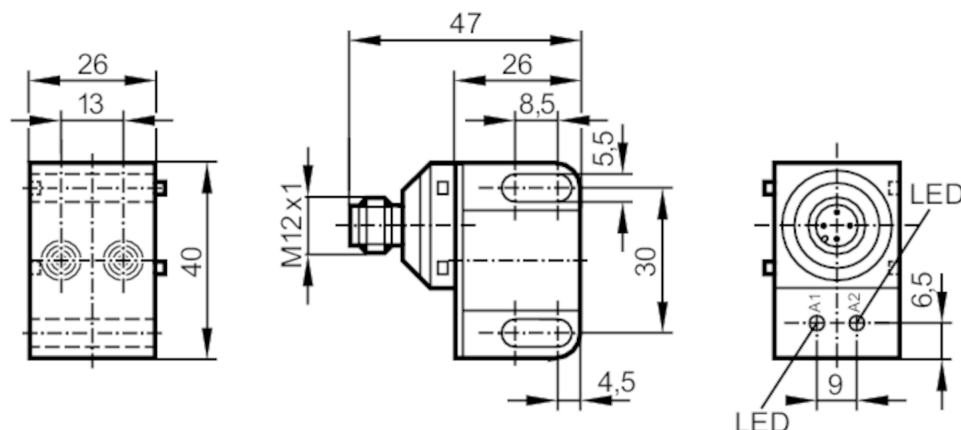


# IN5331

## Dual inductive sensor for valve actuators

IND2004DARKG/US-100-ZRV RT



### Product characteristics

|                    |                   |
|--------------------|-------------------|
| Electrical design  | PNP/NPN           |
| Output function    | 2 x normally open |
| Sensing range [mm] | 4                 |
| Housing            | rectangular       |
| Dimensions [mm]    | 40 x 26 x 47      |

### Application

|             |                                     |
|-------------|-------------------------------------|
| Application | Position sensor for valve actuators |
|-------------|-------------------------------------|

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...36 DC |
| Protection class            | II         |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |                    |
|------------------------------------------------------|--------------------|
| Electrical design                                    | PNP/NPN            |
| Output function                                      | 2 x normally open  |
| Max. voltage drop switching output DC [V]            | 4                  |
| Minimum load current [mA]                            | 4                  |
| Max. leakage current [mA]                            | 2 x 0.7            |
| Permanent current rating of switching output DC [mA] | 250                |
| Switching frequency DC [Hz]                          | 250                |
| Short-circuit protection                             | yes                |
| Type of short-circuit protection                     | yes (non-latching) |
| Overload protection                                  | yes                |

### Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 4        |
| Real sensing range Sr [mm] | 4 ± 10 % |
| Operating distance [mm]    | 0...3.25 |

| Accuracy / deviations         |                                                               |                         |
|-------------------------------|---------------------------------------------------------------|-------------------------|
| Correction factor             | steel: 1 / stainless steel: 0.7 / aluminum: 0.3 / copper: 0.4 |                         |
| Hysteresis                    | [% of Sr]                                                     | 3...15                  |
| Switch-point drift            | [% of Sr]                                                     | -10...10                |
| Operating conditions          |                                                               |                         |
| Ambient temperature           | [°C]                                                          | -25...80                |
| Protection                    |                                                               | IP 67                   |
| Tests / approvals             |                                                               |                         |
| EMC                           | EN 60947-5-2                                                  |                         |
| MTTF                          | [years]                                                       | 1229                    |
| Mechanical data               |                                                               |                         |
| Weight                        | [g]                                                           | 58.5                    |
| Housing                       |                                                               | rectangular             |
| Mounting                      |                                                               | non-flush mountable     |
| Dimensions                    | [mm]                                                          | 40 x 26 x 47            |
| Material                      |                                                               | housing: PBT; cover: PC |
| Displays / operating elements |                                                               |                         |
| Display                       | Switching status                                              | 2 x LED, red            |
| Remarks                       |                                                               |                         |
| Pack quantity                 |                                                               | 1 pcs.                  |
| Electrical connection - plug  |                                                               |                         |

Connector: 1 x M12; coding: A; Moulded body: brass, white bronze coated



#### Connection

