



**Proximity switch, E57P Performance Serie, 1 N/O, 3-wire, 10 – 48 V DC, M18 x 1 mm, S<sub>n</sub>= 8 mm, Non-flush, NPN, Stainless steel, 2 m connection cable**

**Part no. E57P-18UNN8-C2**  
**Catalog No. 197797**  
**Alternate Catalog No. E57P-18UNN8-C2**

### Delivery program

|                           |                |    |                         |
|---------------------------|----------------|----|-------------------------|
| Basic function            |                |    | Inductive Sensors       |
| Product range             |                |    | E57P performance series |
| Connection                |                |    | 3-wire                  |
| Design (outer dimensions) |                | mm | M18 x 1                 |
| Rated operational voltage | U <sub>e</sub> |    | 10 – 48 V DC            |
| Rated switching distance  | S <sub>n</sub> | mm | 8                       |
| 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<br>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  | 8                               |
| 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  | 8                               |
| 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  | 1200                            |
| 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  | M18 x 1                         |
| For connection of:                                 |                |     | 2 m connection cable            |

|          |  |                 |
|----------|--|-----------------|
| Material |  | Stainless steel |
|----------|--|-----------------|

## 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 | 65.9                   |
| Diameter sensor   | mm | 18                     |
| Mechanical mounting condition for sensor  |    | Not flat               |
| Switching distance  | mm | 8                      |
| 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 | 1200                   |
| 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**

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

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