OEM AUTOMATIC

OEM Automatic Ltd
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

DATASENSING FA SERIES M18 PHOTOELECTRIC SENSORS

FAI7/BP-1AAN
Diffuse 400mm adj. PNP NO+NC cable 2m II 3G Ex

DATASENSING easing automation challenges

- Sensing distance up to 20m
- Metallic or plastic housing
- Output types PNP, NPN and emitter
- IP67 protection
- Retro-reflective models for transparent object detection with red emission

PRODUCT DESCRIPTION

The **FA Series M18 Photoelectric Sensors** from Datasensing are designed to provide reliable, high-performance solutions for a wide variety of industrial applications. With a range of optic functions, including polarised retro-reflective, diffuse proximity, background suppression, and through-beam sensing, these sensors offer versatile detection capabilities for different operational needs. Whether you need precise object detection, background rejection, or reliable distance measurement, the FA Series ensures consistent and accurate performance across a broad spectrum of environments.

Built with the classic M18 barrel housing, the FA Series sensors are easy to integrate into industrial systems while offering excellent mounting flexibility. The sensors are available with either radial or axial optics, giving you the flexibility to choose the best configuration for your application, whether you're dealing with space constraints or need precise alignment for optimal performance. Additionally, the FA Series sensors can be equipped with a 2-meter embedded cable or an M12 connection, providing convenience for installation and integration into existing setups.

Designed for durability and reliability, the FA Series sensors are available in both plastic and metal housing options, ensuring they can withstand various environmental conditions. Their IP67 protection rating ensures they are resistant to dust, water, and other harsh elements, making them ideal for industrial environments where durability is key. The wide operating temperature range and high tolerance to vibration and external factors make these sensors a great fit for tough applications, from manufacturing to material handling and packaging systems.

Technical features:

- Available in multiple sensing modes: Polarised retro-reflective, diffuse proximity, background suppressio and through-beam
- Housing: Classic M18 barrel housing for easy installation and excellent mounting flexibility or options for plastic or metal housing depending on environmental requirements.
- Optic Configurations: Radial and axial optics for flexible alignment and optimal performance in different setups.
- Connection Options: Available with a 2-meter embedded cable or an M12 connection, allowing for versatile installation.
- Protection Rating: IP67 rating, ensuring resistance to dust, dirt, and water, making it suitable for harsh industrial environments.
- Operating Temperature Range: Typically, from -25°C to +55°C, ensuring stable operation across a wide range of environmental conditions.
- High Precision: Offers accurate object detection, position sensing, and background suppression for various industrial applications.
- Detection Range: Wide sensing range depending on the specific mode (e.g., long-range detection in through-beam mode and short-range in diffuse proximity).
- Durability: Designed for long-lasting performance in industrial environments, with resistance to mechanical wear and vibration.
- Power Supply: Operates on typical 24V DC power, making it compatible with common industrial control systems.
- Versatility: Suitable for a broad range of applications, including factory automation, material handling, robotics, and packaging systems.

TECHNICAL DATA

Distance max	400 mm
Electrical connection	Cable exit
Housing	M18

IP class	IP67
LED indication	YES
Light/dark switching	No
Material of body	Nickel-plated brass
Output	PNP
Photocell technology	Direct Reflection
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	IR LED