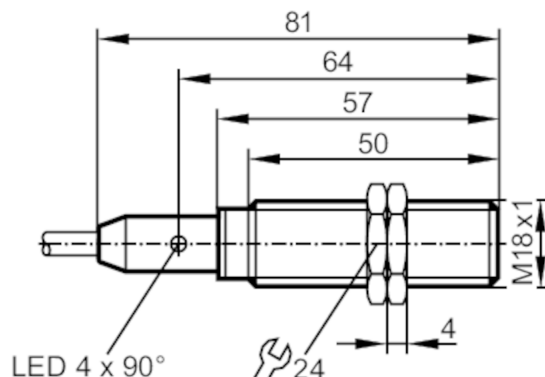


## Inductive sensor

IGKC008BASKG/M/6M/ZH



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP/NPN          |
| Output function    | normally open    |
| Sensing range [mm] | 8                |
| Housing            | threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 81 |

### Application

|                 |                                      |
|-----------------|--------------------------------------|
| Special feature | Increased sensing range              |
| Application     | Use in mobile and harsh applications |

### Electrical data

|                             |                                  |
|-----------------------------|----------------------------------|
| Operating voltage [V]       | 10...36 DC                       |
| Current consumption [mA]    | < 10; (only in 3-wire operation) |
| Protection class            | II                               |
| Reverse polarity protection | yes                              |

### Outputs

|                                                      |                                 |
|------------------------------------------------------|---------------------------------|
| Electrical design                                    | PNP/NPN                         |
| Output function                                      | normally open                   |
| Max. voltage drop switching output DC [V]            | 2.5                             |
| Minimum load current [mA]                            | 2; (only in 2-wire operation)   |
| Max. leakage current [mA]                            | 0.5; (only in 2-wire operation) |
| Permanent current rating of switching output DC [mA] | 100                             |
| Switching frequency DC [Hz]                          | 200                             |
| Short-circuit protection                             | yes                             |
| Type of short-circuit protection                     | pulsed                          |
| Overload protection                                  | yes                             |

### Detection zone

|                    |   |
|--------------------|---|
| Sensing range [mm] | 8 |
|--------------------|---|

# IGM202



## Inductive sensor

IGKC008BASKG/M/6M/ZH

|                              |                                                                                                             |                                                                                                |
|------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Operating distance           | [mm]                                                                                                        | 0...6.48                                                                                       |
| Increased sensing range      |                                                                                                             | yes                                                                                            |
| <b>Accuracy / deviations</b> |                                                                                                             |                                                                                                |
| Correction factor            |                                                                                                             | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.45 / copper: 0.35                  |
| Hysteresis                   | [% of Sr]                                                                                                   | 1...20                                                                                         |
| <b>Operating conditions</b>  |                                                                                                             |                                                                                                |
| Ambient temperature          | [°C]                                                                                                        | -40...85                                                                                       |
| Protection                   |                                                                                                             | IP 67; IP 69K                                                                                  |
| <b>Tests / approvals</b>     |                                                                                                             |                                                                                                |
| EMC                          | automotive area                                                                                             |                                                                                                |
|                              | noise emission and noise immunity: ECE R10                                                                  | E1 type approval                                                                               |
|                              | noise immunity according to DIN ISO 11452-2                                                                 | 100 V/m                                                                                        |
|                              | conducted interference in 24 V networks to ISO 7637-2: 2004 (pulse 1 to 4) and ISO16750-2: 2012 (load dump) |                                                                                                |
|                              | pulse                                                                                                       | 1 2a 2b 3a 3b 4 Load dump                                                                      |
|                              | severity level                                                                                              | III III III III III III Test A                                                                 |
|                              | failure criterion                                                                                           | C A C A A C C                                                                                  |
|                              | EN 61000-4-2 ESD                                                                                            | 4 kV CD / 8 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 mains line to line                                                                      |
|                              | EN 61000-4-6 HF conducted                                                                                   | 10 V                                                                                           |
|                              | EN 55011                                                                                                    | class B                                                                                        |
|                              | EN 60068-2-6 Fc                                                                                             | 20 g (10...3000 Hz) / -20...50 °C                                                              |
| Vibration resistance         |                                                                                                             | 50 sweep cycles, 1 octave per minute, in 3 axes                                                |
| Shock resistance             | EN 60068-2-27 Ea                                                                                            | 100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes / -40...85 °C |
| Continuous shock resistance  | EN 60068-2-27                                                                                               | 40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes / -20...50 °C          |
| Fast temperature change      | EN 60068-2-14 Na                                                                                            | TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles                                   |
| Salt spray test              | EN 60068-2-52 Kb                                                                                            | severity level 5 (4 test cycles)                                                               |
| MTTF                         | [years]                                                                                                     | 1192                                                                                           |
| UL approval                  | Ta                                                                                                          | 0...40 °C                                                                                      |
|                              | Enclosure type                                                                                              | Type 1                                                                                         |
|                              | power supply                                                                                                | Hazardous voltage                                                                              |
|                              | File number UL                                                                                              | E174191                                                                                        |
| <b>Mechanical data</b>       |                                                                                                             |                                                                                                |
| Weight                       | [g]                                                                                                         | 305.5                                                                                          |
| Housing                      |                                                                                                             | threaded type                                                                                  |
| Mounting                     |                                                                                                             | flush mountable                                                                                |
| Dimensions                   | [mm]                                                                                                        | M18 x 1 / L = 81                                                                               |
| Thread designation           |                                                                                                             | M18 x 1                                                                                        |
| Materials                    |                                                                                                             | housing: stainless steel; sensing face: LCP; lock nuts: brass                                  |

# IGM202



## Inductive sensor

IGKC008BASKG/M/6M/ZH

### Displays / operating elements

|         |                  |                     |
|---------|------------------|---------------------|
| Display | switching status | 4 x 90° LED, yellow |
|---------|------------------|---------------------|

### Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

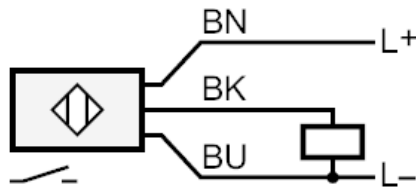
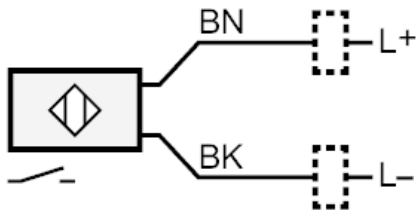
### Remarks

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

### Electrical connection

Cable: 6 m, PUR, Ø 5.4 mm; burning behaviour to ECE R118 rev. 2; 3 x 0.5 mm<sup>2</sup>

#### Connection



BK = Core colours :  
BN = black  
BU = brown  
blue