

# XCC2506PS81KB

absolute encoder Ø 58 single turn - solid shaft  
6 mm - push-pull 13-bit binary

Product availability: Non-Stock - Not normally stocked in distribution facility



## Main

|                              |                                     |
|------------------------------|-------------------------------------|
| Range of product             | OsiSense XCC                        |
| Encoder type                 | Single turn absolute encoder        |
| Device short name            | XCC                                 |
| Product specific application | -                                   |
| Diameter                     | 2.28 in (58 mm)                     |
| Shaft diameter               | 0.24 in (6 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          | G7                                                                           |
| Residual ripple          | 500 mV                                                                       |
| Maximum revolution speed | 9000 rpm                                                                     |
| Shaft moment of inertia  | 0 lb.in <sup>2</sup> (10 g.cm <sup>2</sup> )                                 |
| Torque value             | 0.04 lbf.in (0.004 N.m)                                                      |
| Maximum load             | 10 daN radial<br>5 daN axial                                                 |
| Output frequency         | 100 kHz                                                                      |
| Current consumption      | 0...100 mA no-load                                                           |
| Protection type          | Reverse polarity protection<br>Short-circuit protection                      |
| Maximum output current   | 20 mA                                                                        |
| Output level             | Low level: 0.5 V maximum 20 mA<br>High level: V supply - 2.5 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           | 1.09 lb(US) (0.495 kg)                                                       |

## Environment

|                                       |                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------|
| Marking                               | CE                                                                                       |
| Ambient air temperature for operation | -4...194 °F (-20...90 °C)                                                                |
| Ambient air temperature for storage   | -22...203 °F (-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<br>8 kV air discharge level 3 IEC 61000-4-2 |

|                                      |                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------|
| Resistance to electromagnetic fields | 9.14 V/yd (10 V/m) level 3 IEC 61000-4-3                                          |
| Resistance to fast transients        | 1 kV signal ports level 3 IEC 61000-4-4<br>2 kV power ports level 3 IEC 61000-4-4 |

## Ordering and shipping details

|                       |                       |
|-----------------------|-----------------------|
| Category              | 21581 - ENCODERS, XCC |
| Discount Schedule     | DS2                   |
| GTIN                  | 003389119015400       |
| Nbr. of units in pkg. | 1                     |
| Package weight(Lbs)   | 1.0900000000000001    |
| Returnability         | N                     |
| Country of origin     | FR                    |

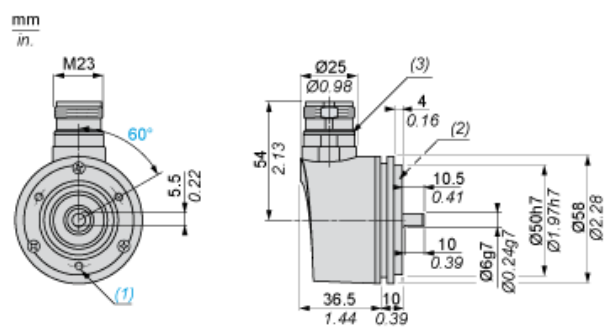
## Offer Sustainability

|                            |                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| RoHS (date code: YYWW)     | Compliant - since 0701 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                      | Reference not containing SVHC above the threshold                                                                                  |
| California proposition 65  | WARNING: This product can expose you to chemicals including:                                                                       |
| - - - - - Substance 1      | Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                                        |
| - - - - - Substance 2      | Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.         |
| - - - - - More information | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                                      |

## Contractual warranty

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

## Dimensions

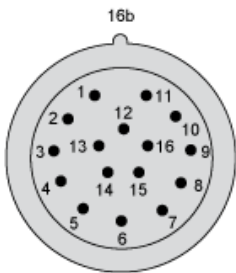


- (1) 3 M4 holes at 120° on 42 PCD, depth: 10 mm
- (2) Collar XCCRB1 mounted
- (3) Nitrile seal

Wiring Diagram

M23, 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 |

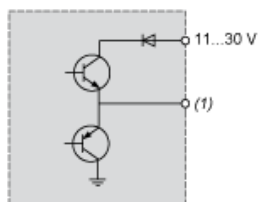
- (1)  : Clockwise direction, 16 to + V  
 : Anticlockwise direction, 16 to 0 V

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## Technical Description

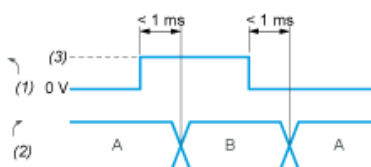
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### Type KB and KG (N) Output Stage



(1) Output

### KB and KG (N) DIRECTION Input



A : Anticlockwise

B : Clockwise

(1) DIRECTION input

(2) DIRECTION of counting

(3) V supply

# Mouser Electronics

Authorized Distributor

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