

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

Part no. **13100RQD07**  
**13100RQD07**

General specifications	
Product name	Eaton Moeller® series E58 Diffuse reflective sensor
Part no.	13100RQD07
EAN	4015081323784
Product Length/Depth	152.4 millimetre
Product height	44.45 millimetre
Product width	152.4 millimetre
Product weight	0.1 kilogram
Compliances	CE Marked
Certifications	UL Recognized cUL Recognized CSA Class No.: 3211-07 UL UL 508 CSA-C22.2 No. 14 CSA CSA File No.: 50513 UL Category Control No.: NRKH, NRKH7 IEC/EN 60947-5-2 CE UL File No.: E117028
Product Tradename	E58
Product Type	Diffuse reflective sensor
Product Sub Type	None
Product Specification Details	
Adjustment type	Manual adjustment
Ambient operating temperature - max	70 °C
Ambient operating temperature - min	-40 °C
Cable sheath material	Polyvinyl chloride (PVC)
Cable type	Polyvinyl Chloride (PVC)
Connection	4-pin M12 connector
Connection type	4-wire Plug-in connection M12 x 1
Contact configuration	NPN and PNP open collector
Contact Rating	100 mA PNP, 250 mA NPN at 10-30 Vdc
Cord length	8 in
Degree of protection	IP67 NEMA 6
Diameter sensor	18 mm
Electric connection type	Connector M12
Enclosure material	Lens: polycarbonate Body: structural polyurethane foam Cable jacket: PVC Plastic
Enclosure type	Cylinder, screw-thread
Environmental rating	NEMA 1, NEMA 3, NEMA 4, NEMA 4X, NEMA 6, NEMA 6P, NEMA 12, NEMA 13, IP68, IP69K
Explosion safety category for dust	None
Explosion safety category for gas	None
Features	Right-angled beam
Functions	Reflected-light beam Short-circuit protection Protection against polarity reversal
Input voltage	10-30 Vdc
Interface type	Other
Laser protection class	None

LED indicator		Output status: red Status indication of Switching state: Red LED
Light dot size		0 mm <sup>2</sup>
Light type		Infrared light
Load current		Max. 250 mA (Ie, NPN, 120 > 50°C) Max. 100 mA (Ie, PNP)
Maximum DC current		100 mA PNP, 250 mA NPN
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 mode		Diffuse reflective Switching principle: Adjustable bright/dark switching
Operating temperature - max		158 °F
Operating temperature - min		-40 °F
Operation agent-safety class		Safety class 2
Operational current (Ib) in the switched state at 24 V DC		30 A
Optical surface material		Plastic
Output current (mA) - max		250 mA
Output current at protected output - max		0 mA
Product category		Comet Series
Protection		Auto reset short circuit
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		0 V
Rated switching distance (Sn)		610 mm
Reflector distance - min		0 mm
Response time		1 ms
Safety type (IEC 61496-1)		1
Sensing mode		Light-/dark switching
Sensor height		0 mm
Sensor length		65 mm
Sensor material		Insulated material
Sensor type		Diffuse reflective
Shock resistance		100 g, Mechanical, Shock duration 3 ms
Switch function type		Other
Switch type		Photoelectric
Switching distance - max		610 mm
Switching frequency		500 Hz
Switching output type		NPN
Switching voltage of OSSD at state "high"		0 V
Transmission range of the safety field		0 m
Type		Optical sensors
Voltage rating - max		30 V
Voltage type		DC
Wavelength of the sensor		0 nm
Width sensor		0 mm
Wire size		22

## Technical data ETIM 9.0

Sensors (EG000026) / Diffuse reflective photoelectric sensor (EC001821)

Operating distance	mm	0 - 0
Pre failure notice		No
With time function		No
Max. switching distance	mm	610
Max. output current	mA	250
With reflector		No
Analogue output 0 V ... 10 V		No
Analogue output 0 mA ... 20 mA		No
Analogue output 4 mA ... 20 mA		No
Analogue output -10 V ... +10 V		No
With other analogue output		No
Setting procedure		Manual adjustment
With communication interface analogue		No
With communication interface AS-Interface		No
With communication interface CANOpen		No
With communication interface DeviceNet		No
With communication interface Ethernet		No
With communication interface INTERBUS		No
With communication interface PROFIBUS		No
With communication interface RS-232		No
With communication interface RS-422		No
With communication interface RS-485		No
With communication interface SSD		No
With communication interface SSI		No
Number of semiconductor outputs with signalling function		2
Number of contact energized outputs with signalling function		0
Number of protected semiconductor outputs		0
Number of protected contact energized outputs		0
Type of interface for safety communication		Other
Type of electric connection		Connector M12
Type of switching output		NPN
Type of switch function		Other
Operation agent-safety class		Safety class 2
Explosion safety category for gas		None
Explosion safety category for dust		None
Construction type housing		Cylinder, screw-thread
Width sensor	mm	0
Diameter sensor	mm	18
Height of sensor	mm	0
Length of sensor	mm	65
Sensing mode		Light-/dark switching
Material of optical surface		Plastic
Housing material		Plastic
Max. output current at protected output	mA	0
Min. reflector distance	mm	0
Response time	ms	1
Transmission range of the safety field	m	0
Switching frequency	Hz	500
Type of safety according to IEC 61496-1		1
Switching voltage of OSSD at state "high"	V	0
Voltage type		DC
With monitoring function downstream switching devices		No
Laser protection class		None
Wavelength of the sensor	nm	0

Type of light		Infrared light
Light dot	mm <sup>2</sup>	0
AWG-number		22
Material of cable sheath		Polyvinyl chloride (PVC)
With restart blockage		No
Suitable for safety functions		No
Degree of protection (IP)		IP67
Degree of protection (NEMA)		6
Ambient temperature	°C	-40 - 70
Rated control supply voltage AC 50 Hz	V	0 - 0
Rated control supply voltage AC 60 Hz	V	0 - 0
Rated control supply voltage DC	V	0 - 30