

## Data sheet

Commercial Art.No.: R1.648.2200.0

light grid SLD-4UP2-2-00

Multibeam-Safety-Lightgrid Type 4, Universal-Professional, 2 Beams, Muting lamp



|                    |               |
|--------------------|---------------|
| Commercial Art.No. | R1.648.2200.0 |
| EAN                | 4049088398742 |
| Order Unit         | 1             |

certificates / approvals



## Technical data

### function

|                      |                          |
|----------------------|--------------------------|
| sensor element       | Transmitter and receiver |
| with muting function | yes                      |
| with muting display  | yes                      |
| with beam coding     | no                       |
| automatic start      | no                       |
| restart interlock    | yes                      |
| alignment aid        | no                       |
| blanking             | no                       |
| cascadable           | no                       |

### technical data

|                                     |               |
|-------------------------------------|---------------|
| type acc. EN 61496-1                | 4             |
| protective field height             | 500 mm        |
| connection                          | connector M12 |
| nominal voltage                     | 24 V          |
| voltage type                        | DC            |
| number of OSSD outputs              | 2             |
| max. output current                 | 380 mA        |
| degree of protection (IP)           | IP67          |
| PFH <sub>d</sub> (High demand mode) | 6.6 E-9 1/h   |
| mission time TM                     | 20 a          |

### safety parameters

|                               |         |
|-------------------------------|---------|
| category (ISO 13849-1)        | 4       |
| PL (ISO 13849-1)              | level e |
| SIL <sub>CL</sub> (IEC 62061) | 3       |

|                                     |             |
|-------------------------------------|-------------|
| PFH <sub>d</sub> (High demand mode) | 6.6 E-9 1/h |
| HFT                                 | 1           |
| T <sub>M</sub>                      | 20 a        |

#### dimensions

|                  |         |
|------------------|---------|
| width sensor     | 52 mm   |
| height of sensor | 64.7 mm |
| length of sensor | 600 mm  |

#### classification

|            |          |
|------------|----------|
| ECLASS 11  |          |
| ECLASS 8.1 | 27270910 |
| ETIM 9.0   | EC001832 |
| ETIM 8.0   | EC001832 |
| ETIM 7.0   | EC002549 |
| ETIM 6.0   | EC002549 |
| ETIM 5.0   | EC002549 |
| ETIM 4.0   | EC002549 |
| ETIM 3.0   | EC002549 |

#### product compliance

|                              |                    |
|------------------------------|--------------------|
| ROHS conformity status       | compliant/exempted |
| ROHS exceptions              | III-6(a); III-6(b) |
| REACH-SVHC conformity status | Duty-To-Declare    |
| REACH-SVHC substances        | Lead               |
| REACH-SVHC CAS numbers       | 7439-92-1          |

## Accessories

| Commercial Art.No.: | Article-type description:                          | Description:                                                          |
|---------------------|----------------------------------------------------|-----------------------------------------------------------------------|
| R1.600.0505.0       | connection cable SLX-CAB-M12-S0505                 | Connection cable M12, 5-pole, Length 5m, shielded                     |
| R1.600.0510.0       | connection cable SLX-CAB-M12-S0510                 | Connection cable M12, 5-pole, Length 10m, shielded                    |
| R1.600.0515.0       | connection cable SLX-CAB-M12-S0515                 | Connection cable M12, 5-pole, Length 15m, shielded                    |
| R1.600.0525.0       | connection cable SLX-CAB-M12-S0525                 | Connection cable M12, 5-pole, Length 25m, shielded                    |
| R1.600.0550.0       | connection cable SLX-CAB-M12-S0550                 | Connection cable M12, 5-pole, Length 50m, shielded                    |
| R1.604.1060.0       | reflector column SLD-COLM2-1060                    | "Reflector column, Reflector distance: 500 mm; Total height: 1060 mm" |
| R1.593.0900.0       | device columns SLX-COL-0900                        | "Device column, profile height: 820 mm; Total height: 900 mm"         |
| R1.591.0001.0       | sliding block set SLX-MO-TNUTM6                    | Set Slot nut with M6-screw thread, 10 pcs.                            |
| R1.591.0005.0       | Z-fixtute SLX-MO-Z                                 | Z-Bracket, 2 pcs.                                                     |
| R1.591.0007.0       | rotary holding with shockabsorber SLX-MO-RO-S      | Rotative bracket with Shockabsorber, 70mm lang, 2 pcs.                |
| R1.591.0009.0       | tool holder SLX-MO-CLIP                            | Clamp bracket, for Installation in Device column                      |
| R1.591.0010.0       | set tool holder SLX-MO-CLIP2                       | Set Clamp bracket, for Installation in Device column                  |
| R1.591.0011.0       | rotary holding 360° SLX-MO-RO-SET1                 | Set with SLX-MO-RO-B + SLX-MO-RO-C + screws                           |
| R1.591.0012.0       | rotary holding 360° SLX-MO-RO-SET2                 | Set with 2 x SLX-MO-RO-C + screws                                     |
| R1.591.0013.0       | rotary holding with shockabsorber SLX-MO-RO-SET1-S | Set with SLX-MO-RO-B, SLX-MO-RO-C + screws + Shockabsorber            |

