

NON-CONTACT ROTARY SENSORS SRH SERIES

Series of 'non-contact' rotary potentiometers designed to withstand the harsh environmental conditions of motorsports. Using proven "Hall Effect" technology, the SRH series sensors offer high performance and reliability at operational temperatures up to +150°C. These small and lightweight sensors are available with a large range of options. Used for detection of angular positions of mechanical organs such as throttle, pedals, etc.



SPECIFICATIONS:

Electrical

◆ Technology:	Hall Effect
◆ Electrical angle:	30° - 100° - 360° STD
◆ Channel Option:	Single & Dual channel (redundant)
◆ Supply Voltage:	5V DC (ratiometric output (10/90% Vin)) 6-30V DC (absolute output 0.5-4.5V)
◆ Output signal:	Analogue voltage
◆ Resolution:	12bit@5KHz
◆ Independent Linearity:	≤0.3% of measurement range
◆ Temperature Coefficient:	50ppm/K° of output signal
◆ Reverse Polarity Protection:	Yes
◆ Over Voltage Protection:	40V DC
◆ MAX Output Current:	8mA (per channel)

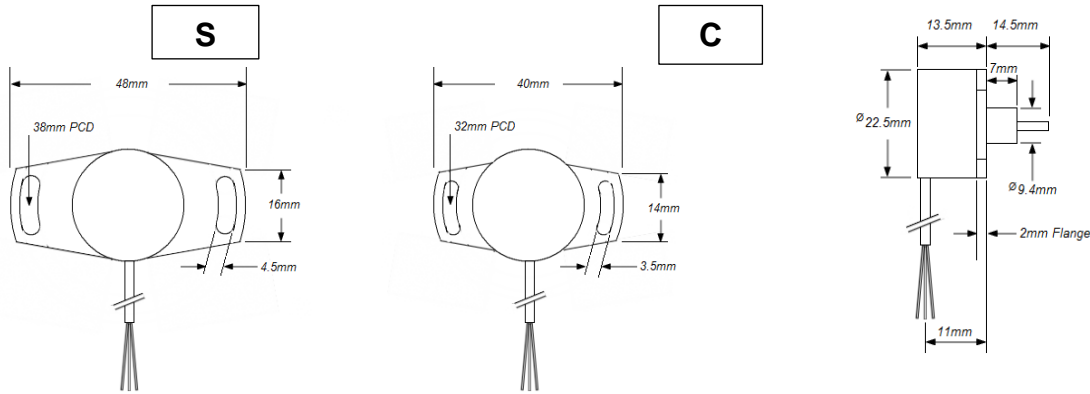
Mechanical

◆ Mechanical Angle:	360° continuous rotation
◆ MAX Shaft Velocity:	600 RPM
◆ Torque:	<3Ncm
◆ Housing material:	Aluminum
◆ Shaft Material:	Stainless Steel
◆ Weight:	15g (without cable)
◆ Sealing:	IP67
◆ Operating Temperature:	-40°C ÷ +150°C
◆ Vibrations:	5-2000Hz random
◆ Cable type and length:	~1000mm AWG26 Spec 55A
◆ Wiring:	

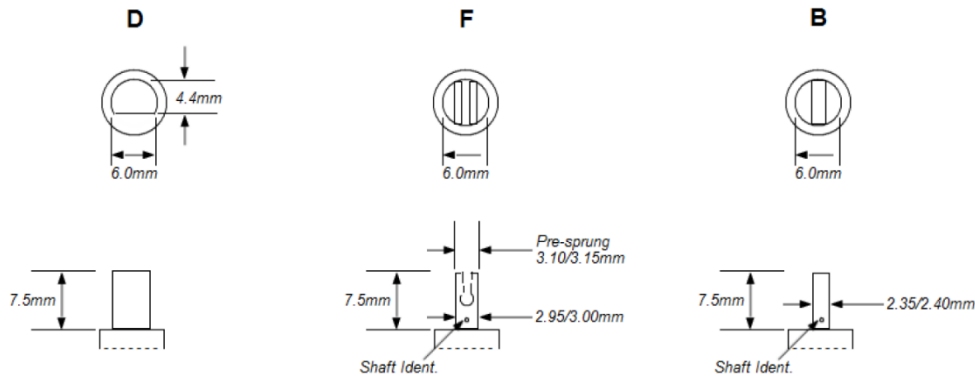
	Vcc	Gnd	Segnale
Single output (3 wires):	RED	BLACK	YELLOW
Dual output (6 wires):	BROWN	BLUE	WHITE

◆ Alignment:	Sensor output is at electrical center, when the shaft flat (D) or shaft ident ° (F,B) is aligned with the cable exit.
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Dimensions:



Shaft Options:



Ordering information:

Sample Product Code: **SRH - 360 - S - 5 AB - F**

Electrical Angle: ←
 XXX = 30°/100°/360° STD
 On request other ranges, with step of 1°
 (from 20° to 360°)

Housing: ←
 S = Standard flange mount (refer to drawing)
 C = Compact flange mount (refer to drawing)

Power Supply & Output: ←
 5 = 5V DC (ratiometric output 10-90%Vin (0.5-4.5V DC))
 6 = 6-30V DC (absolute output 0.5-4.5V DC)

Output Channel & Direction: ←
 AX = Single channel, clockwise rotation output (CW)
 BX = Single channel, counter-clockwise rotation output (CCW)
 AA = Dual channel, clockwise rotation outputs (CW, CW)
 BB = Dual channel, counter-clockwise rotation outputs (CCW, CCW)
 AB = Dual channel, opposite rotation outputs (CW, CCW)

Shaft Style: ←
 D = Shaft design D (refer to drawing)
 F = Shaft design F (refer to drawing)
 B = Shaft design B (refer to drawing)