

XCC1510PSM05Y

incremental encoder Ø 58 - solid shaft 10 mm -
500..8000 points - push-pull



Main

Range of product	OsiSense XCC
Encoder type	Incremental encoder
Encoder name	XCC
Product specific application	-
Diameter	2.28 in (58 mm)
Complementary function	Parameterable
Shaft diameter	0.39 in (10 mm)
Shaft type	Solid shaft
Resolution	500...8000 points
Output stage	Type Y
Type of output stage	Driver push-pull
Electrical connection	1 male connector M23 radial 12 pins
[Us] rated supply voltage	5...30 V DC
Enclosure material	Zamak

Complementary

Residual ripple	500 mV
Maximum revolution speed	9000 rpm
Shaft moment of inertia	0.00 lb.in ² (10 g.cm ²)
Torque value	0.04 lbf.in (0.004 N.m)
Maximum load	10 daN radial 5 daN axial
Output frequency	300 kHz
Number of channels	3
Current consumption	0...75 mA no-load
Protection type	Short-circuit protection Reverse polarity protection
Maximum output current	40 mA
Output level	Low level: 0.5 V maximum 20 mA High level: V supply - 2.5 V minimum 20 mA
Surge withstand	1 kV, level 2 IEC 61000-4-5
Base material	Aluminium
Shaft material	Stainless steel
Type of ball bearings	6000ZZ1
Net Weight	1.03 lb(US) (0.465 kg)

Environment

Marking	CE
Ambient air temperature for operation	-22...212 °F (-30...100 °C)
Ambient air temperature for storage	-22...185 °F (-30...85 °C)
IP degree of protection	IP65 IEC 60529
Vibration resistance	10 gn 55...2000 Hz)IEC 60068-2-6
Shock resistance	30 gn 11 ms IEC 60068-2-27
Resistance to electrostatic discharge	4 KV contact discharge) level 3 IEC 61000-4-2 8 kV air discharge) level 3 IEC 61000-4-2

Resistance to electromagnetic fields	9.14 V/m (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV signal ports level 3 IEC 61000-4-4 2 kV power ports level 3 IEC 61000-4-4

Ordering and shipping details

Category	21581 - ENCODERS, XCC
Discount Schedule	DS2
GTIN	03389119014922
Nbr. of units in pkg.	1
Package weight(Lbs)	1.02 lb(US) (0.46 kg)
Returnability	No
Country of origin	FR

Packing Units

Package 1 Height	0.850 dm
Package 1 width	1.400 dm
Package 1 Length	2.700 dm

Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP) and Diisononyl phthalate (DINP) which is known to the State of California to cause Carcinogen and Reproductive harm. For more information go to www.p65warnings.ca.gov
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	 Yes

Contractual warranty

Warranty	18 months
----------	-----------

Technical drawing of the 1000 Series Ball Valve, showing front and side views with dimensions in mm and inches.

Front View Dimensions:

- Top connection: M23
- Top connection length: (4)
- Top connection diameter: $\varnothing 9.5$ (0.37)
- Ball diameter: $\varnothing 36 f7$
- Ball bore diameter: $\varnothing 1.42 f7$
- Ball bore length: (2)

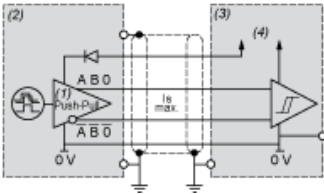
Side View Dimensions:

- Top connection length: 2 (0.08)
- Top connection diameter: $\varnothing 25$ ($\varnothing 0.98$)
- Top connection length: 8 (0.31)
- Top connection length: 19 (0.75)
- Top connection diameter: $\varnothing 10^{-0.010}$ ($\varnothing 0.39$)
- Top connection diameter: $\varnothing 0.39$ ($\varnothing 0.020$)
- Top connection length: 54 (2.13)
- Top connection diameter: $\varnothing 31.75 f9$
- Top connection diameter: $\varnothing 1.245 f9$
- Top connection length: 15 (0.59)
- Top connection diameter: $\varnothing 31.75 f9$
- Top connection diameter: $\varnothing 1.245 f9$
- Top connection length: 36.5 (1.44)
- Top connection diameter: $\varnothing 10$ (0.39)
- Top connection length: 10 (0.39)
- Top connection diameter: $\varnothing 56.5$
- Top connection diameter: $\varnothing 1.10$

- (1) 3 M4 holes at 120° on 48 PCD, depth: 8 mm
- (2) 3 M3 holes at 120° on 48 PCD, depth: 8 mm
- (3) Blanking plug
- (4) Nitrile seal

Wiring Diagram

Type Y Output Stage

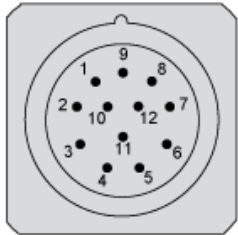


- (1) RS 422 compatible on 5 V supply
- (2) Encoder
- (3) Processing
- (4) Supply 5 V/30 V

Wiring Diagram

M23, 12-pin Connector Connections

Male Connector on Encoder

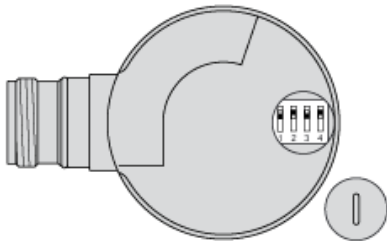


Pin number	1	2	3	4	5	6	7	8	9	10	11	12
Signal Supply	A ⁻	+V	0	0 ⁻	B	B ⁻	R	A	R	0 V	0 V	+V

R = reserved, do not connect

Wiring Diagram

Resolutions for Parameterable Ø 58 mm Encoders



Interpolation factor		Basic resolution					Position of dip switches			
Counting	Speed	256	360	500	1024	5000	1	2	3	4
x1	x1	256	360	500	1024	5000	Off	On	Off	On
x2	x2	512	720	1000	2048	10,000	On	On	Off	On
x3	x3	768	1080	1500	3072	15,000	On	Off	Off	On
x4	x4	1024	1440	2000	4096	20,000	Off	On	On	On
x5	-	1280	1800	2500	5120	25,000	On	On	On	On
x8	-	2048	2880	4000	8192	40,000	On	Off	On	On

Interpolation factor		Basic resolution					Position of dip switches			
x10	-	2560	3600	5000	10,240	50,000	Off	On	On	Off
x12	-	3072	4320	6000	12,288	60,000	On	On	On	Off
x16	-	4096	5760	8000	16,384	80,000	On	Off	On	Off