



RP0900 range

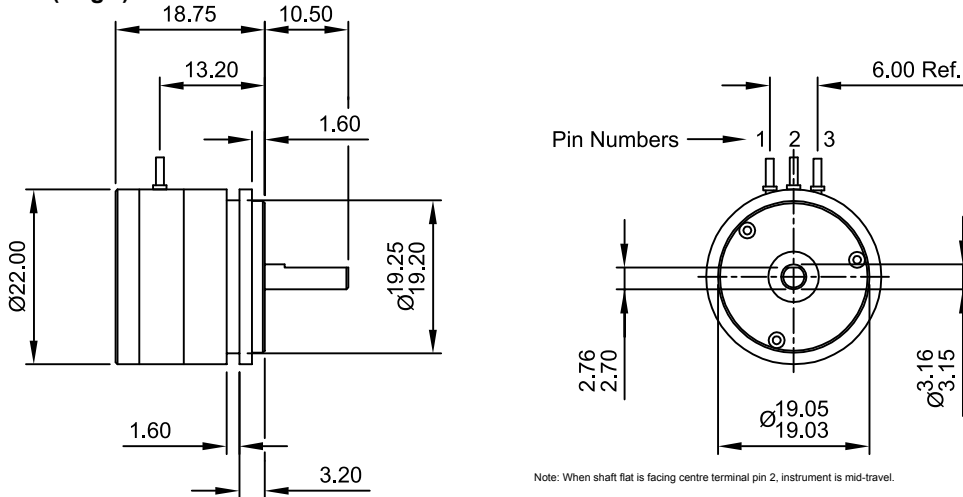


The RP0900 is a high performance rotary potentiometer sensor designed for the most demanding control and measurement systems. They are used extensively in motorsport for throttle and gearbox control, steering angle measurement and the monitoring systems of the chassis and also industrial applications such as valve position feedback. Models available have a choice of mounting and shaft options and electrical angles up to 350°.

- Measurement Range: Up to 350°
- Robust aluminium construction
- Servo and flange mounting
- Multi-fingered electrical contacts
- Long life 'twin' ball-race shaft bearings
- Single, duplex & triplex models
- Very long operational life
- Models available from stock

Model dimensions and mounting

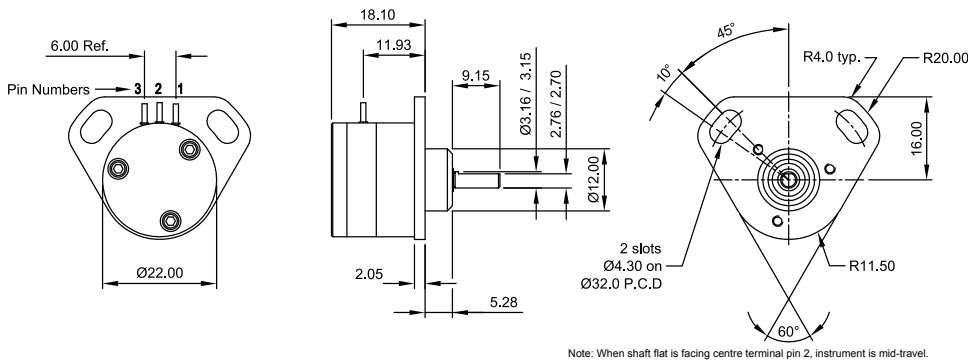
RP0911 - servo mount (single)



Not to scale. Dims: mm

Product ordering code
RP0911-XXX
 Electrical angle in °

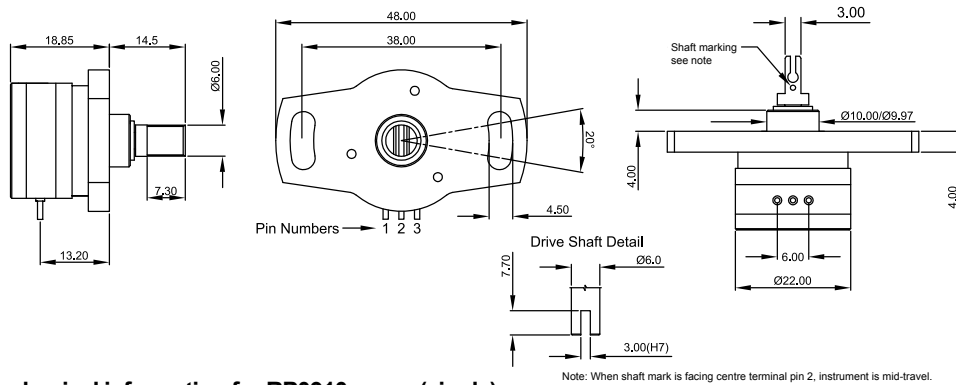
RP0912 - triangular flange (single)



Not to scale. Dims: mm

Product ordering code
RP0912-XXX
 Electrical angle in °

RP0913 - flange mount (single)



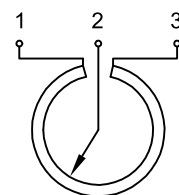
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Product ordering code
RP0913-XXX
 Electrical angle in °

Electrical & mechanical information for RP0910 range (single)

Electrical angle ($\pm 2^\circ$)	350°	130°	100°	
Resistance (typical)	6	2.2	1.7	kohms
Non-linearity	< ± 0.30		< ± 0.50	%
Applied voltage	<42	<20	<15	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			Mohms
Operating temp. range	-55° to +125°			°C
Sealing	IP50			
Shaft starting torque (max.)	10			grams cm
Weight (approx.)	15			grams
Materials	Case - Aluminium 6262 Shaft - Stainless Steel 303 series Bearing - AISI 440c Martensitic Stainless Steel (NMB DDRIF-418ZZ)			

