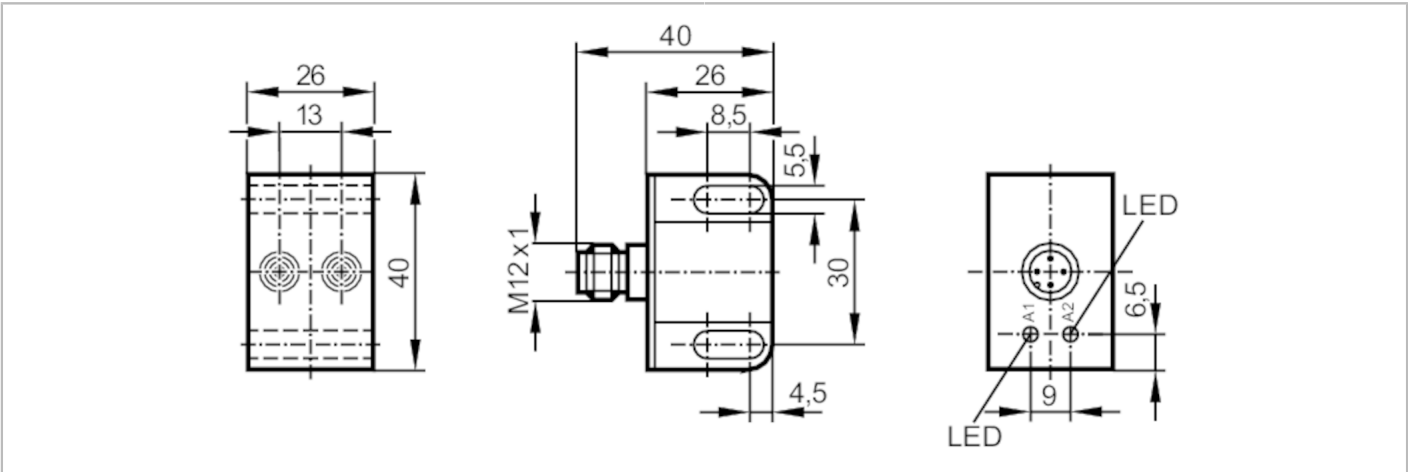


# IN5224



## Dual inductive sensor for valve actuators

IND2004DARKG/US-100-ZRV



| Product characteristics                         |      |                      |
|-------------------------------------------------|------|----------------------|
| Electrical design                               |      | PNP/NPN              |
| Output function                                 |      | 2 x normally open    |
| Sensing range                                   | [mm] | 4                    |
| Housing                                         |      | rectangular          |
| Dimensions                                      | [mm] | 40 x 26 x 26         |
| Application                                     |      |                      |
| System                                          |      | gold-plated contacts |
| 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] | 1300                 |
| 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             |

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| Accuracy / deviations         |                                                                            |                          |
|-------------------------------|----------------------------------------------------------------------------|--------------------------|
| Correction factor             | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.3 / copper: 0.2 |                          |
| Hysteresis                    | [% of Sr]                                                                  | 1...15                   |
| Switch-point drift            | [% of Sr]                                                                  | -10...10                 |
| Operating conditions          |                                                                            |                          |
| Ambient temperature           | [°C]                                                                       | -20...80                 |
| Protection                    |                                                                            | IP 67                    |
| Tests / approvals             |                                                                            |                          |
| EMC                           | EN 60947-5-2                                                               |                          |
|                               | EN 55011                                                                   | class B                  |
| MTTF                          | [years]                                                                    | 1229                     |
| Mechanical data               |                                                                            |                          |
| Weight                        | [g]                                                                        | 40.5                     |
| Housing                       |                                                                            | rectangular              |
| Mounting                      |                                                                            | non-flush mountable      |
| Dimensions                    | [mm]                                                                       | 40 x 26 x 26             |
| Material                      |                                                                            | PBT; PC                  |
| Tightening torque             | [Nm]                                                                       | 0.6...1.5; (knurled nut) |
| Displays / operating elements |                                                                            |                          |
| Display                       | Switching status                                                           | 2 x LED, yellow          |
| Remarks                       |                                                                            |                          |
| Pack quantity                 |                                                                            | 1 pcs.                   |
| Electrical connection - plug  |                                                                            |                          |

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

