

The **RP5100 Series** is a general purpose sensor with a glass filled nylon case and stainless steel operating shaft. Designed with innovative 'thick track' technology and precious metal multi-fingered electrical contacts, the sensor has infinite output resolution coupled with a long operational life.

Extensively used in non-critical data acquisition and measurement control systems, they are environmentally sealed against the ingress of dust and water to IP66. If additional sensor protection is required, then an optional heat shrink boot is available.

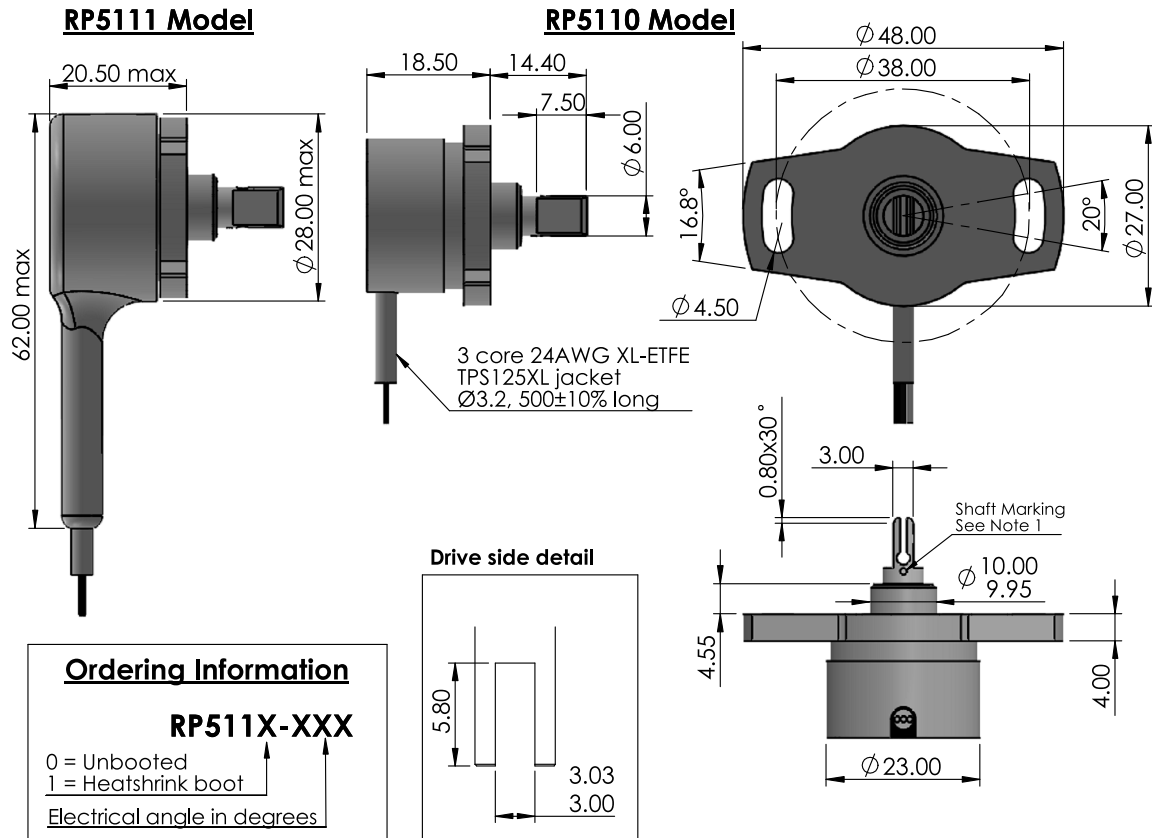
For full system integrity, this rotary potentiometer series is fitted with fire and chemical resistant, high temperature TPS125XL sleeved 24AWG signal cabling.

