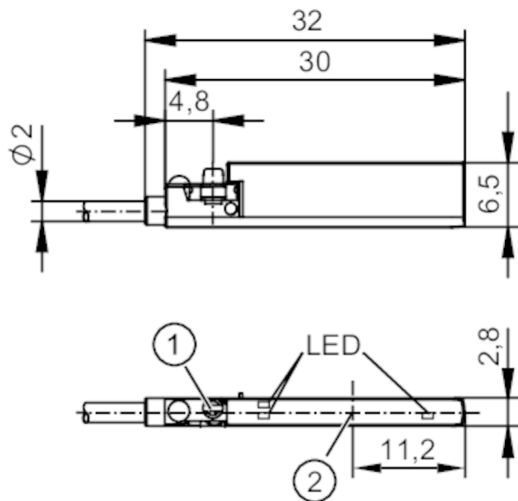


MK5803



Cylinder sensor with IO-Link

MKC3028BFRKG/H/IO/0,3M/ZH/US



- 1 Fixing element
- 2 sensing face



| Product characteristics                         |                                                    |                                         |
|-------------------------------------------------|----------------------------------------------------|-----------------------------------------|
| Electrical design                               | PNP/NPN; (parameterisable)                         |                                         |
| Output function                                 | normally open / normally closed; (parameterisable) |                                         |
| Communication interface                         | IO-Link                                            |                                         |
| Application                                     |                                                    |                                         |
| Operating principle                             | Hall sensor; (3D function)                         |                                         |
| Electrical data                                 |                                                    |                                         |
| Operating voltage                               | [V]                                                | 10...30 DC; ("supply class 2" to cULus) |
| Current consumption                             | [mA]                                               | < 20                                    |
| Protection class                                |                                                    | III                                     |
| Reverse polarity protection                     |                                                    | yes                                     |
| Max. power-on delay time                        | [ms]                                               | 300                                     |
| Inputs / outputs                                |                                                    |                                         |
| Number of inputs and outputs                    | Number of digital outputs: 1                       |                                         |
| Outputs                                         |                                                    |                                         |
| Output signal                                   | switching signal; IO-Link                          |                                         |
| Electrical design                               | PNP/NPN; (parameterisable)                         |                                         |
| Number of digital outputs                       | 1                                                  |                                         |
| Output function                                 | normally open / normally closed; (parameterisable) |                                         |
| Max. voltage drop switching output DC           | [V]                                                | 2.5                                     |
| Max. leakage current                            | [mA]                                               | 0.5                                     |
| Permanent current rating of switching output DC | [mA]                                               | 100                                     |
| Switching frequency DC                          | [Hz]                                               | 200                                     |
| Type of short-circuit protection                | pulsed                                             |                                         |
| Short-circuit proof                             | yes                                                |                                         |



