#### Select your language

- German
- English
- Spanish
- French
- Dutch
- Italian
- Polish
- Czech
- Russian
- Norwegian Bokmål

Worldwide English



Powering Business Worldwide

E58-30TD250-HDP - Thru-beam photoelectric sensor, receiver, Sn=250m, 4L, 10-30VDC, dark, NPN, PNP, M80, metal



135693 E58-30TD250-HDP

Overview Specifications Resources



# 135693 E58-30TD250-HDP

Thru-beam photoelectric sensor, receiver, Sn=250m, 4L, 10-30VDC, dark, NPN, PNP, M30, metal Alternate Catalog No. E58-30TD250-HDP

EL-Nummer (Norway) 4315349

E58 series, product features: sensors with a diameter of 18 mmor 30 mm. Highly refined optics for long sensing ranges and to see through high levels of contamination – unmatched optical performance. Resistant to many chemicals used in the automotive, food processing and forest products industries. Suitable for high temperature, high pressure washdown (82 bar). mechanical Viton gaskets are resistant to extreme temperature variations. visible sensing beam on all models lets you see where the beam is aimed for quick flush mounting and alignment. The function display is the brightest available and is visible from any angle and in any lighting condition. The industry's only background suppression sensors with a 2-wire circuit design. 4-wire DC sensors feature an PNP and a NPN output

#### Delivery program

Technical data

Design verification as per IEC/EN 61439

Technical data ETIM 7.0

Approvals

Dimensions

### **Delivery program**

Basic function

Optical sensors

Product range

E58 Harsh Duty Series

For connection of:

Plug-in connection M12 x 1

Design (outer dimensions)

M30 x 1.5 mm

Rated operational voltage [Ue]

10 - 30 V DC

Rated switching distance [S<sub>n</sub>]

250000 mm

Description

Detector (for combination with source)

Connection

4-wire

Function

Thru-beam photoelectric sensor

Material

Stainless steel

Switching type

NPN

PNP

Switching principle

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. E166051

UL Category Control No. NRKH, NRKH7

CSA File No. UL report applies to both Canada and US

CSA Class No. -

North America Certification UL listed, certified by UL for use in Canada

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP68, IP69K; UL/CSA Type: 1, 2, 3, 3R, 3S, 4, 4x, 6, 6P, 12, 12K, 13

#### Technical data

General

Standards

IEC/EN 60947-5-2

Ambient temperature

-40 - +55

Mechanical shock resistance

100

Shock duration 3 ms g

Degree of Protection

**IP69** 

Characteristics

Rated switching distance Rated switching distance [S<sub>n</sub>]

250000 mm

Range

250 mm

Rated operational voltage [Ue]

10 - 30 V DC

Maximum load current [le]

 $< 100 \, \text{mA}$ 

Response time

1.6 ms

Switching state display

Red LED

Protective functions

Short-circuit protective device

Protection against polarity reversal

Protection against wire breakage

Connection

4-wire

StyleDesign (outer dimensions)

M30 x 1.5 mm

For connection of:

Plug-in connection M12 x 1

Material

Stainless steel

### Design verification as per IEC/EN 61439

Operating ambient temperature min.

-40 °C

Operating ambient temperature max.

+55 °C

#### Technical data ETIM 7.0

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

Bectric 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

Nh

With time function

No

Rated switching distance

250000 mm

Max. switching distance

 $0 \, \text{mm}$ 

Max. output current

100 mA

Reflector included

Analogue output 0 V ... 10 V

Analogue output 0 mA ... 20 mA

Analogue output 4 mA ... 20 mA

Analogue output -10 V ... +10 V

With other analogue output

Setting procedure

With communication interface analogue

With communication interface AS-Interface

With communication interface CANOpen

With communication interface DeviceNet

With communication interface Ethernet

With communication interface INTERBUS

With communication interface PROFIBUS

With communication interface RS-232

With communication interface RS-422

With communication interface RS-485

With communication interface SSD

With communication interface SSI

Number of semiconductor outputs with signalling function

Number of contact energized outputs with signalling function

Number of protected semiconductor outputs

Number of protected contact energized outputs

Type of interface for safety communication

Other

Type of electric connection

Connector M12

Type of switching output

PNP/NPN

Type of switch function

Other

Operation agent-safety class

Safety class 2

Explosion safety category for gas

None

Explosion safety category for dust

None

Construction type housing

Cuboid

Width sensor

 $0 \, \text{mm}$ 

Diameter sensor

30 mm

Height of sensor

0 mm

Length of sensor

111 mm

Sensing mode

Dark switching

Material of optical surface

Glass

Material housing

Metal

Max. output current at protected output

0 mA

Mn. reflector distance

0 mm

Ambient temperature

40 - 55 °C

Time of reaction

0 ms

Transmission range of the safety field

0 m

Switching frequency

312 Hz

Type of safety acc. IEC 61496-1

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

30 \

Rated control supply voltage Us at AC 50HZ

0-0V

Rated control supply voltage Us at AC 60HZ

0-0V

Rated control supply voltage Us at DC

10 - 30 V

Voltage type

DC

With monitoring function downstreamswitching devices

Nh

Laser protection class

None

Wavelength of the sensor

0 nm

Type of light

Other

Light dot

 $0 \, \text{mm}^2$ 

AWG-number

0

Material of cable sheath

Other

With restart blockage

No

Suitable for safety functions

No

Degree of protection (IP)

IP67

Degree of protection (NEVA)

4X

### **Approvals**

**Product Standards** 

UL 508; CSA-C22.2 No. 14; IEO60947-5-2; CE marking

UL File No.

E166051

UL Category Control No.

NRKH, NRKH7

CSA File No.

UL report applies to both Canada and US

CSA Class No.

\_

North America Certification
UL listed, certified by UL for use in Canada
Max. Voltage Rating
30 V DC
Degree of Protection

IEC: IP68, IP69K; UL/CSA Type: 1, 2, 3, 3R, 3S, 4, 4x, 6, 6P, 12, 12K, 13

#### **Dimensions**



☐ M12 plug-in connection: 178 ±25

# Product photo



# 3D drawing



# Dimensions single product

1360DIM-315

Line drawing

□ M12 plug-in connection: 178 ±25, Connection cable: 2m

### **Instruction Leaflet**

Optical sensors: E58 Series (IL05305003Z)
 Asset
 (PDF, multilingual)

# **Declaration of Conformity**

#### EU

 Photoelectric Sensors, E58 Series (DC) (DA-DC-00002425)
 Asset (PDF)

# **Download-Center**

- Download-Center (this item)
   Eaton EVEA Download-Center download data for this item
- Dow nload-Center
   Eaton EVEA Dow nload-Center

Generate data sheet in PDF format

Generate data sheet in Excel format

Write a comment

Imprint Privacy Policy Legal Disclaimer Terms and Conditions

© 2021 by Eaton Industries GmbH