Key features and benefits

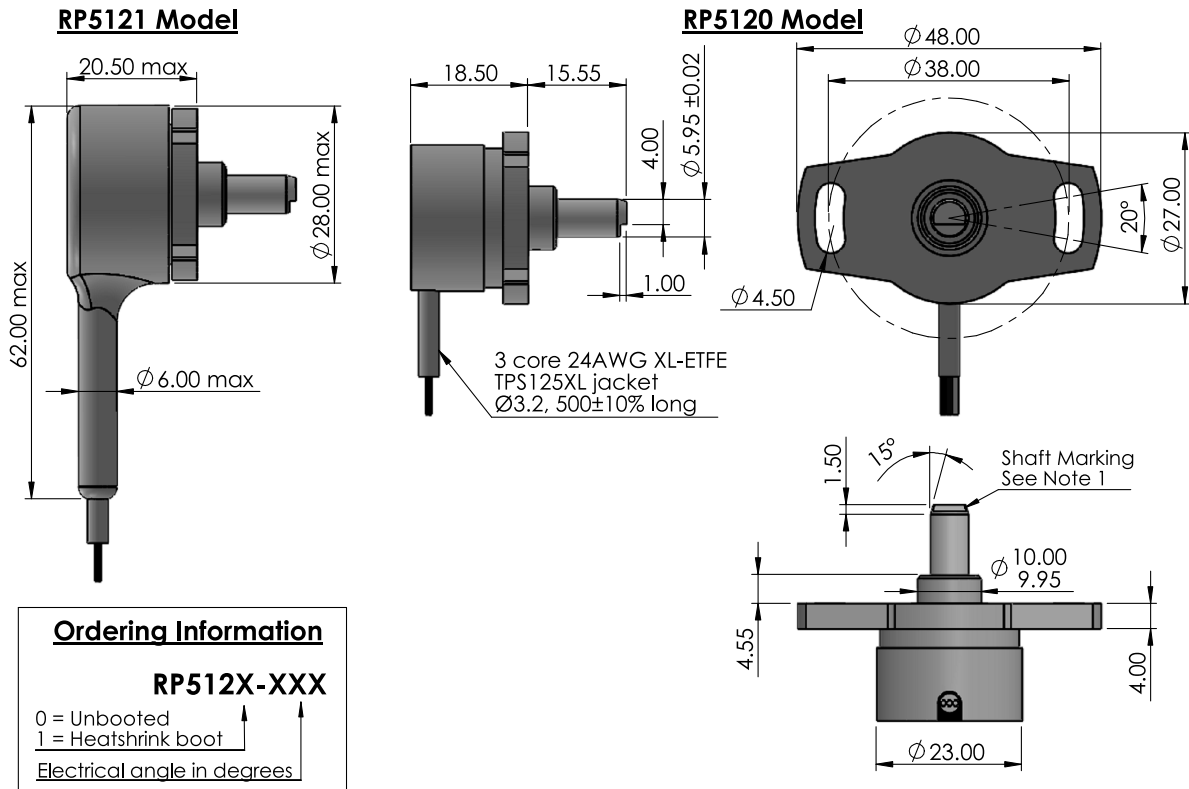
- Choice of electrical angles, 100°, 130° and 350°
- Three stainless steel shafts, sprung, round and blade
- Maximum operating temperature 125°C (257°F)
- Sealed to IP66
- Optional heat shrink boot
- Flange mounting with a bush type shaft bearing
- 3 core 24AWG XL-ETFE TPS125XL cabling



