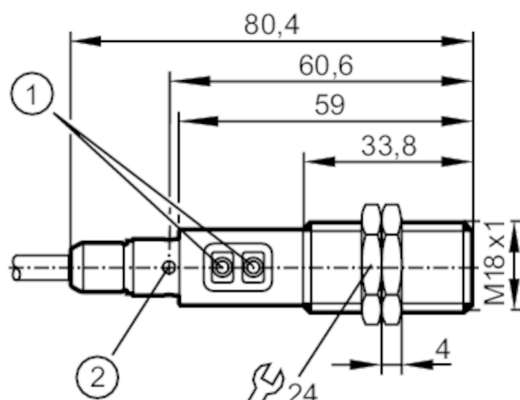




## Diffuse reflection sensor with background suppression

OGH-FPKG/2M



- 1 programming buttons  
2 LED 4 x 90°



### Product characteristics

|               |               |
|---------------|---------------|
| Type of light | red light     |
| Housing       | threaded type |

### Application

|                    |                           |
|--------------------|---------------------------|
| Special feature    | Background suppression    |
| Function principle | Diffuse reflection sensor |

### Electrical data

|                             |      |            |
|-----------------------------|------|------------|
| Operating voltage           | [V]  | 10...36 DC |
| Current consumption         | [mA] | 25         |
| Protection class            |      | II         |
| Reverse polarity protection |      | yes        |
| Type of light               |      | red light  |
| Wave length                 | [nm] | 624        |

### Outputs

|                                                 |      |                                       |
|-------------------------------------------------|------|---------------------------------------|
| Electrical design                               |      | PNP                                   |
| Output function                                 |      | light-on/dark-on mode; (programmable) |
| Max. voltage drop switching output DC           | [V]  | 2.5                                   |
| Permanent current rating of switching output DC | [mA] | 150; (200 (...60 °C))                 |
| Switching frequency DC                          | [Hz] | 1000                                  |
| Short-circuit protection                        |      | yes                                   |
| Type of short-circuit protection                |      | pulsed                                |
| Overload protection                             |      | yes                                   |

### Detection zone

|                                        |      |                                                    |
|----------------------------------------|------|----------------------------------------------------|
| Range                                  | [mm] | 15...300; (white paper 200 x 200 mm 90% remission) |
| Range on white object (90 % remission) | [mm] | 15...300                                           |



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|                                            |                                                       |
|--------------------------------------------|-------------------------------------------------------|
| Range on grey object (18 % remission) [mm] | 15...290                                              |
| Range on black object (6 % remission) [mm] | 15...190                                              |
| Factory setting                            | light-on mode                                         |
| Range adjustable                           | yes                                                   |
| Max. light spot diameter [mm]              | 25                                                    |
| Light spot dimensions refer to             | at maximum range                                      |
| Background suppression available           | yes                                                   |
| <b>Operating conditions</b>                |                                                       |
| Ambient temperature [°C]                   | -25...80                                              |
| Protection                                 | IP 67                                                 |
| <b>Tests / approvals</b>                   |                                                       |
| EMC                                        | EN 60947-5-2                                          |
| MTTF [ANN]                                 | 362                                                   |
| <b>Mechanical data</b>                     |                                                       |
| Weight [g]                                 | 124.7                                                 |
| Housing                                    | threaded type                                         |
| Dimensions [mm]                            | M18 x 1 / L = 80.4                                    |
| Thread designation                         | M18 x 1                                               |
| Materials                                  | stainless steel (1.4404 / 316L); PA; LCP; EPDM; TPU   |
| Lens material                              | PMMA                                                  |
| <b>Displays / operating elements</b>       |                                                       |
| Display                                    | switching status 1 x LED, yellow                      |
| Teach function                             | yes                                                   |
| Electronic lock                            | yes                                                   |
| <b>Аксессуары</b>                          |                                                       |
| Items supplied                             | lock nuts: 2                                          |
| <b>Remarks</b>                             |                                                       |
| Remarks                                    | operating voltage "supply class 2" according to cULus |
| Pack quantity                              | 1 pcs.                                                |



