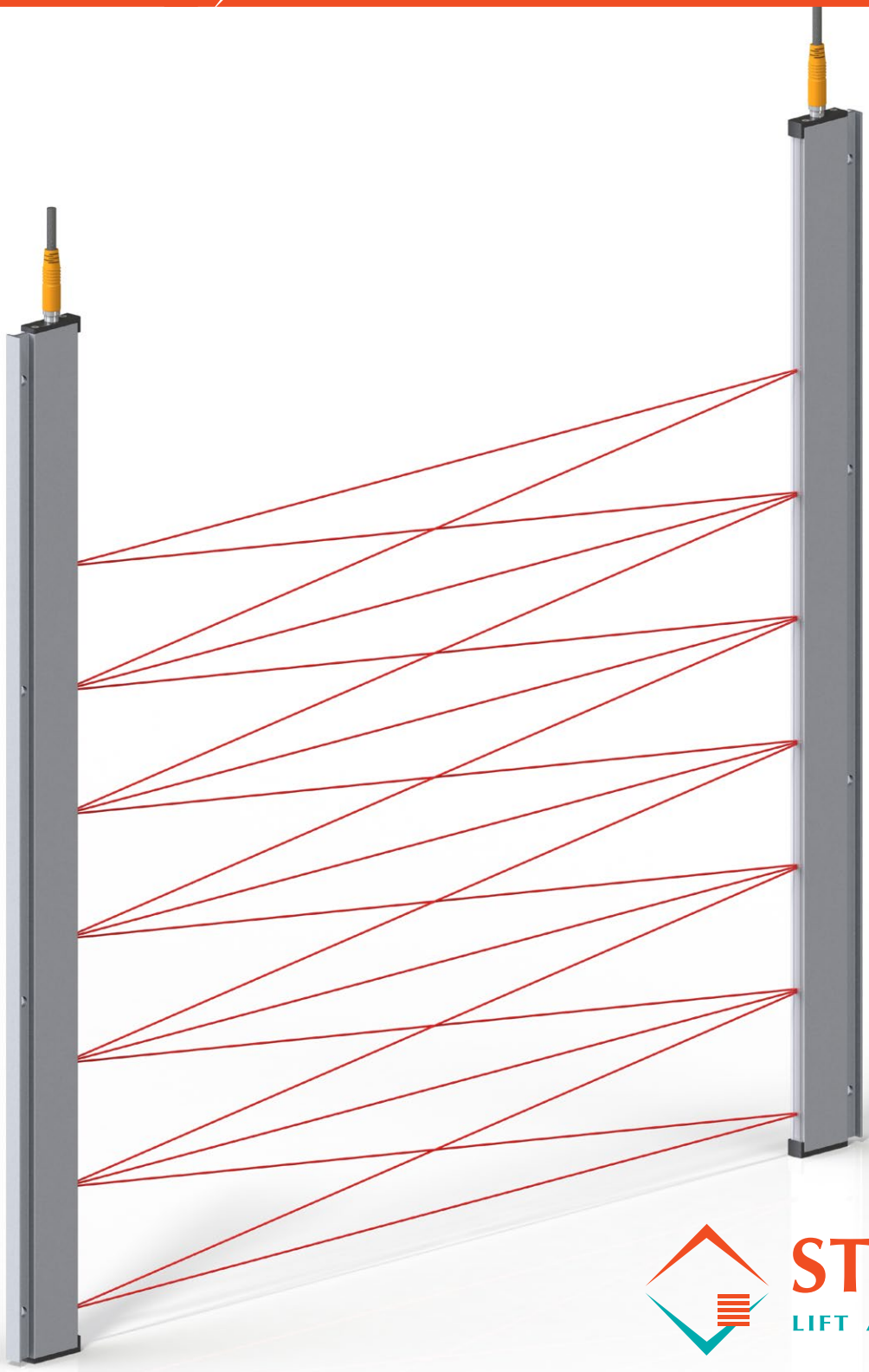
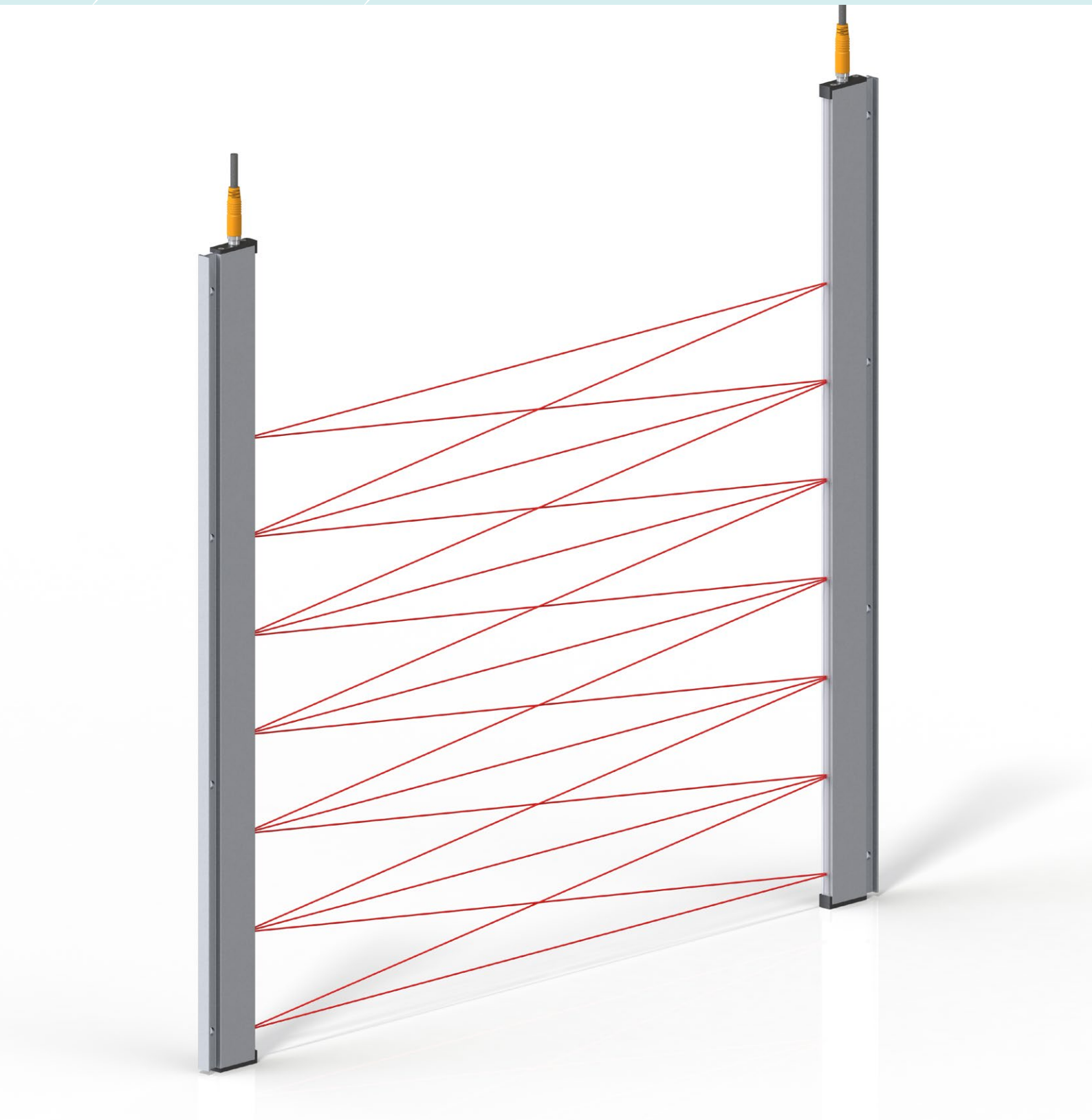


