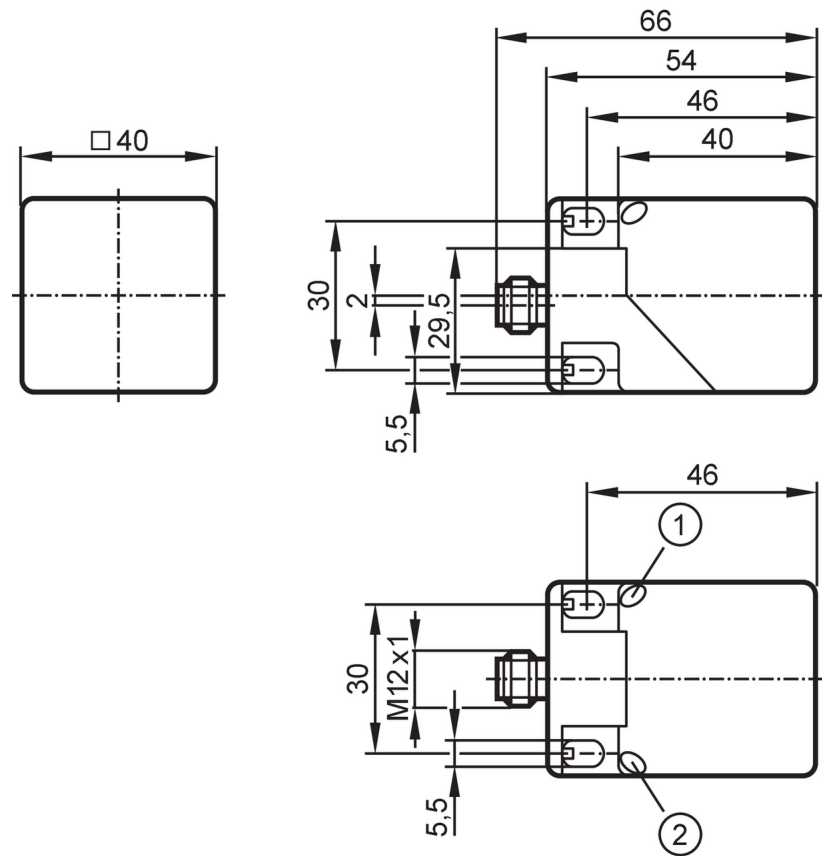


# IM5120



## Inductive sensor

IMC3035UBPKG/K1/SC/US-100-DPS



- 1 LED yellow
- 2 LED green



| Product characteristics             |      |                                              |
|-------------------------------------|------|----------------------------------------------|
| Electrical design                   |      | PNP                                          |
| Output function                     |      | normally open                                |
| Sensing range                       | [mm] | 35                                           |
| Housing                             |      | rectangular                                  |
| Dimensions                          | [mm] | 40 x 40 x 54                                 |
| Application                         |      |                                              |
| Special feature                     |      | correction factor = 1; Magnetic-field immune |
| Application                         |      | Inductive sensors for welding applications   |
| Magnetic-field immune               |      | yes                                          |
| Max. electromagnetic field immunity | [mT] | 300                                          |
| Electrical data                     |      |                                              |
| Operating voltage                   | [V]  | 10...36 DC                                   |
| Current consumption                 | [mA] | < 20                                         |
| Protection class                    |      | II                                           |
| Reverse polarity protection         |      | yes                                          |
| Outputs                             |      |                                              |
| Electrical design                   |      | PNP                                          |

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|                                                 |                           |                                                                                                                                                |
|-------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Output function                                 |                           | normally open                                                                                                                                  |
| Max. voltage drop switching output DC           | [V]                       | 2.5                                                                                                                                            |
| Permanent current rating of switching output DC | [mA]                      | 200                                                                                                                                            |
| Switching frequency DC                          | [Hz]                      | 200                                                                                                                                            |
| Short-circuit protection                        |                           | yes                                                                                                                                            |
| Type of short-circuit protection                |                           | yes (non-latching)                                                                                                                             |
| Overload protection                             |                           | yes                                                                                                                                            |
| Monitoring range                                |                           |                                                                                                                                                |
| Sensing range                                   | [mm]                      | 35                                                                                                                                             |
| Real sensing range Sr                           | [mm]                      | 35 ± 10 %                                                                                                                                      |
| Operating distance                              | [mm]                      | 0...28.3                                                                                                                                       |
| Accuracy / deviations                           |                           |                                                                                                                                                |
| Correction factor                               |                           | steel: 1 / stainless steel: 1 / brass: 1 / aluminum: 1 / copper: 1                                                                             |
| Hysteresis                                      | [% of Sr]                 | 1...20                                                                                                                                         |
| Switch-point drift                              | [% of Sr]                 | -10...10                                                                                                                                       |
| Correction factor = 1                           |                           | yes                                                                                                                                            |
| Operating conditions                            |                           |                                                                                                                                                |
| Ambient temperature                             | [°C]                      | -25...70                                                                                                                                       |
| Protection                                      |                           | IP 67                                                                                                                                          |
| Tests / approvals                               |                           |                                                                                                                                                |
| EMC                                             | EN 61000-4-2 ESD          | 8 kV CD / 6 kV AD                                                                                                                              |
|                                                 | EN 61000-4-3 HF radiated  | 10 V/m                                                                                                                                         |
|                                                 | EN 61000-4-4 Burst        | 2 kV                                                                                                                                           |
|                                                 | EN 61000-4-5 Surge        | 0,5 kV line to line, Ri: 2 Ohm                                                                                                                 |
|                                                 | EN 61000-4-6 HF conducted | 10 V                                                                                                                                           |
|                                                 | EN 55011                  | class B                                                                                                                                        |
| MTTF                                            | [years]                   | 1161                                                                                                                                           |
| UL approval                                     | Ta                        | -25...70 °C                                                                                                                                    |
|                                                 | Enclosure type            | Type 1                                                                                                                                         |
|                                                 | voltage supply            | Class 2                                                                                                                                        |
|                                                 | File number UL            | E174191                                                                                                                                        |
| Mechanical data                                 |                           |                                                                                                                                                |
| Weight                                          | [g]                       | 134                                                                                                                                            |
| Housing                                         |                           | rectangular                                                                                                                                    |
| Sensing face                                    |                           | 5 positions selectable                                                                                                                         |
| Mounting                                        |                           | non-flush mountable                                                                                                                            |
| Dimensions                                      | [mm]                      | 40 x 40 x 54                                                                                                                                   |
| Material                                        |                           | housing: PA weld coated; sensing face: PA black weld coated; bevelled housing part: PA; clamp: orange; screw: stainless steel (1.4567 / 304Cu) |
| Displays / operating elements                   |                           |                                                                                                                                                |
| Display                                         | Switching status          | 1 x LED, yellow                                                                                                                                |
|                                                 | Power                     | 1 x LED, green                                                                                                                                 |

# IM5120



## Inductive sensor

IMC3035UBPKG/K1/SC/US-100-DPS

### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4; Locking: locking, rotatable, stainless steel (1.4404 / 316L)



### Connection

