



### through-beam sensor, retro-reflective sensor, dif. reflection sensor 2400

dimensions

18 x 50 x 50mm

through-beam sensor operating range retro-reflective sensor operating range dif. reflection sensor sensing range up to 20m up to 5m up to 2m



- ✓ robust plastic housing
- ✓ high degree of protection IP65
- ✓ sensitivity adjustable by potentiometer
- ✓ status display by LED
- programmable normally open or normally closed function
- ✓ high sensing ranges
- ✓ connection with cable

univ. power supply with relay output retro-refl. sensor with pol. filter





description

Optoelectronic sensors are indispensable components in all automated production processes.

They are used in all applications where parts are to be detected, counted, measured or positioned in a way which does not involve contact and which is reliable and fast.

These optoelectronic proximity switches are robust devices with the latest electronics in a compact plastic housing. They are used as limit switches, position switches and pulse generators on automatic machines / production sequences, often in conjunction with a PLC. They detect objects made of metal, glass, plastic (films), wood, paper etc. without the need for contact. The multi-voltage devices are to be operated with a voltage from 15 to 264V AC/DC.

All devices have a relay output and should be connected using a fixed cable.

The retro-reflective sensor works using a polarizing filter.

#### application examples

- checking the presence of various objects
- > avoiding collision, in the case of feed movements
- control of object and stack heights
- Imit switches, position switches and pulse generators



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# optical sensors

## 2400 through-beam sensor, retro-reflective sensor, dif. reflection sensor

article-no. version operating range	OE505800 receiver / through-beam sensor 20m	OS505000 transmitter / through-beam sensor -
FECHNICAL DATA	Poti light-on/dark-on change-over switch	
operating range	20m	· ·
output signal	relay, no / nc	-
operating voltage current consumption (w/o load) output current (max. load) transmitting element (pulsed) wavelength	15 264V AC/DC ≤ 40mA 3A, ohmic load at 250V AC - -	15 264V AC/DC ≤ 40mA - LED, infrared light 880nm
response/decay time	30ms/-	-
sampling frequency display (signal) sensitivity adjustment	16Hz red LED potentiometer, 270°	-
short-circuit protection	· ·	
short-circuit protection reverse polarity protection	- +	+
short-circuit protection reverse polarity protection dimensions housing material lens material operating temperature	18x50x50mm plastic ABS plastic PMMA -25 +55°C	+ 18x50x50mm plastic ABS plastic PMMA -25 +55°C
short-circuit protection reverse polarity protection dimensions nousing material ens material	18x50x50mm plastic ABS plastic PMMA	+ 18x50x50mm plastic ABS plastic PMMA





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## optical sensors through-beam sensor, retro-reflective sensor, dif. reflection sensor 2400

version operating range / sensing range article-no. version sensing range / operating range	retro-reflective sensor with polarizing filter 5m	diffuse reflection sensor
article-no. version	5m	
version		0.9m
	-	OT505801
	-	diffuse reflection sensor 2m
	50 Image: orgen switch   6 0   6 0   6 0   6 0   6 0   6 0   6 0   6 0   6 0   7 0   6 0	50 Image: Constraint of the second secon
ECHNICAL DATA	5.0m relay, no / nc	see above relay, no / nc
operating voltage	15 264V AC/DC	15 264V AC/DC
current consumption (w/o load)	≤ 40mA	≤ 40mA
output current (max. load)	3A, ohmic load at 250V AC	3A, ohmic load at 250V AC
ransmitting element (pulsed)	LED, infrared light	LED, infrared light
ver vel e e ette	880nm	880nm
esponse/decay time	30ms/-	30ms/-
esponse/decay time ampling frequency	16Hz	30ms/- 16Hz
esponse/decay time ampling frequency lisplay (signal)	16Hz red LED	30ms/- 16Hz red LED
esponse/decay time ampling frequency lisplay (signal) ensitivity adjustment	16Hz	30ms/- 16Hz
esponse/decay time ampling frequency lisplay (signal) ensitivity adjustment hort-circuit protection	16Hz red LED potentiometer, 270° -	30ms/- 16Hz red LED potentiometer, 270°
esponse/decay time ampling frequency lisplay (signal) ensitivity adjustment hort-circuit protection everse polarity protection	16Hz red LED potentiometer, 270° - +	30ms/- 16Hz red LED potentiometer, 270° - +
esponse/decay time ampling frequency lisplay (signal) ensitivity adjustment hort-circuit protection everse polarity protection limensions limensions	16Hz red LED potentiometer, 270° - + 18x50x50mm	30ms/- 16Hz red LED potentiometer, 270° - + 18x50x50mm
esponse/decay time ampling frequency lisplay (signal) ensitivity adjustment hort-circuit protection everse polarity protection limensions tousing material	16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS	30ms/- 16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS
esponse/decay time ampling frequency ampling frequency ampling frequency ampling frequency and the second s	16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS plastic PMMA	30ms/- 16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS plastic PMMA
esponse/decay time ampling frequency lisplay (signal) ensitivity adjustment hort-circuit protection everse polarity protection limensions nousing material ens material operating temperature list and the second se	16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS plastic PMMA -25 +55°C	30ms/- 16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS plastic PMMA -25 +55°C
vavelengthesponse/decay timeesponse/decay timeeampling frequencydisplay (signal)ensitivity adjustmentchort-circuit protectioneverse polarity protectiondimensionsnousing materialens materialoperating temperaturedegree of protection (EN 60529)connection	16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS plastic PMMA	30ms/- 16Hz red LED potentiometer, 270° - + 18x50x50mm plastic ABS plastic PMMA





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#### connection

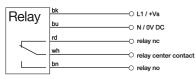
cable device receiver, retro-reflective sensor, dif. reflection sensor

cable device transmitter

-0 N/OV DC

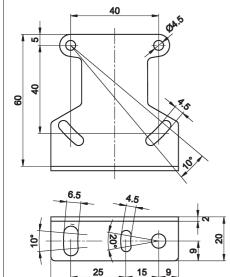
bk

bu



wire colors: bu = blue, bk = black, br = brown, wh = white, rd = red

mounting accessories AO000057



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This data sheet contains the standard versions only. Kindly request the availability of other output- and connection functions. Warning: Never use these devices in applications where the safety of a person depends on their functionality.

This data sheet as well as your personal contact can be found at www.ipf-electronic.com ipf electronic gmbh



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