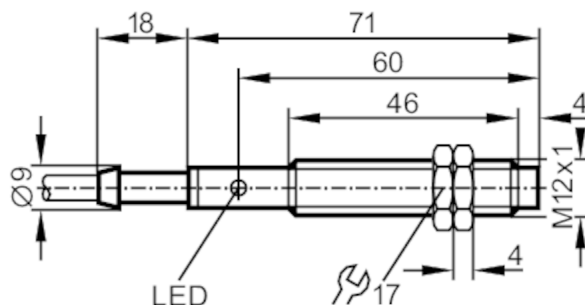


## Inductive sensor

IFA2004-FRKG/PH



## Product characteristics

|                    |                                               |
|--------------------|-----------------------------------------------|
| Electrical design  | PNP/NPN                                       |
| Output function    | normally open / normally closed; (selectable) |
| Sensing range [mm] | 4                                             |
| Housing            | threaded type                                 |
| Dimensions [mm]    | M12 x 1 / L = 71                              |

## 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]                          | 1500                                          |
| Short-circuit protection                             | yes                                           |
| Type of short-circuit protection                     | pulsed                                        |
| Overload protection                                  | yes                                           |

## Detection zone

|                               |               |
|-------------------------------|---------------|
| Sensing range [mm]            | 4             |
| Real sensing range $S_r$ [mm] | $4 \pm 10 \%$ |
| Operating distance [mm]       | 0...3.25      |

## Accuracy / deviations

|                                  |                                                                             |
|----------------------------------|-----------------------------------------------------------------------------|
| Correction factor                | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |
| Hysteresis [% of $S_r$ ]         | 1...15                                                                      |
| Switch point drift [% of $S_r$ ] | -10...10                                                                    |

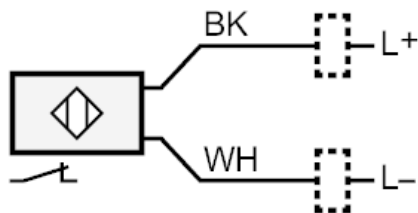
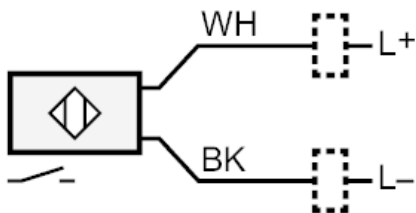
IF5646



Inductive sensor

IFA2004-FRKG/PH

| Operating conditions                |                  |                                             |
|-------------------------------------|------------------|---------------------------------------------|
| Ambient temperature                 | [°C]             | -25...80                                    |
| Protection                          |                  | IP 67                                       |
| Tests / approvals                   |                  |                                             |
| EMC                                 | EN 60947-5-2     |                                             |
|                                     | EN 55011         | class B                                     |
| MTTF                                | [years]          | 1815                                        |
| Mechanical data                     |                  |                                             |
| Weight                              | [g]              | 101.2                                       |
| Housing                             |                  | threaded type                               |
| Mounting                            |                  | non-flush mountable                         |
| Dimensions                          | [mm]             | M12 x 1 / L = 71                            |
| Thread designation                  |                  | M12 x 1                                     |
| Materials                           |                  | brass white bronze coated; 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               |                  |                                             |
| Cable: 2 m, PUR / PVC; 2 x 0.34 mm² |                  |                                             |
| Connection                          |                  |                                             |



BK = Core colours :  
          black  
WH =       white