## Cylinder sensor with IO-Link

MKC3028BFRKG/H/IO/0,3M/ZH/US

|                           |                                                      |                                                                                 |
|---------------------------|------------------------------------------------------|---------------------------------------------------------------------------------|
| Overload protection       | yes                                                  |                                                                                 |
| Detection zone            |                                                      |                                                                                 |
| Measuring range           | [mm]                                                 | 50; (depending on the application)                                              |
| Min. field strength       | [mT]                                                 | 1                                                                               |
| Accuracy / deviations     |                                                      |                                                                                 |
| Hysteresis                | [mm]                                                 | 1.25; (parameterisable)                                                         |
| Repeatability             | [mm]                                                 | < 0.2                                                                           |
| Linearity error IO-Link   | [%]                                                  | < 5                                                                             |
| Resolution                | [mm]                                                 | 0,01; (depending on the application)                                            |
| Software / programming    |                                                      |                                                                                 |
| Parameter setting options | switch points; counter function; diagnostic function |                                                                                 |
| Interfaces                |                                                      |                                                                                 |
| Communication interface   | IO-Link                                              |                                                                                 |
| Transmission type         | COM2 (38,4 kBaud)                                    |                                                                                 |
| IO-Link revision          | 1.1.3                                                |                                                                                 |
| SDCI standard             | IEC 61131-9 CDV                                      |                                                                                 |
| Profiles                  | Function class                                       | Designation                                                                     |
|                           | 0x0010                                               | Measuring and Switching Sensor, 1 channel / SSP 4.1.1                           |
|                           | 0x4000                                               | Identification and Diagnosis                                                    |
|                           | 0x8013                                               | Object detection                                                                |
|                           | 0x8101                                               | Locator                                                                         |
|                           | 0x8102                                               | ProductURI                                                                      |
| SIO mode                  | yes                                                  |                                                                                 |
| Required master port type | A                                                    |                                                                                 |
| Supported DeviceIDs       | Type of operation                                    | DeviceID                                                                        |
|                           | default                                              | 1612                                                                            |
| Operating conditions      |                                                      |                                                                                 |
| Ambient temperature       | [°C]                                                 | -25...85                                                                        |
| Protection                | IP 65; IP 67                                         |                                                                                 |
| Tests / approvals         |                                                      |                                                                                 |
| EMC                       | EN 61000-4-2                                         | - CD / 8 kV AD                                                                  |
|                           | EN 61000-4-3                                         | 10 V/m                                                                          |
|                           | EN 61000-4-4                                         | 2 kV                                                                            |
|                           | EN 61000-4-6                                         | 10 V                                                                            |
|                           | EN 55011                                             | class B                                                                         |
| Impact resistance         | EN 60068-2-75 Ehc                                    | 1 J                                                                             |
| Vibration resistance      | EN 60068-2-6 Fc                                      | 20 g (10...3000 Hz) / 50 sweep cycles, 1 octave per minute, in 3 axes           |
| Shock resistance          | EN 60068-2-27 Ea                                     | 30 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes |
| MTTF                      | [years]                                              | 1362                                                                            |

MK5803



Cylinder sensor with IO-Link

MKC3028BFRKG/H/IO/0,3M/ZH/US

|             |                 |             |
|-------------|-----------------|-------------|
| UL approval | Ta              | -25...75 °C |
|             | Enclosure type  | Type 1      |
|             | power supply    | Class 2     |
|             | UL Approval no. | C020        |
|             | File number UL  | E174191     |

| Mechanical data  |     |                                                   |
|------------------|-----|---------------------------------------------------|
| Weight           | [g] | 18.85                                             |
| Mounting         |     | flush mountable                                   |
| Type of mounting |     | clamping screws with head for slotted screwdriver |
| Cylinder type    |     | C-slot cylinders                                  |
| Materials        |     | housing: PA; fastening clamp: stainless steel     |

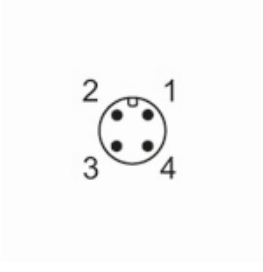
| Displays / operating elements |                  |                               |
|-------------------------------|------------------|-------------------------------|
| Display                       | switching status | 2 x LED, yellow SSC1.1 SSC1.2 |
|                               | operation        | 1x LED, green                 |

| Remarks       |        |
|---------------|--------|
| Pack quantity | 1 pcs. |

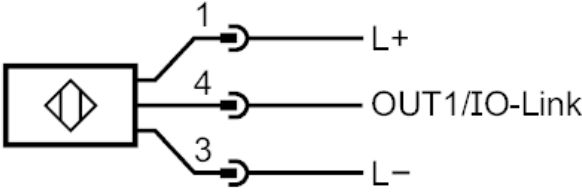
Electrical connection

Cable: 0.3 m, Ø 2 mm; 4 x 0.08 mm²

Connector: 1 x M12; coding: A



Connection



4: IO-Link / OUT1