

# Specifications



## Eaton 13100AQD07

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

### General specifications

<b>PRODUCT NAME</b>	Eaton Moeller® series E58 Diffuse reflective sensor
<b>CATALOG NUMBER</b>	13100AQD07
<b>MODEL CODE</b>	13100AQD07
<b>UPC</b>	782113843551
<b>EAN</b>	4015081323746
<b>PRODUCT LENGTH/DEPTH</b>	158.75 mm
<b>PRODUCT HEIGHT</b>	50.8 mm
<b>PRODUCT WIDTH</b>	133.35 mm
<b>PRODUCT WEIGHT</b>	0.091 kg
<b>WARRANTY</b>	3 year
<b>CERTIFICATIONS</b>	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
<b>PRODUCT TYPE</b>	Diffuse reflective sensor



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## Product specifications

<b>TYPE</b>	Optical sensors
<b>CONTACT RATING</b>	100 mA PNP, 250 mA NPN at 10-30 Vdc
<b>FEATURES</b>	Straight beam
<b>ELECTRIC CONNECTION TYPE</b>	Plug-in connection
<b>ENCLOSURE MATERIAL</b>	Polyurethane foam (RIM) Plastic
<b>ENCLOSURE TYPE</b>	Cylinder, screw-thread
<b>OPERATING MODE</b>	Switching principle: Adjustable bright/dark switching
<b>CONNECTION</b>	M12
<b>CONTACT CONFIGURATION</b>	NPN and PNP open collector
<b>EXPLOSION SAFETY CATEGORY FOR DUST</b>	None
<b>SENSOR TYPE</b>	Diffuse reflective
<b>EXPLOSION SAFETY CATEGORY FOR GAS</b>	None
<b>FUNCTIONS</b>	Reflected-light beam Protection against polarity reversal Short-circuit protection
<b>VOLTAGE TYPE</b>	DC
<b>WIRE SIZE</b>	22
<b>CONNECTION TYPE</b>	Plug-in connection M12 x 1 4-wire
<b>INPUT VOLTAGE</b>	10-30 Vdc
<b>CABLE SHEATH MATERIAL</b>	Polyvinyl chloride (PVC)
<b>LIGHT TYPE</b>	Infrared light
<b>DEGREE OF PROTECTION</b>	IP67 NEMA 6
<b>INTERFACE TYPE</b>	Other
<b>LED INDICATOR</b>	Output ON Status indication of Switching state: Red LED
<b>SWITCH FUNCTION TYPE</b>	Other
<b>LOAD CURRENT</b>	Max. 250 mA (Ie, NPN, 120 > 50°C) Max. 100 mA (Ie, PNP)
<b>LASER PROTECTION CLASS</b>	None
<b>OPERATION AGENT-SAFETY CLASS</b>	Safety class 2

## Resources

CATALOGS	<a href="#">Product Range Catalog Sensors – products, basic information, applications</a>
	<a href="#">Sensing Solutions, Photoelectric Sensor, Volume 8, Tab 5</a>
DECLARATIONS OF CONFORMITY	<a href="#">eaton-proximity-sensor-declaration-of-conformity-eu251572en.pdf</a>
DRAWINGS	<a href="#">eaton-proximity-switches-dimensions-002.eps</a>
	<a href="#">eaton-proximity-switches-dimensions-003.eps</a>
	<a href="#">eaton-proximity-switches-3d-drawing-007.eps</a>
INSTALLATION INSTRUCTIONS	<a href="#">IL05305002Z</a>
MCAD MODEL	<a href="#">DA-CS-90_28267_104</a>
	<a href="#">DA-CD-90_28267_104</a>
SPECIFICATIONS AND DATASHEETS	<a href="#">Eaton Specification Sheet - 13100AQD07</a>

