

# Eaton 13100AQD07

Catalog Number: 13100AQD07

Eaton Moeller® series E58 Diffuse reflective sensor, Sn=610mm, 4L, 10-30VDC, NPN, PNP, M18, insulated material, M12

## General specifications



### Product Name

Eaton Moeller® series E58 Diffuse reflective sensor

### Catalog Number

13100AQD07

### Model Code

13100AQD07

### UPC

782113843551

### EAN

4015081323746

### Product Length/Depth

158.75 mm

### Product Height

50.8 mm

### Product Width

133.35 mm

### Product Weight

0.091 kg

### Warranty

3 year

### Certifications

UL Recognized

cUL Recognized

CE

UL

CSA Class No.: 3211-07

CSA File No.: 50513

UL Category Control No.: NRKH, NRKH7

UL 508

CSA

CSA-C22.2 No. 14

IEC/EN 60947-5-2

UL File No.: E117028

## Product specifications

### Type

Optical sensors

### Contact Rating

100 mA PNP, 250 mA NPN at 10-30 Vdc

### Features

Straight beam

### Electric connection type

Plug-in connection

### Enclosure material

Polyurethane foam (RIM)

Plastic

### Enclosure type

Cylinder, screw-thread

### Operating mode

Switching principle: Adjustable bright/dark switching

### Connection

M12

### Contact configuration

NPN and PNP open collector

### Explosion safety category for dust

None

### Sensor type

Diffuse reflective

### Explosion safety category for gas

None

### Functions

Reflected-light beam

Protection against polarity reversal

Short-circuit protection

### Voltage type

DC

### Wire size

22

### Connection type

Plug-in connection M12 x 1

4-wire

## Resources

### Catalogs

Product Range Catalog Sensors – products, basic information, applications

### Declarations of conformity

DA-DC-00004657.pdf

DA-DC-00004652.pdf

### Drawings

eaton-proximity-switches-dimensions-002.eps

1360DIM-188

eaton-proximity-switches-dimensions-003.eps

1360DIM-189

### Drawings

eaton-proximity-switches-3d-drawing-007.eps

1360DRW-35

### Installation instructions

IL05305002Z

### mCAD model

DA-CS-90\_28267\_104

eaton-cadenas-path-sensoren-assemblies-90\_28267\_104\_asmtpl.prj

eaton-cadenas-side\_view-90\_28267\_104\_side.pra

eaton-cadenas-front\_view-90\_28267\_104\_front.pra

DA-CD-90\_28267\_104

### Specifications and datasheets

Eaton Specification Sheet - 13100AQD07

Input voltage

10-30 Vdc

Cable sheath material

Polyvinyl chloride (PVC)

Light type

Infrared light

Degree of protection

IP67

NEMA 6

Interface type

Other

LED indicator

Output ON

Status indication of Switching state: Red LED

Switch function type

Other

Load current

Max. 250 mA (Ie, NPN, 120 > 50°C)

Max. 100 mA (Ie, PNP)

Laser protection class

None

Operation agent-safety class

Safety class 2

Shock resistance

100 g, Mechanical, Shock duration 3 ms

Optical surface material

Plastic

Output current (mA) - max

250 mA

Output current at protected output - max

0 mA

Rated control supply voltage (Us) at AC, 50 Hz - max

0 V

Rated control supply voltage (Us) at AC, 50 Hz - min

0 V

Rated control supply voltage (Us) at AC, 60 Hz - max

0 V

Rated control supply voltage (Us) at AC, 60 Hz - min

0 V

Rated control supply voltage (Us) at DC - max

30 V

Rated control supply voltage (Us) at DC - min

10 V

Rated switching distance (Sn)

610 mm

Reflector distance - min

0 mm

Sensor height

0 mm

Sensor length

56 mm

Switching distance - max

610 mm

Switching voltage of OSSD at state high

0 V

Transmission range of the safety field

0 m

Voltage rating - max

30 V

Safety type (IEC 61496-1)

1

Switching frequency

500 Hz

Sensing mode

Light-/dark switching

Switching output type

PNP/NPN

Sensor material

Insulated material

Wavelength of the sensor

0 nm

Width sensor

0 mm

Accessories

Can be expanded with fibre optic cable.

Product category

Comet Series

Number of pins

4

Protection

Auto reset short circuit

Response time

1 ms

Maximum DC current

100 mA PNP, 250 mA NPN

Ambient operating temperature - max

70 °C

Ambient operating temperature - min

-40 °C

Diameter sensor

18 mm

Light dot size

0 mm<sup>2</sup>

Number of contact energized outputs with signalling function

0

Number of outputs (protected contact energized)

0

Number of outputs (protected semiconductor)

0

Number of outputs (semiconductor with signaling function)

2

Operating distance - max

0 mm

Operating distance - min

0 mm

Operating temperature - max

158 °F

Operating temperature - min

-40 °F

Operational current (Ib) in the switched state at 24 V DC

30 A

Environmental rating

NEMA 1, NEMA 3, NEMA 4, NEMA 4X, NEMA 6, NEMA 12,  
NEMA 13, IP69K

Adjustment type

Manual adjustment



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### Operating mode

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### Connection

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### Explosion safety category for dust

None

### Sensor type

Diffuse reflective

### Explosion safety category for gas

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### Functions

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Protection against polarity reversal

Short-circuit protection

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Laser protection class

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Operation agent-safety class

Safety class 2

Shock resistance

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Optical surface material

Plastic

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Output current at protected output - max

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Rated control supply voltage (Us) at AC, 50 Hz - min

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Rated control supply voltage (Us) at AC, 60 Hz - max

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Rated control supply voltage (Us) at AC, 60 Hz - min

0 V

Rated control supply voltage (Us) at DC - max

30 V

Rated control supply voltage (Us) at DC - min

10 V

Rated switching distance (Sn)

610 mm

Reflector distance - min

0 mm

Sensor height

0 mm

Sensor length

56 mm

Switching distance - max

610 mm

Switching voltage of OSSD at state high

0 V

Transmission range of the safety field

0 m

Voltage rating - max

30 V

Safety type (IEC 61496-1)

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Switching frequency

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Sensing mode

Light-/dark switching

Switching output type

PNP/NPN

Sensor material

Insulated material

Wavelength of the sensor

0 nm

Width sensor

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Accessories

Can be expanded with fibre optic cable.

Product category

Comet Series

Number of pins

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Protection

Auto reset short circuit

Response time

1 ms

Maximum DC current

100 mA PNP, 250 mA NPN

Ambient operating temperature - max

70 °C

Ambient operating temperature - min

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Diameter sensor

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Number of contact energized outputs with signalling function

0

Number of outputs (protected contact energized)

0

Number of outputs (protected semiconductor)

0

Number of outputs (semiconductor with signaling function)

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Operating distance - max

0 mm

Operating distance - min

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Operating temperature - max

158 °F

Operating temperature - min

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