



Proximity switch, E57P Performance Serie, 1 N/O, 3-wire, 10 – 48 V DC, M12 x 1 mm, S<sub>n</sub>= 4 mm, Non-flush, NPN, Stainless steel, 2 m connection cable



**Part no.** E57P-12UNN4-C2  
**Catalog No.** 197781  
**Alternate Catalog No.** E57P-12UNN4-C2

### Delivery program

Basic function			Inductive Sensors
Product range			E57P performance series
Connection			3-wire
Design (outer dimensions)		mm	M12 x 1
Rated operational voltage	U <sub>e</sub>		10 – 48 V DC
Rated switching distance	S <sub>n</sub>	mm	4
Type of mounting			Non-flush
Switching type			NPN
For connection of:			2 m connection cable
<b>Contacts</b>			
N/O = Normally open			1 N/O
Material			Stainless steel
Degree of Protection			IP69

### Technical data

#### General

Standards			IEC/EN 60947-5-2
Ambient temperature			-40 - +70
Mechanical shock resistance		g	30 Shock duration 11 ms
Degree of Protection			IP69
Vibration			Amplitude 1 mm: 10 - 55 Hz

#### Characteristics

Rated switching distance			
Rated switching distance	S <sub>n</sub>	mm	4
Repetition accuracy of S <sub>n</sub>		%	3
Temperature drift of S <sub>n</sub>		%	10
Switching hysteresis of S <sub>n</sub>		%	20
Range		mm	4
Rated operational voltage	U <sub>e</sub>		10 – 48 V DC
Maximum load current	I <sub>e</sub>	mA	< 300
Operating current in the switched state at 24 V DC	I <sub>b</sub>	mA	10
Voltage drop at I <sub>e</sub>	U <sub>d</sub>	V	2.5
Switching Frequency		Hz	2000
Response time		ms	200
Min. load current	I <sub>e</sub>	mA	1
Switching state display		LED	Yellow
Protective functions			Short-circuit protective device
Connection			3-wire
Contacts			
N/O = Normally open			1 N/O
Style			
Design (outer dimensions)		mm	M12 x 1
For connection of:			2 m connection cable

Material		Stainless steel
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## Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-40
Operating ambient temperature max.	°C	70

## Technical data ETIM 7.0

Sensors (EG000026) / Inductive proximity switch (EC002714)		
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ecl@ss10.0.1-27-27-01-01 [AGZ376015])		
Width sensor	mm	0
Height of sensor	mm	0
Length of sensor	mm	64.1
Diameter sensor	mm	12
Mechanical mounting condition for sensor		Not flat
Switching distance	mm	4
Suitable for safety functions		No
Type of switch function		Breaker contact
Type of switching output		NPN
Type of electric connection		Cable
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 actuation		Metallic Target
Type of interface		None
Type of interface for safety communication		None
Construction type housing		Cylinder, screw-thread
Coating housing		Other
Cascadable		No
Category according to EN 954-1		B
SIL according to IEC 61508		None
Performance level acc. EN ISO 13849-1		None
Max. output current at protected output	mA	0
Supply voltage	V	10 - 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
Switching frequency	Hz	2000
With monitoring function downstream switching devices		No
Material housing		Metal
Compression-resistant		No
Explosion safety category for gas		None
Explosion safety category for dust		None
Interference resistance to magnetic fields		

## Approvals

Product Standards		UL 508/CSA-C22.2 No. 14
UL File No.		E166051
UL Category Control No.		NRKH, NRKH7
North America Certification		UL listed, certified by UL for use in Canada
Degree of Protection		UL Type1, NEMA Type 6P, 4X

## Additional product information (links)

**IL053003EN Inductive sensors: E57 performance (short body), E57G General Purpose Series Inductive Proximity Sensors**

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[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL053003EN2018\\_10.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL053003EN2018_10.pdf)