STRACK
LIFT AUTOMATION

ILG

STRACK LIFT AUTOMATION GmbH
Lise-Meitner-Straße 2
42489 Wülfrath
GERMANY

Tel. +49 2058 89328 - 0
Fax +49 2058 89328 - 99
sales@liftnet.org
www.liftnet.org



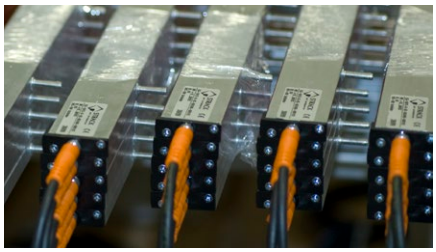
ILG

Light grid with slim shape and range 5 m or 10 m.

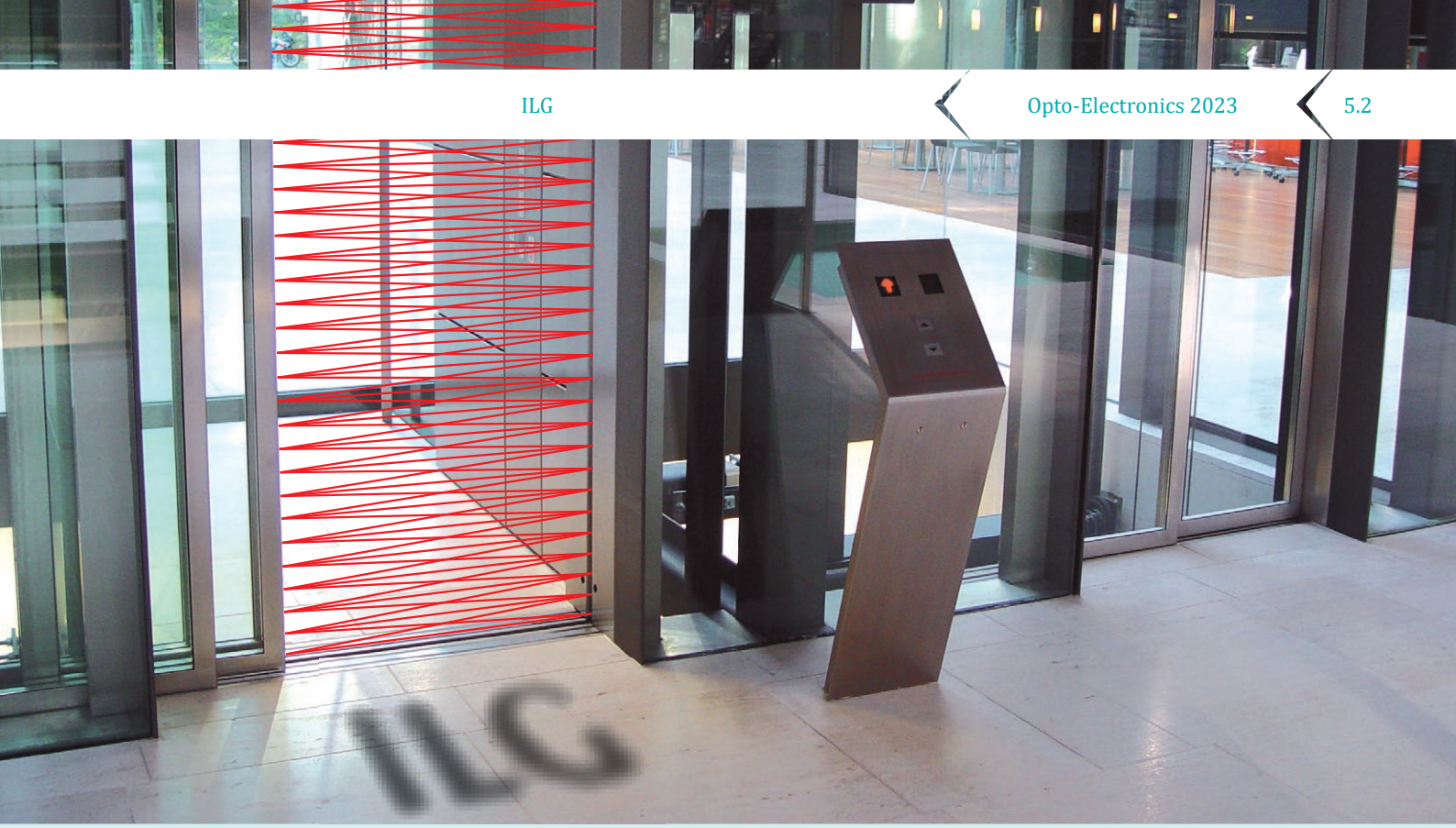
ILG

The ILG is the only slim light grid on the market which in the lowest price segment combines an enormous range of different versions together with high technical capabilities. But there is no need to worry: first of all it is a perfectly normal light grid - simply connect and ready to use. Due to the free parameterability without auxiliaries you can, however, adapt the ILG directly on site to most unforeseen installation situations and customer wishes, such as hiding one or more disruptive objects of any size in the light path, or inverting the function of the output. Illuminated ILG, ILG with heating, adjustable buzzers etc. are also available.

ILG light grids are used as reversing devices on doors and gates, in passenger lifts, on access openings in industrial production, in automatic stores, for the monitoring of cargo, etc.



Configuration example: ILG-LED,
the ILG with integrated red-green LEDs for
signalization of „door will close/closes/is open“



ILG at a glance:

- *slim 9 mm*
- *range 5 m or 10 m with much reserve*
- *automatic sensitivity control with parallel and cross beams close to „zero“ distance*
