

AM-RSS - Programmable Sensor

Rotary Shafted Sensor - Moulded

PHOENIX
AMERICA



* Actual colour may vary



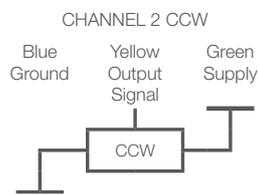
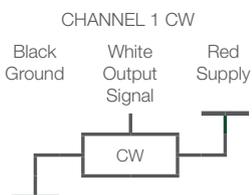
- Hall Effect Technology
- Long life - extremely robust
- Programmable Angles from 30° up to 360°
- Redundant output
- Numerous shaft and mounting options as standard
- Form U, D-Shaft and spring coupling drive shaft as standard
- Bespoke Mounting / Shaft options available on request

The AM-RSS series programmable angle sensors offer a flexible range of performance for high duty cycle position feedback applications in all areas of industry. With programmable angle selection, and a choice of U-Shaft, D-Shaft and Spring Coupling mounting shafts as standard as well as numerous input and output options this compact and contactless Hall Effect sensor series features IP68 sealing and redundant output in a very competitive package.

General specifications

Mechanical		Vibration	20...2000 Hz; Amax = 0.75 mm; amax = 31.4 g to IEC 60068-2-6
Typical Life Cycle	>50 million movements (restriction by mechanics)	IP rating	IP68 (minimum)
Torque	< 0.8 Ncm	Electrical	
Measuring range	360° redundant, signal 1 cw, signal 2 ccw	Supply Voltage	5V +/- 0.5V
Max. operating speed	120 U/min	Output signal	
Housing	High Grade Temperature Resistant Plastic	Ratiometric 5%...95% of supply (+/-25mv of specified electrical output range for both start & end voltage) PWM frequency 100Hz... 1000Hz, 1000Hz default, duty cycle between 5%-95%	
Bearing	Oillite	Independent linearity	+/- 0.5% of each signal range
Shaft	Stainless Steel- 316 as U-Shaft / D-Shaft / Spring Coupling	Isolation resistance	200 MΩ (500 VDC, 1 bar, 2s)
Tightening torque	Maximum recommended tightening Torque 2Nm	Repeatability	<= 0.2% (dependent on mounting tolerances)
Mounting	Customer to ensure correct suitability and fitment of mounting bolts	Electrical connection	See ordering code/wiring diagram
Environmental		Cable type	Raychem Spec 55, 24 AWG; Sleeving- Raychem DR25 & FEP, 24 AWG; Sleeving- PUR
Operating temperature	-40°C to +125°C (Short Term 150°C [DR25 Cable]) & -40°C to +85°C (Short Term 90°C [Low Temp PUR Cable])		

Wiring



AM-RSS - Programmable Sensor

Rotary Shafted Sensor - Moulded

PHOENIX
A M E R I C A

Ordering information

(Please use the characters in the chart below to construct your product code)

These standard models are available from stock:

95088 AM-RSS-S-112-2838-030-1178-50-R	95402 AM-RSS-D-111-2832-360-17-50-L
95298 AM-RSS-S-112-2838-060-1178-50-R	95073 AM-RSS-D-111-2838-360-17-50-L
95299 AM-RSS-S-112-2838-120-1178-50-R	95401 AM-RSS-D-112-2838-360-1178-50-L
95300 AM-RSS-S-112-2838-180-1178-50-R	95261 AM-RSS-S-111-2838-360-17-50-L
94472 AM-RSS-S-112-2838-360-1178-50-R	94480 AM-RSS-S-111-2832-360-17-50-L

AM-RSS - S - 1 1 2 - 2832 - 360 - 11 78 - 50 - R

Product Series	Shaft	Input Type	Output Type	Number of Channels	Mounting Flange PCD	Electrical Angle	Output Signal	Channel Direction	Cable Length	Cable Type
Rotary Shafted Sensor	U = Male U Shaft D = Male D Shaft S = Male Spring Coupling Shaft X = Customised on request	1 = 5V Supply 2 = 6-32V Unregulated Supply 3 = 12-32V Unregulated Supply 4 = 9-32V Supply	1 = Analog Ratiometric 2 = PWM 3 = 0-10V 4 = 4... 20mA	1 = Single Channel 2 = Dual Channel	32 = 32mm PCD 38 = 38mm PCD XX = Custom on request	360 = Standard Electrical Angle 360° Optional Angle from 30° to 360° in 1° steps (e.g. 181=181°)	1 = 5% to 95% of Input Voltage 2 = 10% to 90% of Input Voltage 3 = Custom on request e.g. 11 = 5 to 95% both channels	7 = Clockwise* 8 = Counter Clockwise* e.g. 77 = Clockwise both channels	50 = Standard Cable Length 500mm XX = Custom on request < 1 metre XXX = Custom on request > 1 metre	R = Raychem L = Lower Temp Rating

Input and Output options coming soon

Some Inputs to Outputs are not configurable please contact our sales team for more info.

