

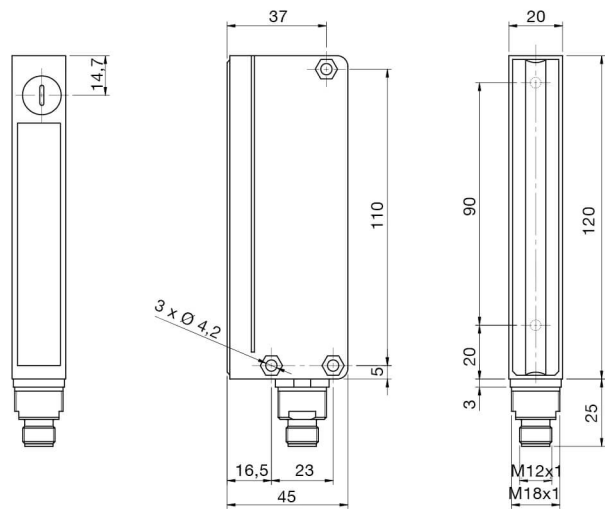


Indicative image



MEDIUM RESOLUTION AREA SENSORS

- IP67 protection degree(IP69K special model)
- Complete protection against electrical damages
- Detection of objects with irregular shape
- ATEX models, cat. 2 and cat. 3, available on request
- LED indicators
- Crossed beams detection



Detection properties

|                           |            |
|---------------------------|------------|
| Nominal sensing distance  | 0,3 ... 2m |
| Thermal drift of Sr       | ≤10%       |
| Beams space               | 10mm       |
| controlled height         | 90mm       |
| minimum detectable object | Ø 5mm      |
| number of rays            | 10         |
| Sensitivity adjustment    | Trimmer    |

Application

|                    |                    |
|--------------------|--------------------|
| Function Principle | Emitter with check |
|--------------------|--------------------|

Outputs

|                               |           |
|-------------------------------|-----------|
| Output type                   | NPN + PNP |
| Output Function               | NO        |
| Switching frequency           | 180Hz     |
| Resposnse time for light/dark |           |

|                                          |                                                 |
|------------------------------------------|-------------------------------------------------|
| transition                               | 500µs                                           |
| Resposnse time for dark/light transition | 5ms                                             |
| <b>Electrical data</b>                   |                                                 |
| Operating Voltage                        | 10 - 26Vdc                                      |
| No-Load supply current                   | 50mA                                            |
| Load current                             | ≤100mA                                          |
| Leakage current                          | 10µA                                            |
| Output voltage drop                      | ≤2V IL =100 mA                                  |
| Max ripple content                       | ≤ 10%                                           |
| LED indicators                           | Green                                           |
| Time delay before availability           | CE                                              |
| Short-circuit protection                 | autoreset                                       |
| Reverse Polarity Protection              | Yes                                             |
| Emission                                 | Infrared                                        |
| Interference to external light           | 1000lux (incandescent lamp), 1500lux (sunlight) |
| Impulsive Overvoltage Protection         | Yes                                             |

#### Mechanical data

|                       |                                |
|-----------------------|--------------------------------|
| Dimensions            | 45mm x 145mm x 20mm            |
| Weight                | 230g                           |
| Housing Material      | PBT                            |
| Connections           | M12 Plug                       |
| Tightening torque     | 25Nm                           |
| Operating temperature | 0°C...+ 50° C (without freeze) |

#### Test/Approvals

|                      |              |
|----------------------|--------------|
| Approvals            | CE           |
| EMC compatibility    | EN 60947-5-2 |
| Degree of protection | IP67         |

#### Accessories

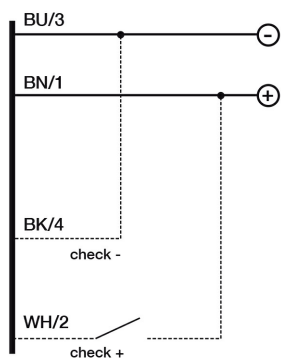
|                      |                                                        |
|----------------------|--------------------------------------------------------|
| Supplied Accessories | 4 nuts M18x1 - 1 adjustment key - 2 90°angled brackets |
|----------------------|--------------------------------------------------------|

#### Generical Data

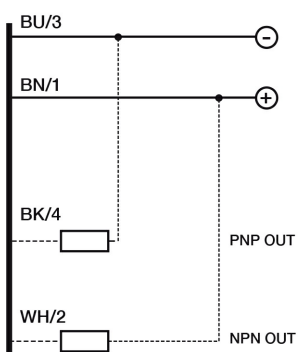
|                       |                                |
|-----------------------|--------------------------------|
| Dimensions            | 45mm x 145mm x 20mm            |
| Operating Temperature | 0°C...+ 50° C (without freeze) |
| Mechanical Protection | IP67                           |

# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

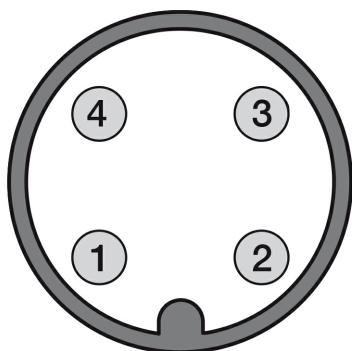
## BX04 - BX10 emitter



## BX04 - BX10 receiver



# CONNECTOR



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