

# IGC200



## Inductive sensor

IGB2008BARKG/M/US-104-DRS



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP/NPN          |
| Output function    | normally open    |
| Sensing range [mm] | 8                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 46 |

### Application

|             |                                               |
|-------------|-----------------------------------------------|
| System      | gold-plated contacts; Increased sensing range |
| Application | 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      |
| 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]                          | 400                |
| Short-circuit protection                             | yes                |
| Type of short-circuit protection                     | yes (non-latching) |
| Overload protection                                  | yes                |

### Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 8        |
| Real sensing range Sr [mm] | 8 ± 10 % |

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|                         |      |         |
|-------------------------|------|---------|
| Operating distance      | [mm] | 0...6.5 |
| Increased sensing range |      | yes     |

| 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 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]                   | 2655              |
| UL approval       | Ta                        | 0...40 °C         |
|                   | Enclosure type            | Type 1            |
|                   | voltage supply            | Hazardous voltage |
|                   | File number UL            | E174191           |

| Mechanical data    |      |                                                       |
|--------------------|------|-------------------------------------------------------|
| Weight             | [g]  | 43.4                                                  |
| Housing            |      | Threaded type                                         |
| Mounting           |      | flush mountable                                       |
| Dimensions         | [mm] | M18 x 1 / L = 46                                      |
| Thread designation |      | M18 x 1                                               |
| Material           |      | housing: brass white bronze coated; sensing face: LCP |

| Displays / operating elements |                  |                     |
|-------------------------------|------------------|---------------------|
| Display                       | Switching status | 4 x 90° LED, yellow |

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

| Remarks       |  |                                                                                                              |
|---------------|--|--------------------------------------------------------------------------------------------------------------|
| Remarks       |  | For direct replacement of 3-wire PNP sensors<br>In this case pin 3 (grey in the wiring diagram) is not used. |
| Pack quantity |  | 1 pcs.                                                                                                       |

## Electrical connection - plug

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



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### Connection

