

# Euro-CMRT Programmable Sensor

## Custom Micro Rotary Threaded



- Micro Threaded Rotary Sensor
- 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-CMRT 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 and a stainless steel shaft which together with the M8 mounting thread are all 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 Nut Torque | 5- 6.2 Nm (may differ dependant on application)                                                            |
| Environmental                   |                                                                                                            |
| Operating temperature           | -40°C to +125°C (Short term 150°C)                                                                         |
| Vibration                       | 5...2000 Hz; Amax = 0.75 mm;<br>amax = 20g 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) |
| 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                                                                                    |

## Ordering information

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

### Euro-CMRT - D - 1 1 2 - 10M8 - 360 - 11 78 - 50

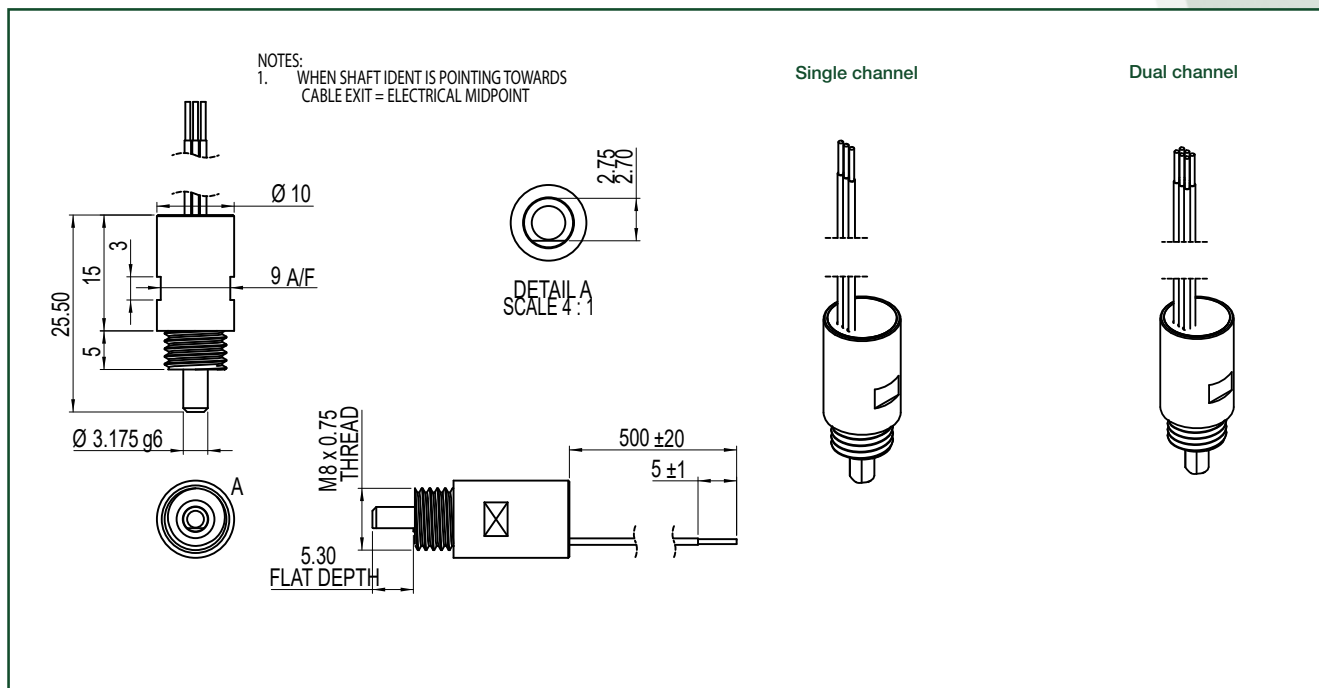
| Product Series Code                  | Shaft                                                                                                                          | Input Type                                                        | Output Type                                                                                   | Number of Channels                                                                                 | Mounting Thread                                                                                      | Electrical Angle                                                                                                                                                | Output Signal                                                                                                                                                                                          | Channel Direction                                                                                                                           | Cable Length                                                                                                                                                                                                                                                         |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Euro -Custom Micro Rotary Threaded) | <ul style="list-style-type: none"> <li>• D - Standard Male D Shaft (3.175mm Ø)</li> <li>• X - Customised on request</li> </ul> | <ul style="list-style-type: none"> <li>• 1 - 5V Supply</li> </ul> | <ul style="list-style-type: none"> <li>• 1 - Analog Ratiometric</li> <li>• 2 - PWM</li> </ul> | <ul style="list-style-type: none"> <li>• 1 - Single Channel</li> <li>• 2 - Dual Channel</li> </ul> | <ul style="list-style-type: none"> <li>• M8 - M8 X 0.75</li> <li>• XX - Custom on request</li> </ul> | <ul style="list-style-type: none"> <li>• 360 - Standard Electrical Angle 360°</li> <li>• Optional Angle from 30° to 360° in 1° steps (e.g. 181=181°)</li> </ul> | <ul style="list-style-type: none"> <li>• 1 - 5% to 95% of Input Voltage</li> <li>• 2 - 10% to 90% of Input Voltage</li> <li>• 3 - Custom on request</li> </ul> <p>e.g. 11 = 5 to 95% both channels</p> | <ul style="list-style-type: none"> <li>• 7 - Clockwise</li> <li>• 8 - Counter Clockwise</li> </ul> <p>e.g. 77 = Clockwise both channels</p> | <ul style="list-style-type: none"> <li>• 50 - Standard Cable Length 500mm</li> <li>• XX - Custom on request &lt; 1 metre</li> <li>• XXX - Custom on request &gt; 1 metre</li> <li>• (Standard Cable Raychem Spec 55, 24 AWG; Others available on request)</li> </ul> |

Some Inputs to Outputs are not configurable please contact sales@variohm.com for more info

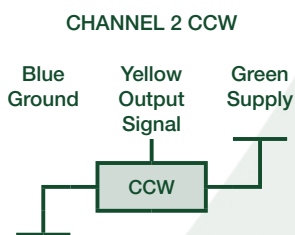
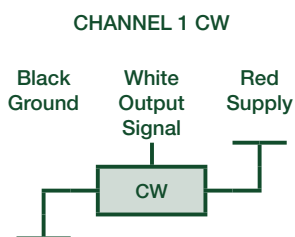
# Euro-CMRT Programmable Sensor Custom Micro Rotary Threaded



## Euro-CMRT - dimensions in mm



## Wiring



## PITCH TECHNOLOGIES

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Subject to change without notice