

## DATASENSING FF SERIES M18 IP69K PHOTOELECTRIC SENSORS

FFI7/BP-1E

Axial Diffuse 400mm adj. PNP NO+NC conn. M12

- Sensing distance up to 20m
- AISI 316L (DIN 1.4404) stainless steel housing
- Output types PNP, NPN and emitter
- Complete range of M18 sensors with IP69K protection
- Innovative teach-in function through sensor housing



### PRODUCT DESCRIPTION

The **FF Series M18 IP69K Photoelectric Sensors** from Datasensing are designed to provide high-performance detection in some of the most challenging industrial environments. These sensors offer a wide range of optic functions, including retro-reflective, diffuse proximity, background suppression, and through-beam sensing, making them suitable for diverse applications such as material handling, packaging, and manufacturing automation. The robust IP69K protection rating ensures these sensors can withstand extreme conditions, including exposure to high-pressure water jets and harsh chemicals, ensuring reliable operation even in demanding environments like food processing or automotive industries.

Featuring a classic M18 barrel housing, the FF Series sensors are known for their excellent mounting flexibility, making them easy to integrate into various systems. Available with radial or axial optics, these sensors allow you to choose the optimal configuration based on your specific detection needs and spatial constraints. Whether you're using the sensor in confined spaces or need precise alignment, the FF Series provides versatile installation options for maximum efficiency.

The sensors come with two connection options: a 2-meter embedded cable or M12 connection, allowing for straightforward installation in any setup. With an IP69K-rated metal housing, the sensors are built to withstand exposure to dust, water, and high temperatures, offering long-term durability and performance in harsh environments. This makes the FF Series the ideal choice for industries requiring sensors that perform reliably under conditions that demand high durability and protection.

#### Technical features:

- **Sensor Types:** Available in multiple sensing modes: Retro-reflective, diffuse proximity, background suppression and through-beam
- **Protection Rating:** IP69K rating, providing protection against dust, water, and high-pressure, high temperature washdowns, making it suitable for harsh industrial environments.
- **Housing:** M18 barrel housing for classic, reliable integration or metal housing for added durability and resistance to physical wear and harsh conditions.
- **Optic Configurations:** Available in radial or axial optics to provide flexible alignment options based on the application needs.
- **Connection Options:** 2-meter embedded cable or M12 connection, allowing for flexible installation and easy system integration.
- **Operating Temperature Range:** Typically -25°C to +55°C, ensuring reliable performance across a wide range of environmental conditions.
- **Durability:** Built to endure challenging environments with resistance to high temperatures, dust, moisture, and chemicals.
- **High Precision:** Accurate detection and sensing, ensuring reliable operation in various modes like background suppression, proximity detection, and long-range applications.
- **Versatile Applications:** Suitable for various industrial applications, including material handling, packaging, automation, and robotics.
- **Fast Response Time:** Provides quick response times for high-speed industrial processes, improving efficiency.
- **Power Supply:** Operates on 24V DC, making it compatible with standard industrial power sources.

### TECHNICAL DATA

Distance max

400 mm

