

Technical data sheet Light curtain receiver Part no.: 50119754 CML720i-R10-480.A/L-M12



The Sensor People In der Braike 1, 73277 Owen

Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com Phone: +49 7021 573-0 • Fax: +49 7021 573-199

Technical data

| Device type Receiver Contains 2x BT-NC sliding block Application Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Guaranteed operating range Operating range limit 7 m Operating range limit 0.3 7 m Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement field langth 50 mm Measurement field langth 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage Ug Supply voltage Ug 18 30 V, DC Residual ripple 0 15 %, From Ug Open-circuit current 0 46 mA, The specified values refer to the entire package consisting of tran mitter and receiver. Type Inputs/outputs selectab | Series | 720 | | |
|--|---------------------------|---|--|--|
| Device type Receiver Contains 2x BT-NC sliding block Application Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Ouranteed operating range Operating range limit Cycical data Operating range O.3 7 m Operating range limit C.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter Z0 mm Electrical data Performance data Short circuit protected Transient protection Short circuit current 0 15 %, From U _B Open-circuit current 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of tran mitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Inputs/outputs selectable O Switching voltage up, outputs C Switching voltage, inputs DC < | Operating principle | Throughbeam principle | | |
| Application Object measurement Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Guaranteed operating range Operating range 0.3 7 m Operating range limit 1 ypical operating range Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Winimum object diameter 20 mm Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0.165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable Oc Voltage type, outputs DC Switching voltage, uputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching vo | Device type | Receiver | | |
| Special version Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Parallel-beam scanning Parallel-beam scanning Parallel-beam scanning Operating range 0.3 7 m Operating range limit 7 ypical operating range Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Protective circuit Portective circuit Portective circuit Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage Switching voltage Switching voltage Switching voltage Switching voltage Switching voltage Switc | Contains | 2x BT-NC sliding block | | |
| Special version Crossed-beam scanning Diagonal-beam scanning Parallel-beam scanning Operating range Guaranteed operating range Operating range 0.3 7 m Operating range 0.3 7 m Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Polarity reversal protection Short circuit protected Transient protection Protective circuit Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Performance data Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current Open-circuit current 0 15 %, From U _B Open-circuit selectable Output current, max. 100 mA Inputs/output selectable Number of inputs/outputs selectable 4 Piece(s) Type Inputs/output Selectable Voltage type, outputs DC Switching voltage, upputs DC Switching voltage, inpu | Application | Object measurement | | |
| Diagonal-beam scanning Parallel-beam scanning Operating range Guaranteed operating range Operating range limit Typical operating range Operating range limit 0.2 7 m Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data 20 mm Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Input solutputs selectable 00 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs Dight 26V low: s4V low: s4V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 80 µs Readiness de | Special version | | | |
| Parallel-beam scanning Optical data Operating range 0.37 m Operating range limit Typical operating range Operating range limit 0.29 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Vision operating range protection Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Performance data Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current Open-circuit current 0 165 mA, The specified values referer to the entire package consisting of transmitter and receiver. Input resistance 6,000 Ω Number of inputs/outputs selectable Openceircuit current, max. Input resistance 6,000 Ω Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC | Special version | Crossed-beam scanning | | |
| Optical data Guaranteed operating range Operating range 0.3 7 m Operating range limit Typical operating range Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Performance data Supply voltage UB Nor 18 5 M, From UB Open-circuit current Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Input resistance 6,000 Ω Number of inputs/outputs selectable 4Piece(s) Type Inputs/outputs Voltage type, outputs DC Switching voltage, inputs Mo ms Cycle time 1.84 ms | | Diagonal-beam scanning | | |
| Operating range Guaranteed operating range Operating range 0.3 7 m Operating range limit 7 ypical operating range Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter Winimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Short circuit protection Short circuit protected Transient protection 0 15 %, From U _B Open-circuit current 0 15 MA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable Piece(s) Voltage type, outputs DC Switching voltage, inputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output | | | | |
| Operating range 0.37 m Operating range limit Typical operating range Operating range limit 0.29 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Short circuit protected Transient protection Performance data Supply voltage Ug Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of frammitter and receiver. Input resistance Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable DC Switching voltage, outputs DC Switching voltage, inputs DC | Optical data | | | |
| Operating range limit Typical operating range Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 155 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 30 µs Interface 30 µs | Operating range | Guaranteed operating range | | |
| Operating range limit Typical operating range Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 155 mA, The specified values refer to the entire package consisting of transitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Inputs/outputs selectable 0 00 Ω Number of inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Quele time 1.84 ms Response time per beam 30 µs Interface | | | | |
| Operating range limit 0.2 9 m Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Polarity reversal protection Protective circuit Polarity reversal protection Short circuit protected Transient protected Transient protection Short circuit protected Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 155 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage telay 0 1 ms Timing 1.84 ms <td></td> <td></td> | | | | |
