



**Reflexní senzor,  $S_n=100\text{mm}$ , 4L, 10-30VDC, světlý, NPN, PNP, M18, kovové provedení, M12**

**Typ** E58-18DP100-HLP  
**Catalog No.** 135667  
**Alternate Catalog No.** E58-18DP100-HLP

## Dodavatelský program

|                                  |       |    |                                    |
|----------------------------------|-------|----|------------------------------------|
| Základní funkce                  |       |    | Optické senzory                    |
| Sortiment                        |       |    | Řada E58 Harsh Duty                |
| Možnosti připojení               |       |    | Konektor M12 x 1                   |
| Konstrukční typ (vnější rozměry) |       | mm | M18 x 1                            |
| Jmenovité provozní napětí        | $U_e$ |    | 10 - 30 V DC                       |
| Jmenovitá spínací vzdálenost     | $S_n$ | mm | 100                                |
| Popis                            |       |    | S potlačením pozadí (Perfect Prox) |
| Připojení                        |       |    | 4-vodičové                         |
| Funkce                           |       |    | Difuzní senzor                     |
| Typ světla                       |       |    | viditelné červené                  |
| Materiál                         |       |    | Nerezová ocel,                     |
| Typ spínače                      |       |    | NPN<br>PNP                         |
| Princip spínání                  |       |    | spíná za světla                    |

### Informace důležité pro export do Severní Ameriky

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

CSA Class No. –

North America Certification UL listed, certified by UL for use in Canada

Max. Voltage Rating 30 V DC

Degree of Protection IEC: IP68, IP69K; UL/CSA Type: 1, 2, 3, 3R, 3S, 4, 4x, 6, 6P, 12, 12K, 13

## Technická data

### Všeobecně

|                       |  |   |                         |
|-----------------------|--|---|-------------------------|
| Normy a ustanovení    |  |   | ČSN EN 60947-5-2        |
| Okolní teplota        |  |   | -40 - +55               |
| Odolnost proti nárazu |  | g | 100<br>Doba otřesu 3 ms |
| Stupeň krytí          |  |   | IP69                    |

### Charakteristiky

|                                  |       |     |                                                                                 |
|----------------------------------|-------|-----|---------------------------------------------------------------------------------|
| Jmenovitá spínací vzdálenost     |       |     |                                                                                 |
| Jmenovitá spínací vzdálenost     | $S_n$ | mm  | 100                                                                             |
| Dosah                            |       | mm  | $\leq 0.1$                                                                      |
| Jmenovité provozní napětí        | $U_e$ |     | 10 - 30 V DC                                                                    |
| Jmenovitý provozní proud         | $I_e$ | mA  | < PNP: 100<br>NPN: 250                                                          |
| Doba odezvy                      |       | ms  | 1                                                                               |
| Zobrazení stavu sepnutí          |       | LED | červená                                                                         |
| Ochranné funkce                  |       |     | Zkratová ochrana<br>Ochrana proti přepólování<br>Ochrana proti přerušení vodiče |
| Připojení                        |       |     | 4-vodičové                                                                      |
| Provedení                        |       |     |                                                                                 |
| Konstrukční typ (vnější rozměry) |       | mm  | M18 x 1                                                                         |
| Možnosti připojení               |       |     | Konektor M12 x 1                                                                |

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

## Verification of design according to ČSN EN 61439

|                                                 |  |    |     |
|-------------------------------------------------|--|----|-----|
| Technical data for verification of construction |  |    |     |
| Operating temperature min.                      |  | °C | -40 |
| Operating temperature max.                      |  | °C | 55  |

