

XCC2506PS81SGN

absolute encoder Ø 58 single turn - solid shaft 6 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	6 mm
Shaft type	Solid shaft
Resolution	8192 points
Electrical connection	1 male connector M23 radial 12 pins
Output stage	Type SG
Type of output stage	SSI 13-bit gray
[Us] rated supply voltage	11...30 V DC
Enclosure material	Zamak

Complementary

Shaft tolerance	G7
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...1000 kHz
Current consumption	0...100 mA no-load
Protection type	Reverse polarity protection Short-circuit protection
Maximum output current	20 mA
Physical interface	RS422
Output level	High level: 2 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
Product weight	0.49 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 IEC 60529
vibration resistance	10 gn (10...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	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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

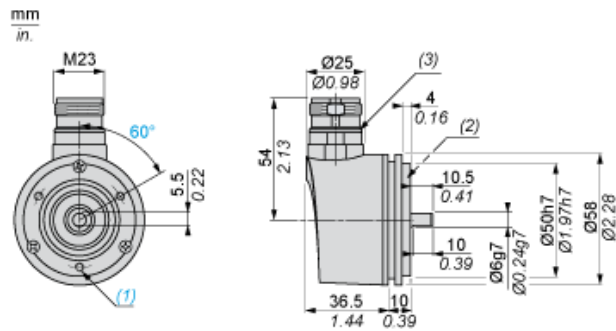
Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

Contractual warranty

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

Dimensions

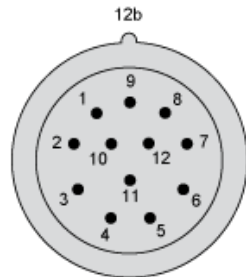


- (1) 3 M4 holes at 120° on 42 PCD, depth: 10 mm
- (2) Collar XCCRB1 mounted
- (3) Nitrile seal

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)	R	R	+ V	R	Data -	Clk -	R

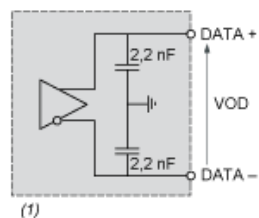
(1) : Clockwise direction, 5 to 0 V

: Anticlockwise direction, 5 to + V

R = Reserved (do not connect)

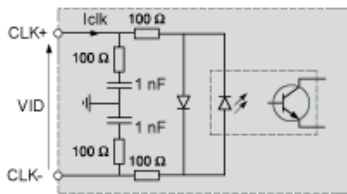
Technical Description

RS 422 Data Output



(1) $I_{data} = 20 \text{ mA}$ $|V_{OD}| > 2 \text{ V}$

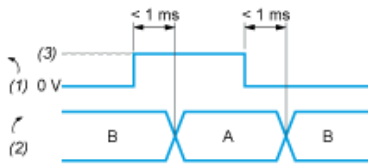
Isolated Clock Input



VID maximum: 5 V

Iclk maximum: 15 mA

DIRECTION Input



A : Anticlockwise

B : Clockwise

(1) DIRECTION input

(2) DIRECTION of counting

(3) V supply