Product datasheet
Characteristics

XCC2514TS81SB
absolute encoder Ø58 single turn - through shaft 14 mm - push-pull 13-bit binary

Price* : 470.37 GBP

Main

Range of product	OsiSense XCC
Encoder type	Single turn absolute encoder
Device short name	XCC
Product specific application	-
Diameter	58 mm
Shaft diameter	14 mm
Shaft type	Through shaft
Resolution	8192 points
Electrical connection	1 male connector M23 radial 12 pins
Output stage	Type SB
Type of output stage	SSI 13-bit binary
[Us] rated supply voltage	11...30 V DC
Enclosure material	Zamak

Complementary

Shaft tolerance	H7
Residual ripple	500 mV
Maximum revolution speed	6000 rpm
Shaft moment of inertia	22 g.cm²
Torque value	0.006 N.m
Maximum load	2 daN axial 5 daN radial
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 conforming to IEC 61000-4-5
Base material	Aluminium

Shaft material	Stainless steel
Type of ball bearings	6803ZZ
Product weight	0.43 kg

Environment

Marking	CE
Ambient air temperature for operation	-20…90 °C
Ambient air temperature for storage	-30…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

Offer Sustainability

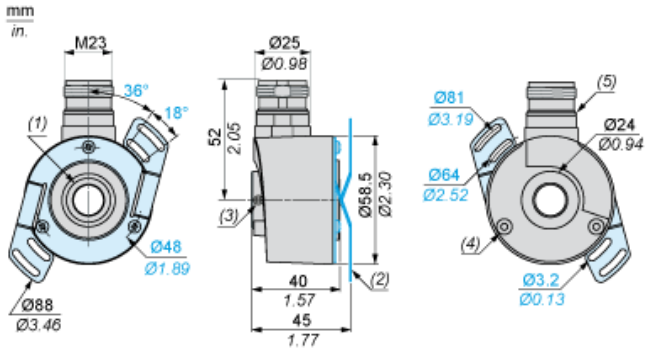
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes

Contractual warranty

Warranty	18 months

XCC2514TS81SB

Dimensions

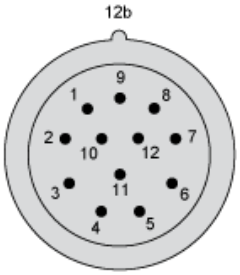


(1) Through shaft, Ø 14 (H7)
(2) Flexible mounting kit, 1 x XCCRF5N mounted
(3) 2 HC M4 x 4 locking screws
(4) Hole for M3 x 6 self-threading screw
(5) Nitrile seal

Wiring Diagram

M23, 12-pin Connector, Anticlockwise Connections

Male Connector on Encoder



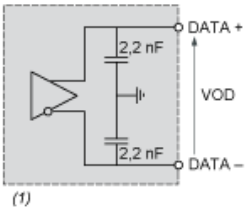
Pin number	1	2	3	4	5	6	7	8	9	10	11	12
Signal Supply	0 V	Data +	Clk +	R	Direction (1)	R	R	+ V	R	Data -	Clk –	R

(1) : Clockwise direction, 5 to 0 V
: Anticlockwise direction, 5 to + V

R = Reserved (do not connect)

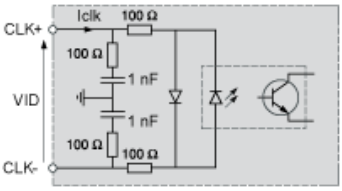
Technical Description

RS 422 Data Output



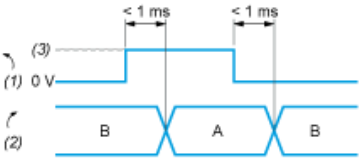
(1) Idata = 20 mA |VOD| > 2 V

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