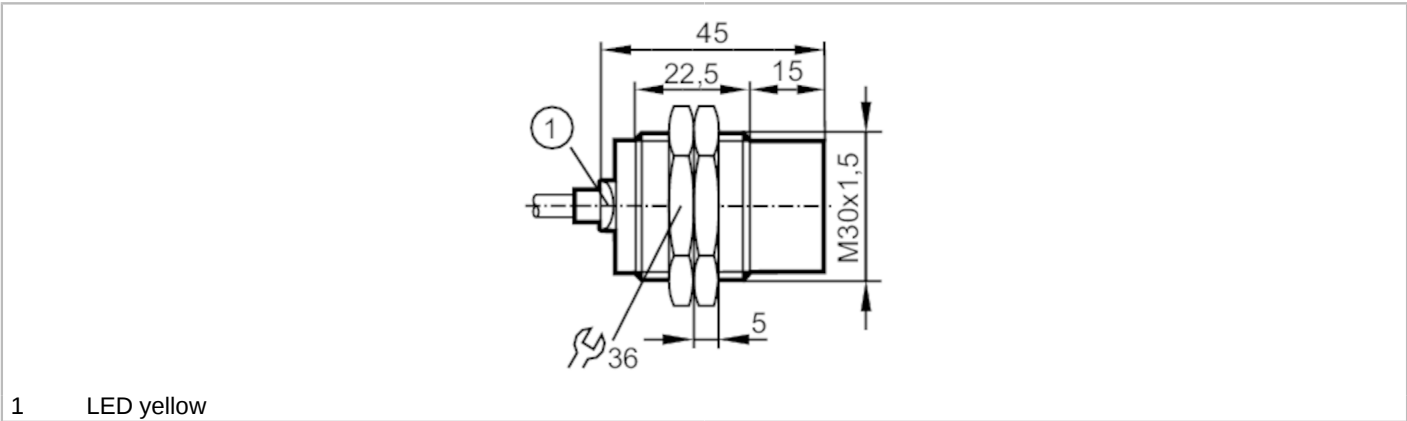




Inductive sensor

IIB3022-BPKG/2M/PUR



1 LED yellow



| Product characteristics                         |      |                                                                                                                     |
|-------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------|
| Electrical design                               |      | PNP                                                                                                                 |
| Output function                                 |      | normally open                                                                                                       |
| Sensing range                                   | [mm] | 22                                                                                                                  |
| Housing                                         |      | threaded type                                                                                                       |
| Dimensions                                      | [mm] | M30 x 1.5 / L = 45                                                                                                  |
| Application                                     |      |                                                                                                                     |
| Special feature                                 |      | Increased sensing range                                                                                             |
| Application                                     |      | Suitable for industrial, mobile, cooling and lubricating applications; Industrial applications / factory automation |
| Electrical data                                 |      |                                                                                                                     |
| Operating voltage                               | [V]  | 10...30 DC                                                                                                          |
| Current consumption                             | [mA] | < 10                                                                                                                |
| Protection class                                |      | III                                                                                                                 |
| Reverse polarity protection                     |      | yes                                                                                                                 |
| Outputs                                         |      |                                                                                                                     |
| Electrical design                               |      | PNP                                                                                                                 |
| Output function                                 |      | normally open                                                                                                       |
| Max. voltage drop switching output DC           | [V]  | 2.5                                                                                                                 |
| Permanent current rating of switching output DC | [mA] | 100                                                                                                                 |
| Switching frequency DC                          | [Hz] | 100                                                                                                                 |
| Short-circuit protection                        |      | yes                                                                                                                 |
| Overload protection                             |      | yes                                                                                                                 |
| Detection zone                                  |      |                                                                                                                     |
| Sensing range                                   | [mm] | 22                                                                                                                  |
| Real sensing range Sr                           | [mm] | 22 ± 10 %                                                                                                           |
| Operating distance                              | [mm] | 0...17.82                                                                                                           |
| Increased sensing range                         |      | yes                                                                                                                 |



## Inductive sensor

IIB3022-BPKG/2M/PUR

| Accuracy / deviations         |                                                                                                            |                                                                             |                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Correction factor             |                                                                                                            | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3 |                                                                                  |
| Hysteresis                    | [% of Sr]                                                                                                  | 3...15                                                                      |                                                                                  |
| Switch point drift            | [% of Sr]                                                                                                  | -10...10                                                                    |                                                                                  |
| Operating conditions          |                                                                                                            |                                                                             |                                                                                  |
| Ambient temperature           |                                                                                                            | [°C]                                                                        | -40...85                                                                         |
| Protection                    |                                                                                                            | IP 65; IP 66; IP 67; IP 68; IP 69K                                          |                                                                                  |
| Tests / approvals             |                                                                                                            |                                                                             |                                                                                  |
| EMC                           | 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 61000-4-6 HF conducted                                                                                  |                                                                             | 10 V                                                                             |
|                               | EN 55011                                                                                                   |                                                                             | class B                                                                          |
| 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                                                                                           |                                                                             | 100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes |
| Continuous shock resistance   | EN 60068-2-27                                                                                              |                                                                             | 40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes          |
| 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]                                                                                                    | 861                                                                         |                                                                                  |
| Embedded software included    |                                                                                                            | yes                                                                         |                                                                                  |
| UL approval                   | Ta                                                                                                         |                                                                             | -25...75 °C                                                                      |
|                               | Enclosure type                                                                                             |                                                                             | Type 1                                                                           |
|                               | power supply                                                                                               |                                                                             | Limited Voltage/Current                                                          |
|                               | UL Approval no.                                                                                            |                                                                             | A002                                                                             |
|                               | File number UL                                                                                             |                                                                             | E174191                                                                          |
| Mechanical data               |                                                                                                            |                                                                             |                                                                                  |
| Weight                        | [g]                                                                                                        | 134.7                                                                       |                                                                                  |
| Housing                       | threaded type                                                                                              |                                                                             |                                                                                  |
| Mounting                      | non-flush mountable                                                                                        |                                                                             |                                                                                  |
| Dimensions                    | [mm]                                                                                                       | M30 x 1.5 / L = 45                                                          |                                                                                  |
| Thread designation            | M30 x 1.5                                                                                                  |                                                                             |                                                                                  |
| Materials                     | brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated |                                                                             |                                                                                  |
| Displays / operating elements |                                                                                                            |                                                                             |                                                                                  |
| Display                       |                                                                                                            | switching status                                                            | 1 x LED, yellow                                                                  |
| Accessories                   |                                                                                                            |                                                                             |                                                                                  |
| Items supplied                |                                                                                                            | lock nuts: 2                                                                |                                                                                  |
| Remarks                       |                                                                                                            |                                                                             |                                                                                  |
| Pack quantity                 |                                                                                                            | 1 pcs.                                                                      |                                                                                  |

# IIS243



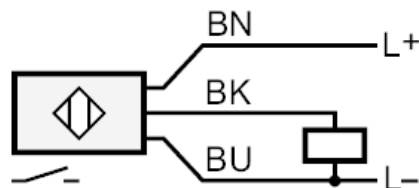
## Inductive sensor

IIB3022-BPKG/2M/PUR

### Electrical connection

Cable: 2 m, PUR, Ø 4 mm; burning behaviour to ECE R118 rev. 2; 3 x 0.34 mm<sup>2</sup>

### Connection



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