| Performance data Measurement field length 480 mm Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs Migh: ≥6V Iow: ≤4V Input/output 1 Activation/disable delay 0 1 ms Timing 30 µs Readiness delay 400 ms Cycle time 1.84 ms < | | | | |
| Number of beams 48 Piece(s) Beam spacing 10 mm Measurement data Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Voltage type, outputs DC Switching voltage, inputs DC Cycle time | | | | |
| Beam spacing 10 mm Measurement data 20 mm Electrical data 20 mm Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 155 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, inputs 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | Number of beams | | | |
| Measurement data Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Short circuit protected Transient protection Short circuit protected Performance data Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refere to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs Voltage type, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs Interface <td></td> <td></td> | | | | |
| Minimum object diameter 20 mm Electrical data Polarity reversal protection Short circuit protected Transient protection Performance data Supply voltage UB 18 30 V, DC Residual ripple 0 15 %, From UB Open-circuit current Open-circuit current 0 165 mA, The specified values refert to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable Plece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing Readiness delay Response time per beam 30 µs | | | | |
| Electrical data Protective circuit Polarity reversal protection Short circuit protected Transient protection Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refert to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs DC Switching voltage, inputs bigh: ≥6V Iow: ≤4V Input/output 1 Activation/disable delay 0 1 ms Timing 30 µs Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | | | | |
| Protective circuit Polarity reversal protection Short circuit protected Transient protected Transient protection Transient protected Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs bigh: ≥6V low: ≤4V Input/output 1 Activation/disable delay 0 1 ms Timing 1.84 ms Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | winimum object diameter | 20 mm | | |
| Short circuit protected Transient protection Performance data Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refert to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Input/output 1 Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 μs | Electrical data | | | |
| Performance data Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 100 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 30 µs Interface 30 µs | Protective circuit | Polarity reversal protection | | |
| Performance data Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing Readiness delay Readiness temp per beam 30 μs | | Short circuit protected | | |
| Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values referent to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 unput current, max. Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 30 µs Interface 30 µs | | Transient protection | | |
| Supply voltage U _B 18 30 V, DC Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values referent to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 30 µs Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | | | | |
| Residual ripple 0 15 %, From U _B Open-circuit current 0 165 mA, The specified values refer to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 1.84 ms Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 μs | Performance data | | | |
| Open-circuit current 0 165 mA, The specified values referse to the entire package consisting of transmitter and receiver. Inputs/outputs selectable 0 mA Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 8eadiness delay Activation per beam 30 µs | | | | |
| to the entire package consisting of transmitter and receiver. Inputs/outputs selectable Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable 200 Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs DC Switching voltage, inputs DC | Residual ripple | 8 | | |
| Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs high: ≥6V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 1.84 ms Response time per beam 30 µs | Open-circuit current | to the entire package consisting of trans | | |
| Output current, max. 100 mA Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs high: ≥6V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 1.84 ms Response time per beam 30 µs | Inputs/outputs soloctable | | | |
| Input resistance 6,000 Ω Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs high: ≥6V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 1.84 ms Response time per beam 30 µs | · · · · | 100 mA | | |
| Number of inputs/outputs selectable 4 Piece(s) Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs DC Switching voltage, inputs DC Switching voltage, inputs high: ≥6V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 1.84 ms Response time per beam 30 µs | • | | | |
| Type Inputs/outputs selectable Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs high: ≥6V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing Readiness delay Activation per beam 30 μs Interface Solution | [| , | | |
| Voltage type, outputs DC Switching voltage, outputs Typ. U _B / 0 V Voltage type, inputs DC Switching voltage, inputs high: ≥6V low: ≤4V low: ≤4V Input/output 1 Activation/disable delay Activation/disable delay 0 1 ms Timing 200 ms Cycle time 1.84 ms Response time per beam 30 μs | | | | |
| Switching voltage, outputs Typ. U _B / 0 ∨ Voltage type, inputs DC Switching voltage, inputs high: ≥6∨ Input/output 1 Input/output 1 Activation/disable delay 0 1 ms Timing 400 ms Cycle time 1.84 ms Response time per beam 30 μs | | | | |
| Voltage type, inputs DC Switching voltage, inputs high: ≥6V low: ≤4V Input/output 1 Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 μs | | | | |
| Switching voltage, inputs high: ≥6∨ Input/output 1 Input/output 1 Activation/disable delay 0 1 ms Timing 200 ms Cycle time 1.84 ms Response time per beam 30 μs Interface 200 ms | | | | |
| Input/output 1 Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 μs Interface 1.84 ms | | | | |
| Input/output 1 Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 μs Interface | e | • | | |
| Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | | | | |
| Activation/disable delay 0 1 ms Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | Input/output 1 | | | |
| Timing Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | | 0 1 ms | | |
| Readiness delay 400 ms Cycle time 1.84 ms Response time per beam 30 µs | - | | | |
| Cycle time 1.84 ms Response time per beam 30 μs | Timing | | | |
| Response time per beam 30 µs | Readiness delay | | | |
| Interface | • | | | |
| | Response time per beam | 30 µs | | |
| Type IO-I ink | Interface | | | |
| | Type | IQ-I ink | | |
| | | | | |

