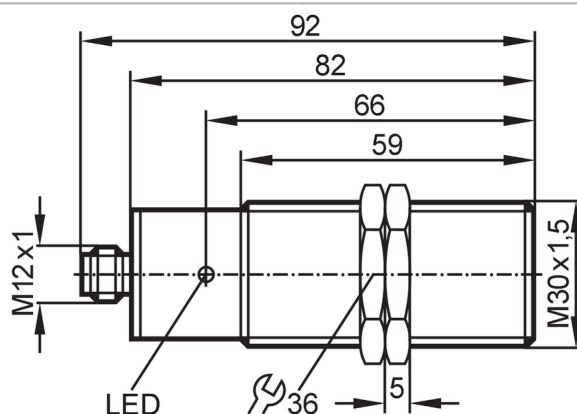




## Inductive sensor

IIA2010-FRKG/V4A/US-100-IRF/AU



## Product characteristics

|                    |                                      |
|--------------------|--------------------------------------|
| Electrical design  | PNP/NPN                              |
| Output function    | normally open / closed; (selectable) |
| Sensing range [mm] | 10                                   |
| Housing            | Threaded type                        |
| Dimensions [mm]    | M30 x 1.5 / L = 92                   |

## Application

|                 |                         |
|-----------------|-------------------------|
| Special feature | gold-plated contacts    |
| Application     | Industrial applications |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...55 DC |
| Protection class            | II         |
| Reverse polarity protection | yes        |

## Outputs

|                                                      |                                      |
|------------------------------------------------------|--------------------------------------|
| Electrical design                                    | PNP/NPN                              |
| Output function                                      | normally open / closed; (selectable) |
| Max. voltage drop switching output DC [V]            | 4.6                                  |
| Minimum load current [mA]                            | 4                                    |
| Max. leakage current [mA]                            | 0.8                                  |
| Permanent current rating of switching output DC [mA] | 400                                  |
| Switching frequency DC [Hz]                          | 450                                  |
| Short-circuit protection                             | yes                                  |
| Type of short-circuit protection                     | yes (non-latching)                   |
| Overload protection                                  | yes                                  |

## Monitoring range

|                            |           |
|----------------------------|-----------|
| Sensing range [mm]         | 10        |
| Real sensing range Sr [mm] | 10 ± 10 % |
| Operating distance [mm]    | 0...8.1   |



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| Accuracy / deviations                                |                                                   |                                                                            |
|------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------|
| Correction factor                                    |                                                   | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3 |
| 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                                                               |
|                                                      |                                                   | EN 55011 class B                                                           |
| MTTF                                                 | [years]                                           | 1835                                                                       |
| Mechanical data                                      |                                                   |                                                                            |
| Weight                                               | [g]                                               | 160                                                                        |
| Housing                                              | Threaded type                                     |                                                                            |
| Mounting                                             | flush mountable                                   |                                                                            |
| Dimensions                                           | [mm]                                              | M30 x 1.5 / L = 92                                                         |
| Thread designation                                   | M30 x 1.5                                         |                                                                            |
| Material                                             | stainless steel (1.4571/316Ti ); sensing face: PC |                                                                            |
| 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; Contacts: gold-plated |                                                   |                                                                            |
| <div><div>21</div><div>34</div></div>                |                                                   |                                                                            |

