

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	Catalog Number
Eaton Moeller® series E58 Diffuse reflective sensor	13100AQD07
	Model Code
	13100AQD07
UPC	EAN
782113843551	4015081323746
Product Length/Depth	Product Height
158.75 mm	50.8 mm
Product Width	Product Weight
133.35 mm	0.091 kg
Warranty	Certifications
3 year	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-00004652.pdf

DA-DC-00004657.pdf

Drawings

1360DIM-188

eaton-proximity-switches-dimensions-002.eps

1360DIM-189

eaton-proximity-switches-dimensions-003.eps

Drawings

1360DRW-35

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

Installation instructions

IL05305002Z

mCAD model

eaton-cadenas-front_view-90_28267_104_front.pra

eaton-cadenas-side_view-90_28267_104_side.pra

eaton-cadenas-path-sensoren-assemblies-90_28267_104_asmtpl.prj

DA-CD-90_28267_104

DA-CS-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 mm²

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 (I_b) 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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Sensor type

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Switch function type

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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

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Ambient operating temperature - max

70 °C

Ambient operating temperature - min

-40 °C

Diameter sensor

18 mm

Light dot size

0 mm²

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,
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Adjustment type

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