

# I7R204



## Inductive ring sensor

I7R3010-FNKG/DY/US-100-INF



- 1 Sensitivity
- 2 Output function
- 3 Pulse stretching time



### Product characteristics

|                   |                                      |
|-------------------|--------------------------------------|
| Electrical design | NPN                                  |
| Output function   | normally open / closed; (selectable) |
| Housing           | circular                             |
| Dimensions [mm]   | 60 x 35 x 20                         |

### Application

|                        |         |
|------------------------|---------|
| Principle of operation | dynamic |
|------------------------|---------|

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...35 DC |
| Current consumption [mA]    | < 20       |
| Protection class            | III        |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |                                      |
|------------------------------------------------------|--------------------------------------|
| Electrical design                                    | NPN                                  |
| Output function                                      | normally open / closed; (selectable) |
| Max. voltage drop switching output DC [V]            | 2                                    |
| Permanent current rating of switching output DC [mA] | 200                                  |
| Short-circuit protection                             | yes                                  |
| Overload protection                                  | yes                                  |

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| Monitoring range                    |                  |                                       |
|-------------------------------------|------------------|---------------------------------------|
| Resolution of steel ball (diameter) | [mm]             | 0.6                                   |
| Max. part speed                     | [m/s]            | 35                                    |
| Reaction times                      |                  |                                       |
| Pulse stretching                    | [ms]             | 0.1...150                             |
| Pulse stretching adjustable         |                  | yes                                   |
| Max. fall time                      | [ms]             | 0.2                                   |
| Response time                       | [ms]             | < 0.2                                 |
| Operating conditions                |                  |                                       |
| Ambient temperature                 | [°C]             | -25...70                              |
| Protection                          |                  | IP 67                                 |
| Tests / approvals                   |                  |                                       |
| MTTF                                | [years]          | 553                                   |
| 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]              | 59                                    |
| Housing                             |                  | circular                              |
| Dimensions                          | [mm]             | 60 x 35 x 20                          |
| Inside diameter                     | [mm]             | 10.1                                  |
| Material                            |                  | housing: PA; ring: POM                |
| Displays / operating elements       |                  |                                       |
| Display                             | Switching status | 1 x LED, yellow                       |
| Remarks                             |                  |                                       |
| Pack quantity                       |                  | 1 pcs.                                |
| Electrical connection - plug        |                  |                                       |

Connector: 1 x M12; coding: A



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### Connection

