

Diffuse reflective sensor, Sn=40mm, 4L, 10-30VDC, NPN, PNP, M18, insulated material, M12



**Part no.**                    **13102AQD07**  
**135593**

<b>General specifications</b>		
Product name		Eaton Moeller® series E58 Diffuse reflective sensor
Part no.		13102AQD07
EAN		4015081323869
Product Length/Depth		127 millimetre
Product height		50.8 millimetre
Product width		152.4 millimetre
Product weight		0.3 kilogram
Certifications		CSA-C22.2 No. 14 UL File No.: E117028 CSA CSA File No.: 50513 CE IEC/EN 60947-5-2 CSA Class No.: 3211-07 UL Category Control No.: NRKH, NRKH7 UL UL 508
Product Tradename		E58
Product Type		Diffuse reflective sensor
Product Sub Type		None
<b>Product Specification Details</b>		
Adjustment type		Manual adjustment
Ambient operating temperature - max		70 °C
Ambient operating temperature - min		-40 °C
Cable sheath material		Polyvinyl chloride (PVC)
Connection type		Plug-in connection M12 x 1 4-wire
Degree of protection		IP67 NEMA 6
Diameter sensor		18 mm
Electric connection type		Plug-in connection
Enclosure material		Plastic
Enclosure type		Cylinder, screw-thread
Explosion safety category for dust		None
Explosion safety category for gas		None
Features		Focused, forward viewing beam
Functions		Reflected-light beam Protection against polarity reversal Short-circuit protection
Interface type		Other
Laser protection class		None
LED indicator		Status indication of Switching state: Red LED
Light dot size		0 mm <sup>2</sup>
Light type		Visible red light Polarity free red light
Load current		Max. 100 mA (Ie, PNP) Max. 250 mA (Ie, NPN, 120 > 50°C)
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		Switching principle: Adjustable bright/dark switching
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
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)		40 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		66 mm
Sensor material		Insulated material
Shock resistance		100 g, Mechanical, Shock duration 3 ms
Switch function type		Other
Switching distance - max		40 mm
Switching frequency		500 Hz
Switching output type		PNP/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)		
Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner (ecl@ss13-27-27-09-03 [AKP252018])		
Operating distance	mm	0 - 0
Pre failure notice		No
With time function		No
Max. switching distance	mm	40
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		Plug-in connection
Type of switching output		PNP/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	66
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		Polarity free red 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	10 - 30