- *outstanding ambient light immunity > 200,000 lux*
- *parametrisable on site without any auxiliaries*
- *output either electronic NO or NC contact, potential-free*
- *switch-on and switch-off delay*
- *test input*
- *ray failure toleration*
- *cut-out of channels on site as desired*
- *completely integrated electronics*
- *EN 81-20 and EN 81-70*
- *high reliability e.g. by 48 hour routine test*
- *budget-priced*
- *option: non-halog., pluggable cable of high flexibility, for >50 millon door movements*
- *option: buzzer (see NTR 12)*
- *option: red/green LED door signalling (ILG-LED)*
- *option: integrated heating*

Product specification

Fully automatic control: The signal intensity of the ILG is automatically controlled. This ensures that there is steady and optimum luminous power at close range, at extreme values and in the case of contamination, without any readjustment being necessary. Even in the case of ILG which moves along with the doors or gate, this functionality is maintained down close to zero distance, irrespective of the closing speed.

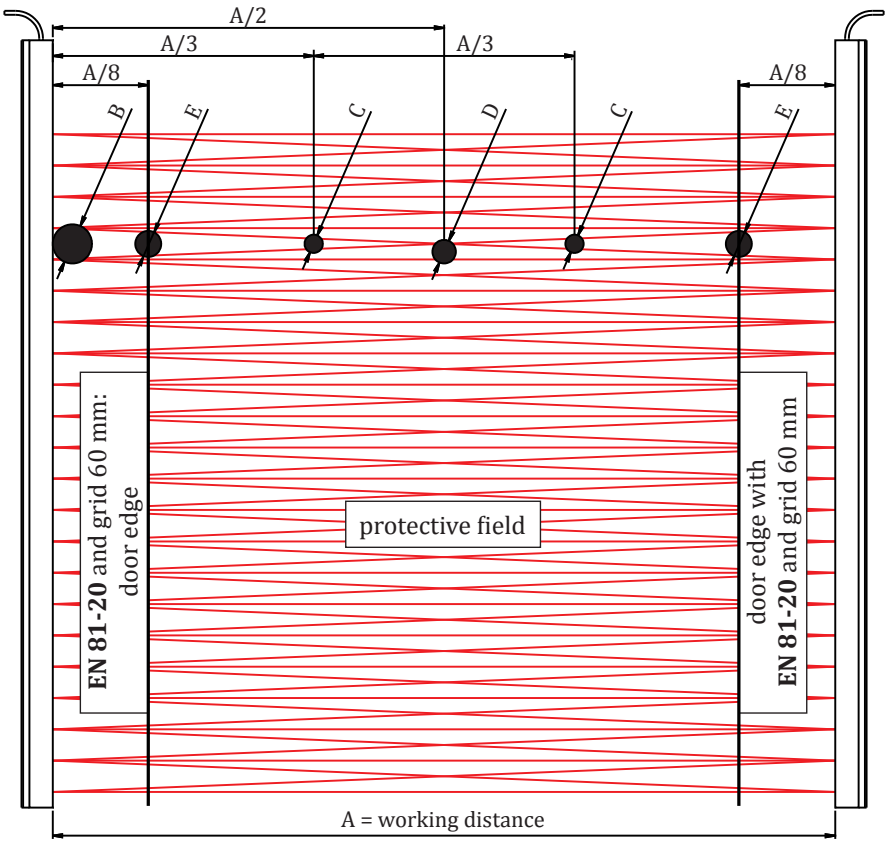
Parametrisable on site: All parameters of the ILG can be set on site without the need of additional devices. Functions like output NO/NC, ray failure toleration, channel cut-out, test input high or low active, switch-on delay, switch-off delay, and more can be set. Only the parameter of the transmitter must be set. The data are transmitted optically to the receiver and are stored in both.

