

Select your language

- [German](#)
- [English](#)
- [Spanish](#)
- [French](#)
- [Dutch](#)
- [Italian](#)
- [Polish](#)
- [Czech](#)
- [Russian](#)
- [Norwegian Bokmål](#)

Worldwide English



Powering Business Worldwide

E71-FFDP-M8 - Proximity switch, optical, long range 10cm, 4L, 10-30VDC, FNP, M8



100518 E71-FFDP-M8

[Overview](#) [Specifications](#) [Resources](#)



100518 E71-FFDP-M8

Proximity switch, optical, long range 10cm, 4L, 10-30VDC, FNP, M8

Alternate Catalog No.

E71-FFDP-M8

EL-Nummer (Norway)

4315315

E71 NanoView series, product features: optical miniature sensor, very minimal size in cube form, IP66_x, status LED for Power und Output, light and dark switching, visible red LED beam enables simple commissioning and adjustment, fixed focus diffuse reflective version to detect very small parts

- [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

E71 NanoView Series

For connection of:

Plug-in connection M8 x 1

Design (outer dimensions)

Rectangular (20 x 12 x 32) mm

Rated operational voltage [U_b]

10 - 30 V DC

Rated switching distance [S_n]

100 mm

Description

Beam focused, forward viewing

Connection

4-wire

Function

Reflected-light beam

Type of light

Visible red

Material

Insulated material

Switching type

FNP

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. E166051

UL Category Control No. NRKH, NRKH7

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

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

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP67; UL/CSA Type: -

Technical data

General

Ambient temperature

-25 - +55

Operation [9]

-25 - +55 °C

Storage [9]

-25 - +70 °C

Mechanical shock resistance

30

Shock duration 11 ms g

Degree of Protection

IP67

Vibration

Amplitude 0.5 mm 10 - 55 Hz.

IEC/EN 60068-2-6

Characteristics

Rated switching distance Rated switching distance [S_n]

100 mm

Rated operational voltage [U_e]

10 - 30 V DC

Maximum load current [I_e]

< 100 mA

Switching Frequency

500 Hz

Response time

1 ms

Switching state display

Yellow LED

Operating voltage display

Green LED

Protective functions

Short-circuit protective device

Protection against polarity reversal

Connection

4-wire

Style Design (outer dimensions)

Rectangular (20 x 12 x 32) mm

For connection of:

Plug-in connection M8 x 1

Material

Insulated material

Design verification as per IEC/EN 61439

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+55 °C

Technical data ETIM 7.0

Sensors (EG000026) / Light scanner, energetic (EC001821)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner, energetic (ecl@ss10.0.1-27-27-09-03 [AKP252013])

Operating distance

0 - 100 mm

Pre failure notice

No

With time function

No

Max. switching distance

100 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

1

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 M8

Type of switching output

PNP

Type of switch function

Other

Operation agent-safety class

Explosion safety category for gas

None

Explosion safety category for dust

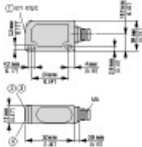
None
 Construction type housing
 Cuboid
 Width sensor
 12 mm
 Diameter sensor
 0 mm
 Height of sensor
 32 mm
 Length of sensor
 20 mm
 Sensing mode
 Light-/dark switching
 Material of optical surface
 Plastic
 Material housing
 Plastic
 Max. output current at protected output
 0 mA
 Min. reflector distance
 0 mm
 Time of reaction
 1 ms
 Transmission range of the safety field
 0 m
 Switching frequency
 500 Hz
 Type of safety acc. IEC 61496-1
 "Switching voltage of OSSD at state ""high""
 30 V
 Voltage type
 DC
 With monitoring function downstream switching devices
 No
 Laser protection class
 Wavelength of the sensor
 660 nm
 Type of light
 Polarity free red light
 Light dot
 0 mm²
 AWG-number
 0
 Material of cable sheath
 With restart blockage
 No
 Suitable for safety functions
 No
 Degree of protection (IP)
 IP67
 Degree of protection (NEMA)
 4
 Ambient temperature
 25 - 55 °C
 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

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
North America Certification
UL listed, certified by UL for use in Canada
Max. Voltage Rating
30 V DC
Degree of Protection
IEC: IP67; UL/CSA Type: -

Dimensions



- ☐ Sensitivity potentiometer
- ☐ Stability LED
- ☐ Power On LED
- ☐ Output LED

CAD data

- [Product-specific CAD data](#)
(Web)
- [3D Preview](#)
(Web)

DWG files

- [DA-CD-90_28292_004](#)
File
(Web)

Step files

- [DA-CS-90_28292_004](#)
File
(Web)

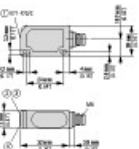
Product photo

- 
[1360PIC-219](#)
Photo

3D drawing

- 
[1360DRV-189](#)
Line drawing

Dimensions single product

- 
[1360DIM-353](#)

Line drawing

☐ Sensitivity potentiometer

☐ Stability LED

☐ Power On LED

☐ Output LED

Instruction Leaflet

- [IL05305006Z](#)

Asset

(PDF, Int)

Declaration of Conformity

EU

- [Photoelectric Sensors, NanoView & InetliView Series \(DA-DC-00002590\)](#)

Asset

(PDF)

Download-Center

- [Download-Center \(this item\)](#)

Eaton EMEA Download-Center - download data for this item

- [Download-Center](#)

Eaton EMEA Download-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

