OEM AUTOMATIC

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DATASENSING FAL SERIES M18 LASER PHOTOELECTRIC SENSORS

DATASENSING
easing automation challenges

FAL4/0N-1E
Axial laser Diffuse 300mm NPN L/Dselez.met. M12

- Sensing distance up to 50m
- Metallic or plastic housing
- Output types PNP, NPN and emitter
- IP67 protection
- Laser background suppression

PRODUCT DESCRIPTION

The **FAL Series M18 Laser Photoelectric Sensor**s from Datasensing offer advanced performance for a wide range of industrial applications. With versatile optic functions, including retro-reflective, diffuse proximity, background suppression, and through-beam, these sensors provide precise and reliable object detection, even in challenging environments. The integration of laser technology ensures high accuracy and long-range detection, making them ideal for tasks that require exceptional precision, such as positioning and counting in manufacturing or automated systems.

Designed with the classic M18 barrel housing, the FAL Series sensors offer exceptional mounting flexibility, making them easy to integrate into both new and existing systems. Available with radial or axial optics, these sensors can be customized to meet the specific alignment and detection needs of your application. The sensors come with either a 2-meter embedded cable or an M12 connection, offering flexibility and convenience for installation, regardless of your system's configuration.

Built to withstand tough industrial environments, the FAL Series is available in both plastic and metal housing options, providing durability and protection against harsh conditions such as vibration, dust, and moisture. With an IP67 protection rating, these sensors are highly resistant to environmental factors, ensuring reliable operation in challenging conditions. Their wide operating temperature range and robust construction make them suitable for demanding applications in industries such as robotics, packaging, and material handling.

Technical features:

- Sensor Types: Available in multiple sensing modes: Retro-reflective, diffuse proximity, background suppression and through-beam
- Laser Technology: Utilizes laser technology for high-precision detection
- Housing: M18 barrel housing, providing a classic and compact design for easy integration and excellent mounting flexibility. Available in both plastic and metal housing options for varying environmental conditions.
- Optic Configurations: Choice of radial or axial optics for flexible alignment based on application needs.
- Connection Options: Available with a 2-meter embedded cable or M12 connection
- Protection Rating: IP67 rating, ensuring the sensor is resistant to dust, dirt, and water, suitable for harsh industrial environments.
- Operating Temperature Range: Typically ranges from -25°C to +55°C, providing reliable performance in a wide range of environmental conditions.
- High Detection Precision: Offers accurate object detection, position sensing, and background suppression, utilizing laser technology for enhanced precision.
- Long Detection Range: High-performance laser-based detection with an extended sensing range, particularly useful in through-beam and retro-reflective modes.
- Durability: Designed for long-lasting operation in demanding environments, with resistance to mechanical wear, vibration, and other harsh conditions.
- Power Supply: Operates with standard 24V DC power
- Versatile Application: Suitable for a variety of applications including positioning, counting, material handling, and automated systems.

TECHNICAL DATA

Distance max	300 mm

Distance min	0 mm
Housing	M18
IP class	IP67
LED indication	YES
Material of body	Nickel plated brass
Photocell technology	Direct Reflection
Supply voltage dc max	30 V DC
Supply voltage dc min	10 V DC
Temperature operational max	55 °C
Temperature operational min	-10 °C
Type of light	Red

electrical diagrams of the connections

dimensions (mm)

electrical diagrams of the connections

plug

dimensions (mm)
accessories included in all plastic models

dimensions (mm)
accessories included in all metallic models

plug

dimensions (mm)

dimensions (mm)
accessories included in all plastic models

dimensions (mm)
accessories included in all metallic models