



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

Based on the well proven Euro-XPk angle sensor, this miniaturised variant boasts the same features in a 30 mm outer diameter package. With programmable angle selection and redundant output, this extremely compact and fully contactless Hall Effect Sensor features IP68 sealing and will suit arduous, high-duty cycle position feedback applications in all industries.

## Specifications

### Mechanical

Typical Life Cycle	In excess of 100 million cycles
Measuring range	360° redundant, signal 1 cw, signal 2 ccw
Housing	High grade temperature resistant plastic
Tightening torque	Maximum recommended tightening Torque 2Nm
Mounting	Customer to ensure correct suitability and fitment of mounting bolts
Weight	17 g

### Environmental

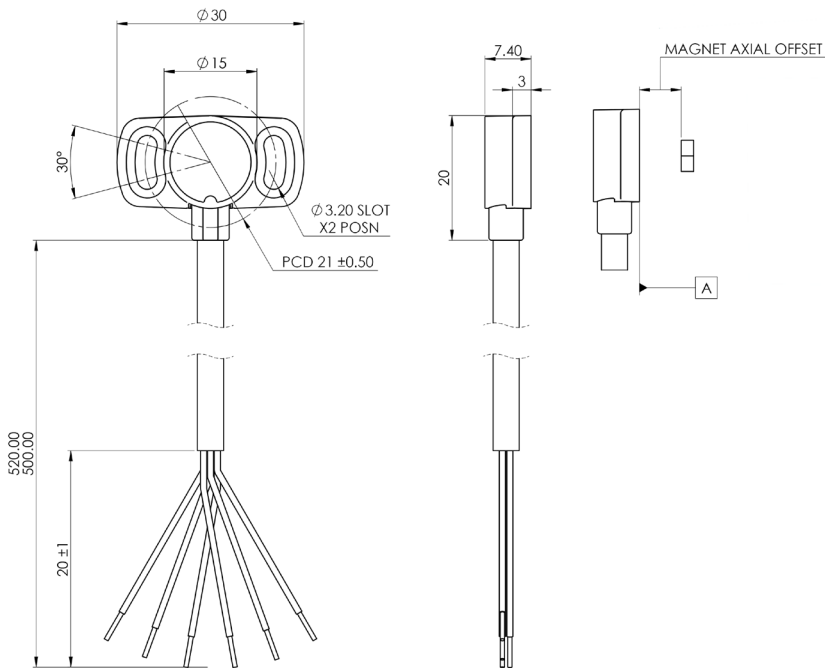
Operating temperature	-40° C to +125° C (Short term 150° C)
Vibration	20...2000 Hz; Amax = 0.75 mm; amax = 31.4 g to IEC 60068-2-6
IP rating	IP68

### Electrical

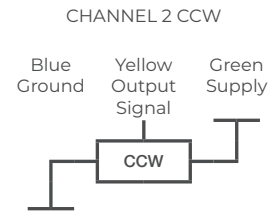
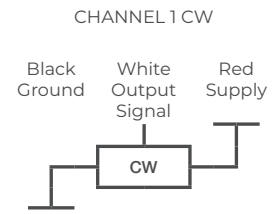
Supply Voltage	5V +/- 0.5V
Output signal	Ratiometric 5%...95% of supply (+/-25mv of specified electrical output range for both start and end voltage). PWM Frequency 100 Hz ... 1000 Hz default, duty cycle between 5% - 95%
Independent linearity	+/- 0.5% of each signal range
Sample Rate (Fast Mode)	5KHz
System Propagation Delay (Fast Mode)	600µs
Isolation resistance	200 MΩ (500 VDC, 1 bar, 2s)
Electrical connection	See ordering code/wiring diagram
Cable type	24 AWG PFA Insulated cable sheathed in a PUR Fuel/Diesel resistant jacket



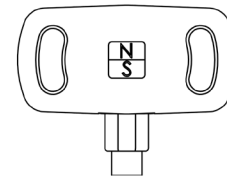
## Dimensions in mm



## Wiring and orientation

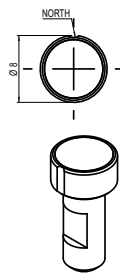


**ORIENTATION -**  
midpoint of electrical travel shown

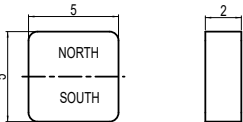
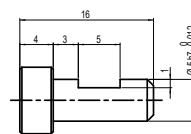


## Magnet options - dimensions in mm

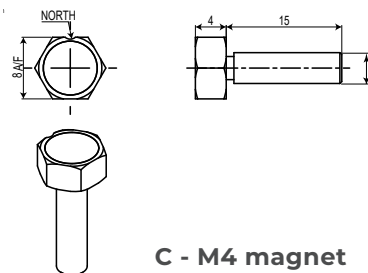
Magnet Code	Magnet Type	Distance from MXPB face
A	No magnet	
B	5x5x2 magnet	0.25 - 2 mm
C	M4 magnet	0.25 - 1 mm
D	Micro plug magnet	0.25 - 1 mm
E	M2 Female magnet	0.25 - 1.5 mm
X	Custom - on request	-



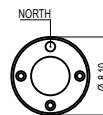
**D - Micro Plug magnet**



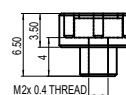
**B - 5 x 5 x 2 magnet**



**C - M4 magnet**



**E - M2 Female magnet**



Note for magnets: Maximum permitted radial offset =  $\pm 0.3$  mm

# EURO-MXPK PROGRAMMABLE SENSOR MICRO PUCK SENSOR



## Ordering information

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

Sample Code	Euro-MXPK	X	1	1	1	-	1521	-	360	-	11	-	78	-	50
<b>Series</b>	Euro-MXPK														
<b>Accompanying magnet</b>	<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>														
<b>Input type</b>	1 5V supply														
<b>Output type</b>	<ul style="list-style-type: none"> <li>1 Analog Ratiometric</li> <li>2 PWM</li> </ul>														
<b>No. of channels</b>	<ul style="list-style-type: none"> <li>1 Single channel</li> <li>2 Dual channel</li> </ul>														
<b>Electrical angle</b>	360 Standard electrical angle 360° Optional Angle from 30° to 360° in 1° steps (e.g. 181 = 181°)														
<b>Output signal</b>	<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 e.g. 11 = 5 to 95% both channels</li> </ul>														
<b>Channel direction</b>	<ul style="list-style-type: none"> <li>7 Clockwise</li> <li>8 Counter clockwise</li> </ul> e.g. 77 = Clockwise both channels														
<b>Cable length</b>	<ul style="list-style-type: none"> <li>50 Standard Cable Length 500 mm</li> <li>XX Custom on request &lt; 1 metre</li> <li>XXX Custom on request &gt; 1 metre</li> </ul>														

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

**The following magnets are typically available from stock:**

17962 B-5x5x2 Magnet	94385 C-M4 Magnet	94386 D-Micro Plug Magnet	94387 E - M2 Female Magnet
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