| | IO-Link COM mode | COM2 |
|----|---|------------------------------|
| | Specification | V1.0.1 |
| | opeometation | V1.1 |
| | Min. cycle time | COM2 = 2.3 ms |
| | | 00WZ - 2.0 M3 |
| S | ervice interface | |
| Т | /pe | IO-Link |
| ر. | ,pe | |
| | IO-Link | |
| | Function | Configuration via software |
| | | Service |
| | | |
| С | onnection | |
| N | umber of connections | 2 Piece(s) |
| PI | ug outlet | Axial |
| | | |
| | Connection 1 | Configuration interferen |
| | Function | Configuration interface |
| | | Signal IN |
| | | |
| | The second se | Voltage supply |
| | Type of connection | Connector M12 |
| | Thread size | |
| | Type | Male |
| | Material | Metal |
| | No. of pins Encoding | 8 -pin A-coded |
| | Encouning | A-coded |
| | Connection 2 | |
| | Function | Connection to transmitter |
| | Type of connection | Connector |
| | Thread size | M12 |
| | Туре | Female |
| | Material | Metal |
| | No. of pins | 5 -pin |
| | Encoding | A-coded |
| | | |
| M | echanical data | |
| D | esign | Cubic |
| Di | imension (W x H x L) | 29 mm x 35.4 mm x 555 mm |
| H | ousing material | Metal |
| | etal housing | Aluminum |
| Le | ens cover material | Plastic |
| | et weight | 700 g |
| | ousing color | Silver |
| Ту | /pe of fastening | Groove mounting |
| | | Via optional mounting device |
| 0 | peration and display | |
| - | | 152 |
| 1) | /pe of display | |
| | | OLED display |
| | umber of LEDs | 2 Piece(s) |
| Ŋ | pe of configuration | Software |
| ~ | norational controls | Teach-in |
| 0 | perational controls | Membrane keyboard |
| Е | nvironmental data | |
| ٨ | mbient temperature, operation | -30 60 °C |
| | mbient temperature, storage | -40 70 °C |
| ~ | | |
| | | |

