



RP5300 range

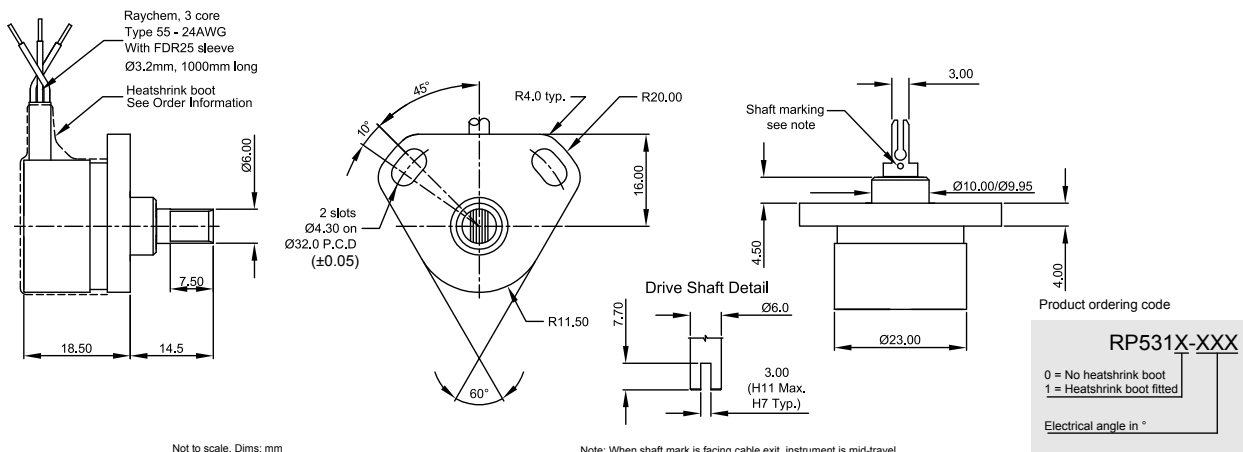


- Robust aluminium construction
- Choice of electrical angles
- Twin ball-race shaft bearings
- Flange mounting
- Choice of shaft detail
- Protective shrink boot option

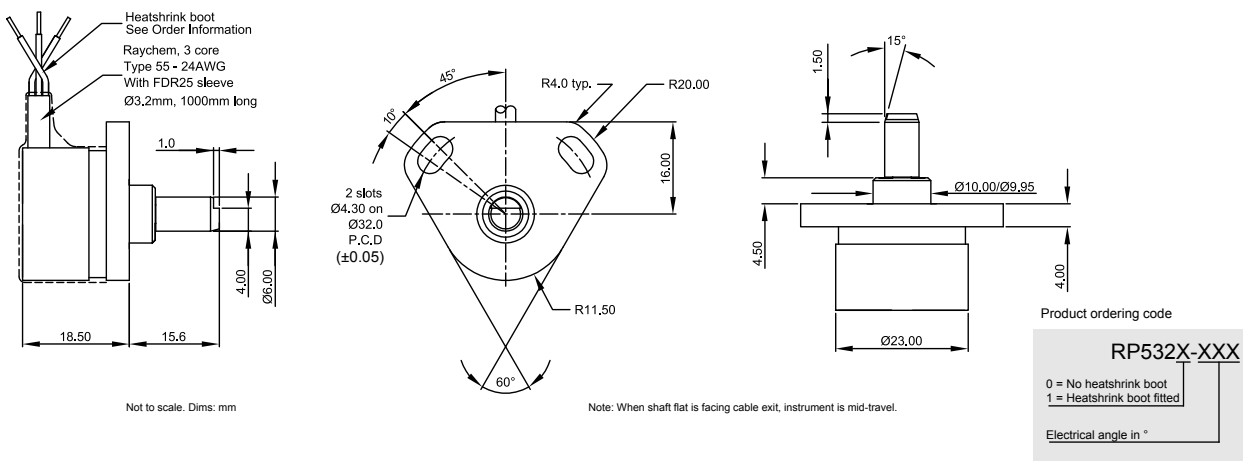
The high performance RP5300 sensor contains design features that make it ideally suited for applications where system reliability is a design consideration. They are used extensively in motorsport applications for throttle actuation and gear selection control systems. The sensor provides precision measurement, reliability and quality. The multi-fingered precious metal electrical contacts, combined with Active Sensors unique hard wearing 'thick track' technology provide unparalleled levels of reliability coupled with long operational life. The RP5300 has precision set stainless steel ball race 'shaft bearings' that provide excellent vibration and shock performance throughout the life of the sensor. The housing is manufactured from aluminium alloy and the operating shaft is stainless steel. The sensor is environmentally sealed and is fitted with Raychem fire and chemical resistant, high temperature FDR-type 55-24 signal cabling. The housing is designed for the easy fitting of an optional shrink down boot for additional sensor protection.

