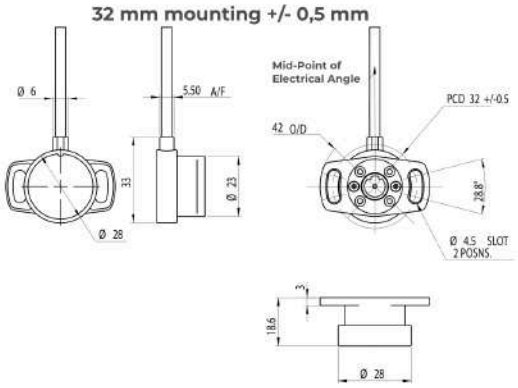
- **Programmable Sensor with angles from 30° to 360°**
- **8 mm D-Shaft Rotary Sensor**
- **Hall Effect non-contact technology**
- **Long life - extremely robust**
- **IP68 protection**
- **Selectable mounting options**
- **Redundant output**

Based on the well proven 28 mm diameter Euro-XP angle sensor, the D-shaft option is available with a choice of 32 or 38 mm PCD mounting. With programmable angle selection and redundant output this compact and contactless Hall Effect sensor features IP68 sealing and will suit arduous high-duty cycle position feedback applications in all areas of motorsports.

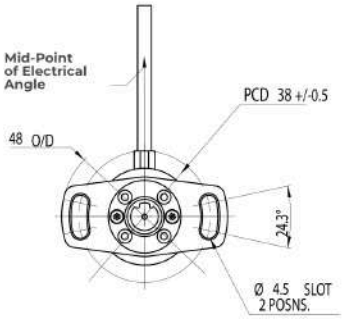
Specifications	
Mechanical	
Typical Life Cycle	>50 million movements (restriction by mechanics)
Torque	< 0.1 Ncm
Measuring range	360° redundant, signal 1 cw, signal 2 ccw
Housing	High grade temperature resistant plastic
D-Shaft	Nylon 66
Tightening torque	Maximum recommended tightening Torque 2Nm
Mounting	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
IP rating	IP68 (minimum)
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
Isolation resistance	200 MΩ (500 VDC, 1 bar, 2s)
Electrical connection	See ordering code/wiring diagram
Cable type	Raychem Spec 55, 24 AWG; Sleeving - Raychem DR25
MTTFd	370 years

Dimensions

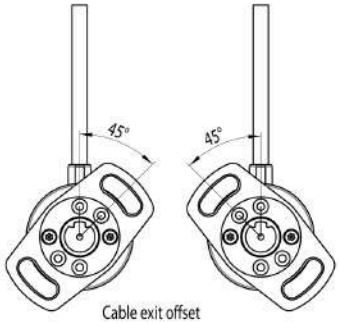
Euro XPD
32 mm mounting +/- 0,5 mm



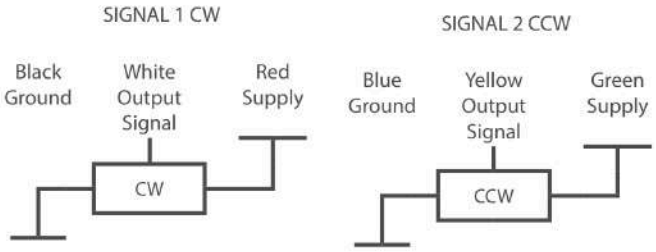
Euro XPD
38 mm mounting +/- 0,5 mm



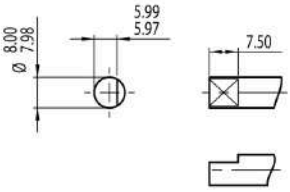
Cable exit offset
45° CW, =°, 45° CCW
see ordering information



Wiring



Euro XPD
Mating 8 mm D-Shaft detail



Ordering information

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

Sample code Euro-XPD - 28xx - 8xx - 2 1 4 - 911 - 00

Mechanical version

32 =	Plastic Housing D shaft 32 mm mounting
38 =	Plastic Housing D shaft 38 mm mounting

Electrical angle

36 =	Standard electrical angle 360°
xx =	Optional angle from 30° to 360° in 10° steps (eg. 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	PWM

Output characteristics

1	Rising characteristics cw
2	Rising characteristics ccw
4	Crossed outputs, channel 1 rising cw

Other output characteristics on request

Cable length

911 = Raychem Spec 55, 24 AWG;
Sleeving - Raychem
DR25
XL EFTE: Ø = 0.94 mm;
0.24 mm²; L = 500 mm

Cable exit offset

00	0°
01	45° CW
02	45° CCW

Custom options available on request

The following sensor models are available as standard products:

93873 Euro-XPD-2832-836-214-911-00
93659 Euro-XPD-2838-836-214-911-00
95252 Euro-XPD-2832-806-214-911-00
95150 Euro-XPD-2838-806-214-911-00
94329 Euro-XPD-2832-812-214-911-00
95297 Euro-XPD-2838-812-214-911-00
94140 Euro-XPD-2832-803-214-911-00
93746 Euro-XPD-2832-809-214-911-00
94384 Euro-XPD-2832-809-214-911-CS (Tilton - 90° angle 10-90%V ratiometric 180° angle off-set)
94097 Euro-XPD-2832-811-214-911-00