Technical data

Leuze

Certifications

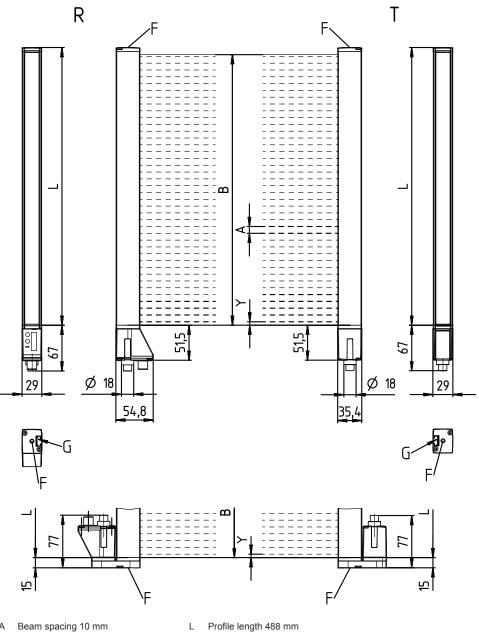
| Degree of protection | IP 65 |
|----------------------|---------------|
| Protection class | III |
| Certifications | c CSA US |
| Standards applied | IEC 60947-5-2 |

Classification

| Customs tariff number | 90314990 |
|-----------------------|----------|
| eCl@ss 5.1.4 | 27270910 |
| eCl@ss 8.0 | 27270910 |
| eCl@ss 9.0 | 27270910 |
| eCl@ss 10.0 | 27270910 |
| eCl@ss 11.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |

Dimensioned drawings

All dimensions in millimeters



Beam spacing 10 mm А

Fastening groove

- В Measurement field length 480 mm
- F M6 thread

G

R Receiver

Т

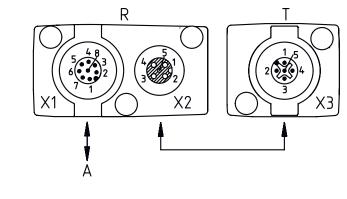
Υ 5 mm

Transmitter



Dimensioned drawings





A PWR / SW IN / OUT

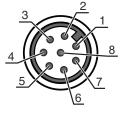
Electrical connection

Connection 1

| Function | Configuration interface |
|--------------------|-------------------------|
| | Signal IN |
| | Signal OUT |
| | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Туре | Male |
| Material | Metal |
| No. of pins | 8 -pin |
| Encoding | A-coded |
| | |

Pin Pin assignment

| 1 | V+ | |
|---|---------|--|
| 2 | IO1 | |
| 3 | GND | |
| 4 | IO-Link | |
| 5 | IO2 | |
| 6 | IO3 | |
| 7 | IO4 | |
| 8 | GND | |
| | | |



Connection 2

| Connection to transmitter |
|---------------------------|
| Connector |
| M12 |
| Female |
| Metal |
| 5 -pin |
| A-coded |
| |

Pin Pin assignment

| 1 | FE/SHIELD |
|---|------------|
| 2 | V+ |
| 3 | GND |
| 4 | RS 485 Tx+ |
| 5 | RS 485 Tx- |



Operation and display

| LED | Display | Meaning |
|-----|--------------------------|--|
| 1 | Green, continuous light | Operational readiness |
| | Green, flashing | Teach / error |
| 2 | Yellow, continuous light | Light path free, with function reserve |
| | Yellow, flashing | No function reserve |
| | Off | Object detected |

Suitable transmitters

| Part no. | Designation | Article | Description |
|--------------|---------------------------|------------------------------|---|
| 50119407 | CML720i-T10-480.A- M12 | Light curtain transmitter | Operating range: 0.3 6 m Connection: Connector, M12, Axial, 5 -pin |

