Diffuse reflective sensor, Sn=50mm, 4L, 10-30VDC, light, NPN, PNP, quad 40, insulated material, M12



Part no. E65-SMPP050-HLD 135705

General specifications	
Product name	Eaton Moeller® series E65 Diffuse reflective sensor
Part no.	E65-SMPP050-HLD
EAN	4015081324989
Product Length/Depth	139.7 millimetre
Product height	139.7 millimetre
Product width	38.1 millimetre
Product weight Product weight	0.11 kilogram
Certifications	Certified by UL for use in Canada UL File No.: E166051 IEC/EN 60947-5-2 UL 508 CE CSA File No.: UL report applies to both US and Canada UL UL Category Control No.: NRKH, NRKH7 CSA-C22.2 No. 14
Product Tradename	E65
Product Type	Diffuse reflective sensor
Product Sub Type	None
Product Specification Details	
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	Other
Catalog Notes	Yellow
Connection type	4-wire Plug-in connection M12 x 1
Degree of protection	NEMA 6 IP68
Diameter sensor	0 mm
Electric connection type	Connector M12
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	Reflected-light beam Protection against polarity reversal Short-circuit protection Protection against wire breakage
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 (le)
Number of contact energized outputs with signalling function	0

Number of outputs (protected contact energized)	0
Number of outputs (protected contact energized)  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: Light 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	100 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	Light switching
Sensor height	55 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
Туре	Optical sensors
Voltage rating - max	30 V
Voltage type	DC
Wavelength of the sensor	660 nm
Width sensor	33 mm
Wire size	0

## **Technical data ETIM 9.0**

Toomitour data ETTM 0.0					
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 V 10 V		
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		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		Cuboid
Width sensor	mm	33
Diameter sensor	mm	0
Height of sensor	mm	55
Length of sensor	mm	41
Sensing mode		Light switching
Material of optical surface		Plastic
Housing material		Plastic
Max. output current at protected output	mA	100
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	mm²	0
AWG-number		0

Material of cable sheath	Other
With restart blockage	No
Suitable for safety functions	No
Degree of protection (IP)	IP68
Degree of protection (NEMA)	6