## Technical data according to ETIM 7.0

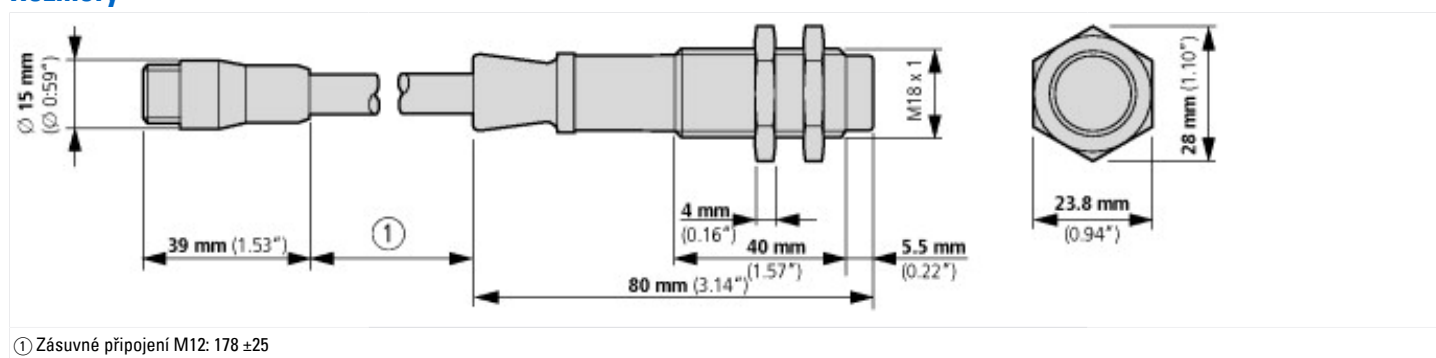
|                                                                                                                                                                                                                                                          |  |    |                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|------------------------|
| Sensors (EG000026) / Light scanner with background masking (EC002719)                                                                                                                                                                                    |  |    |                        |
| Elektrotechnika, automatizační technika a technika řízení procesu / Binární senzorka, bezpečnostně orientovaná senzorka, výrobní měřicí technika / Optoelektronický senzor / Světelný snímač se zamlženým pozadím (ecl@ss10.0.1-27-27-09-04 [AKP253013]) |  |    |                        |
| Adjustment range                                                                                                                                                                                                                                         |  | mm | 0 - 100                |
| Operating distance                                                                                                                                                                                                                                       |  | mm | 0 - 0                  |
| Triangulation                                                                                                                                                                                                                                            |  |    | Background fade-out    |
| Pre failure notice                                                                                                                                                                                                                                       |  |    | No                     |
| With time function                                                                                                                                                                                                                                       |  |    | No                     |
| Rated switching distance                                                                                                                                                                                                                                 |  | mm | 100                    |
| Max. switching distance                                                                                                                                                                                                                                  |  | mm | 127                    |
| Max. output current                                                                                                                                                                                                                                      |  | mA | 250                    |
| 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                                                                                                                                                                                                 |  |    | 2                      |
| 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                                                                                                                                                                                                               |  |    | Other                  |
| Type of electric connection                                                                                                                                                                                                                              |  |    | Connector M12          |
| Type of switching output                                                                                                                                                                                                                                 |  |    | PNP/NPN                |
| Type of switch function                                                                                                                                                                                                                                  |  |    | Other                  |
| Operation agent-safety class                                                                                                                                                                                                                             |  |    | Safety class 2         |
| Explosion safety category for gas                                                                                                                                                                                                                        |  |    | None                   |
| Explosion safety category for dust                                                                                                                                                                                                                       |  |    | None                   |
| Construction type housing                                                                                                                                                                                                                                |  |    | Cylinder, screw-thread |
| Width sensor                                                                                                                                                                                                                                             |  | mm | 0                      |
| Diameter sensor                                                                                                                                                                                                                                          |  | mm | 18                     |
| Height of sensor                                                                                                                                                                                                                                         |  | mm | 0                      |
| Length of sensor                                                                                                                                                                                                                                         |  | mm | 80                     |
| Sensing mode                                                                                                                                                                                                                                             |  |    | Light switching        |
| Material of optical surface                                                                                                                                                                                                                              |  |    | Glass                  |

|                                                       |                 |          |
|-------------------------------------------------------|-----------------|----------|
| Material housing                                      |                 | Metal    |
| Max. output current at protected output               | mA              | 0        |
| Min. reflector distance                               | mm              | 0        |
| Ambient temperature                                   | °C              | -40 - 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                                         |                 | Other    |
| Light dot                                             | mm <sup>2</sup> | 0        |
| AWG-number                                            |                 | 0        |
| Material of cable sheath                              |                 | Other    |
| With restart blockage                                 |                 | No       |
| Suitable for safety functions                         |                 | No       |
| Degree of protection (IP)                             |                 | IP67     |

## aprobace,

|                             |  |                                                                           |
|-----------------------------|--|---------------------------------------------------------------------------|
| 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                                   |
| CSA Class No.               |  | –                                                                         |
| North America Certification |  | UL listed, certified by UL for use in Canada                              |
| Max. Voltage Rating         |  | 30 V DC                                                                   |
| Degree of Protection        |  | IEC: IP68, IP69K; UL/CSA Type: 1, 2, 3, 3R, 3S, 4, 4x, 6, 6P, 12, 12K, 13 |

## Rozměry



## Další informace o produktech (propojení)

### IL05305003Z Optické senzory řady E58 do náročného prostředí

IL05305003Z Optické senzory řady E58 do náročného prostředí

[https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05305003Z2018\\_05.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL05305003Z2018_05.pdf)