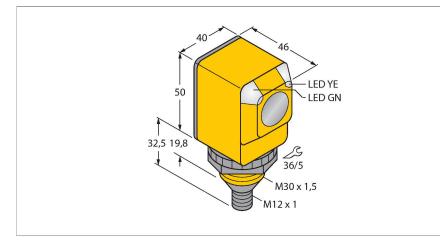


Q40AW3REQ1 Photoelectric Sensor – Opposed Mode Sensor (Receiver)



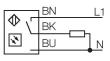
Technical data

| ID no.3037106Optical dataFunctionFunctionOpposed mode sensorOperating modeEmitter/receiver pairRange060000 mmElectrical dataCoperating voltageOperating voltage20250 VACAC rated operational current≤ 200 mAOutput functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataUutputDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Туре | Q40AW3REQ1 |
|---|------------------------------|-------------------------------|
| FunctionOpposed mode sensorOperating modeEmitter/receiver pairRange060000 mmElectrical dataOperating voltage20250 VACAC rated operational current≤ 200 mAOutput functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | ID no. | 3037106 |
| Operating modeEmitter/receiver pairRange060000 mmElectrical dataOperating voltage20250 VACAC rated operational current≤ 200 mAOutput functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Optical data | |
| Range060000 mmElectrical data60000 mmOperating voltage20250 VACAC rated operational current≤ 200 mAOutput functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Function | Opposed mode sensor |
| Electrical dataOperating voltage20250 VACAC rated operational current≤ 200 mAOutput functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Operating mode | Emitter/receiver pair |
| Operating voltage20250 VACAC rated operational current \leq 200 mAOutput functionLight operation, Relay outputSwitching frequency \leq 40 HzReadiness delay \leq 100 msMechanical data \sum DesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Range | 060000 mm |
| AC rated operational current≤ 200 mAOutput functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Electrical data | |
| Output functionLight operation, Relay outputSwitching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Operating voltage | 20250 VAC |
| Switching frequency≤ 40 HzReadiness delay≤ 100 msMechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | AC rated operational current | ≤ 200 mA |
| Readiness delay≤ 100 msMechanical dataRectangular, Q40DesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Output function | Light operation, Relay output |
| Mechanical dataDesignRectangular, Q40DimensionsØ 30 x 46 x 40.1 x 82.5 mmHousing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Switching frequency | ≤ 40 Hz |
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| Housing materialPlastic, PBTLensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Design | Rectangular, Q40 |
| Lensplastic, LexanElectrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Dimensions | Ø 30 x 46 x 40.1 x 82.5 mm |
| Electrical connectionConnectors, 1/2", PVCNumber of cores4Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Housing material | Plastic, PBT |
| Number of cores 4 Ambient temperature -40+70 °C Protection class IP69K Special features Encapsulated Wash down Power-on indication LED, Green Switching state LED, Yellow | Lens | plastic, Lexan |
| Ambient temperature-40+70 °CProtection classIP69KSpecial featuresEncapsulated Wash downPower-on indicationLED, GreenSwitching stateLED, Yellow | Electrical connection | Connectors, 1/2", PVC |
| Protection class IP69K Special features Encapsulated Wash down Power-on indication LED, Green Switching state LED, Yellow | Number of cores | 4 |
| Special features Encapsulated Wash down Power-on indication LED, Green Switching state LED, Yellow | Ambient temperature | -40+70 °C |
| Wash down Power-on indication LED, Green Switching state LED, Yellow | Protection class | IP69K |
| Switching state LED, Yellow | Special features | |
| | Power-on indication | LED, Green |
| Excess gain indication LED | Switching state | LED, Yellow |
| | Excess gain indication | LED |

Features

M12 × 1 Micro male connector (AC), 4-pin
Protection classes IP67/IP69K
Ambient temperature: -40 °C...+70 °C

Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremly high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions. Excess gain curve

Excess gain in relation to the distance



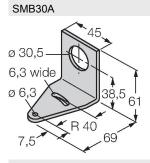
Technical data

Tests/approvals

Approvals

CE, UL, CSA

Accessories



3032723 Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



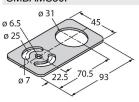
3011185

Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 $\,$ mm

SMB30SC 12,7 66,5 07 50,8 29

3052521 Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

SMBAMS30P



3073135

Mounting bracket, stainless steel, for sensors with 30 mm thread