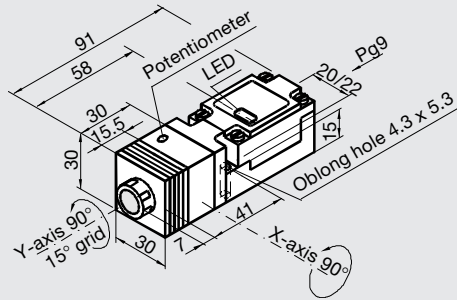
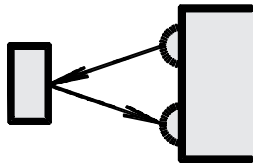


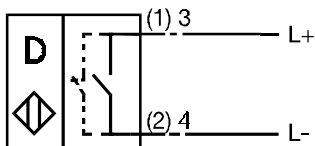


Housing material PBT (Polybutylenterephthalate)
Optical outlet material mineral glass

- 300 mm adjustable range
- Intrinsically safe, identification codes: EEx ia IIC T6
- PTB No. Ex-93.C.2118
- Electrical ratings in accordance with DIN 19 234 (NAMUR)
- Adaptable to glass fibre light guides
- Light/dark ON wiring dependent
- Terminal compartment
- Moveable sensing head
- Protection class IP 67
- Scratch resistant mineral glass window
- Mounting attachments and reflectors - see "Accessories" section

The sensor should be considered as active even in the fault condition. The peak values can be taken from the Certificate of Conformity.

Connection:



N.C. (Dark ON) Terminal 1,2
N.O. (Light ON) Terminal 3,4

Ordering details

OCT300-M1K-N2

Sensing range

Reference standard
Range adjustment
Detectable objects

300 mm

with white target 200 mm x 200 mm
70 mm ... 300 mm, with 18 turn Potentiometer
Opaque and transparent objects

Switching rate (mark : space ratio 1:1)
Rise delay time
Readiness delay
Range hysteresis
Detection width hysteresis
Repeatability
Temperature effect

100 Hz
5 ms
20 ms
≤ 10 %
≤ 3 %
≤ 0.5 % of the sensing range
≤ 0.5 mm/K

Operation mode
Indicator
LED yellow
Type of light
Extraneous light limit
Daylight
Halogen light
Ambient temperature
Storage temperature

Light/dark ON, wiring dependent
Switching status
IR-light 880 nm
≤ 40 000 Lux
≤ 30 000 Lux
248 Kelvin ... 343 Kelvin (-25 °C ... +70 °C)
233 Kelvin ... 353 Kelvin (-40 °C ... +80 °C)

Electrical ratings

Nominal voltage
Rated operational voltage
Self inductance
Self capacitance
Output / current consumption
Light path free
Object in detection range

8 V DC (R, approx. 1 kΩ)
6 V DC ... 20 V DC, ripple 5 %_{SS}
Negligible
Negligible
Connection 1, 2 Connection 3, 4
≥ 2.7 mA ≤ 1 mA
≤ 1 mA ≥ 2.7 mA

Data in accordance with the Certificate of Conformity:

PTB Nr. Ex-93.C.2118

Maximum values of the connected circuit

U_o
 I_K
 P_{max}

15.5 V
52 mA
169 mW

Mechanical Data

Protection class to EN 60 529
Filter
Optical
Permissible shock and vibration loading
Method of connection
Weight

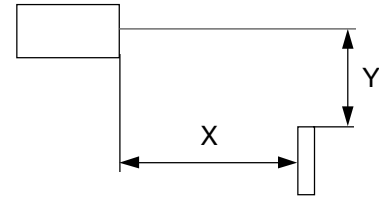
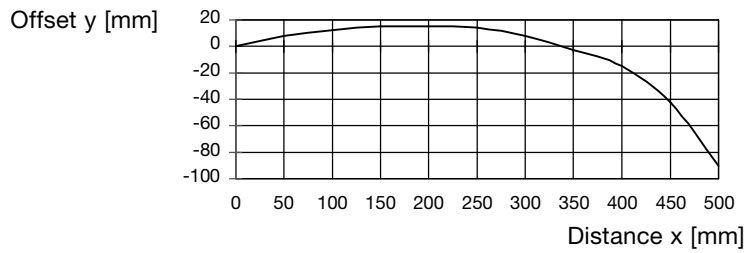
IP 67
Red filter
Lens elements
Shock $b \leq 30$ g, $T \leq 11$ ms
Vibration $f \leq 55$ Hz, $a \leq 1$ mm
Terminal compartment ≤ 2.5 mm² conductor csa
100 g

In compliance with

DIN 19 234 (NAMUR)

Characteristic response curve for OCT 300-M1K-N2

Permissible distance (offset) between optical axis and object



Minimum edge length of a square piece of paper as a function of the sensing range

