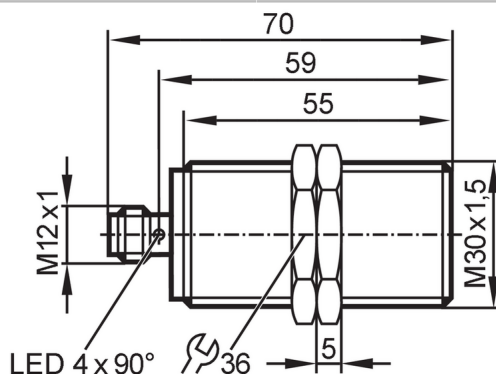




## Inductive sensor

IIC2015BFRKG/2LED/US-104



## Product characteristics

|                    |                                      |
|--------------------|--------------------------------------|
| Electrical design  | PNP/NPN                              |
| Output function    | normally open / closed; (selectable) |
| Sensing range [mm] | 15                                   |
| Housing            | Threaded type                        |
| Dimensions [mm]    | M30 x 1.5 / L = 70                   |

## Application

|                 |                                                                    |
|-----------------|--------------------------------------------------------------------|
| Special feature | gold-plated contacts; Increased sensing range; optical setting aid |
| Application     | Industrial applications; Oils and coolants                         |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Protection class            | II         |
| Reverse polarity protection | yes        |

## Outputs

|                                                      |                                      |
|------------------------------------------------------|--------------------------------------|
| Electrical design                                    | PNP/NPN                              |
| Output function                                      | normally open / closed; (selectable) |
| Max. voltage drop switching output DC [V]            | 4.6                                  |
| Minimum load current [mA]                            | 4                                    |
| Max. leakage current [mA]                            | 1                                    |
| Permanent current rating of switching output DC [mA] | 100                                  |
| Switching frequency DC [Hz]                          | 100                                  |
| Short-circuit protection                             | yes                                  |
| Type of short-circuit protection                     | yes (non-latching)                   |
| Overload protection                                  | yes                                  |

## Monitoring range

|                         |          |
|-------------------------|----------|
| Sensing range [mm]      | 15       |
| Operating distance [mm] | 0...12.1 |
| Increased sensing range | yes      |



## Inductive sensor

IIC2015BFRKG/2LED/US-104

| Accuracy / deviations                                                               |                                                                                                                       |                     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------|
| Correction factor                                                                   | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.5 / copper: 0.4                                            |                     |
| Hysteresis [% of Sr]                                                                | 1...15                                                                                                                |                     |
| Operating conditions                                                                |                                                                                                                       |                     |
| Ambient temperature [°C]                                                            | -25...70                                                                                                              |                     |
| Protection                                                                          | IP 68; ("Coolant")                                                                                                    |                     |
| 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             |
| MTTF [years]                                                                        | 1424                                                                                                                  |                     |
| Mechanical data                                                                     |                                                                                                                       |                     |
| Weight [g]                                                                          | 126.6                                                                                                                 |                     |
| Housing                                                                             | Threaded type                                                                                                         |                     |
| Mounting                                                                            | flush mountable                                                                                                       |                     |
| Dimensions [mm]                                                                     | M30 x 1.5 / L = 70                                                                                                    |                     |
| Thread designation                                                                  | M30 x 1.5                                                                                                             |                     |
| Material                                                                            | housing: brass white bronze coated; sensing face: LCP white;<br>LED window: PEI; lock nuts: brass white bronze coated |                     |
| Tightening torque [Nm]                                                              | 50                                                                                                                    |                     |
| Displays / operating elements                                                       |                                                                                                                       |                     |
| Display                                                                             | Switching status                                                                                                      | 4 x 90° LED, yellow |
|                                                                                     | Setting aid                                                                                                           | 1 x LED, red        |
| Optical setting aid                                                                 | yes                                                                                                                   |                     |
| Accessories                                                                         |                                                                                                                       |                     |
| Items supplied                                                                      | lock nuts: 2                                                                                                          |                     |
| Remarks                                                                             |                                                                                                                       |                     |
| Pack quantity                                                                       | 1 pcs.                                                                                                                |                     |
| Electrical connection - plug                                                        |                                                                                                                       |                     |
| Connector: 1 x M12; coding: A; Contacts: 2, gold-plated                             |                                                                                                                       |                     |
|  |                                                                                                                       |                     |

**Inductive sensor**

IHK2015BFRKG/2LED/US-104

**Connection**