|               |                                                    |                                                   |
|---------------|----------------------------------------------------|---------------------------------------------------|
| R1.591.0014.0 | rotary holding with shockabsorber SLX-MO-RO-SET2-S | Set with 2 x SLX-MO-RO-C + screws + Shockabsorber |
| R1.597.0017.0 | sensor connector box SLX-MUT-BOX2                  | sensor connection box for 2 muting sensors        |

### Fits with

| Commercial Art.No.: | Article-type description: | Description:                                              |
|---------------------|---------------------------|-----------------------------------------------------------|
| R1.606.2008.0       | light grid SLD-MIR2-0-08  | Multibeam-Safety-Lightgrid, Mirror, 2 Beams, Distance 8 m |

SLD - Sender /  
transmitter

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.641.2050.0             | 600                     |
| R1.641.2070.0             | 600                     |
| R1.641.2150.0             | 600                     |
| R1.641.2170.0             | 600                     |
| R1.641.3050.0             | 900                     |
| R1.641.3070.0             | 900                     |
| R1.641.3150.0             | 900                     |
| R1.641.3170.0             | 900                     |
| R1.641.4050.0             | 1000                    |
| R1.641.4070.0             | 1000                    |
| R1.641.4150.0             | 1000                    |
| R1.641.4170.0             | 1000                    |

SLD - Empfaenger Standard /  
receiver standard

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.642.1050.0             | 193                     |
| R1.642.1070.0             | 193                     |
| R1.642.1150.0             | 193                     |
| R1.642.2050.0             | 600                     |
| R1.642.2070.0             | 600                     |
| R1.642.2150.0             | 600                     |
| R1.642.2170.0             | 600                     |
| R1.642.3050.0             | 900                     |
| R1.642.3070.0             | 900                     |
| R1.642.3150.0             | 900                     |
| R1.642.3170.0             | 900                     |
| R1.642.4050.0             | 1000                    |
| R1.642.4070.0             | 1000                    |
| R1.642.4150.0             | 1000                    |
| R1.642.4170.0             | 1000                    |

SLD - Empfaenger Select /  
receiver select

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.643.1050.0             | 193                     |
| R1.643.1070.0             | 193                     |
| R1.643.1150.0             | 193                     |
| R1.643.2050.0             | 600                     |
| R1.643.2070.0             | 600                     |
| R1.643.2150.0             | 600                     |
| R1.643.2170.0             | 600                     |
| R1.643.3050.0             | 900                     |
| R1.643.3070.0             | 900                     |
| R1.643.3150.0             | 900                     |
| R1.643.3170.0             | 900                     |
| R1.643.4050.0             | 1000                    |
| R1.643.4070.0             | 1000                    |
| R1.643.4150.0             | 1000                    |
| R1.643.4170.0             | 1000                    |

SLD - Sender Professional /  
transmitter professional

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.641.1050.0             | 193                     |
| R1.641.1070.0             | 193                     |
| R1.641.1150.0             | 193                     |

SLD - Empfaenger Professional /  
receiver professional

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.647.1050.0             | 193                     |
| R1.647.1070.0             | 193                     |
| R1.647.1150.0             | 193                     |
| R1.647.2050.0             | 600                     |
| R1.647.2070.0             | 600                     |
| R1.647.2150.0             | 600                     |
| R1.647.2170.0             | 600                     |
| R1.647.2250.0             | 600                     |
| R1.647.2350.0             | 600                     |
| R1.647.3050.0             | 900                     |
| R1.647.3070.0             | 900                     |
| R1.647.3150.0             | 900                     |

