

# **Rotary potentiometers**











# RP5100 range



- General-purpose (plastic housing)
- Bush type shaft bearing
- Choice of electrical angles
- Flange mounting
- Choice of shaft detail
- Protective shrink boot option

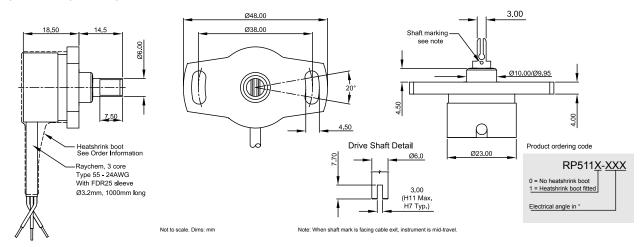
This general-purpose sensor is used extensively in motorsport data acquisition systems for monitoring suspension movement, steering angle and gear position. The sensor housing is manufactured from glass filled nylon and the operating shaft is stainless steel. The sensor is environmentally sealed as standard and is fitted with Raychem fire & chemical resistant, high temperature FDR-type 55-24 signal cabling. The sensor housing is also designed for the easy fitting of an optional shrink down boot for additional sensor protection.

Designed with a combination of Active's unique 'thick track ' technology and precious metal multi-fingered electrical contacts, the sensor has an infinite output resolution coupled with long operational life.

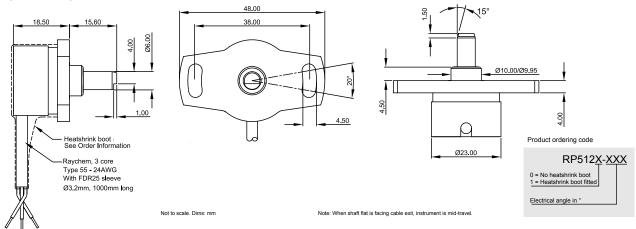
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# Model dimensions and mounting

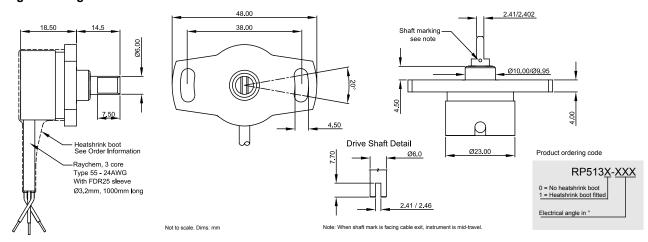
### RP5110 - flange mounting / sprung shaft



RP5120 - flange mounting / round shaft



### RP5130 - flange mounting / blade shaft

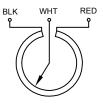


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#### Electrical & mechanical information for RP5100 range

Electrical angle (±2°)	350°	130°	100°	
Resistance (Typical)	4.5	1.5	1	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			
Weight	38			grams
Shaft starting torque (max.)	60			grams
Materials	Case - Glass filled Nylon Shaft - Stainless Steel 303 series Bearing - DU Bush			

#### **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







### **Contact details**

## Europe

Active Sensors Ltd Unit 12, Wilverley Road Christchurch, Dorset BH23 3RU UK

Tel +44 (0)1202 480620 Fax +44 (0)1202 480664



#### **North America**

Active Sensors Inc. 8520 Allison Point Blvd Suit 220 Indianapolis IN 46250 USA

Tel + 317 713 2973 Fax + 317 713 2950

sales@activesensors.com



#### Additional product information

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