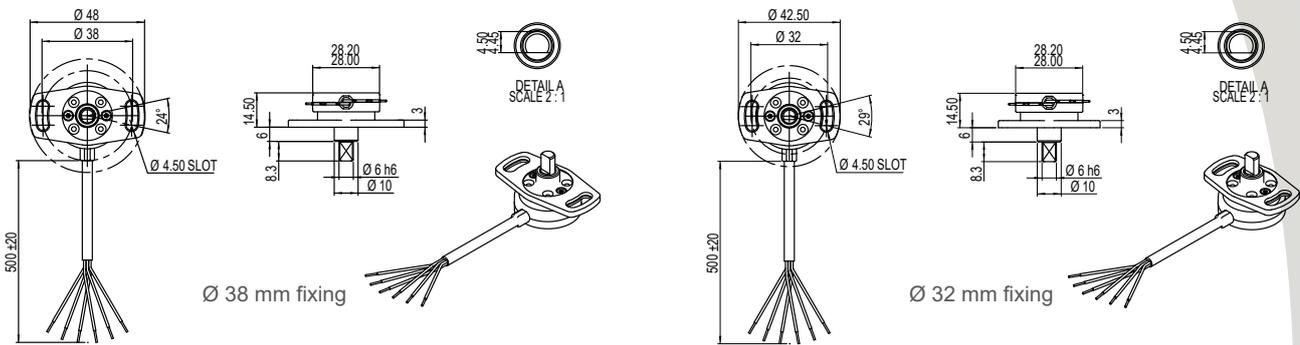
*In view of the shaft.

AM-RSS - Programmable Sensor Rotary Shafted Sensor - Moulded

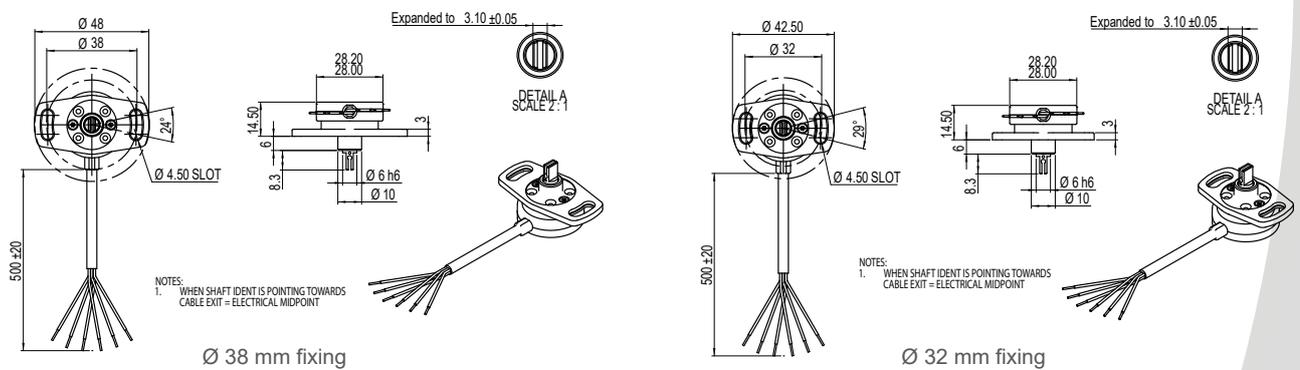
PHOENIX
AMERICA

Outline dimensions in mm

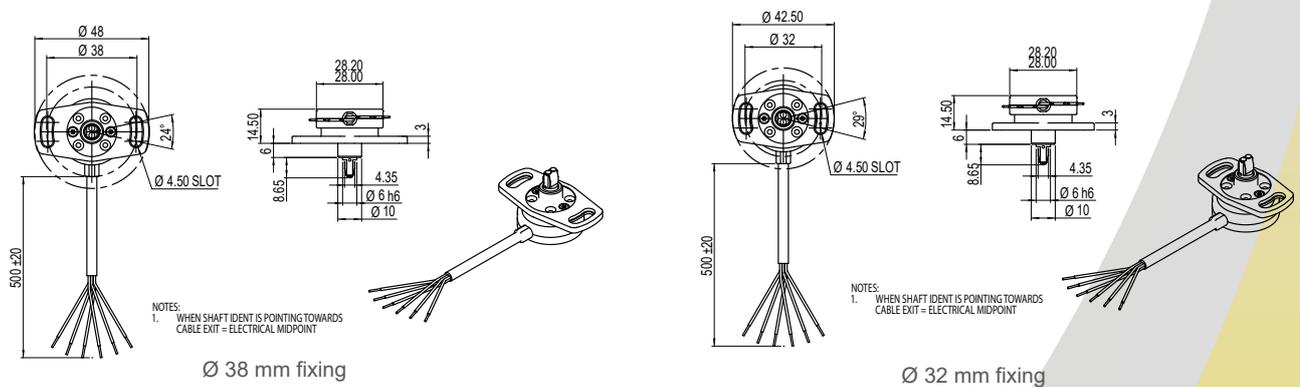
Standard D-Shaft option



Standard U-Shaft option

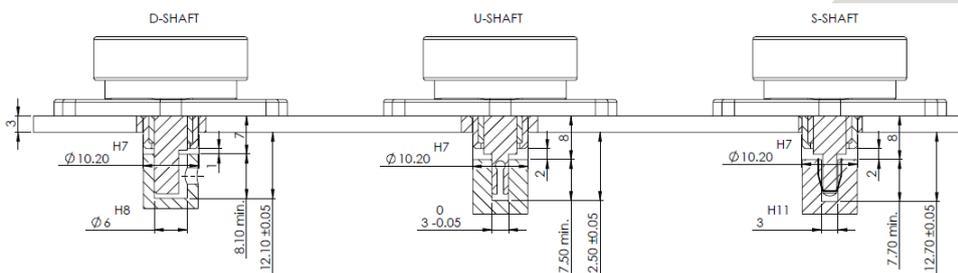


Standard Spring-Shaft option



Recommended installation guide

- Recommended lead in chamfer on flange boss and mating shaft interface.
- D-Shaft geometry utilises a set screw (recommend at minimum M3 Dog point set screw).
- S-Shaft spring clip compresses into slot (not as shown).
- U-Shaft geometry compresses into slot.



Phoenix America LLC • 4717 Clubview Drive
Fort Wayne, Indiana 46804, USA • www.phoenixamerica.com
Within USA: 1 888 801 1422 • Outside USA: +1 260 432 9664

Subject to change without notice