

TRANSFORMER LINEAR DISPLACEMENT TRANSMITTERS (LVDT) PSz SERIES

APPROPRIATION

Transformer linear displacement transmitters (LVDT) of the PSz series, provided with a return spring, can be used in static and dynamic measurements like: displacements, materials length and thickness change, construction and machine elements deflections.

CHARACTERIZATION

- Captive spring return armature
- High stability and accuracy
- Very high repeatability
- High mechanical durability
- Standard output signal

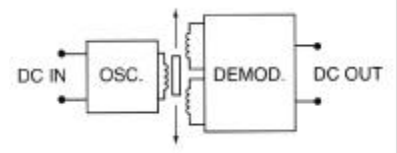
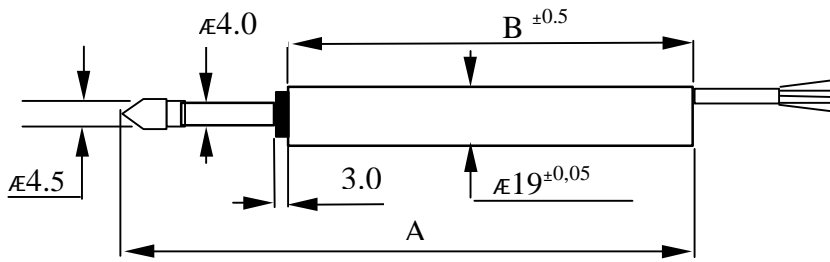
CONSTRUCTION

The transmitter construction is based on the differential transformer placed in a cylindrical housing. The output signal depends from a movable magnetic core position inside the coil assembly. The return spring tightens the core connecting rod to the measured object. . In the same housing is an electronic system.

TECHNICAL DATA

Measurement ranges (mm)	$\pm 2,5$ ± 5 ± 10 ± 25 ± 50
Power supply	15V DC , 20...40mA
Output signal	$\pm 5V$ DC ± 10 %; option $\pm 10V$ DC ± 10 % for PSz100
Output resistance	5600 Ω ± 10 %
Load resistance	10k Ω
Pass band	3dB, 50Hz
Insulation resistance	$\geq 20M$ Ω
Nonlinearity	$\leq 0.5\%$; option $\leq 0.25\%$
Operating temperature	- 20...+ 70°C
Pulsation	0.5% FSO
Housing protection	IP67
Electrical connection	only cable or cable with MIC326 connector
Vibration tolerance	20g up to 2kHz
Shock survival	100g, 11ms
Housing material	1H18N9T acid resistant steel, according to PN-86020 or AISI 304 series stainless steel

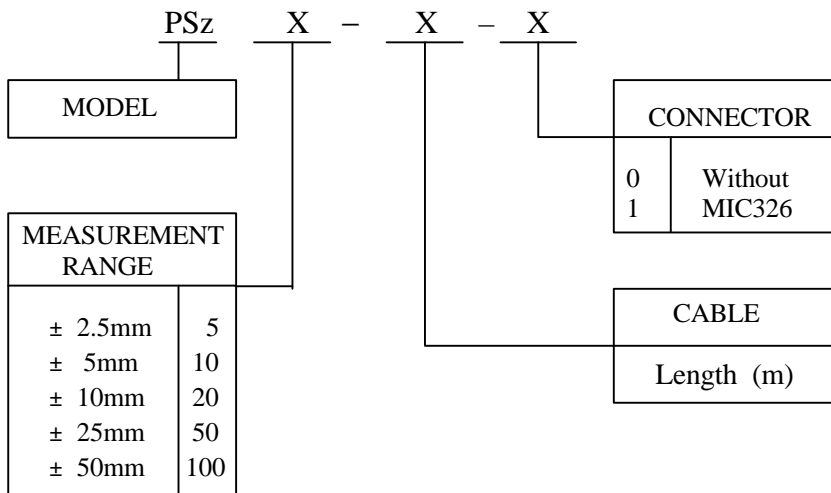
DIMENSIONS AND CIRCUIT DIAGRAM



PSz transmitter	PSz5	PSz10	PSz20	PSz50	PSz100
Measurement range (mm)	± 2.5	± 5	± 10	± 25	± 50
A(mm), for the electrical zero	127	141	254	308	454
B (mm)	100	129	190	255	380

ORDERING INFORMATION

Specify the model according to the ordering code:



Ordering example:

PSz20 - 3 - 0

PSz - Linear displacement transmitter

20 - Measurement range ± 10 mm

3 - 3m length cable

0 - No connector

Notes:

1. Standard version: 0.5m length of the cable, without connector.
2. Measurement conditions: the load 51 k Ω , ambient temp. 20°C.
3. In the special order is possible the construction and making of non typical transmitters.

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The continual development of our products causes a necessity of changes introduction which can not be published in this document