



Proximity switch, optical, long range 1.5m, 4L, 10-30VDC, NPN, cable

Part no. E71-NTBS-CA
Article no. 100521
Catalog No. E71-NTBS-CA

Delivery program

| | | | |
|--|-------|----|--|
| Basic function | | | Optical sensors |
| Product range | | | E71 NanoView Series |
| For connection of: | | | 2 m connection cable |
| Design (outer dimensions) | | mm | Rectangular (20 x 12 x 32) |
| Rated operational voltage | U_e | | 10 - 30 V DC |
| Rated switching distance | S_n | mm | 1500 |
| Description | | | Source (for combination with detector) |
| Connection | | | 4-wire |
| Function | | | Thru-beam photoelectric sensor |
| Type of light | | | Infra-red |
| Material | | | Insulated material |
| 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

| | | | |
|-----------------------------|----------|----|---|
| Ambient temperature | | | -25 - +55 |
| Operation | θ | °C | -25 - +55 |
| Storage | θ | °C | -25 - +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 | 1500 |
| Rated operational voltage | U_e | | 10 - 30 V DC |
| Maximum load current | I_e | mA | < 100 |
| Switching Frequency | | Hz | 500 |
| Response time | | ms | 1 |
| Switching state display | | LED | Yellow |
| Operating voltage display | | LED | Green |
| Protective functions | | | Short-circuit protective device Protection against polarity reversal |
| Connection | | | 4-wire |
| Style | | | |
| Design (outer dimensions) | | mm | Rectangular (20 x 12 x 32) |
| For connection of: | | | 2 m connection cable |
| Material | | | Insulated material |

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 6.0

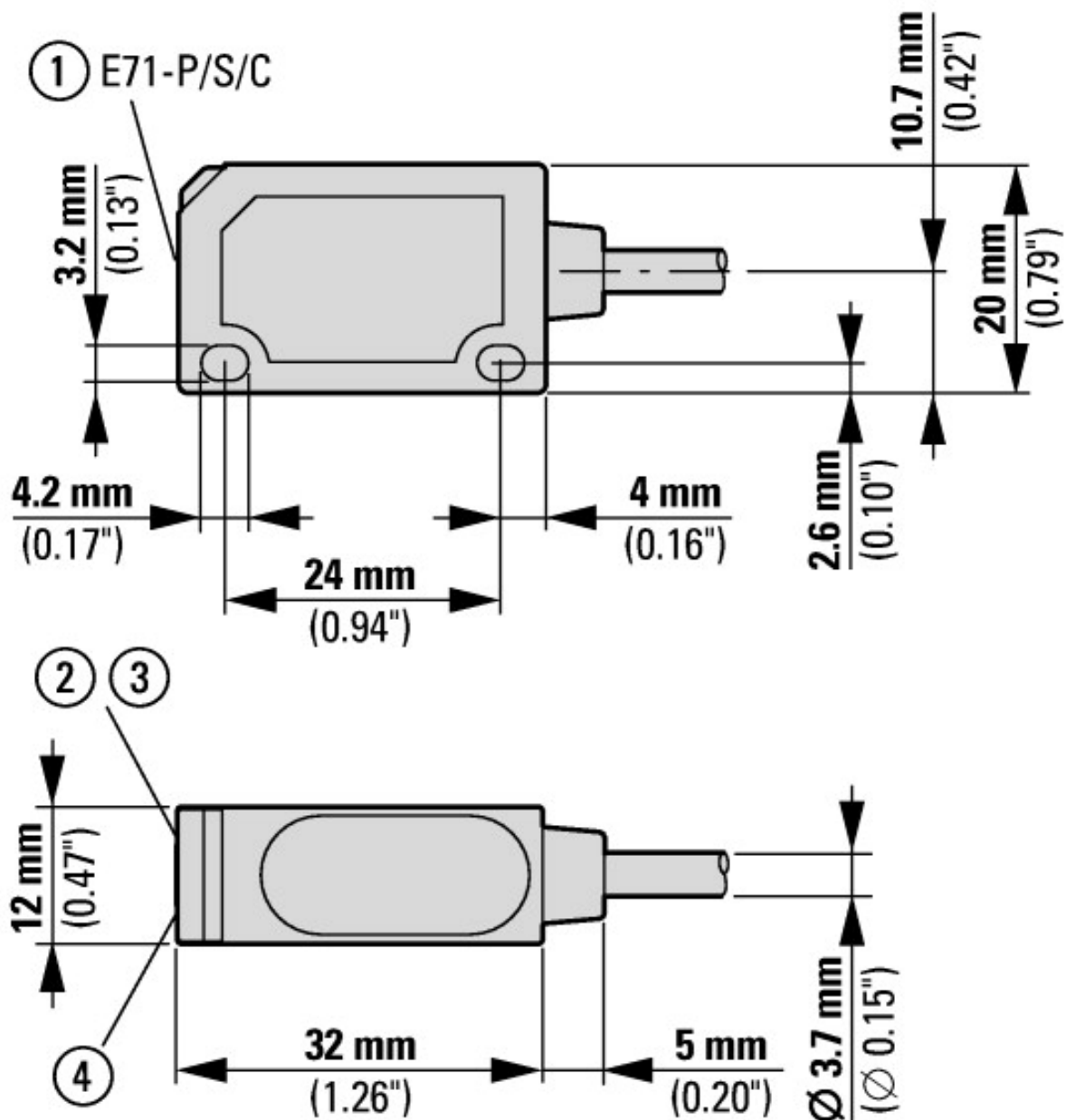
| Sensors (EG000026) / One-way light barrier (EC002716) | | |
|--|----|-----------------------|
| Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Optoelectronic sensor / One-way light barrier (ecl@ss8.1-27-27-09-01 [AKP250010]) | | |
| Scope of delivery of the one-way system | | Transmitter |
| Opening angle | ° | 0 |
| Pre failure notice | | No |
| With time function | | No |
| Rated switching distance | mm | 1500 |
| Max. switching distance | mm | 1500 |
| Max. output current | mA | 0 |
| 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 analog output | | No |
| Setting procedure | | - |
| With communication interface analog | | 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 | | 0 |
| 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 | | Cable |
| Type of switching output | | NPN |
| Type of switch function | | - |
| Operation agent-safety class | | Safety class 2 |
| Explosion safety category for gas | | None |
| Explosion safety category for dust | | None |
| Construction type housing | | Cuboid |
| Width sensor | mm | 12 |
| Diameter sensor | mm | 0 |
| Height of sensor | mm | 32 |
| Length of sensor | mm | 20 |
| Switch function | | Light-/dark switching |
| Material of optical surface | | Plastic |
| Material housing | | Plastic |
| Max. output current at protected output | mA | 0 |
| Min. reflector distance | mm | 0 |
| Ambient temperature | °C | -25 - 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 | 880 |
| Type of light | | Infrared light |
| Light dot | mm ² | 0 |
| AWG-number | | 22 |
| Material of cable sheath | | - |
| With restart blockage | | No |
| Suitable for safety functions | | No |
| Degree of protection (IP) | | IP67 |

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: - |

Dimensions



- ① Sensitivity potentiometer
- ② Stability LED
- ③ Power On LED
- ④ Output LED

Additional product information (links)

IL05305006Z NanoView Optical Sensors

IL05305006Z NanoView Optical Sensors

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05305006Z2016_07.pdf