

Specifications



Eaton 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
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

Resources

CATALOGS

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

[Sensing
Solutions, Photoelectric
Sensor, Volume 8, Tab 5](#)

DRAWINGS

[eaton-proximity-switches-
dimensions-003.eps](#)

[eaton-proximity-switches-
dimensions-002.eps](#)

[eaton-proximity-switches-
3d-drawing-007.eps](#)

INSTALLATION INSTRUCTIONS

[IL05305002Z](#)

MCAD MODEL

[DA-CD-90 28267 104](#)

[DA-CS-90 28267 104](#)

SPECIFICATIONS AND DATASHEETS

[Eaton Specification Sheet -
13100AQD07](#)

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 ²
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

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2025 Eaton. All Rights Reserved.

Follow us on social media to get the latest product and support information.

