

DATASENSING FQ SERIES SHORT BODIED M18 PHOTOELECTRIC SENSORS

FQRN/BP-0E

Axial Polarised 3m adj. PNP NO +NC plast. conn. M12

- Sensing distance up to 20m
- Nickel brass or plastic housing
- NO+NC complementary output
- IP67 Protection
- Short bodied M18 barrel sensors in a range of technologies



PRODUCT DESCRIPTION

The **FQ Series Short Bodied M18 Photoelectric Sensors** from Datasensing are a versatile and compact solution for a wide range of industrial applications. Designed with a short body for space-saving installation, these sensors provide a variety of optic functions including retro-reflective, diffuse proximity, background suppression, fixed focus, through beam, and retro reflective for transparent objects. This broad range of sensing options makes the FQ Series an ideal choice for applications that require precise object detection in tight or confined spaces, including material handling, packaging, and robotics.

With both radial and axial optics available, the FQ Series offers flexible alignment options to meet specific application needs. These sensors are available with either a 2-meter embedded cable or an M12 connection, providing seamless integration into existing industrial automation systems. The FQ Series comes in both plastic and metal housing options, offering durability and protection suited to varying environments. The M18 barrel housing design guarantees easy mounting and ensures reliable performance even in spaces where mounting flexibility is essential.

Engineered for rugged industrial environments, the FQ Series photoelectric sensors deliver consistent and accurate performance, whether you're dealing with opaque or transparent materials. The wide range of available functions ensures that these sensors can handle diverse detection requirements, from detecting small objects to differentiating between transparent materials and more opaque surfaces. Whether it's for proximity sensing, background suppression, or long-distance detection, the FQ Series provides optimal solutions for industries ranging from logistics to automotive.

Technical features:

- **Sensor Types:** Retro-reflective, diffuse proximity, background suppression, fixed focus, through beam or retro reflective for transparent objects
- **Housing:** Short-bodied M18 barrel housing for space-saving and compact installations or available in plastic or metal housing, offering durability and flexibility for various industrial environments.
- **Optic Configurations:** Available with radial or axial optics, allowing flexible alignment options based on the application requirements.
- **Connection Type:** 2-meter embedded cable or M12 connection for easy integration into existing industrial systems.
- **Detection Range:** Reliable detection over a wide range of distances, depending on the specific sensor type and application.
- **Operating Temperature Range:** Typically -25°C to +55°C, ensuring reliable operation in diverse industrial conditions.
- **Power Supply:** Operates on a standard 24V DC power supply, compatible with most industrial setups.
- **Fast Response Time:** High-speed response for real-time object detection, suitable for fast-moving automation systems.
- **Sensing Flexibility:** Provides versatile sensing capabilities for various industrial tasks, including object detection, positioning, and distance measurement.
- **Durability:** Built to withstand harsh environments, with protection against dust, moisture, and mechanical wear (especially with metal housing options).
- **Compact Design:** Short-bodied design makes it suitable for applications with limited space, offering ease of integration and mounting flexibility.
- **Applications:** Ideal for material handling, robotics, logistics, packaging, and other industrial applications requiring precise and space-efficient sensing.

TECHNICAL DATA

Distance max

4500 mm

| | |
|-----------------------------|----------------------------|
| Electrical connection | M12 plug cable exit |
| Housing | M18 Short Body |
| IP class | IP67 |
| LED indication | YES |
| Material of body | PBT |
| Photocell technology | Polarised retro reflective |
| Supply voltage dc max | 30 V DC |
| Supply voltage dc min | 10 V DC |
| Temperature operational max | 70 °C |
| Temperature operational min | -25 °C |
| Type of light | Red |

plug

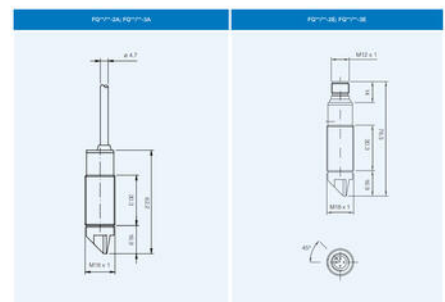


electric diagrams of the connections

NO + NC complementary exit

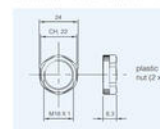


dimensions (mm)



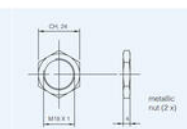
dimensions (mm)

accessories included in all plastic models

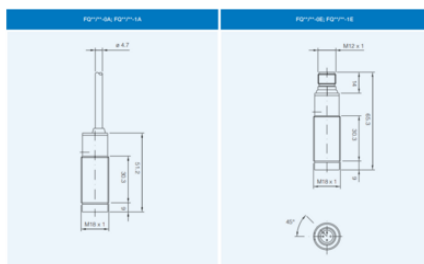


dimensions (mm)

accessories included in all metallic models



dimensions (mm)



plug

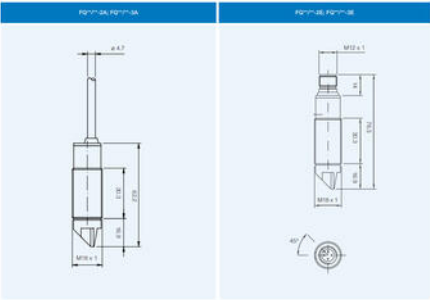


electric diagrams of the connections

NO + NC complementary exit



dimensions (mm)

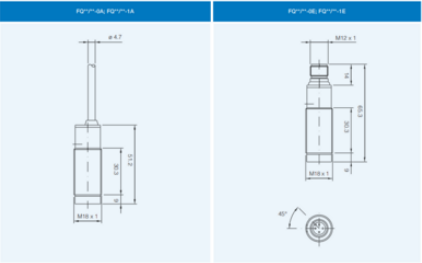


dimensions (mm)

accessories included in all plastic models



dimensions (mm)



dimensions (mm)

accessories included in all metallic models