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.647.3170.0             | 900                     |
| R1.647.3250.0             | 900                     |
| R1.647.3350.0             | 900                     |
| R1.647.4050.0             | 1000                    |
| R1.647.4070.0             | 1000                    |
| R1.647.4150.0             | 1000                    |
| R1.647.4170.0             | 1000                    |
| R1.647.4250.0             | 1000                    |
| R1.647.4350.0             | 1000                    |

SLD - Universal Standard

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.644.2000.0             | 600                     |
| R1.644.3000.0             | 900                     |

Umlenkspiegel /  
deflection mirror

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.606.2008.0             | 594                     |
| R1.606.3006.0             | 894                     |
| R1.606.3008.0             | 894                     |

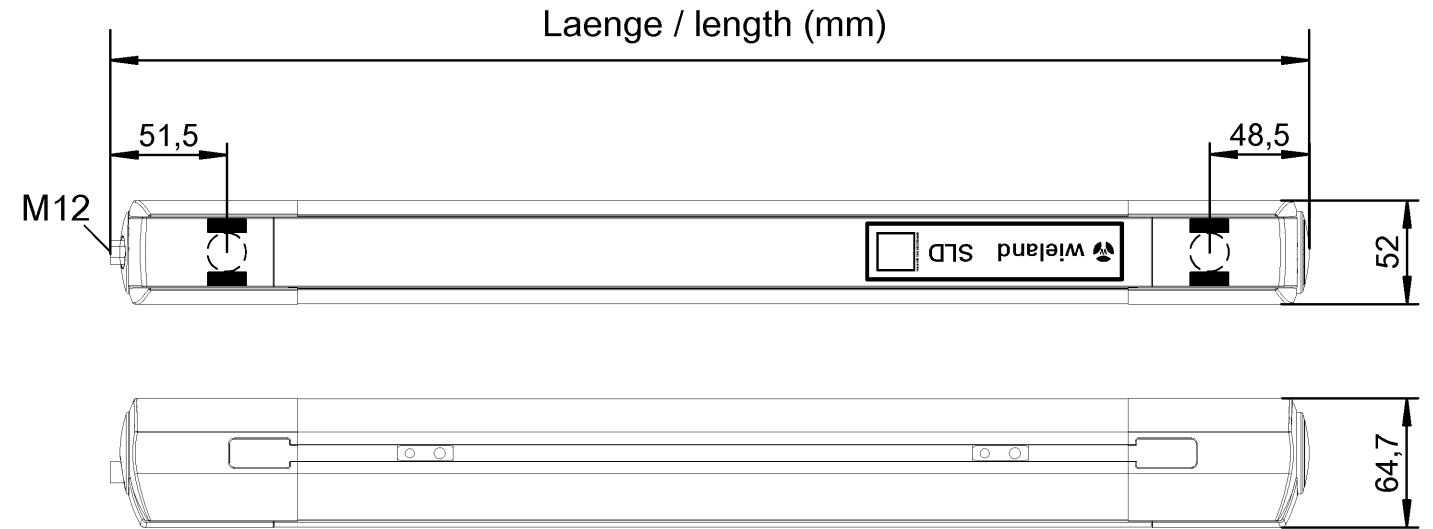
SLD - Universal Select

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.645.2000.0             | 600                     |
| R1.645.3000.0             | 900                     |

