

# Euro-CMRK Programmable Sensor Custom Micro Rotary Puck



Eurosensor



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- Puck and magnet design
- Hall Effect non-contacting technology
- Long life - extremely robust
- Programmable angles from 30° up to 360°
- IP68 protection
- Redundant output
- Customisable housing

Based on the Euro-XPk the Euro-CMRK angle sensor is specifically aimed applications where miniaturisation is a key factor. The main sensor housing is manufactured from high grade aluminium alloy with an anodised finish and may be customised to exactly suit the application. The Euro-CMRK series' housing and magnet accessory dimensions are fully customisable dependant on customers' requirements. With redundant output this compact and fully non-contacting Hall Effect sensor features IP68 sealing and will suit arduous high-duty cycle position feedback applications.

## Specifications



Mechanical	
Typical Life Cycle	In excess of 100 million cycles
Measuring range	360° redundant, signal 1 cw, signal 2 ccw
Housing	High grade anodised aluminium
Recommended Mounting Bolt Torque	0.5- 0.63 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; 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) PWM frequency 100Hz... 1000Hz, 1000Hz default, duty cycle between 5%-95%
Independant linearity	+/- 0.5% of each signal range
Sample Rate (Fast Mode)	5 kHz
System Propagation Delay (Fast Mode)	600 µs
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-CMRK - X - 1 1 1 - 1216 - 360 - 11 78 - 50**

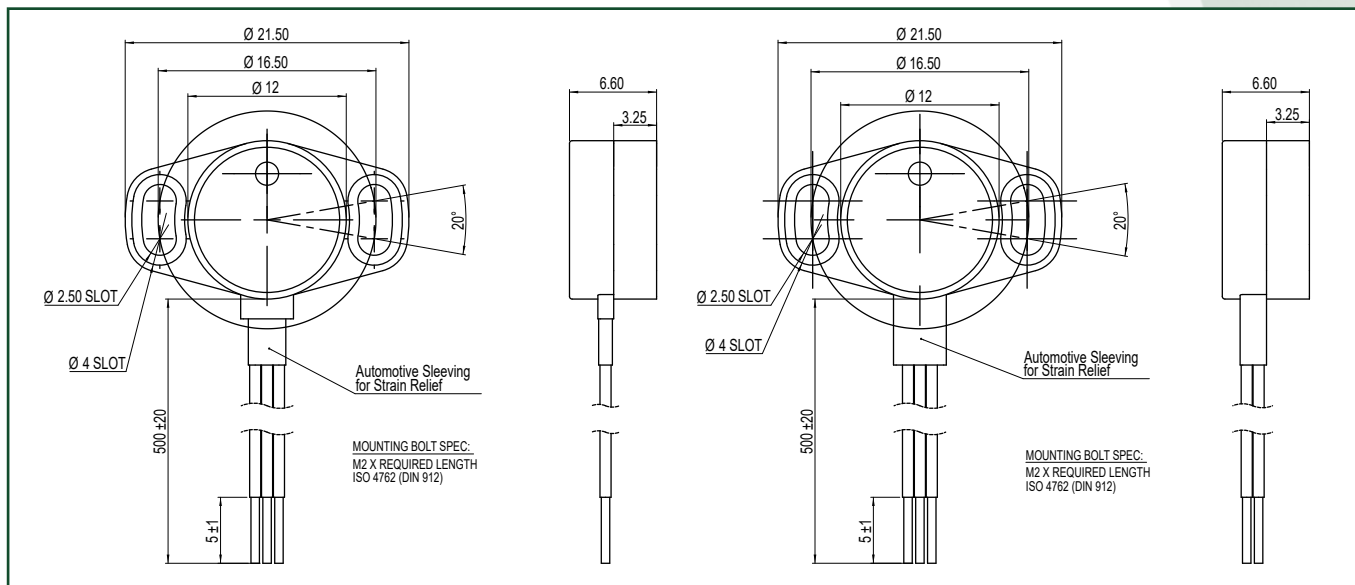
Product Series Code	Accompanying Magnet	Input Type	Output Type	Number of Channels	Mounting Flange PCD	Electrical Angle	Output Signal	Channel Direction	Cable Length
(Euro-Custom Micro Rotary Puck)	<ul style="list-style-type: none"> <li>• A – No magnet</li> <li>• B – 5x5x2 magnet</li> <li>• C – M4 magnet</li> <li>• D – Micro Plug magnet</li> <li>• E – M2 female magnet</li> <li>• X – Custom - 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>• 16 – 16.5mm PCD</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> <li>e.g. 11 = 5 to 95% both channels</li> </ul>	<ul style="list-style-type: none"> <li>• 7 – Clockwise</li> <li>• 8 – Counter Clockwise</li> <li>e.g. 77 = Clockwise both channels</li> </ul>	<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>