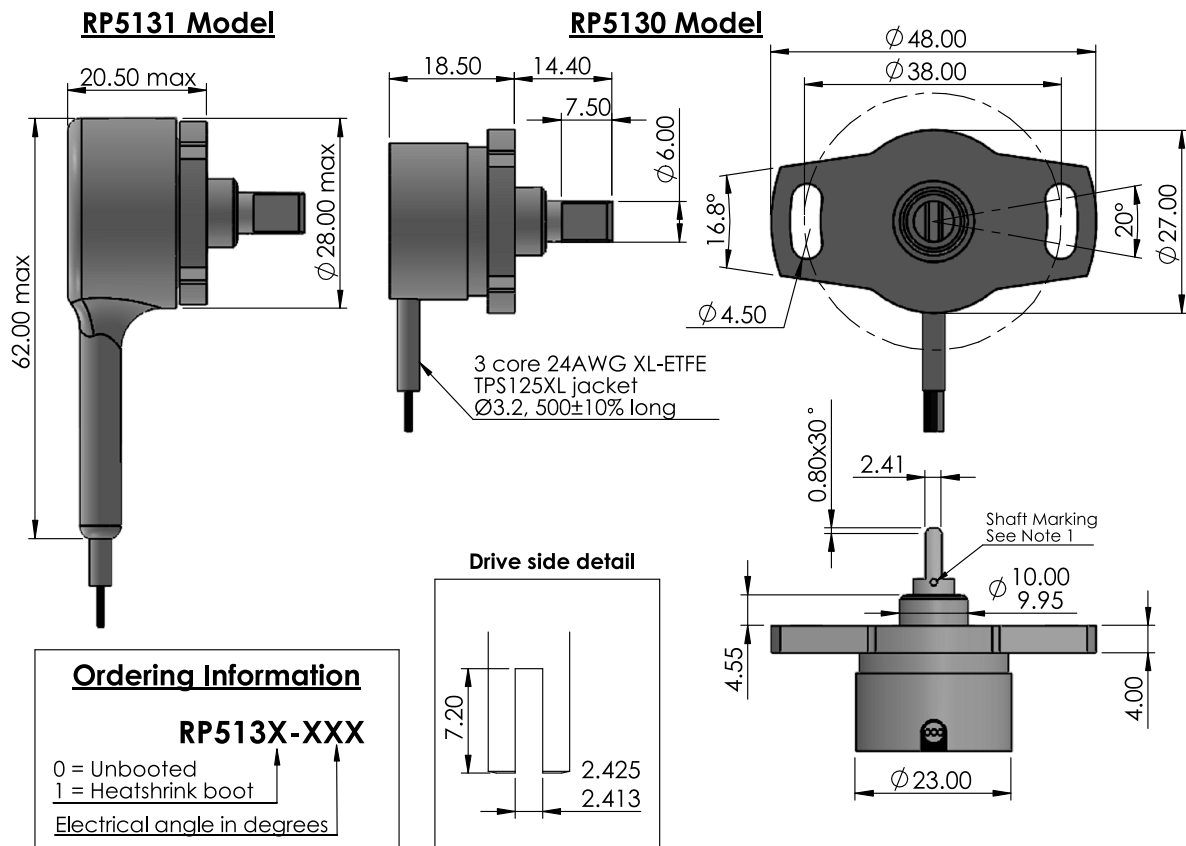
RP5110 and RP5111 - Flange mounting with a sprung shaft



RP5120 and RP5121 - Flange mounting with a round shaft



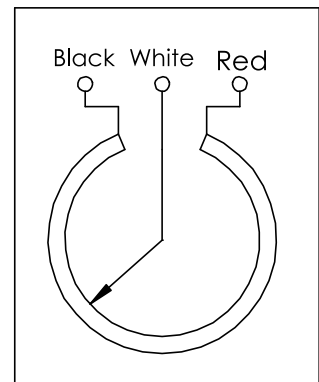
RP5130 and RP5131 – Flange mounting with a blade shaft



Electrical and mechanical specification for RP5100 Series

| | | | | | |
|------------------------------------|-----------|-------------------------------------------------------------------------------------|------|------|-------|
| Electrical angle | (±2°) | 350° | 130° | 100° | |
| Resistance | (Typical) | 4.5 | 1.5 | 1.0 | Kohms |
| Non-linearity | | <±0.5 | | | % |
| Applied Voltage | | <42 | <14 | <14 | VDC |
| Maximum wiper current | | 1 | | | mA |
| Mechanical travel | | 360° Continuous | | | |
| Output smoothness | | MIL-R-39023 Grd.C 0.1% | | | |
| Insulation resistance (at 500V DC) | | >100 | | | Mohms |
| Operating temperature range | | -55 to +125 | | | °C |
| Sealing | | IP66 | | | |
| Shaft starting torque (max.) | | 60 | | | grams |
| Weight (approx.) | | 38 | | | grams |
| Materials | | Case - Black glass filled nylon Shaft - Stainless steel 303 Bearing - DU bush | | | |

Electrical connections See note 2



Notes:

1. When shaft marking is facing cable exit, instrument is mid-travel.
2. Incorrect wiring may cause internal damage.
3. General dimension tolerance is ±0.25

