



- ▶ **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.

Specifications	
Mechanical	
Typical Life Cycle	>50 million movements (restriction by mechanics)
Torque	< 0.8 Ncm
Measuring range	360° redundant, signal 1 cw, signal 2 ccw
Max. operating speed	120 U/min
Housing	High Grade Temperature Resistant Plastic
Bearing	Oilite
Shaft	Stainless Steel - 316 as U-Shaft / D-Shaft / Spring Coupling
Tightening torque	Maximum recommended tightening Torque 2Nm
Mounting	Customer to ensure correct suitability and fitment of mounting bolts
Environmental	
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])
Vibration	20...2000 Hz; Amax = 0.75 mm; amax = 31.4 g to IEC 60068-2-6
IP rating	IP68 (minimum)
Electrical	
Supply Voltage	5V +/- 0.5V
Output signal	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%
Independant linearity	+/- 0.5% of each signal range
Isolation resistance	200 MΩ (500 VDC, 1 bar, 2s)
Repeatability	<= 0.2% (dependent on mounting tolerances)
Electrical connection	See ordering code/wiring diagram
Cable type	Raychem Spec 55, 24 AWG; Sleeving - Raychem DR25 & FEP, 24 AWG; Sleeving- PUR
MTTFd	370 years
Coloured Housing	
Green (other colours available, POA, MOQ 100 units)	

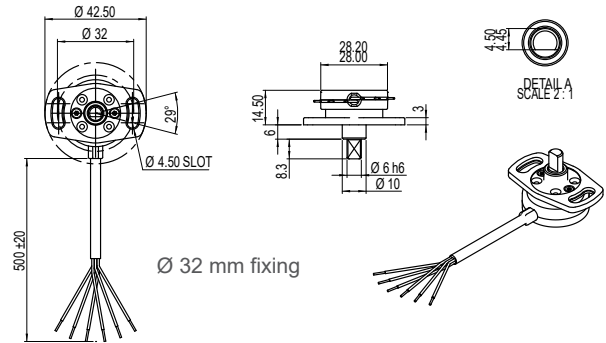
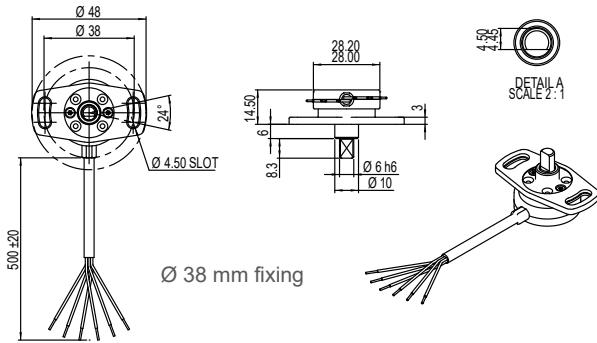
# AM-RSS - PROGRAMMABLE SENSOR

## Rotary Shafted Sensor - Moulded

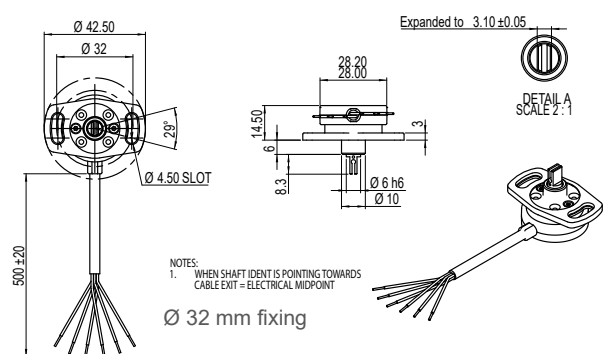
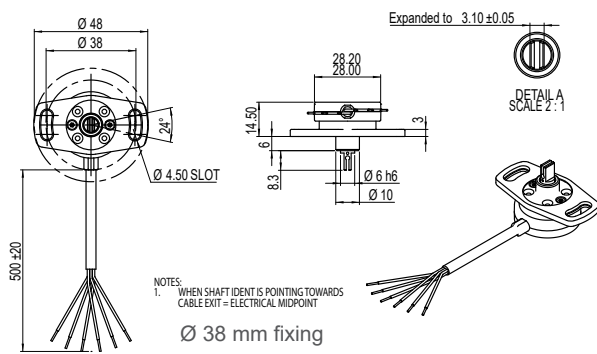


### Outline dimensions in mm

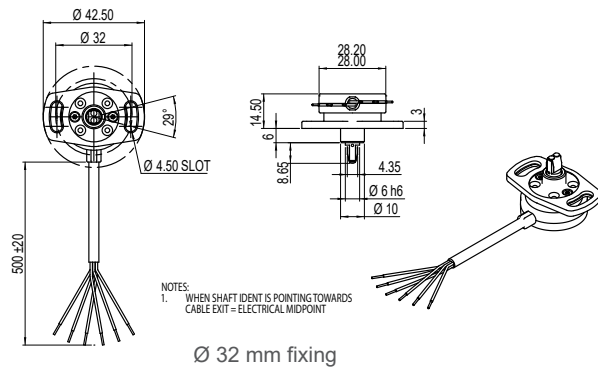
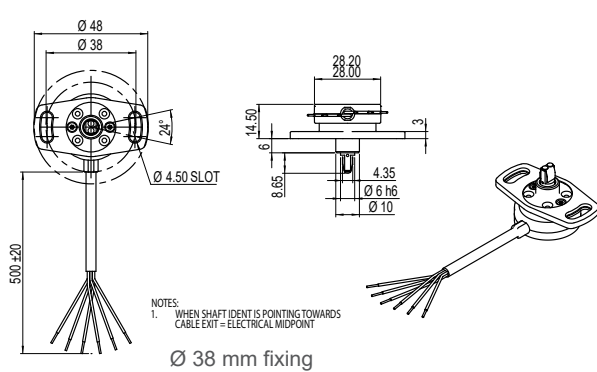
#### Standard D-Shaft option



#### Standard U-Shaft option



#### Standard Spring-Shaft option



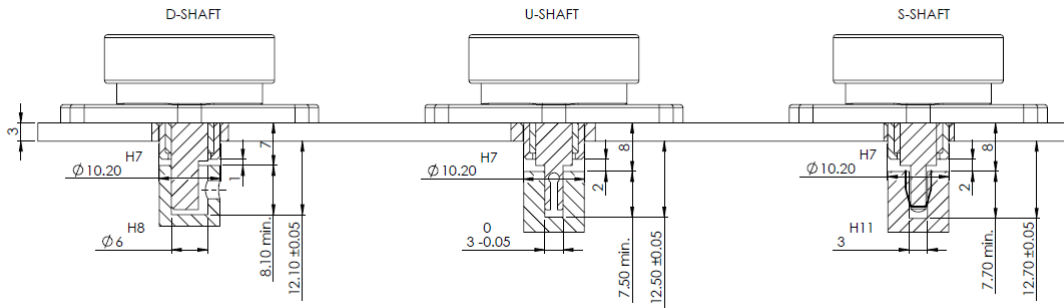
# AM-RSS - PROGRAMMABLE SENSOR

## Rotary Shafted Sensor - Moulded



### 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.



### Wiring





# AM-RSS - PROGRAMMABLE SENSOR

## Rotary Shafted Sensor - Moulded



The following models are available as standard products:

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