Model dimensions and mounting

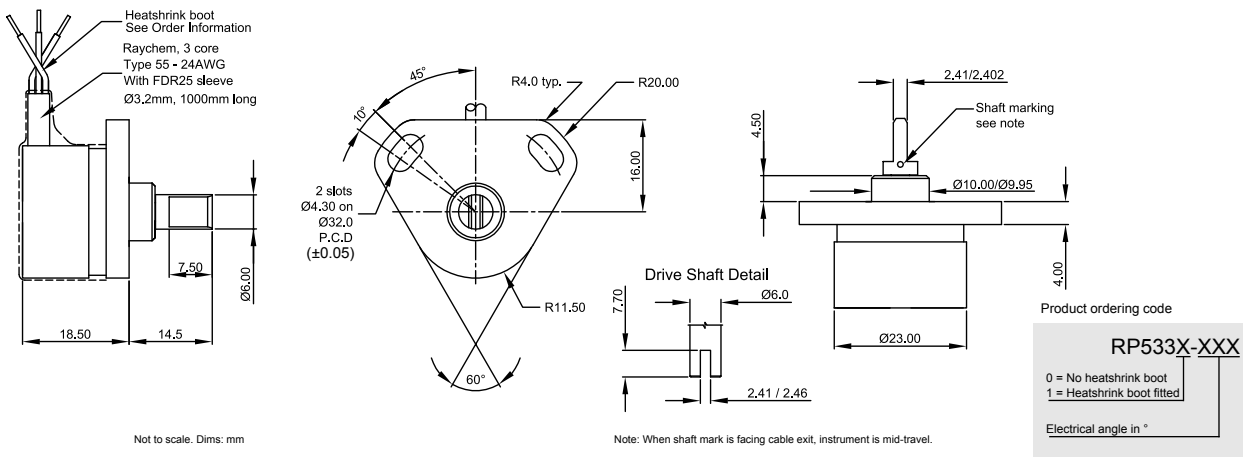
RP5310 - flange mounting / sprung shaft



RP5320 - flange mounting / round shaft



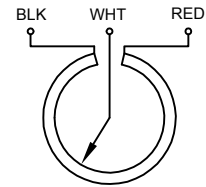
RP5330 - flange mounting / blade shaft



Electrical & mechanical information for RP5300 range

Electrical angle ($\pm 2^\circ$)	350°	130°	100°	
Resistance (Typical)	4.5	1.5	1.5	K ohms
Non-linearity	< ± 0.50			%
Applied voltage	<42	<14	<14	Volts
Maximum wiper current	1			mA
Mechanical travel	360° continuous			
Output smoothness	MIL-R-39023 Grd.C 0.1%			
Insulation resistance (at 500V dc)	>100			M ohms
Operating temp. range	-55° to +125°			°C
Sealing	IP66			
Shaft starting torque (max.)	60			grams
Weight	38			grams
Materials	Case - Aluminium 6262 Shaft - Stainless Steel 303 series Bearing - AISI 440c Martensitic Stainless Steel (NMB DDRIF-418ZZ)			

Electrical Connections



Schematic view on shaft

Note: Incorrect wiring may cause internal damage.

Circuit recommendation: Due to the presence of a high contact resistance, these potentiometers should be used as voltage dividers only. Operation with wiper circuits of low impedance will degrade the output signal.

Other RP rotary position sensor models available

RP0900

- Servo & flange mounting
- Twin ball-race shaft bearings
- Choice of electrical angles
- Single, duplex or triplex models



RP5100

- General-purpose
- Bush type shaft bearing
- Choice of electrical angles
- Flange mounting



RP5200

- Robust aluminium construction
- Twin ball-race shaft bearings
- Choice of electrical angles
- Flange mounting



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Additional product information

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