

XCC2912PS81KBN

absolute encoder Ø 90 single turn - solid shaft
12 mm - push-pull 13-bit binary



Main

Range of product	OsiSense XCC
Encoder type	Single turn absolute encoder
Encoder name	XCC
Product specific application	-
Diameter	90 mm
Shaft diameter	12 mm
Shaft type	Solid shaft
Resolution	8192 points
Electrical connection	1 male connector M23 radial 16 pins
Output stage	Type KB
Type of output stage	Driver push-pull binary
[Us] rated supply voltage	11...30 V DC
Enclosure material	Zamak

Complementary

Shaft tolerance	G6
Residual ripple	0...500 mV
Maximum revolution speed	6000 rpm
Shaft moment of inertia	150 g.cm ²
Torque value	0.01 N.m
Maximum load	20 daN radial 10 daN axial
Output frequency	100 kHz
Current consumption	0...100 mA no-load
Protection type	Reverse polarity protection Short-circuit protection
Maximum output current	20 mA
Output level	High level: V supply - 3 V minimum 20 mA Low level: 0.5 V maximum 20 mA
Surge withstand	1 kV level 2 IEC 61000-4-5
Base material	Aluminium
Shaft material	Stainless steel
Type of ball bearings	6001ZZ
Product weight	1365 kg

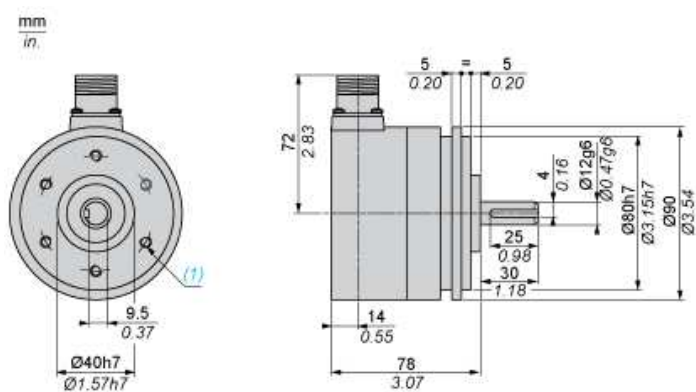
Environment

Marking	CE
Ambient air temperature for operation	-20...85 °C
Ambient air temperature for storage	-40...85 °C
IP degree of protection	IP66 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	8 kV air discharge level 3 IEC 61000-4-2 4 kV contact discharge level 3 IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m level 3 IEC 61000-4-3
Resistance to fast transients	2 kV power ports level 3 IEC 61000-4-4 1 kV signal ports level 3 IEC 61000-4-4

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

Dimensions

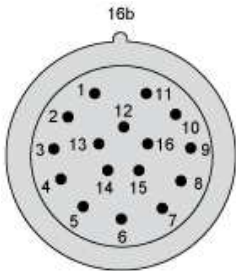


(1) 6 holes M6 x 1 at 120° on 60 PCD, depth: 12 mm maximum

Wiring Diagram

M23, 16-pin Connector, Anticlockwise Connections

Male Connector on Encoder

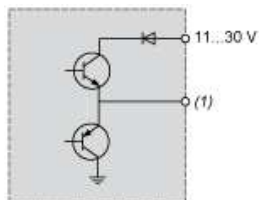


Pin number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Signal Supply	0 V	+V	d0	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11	d12	Dir

- (1) ⤴ : Clockwise direction, 16 to + V
⤵ : Anticlockwise direction, 16 to 0 V

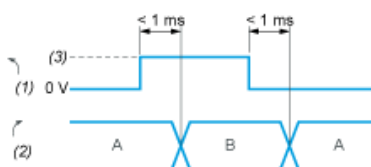
Technical Description

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