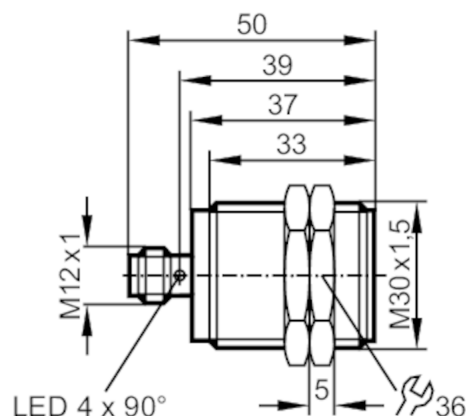


## Inductive sensor

IIB3014BBPKG/M/V4A/US-104-DPS



## Product characteristics

|                    |                    |
|--------------------|--------------------|
| Electrical design  | PNP                |
| Output function    | normally open      |
| Sensing range [mm] | 14                 |
| Housing            | threaded type      |
| Dimensions [mm]    | M30 x 1.5 / L = 50 |

## Application

|                 |                                               |
|-----------------|-----------------------------------------------|
| Special feature | Gold-plated contacts; Increased sensing range |
| Application     | regular cleaning processes                    |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...36 DC |
| Current consumption [mA]    | 10; (24 V) |
| Protection class            | II         |
| 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           |
| Type of short-circuit protection                     | pulsed        |
| Overload protection                                  | yes           |

## Detection zone

|                               |                |
|-------------------------------|----------------|
| Sensing range [mm]            | 14             |
| Real sensing range $S_r$ [mm] | $14 \pm 10 \%$ |
| Operating distance [mm]       | 0...11.34      |



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|                         |     |
|-------------------------|-----|
| Increased sensing range | yes |
|-------------------------|-----|

## 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] | 0...100                |
| Protection               | IP 68; IP 69K; ("COP") |

## 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] | 1590                      |                         |
| UL approval  | Ta                        | 0...40 °C               |
|              | Enclosure type            | Type 1                  |
|              | power supply              | Limited Voltage/Current |
|              | File number UL            | E174191                 |

## Mechanical data

|                    |                                                                      |
|--------------------|----------------------------------------------------------------------|
| Weight [g]         | 103.9                                                                |
| Housing            | threaded type                                                        |
| Mounting           | flush mountable                                                      |
| Dimensions [mm]    | M30 x 1.5 / L = 50                                                   |
| Thread designation | M30 x 1.5                                                            |
| Materials          | threaded sleeve: stainless steel (1.4404 / 316L); sensing face: PEEK |

## 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





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### Connection

