



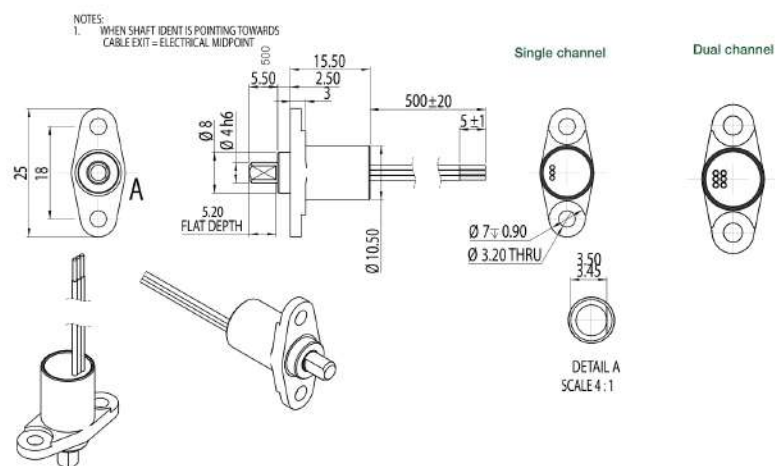
- ▶ **Hall Effect non-contact technology**
- ▶ **Long life - extremely robust**
- ▶ **Programmable angles from 30° up to 360°**
- ▶ **IP68 protection**
- ▶ **Selectable and customisable mounting options**
- ▶ **Redundant output**

The Euro-CMRS angle sensor is specifically aimed at arduous high-duty cycle position feedback applications where miniaturisation is a key factor. With programmable angle selection, this compact and contactless IP68 rated Hall Effect sensor features a high grade aluminium housing with stainless steel shaft that are both mechanically customisable to suit the customer's application.

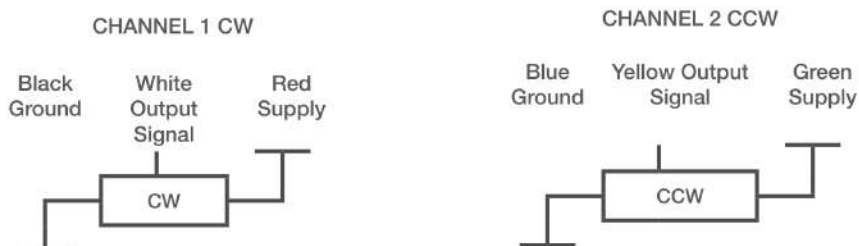
| Specifications                   |                                                                                                                                                                                        |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical                       |                                                                                                                                                                                        |
| Typical Life Cycle               | >50 million movements (restriction by mechanics)                                                                                                                                       |
| Torque                           | < 0.8 Ncm                                                                                                                                                                              |
| Measuring range                  | 360° redundant, signal 1 cw, signal 2 ccw                                                                                                                                              |
| Housing                          | High grade anodised aluminium                                                                                                                                                          |
| Shaft                            | Stainless steel 316                                                                                                                                                                    |
| Bearing                          | Phosphor bronze sleeve                                                                                                                                                                 |
| Recommended Mounting Bolt Torque | 1.8- 2.2 Nm (may differ dependant on application)                                                                                                                                      |
| Environmental                    |                                                                                                                                                                                        |
| Operating temperature            | -40°C to +125°C (Short term 150°C)                                                                                                                                                     |
| Vibration                        | 20...2000 Hz; Amax = 0.75 mm; amax = 31.4 g to IEC 60068-2-6                                                                                                                           |
| IP rating                        | IP68                                                                                                                                                                                   |
| Electrical                       |                                                                                                                                                                                        |
| Supply Voltage                   | 5V +/- 0.5V                                                                                                                                                                            |
| Output signal                    | Ratiometric 5%...95% of supply (+/-25mv of specified electrical output range for both start & end voltage)<br>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)                                                                                                                                                            |
| Electrical connection            | See ordering code/wiring diagram                                                                                                                                                       |
| Cable type                       | Raychem Spec 55, 24 AWG                                                                                                                                                                |



## Dimensions in mm



## Wiring





## Ordering information

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

**Sample Code** Euro-CMRS – D – 1 1 2 – 1018 – 360 – 11 78 – 50

### Shaft

D Standard Male D Shaft (3.175mm Ø)

X Customised on request

### Input Type

1 SV

### Output Type

1 Analog ratiometric

2 PWM

### Nr. of Channels

1 Single Channel

2 Dual Channel

### Mounting Flange PCD

18 18mm PCD

XX Custom on request

### Electrical Angle

360 Standard Electrical Angle 360°

Optional Angle from 30° to 360° in 1° steps (e.g. 181=181°)

### Output Signal

1 5% to 95% of Input

2 10% to 90% of Input Voltage

3 Custom on request z.B. 11 = 5 bis 95% both Channels

### Channel Direction

7 Clockwise

8 Counter Clockwise

z.B. 77 = Clockwise both channels

### Cable length

50 Standard Cable Length 500mm

xx Custom on request < 1 metre

xxx Custom on request > 1 metre  
(Standard Cable Raychem Spec 55, 24 AWG; Others available on request)

The following sensor models are available as standard products:

94474 Euro-CMRS-D-112-1018-360-1178-50

95291 Euro-CMRS-D-112-1018-120-1178-50

95290 Euro-CMRS-D-112-1018-060-1178-50

**If you require a customized solution for your program contact our sales team.**