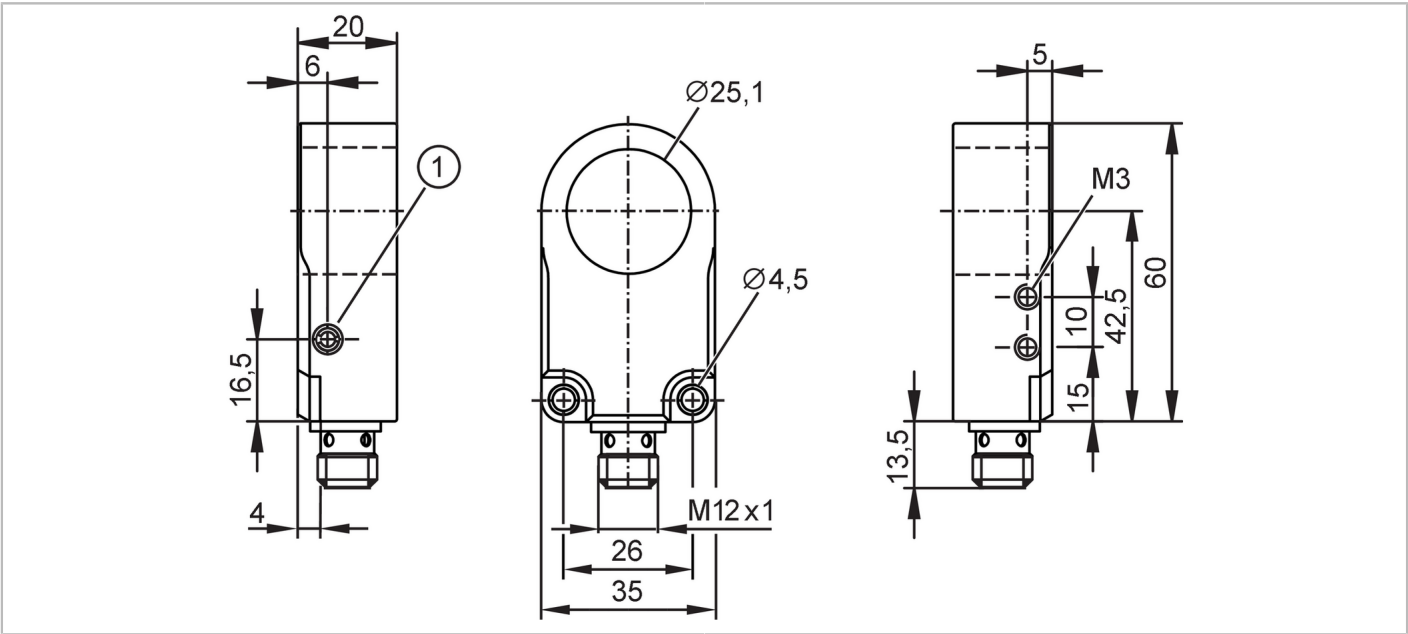


# I7R213



## Inductive ring sensor

I7R3025-FRKG/IO/US-104



| Product characteristics                              |                                      |
|------------------------------------------------------|--------------------------------------|
| Electrical design                                    | PNP/NPN; (selectable)                |
| Output function                                      | normally open / closed; (selectable) |
| Communication interface                              | IO-Link                              |
| Housing                                              | circular                             |
| Dimensions [mm]                                      | 60 x 35 x 20                         |
| Application                                          |                                      |
| Principle of operation                               | static; dynamic; (selectable)        |
| Application                                          | Industrial applications              |
| Electrical data                                      |                                      |
| Operating voltage [V]                                | 10...30 DC                           |
| Current consumption [mA]                             | < 30                                 |
| Protection class                                     | III                                  |
| Reverse polarity protection                          | yes                                  |
| Outputs                                              |                                      |
| Electrical design                                    | PNP/NPN; (selectable)                |
| Output function                                      | normally open / closed; (selectable) |
| Max. voltage drop switching output DC [V]            | 2                                    |
| Permanent current rating of switching output DC [mA] | 100                                  |
| Factory setting                                      | Electrical design: PNP               |
|                                                      | Output function: normally open       |
|                                                      | Principle of operation: static       |
| Short-circuit protection                             | yes                                  |
| Overload protection                                  | yes                                  |

