

OI0002 / OIT-FBOA

Diffuse Reflection Sensor

M30 threaded barrel • infrared • 20-250 V AC/DC two-wire

ifm electronic gmbh • efector 200 series



The ifm OI0002 (product designation OIT-FBOA) is an infrared diffuse reflection sensor built into an M30 threaded barrel housing. It emits an infrared beam and detects the light scattered back from the target itself, so no separate reflector or receiver unit is needed on the opposite side of the detection point. The combined AC/DC output stage and two-wire connection let it run directly from any supply between 20 and 250 V, suiting both older AC-powered machinery and modern DC control panels. Wiring lands on screw terminals inside a chamber that rotates through 90 degrees, and the output can be set to light-on or dark-on operation.

GENERAL / IDENTIFICATION

Manufacturer	ifm electronic gmbh
Article number	OI0002
Product designation	OIT-FBOA
Product family	efector 200
Function principle	Diffuse reflection sensor
EAN / GTIN	4021179175043

OPTICAL / DETECTION

Type of light	Infrared light
Sensing range	3 ... 700 mm

ELECTRICAL

Operating voltage	20 ... 250 V AC/DC
Supply frequency (AC)	47 ... 63 Hz
Wiring technology	Two-wire
Output stage	Combined AC/DC
Output function	Light-on / dark-on mode, programmable

MECHANICAL & CONNECTION

Housing	Threaded barrel
Thread size	M30 x 1.5, plastic thread
Housing material	PBT, modified PPO
Lens material	PMMA
Terminal chamber	Rotatable through 90 degrees
Electrical connection	Screw terminals, up to 1.5 mm ²
Cable sheath diameter	7 ... 13 mm

ENVIRONMENTAL

Protection rating	IP 65
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TYPICAL APPLICATIONS

Object and part detection on conveyors and transfer lines; carton, crate and pallet detection in packaging and materials handling; end-of-travel and jam detection on AC-powered machinery; bottling, washing and general factory automation.