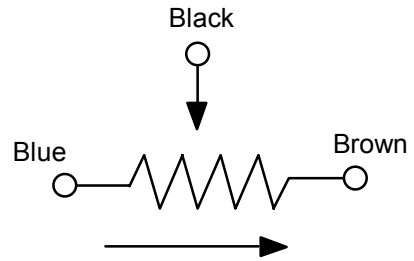
POTENTIOMETRIC WIRE TRANSDUCER
PF1000 PF2000 PF3000

FIAMA since 1913
COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001:2015 =

Description

The instruments PF1000, PF2000 are potentiometric position wire transducers which convert a linear displacement into a resistance change.
They consist of a rotating precision potentiometer operated by the winding and unwinding of a stainless steel wire.
Combined with a electronic display unit (e.g. the 4 digit V4P model or the 5 digit VE6P model) 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 ± 0.1 mm.

Connection :



As the wire is extracted the resistance between Blue-Black 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°.
- 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	RESISTANCE	LINEARITY	Number of cycles	Scale span with V4P display unit
PF1000	1100 mm	10 Kohm	± 0,25%	400,000	-200,0 ÷ + 1100 mm
PF2000	2200 mm	10 Kohm	± 0,25%	300,000	-200,0 ÷ + 2200 mm
PF3000	3200 mm	10 Kohm	± 0,25%	300,000	-200,0 ÷ + 3200 mm

Technical Characteristics

- Maximum speed 0,1 m/s
- Degree of protection IP54
- Color RAL 7004 Grey
- Temperature of operation -10 - 70°C
- Relative humidity 10 - 90%
- Weight 400 gr.
- Technopolymer, blow-resistant, self-exting.housing resistant to solvents, petrol, oils & grease.
- Output with 3-pole 2-metre-long screened cable
- Directive: 2014/30/EU Electromagnetic compatibility, 2011/65/EU RoHS