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E58-30RS18-HDP - Retroflective sensing sensor, Sn=18m, 4L, 10-30VDC, dark, NPN, PNP, M30, metal, M12



135689 E58-30RS18-HDP

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## 135689 E58-30RS18-HDP

Retroflective sensing sensor, Sn=18m, 4L, 10-30VDC, dark, **NPN**, **PNP**, M30, metal, M12

Alternate Catalog No.

E58-30RS18-HDP

EL-Nummer (Norway)

4315347

E58 series, product features: sensors with a diameter of 18 mm or 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

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### 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 [U<sub>a</sub>]

10 - 30 V DC

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

18000 mm

Description

for combination with reflector

Connection

4-wire

Function

Reflex photoelectric sensor

Type of light

Visible red

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 [ $S_n$ ]

18000 mm

Range

18 mm

Rated operational voltage [ $U_b$ ]

10 - 30 V DC

Maximum load current [ $I_e$ ]

< 100 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

Style Design (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) / Reflection light barrier (EC002717)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Reflection light barrier (ecl@ss10.0.1-27-27-09-02 [AKP251013])

Pre failure notice

No

With time function

No

Rated switching distance

18000 mm

Max. switching distance

0 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  
 Other  
 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  
 No  
 With communication interface RS-422  
 No  
 With communication interface RS-485  
 No  
 With communication interface SSD  
 No  
 With communication interface SSI  
 No  
 Number of semiconductor outputs with signalling function  
 2  
 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  
 Type of electric connection  
 Connector M12  
 Type of switching output  
 PNP/NPN  
 Type of switch function  
 Other  
 Operation agent-safety class  
 Explosion safety category for gas  
 None  
 Explosion safety category for dust  
 None  
 Construction type housing  
 Cuboid  
 Width sensor  
 0 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  
 Min. 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 V  
 Rated control supply voltage Us at AC 50Hz  
 0 - 0 V  
 Rated control supply voltage Us at AC 60Hz  
 0 - 0 V  
 Rated control supply voltage Us 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  
 Other  
 Light dot  
 0 mm²  
 With restart blockage  
 No  
 Suitable for safety functions  
 No  
 Degree of protection (IP)  
 IP67  
 Degree of protection (NEMA)  
 4X

## Approvals

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

## Dimensions

## DIMENSIONS



□ M12 plug-in connection: 178 ±25

## Product photo

-   
1360PIC-89  
Photo

## 3D drawing

-   
1360DRV-25  
Line 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)

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