Ray failure toleration: If it is observed during operation that up to 3 of the channels are not switching for more than 60 seconds, the ILG identifies a defect and deactivates this channels. The ILG then functions normally again, but shows the faulty channel with the red error LED.

Free cut-out of channels: If you cover some channels and activate the function "channel cut-out", the ILG deactivates the hidden channels and saves this configuration permanently. After removing the cover the ILG functions normally, but without the deactivated channels. This procedure can be repeated all the time.

Test input: The ILG can be checked for correct function by means of the test input. The transmitter switches off with signal at this input. The receiver output then has to switch off as well; this can be monitored by the master control.

Switch-on delay (door-open period): As soon as the optical path of the ILG becomes clear (again), the ILG normally switches to alert with the shortest possible response time. It is, however, possible to parameterize a switch-on delay to slow down the alerting. This enables you to realize a door-open period on older doors without further expense when retrofitting the ILG.



Object recognition with cross beams

The distance between the individual light beams is, directly at the sensor units, the same as the distance between the LEDs (channels). Owing to the triple crossing of the light beams, a higher resolution occurs in the centre section of the safe area than directly at the sensor units. In the drawing on the left, the size of the clearly recognised objects is indicated with B, C, D, E. Thus, for the different light grid versions the following applies:

grid 12: ***B=123 mm*** *D=63 mm C=43 mm*

grid 06: ***B= 63 mm*** *D=33 mm C=23 mm*

grid 05: ***B= 50 mm*** *D=27 mm C=19 mm*

grid 04: ***B= 43 mm*** *D=23 mm C=17 mm*

grid 02: ***B= 23 mm*** *D=13 mm C=10 mm*

EN 81-20

Acc. to EN 81-20 the light grid must recognize objects with a diameter of 50 mm (B in the left drawing) at power-operated lift doors. Light grids with channel grid 02 and 04 meet the standards without restriction. At grid 05, cross beams must be parameterized (standard), at grid 06 each sensor unit also must be fitted recessed to min. A/8 from the edge of the door (E in the left drawing), e.g. with a clear door width of 900 mm at least 113 mm. Grid 12 is not allowed acc. to EN 81-20.

Switch-off delay (function „slow light grid“): It is also possible to parameterize a switch-off delay to slow down the recognition of the interrupted optical path. Example: If a switch-off delay of 1 second is parameterized, the ILG will switch off the output only when the light beam has been permanently interrupted for more than 1 second.

Heating: An ILG with temperature controlled heating in the sensor units is available. In combination with the small dimensions, this feature is also unique on the market.

LED illumination: The version ILG-LED is illuminated with red and green LEDs. The sensor strips are preferably mounted on the door leaves. When the door opens, or if it is already open, the ILG-LED lights up in green to show that „everything is okay“. Before the door begins to close, it flashes several times in red to indicate „caution, the door is about to close“. When the door is closing, or if it is already closed, it remains red. If the door is closed for more than 60 seconds, the LEDs go off in order to save energy. The ILG-LED therefore offers additional safety and a „visible investment“ for your customer. It is particularly well-suited, for example, for retirement homes, hospitals and public buildings.

Buzzer: An optional buzzer function is available when using the optional power supply NTR12. The buzzer sounds when the light grid is interrupted for too long (time selectable) or immediately when the interruption occurs, with a selectable maximum duration. The buzzer can sound at intervals or continously, and it can be deactivated.

Electronics: The complete electronic system is integrated in the sensor units, so that with 10-30V DC no separate power supply unit is required. The relay output is potential-free and electronic, i.e. without contacts and wear-resistant. The closing or opening function can be selected. With the optional NTR12 power supply unit, direct connection to the mains power supply is also possible.

EN 81-20: The standard is met when the light rays are between 25 and 1600 mm above the car door threshold and the light grid can detect a foreign object with a size of at least 50 mm. Use min. ILG-28/06 that you mount recessed from the front edge of the cabin door (mobile or fixed mount) (see „Object recognition with cross beams“).
If you also want to mount the light grid directly on the door edge, please use min. **ILG-35/05 (preferred type)** or ILG-42/04.

Acc. to EN 81-20 a failure of the light grid must be recognized. The default test input of the ILG is available for it (see „Test input“).

