### **DATASHEET - E71-SDN-M8**



Proximity switch, optical, long range 35cm, 4L, 10-30VDC, NPN, M8

Powering Business Worldwide\*

Part no. E71-SDN-M8
Catalog No. 100528
Alternate Catalog E71-SDN-M8

	livery		

Basic function			Optical sensors
Product range			E71 NanoView Series
For connection of:			Plug-in connection M8 x 1
Design (outer dimensions)		mm	Rectangular (20 x 12 x 32)
Rated operational voltage	U <sub>e</sub>		10 - 30 V DC
Rated switching distance	$S_n$	mm	350
Description			Beam: straight
Connection			4-wire
Function			Reflected-light beam
Type of light			Infra-red
Material			Insulated material
Switching type			NPN
Switching principle			Adjustable bright/dark switching

#### Information relevant for export to North America

Product Standards UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking

UL File No. E166051

UL Category Control No. NRKH, NRKH7

 $\ensuremath{\mathsf{CSA}}$  File No. UL report applies to both Canada and US

North America Certification UL listed, certified by UL for use in Canada

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP66; UL/CSA Type: -

# **Technical data**

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Ambient temperature			-25 - +55
Operation	θ	°C	-25 - +55
Storage	θ	°C	-25 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP66
Vibration			Amplitude 0.5 mm: 10 - 55 Hz. IEC/EN 60068-2-6

### Characteristics

Rated switching distance			
Rated switching distance	$S_n$	mm	350
Rated operational voltage	U <sub>e</sub>		10 - 30 V DC
Maximum load current	I <sub>e</sub>	mA	< 100
Switching Frequency		Hz	500
Response time		ms	1
Switching state display		LED	Yellow
Operating voltage display		LED	Green
Protective functions			Short-circuit protective device Protection against polarity reversal
Connection			4-wire
Style			

Design (outer dimensions)	mm	Rectangular (20 x 12 x 32)
For connection of:		Plug-in connection M8 x 1
Material		Insulated material

# Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.	٥	,C	-25
Operating ambient temperature max.	٥	C.	55

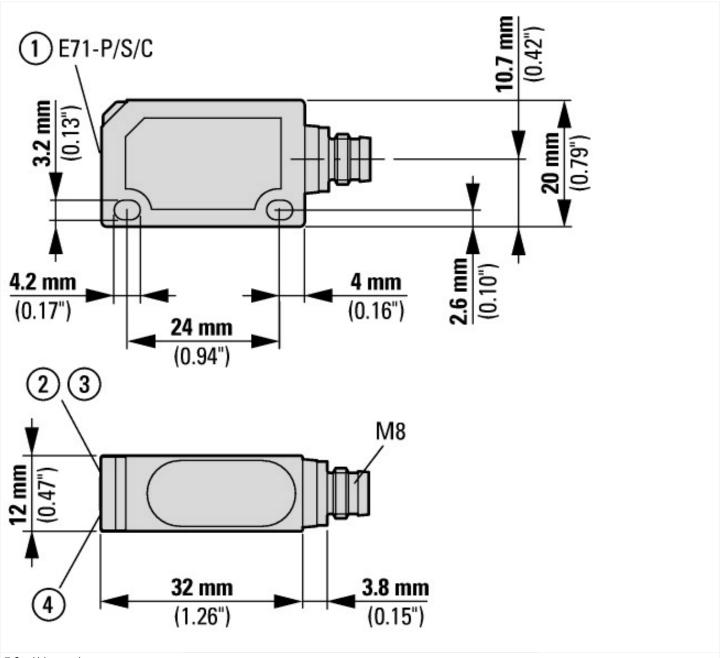
Technical data ETIM 7.0					
Sensors (EG000026) / Light scanner, energetic (EC001821)					
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner, energetic ecl@ss10.0.1-27-27-09-03 [AKP252013])					
Operating distance		mm	0 - 350		
Pre failure notice			No		
With time function			No		
Max. switching distance	1	mm	350		
Max. output current	1	mA	100		
Reflector included			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					
Type of electric connection			Connector M8		
Type of switching output			NPN		
Type of switch function			Other		
Operation agent-safety class					
Explosion safety category for gas			None		
Explosion safety category for dust			None		
Construction type housing			Cuboid		
Width sensor	1	mm	12		
Diameter sensor	1	mm	0		
Height of sensor	1	mm	0		
Length of sensor	1	mm	20		
Sensing mode			Light-/dark switching		
Material of optical surface			Plastic		
Material housing			Plastic		

Max. output current at protected output	m/	A	0
Min. reflector distance	mr	m	0
Time of reaction	ms	s	1
Transmission range of the safety field	m		0
Switching frequency	Hz	2	500
Type of safety acc. IEC 61496-1			
"Switching voltage of OSSD at state ""high"""	V		30
Voltage type			DC
With monitoring function downstream switching devices			No
Laser protection class			
Wavelength of the sensor	nn	n	880
Type of light			Infrared light
Light dot	mr	m²	0
AWG-number			0
Material of cable sheath			
With restart blockage			No
Suitable for safety functions			No
Degree of protection (IP)			IP66
Degree of protection (NEMA)			4
Ambient temperature	°C	;	25 - 55
Rated control supply voltage Us at AC 50HZ	V		0 - 0
Rated control supply voltage Us at AC 60HZ	V		0 - 0

# Approvals

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
UL File No.	E166051
UL Category Control No.	NRKH, NRKH7
CSA File No.	UL report applies to both Canada and US
North America Certification	UL listed, certified by UL for use in Canada
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP66; UL/CSA Type: -

### **Dimensions**



- Sensitivity potentiometer
   Stability LED
- 3 Power On LED
  4 Output LED

### **Assets (links)**

**Declaration of CE Conformity** 00002590

**Instruction Leaflets** 

IL05305006Z2018\_05

## **Additional product information (links)**

IL05305006Z NanoView Optical Sensors

IL05305006Z NanoView Optical Sensors

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL05305006Z2018\_05.pdf