

## Inductive sensor

IMC4020BCPKG/K1/US-100-DPA



- 1 LED yellow  
2 LED green



## Product characteristics

|                    |               |
|--------------------|---------------|
| Electrical design  | PNP           |
| Output function    | complementary |
| Sensing range [mm] | 20            |
| Housing            | rectangular   |
| Dimensions [mm]    | 40 x 40 x 54  |

## Application

|                                   |                                                |
|-----------------------------------|------------------------------------------------|
| Special feature                   | Correction factor K = 1; Magnetic-field immune |
| Magnetic-field immune             | yes                                            |
| Max. magnetic field immunity [mT] | 300                                            |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...36 DC |
| Current consumption [mA]    | < 20       |
| Protection class            | II         |
| Reverse polarity protection | yes        |



## Inductive sensor

IMC4020BCPKG/K1/US-100-DPA

| Outputs                                         |                           |                                                                                                          |
|-------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------|
| Electrical design                               |                           | PNP                                                                                                      |
| Output function                                 |                           | complementary                                                                                            |
| Max. voltage drop switching output DC           | [V]                       | 2.5                                                                                                      |
| Max. leakage current                            | [mA]                      | 0.1                                                                                                      |
| Permanent current rating of switching output DC | [mA]                      | 200                                                                                                      |
| Switching frequency DC                          | [Hz]                      | 200                                                                                                      |
| Short-circuit protection                        |                           | yes                                                                                                      |
| Type of short-circuit protection                |                           | pulsed                                                                                                   |
| Overload protection                             |                           | yes                                                                                                      |
| Detection zone                                  |                           |                                                                                                          |
| Sensing range                                   | [mm]                      | 20                                                                                                       |
| Real sensing range Sr                           | [mm]                      | 20 ± 10 %                                                                                                |
| Operating distance                              | [mm]                      | 0...16.2                                                                                                 |
| Accuracy / deviations                           |                           |                                                                                                          |
| Correction factor                               |                           | steel: 1 / stainless steel: 1 / brass: 1 / aluminium: 1 / copper: 1                                      |
| Hysteresis                                      | [% of Sr]                 | 1...20                                                                                                   |
| Switch point drift                              | [% of Sr]                 | -10...10                                                                                                 |
| Correction factor K = 1                         |                           | yes                                                                                                      |
| Operating conditions                            |                           |                                                                                                          |
| Ambient temperature                             | [°C]                      | -25...70                                                                                                 |
| Protection                                      |                           | IP 67; IP 69K                                                                                            |
| Tests / approvals                               |                           |                                                                                                          |
| EMC                                             | EN 61000-4-2 ESD          | 8 kV CD / 6 kV AD                                                                                        |
|                                                 | EN 61000-4-3 HF radiated  | 10 V/m                                                                                                   |
|                                                 | EN 61000-4-4 Burst        | 2 kV                                                                                                     |
|                                                 | EN 61000-4-5 Surge        | 0,5 kV line to line, Ri: 2 Ohm                                                                           |
|                                                 | EN 61000-4-6 HF conducted | 10 V                                                                                                     |
|                                                 | EN 55011                  | class B                                                                                                  |
| MTTF                                            | [years]                   | 975                                                                                                      |
| UL approval                                     | Ta                        | -25...70 °C                                                                                              |
|                                                 | Enclosure type            | Type 1                                                                                                   |
|                                                 | voltage supply            | Class 2                                                                                                  |
|                                                 | File number UL            | E174191                                                                                                  |
| Mechanical data                                 |                           |                                                                                                          |
| Weight                                          | [g]                       | 141.5                                                                                                    |
| Housing                                         |                           | rectangular                                                                                              |
| Sensing face                                    |                           | 5 positions selectable                                                                                   |
| Mounting                                        |                           | flush mountable                                                                                          |
| Dimensions                                      | [mm]                      | 40 x 40 x 54                                                                                             |
| Materials                                       |                           | housing: PA; sensing face: PA black; end cap: PA; clamp: orange; screw: stainless steel (1.4567 / 304Cu) |

# IM5132



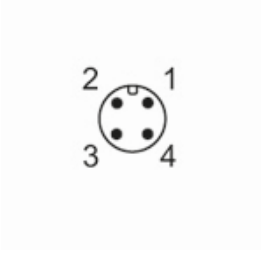
## Inductive sensor

IMC4020BCPKG/K1/US-100-DPA

| Displays / operating elements |                  |                 |
|-------------------------------|------------------|-----------------|
| Display                       | switching status | 1 x LED, yellow |
|                               | operation        | 1 x LED, green  |
| Remarks                       |                  |                 |
| Pack quantity                 | 1 pcs.           |                 |

### Electrical connection - plug

Connector: 1 x M12; Locking: locking, rotatable, stainless steel (1.4404 / 316L)



### Connection

