



M40Z-025022AU0

M4000 Standard A/P

SAFETY MULTIBEAM SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|----------------|----------|
| M40Z-025022AU0 | 1201456 |

Other models and accessories → www.sick.com/M4000_Standard_A_P

Illustration may differ



Detailed technical data

Features

| | |
|------------------------------------|----------------------------------------------------------|
| Specialty | Actuator Sensor Interface replaces the system connection |
| Functional principle | Active/passive |
| System part | Active unit |
| Type of diversion | Mirror deflection |
| Scanning range | 0.5 m ... 7.5 m |
| Number of beams | 2 |
| Beam separation | 500 mm |
| Response time | 10 ms |
| End cap with integrated LED | ✓ |

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) | 6.6×10^{-9} (EN ISO 13849) |
| T_M (mission time) | 20 years (EN ISO 13849) |

Functions

| | | |
|--------------------|-----------|-----------------|
| | Functions | Delivery status |
| Beam coding | ✓ | Uncoded |

Interfaces

| | |
|----------------------------------|---------------------------|
| Actuator Sensor Interface | ✓ |
| System connection | Male connector M12, 4-pin |

| | |
|------------------------------------|---------------------------|
| Configuration method | Configuration buttons |
| Display elements | LEDs 7-segment display |
| End cap with integrated LED | ✓ |

Electronics

| | |
|----------------------------------------|---------------------------------------|
| Protection class | III (IEC 61140) |
| Supply voltage V_s | (26 V DC ... 31.6 V DC) ¹⁾ |
| Power consumption | ≤ 0.2 A |

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.

Mechanics

| | |
|------------------------------|------------------------------------------|
| Dimensions | See dimensional drawing |
| Housing cross-section | 52 mm x 55.5 mm |
| Material | |
| Housing | Aluminum alloy ALMGSI 0.5, powder coated |
| Front screen | Polycarbonate, scratch-resistant coating |

Ambient data

| | |
|--------------------------------------|-------------------------------------|
| Enclosure rating | IP65 (EN 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 |
|--------------------|--------|

Certificates

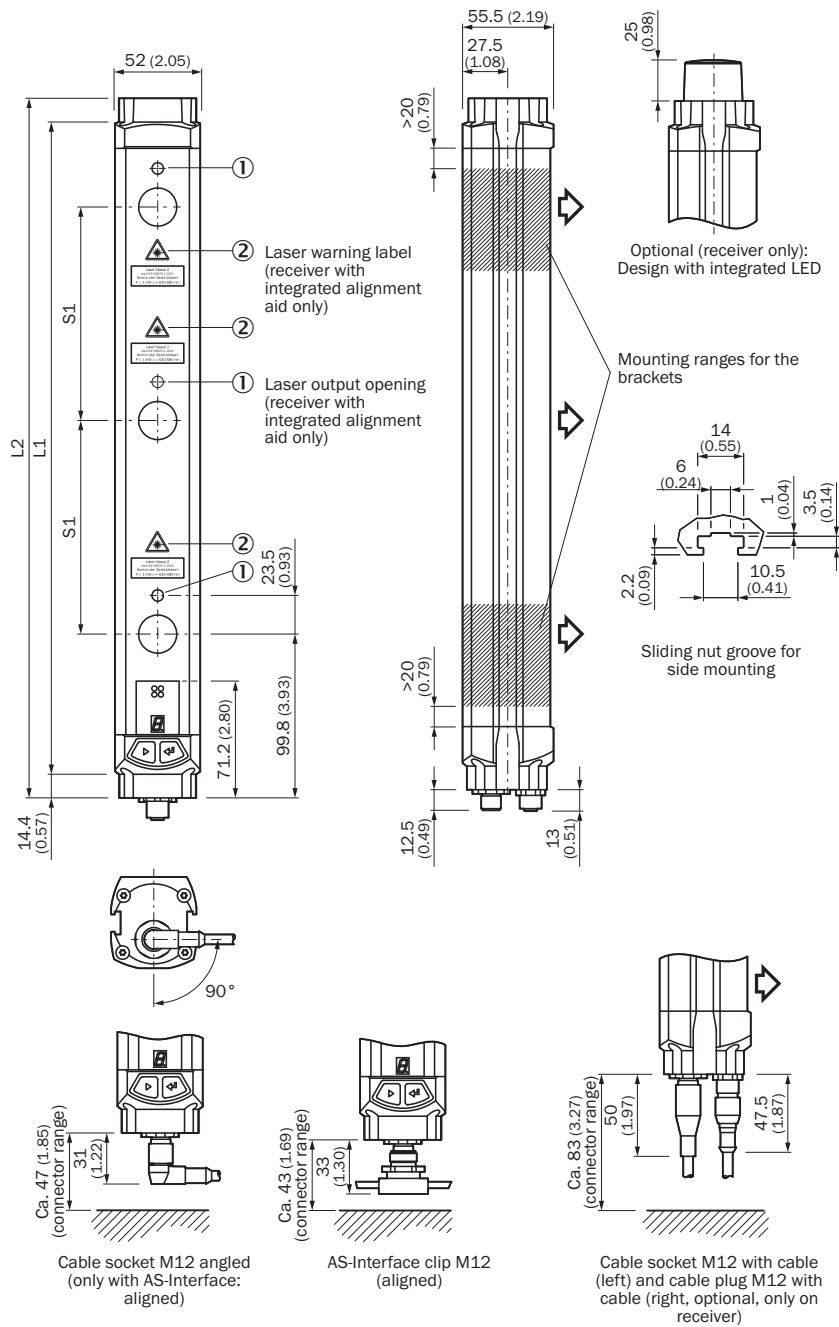
| | |
|------------------------------------------------------------------------------|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| ULus approval | ✓ |
| cUL approval | ✓ |
| EC-Type-Examination approval | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

