



Proximity Sensor, HxWxD=50x18x50mm, Sn=10-50cm, 10-30VDC, PNP, M12

Part no. E75-PPA050P-M12  
 Catalog No. 166924  
 Alternate Catalog No. E75-PPA050P-M12

### Delivery program

Basic function			Optical sensors
Product range			E75 IntelliView Series
For connection of:			Plug-in connection M12 x 1
Design (outer dimensions)		mm	Rectangular (50 x 50 x 18)
Rated operational voltage	$U_e$		10 - 30 V DC
Rated switching distance	$S_n$	mm	500
Description			Background suppression (Perfect Prox)
Connection			4-wire
Function			Reflected-light beam
Type of light			Infra-red
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: IP65; UL/CSA Type: -

### Technical data

#### General

Standards			IEC/EN 60947-5-2
Ambient temperature			-25 - +55
Operation	$\theta$	°C	-25 - +55
Storage	$\theta$	°C	-25 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP65
Vibration			Amplitude 0.5 mm: 10 - 55 Hz. IEC/EN 60068-2-6

#### Characteristics

Rated switching distance			
Rated switching distance	$S_n$	mm	500
Rated operational voltage	$U_e$		10 - 30 V DC
Maximum load current	$I_e$	mA	< 100
Switching Frequency		Hz	500
Switching state display		LED	Red
Operating voltage display		LED	Green
Protective functions			Short-circuit protective device
Connection			4-wire
Style			
Design (outer dimensions)		mm	Rectangular (50 x 50 x 18)
For connection of:			Plug-in connection M12 x 1

## 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

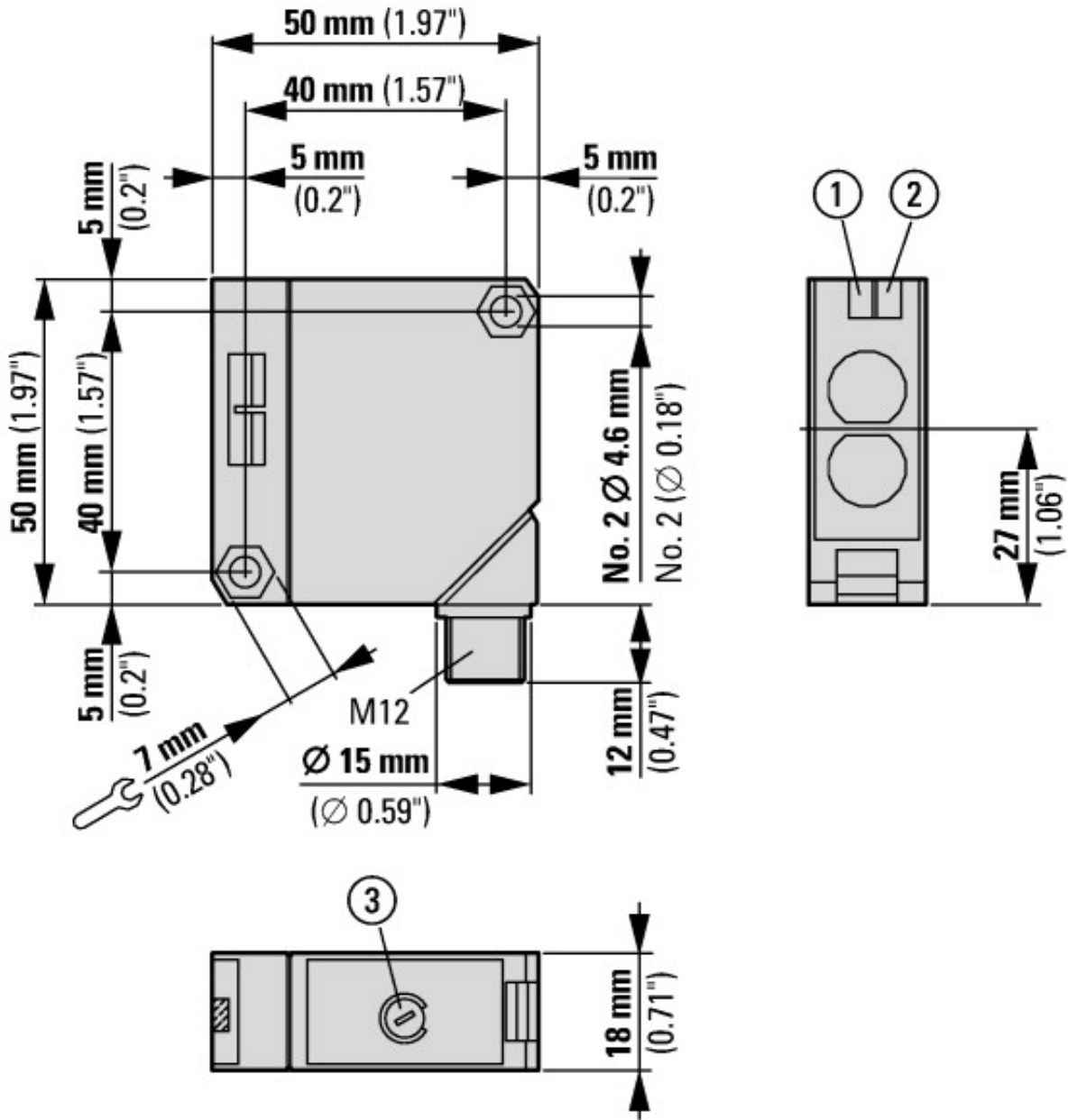
Sensors (EG000026) / Light scanner, energetic (EC001821)			
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Light scanner, energetic (ecl@ss10.0.1-27-27-09-03 [AKP252013])			
Operating distance		mm	100 - 500
Pre failure notice			No
With time function			No
Max. switching distance		mm	500
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 M12
Type of switching output			PNP
Type of switch function			Programmable/configurable
Operation agent-safety class			
Explosion safety category for gas			None
Explosion safety category for dust			None
Construction type housing			Cuboid
Width sensor		mm	18
Diameter sensor		mm	0
Height of sensor		mm	50
Length of sensor		mm	50
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
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
Voltage type		DC
With monitoring function downstream switching devices		No
Laser protection class		
Wavelength of the sensor	nm	880
Type of light		Infrared light
Light dot	mm <sup>2</sup>	0
AWG-number		0
Material of cable sheath		
With restart blockage		No
Suitable for safety functions		No
Degree of protection (IP)		IP65
Degree of protection (NEMA)		6
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
Rated control supply voltage Us at DC	V	10 - 30

## 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: IP65; UL/CSA Type: -

## Dimensions



- ① Output LED
- ② Stability LED
- ③ Adjustment Pot

## Additional product information (links)

IL05305007Z IntelliView Optical Sensors with adjustable Background rejection

IL05305007Z IntelliView Optical Sensors with adjustable Background rejection [https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05305007Z2018\\_05.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05305007Z2018_05.pdf)