



Sensor, contrast, M18,  $S_n=10\text{mm}$ , 10-30VDC, NPN, M12

**Part no.** E76-CNT010N-M12  
**Article no.** 166929  
**Catalog No.** E76-CNT010N-M12

## Delivery program

Basic function			Optical sensors
Product range			E76 IntelliView Series
For connection of:			Plug-in connection M12 x 1
Design (outer dimensions)		mm	M18 x 1
Rated operational voltage	$U_e$		10 - 30 V DC
Rated switching distance	$S_n$	mm	100
Description			Contrast sensing
Connection			4-wire
Function			Reflected-light beam
Type of light			UV (white LED, 400 - 700 nm)
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  
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: IP67; UL/CSA Type: -

## Technical data

### General

Standards			IEC/EN 60947-5-2
Ambient temperature			-10 - +55
Operation	$\theta$	°C	-10 - +55
Storage	$\theta$	°C	-20 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP67
Vibration			Amplitude 0.5 mm: 10 - 55 Hz. IEC/EN 60068-2-6

### Characteristics

Rated switching distance			
Rated switching distance	$S_n$	mm	100
Rated operational voltage	$U_e$		10 - 30 V DC
Maximum load current	$I_e$	mA	< 100
Switching Frequency		Hz	2700
Response time		ms	0.19
Switching state display		LED	Yellow
Operating voltage display		LED	Green
Protective functions			Short-circuit protective device
Connection			4-wire
Style			
Design (outer dimensions)		mm	M18 x 1
For connection of:			Plug-in connection M12 x 1
Material			Insulated material

## Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-10
Operating ambient temperature max.		°C	55

## Technical data ETIM 6.0

Sensors (EG000026) / Luminescence sensor (EC001822)			
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / Luminescence scanner (ecl@ss8.1-27-27-09-08 [AKP257012])			
Type of lamp			-
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
Type of electric connection			Connector M12
Number of semiconductor outputs with signalling function			0
Number of contact energized outputs with signalling function			0
Type of switching output			NPN
Type of switch function			Programmable/configurable
With blanking function			No
Operation agent-safety class			Safety class 2
Width sensor		mm	0
Height of sensor		mm	0
Length of sensor		mm	81.5
Diameter sensor		mm	18
Setting procedure			-
Type of frequency band of the receiving spectrum			-
Construction type housing			Cylinder, screw-thread
Laser protection class			-
No load current		mA	0
Type of light			White light
Light dot		mm <sup>2</sup>	0
With fibre optics connection			No
Max. output current		mA	100
Nominal operating distance		mm	10
Switching frequency		Hz	2700
Degree of protection (IP)			IP67
Voltage type			DC
Ambient temperature		°C	-10 - 50
With exchange lens			No
Material of optical surface			Plastic
Material housing			Plastic
Material of cable sheath			-
Material fibre optics core			-
With time function			No
AWG-number			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: IP67; UL/CSA Type: -

