

Diffuse reflective sensor, Sn=50mm, 4L, 10-30VDC, dark, NPN, PNP, quad 40, insulated material, line 2m



**Part no. E65-SMPP050-HD  
135702**

<b>General specifications</b>		
Product name		Eaton Moeller® series E65 Diffuse reflective sensor
Part no.		E65-SMPP050-HD
EAN		4015081324958
Product Length/Depth		139.7 millimetre
Product height		139.7 millimetre
Product width		38.1 millimetre
Product weight		0.11 kilogram
Certifications		UL UL Category Control No.: NRKH, NRKH7 Certified by UL for use in Canada IEC/EN 60947-5-2 CSA File No.: UL report applies to both US and Canada CSA-C22.2 No. 14 CE UL File No.: E166051 UL 508
Product Tradename		E65
Product Type		Diffuse reflective sensor
Product Sub Type		None
<b>Product Specification Details</b>		
Adjustment range - max		50 mm
Adjustment range - min		0 mm
Adjustment type		Other
Ambient operating temperature - max		55 °C
Ambient operating temperature - min		-25 °C
Ambient storage temperature - max		70 °C
Ambient storage temperature - min		-25 °C
Cable sheath material		Polyvinyl chloride (PVC)
Catalog Notes		Yellow
Connection type		2 m connection cable 4-wire
Degree of protection		NEMA 6 IP68
Diameter sensor		0 mm
Electric connection type		Cable
Enclosure material		Plastic
Enclosure type		Cuboid
Explosion safety category for dust		None
Explosion safety category for gas		None
Fitted with:		Background suppression (Perfect Prox)
Functions		Protection against polarity reversal Short-circuit protection Protection against wire breakage Reflected-light beam
Interface type		Other
Laser protection class		None
LED indicator		Status indication of Operating voltage: Green LED Status indication of Switching state: Red LED
Light dot size		0 mm <sup>2</sup>
Light type		Other
Load current		Max. 100 mA (Ie)
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)		1
Operating distance - max		0 mm
Operating distance - min		0 mm
Operating mode		Switching principle: Dark switching
Operating temperature - max		55 °C
Operating temperature - min		-25 °C
Operation agent-safety class		Safety class 2
Operational current (Ib) in the switched state at 24 V DC		20 A
Optical surface material		Plastic
Output current (mA) - max		100 mA
Output current at protected output - max		0 mA
Product category		E65 SM 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)		50 mm
Reflector distance - min		0 mm
Response time		1 ms
Safety type (IEC 61496-1)		1
Sensing mode		Dark switching
Sensor height		43 mm
Sensor length		41 mm
Sensor material		Insulated material
Shock resistance		50 g, Mechanical, Shock duration 10 ms
Switch function type		Other
Switching distance - max		50 mm
Switching frequency		500 Hz
Switching output type		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		660 nm
Width sensor		33 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 - 50
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	100
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		1
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		Cable
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		Cuboid
Width sensor	mm	33
Diameter sensor	mm	0
Height of sensor	mm	43
Length of sensor	mm	41
Sensing mode		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	-25 - 55
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	660
Type of light		Other
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)			IP68
Degree of protection (NEMA)			6