DATASHEET - E71-COP-M8



Proximity switch, optical, long range 80cm, 4L, 10-30VDC, PNP, M8

Powering Business Worldwide*

Part no. E71-COP-M8
Catalog No. 100428
Alternate Catalog E71-COP-M8

No.

EL-Nummer 4315314

(Norway)

Delivery program

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 _e		10 - 30 V DC
Rated switching distance	S_n	mm	800
Description			for combination with reflector Detection of transparent objects
Connection			4-wire
Function			Reflex photoelectric sensor
Type of light			Visible red
Material			Insulated material
Switching type			PNP
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

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 General

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 Sn mm 800 Rated operational voltage Ue 10 - 30 V DC Maximum load current Le mA < 100 Response time Switching state display Derating voltage display Protective functions Sn mm 800 10 - 30 V DC	Undi delle i sules			
Nated operational voltage Vertically a stated operational voltage display Vertically a stated operational voltage operational voltage display Vertically a stated operational voltage operational voltage display Vertically a stated operational voltage operat	Rated switching distance			
Maximum load current Le mA < 100 Witching Frequency Response time Maximum load current Maximum load curre	Rated switching distance	S_n	mm	800
Switching Frequency Hz 500 Response time ms 1 LED Yellow Departing voltage display Protective functions Protective functions Hz 500 Short-circuit protective device Protection against polarity reversal	Rated operational voltage	U _e		10 - 30 V DC
Response time ms 1 Switching state display LED Yellow Operating voltage display LED Green Protective functions Short-circuit protective device Protection against polarity reversal	Maximum load current	l _e	mA	< 100
Switching state display LED Yellow Departing voltage display LED Green Protective functions Short-circuit protective device Protection against polarity reversal	Switching Frequency		Hz	500
Operating voltage display LED Green Protective functions Short-circuit protective device Protection against polarity reversal	Response time		ms	1
Protective functions Short-circuit protective device Protection against polarity reversal	Switching state display		LED	Yellow
Protection against polarity reversal	Operating voltage display		LED	Green
Connection 4-wire	Protective functions			
	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.	°C	-25
Operating ambient temperature max.	°C	55

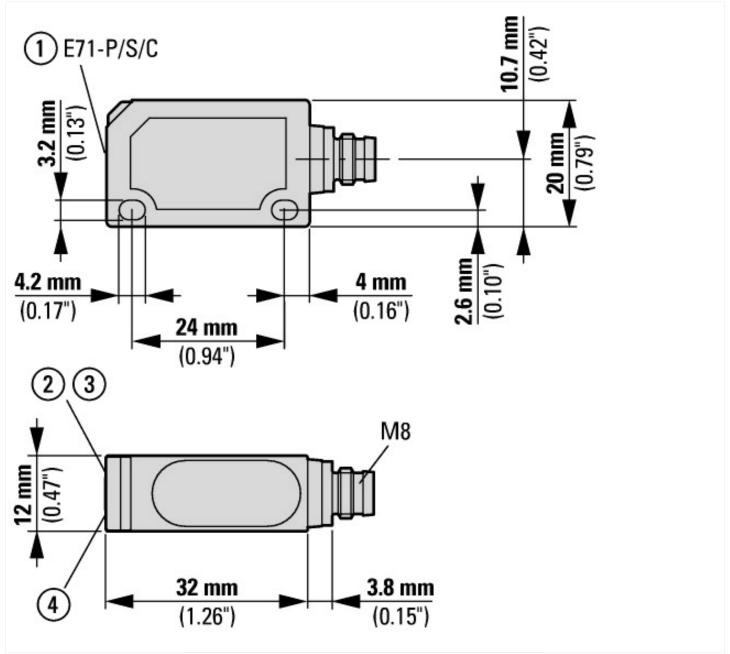
Technical data ETIM 7.0		
Sensors (EG000026) / Reflection light barrier (EC002717)		
Electric engineering, automation, process control engineering / Binary sensor techn (ecl@ss10.0.1-27-27-09-02 [AKP251013])	nology, safety-related	sensor technology / Optoelectronic sensor / Reflection light barrier
Pre failure notice		No
With time function		No
Rated switching distance	mm	800
Max. switching distance	mm	800
Max. output current	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		PNP
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	mm	12
Diameter sensor	mm	0
Height of sensor	mm	32
Length of sensor	mm	20
Sensing mode		Light-/dark switching
Material of optical surface		Plastic

Material housing		Plastic
Max. output current at protected output	mA	0
Min. reflector distance	mm	0
Ambient temperature	°C	25 - 55
Time of reaction	ms	1
Transmission range of the safety field	m	0
Switching frequency	Hz	500
Type of safety acc. IEC 61496-1		
"Switching voltage of OSSD at state ""high"""	V	30
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at 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		Polarity free red light
Light dot	mm²	0
With restart blockage		No
Suitable for safety functions		No
Degree of protection (IP)		IP66
Degree of protection (NEMA)		Other

Approvals

UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking
E166051
NRKH, NRKH7
UL report applies to both Canada and US
UL listed, certified by UL for use in Canada
30 V DC
IEC: IP66; UL/CSA Type: -

Dimensions



- Sensitivity potentiometer
 Stability LED
 Power On LED
 Output LED