

# POTENTIOMETRIC WIRE TRANSDUCER

## PFAS600T PFAS1000T PFAS2000T PFAS2500T PFAS3200T PFAS4200T



### Description

The PFAS\_T-I/V is wire potentiometer position transducer that convert a linear motion into an analogue 0-10V voltage signal or 4-20mA current signal.

They consist of a rotating precision potentiometer operated by the winding and unwinding of a stainless steel wire.

It constitutes a simple but effective system to measure linear displacements on machine tools, marble, glass and woodworking machinery etc, to a degree of resolution of  $\pm 0.1$  mm.

### Connection

BROWN	+15÷30VDC
GREEN	GND
WHITE	COM
YELLOW	OUT
GREY	not connected

When the wire is extracted, the value of the analogue output increases

### Assembling precautions

- ◆ The incremental wire transducer must be installed on a level surface.
- ◆ Do not release the wire of the transducer too rapidly.
- ◆ Do not over-tighten the fastening screws in order to avoid deforming the housing.
- ◆ Do not bend or distort the wire.
- ◆ Don't forget to pull the wire along its own axis and avoid misalignments over  $2^\circ$ .
- ◆ Do not exceed the maximum travel of the wire.
- ◆ For electrical connections don't forget to use a shielded cable, and keep it separated from power lines or sources of electromagnetic interferences.
- ◆ Do not squeeze or pull the feed cable.
- ◆ Connect the electrical parts with care and attention: a measure of a connection annuls the guarantee.

VERSION	MAX TRAVEL	LINEARITY
PFA600T	625 mm	$\pm 0,25\%$
PFA1000T	1050 mm	$\pm 0,25\%$
PFA2000T	2050 mm	$\pm 0,25\%$
PFA2500T	2520 mm	$\pm 0,25\%$
PFA3200T	3220 mm	$\pm 0,25\%$
PFA4200T	4220 mm	$\pm 0,25\%$

### Technical Characteristics

- ◆ Maximum speed 0,3 m/s
- ◆ Power supply 15-30VDC max 50mA
- ◆ Analogic output 0-10V or 4-20 mA (must be specified in order)
- ◆ Degree of protection IP54
- ◆ Wire strength Max 1,8 N
- ◆ Temperature of operation  $-10 - 70^\circ\text{C}$
- ◆ Relative humidity 10 - 90%
- ◆ Weight 400 gr.
- ◆ Black Anodized aluminium
- ◆ Output with 3-pole 2-metre-long screened cable, other lenght on request
- ◆ Directive: 2014/30/EU Electromagnetic compatibility, 2011/65/EU RoHS