# I7R213



## Inductive ring sensor

I7R3025-FRKG/IO/US-104

| Monitoring range                    |                          |                                                              |
|-------------------------------------|--------------------------|--------------------------------------------------------------|
| Max. part speed                     | [m/s]                    | 35                                                           |
| Dynamic                             |                          |                                                              |
| Resolution of steel ball (diameter) | [mm]                     | 1.2                                                          |
| Static                              |                          |                                                              |
| Resolution of steel ball (diameter) | [mm]                     | 3                                                            |
| Reaction times                      |                          |                                                              |
| Pulse stretching                    | [ms]                     | 0...60000                                                    |
| Pulse stretching adjustable         |                          | yes                                                          |
| Interfaces                          |                          |                                                              |
| Communication interface             | IO-Link                  |                                                              |
| Transmission type                   | COM2 (38,4 kBaud)        |                                                              |
| IO-Link revision                    | 1.1                      |                                                              |
| SDCI standard                       | IEC 61131-9              |                                                              |
| Profiles                            | Smart Sensor - SSP 4.1.1 | Measuring and Switching Sensor, 1 channel                    |
|                                     | Common - I&D             | Identification and Diagnosis                                 |
|                                     | Extension                | Teach dynamic                                                |
|                                     | Extension                | Quantity detection, switches when value exceeds the setpoint |
|                                     | Function                 | Locator                                                      |
|                                     | Function                 | ProductURI                                                   |
| SIO mode                            | yes                      |                                                              |
| Required master port class          | A                        |                                                              |
| Min. process cycle time             | [ms]                     | 3.2                                                          |
| Supported DeviceIDs                 | Type of operation        | DeviceID                                                     |
|                                     | default                  | 1764                                                         |
| Operating conditions                |                          |                                                              |
| Ambient temperature                 | [°C]                     | -25...70                                                     |
| Protection                          | IP 67                    |                                                              |
| Tests / approvals                   |                          |                                                              |
| MTTF                                | [years]                  | 646                                                          |
| UL approval                         | Ta                       | -25...70 °C                                                  |
|                                     | Enclosure type           | Type 4X (indoor use only) / 12 and 13                        |
|                                     | voltage supply           | Class 2                                                      |
|                                     | File number UL           | E174191                                                      |
| Mechanical data                     |                          |                                                              |
| Weight                              | [g]                      | 54                                                           |
| Housing                             | circular                 |                                                              |
| Dimensions                          | [mm]                     | 60 x 35 x 20                                                 |
| Inside diameter                     | [mm]                     | 25.1                                                         |
| Material                            | housing: PA; ring: POM   |                                                              |
| Displays / operating elements       |                          |                                                              |
| Display                             | Switching status         | 4 x LED, yellow                                              |

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Inductive ring sensor

I7R3025-FRKG/IO/US-104

Remarks

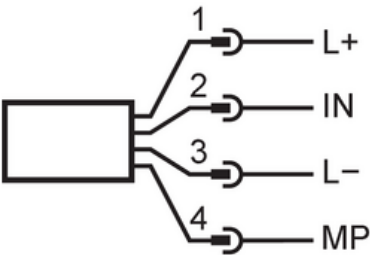
Pack quantity 1 pcs.

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4



Connection



- 1 L+
- 2 IN DI (Teach)
- 3 L-
- 4 MP DO (NO/NC), IO-Link

DI: digital input; DO: digital output; MP: multi-function connection; NC: normally closed; NO: normally open