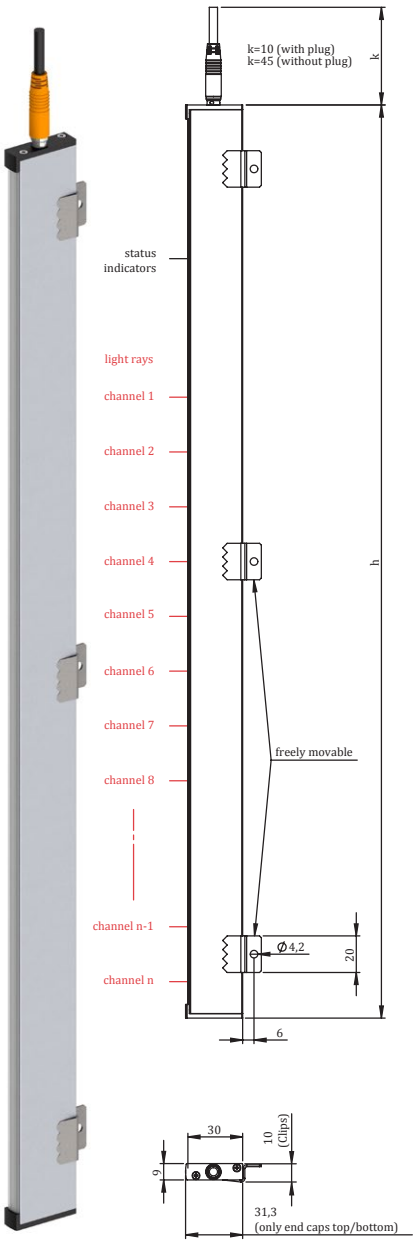
EN 81-70: The standard is met when the light rays are between 25 and 1800 mm above the cabin door threshold. Use for this purpose min. ILG-31/06, **ILG-39/05 (preferred type)** or ILG-46/04, please.

Restrictions: It is not permissible for ILG to be used in applications in which the safety of passengers depends exclusively on the function of this device. Also it is not allowed to use the ILG in explosive hazard areas.

ILG-N

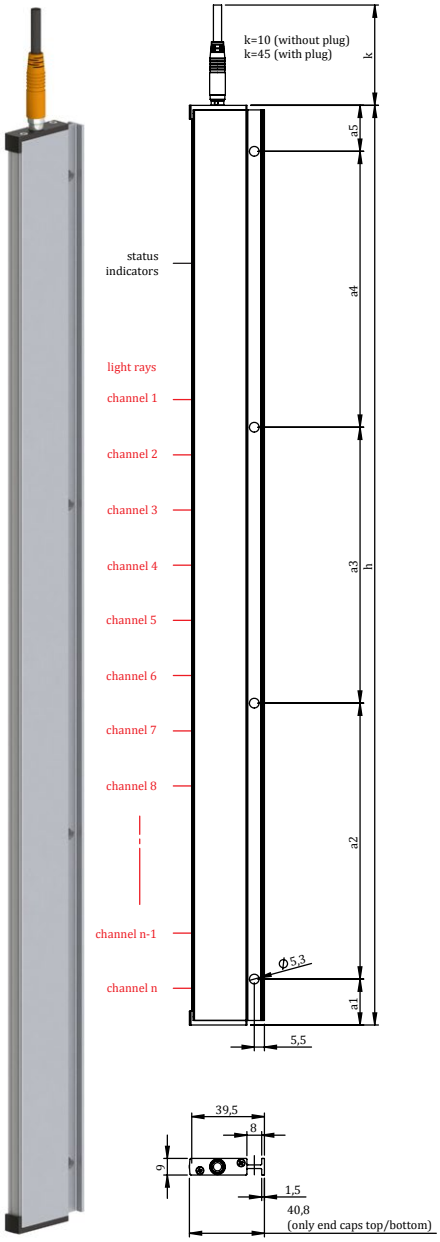
Normal (with stainless steel clamps)

(optional installation kit see page 24)



