

THROUGH-SHAFT POTENTIOMETRIC ROTATING TRANSDUCER MODEL PR20K



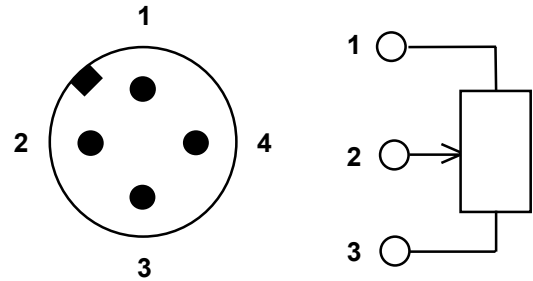
Description

The PR20K 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. the V4P model or the 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
- ◆ Velocity 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° ±4°	1080° ±10°	1800° ±10°	3600° ±10°
◆ Linearity	± 0,25%	± 0,25%	± 0,25%	± 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: circular connector M12, 4 poles, male
- ◆ 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