



Product Description:

- Robust Painted aluminium housing
- Compact size design
- Safety Range 5.5 m
- Scanning range up to 0-275°
- Multiple set of programmable regions
- Dynamic masking function
- Excellent anti-dust interference function
- Adapted special software, intuitive user interface, easy to edit

Applicable industries: automotive and parts, logistics, 3C, robotics, printing/packaging and other industries

Technical parameters:

| | |
|---------------------------------------|-------------------------------|
| Type | ASL10-3E ASL10-5E |
| Common data | |
| Types (EN61496-1) | 3 |
| PL (EN ISO 13849-1) | d |
| SIL (IEC 61508) | 2 |
| Test data | |
| Detection performance | 30/40/50/70/150 mm |
| Angular resolution | 0.1° |
| Safe area working scope | 3m, 5.5m |
| Maximum working range of alarm area | 40m |
| Set the maximum number of safe zones | 1 |
| Set the maximum number of alarm areas | 2 |
| Maximum detection Angle | 275° |
| Range of tolerance | 100 mm |
| Electrical data | |
| Power supply (VDD) | 24 VDC ± 20% |
| Current of output | Max 0.25 A / Each OSSD |
| Output capacitive load | 2.2 uF @ Max 24VDC |
| Input load current | 6 ... 15 mA |
| Input saturation voltage | > 15 V |
| Input capacitive load | 22 uF |
| Mechanical and environmental data | |
| Ambient temperature | -10 ...+50 °C |
| Storage temperature | -20 ... 70°C |
| Humidity | 15 ... 95 % (No condensation) |
| Protection degree | IP 65 (EN 60529) |
| Input/output configuration data | |
| Connector | M12 8 pin |
| Safety output(OSSDs) | 1 x 2 |
| Configurable input | 0 |
| Configurable output | 0 |
| Configurable input/output | 3 |
| High speed input(100kHz) | N/A |
| Configurable I/O total | 5 |

Notes:
(*1) Maximum number of region set switches that can be achieved when all inputs are used for region set switching. Using 8 input or encoder speed measurements, 70 region sets (the maximum number) can be reached.
(*2) Only 1 safety area, up to 3 zones in any activation order. There can be up to six when only some allowed activation orders are adopted. See the manual and GUI (Graphical User Interface) for more details.
(*3) The forced invalidations input, shielded enable input, and shielded lamp output of SLS-SAx are mutually exclusive.
(*4) Programmable connectors are used on the front of the device.

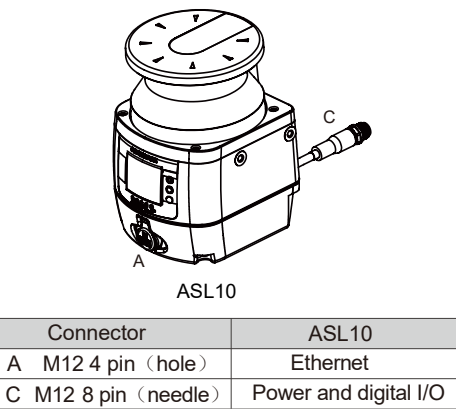
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|---|----------------------------------|
| Configurable parameters | |
| Response time | |
| Master machine | Shortest: 62 ms; Longest: 482 ms |
| Any other slave machine | 10 ms |
| Connector | M12 8 pin |
| Maximum number of region sets for any activation order(*1): | |
| 1 safety area | 3 |
| 1 safety area+1 alarm area | 2 |
| 1 safety area+2 alarm area | N/A |
| 2 safety area | N/A |
| 2 safety area+1 alarm area | N/A |
| 2 safety area+2 alarm area | N/A |
| 3 safety area | N/A |
| The largest region for a particular activation order | 6 |
| Number of sets (1 safety area) (*2): | |
| The region set inputs the switching time Shortest:30 ms;Longest:5000 ms | |
| Function | |
| Manual/automatic restart | yes |
| Reset (power restart) | yes |
| Overall shielding (unidirectional or bidirectional) | yes |
| Locally masked, the first pair of OSSD is dynamic | yes |
| Point of reference | yes |
| Forced invalidation | yes (*3) |
| Shield lamp | yes (*3) |
| Shield enable | yes (*3) |
| Cleaning window alarm | yes |
| General fault alarm | yes |
| Stop | yes |
| Advanced measurement data | yes (*4) |
| Maximum angular resolution of the measured data | |
| 0.1° | |
| Applications | |
| Horizontal static | yes |
| Vertical static | yes |
| Moving (Simple AGV) | yes |
| Moving (Medium complexity level AGV) | N/A |