Classifications

| | |
|---------------------|----------|
| ECLASS 5.0 | 27272703 |
| ECLASS 5.1.4 | 27272703 |
| ECLASS 6.0 | 27272703 |
| ECLASS 6.2 | 27272703 |

| | |
|----------------|----------|
| ECLASS 7.0 | 27272703 |
| ECLASS 8.0 | 27272703 |
| ECLASS 8.1 | 27272703 |
| ECLASS 9.0 | 27272703 |
| ECLASS 10.0 | 27272703 |
| ECLASS 11.0 | 27272703 |
| ECLASS 12.0 | 27272703 |
| ETIM 5.0 | EC001832 |
| ETIM 6.0 | EC001832 |
| ETIM 7.0 | EC001832 |
| ETIM 8.0 | EC001832 |
| UNSPSC 16.0901 | 46171620 |

Dimensional drawing Active unit








Dimensions in mm (inch)

Sender/receiver in one housing

| | | L1 | L2 |
|---|-----|-------|-------|
| 2 | 500 | 643 | 672 |
| 4 | 300 | 1,043 | 1,072 |

Recommended accessories

Other models and accessories → www.sick.com/M4000_Standard_A_P

| | Brief description | Type | part no. |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Mounting kit 12, rotatable, swivel mount Packing unit: 4 pieces Suitable for: All protective field heights | BEF-2SMGEAKU4 | 2030510 |
|  | <ul style="list-style-type: none"> Description: Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers Packing unit: 4 pieces Suitable for: All protective field heights | BEF-3WNGBAST4 | 7021352 |
|  | <ul style="list-style-type: none"> Description: Mounting kit 6, side bracket, rotatable Material: Zinc diecast Details: Zinc diecast Packing unit: 4 pieces Suitable for: All protective field heights | BEF-1SHABAZN4 | 2019506 |
| Commissioning aids and test equipment | | | |
|  | <ul style="list-style-type: none"> Product: Alignment aids Dimensions (W x H x L): 19 mm 67.3 mm 66.9 mm Description: Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam! | AR60 | 1015741 |
|  | <ul style="list-style-type: none"> Product: Alignment aids Description: Adapter AR60 for M4000 and M4000 Curtain | AR60 adapter, M4000 | 4040006 |

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