<b>SHOCK RESISTANCE</b>	100 g, Mechanical, Shock duration 3 ms
<b>OPTICAL SURFACE MATERIAL</b>	Plastic
<b>OUTPUT CURRENT (MA) - MAX</b>	250 mA
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>	30 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>	10 V
<b>RATED SWITCHING DISTANCE (SN)</b>	610 mm
<b>SENSOR LENGTH</b>	56 mm
<b>SWITCHING DISTANCE - MAX</b>	610 mm
<b>VOLTAGE RATING - MAX</b>	30 V
<b>SAFETY TYPE (IEC 61496-1)</b>	1
<b>SWITCHING FREQUENCY</b>	500 Hz
<b>SENSING MODE</b>	Light-/dark switching
<b>SWITCHING OUTPUT TYPE</b>	PNP/NPN
<b>SENSOR MATERIAL</b>	Insulated material
<b>ACCESSORIES</b>	Can be expanded with fibre optic cable.
<b>PRODUCT CATEGORY</b>	Comet Series
<b>NUMBER OF PINS</b>	4
<b>PROTECTION</b>	Auto reset short circuit
<b>RESPONSE TIME</b>	1 ms
<b>MAXIMUM DC CURRENT</b>	100 mA PNP, 250 mA NPN
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	70 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-40 °C
<b>DIAMETER SENSOR</b>	18 mm
<b>NUMBER OF CONTACT ENERGIZED OUTPUTS WITH SIGNALLING FUNCTION</b>	0
<b>NUMBER OF OUTPUTS (PROTECTED CONTACT ENERGIZED)</b>	0
<b>NUMBER OF OUTPUTS (PROTECTED SEMICONDUCTOR)</b>	0
<b>NUMBER OF OUTPUTS (SEMICONDUCTOR WITH</b>	2

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<b>SIGNALING FUNCTION)</b>	
<b>OPERATING TEMPERATURE - MAX</b>	158 °F
<b>OPERATING TEMPERATURE - MIN</b>	-40 °F
<b>OPERATIONAL CURRENT (IB) IN THE SWITCHED STATE AT 24 V DC</b>	30 A
<b>ENVIRONMENTAL RATING</b>	NEMA 1, NEMA 3, NEMA 4, NEMA 4X, NEMA 6, NEMA 12, NEMA 13, IP69K
<b>ADJUSTMENT TYPE</b>	Manual adjustment

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<b>PROJECT NAME:</b>
<b>PROJECT NUMBER:</b>
<b>PREPARED BY:</b>
<b>DATE:</b>

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## Eaton 13100AQD07

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### General specifications

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<b>ELECTRIC CONNECTION TYPE</b>	Plug-in connection
<b>ENCLOSURE MATERIAL</b>	Polyurethane foam (RIM) Plastic
<b>ENCLOSURE TYPE</b>	Cylinder, screw-thread
<b>OPERATING MODE</b>	Switching principle: Adjustable bright/dark switching
<b>CONNECTION</b>	M12
<b>CONTACT CONFIGURATION</b>	NPN and PNP open collector
<b>EXPLOSION SAFETY CATEGORY FOR DUST</b>	None
<b>SENSOR TYPE</b>	Diffuse reflective
<b>EXPLOSION SAFETY CATEGORY FOR GAS</b>	None
<b>FUNCTIONS</b>	Reflected-light beam Protection against polarity reversal Short-circuit protection
<b>VOLTAGE TYPE</b>	DC
<b>WIRE SIZE</b>	22
<b>CONNECTION TYPE</b>	Plug-in connection M12 x 1 4-wire
<b>INPUT VOLTAGE</b>	10-30 Vdc
<b>CABLE SHEATH MATERIAL</b>	Polyvinyl chloride (PVC)
<b>LIGHT TYPE</b>	Infrared light
<b>DEGREE OF PROTECTION</b>	IP67 NEMA 6
<b>INTERFACE TYPE</b>	Other
<b>LED INDICATOR</b>	Output ON Status indication of Switching state: Red LED
<b>SWITCH FUNCTION TYPE</b>	Other
<b>LOAD CURRENT</b>	Max. 250 mA (Ie, NPN, 120 > 50°C) Max. 100 mA (Ie, PNP)
<b>LASER PROTECTION CLASS</b>	None
<b>OPERATION AGENT-SAFETY CLASS</b>	Safety class 2

## Resources

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<b>ACCESSORIES</b>	Can be expanded with fibre optic cable.
<b>PRODUCT CATEGORY</b>	Comet Series
<b>NUMBER OF PINS</b>	4
<b>PROTECTION</b>	Auto reset short circuit
<b>RESPONSE TIME</b>	1 ms
<b>MAXIMUM DC CURRENT</b>	100 mA PNP, 250 mA NPN
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	70 °C
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<b>NUMBER OF OUTPUTS (SEMICONDUCTOR WITH</b>	2

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<b>ADJUSTMENT TYPE</b>	Manual adjustment

<b>PROJECT NAME:</b>
<b>PROJECT NUMBER:</b>
<b>PREPARED BY:</b>
<b>DATE:</b>



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