Part number code

Part designation: CML7XXi-YZZ-AAAA.BCCCDDD-EEEFFF

| CML | Operating principle Measuring light curtain |
|-----------|---|
| 7XXi | Series 720i: 720i series 730i: 730i series |
| Y | Device type T: transmitter R: receiver |
| ZZ | Beam spacing 05: 5 mm 10: 10 mm 20: 20 mm 40: 40 mm |
| AAAA | Measurement field length [mm], dependent on beam spacing |
| В | Equipment A: connector outlet, axial R: rear connector outlet |
| ccc | Interface L: IO-Link /CN: CANopen /PB: PROFIBUS /PN: PROFINET /CV: Analog current and voltage output /D3: RS 485 Modbus |
| DDD | Special equipment -PS: Power Setting |
| EEE | Electrical connection M12: M12 connector |
| FFF | -EX: Explosion protection |
| Note | |
| A list wi | th all available device types can be found on the Leuze website at www.leuze.com. |

Notes

Observe intended use!

✤ This product is not a safety sensor and is not intended as personnel protection.

 ${\ensuremath{\,\textcircled{\tiny \ensuremath{\,\Downarrow}}}}$ The product may only be put into operation by competent persons.

 $\ensuremath{^{\ensuremath{\Downarrow}}}$ Only use the product in accordance with its intended use.

| | For UL applications: |
|---|---|
| A | For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code). These proximity switches shall be used with UL Listed Cable assemblies rated 30V, 0.5A min, in the field installation, or equivalent (categories: CYJV/ CYJV7 or PVVA/PVVA7) |

Accessories

Connection technology - Connection cables

| | Part no. | Designation | Article | Description |
|--|----------|--------------------|------------------|--|
| | 50135128 | KD S-M12-8A-P1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |

Connection technology - Interconnection cables

| | Part no. | Designation | Article | Description |
|--|----------|---------------------------------|-----------------------|---|
| | 50129781 | KDS DN-M12-5A- M12-5A-P3-050 | Interconnection cable | Suitable for interface: IO-Link, DeviceNet, CANopen Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR |

Mounting technology - Mounting brackets

| | Part no. | Designation | Article | Description |
|---|----------|----------------|---------------------|---|
| 1 + 1 + + + + + + + + + + + + + + + + + | 50142900 | BT 700M.5-2SET | Mounting device set | Design of mounting device: Bracket mounting Fastening, at system: Through-hole mounting, T slotted hole Mounting bracket, at device: Screw type, Sliding block Type of mounting device: Rigid Material: Steel |

7/8

Accessories



Mounting technology - Swivel mounts

| | Part no. | Designation | Article | Description |
|-----|----------|-------------|----------------------|---|
| ęę. | 429046 | BT-2R1 | Mounting bracket set | Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable Type of mounting device: Turning, 360° Material: Metal, Plastic |

Configuration devices

| Part no. | Designation | Article | Description |
|--------------|------------------------------|-----------------|--|
| 50121098 | SET MD12-US2-IL1.1 + Zub. | Diagnostics set | Interface: USB Connections: 2 Piece(s) Degree of protection: IP 20 |

Services

| | Part no. | Designation | Article | Description |
|----------|----------|-------------|------------------|---|
| с. С. | S981001 | CS10-S-110 | Start-up support | Details: Performed at location of customer's choosing, duration: max. 10 hours. Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses. Restrictions: No mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment. |
| | S981005 | CS10-T-110 | Product training | Details: Location and content to be agreed upon, duration: max. 10 hours. Conditions: Price not including travel costs and, if applicable, accommodation expenses. Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure. |

| | Note |
|---|---|
| A | the A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page. |

 Leuze electronic GmbH + Co. KG
 info@leuze.com • www.leuze.com
 We reserve the right to make technical changes

 The Sensor People
 In der Braike 1, 73277 Owen
 Phone: +49 7021 573-0 • Fax: +49 7021 573-199
 We reserve the right to make technical changes