Electrical Connections

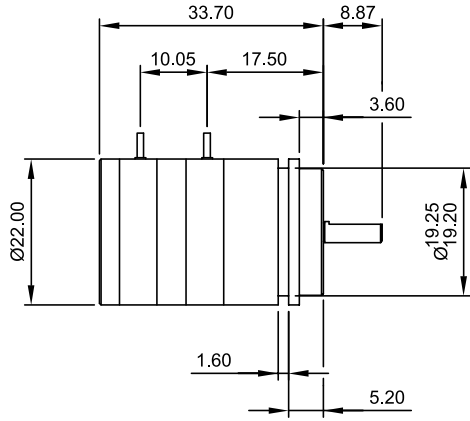


Schematic view on shaft

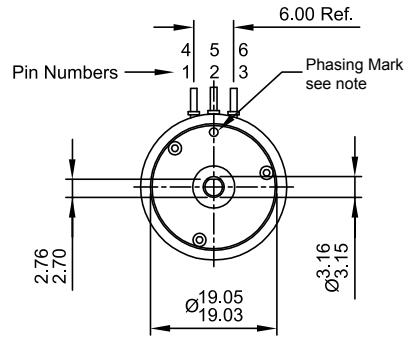
Note: Incorrect wiring may cause internal damage.

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.

RP0921 - servo mount (duplex)



Not to scale. Dims: mm



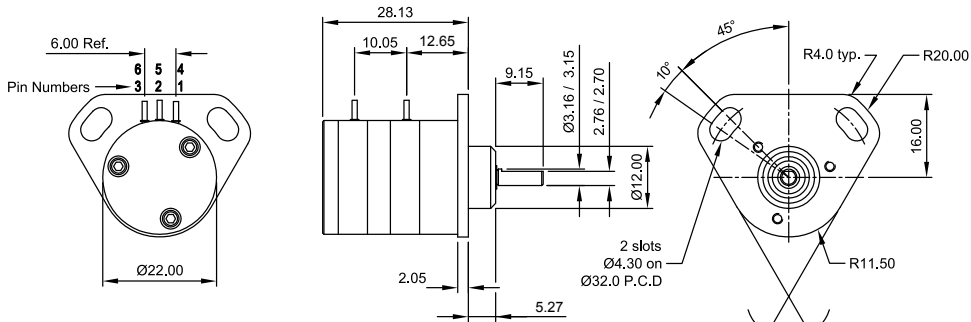
Note: When shaft flat is facing centre terminal pin 2, instrument is mid-travel.

Product ordering code

RP0921-XXX

Electrical angle in °

RP0922 - triangular flange (duplex)



Not to scale. Dims: mm

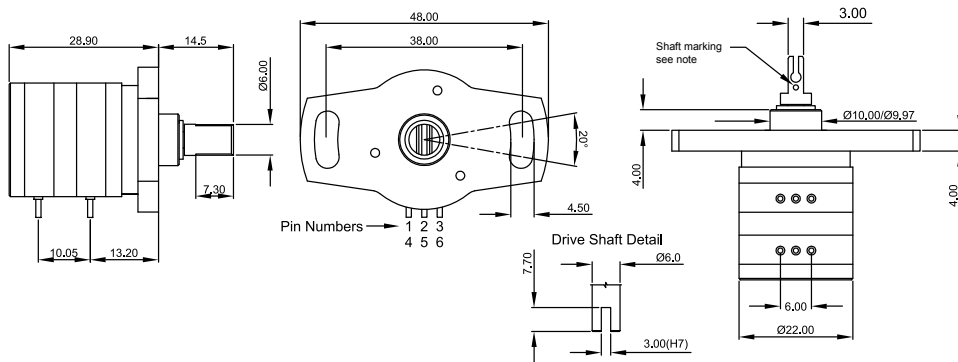
Note: When shaft flat is facing centre terminal pin 2, instrument is mid-travel.

Product ordering code

RP0922-XXX

Electrical angle in °

RP0923 - flange mount (duplex)



Not to scale. Dims: mm

Note: When shaft mark is facing centre terminal pin 2, instrument is mid-travel.

Product ordering code

RP0923-XXX

Electrical angle in °

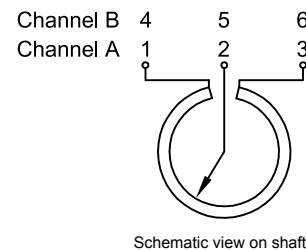
Electrical & mechanical information range for RP0920 (duplex)

Electrical angle (±2°)	350°	130°	100°	
Resistance (typical)	6	2.2	1.7	kohms
Non-linearity	<±0.30		<±0.50	%
Phasing (channel to channel)	<0.5		<1.0	%
Applied voltage	<42	<20	<15	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			Mohms
Operating temp. range	-55° to +125°			°C
Sealing	IP50			
Shaft starting torque (max.)	10			grams cm
Weight (approx.)	55			grams
Materials	Case - Aluminium 6262 Shaft - Stainless Steel 303 series Bearing - AISI 440c Martensitic Stainless Steel (NMB DDRIF-418ZZ)			

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.

Electrical Connections



Other RP rotary position sensor models available

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



RP5300

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



Contact details

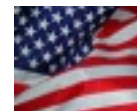
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