



C45E-0603AG220

C4000 Micro in IP69K Housing

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

| Type | part no. |
|----------------|----------|
| C45E-0603AG220 | 1025735 |

Other models and accessories → www.sick.com/C4000_Micro_in_IP69K_Housing

Detailed technical data

Features

| | |
|--------------------------------|-------------------------|
| System part | Receiver |
| Resolution | 30 mm |
| Scanning range | 14.5 m |
| Protective field height | 600 mm |
| Synchronization | Optical synchronization |

Safety-related parameters

| | |
|---|--|
| Type | Type 4 (IEC 61496-1) |
| Safety integrity level | SIL 3 (IEC 61508) |
| Category | Category 4 (EN ISO 13849) |
| Performance level | PL e (EN ISO 13849) |
| PFH_D (mean probability of a dangerous failure per hour) | 15 * 10 ⁻⁹ (EN ISO 13849) |
| T_M (mission time) | 20 years (EN ISO 13849) |
| Safe state in the event of a fault | At least one OSSD is in the OFF state. |

Functions

| | Functions | Delivery status |
|---|-----------|-----------------|
| Protective operation | ✓ | |
| Restart interlock | ✓ | Internal |
| External device monitoring (EDM) | ✓ | Activated |

Interfaces

| | |
|-------------------------------|----------------------|
| System connection | Cable 15 m, PVC |
| Direction of cable connection | Straight |
| Cable diameter | 6 mm |
| Conductor cross section | 0.25 mm ² |
| Permitted cable length | 15 m |
| Configuration method | Hard wired |

| | |
|-------------------------|-------------------|
| Display elements | 7-segment display |
|-------------------------|-------------------|

Electrical data

| | |
|--|--|
| Protection class | III (IEC 61140) |
| Supply voltage V_s | 24 V DC (19.2 V ... 28.8 V) ¹⁾ |
| Residual ripple | $\leq 10\%$ ²⁾ |
| Output signal switching devices (OSSDs) | |
| Type of output | 2 PNP semiconductors, short-circuit protected, cross-circuit monitored |
| ON state, switching voltage HIGH | 24 V DC (15 V DC ... 28.8 V DC) |
| OFF state, switching voltage LOW | 2 V DC |
| Current-carrying capacity per OSSD | ≤ 500 mA |

¹⁾ The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

²⁾ Within the limits of V_s .

Mechanical data

| | |
|-------------------|-------------------------|
| Dimensions | See dimensional drawing |
| Weight | 665 g |

Ambient data

| | |
|--------------------------------------|-------------------------------------|
| Enclosure rating | IP69K, IP67, IP66, IP65 (IEC 60529) |
| Ambient operating temperature | -30 °C ... +55 °C |
| Storage temperature | -30 °C ... +70 °C |
| Air humidity | 15 % ... 95 %, Non-condensing |
| Vibration resistance | 5 g, 10 Hz ... 55 Hz (EN 60068-2-6) |
| Shock resistance | 10 g, 16 ms (EN 60068-2-27) |

Other information

| | |
|--------------------|--------|
| Wave length | 850 nm |
|--------------------|--------|

