Product data sheet
Characteristics

XCC3506PS84SGN

Opto-electronic rotary encoders XCC, absolute encoder Ø 58 multi turn, solid shaft 6 mm, SSI 25 bit Gray

Main

Range of product	OsiSense XCC
Encoder type	Multiturn absolute encoder
Device short name	XCC
Product specific application	-
Diameter	58 mm
Shaft diameter	6 mm
Shaft type	Solid shaft
Resolution	4096 turns/8192 points
Electrical connection	1 male connector M23 radial 12 pins
Output stage	Type SG
Type of output stage	SSI 25-bit gray
[Us] rated supply voltage	11...30 V DC
Enclosure material	Steel

Complementary

Shaft tolerance	G7
Residual ripple	500 mV
Maximum revolution speed	6000 rpm
Shaft moment of inertia	10 g.cm²
Torque value	0.004 N.m
Maximum load	10 daN radial 5 daN axial
Output frequency	100…500 kHz
Current consumption	0...100 mA no-load
Protection type	Short-circuit protection Reverse polarity protection
Physical interface	RS422
Output level	High level: 2 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	6900ZZ1
Net weight	0.725 kg

Environment

Marking	CE
Ambient air temperature for operation	-20…85 °C
Ambient air temperature for storage	-20…85 °C
IP degree of protection	IP65 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

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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	725 g

Offer Sustainability

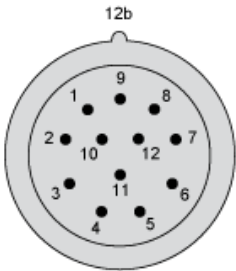|	
Toxic heavy metal free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects 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 42 PCD, depth: 10 mm
(2) Collar XCCRB1 mounted
(3) Nitrile seal

Wiring Diagram

M23, 12-pin Connector, Anticlockwise Connections
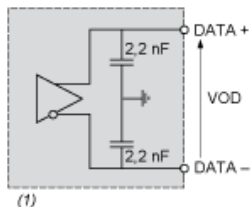
Male Connector on Encoder

Pin number	1	2	3	4	5	6	7	8	9	10	11	12
Signal Supply	0 V	Data +	Clk +	R	Direction (1)	Reset to zero	R	+ V	R	Data -	Clk –	R

(1) ⌒ : Clockwise direction
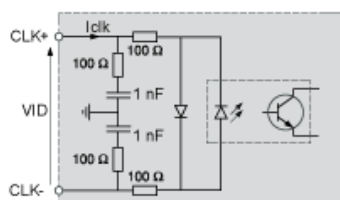
⌐ : Anticlockwise direction

R = Reserved (do not connect)

Technical Description

RS 422 Data Output

(1)   Idata = 20 mA |VOD| > 2 V
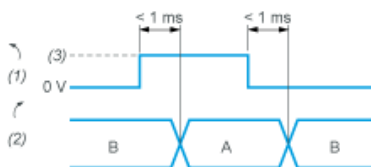
Isolated Clock Input

VID   maximum: 5 V
Iclk   maximum: 15 mA

DIRECTION Input
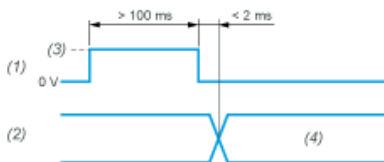

A :   Anticlockwise
B :   Clockwise
(1)   DIRECTION input
(2)   DIRECTION of counting
(3)   V supply

Input Stage - Reset to Zero

(1)   Reset input
(2)   Position
(3)   V supply
(4)   Position=0 (Reset to zero)