



LINEAR VARIABLE DISPLACEMENT TRANSDUCERS – PTx series

Transducers of this type are a group of AC/AC transducers (sensors) based on differential transformer principle. AC/AC group means without electronic components inside. They are used to measure: position, displacement, movement, distance, height, length etc. The main application of this type is to measure deflecting moving and displacement of machines' details.

CHARACTERISTIC

- Compact construction
- Harsh environment application
- High accuracy
- High reliability

CONSTRUCTION

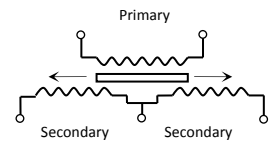
The basic element of this sensors is a differential transformer placed inside a cylindrical enclosure. Inside the transformer there is a magnetic core. The core's position affects the output signal amplitude converting displacement to electric signal.

TECHNICAL DATA

Type	PTx6	PTx10	PTx20	PTx30	PTx50	PTx100	PTx200	PTx300
Measure range [mm]	±3	±5	±10	±15	±25	±50	±100	±150
A [mm]	58	72	82	102	132	212	342	472
B [mm]	100	100	140	150	170	270	380	490

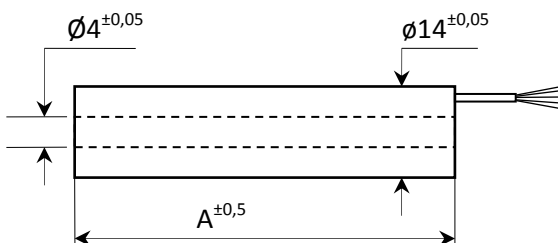
1	Excitation	2Vrms, 5÷15 mA, 5 kHz
2	Output signal	1 Vrms ±10% (for PTx6 0,5Vrms ±10%)
3	Load resistance	$R_{load} \geq 51 \text{ k}\Omega$
4	Isolation resistance	$\geq 20 \text{ M}\Omega$
5	Accuracy	<ul style="list-style-type: none"> • ±0,5% • ±0,25% • ±0,1%
6	Temperature range [°C]	<ul style="list-style-type: none"> • -20 ÷ +80 • -20 ÷ +200
7	Temperature accuracy	0,02% / °C
8	Electrical connection	cable ½ m, no connector
9	Vibration	20 g to 2 kHz
10	Surge	100 g, 11 ms
11	Material	304 steel

SCHEMATIC DIAGRAM

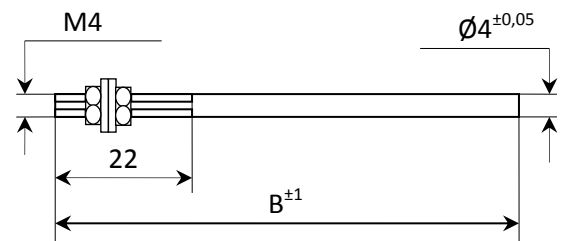


DIMENSIONS

BODY'S DIMENSIONS



CORE'S DIMENSIONS



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