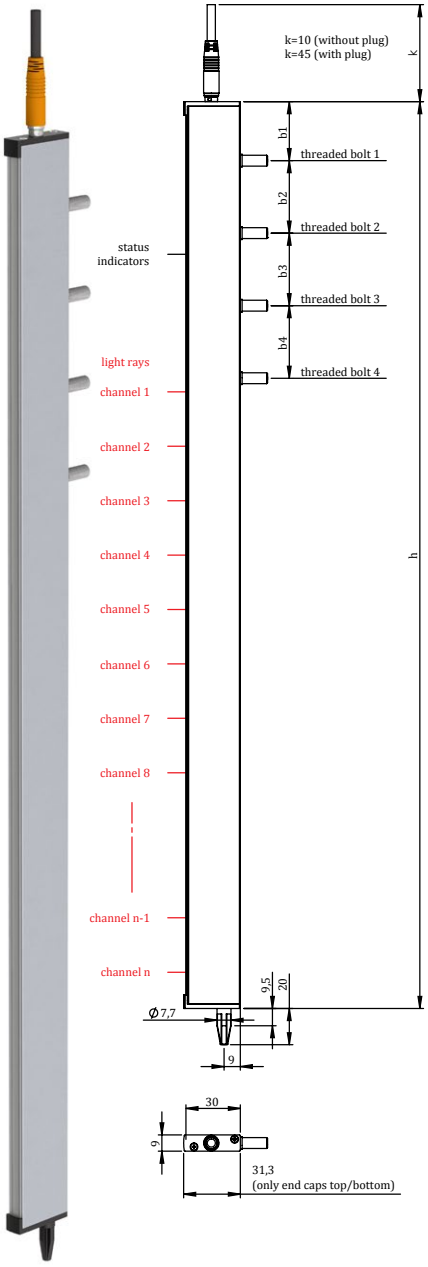
ILG-L

with strap

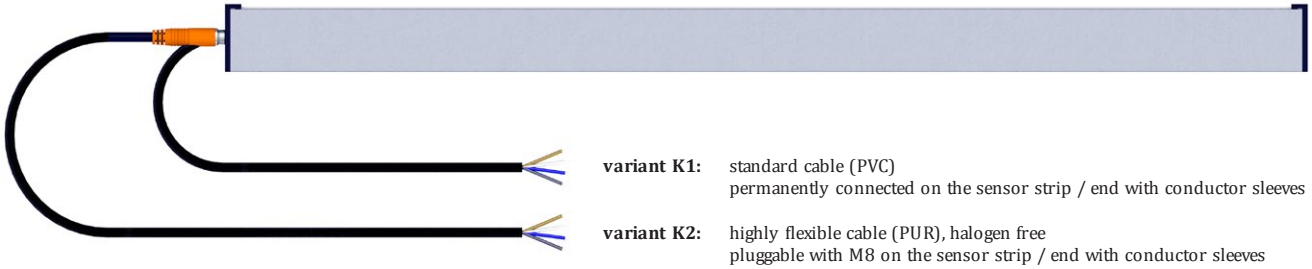


ILG-B

with bolts



Cable variants

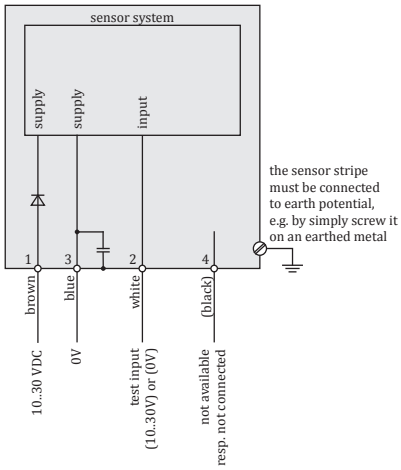


variant K1: standard cable (PVC)
permanently connected on the sensor strip / end with conductor sleeves

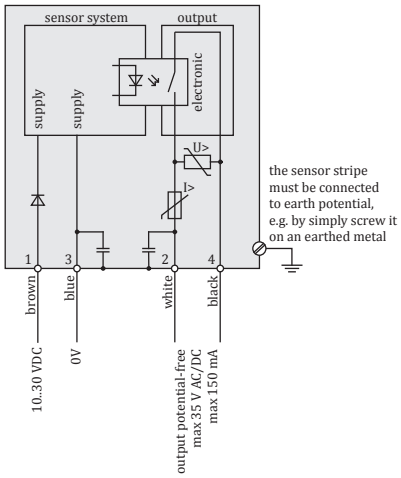
variant K2: highly flexible cable (PUR), halogen free
pluggable with M8 on the sensor strip / end with conductor sleeves

Connection ILG

transmitter

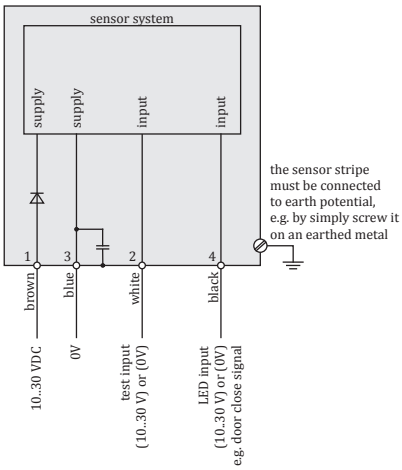


receiver

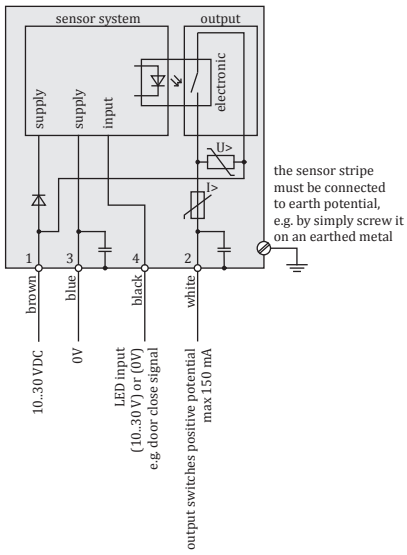


Connection ILG-LED

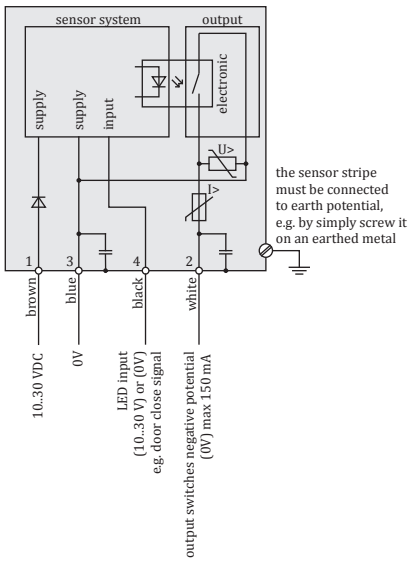
transmitter



receiver LEDP (positive output)



receiver LEDN (negative output)



Connector pin assignments

M8 connector
(view onto the pins)

M12 connector
(view onto the pins)