Disclaimer: Specifications listed are only applicable when used in conjunction with Variohm specified magnets.



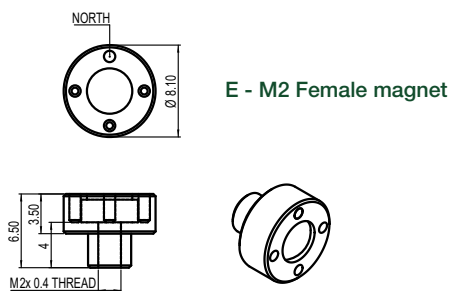
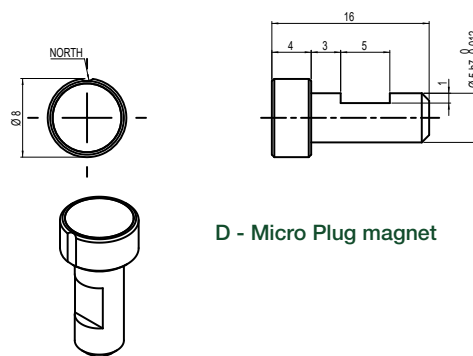
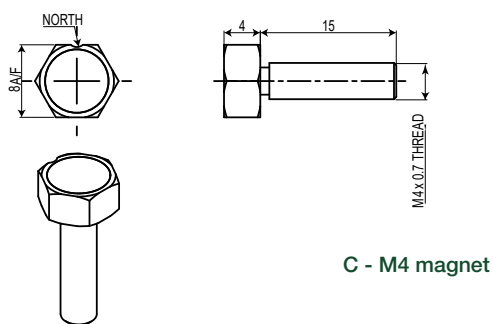
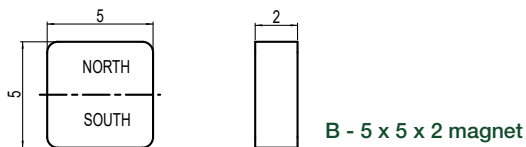
Subject to change without notice

## Euro-CMRK - dimensions in mm



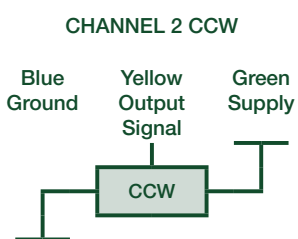
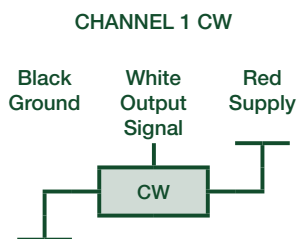
## Magnet options - dimensions in mm

Magnet Code	Magnet Type	Distance from CMRK face
A	No magnet	
B	5x5x2 magnet	0.5 - 3 mm
C	M4 magnet	0.5 - 3 mm
D	Micro plug magnet	0.5 - 3 mm
E	M2 Female magnet	0.5 - 3 mm
X	Custom - on request	-



Note for magnets: Maximum permitted radial offset = +/- 0.75 mm

## Wiring and orientation



**ORIENTATION** - midpoint of electrical travel shown

