

Product data sheet

Characteristics

XCC2510PS81KGN

Opto-electronic rotary encoders XCC, absolute encoder Ø 58 single turn, solid shaft 10 mm, push pull 13 bit Gray



Main

Range of product	OsiSense XCC
Encoder type	Single turn absolute encoder
Device short name	XCC
Product specific application	-
Diameter	58 mm
Shaft diameter	10 mm
Shaft type	Solid shaft
Resolution	8192 points
Electrical connection	1 male connector M23 radial 16 pins
Output stage	Type KG
Type of output stage	Driver push-pull gray
[Us] rated supply voltage	11...30 V DC
Enclosure material	Zamak

Complementary

Residual ripple	500 mV
Maximum revolution speed	9000 rpm
Shaft moment of inertia	10 g.cm ²
Torque value	0.004 N.m
Maximum load	10 daN radial 5 daN axial
Output frequency	100 kHz
Current consumption	0...100 mA no-load
Protection type	Short-circuit protection Reverse polarity protection
Maximum output current	20 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 conforming to IEC 61000-4-5
Base material	Aluminium
Shaft material	Stainless steel
Type of ball bearings	6000ZZ1
Net weight	0.465 kg

Environment

Marking	CE
Ambient air temperature for operation	-20...90 °C
Ambient air temperature for storage	-30...95 °C
IP degree of protection	IP65 conforming to IEC 60529 IP67 conforming to IEC 60529
Vibration resistance	10 gn (f= 10...2000 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	4 KV (contact discharge) level 3 conforming to IEC 61000-4-2 8 KV (air discharge) level 3 conforming to IEC 61000-4-2

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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.5 cm
Package 1 Width	14 cm
Package 1 Length	27 cm
Package 1 Weight	465 g

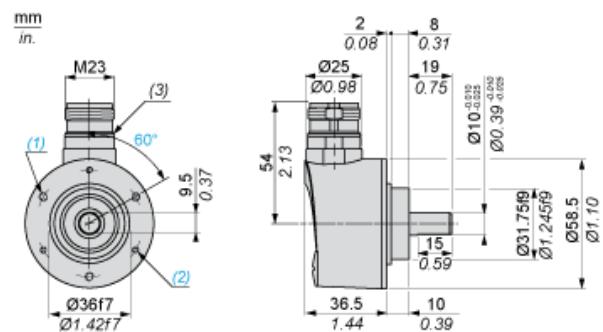
Offer Sustainability

Toxic heavy metal free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

Contractual warranty

Warranty	18 months
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Dimensions

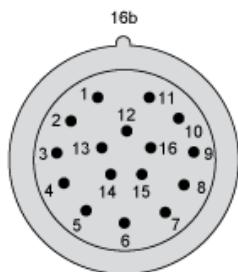


- (1) 3 M4 holes at 120° on 48 PCD, depth: 8 mm
- (2) 3 M3 holes at 120° on 48 PCD, depth: 8 mm
- (3) Nitrile seal

Wiring Diagram

M23, 16-pin Connector, Anticlockwise Connections

Male Connector on Encoder



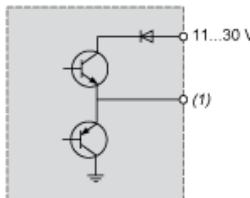
Pin number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Signal Supply	0 V	+V	d0	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11	d12	Dir (1)

(1)  : Clockwise direction, 16 to + V

 : Anticlockwise direction, 16 to 0 V

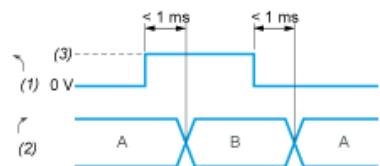
Technical Description

Type KB and KG (N) Output Stage



(1) Output

KB and KG (N) DIRECTION Input



A : Anticlockwise

B : Clockwise

(1) DIRECTION input

(2) DIRECTION of counting

(3) V supply