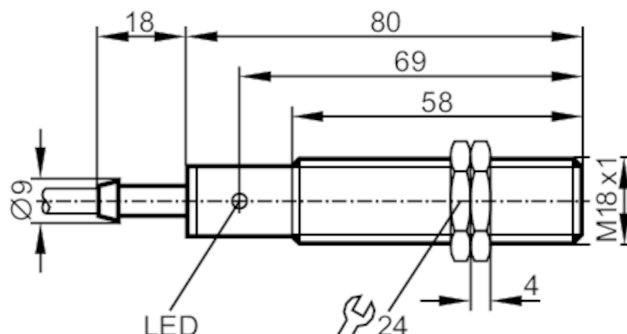




## Inductive sensor

IGA2005-ABOA/RT



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Output function    | normally open    |
| Sensing range [mm] | 5                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 80 |

### Electrical data

|                             |                |
|-----------------------------|----------------|
| Operating voltage [V]       | 20...250 AC/DC |
| Protection class            | II             |
| Reverse polarity protection | no             |

### Outputs

|                                                      |                                                 |
|------------------------------------------------------|-------------------------------------------------|
| Output function                                      | normally open                                   |
| Max. voltage drop switching output DC [V]            | 6                                               |
| Max. voltage drop switching output AC [V]            | 6.5                                             |
| Minimum load current [mA]                            | 5                                               |
| Max. leakage current [mA]                            | 2.5 (250 V AC) / 1.3 (110 V AC) / 0.8 (24 V DC) |
| Permanent current rating of switching output AC [mA] | 250; (350 (...50 °C))                           |
| Permanent current rating of switching output DC [mA] | 100                                             |
| Short-time current rating of switching output [mA]   | 2200; (20 ms / 0,5 Hz)                          |
| Switching frequency AC [Hz]                          | 25                                              |
| Switching frequency DC [Hz]                          | 50                                              |
| Short-circuit proof                                  | no                                              |
| Overload protection                                  | no                                              |

### Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 5        |
| Real sensing range Sr [mm] | 5 ± 10 % |
| Operating distance [mm]    | 0...4.05 |

### Accuracy / deviations

|                   |                                                                            |
|-------------------|----------------------------------------------------------------------------|
| Correction factor | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.3 / copper: 0.2 |
|-------------------|----------------------------------------------------------------------------|

# IG0305



## Inductive sensor

IGA2005-ABOA/RT

|                    |           |          |
|--------------------|-----------|----------|
| Hysteresis         | [% of Sr] | 1...15   |
| Switch-point drift | [% of Sr] | -10...10 |

### Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...80 |
| 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]                   | 609               |
| UL approval | Ta                        | 0...40 °C         |
|             | Enclosure type            | Type 1            |
|             | voltage supply            | Hazardous voltage |
|             | File number UL            | E174191           |

### Mechanical data

|                    |      |                                                                               |
|--------------------|------|-------------------------------------------------------------------------------|
| Weight             | [g]  | 154.8                                                                         |
| Housing            |      | Threaded type                                                                 |
| Mounting           |      | flush mountable                                                               |
| Dimensions         | [mm] | M18 x 1 / L = 80                                                              |
| Thread designation |      | M18 x 1                                                                       |
| Material           |      | brass white bronze coated; sensing face: PBT natural; LED window: PBT natural |
| Tightening torque  | [Nm] | 23                                                                            |

### Displays / operating elements

|         |                  |              |
|---------|------------------|--------------|
| Display | Switching status | 1 x LED, red |
|---------|------------------|--------------|

### Electrical connection

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| Required protection | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting |
|---------------------|----------------------------------------------------------|

### Accessories

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

### Remarks

|               |                                                                             |
|---------------|-----------------------------------------------------------------------------|
| Remarks       | Recommendation: check the unit for reliable function after a short circuit. |
| Pack quantity | 1 pcs.                                                                      |

# IG0305



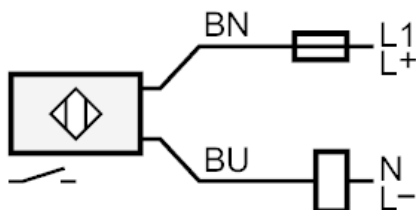
## Inductive sensor

IGA2005-ABOA/RT

### Electrical connection

Cable: 2 m, PVC; 2 x 0.5 mm<sup>2</sup>

### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq$  2 A fast acting

Core colors :

BN =

brown

BU =

blue