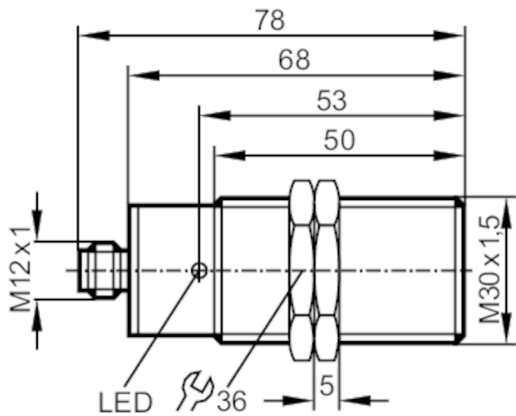




Inductive sensor

I1A2010-FRKG/US-100-IRF



| Product characteristics                              |                                                                             |
|------------------------------------------------------|-----------------------------------------------------------------------------|
| Electrical design                                    | PNP/NPN                                                                     |
| Output function                                      | normally open / normally closed; (selectable)                               |
| Sensing range [mm]                                   | 10                                                                          |
| Housing                                              | threaded type                                                               |
| Dimensions [mm]                                      | M30 x 1.5 / L = 78                                                          |
| Electrical data                                      |                                                                             |
| Operating voltage [V]                                | 10...55 DC                                                                  |
| Protection class                                     | II                                                                          |
| Reverse polarity protection                          | yes                                                                         |
| Outputs                                              |                                                                             |
| Electrical design                                    | PNP/NPN                                                                     |
| Output function                                      | normally open / normally closed; (selectable)                               |
| Max. voltage drop switching output DC [V]            | 4.6                                                                         |
| Minimum load current [mA]                            | 4                                                                           |
| Max. leakage current [mA]                            | 0.5                                                                         |
| Permanent current rating of switching output DC [mA] | 400                                                                         |
| Switching frequency DC [Hz]                          | 450                                                                         |
| Short-circuit protection                             | yes                                                                         |
| Type of short-circuit protection                     | pulsed                                                                      |
| Overload protection                                  | yes                                                                         |
| Detection zone                                       |                                                                             |
| Sensing range [mm]                                   | 10                                                                          |
| Real sensing range Sr [mm]                           | 10 ± 10 %                                                                   |
| Operating distance [mm]                              | 0...8.1                                                                     |
| Accuracy / deviations                                |                                                                             |
| Correction factor                                    | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |



Inductive sensor

IIA2010-FRKG/US-100-IRF

|                    |           |          |
|--------------------|-----------|----------|
| Hysteresis         | [% of Sr] | 1...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 |         |
|      | EN 55011     | class B |
| MTTF | [years]      | 1699    |

Mechanical data

|                    |      |                                              |
|--------------------|------|----------------------------------------------|
| Weight             | [g]  | 151                                          |
| Housing            |      | threaded type                                |
| Mounting           |      | flush mountable                              |
| Dimensions         | [mm] | M30 x 1.5 / L = 78                           |
| Thread designation |      | M30 x 1.5                                    |
| Materials          |      | brass white bronze coated; sensing face: PBT |

Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | switching status | 1 x LED, yellow |
|---------|------------------|-----------------|

Accessories

|                |  |              |
|----------------|--|--------------|
| Items supplied |  | lock nuts: 2 |
|----------------|--|--------------|

Remarks

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

Electrical connection - plug

Connector: 1 x M12; coding: A

