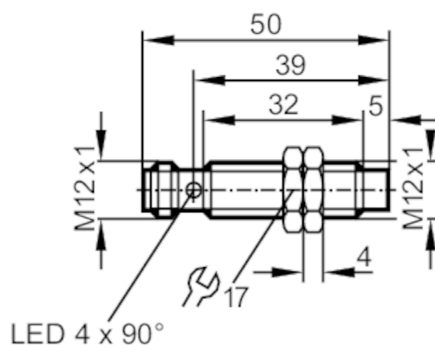




## Inductive sensor

IFB2007-ARKG/M/US-104-ARS



## Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP/NPN          |
| Output function    | normally open    |
| Sensing range [mm] | 7                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M12 x 1 / L = 50 |

## Application

|             |                                               |
|-------------|-----------------------------------------------|
| System      | gold-plated contacts; Increased sensing range |
| Application | Industrial applications                       |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| 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                  |
| Max. leakage current [mA]                            | 0.5                |
| Permanent current rating of switching output DC [mA] | 100                |
| Switching frequency DC [Hz]                          | 700                |
| Short-circuit protection                             | yes                |
| Type of short-circuit protection                     | yes (non-latching) |
| Overload protection                                  | yes                |

## Monitoring range

|                            |              |
|----------------------------|--------------|
| Sensing range [mm]         | 7            |
| Real sensing range Sr [mm] | $7 \pm 10\%$ |
| Operating distance [mm]    | 0...5.7      |
| Increased sensing range    | yes          |



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| Accuracy / deviations                                                                          |           |                                                                            |                     |
|------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------|---------------------|
| Correction factor                                                                              |           | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3 |                     |
| Hysteresis                                                                                     | [% of Sr] | 3...15                                                                     |                     |
| Switch-point drift                                                                             | [% of Sr] | -10...10                                                                   |                     |
| Operating conditions                                                                           |           |                                                                            |                     |
| Ambient temperature                                                                            |           | [°C]                                                                       | -25...70            |
| Protection                                                                                     |           |                                                                            | IP 67               |
| 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]   | 2487                                                                       |                     |
| UL approval                                                                                    |           | Ta                                                                         | 0...40 °C           |
|                                                                                                |           | Enclosure type                                                             | Type 1              |
|                                                                                                |           | voltage supply                                                             | Hazardous voltage   |
|                                                                                                |           | File number UL                                                             | E174191             |
| Mechanical data                                                                                |           |                                                                            |                     |
| Weight                                                                                         |           | [g]                                                                        | 25.8                |
| Housing                                                                                        |           | Threaded type                                                              |                     |
| Mounting                                                                                       |           | non-flush mountable                                                        |                     |
| Dimensions                                                                                     |           | [mm]                                                                       | M12 x 1 / L = 50    |
| Thread designation                                                                             |           | M12 x 1                                                                    |                     |
| Material                                                                                       |           | brass white bronze coated; sensing face: PBT                               |                     |
| Displays / operating elements                                                                  |           |                                                                            |                     |
| Display                                                                                        |           | Switching status                                                           | 4 x 90° LED, yellow |
| Accessories                                                                                    |           |                                                                            |                     |
| Items supplied                                                                                 |           | lock nuts: 2                                                               |                     |
| Remarks                                                                                        |           |                                                                            |                     |
| Pack quantity                                                                                  |           | 1 pcs.                                                                     |                     |
| Electrical connection - plug                                                                   |           |                                                                            |                     |
| Connector: 1 x M12; coding: A; Contacts: gold-plated                                           |           |                                                                            |                     |
| <div></div> |           |                                                                            |                     |





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### Connection