Order data

Type code: a-c-e/g-i-m-p(/q)(-x)(/y)

Example: 685-ILG-35/05-N-K2-05

Customer-specific special versions:
It is possible to position the threaded bolts according to your requirements, to omit the base pin at the lower end of the unit, to use other positions of bolts, etc. We would be pleased to manufacture your special ILG.

a	article category	685	
c	model	ILG	
e	number of channels	03 - 64	number of channels (number of light rays = 3 x number of channels - 2)
g	channel grid	02	20 mm
		04	40 mm
		05	47 mm (recomended for EN 81-20)
		06	60 mm
		12	120 mm
i	profile type	N	normal (standard model, incl. mounting clamps made of stainless steel)
		L	with mounting strap
		B	with threaded bolt
m	connecting cable	K1	standard PVC / permanently connected at sensor strip / end with conductor sleeves
		K2	highly flexible cable PUR halogen free / pluggable with M8 at sensor strip / end with conductor sleeves
p	cable length	00	0 m (only with plug-and-socket connector M8 at sensor strip)
		02	2 m
		05	5 m (standard)
		10	10 m
q	special profile length in mm	0000 - 3100	(if not specified, then the lengths are according to the following tables)
x	special variant *(several special variants also can be strung to each other)*	H	with integrated regulated heater (LED illumination not possible)
		R...	range 10 m (5 m is standard)
		LEDP	with red-/green LED illumination and positive receiver output (integrated heater not possible)
		LEDN	with red-/green LED illumination and negative receiver output (integrated heater not possible)
		S001	special variant No. 001 (e.g. other positions of threaded bolts)
y		S...	transmitter strip (optionally followed by the software version, e.g. S3)
		E...	receiver strip (optionally followed by the software version, e.g. E3)
		...	complete system (transmitter and receiver strip)

Form of delivery / Packing:
We ship (related to pairs of ILG with/without NTR power supply) in single and multi-part cartons.
Example: single carton for 1 pair of ILG with 2070 mm length: weight: 1800 g (without ILG), carton dimensions HxWxD: 2180x160x120

Length variants ILG with channel grid 120 mm

Grid code 12 / channels at heigth (mm): 20, 140, 260, 380, ...

Number of channels	Number of light rays	Overall length h (mm)	Lowest channel at height (mm)	Highest channel at heigth (mm)	ILG variant	Dimension a1 (mm)	Dimension a2 (mm)	Dimension a3 (mm)	Dimension a4 (mm)	Dimension a5 (mm)	Bolt size (mm)	Dimension b1 (mm)	Dimension b2 (mm)	Dimension b3 (mm)	Dimension b4 (mm)
3	7	**510**	20	260	..-03/12-..	25	230	0	230	25	M4x15	15	0	0	0
4	10	**630**	20	380	..-04/12-..	25	290	0	290	25	M4x15	15	0	0	0
5	13	**750**	20	500	..-05/12-..	25	350	0	350	25	M4x15	15	0	0	0
6	16	**870**	20	620	..-06/12-..	25	410	0	410	25	M4x15	15	200	0	0
7	19	**990**	20	740	..-07/12-..	25	470	0	470	25	M4x15	15	200	0	0
8	22	**1110**	20	860	..-08/12-..	25	530	0	530	25	M4x15	15	200	0	0
9	25	**1230**	20	980	..-09/12-..	25	590	0	590	25	M4x15	15	200	0	0
10	28	**1350**	20	1100	..-10/12-..	25	650	0	650	25	M4x15	15	200	0	0
11	31	**1470**	20	1220	..-11/12-..	25	710	0	710	25	M4x15	15	200	0	0
12	34	**1590**	20	1340	..-12/12-..	25	770	0	770	25	M4x15	15	200	0	0
13	37	**1710**	20	1460	..-13/12-..	25	830	0	830	25	M4x15	15	200	0	0
14	40	**1830**	20	1580	..-14/12-..	25	890	0	890	25	M4x15	15	200	0	0
15	43	**1950**	20	1700	..-15/12-..	25	650	600	650	25	M4x15	15	200	0	0
16	46	**2070**	20	1820	..-16/12..	25	690	640	690	25	M4x15	15	200	0	0
17	49	**2190**	20	1940	..-17/12-..	25	730	680	730	25	M4x15	15	200	0	0
18	52	**2310**	20	2060	..-18/12-..	25	770	720	770	25	M4x15	15	200	0	0
19	55	**2430**	20	2180	..-19/12-..	25	810	760	810	25	M4x15	15	200	0	0
20	58	**2550**	20	2300	..-20/12-..	25	850	800	850	25	M4x15	15	200	0	0
21	61	**2670**	20	2420	..-21/12-..	25	890	840	890	25	M4x15	15	200	0	0
22	64	**2790**	20	2540	..-22/12-..	25	930	880	930	25	M4x15	15	200	0	0
23	67	**2910**	20	2660	..-23/12-..	25	970	920	970	25	M4x15	15	200	0	0
24	70	**3030**	20	2780	..-24/12-..	25	1010	960	1010	25	M4x15	15	200	0	0

Length variants ILG with channel grid 60 mm

Grid code 06 / channels at heigth (mm): 20, 80, 140, 200, ...