Classifications

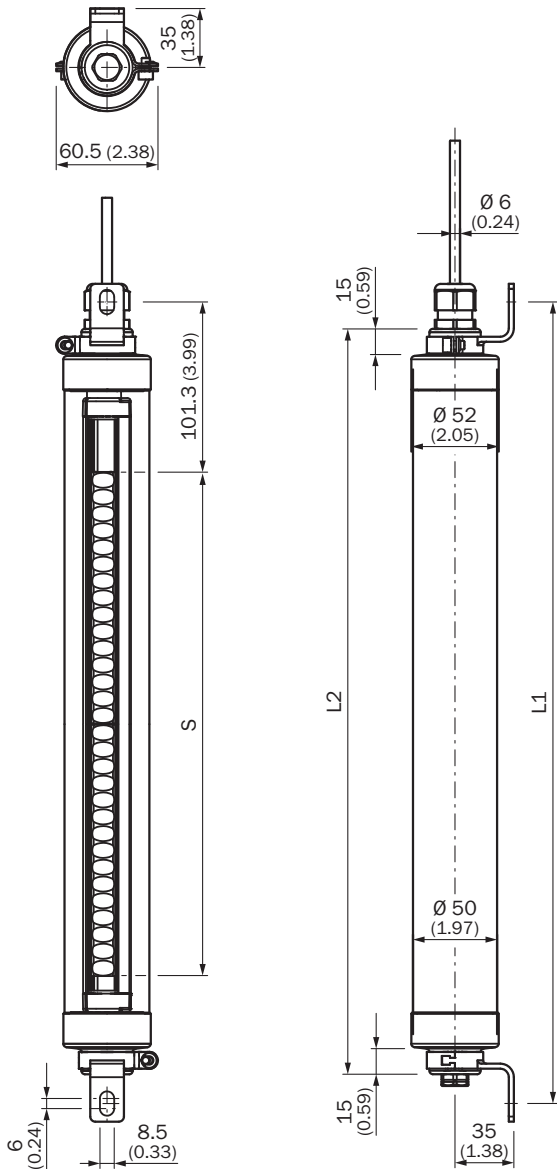
| | |
|---------------------|----------|
| ECLASS 5.0 | 27272704 |
| ECLASS 5.1.4 | 27272704 |
| ECLASS 6.0 | 27272704 |
| ECLASS 6.2 | 27272704 |
| ECLASS 7.0 | 27272704 |
| ECLASS 8.0 | 27272704 |
| ECLASS 8.1 | 27272704 |
| ECLASS 9.0 | 27272704 |
| ECLASS 10.0 | 27272704 |
| ECLASS 11.0 | 27272704 |
| ECLASS 12.0 | 27272704 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |

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| | |
|-----------------------|----------|
| ETIM 8.0 | EC002549 |
| UNSPSC 16.0901 | 46171620 |

Dimensional drawing









Dimensions in mm (inch)
illustration sender (receiver mirror image)

| Protective field height S | L1 | L2 |
|---------------------------|-------|-------|
| 150 | 357 | 324 |
| 300 | 476 | 443 |
| 450 | 626 | 593 |
| 600 | 777 | 744 |
| 750 | 927 | 894 |
| 900 | 1.078 | 1.045 |

| Protective field height S | L1 | L2 |
|---------------------------|-------|-------|
| 1.050 | 1.228 | 1.195 |
| 1.200 | 1.377 | 1.344 |
| 1.350 | 1.529 | 1.496 |
| 1.500 | 1.680 | 1.647 |
| 1.650 | 1.830 | 1.797 |
| 1.800 | 1.981 | 1.948 |

Recommended accessories

Other models and accessories → www.sick.com/C4000_Micro_in_IP69K_Housing

| | Brief description | Type | part no. |
|---|--|------------------------------------|----------|
| device protection and care | | | |
|  | <ul style="list-style-type: none"> Product family: Cleaning agents Description: Cloth for cleaning optical surfaces | Lens cloth | 4003353 |
|  | <ul style="list-style-type: none"> Description: Bidirectional ventilation membrane made from Gore-Tex | Bidirectional ventilation membrane | 5309082 |
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Stainless steel bracket, rotatable Material: Stainless steel Details: Stainless steel 1.4350, stainless steel 1.4301 Packing unit: 4 pieces | BEF-2SMMEAES4 | 2023708 |
|  | <ul style="list-style-type: none"> Description: Reinforced stainless steel bracket, rotatable Material: Stainless steel Details: Stainless steel 1.4350, stainless steel 1.4301 Packing unit: 4 pieces | BEF-2SMMVAES4 | 2026850 |
|  | <ul style="list-style-type: none"> Description: Stainless steel support bracket Material: Stainless steel Details: Stainless steel 1.4350 Packing unit: 2 pieces | BEF-2AAAADES2 | 2026849 |
|  | <ul style="list-style-type: none"> Description: Reinforced stainless steel bracket, rotatable Material: Stainless steel Details: Stainless steel 1.4350, stainless steel 1.4301 Packing unit: 2 pieces | BEF-2SMMVAES2 | 2048373 |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com