


KEY FEATURES

- Rugged Construction
- Single or Dual output
- IP67 Seal
- Angles from 20° to 360°
- Wide Temperature Range

APPLICATIONS

- Motorsport control monitoring
- Vehicle and machine controls
- Axle angle detection

Description/Application Information

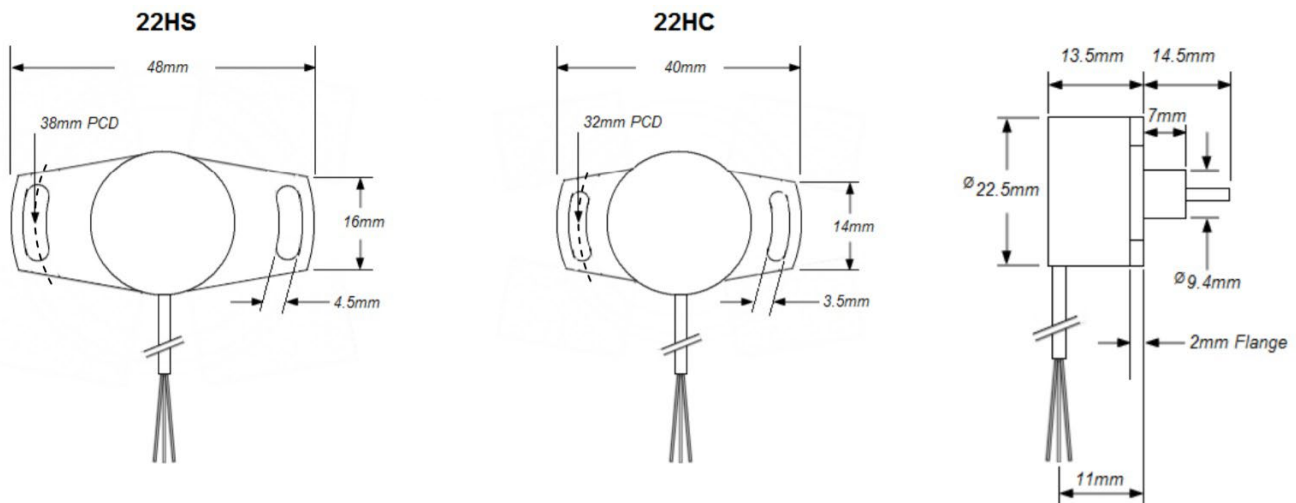
The MS22H series of 'non-contact' rotary position sensors are designed to withstand the harsh environments of motorsport, testing and industrial applications. Using proven 'Hall Effect' technology, the sensors offer high performance and reliability at operational temperatures up to +150°C

The small and lightweight, 22.5mm diameter MS-22H is available as either a single output or dual output sensor, with a choice of electrical angle, flange mount and shaft design options.

Configurable with single or dual output with phase and angle independent for each channel, set up during production to your specification.

Measurement Ranges

Our MS-22H Rotary sensors are made to order with start and finish point set up as per your specification. Available from 0-20° up to 0-360° range in 1° increments, with Single or Dual Output channels.

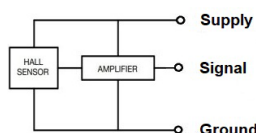
Dimensions


Specification

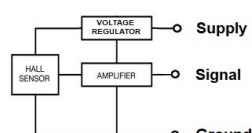
Technology	Hall Effect	
Electrical Angle	20° to 360°	Specified In 1° increments
Channels	Single or Dual	Each channel Independently set
Supply Voltage	5V DC	Regulated
Optional supply Voltage	6-30V DC	Unregulated
Output signal	Analogue Voltage or PWM	
Resolution	12 Bit @ 5KHz	<0.09° 360°angle
Independent Linearity	<0.3% of measurement range	
Temperature Coefficient	50ppm/°K of output signal	
Reverse Polarity Protection	Yes	
Max Shaft Velocity	600 RPM	
Max Output Current	8mA	Per Channel
Housing Material	Aluminium	
Shaft Material	Stainless Steel	
Mechanical Angle	360° continuous Rotation	
Mechanical Life	>50 Million Cycles	Depending on Environment
Torque	<3Ncm	
Standard Cable Length	0.5	m
Sealing	IP67	
Operating Temperature	-40°C to +150°C	
Vibration and Shock	5-2000Hz Random	3m drop onto concrete

