XCC1514TSM50X

incremental encoder Ø 58 - through shaft 14 mm - 5000..80K points - 5V RS422

Main

Range of product	OsiSense XCC
Encoder type	Incremental encoder
Encoder name	XCC
Product specific application	-
Diameter	58 mm
Complementary function	Parameterable
Shaft diameter	14 mm
Shaft type	Through shaft
Resolution	5000...80000 points
Output stage	Type X
Type of output stage	Driver 5V, RS422
Electrical connection	1 male connector M23 radial 12 pins
[Us] rated supply voltage	4.75...30 V DC
Enclosure material	Zamak

Complementary

Shaft tolerance	H7
Residual ripple	0...500 mV
Maximum revolution speed	6000 rpm
Shaft moment of inertia	22 g.cm²
Torque value	0.006 N.m
Maximum load	5 daN radial 2 daN axial
Output frequency	300 kHz
Number of channels	3
Current consumption	0...75 mA (no-load)
Protection type	Reverse polarity protection Short-circuit protection
Maximum output current	40 mA
Output level	High level: 4.5 V minimum (20 mA) Low level: 0.5 V maximum (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	0.435 kg

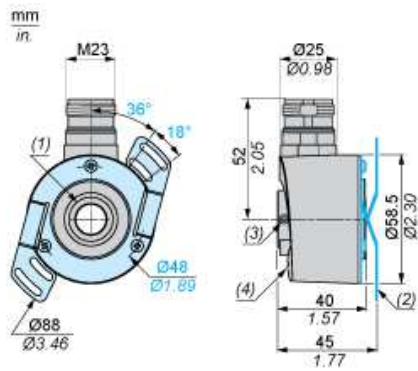## Environment

Marking	CE
Ambient air temperature for operation	-30...70 °C
Ambient air temperature for storage	-30...85 °C
IP degree of protection	IP65 conforming to IEC 60529
Vibration resistance	10 gn (f = 55...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	8 kV (air discharge) level 3 conforming to IEC 61000-4-2 4 kV (contact 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	2 kV (power ports) level 3 conforming to IEC 61000-4-4 1 kV (signal ports) level 3 conforming to 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

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Dimensions
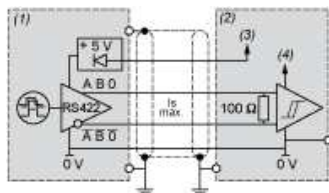

(1)   Through shaft, Ø 14 (H7)
(2)   Flexible mounting kit, 1 x XCCRF5N mounted
(3)   2 HC M4 x 4 locking screws
(4)   Blanking plug

(1)   Blanking plug

Wiring Diagram

Type X Output Stage
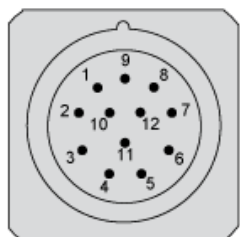

(1) Encoder
(2) Processing
(3) Supply 4.75 V/30 V
(4) Supply 5 V

Wiring Diagram

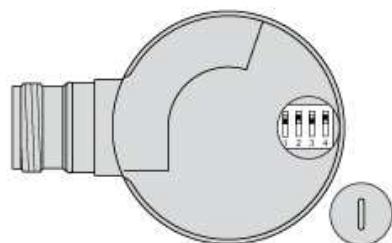### M23, 12-pin Connector Connections

Male Connector on Encoder

Pin number	1	2	3	4	5	6	7	8	9	10	11	12
Signal Supply	A⁻	+V	0	0⁻	B	B⁻	R	A	R	0 V	0 V	+V

R = reserved, do not connect

Wiring Diagram

Resolutions for Parameterable Ø 58 mm Encoders

Interpolation factor		Basic resolution					Position of dip switches			
Counting	Speed	256	360	500	1024	5000	1	2	3	4
x1	x1	256	360	500	1024	5000	Off	On	Off	On
x2	x2	512	720	1000	2048	10,000	On	On	Off	On
x3	x3	768	1080	1500	3072	15,000	On	Off	Off	On
x4	x4	1024	1440	2000	4096	20,000	Off	On	On	On
x5	-	1280	1800	2500	5120	25,000	On	On	On	On
x8	-	2048	2880	4000	8192	40,000	On	Off	On	On

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Interpolation factor		Basic resolution					Position of dip switches			
x10	-	2560	3600	5000	10,240	50,000	Off	On	On	Off
x12	-	3072	4320	6000	12,288	60,000	On	On	On	Off
x16	-	4096	5760	8000	16,384	80,000	On	Off	On	Off