

## Inductive sensor

IGB3005-BPKG/US-104



## Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP              |
| Output function    | normally open    |
| Sensing range [mm] | 5                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 45 |

## Application

|        |                      |
|--------|----------------------|
| System | gold-plated contacts |
|--------|----------------------|

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 10       |
| 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] | 200           |
| Switching frequency DC [Hz]                          | 250           |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |

## Monitoring range

|                               |               |
|-------------------------------|---------------|
| Sensing range [mm]            | 5             |
| Real sensing range $S_r$ [mm] | $5 \pm 10 \%$ |
| Operating distance [mm]       | 0...4.05      |

## Accuracy / deviations

|                                  |                                                                            |
|----------------------------------|----------------------------------------------------------------------------|
| Correction factor                | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3 |
| Hysteresis [% of $S_r$ ]         | 3...15                                                                     |
| Switch-point drift [% of $S_r$ ] | -10...10                                                                   |

# IG5942



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### Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...70 |
| Protection          |      | IP 67    |

### Tests / approvals

|                            |              |         |
|----------------------------|--------------|---------|
| EMC                        | EN 60947-5-2 |         |
|                            | EN 55011     | class B |
| MTTF                       | [years]      | 1083    |
| Embedded software included |              | no      |

### Mechanical data

|                    |      |                                                                                                                        |
|--------------------|------|------------------------------------------------------------------------------------------------------------------------|
| Weight             | [g]  | 42.5                                                                                                                   |
| Housing            |      | Threaded type                                                                                                          |
| Mounting           |      | flush mountable                                                                                                        |
| Dimensions         | [mm] | M18 x 1 / L = 45                                                                                                       |
| Thread designation |      | M18 x 1                                                                                                                |
| Material           |      | housing: brass white bronze coated; sensing face: PBT orange;<br>LED window: PEI; lock nuts: brass white bronze coated |

### Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | Switching status | 4 x LED, yellow |
|---------|------------------|-----------------|

### Accessories

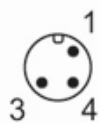
|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

### Remarks

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

### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



### Connection