Electrical Characteristic

Regulated (5V input)
Sensor

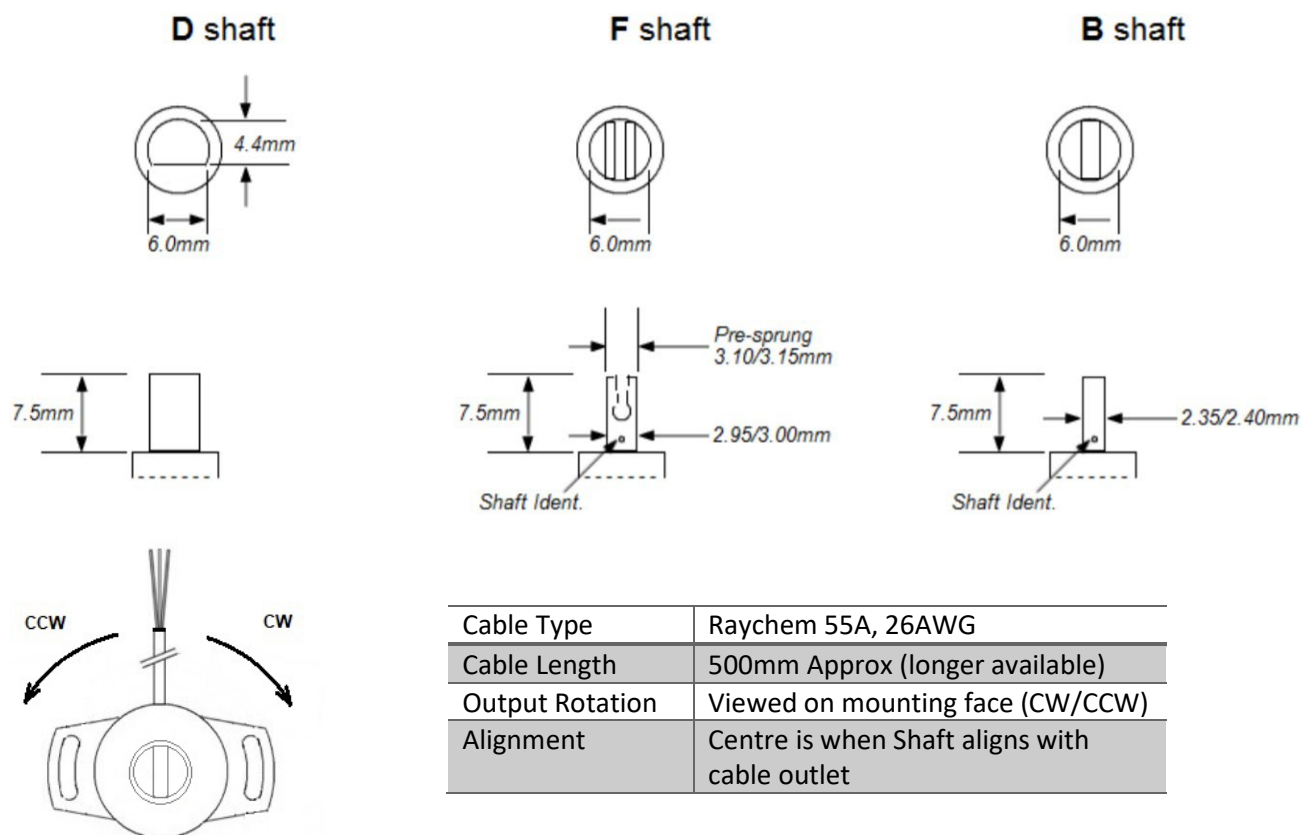


Un-regulated (6-30V)
Sensor



Red	+ Supply Channel 1
Black	GND (0V) Channel 1
Yellow	Signal Channel 1
Brown*	+ Supply Channel 2
Blue*	GND (0V) Channel 2
White*	Signal Channel 2
Green	Not Used

*Not required on single channel version

Mechanical Characteristic


Ordering Information

Example product code: **MS-22H S -360 5 BX 67 F 4W**

Series MS-22H

Mechanical Mounting

C = Compact Flange Mount

S = Standard Flange Mount

Electrical Angle

Insert required angle 20° to 360° in increments of 1° eg:045

Power Supply and Output

5 = 5V DC regulated, ratiometric output 10-90% of supply

6 = 6-30V DC unregulated Absolute output 0.5 to 4.5V DC

Output Channel and Direction

AX = Single Channel ,Clockwise Rotation (CW)

BX = Single Channel ,Counter-Clockwise Rotation (CCW)

AA = Dual Channel Both Clockwise output (CW,CW)

BB = Dual Channel Both Counter-Clockwise output (CCW,CCW)

AB = Dual Channel Opposite Rotation outputs (CW,CCW)

Seal Rating

65 = IP65

67 = IP67

Shaft Style

D = Design D

F = Design F (refer to drawings for details)

B = Design B

Options (leave blank if not required)

4W = Dual channel 4 wire (semi-redundant)

R14 = Resolution 14 Bit @ 1.66KHz

V1 = Voltage Output 0.25 to 4.75V DC (5V Ratiometric)

V2 = Voltage Output 0.1 to 4.9V DC (5V Ratiometric)

LXXXX = Cable Length in mm (500mm supplied as standard)

Non-standard ranges available
Please contact us for other options

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