

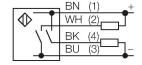
Q2XABFF30-2M Photoelectric Sensor – Diffuse-Mode Sensor with Fixed Background Suppression

| Technical data | |
|----------------------------------|--|
| Туре | Q2XABFF30-2M |
| ID | 3814142 |
| Optical data | |
| Function | Diffuse mode sensor with fixed-field back- ground suppression |
| Light type | Red |
| Wavelength | 645 nm |
| Range | 030 mm |
| Electrical data | |
| Operating voltage U _B | 1030 VDC |
| Residual ripple | < 10 % U _{ss} |
| DC rated operating current I. | ≤ 16 mA |
| Reverse polarity protection | yes |
| Output function | PNP/NPN |
| Readiness delay | ≤ 120 ms |
| Response time typical | < 0.85 ms |
| Setting option | Potentiometer |
| Mechanical data | |
| Design | Rectangular, Q2X |
| Dimensions | 14 x 31 mm |
| Housing material | Plastic, PC ABS |
| Lens | acrylic, Acrylic |
| Electrical connection | Cable, PVC |
| Number of cores | 3 |
| Ambient temperature | -25+50 °C |
| Relative humidity | 095 % |
| Protection class | IP67 |
| Special features | Miniature Crosstalk protection |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |
| Excess gain indication | LED, yellow, flashing |
| Tests/approvals | |
| Approvals | CE, cURus |
| | |

Features

- Miniature sensor with slim housing for confined spaces
- Protection class IP67
- Connection via 2-m PVC cable, 3-wire
- ■LED, all-round visible
- Adjusted via potentiometer
- ■Switching output, bipolar, light operation

Wiring diagram

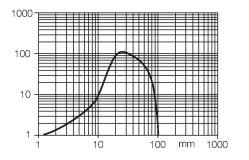


Functional principle

Diffuse-mode sensors with background suppression operate with a single emitter and several receiver elements. The position of the object to be detected and the optical structure of the sensor dictate which receiver element gets the most light. The sensor electronics determine whether the reflecting object is within or outside the detection range. These sensors come with a fixed cut-off point.

Excess gain curve Excess gain in relation to range

Excess Gain Curve





Accessories

SMBQ2XB 3812494 SMBQ2XA 3812493

Mounting bracket, stainless steel, for Q2X design, L-shaped for wall mounting

Mounting bracket, stainless steel, for Q2X design, L-shaped for mounting on horizontal surfaces