



Powering Business Worldwide



135577
12102AQD07

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DELIVERY PROGRAM

Basic function
Optical sensors

Product range
Cormet Series

For connection of:
Plug-in connection M12 x 1

Design (outer dimensions)
M18 x 1 mm

Rated operational voltage [U_a]
10 - 30 V DC

Rated switching distance [S_n]
24000 mm

Description
Detector (for combination with source)
Beam straight

Connection
4-wire


Function
Thru-beam photoelectric sensor

Type of light
Visible red

Material
Insulated material

Switching type
NPN
PNP

Switching principle
Adjustable bright/dark switching

Information relevant for export to North America 

Product Standards UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking

UL File No. E117028

UL Category Control No. NRKH, NRK1-7

CSA File No. 50513

CSA Class No. 3211-07

North America Certification UL listed, CSA certified

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

TECHNICAL DATA

General

Standards
IEC/EN 60947-5-2

Ambient temperature
-20 - +70

Mechanical shock resistance
100
Shock duration 3 ms g

Degree of Protection
IP67

Characteristics

Rated switching distance
Rated switching distance [S_n]
24000 mm

Range
24000 mm

Rated operational voltage [U_o]
10 - 30 V DC

Operating current in the switched state at 24 V DC [I_o]
30 mA

Maximum load current [I_b]
< PNP: 100

NPN: 250 (120 > 55 °C) mA

Response time
3.5 ms

Switching state display
Red LED

Protective functions
Short-circuit protective device
Protection against polarity reversal

Connection
4-wire

Style
Design (outer dimensions)
M18 x 1 mm

For connection of:
Plug-in connection M12 x 1

Material
Insulated material

DESIGN VERIFICATION AS PER IEC/EN 61439

Operating ambient temperature min.
-20 °C

Operating ambient temperature max.
+70 °C

TECHNICAL DATA ETIM 7.0

Sensors (EG000026) / One-way light barrier (EC002716)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology
/ Optoelectronic sensor / One-way light barrier (ecl@ss10.0.1-27-27-09-01 [AKP250013])

Scope of delivery of the one-way system
Receiver

Opening angle
0 °

Pre failure notice
No

With time function

No

Rated switching distance
24000 mm

Max. switching distance
24000 mm

Max. output current
100 mA

Reflector included
No

Analogue output 0 V ... 10 V
No

Analogue output 0 mA ... 20 mA
No

Analogue output 4 mA ... 20 mA
No

Analogue output -10 V ... +10 V
No

With other analogue output
No

Setting procedure
Manual adjustment

With communication interface analogue
No

With communication interface AS-Interface
No

With communication interface CANOpen
No

With communication interface DeviceNet
No

With communication interface Ethernet
No

With communication interface INTERBUS
No

With communication interface PROFIBUS
No

With communication interface RS-232

Nb

With communication interface RS-422
Nb

With communication interface RS-485
Nb

With communication interface SSD
Nb

With communication interface SSI
Nb

Number of semiconductor outputs with signalling function
0

Number of contact energized outputs with signalling function
0

Number of protected semiconductor outputs
0

Number of protected contact energized outputs
0

Type of interface for safety communication
Other

Type of electric connection
Connector M12

Type of switching output
PNP/NPN

Type of switch function
Programmable/configurable

Operation agent-safety class
Safety class 2

Explosion safety category for gas
None

Explosion safety category for dust
None

Construction type housing
Cylinder, screw-thread

Width sensor
0 mm

Diameter sensor
18 mm

Height of sensor
0 mm

Length of sensor
70 mm

Sensing mode
Light-/dark switching

Material of optical surface
Plastic

Material housing
Plastic

Max. output current at protected output
0 mA

Mn. reflector distance
0 mm

Ambient temperature
40 - 70 °C

Time of reaction
7 ms

Transmission range of the safety field
0 m

Switching frequency
142 Hz

Type of safety acc. IEC 61496-1

"Switching voltage of OSSD at state ""high""
0 V

Rated control supply voltage U_s at AC 50HZ
0 - 0 V

Rated control supply voltage U_s at AC 60HZ
0 - 0 V

Rated control supply voltage U_s at DC
10 - 30 V

Voltage type
DC

With monitoring function downstream switching devices
No

Laser protection class
None

Wavelength of the sensor
0 nm

Type of light
Polarity free red light

Light dot
0 mm²

AWG-number
0

Material of cable sheath
Polyurethane (PUR)

With restart blockage
No

Suitable for safety functions
No

Degree of protection (IP)
IP67

Degree of protection (NEMA)
4

APPROVALS

Product Standards
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E117028

UL Category Control No.
NRKH, NRKH7

CSA File No.
50513

CSA Class No.
3211-07

North America Certification
UL listed, CSA certified

Max. Voltage Rating
30 V DC

Degree of Protection
IEC: IP68, IP69K; UL/CSA Type: 1, 4, 6

DIMENSIONS



Sensor with installed adapter

- Light/dark
- Gain