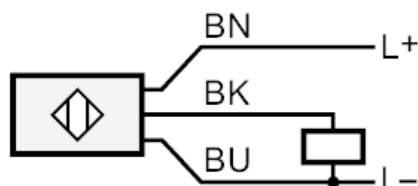
## Diffuse reflection sensor with background suppression

OGH-FPKG/2M

### Electrical connection

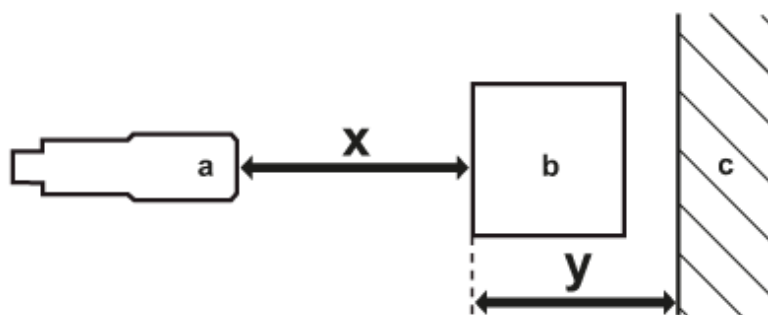
Cable: 2 m, PUR; 3 x 0.34 mm<sup>2</sup>

### Connection



Core colours :  
 BK = black  
 BN = brown  
 BU = blue

### Diagrams and graphs



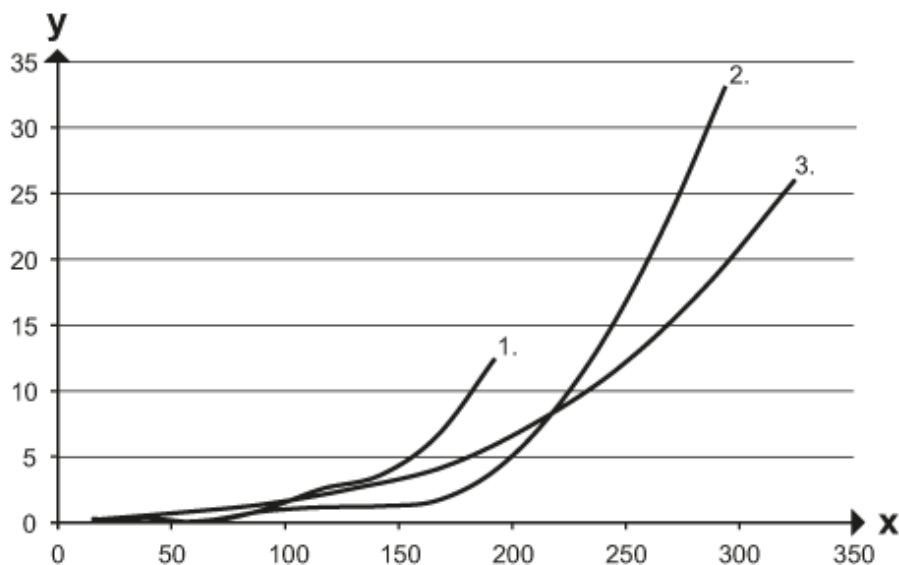
a: sensor  
 b: object  
 c: background  
 x: distance sensor/object [mm]  
 y: min. distance object/background [mm]



## Diffuse reflection sensor with background suppression

OGH-FPKG/2M

accuracy graph



x: distance sensor/object [mm]

y: min. distance object/background [mm]

1 = object black (6 % remission) , Фон білий (90 % ремісія)

2 = object grey (18 % remission) , Фон білий (90 % ремісія)

3 = object white (90 % remission) , Фон білий (90 % ремісія)