PELTRON

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 of machines and constructions.

FEATURES

- return spring
- high stability

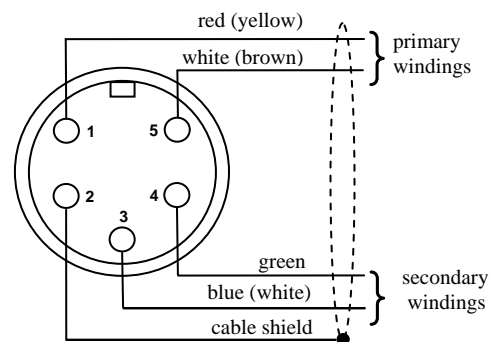- weatherproof
- very high repeatability

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				
A (mm) under electrical zero	82	89	100	129	Under construction			
B (mm)	51	56	78	102				

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 , 2 kHz
11	Shock proofness	100 g, 11 ms
12	Enclosure material	Steel 1H18N9T or AISI 304

red (yellow)
white (brown)
} primary windings

green
blue (white)
} secondary windings

cable shield

Connector C091-T3361-001 Amphenol (optional). Connection for four wire cable.

DIMENSIONS

Ø 4,5   Ø 3   B   Ø 10 $^{± 0.05}$ 2,5   A

Continuous development of our products makes necessity of introducing changes to their construction, which may not be indicated in this document.