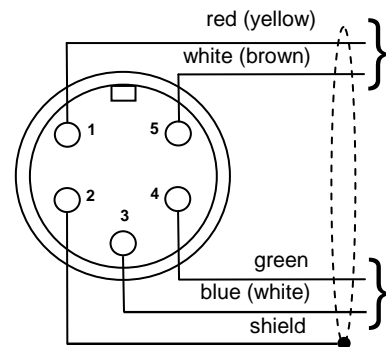
Transducers series PSy are based on a differential transformer placed in a cylindrical enclosure. There is a magnetic core inside the transducer's coils. Displacement of the core results in a change of the transducer's output signal. The return spring pushes the core so the tip is always be in contact with the moving target object.

TECHNICAL DATA

1

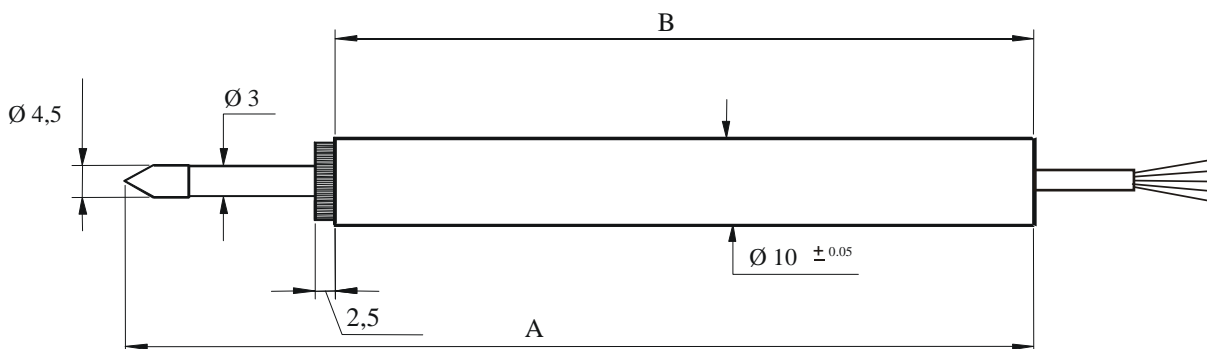
Type	PSy1	PSy2	PSy5	PSy10	PSy20	PSy50	PSy100	PSy200
Range	± 0,5	± 1	± 2,5	± 5	Under construction			
A (mm) under electrical zero	82	89	100	129				
B (mm)	51	56	78	102				

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|-------------------------|--|
| 2 Power supply | 2Vrms, 5÷15 mA, 5 kHz |
| 3 Output signal | 1Vrms ±10% (0,5Vrms, 0,2Vrms) |
| 4 Load resistance | R ≥ 50 kΩ |
| 5 Insulation resistance | ≥ 20 MΩ |
| 6 Linearity error | ≤ 0,5%; ≤ 0,25%; ≤ 0,1% (ranges ≥ 10 mm) |
| 7 Working temperature | -20 ÷ + 80°C; option -20 ÷ 120°C |
| 8 Temperature error | 0,02 % / °C |
| 9 Electrical connector | cable with no connector |
| 10 Vibration proofness | 20 g do 2 kHz |
| 11 Shock proofness | 100 g, 11 ms |
| 12 Enclosure material | Steel 1H18N9T or AISI 304 |



Connector C91 Amphenol (optional).
Connection for four wire-cable

DIMENSIONS



Continuous development of our products may result in changes to this document and the product specification at any time without notice.