



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

Based on the well proven 28 mm diameter Euro-XP angle sensor, the puck option is a two piece design with a separate magnet. 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 temperature resistant plastic
Tightening torque	Maximum recommended tightening Torque 2Nm
Mounting	Customer to ensure correct suitability and fitment of mounting bolts

Environmental

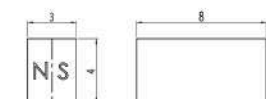
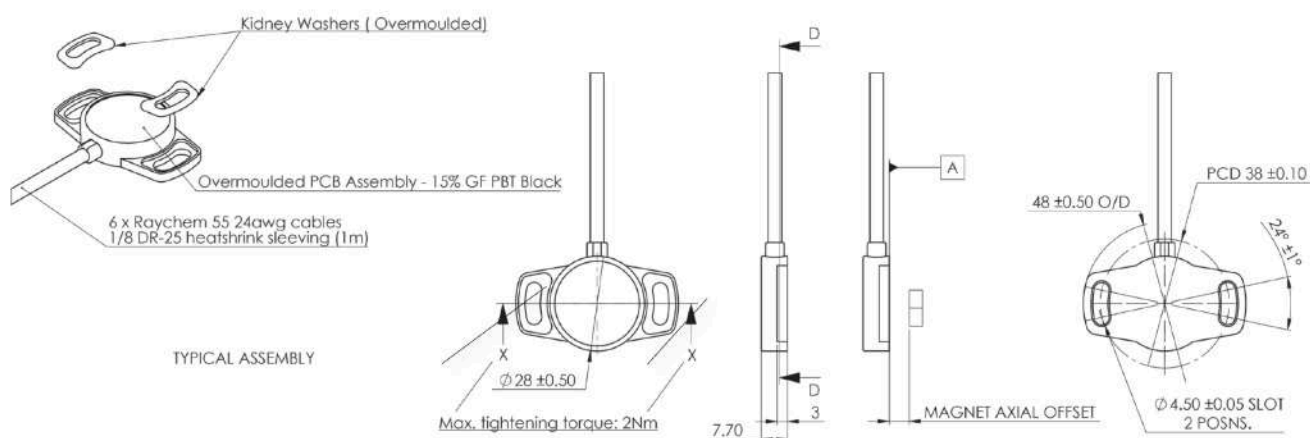
Operating temperature	-40° C to +125° C (Short term 150° C)
Vibration	20...2000 Hz; Amax = 0.75 mm; amax = 31.4 g to IEC 60068-2-6

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 AWC; Sleeving - Raychem DR25
MTTFd	370 years



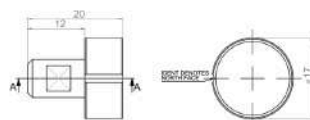
Dimensions in mm



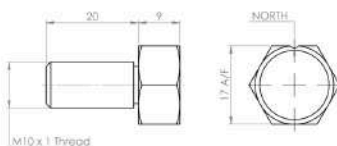
Small magnet -01



Large magnet -03



Plug magnet -04

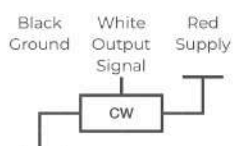


M10 magnet -02

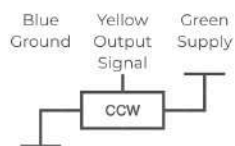
Notes for magnets: Maximum permitted radial offset = +/- 1 mm

Magnet type	Distance from XPK Face
M10 Screw Magnet	0,5 - 5 mm
Small Magnet	0 - 2 mm
Large Magnet	1,5 - 6 mm
Plug Magnet	0,5 - 5 mm

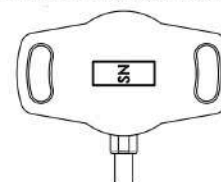
CHANNEL 1 CW



CHANNEL 2 CCW



ORIENTATION - midpoint of electrical travel shown



Mating face of XPK



Ordering information

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

Sample Code	Euro-XPk	-	2838	-	8xx	-	2 1 4	-	911	-	00*
Series											
Euro-XPk											
Mechanical version											
38 = separate Puck und Magnet Design											
Electrical Angle											
36 = Standard electrical angle 360°											
xx = Optional angle - from 30° to 360°/ in 10° steps (z.B. 08=80°)											
Supply voltage Ub											
2 = Ub = 5 VDC											
Interface parameters											
1 = 5...95%, ratiometric to supply voltage Ub (0,25...4,75 VDC)											
2 = 10...90% ratiometric to supply voltage Ub (0,5...4,5 VDC)											
3 = PMW											
Output characteristics											
1 Rising characteristic cw											
2 Rising characteristic ccw											
4 Crossed outputs, channel 1 rising cw											
Other output characteristics on request											
Electrical Connection Cable Length											
911 = Raychem Spec 55, 24 AWG; Sleeving - Raychem DR25 XL ETFE; Ø = 0,94 mm; 0,24 mm²; L = 500 mm (+/- 10 mm)											
Magnet choice											
00 No magnet											
01 Small magnet											
02 Screw magnet											
03 Large magnet											
04 Plug magnet											



*** Note - Magnet options 01, 02, 03 or 04 are selected in the ordering code and a single magnet is included.**

Additional or alternative magnets can be ordered separately as spare parts using the following codes:

93816 - XPK Small Magnet-01
93817 - XPK M10 Magnet-02
93818 - XPK Large Magnet-03
94031 - XPK Plug Magnet-04

**Un-housed magnets do not have polarity marked but can be marked if requested.
Custom magnet housings are available.**

The following sensor models are available as standard products:

93753 Euro-XPK-2838-836-214-911-00
95293 Euro-XPK-2838-806-214-911-00
95294 Euro-XPK-2838-812-214-911-00
95295 Euro-XPK-2838-818-214-911-00
93816 XPK Small Magnet-01
93817 XPK M10 Magnet-02
93818 XPK Large Magnet-03
94031 XPK Plug Magnet-04