

Eaton 100511

Catalog Number: 100511

Eaton Moeller® series E71 Proximity switch, optical, long range
10cm, 4L, 10-30VDC, NPN, M8

General specifications



Product Name	Catalog Number
Eaton Moeller® series E71 Proximity switch	100511
	EAN
	4015081643257
Product Length/Depth	Product Height
536.45 mm	9.91 mm
Product Width	Product Weight
9.91 mm	0.09 kg

Certifications

CE
Certified by UL for use in Canada
UL
UL 508
UL File No.: E166051
UL Category Control No.: NRKH, NRKH7

CSA File No.: UL report applies to both
US and Canada
IEC/EN 60947-5-2
CSA-C22.2 No. 14

Product specifications

Type

Optical sensors

Features

Focused, forward viewing beam

Electric connection type

Connector M8

Enclosure material

Plastic

Enclosure type

Cuboid

Operating mode

Switching principle: Adjustable bright/dark switching

Explosion safety category for dust

None

Explosion safety category for gas

None

Functions

Short-circuit protection

Protection against polarity reversal

Reflected-light beam

Voltage type

DC

Wire size

0

Connection type

Plug-in connection M8 x 1

4-wire

Cable sheath material

Other

Light type

Visible red light

Polarity free red light

Degree of protection

IP67

NEMA 4

Interface type

Resources

Brochures

[eaton-sensors-brochure-br053001en-en-us.pdf](#)

Catalogs

[Product Range Catalog Sensors – products, basic information, applications](#)

Drawings

[eaton-proximity-switches-proximity-switch-dimensions-024.eps](#)

[eaton-proximity-switches-proximity-switch-3d-drawing-002.eps](#)

Installation instructions

[IL05305006Z](#)

mCAD model

[DA-CS-90_28292_004](#)

[DA-CD-90_28292_004](#)

Other

LED indicator

Status indication of Operating voltage: Green LED

Status indication of Switching state: Yellow LED

Switch function type

Other

Load current

Max. 100 mA (I_e)

Laser protection class

None

Operation agent-safety class

Safety class 2

Shock resistance

30 g, Mechanical, Shock duration 11 ms

Optical surface material

Plastic

Output current (mA) - max

100 mA

Output current at protected output - max

0 mA

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

0 V

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

0 V

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

0 V

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

0 V

Rated control supply voltage (U_s) at DC - max

30 V

Rated control supply voltage (U_s) at DC - min

10 V

Rated switching distance (S_n)

100 mm

Reflector distance - min

0 mm

Sensor height

32 mm

Sensor length

20 mm

Switching distance - max

100 mm

Switching voltage of OSSD at state high

30 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

NPN

Sensor material

Insulated material

Vibration resistance

10 - 55 Hz, Amplitude 0.5 mm

According to IEC/EN 60068-2-6

Wavelength of the sensor

660 nm

Width sensor

12 mm

Product category

E71 NanoView Series

Response time

1 ms

Ambient operating temperature - max

55 °C

Ambient operating temperature - min

-25 °C

Ambient storage temperature - max

70 °C

Ambient storage temperature - min

-25 °C

Diameter sensor

0 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)

1

Operating distance - max

100 mm

Operating distance - min

0 mm

Operating temperature - max

55 °C

Operating temperature - min

-25 °C

Adjustment type

Manual adjustment