Safety laser scanner-ASL

Technical parameters:

| Optional input and output | | | |
|---------------------------|-----------------------------|----------------|--|
| Input / Output | signal | ASL10 8 pin | Notes |
| Multiple Input | Reset | yes | |
| | Restart | yes | |
| | Reset/Restart | yes | |
| | Area switch 1 | yes | |
| | Area switch 2 | yes | |
| | Area switch 3 | yes | |
| | Area switch 4 | N/A | |
| | Area switch 5 | N/A | |
| | Shield enable 1 | yes | To activate masking, two masking inputs must be used |
| | Shield 11 | yes | |
| | Shield 12 | yes | |
| | Forced invalidation 11 | yes | |
| | Forced invalidation 12 | yes | |
| | Shield enable 2 | N/A | To activate masking, two masking inputs must be used |
| | Shield 21 | N/A | |
| | Shield 22 | N/A | |
| | Forced invalidation 21 | N/A | |
| | Forced invalidation 22 | N/A | |
| Multiple Output | Alarm 1 | yes | |
| | Alarm 2 | yes | |
| | Shield lamp 1 | yes | It can be used with shielding function |
| | Shield lamp 2 | N/A | |
| | Forced invalidation state 1 | yes | |
| | Forced invalidation state 2 | N/A | |
| | Warning 1 | yes | Cleaning window alarm |
| | Warning 2 | yes | General fault alarm |
| OSSD | OSSD 11 | yes | |
| | OSSD 12 | yes | |
| | OSSD 21 | N/A | |
| | OSSD 22 | N/A | |
| | OSSD 31 | N/A | |
| | OSSD 32 | N/A | |

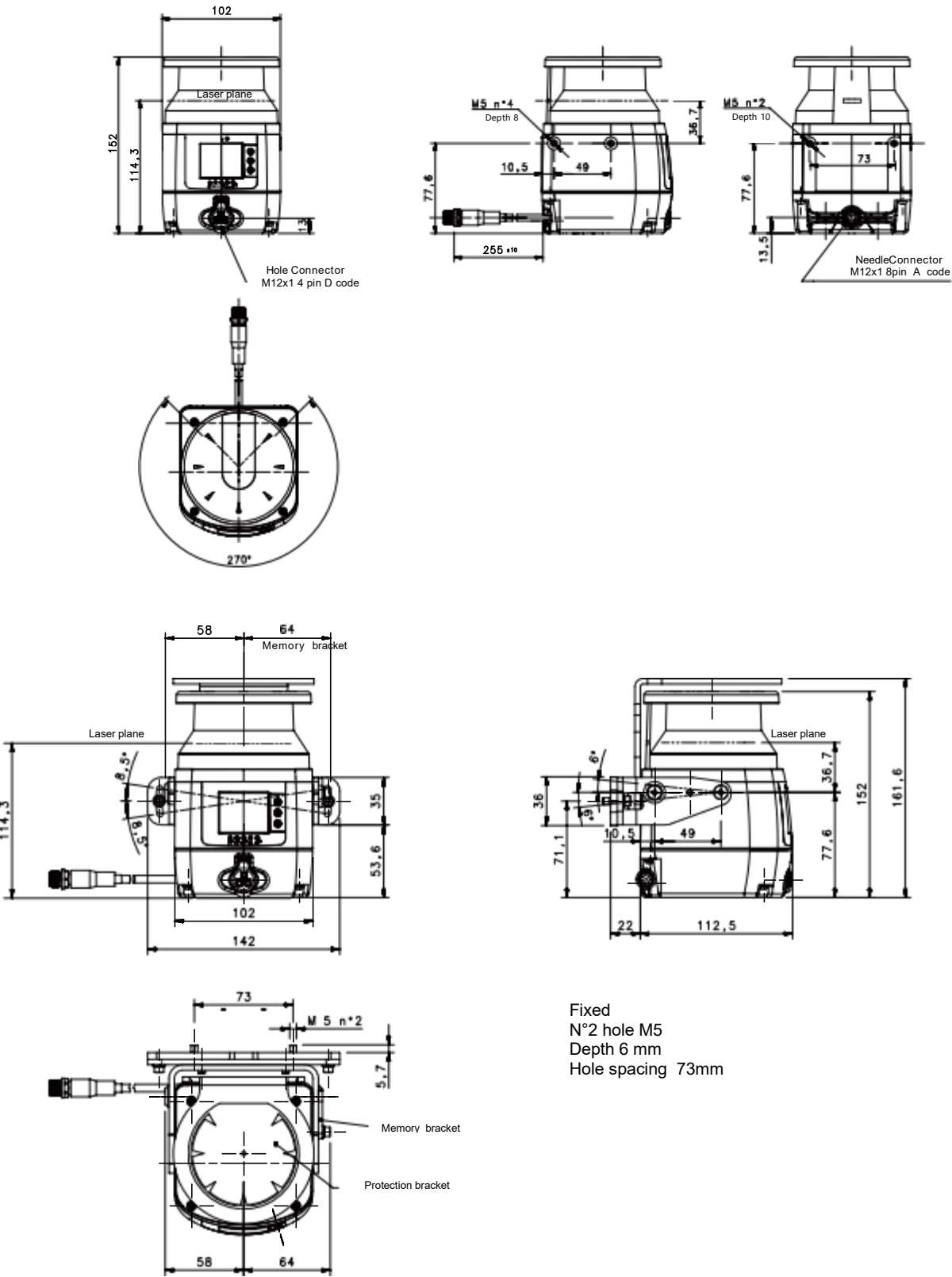
Connection method:



| Connector (M12, 8针) | | | | |
|---------------------|--------------------------|---|--------|-----|
| | Signal | Description | Color | Pin |
| Power supply | Power supply | 24VDC | brown | 2 |
| | GND_ISO | 0 V | blue | 7 |
| Input / Output | Multiple Input/Output | Selectable through a graphical user interface | white | 1 |
| | Multiple Input/Output(*) | Selectable through a graphical user interface | green | 3 |
| | Multiple Input/Output(*) | Selectable through a graphical user interface | yellow | 4 |
| Safety output | OSSD11 | Safety output | gray | 5 |
| | OSSD12 | Safety output | pink | 6 |
| Other | PE | Functional grounding | red | 8 |

Notes: (*) only Multiple Input

Size diagram:



Safety laser scanner-ASL

Model Selection Table :

| Type | Description |
|----------|--------------------------|
| ASL10-3E | Single machine type 3m |
| ASL10-5E | Single machine type 5.5m |

Accessories:

| ASL10 | |
|--|-------------------|
| | Bracket |
| Complete bracket system | ASL10-BT-A |
| Slope adjustment bracket system | ASL10-BT-B |
| Top protection bracket | ASL10-BT-C |
| Unit of safety | |
| Unit of safety | SR22-31/24VUC/ESC |
| Maintenance parts | |
| Replaceable window | ASL10-W |
| Memory component M12 8/12 pin | ASL10-0812 |
| Memory component M12 17/8 pin | ASL10-1708 |
| Spray bottle liquid cleaner(1 lt) | ASL10-CLEANER |
| Cleaning cloth (22 cm x 22 cm), 100 pieces | ASL10-CLOTH |







Accessories:





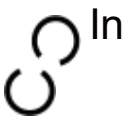
| | Type | One side | The other side | length |
|------------|-------------------|----------------|----------------|--------|
| Main cable | CB-M12-8A-PUR-20 | 8 pin (needle) | Scattered line | 2 m |
| | CB-M12-8A-PUR-30 | | | 3 m |
| | CB-M12-8A-PUR-50 | | | 5 m |
| | CB-M12-8A-PUR-100 | | | 10 m |
| | CB-M12-8A-PUR-150 | | | 15 m |
| | CB-M12-8A-PUR-250 | | | 25 m |

Notes:

As soon as human activity is detected in a safe or alarm area, the LASER SCANNER will display a color graphic to indicate the notification, so that the shutdown action can be taken or an alarm signal can be activated.

The 11 corner areas can show the direction of the detected person and indicate by different colors whether it is within the safe area (red) or the alarm area (yellow).

| Display Icons | Name | Description |
|--|---|---|
| <div><div>Run</div></div> | The "open" state | The device is operating normally (OSSD operating status). No human activity was detected in the safety and alarm area. (Accept configuration) |
| <div><div>Alarm</div></div> | An alarm that intrudes into an alarm area | The equipment is operating normally. The device has detected human activity in the alarm area. (Accept configuration) |
| <div><div>Stop</div></div> | Intrude into the "close" state of a safe area | The device is operating normally (OSSD stop state). The device has detected human activity in the secure area. (Accept configuration) |
| <div><div>Reference</div></div> | The "close" state of the reference point | The device detects the reference point moving. The display area in the direction of the moving reference point is blue. |

| LED Number | Symbol | Definition | Color | Meaning | Output status |
|------------|---|---|--------|---|---|
| 1 |  | Safety area 1 Object detection (OSSD 11/12) | Green | No object was detected | OSSD Close |
| | | | Red | Detecting an object | OSSD Open |
| 2 |  | Safety area 2 Object detection (OSSD 21/22) | Green | No object was detected | OSSD Close |
| | | | Red | Detecting an object | OSSD Open |
| 3 |  | Safety area 3 Object detection or Alarm area 2 Object detection | Yellow | Detecting an object | OSSD Close Alarm 2 On/OFF (as in Settings) |
| | | | Close | No object was detected | OSSD Open The alarm 2 output depends on the alarm function configuration |
| 4 |  | Alarm area 1 Object detection | | An object has been detected in alarm area 1 | The alarm 1 output depends on the alarm function configuration |
| | | | Yellow | No object was detected in alarm area 1 | The alarm 1 output depends on the alarm function configuration |
| 5 |  | Interlock | Close | No object was detected in the safe area Device waiting for manual restart (LED1 red) | OSSD Close |
| | | | Yellow | No object was detected in the safe area The device is enabled (LED1 green) | OSSD Open |
| | | | | The object is detected in the safe area The device is off (LED1 red) | OSSD Close |

