

THROUGH-SHAFT POTENTIOMETRIC ROTATING TRANSDUCER MODEL PR20



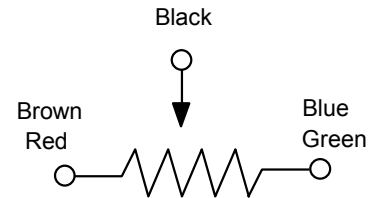
Description

The PR 20 is a through-shaft potentiometric transducer which converts a rotary movement into a resistance change.

It consists of a rotating precision potentiometer to which movement is transmitted from the drive shaft by means of an appropriate transmission.

Combined with a electronic display unit (e.g. V4P model or VE6P model), it constitutes an simple but effective system for measuring displacements on machine tools, marble, glass and wood working machinery etc., with a precision not exceeding ± 0.1 mm.

Connection :



Precautions during assembling

- ◆ Ensure that the assembling shaft (tolerance h7) is perpendicular to the support base.
- ◆ After having secured the transducer and before tightening the grub screws, rotate the hollow shaft to ensure that it turns smoothly.
- ◆ Do not exceed the maximum allowable rpm.
- ◆ For electrical connections always use a shielded cable (with shield connected to GND) which must be kept separate from power lines or sources of electromagnetic interference.
- ◆ Make the electrical connections with due care and attention: a failure due to a connection error renders the guarantee null and void
- ◆ The power supply must fall within the admissible range, a value exceeding this range or an alternate current could damage the encoder.

Technical Characteristics

- ◆ Hole in through-shaft 20 H7; other holes obtained with reducer bushes
- ◆ Typical gear ratios 1/4, 1/3, 1/2 multiplying
1/1, 3.3/1, 10/1, 24/1, 30/1 90/1 dividing
- ◆ Potentiometer 1 turn 3 turns 5 turns 10 turns
- ◆ Maximum rotation 340° $\pm 4^\circ$ 1080° $\pm 10^\circ$ 1800° $\pm 10^\circ$ 3600° $\pm 10^\circ$
- ◆ Linearity $\pm 0,25\%$ $\pm 0,25\%$ $\pm 0,25\%$ $\pm 0,25\%$
- ◆ Resistance 10 KOhm 10 KOhm 10 KOhm 10 KOhm
- ◆ Power 1 W 1W 1,5W 2W
- ◆ Max. rotation speed with transmission ratio 1:1 400 RPM continuous, 1000 RPM for short periods
- ◆ Output with 3-pole 2-metre-long screened cable
- ◆ Technopolymer, blow-resistant, self-extinguishing housing resistant to solvents, petrol, oils, grease.
- ◆ Degree of protection IP54
- ◆ Colour RAL 7004 Grey
- ◆ Temperature of operation -10 - 70°C
- ◆ Relative humidity 10 - 90%
- ◆ Weight 180 gr.
- ◆ Directive: 2014/30/EU Electromagnetic compatibility, 2011/65/EU RoHS