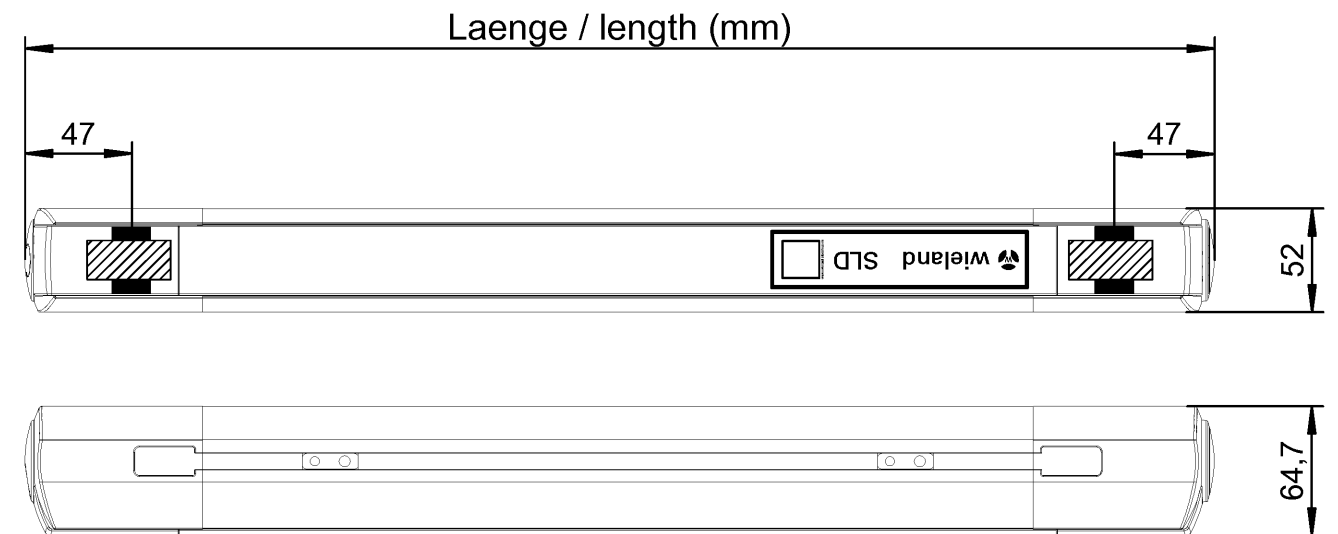
SLD - Universal Professional

| Teilenummer /<br>Part No. | Laenge /<br>length (mm) |
|---------------------------|-------------------------|
| R1.648.2000.0             | 600                     |
| R1.648.2200.0             | 600                     |
| R1.648.3000.0             | 900                     |
| R1.648.3200.0             | 900                     |

Ausfuehrung gezeichnet als 2-strahliger Sender, Empfaenger /  
drawn version as 2-beams transmitter, receiver



Ausfuehrung gezeichnet als 2-strahliger Umlenkspiegel /  
drawn version as 2-beams deflection mirror



Weitere Angaben siehe KATALOG oder eKatalog.  
Additional data see CATALOG or eCatalog.

www.wieland-electric.com  
eshop.wieland-electric.com

ja/yes ☒ Stoffverbots- und Deklarationsliste nach WN 5020.010 ist einzuhalten.  
Conformity with Wieland document WN 5020.010 e (list of prohibited / declarable hazardous substances) to be declared!

|                                        |                               |                                                                                                                                  |                           |                                     |                                                 |
|----------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------|-------------------------------------------------|
| Freitoleranz nach<br>General tolerance |                               | CAD-Zeichnung, keine manuellen Änderungen<br>CAD drawing, no manual modifications allowed                                        |                           | 1. Verwendung:<br>First Use:        | Blatt:<br>Sheet:                                |
|                                        |                               | Werkstoff / Material                                                                                                             | 2015                      | Tag/Date                            | Name                                            |
|                                        |                               |                                                                                                                                  | gezeichnet<br>drawn       | 04.05.                              | Koetzner                                        |
|                                        |                               | Maßstab/Scale                                                                                                                    | geprüft<br>checked        |                                     |                                                 |
|                                        |                               |                                                                                                                                  | Normgepr.<br>Stand. check |                                     |                                                 |
| ©                                      | 05.10.18                      | Datei / File: 40641_C01K.DCD                                                                                                     |                           | Ersatz für / Replacement for:       |                                                 |
| ⓑ                                      | 13.03.17                      |  <b>wieland</b><br>www.wieland-electric.com |                           | Type                                | Benennung / Title                               |
| Ⓐ                                      | 20.07.15                      |                                                                                                                                  |                           |                                     | Teilespezifikation /<br>Component specification |
| Index                                  | Datum / Blatt<br>Date / Sheet |                                                                                                                                  |                           | Lichtgitter SLD /<br>light grid SLD |                                                 |
| Änderung / Revision                    |                               |                                                                                                                                  |                           |                                     |                                                 |

Zeichnung Nr. / Drawing No.  
**T R1.606.2008.0 01K**

Maße in mm / Dimensions are in mm