

Diffuse reflective sensor, Sn=50mm, 4L, 10-30VDC, NPN, PNP, M18, insulated material, M12



Part no. 13104AQD07

13104AQD07

EL Number (Norway)

4315338

General specifications		
Product name		Eaton Moeller® series E58 Diffuse reflective sensor
Part no.		13104AQD07
EAN		4015081323982
Product Length/Depth		127 millimetre
Product height		50.8 millimetre
Product width		152.4 millimetre
Product weight		0.094 kilogram
Certifications		cUL Recognized UL Recognized CE UL Category Control No.: NRKH, NRKH7 UL File No.: E117028 CSA Class No.: 3211-07 UL IEC/EN 60947-5-2 UL 508 CSA CSA File No.: 50513 CSA-C22.2 No. 14
Product Tradename		E58
Product Type		Diffuse reflective sensor
Product Sub Type		None
Product Specification Details		
Adjustment range - max		0 mm
Adjustment range - min		0 mm
Adjustment type		Other
Ambient operating temperature - max		70 °C
Ambient operating temperature - min		-40 °C
Cable sheath material		Other
Connection		M12
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
Degree of protection		NEMA 6 IP67
Diameter sensor		18 mm
EL number		4315338
Electric connection type		Connector M12
Enclosure material		Polyurethane foam (RIM) Plastic
Enclosure type		Cylinder, screw-thread
Environmental rating		NEMA 1, NEMA 3, NEMA 4, NEMA 4X, NEMA 6, NEMA 12, NEMA 13, IP69K
Explosion safety category for dust		None
Explosion safety category for gas		None
Features		Straight beam
Fitted with:		Background suppression (Perfect Prox)
Functions		Protection against polarity reversal Short-circuit protection Reflected-light beam
Input voltage		10-30 Vdc
Interface type		Other

Laser protection class		None
LED indicator		Output ON Status indication of Switching state: Red LED
Light dot size		0 mm <sup>2</sup>
Light type		Polarity free red light
Load current		Max. 100 mA (Ie, PNP) Max. 250 mA (Ie, NPN, 120 > 50°C)
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
Number of pins		4
Operating distance - max		0 mm
Operating distance - min		0 mm
Operating mode		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		10 V
Rated switching distance (Sn)		50 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
Sensor type		Back ground suppression
Series		Comet
Shock resistance		100 g, Mechanical, Shock duration 3 ms
Switch function type		Programmable/configurable
Switching distance - max		50 mm
Switching frequency		500 Hz
Switching output type		PNP/NPN
Switching voltage of OSSD at state "high"		30 V
Transmission range of the safety field		0 m
Triangulation		Background fade-out
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) / Light scanner with background masking (EC002719)

Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner (ecl@ss13-27-27-09-03 [AKP252018])

Adjustment range	mm	0 - 0
Operating distance	mm	0 - 0
Triangulation		Background fade-out
Pre failure notice		No
With time function		No
Rated switching distance	mm	50
Max. switching distance	mm	50
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		Other
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		PNP/NPN
Type of switch function		Programmable/configurable
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
Ambient temperature	°C	-40 - 70
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	30
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
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		Other
With restart blockage		No
Suitable for safety functions		No
Degree of protection (IP)		IP67
Degree of protection (NEMA)		6