Number of channels	Number of light rays	Overall length h (mm)	Lowest channel at height (mm)	Highest channel at heigth (mm)	ILG variant	Dimension a1 (mm)	Dimension a2 (mm)	Dimension a3 (mm)	Dimension a4 (mm)	Dimension a5 (mm)	Bolt size (mm)	Dimension b1 (mm)	Dimension b2 (mm)	Dimension b3 (mm)	Dimension b4 (mm)
3	7	**330**	20	140	..-03/06..	25	0	280	0	25	M4x15	15	0	0	0
4	10	**390**	20	200	..-04/06..	25	0	340	0	25	M4x15	15	0	0	0
5	13	**450**	20	260	..-05/06..	25	0	400	0	25	M4x15	15	0	0	0
6	16	**510**	20	320	..-06/06..	25	230	0	230	25	M4x15	15	0	0	0
7	19	**570**	20	380	..-07/06..	25	260	0	260	25	M4x15	15	0	0	0
8	22	**630**	20	440	..-08/06..	25	290	0	290	25	M4x15	15	0	0	0
10	28	**750**	20	560	..-10/06..	25	350	0	350	25	M4x15	15	200	0	0
11	31	**810**	20	620	..-11/06..	25	380	0	380	25	M4x15	15	200	0	0
12	34	**870**	20	680	..-12/06..	25	410	0	410	25	M4x15	15	200	0	0
13	37	**930**	20	740	..-13/06..	25	440	0	440	25	M4x15	15	200	0	0
14	40	**990**	20	800	..-14/06..	25	470	0	470	25	M4x15	15	200	0	0
15	43	**1050**	20	860	..-15/06..	25	500	0	500	25	M4x15	15	200	0	0
16	46	**1110**	20	920	..-16/06..	25	530	0	530	25	M4x15	15	200	0	0
18	52	**1230**	20	1040	..-18/06..	25	590	0	590	25	M4x15	15	200	0	0
19	55	**1290**	20	1100	..-19/06..	25	620	0	620	25	M4x15	15	200	0	0
20	58	**1350**	20	1160	..-20/06..	25	650	0	650	25	M4x15	15	200	0	0
21	61	**1410**	20	1220	..-21/06..	25	680	0	680	25	M4x15	15	200	0	0
22	64	**1470**	20	1280	..-22/06..	25	710	0	710	25	M4x15	15	200	0	0
23	67	**1530**	20	1340	..-23/06..	25	740	0	740	25	M4x15	15	200	0	0
24	70	**1590**	20	1400	..-24/06..	25	770	0	770	25	M4x15	15	200	0	0
26	76	**1710**	20	1520	..-26/06..	25	830	0	830	25	M4x15	15	200	0	0
27	79	**1770**	20	1580	..-27/06..	25	860	0	860	25	M4x15	15	200	0	0
28	82	**1830**	20	1640	..-28/06..	25	890	0	890	25	M4x15	15	200	0	0
29	85	**1890**	20	1700	..-29/06..	25	630	580	630	25	M4x15	15	200	0	0
30	88	**1950**	20	1760	..-30/06..	25	650	600	650	25	M4x15	15	200	0	0
31	91	**2010**	20	1820	..-31/06..	25	670	620	670	25	M4x15	15	200	0	0
32	94	**2070**	20	1880	..-32/06..	25	690	640	690	25	M4x15	15	200	0	0
34	100	**2190**	20	2000	..-34/06..	25	730	680	730	25	M4x15	15	200	0	0
35	103	**2250**	20	2060	..-35/06..	25	750	700	750	25	M4x15	15	200	0	0
36	106	**2310**	20	2120	..-36/06..	25	770	720	770	25	M4x15	15	200	0	0
37	109	**2370**	20	2180	..-37/06..	25	790	740	790	25	M4x15	15	200	0	0
38	112	**2430**	20	2240	..-38/06..	25	810	760	810	25	M4x15	15	200	0	0
39	115	**2490**	20	2300	..-39/06..	25	830	780	830	25	M4x15	15	200	0	0
40	118	**2550**	20	2360	..-40/06..	25	850	800	850	25	M4x15	15	200	0	0
42	124	**2670**	20	2480	..-42/06..	25	890	840	890	25	M4x15	15	200	0	0
43	127	**2730**	20	2540	..-43/06..	25	910	860	910	25	M4x15	15	200	0	0
44	130	**2790**	20	2600	..-44/06..	25	930	880	930	25	M4x15	15	200	0	0
45	133	**2850**	20	2660	..-45/06..	25	950	900	950	25	M4x15	15	200	0	0
46	136	**2910**	20	2720	..-46/06..	25	970	920	970	25	M4x15	15	200	0	0
47	139	**2970**	20	2780	..-47/06..	25	990	940	990	25	M4x15	15	200	0	0
48	142	**3030**	20	2840	..-48/06..	25	1010	960	1010	25	M4x15	15	200	0	0

Length variants ILG with channel grid 47 mm

Grid code 05 / channels at heigth (mm): 20, 67, 114, 161, ...

= preferred type: | 685-ILG-35/05-N-K1-05 | 685-ILG-35/05-N-K2-05 | 685-ILG-39/05-N-K1-05 | 685-ILG-39/05-N-K2-05 |

Number of channels	Number of light rays	Overall length h (mm)	Lowest channel at height (mm)	Highest channel at heigth (mm)	ILG variant	Dimension a1 (mm)	Dimension a2 (mm)	Dimension a3 (mm)	Dimension a4 (mm)	Dimension a5 (mm)	Bolt size (mm)	Dimension b1 (mm)	Dimension b2 (mm)	Dimension b3 (mm)	Dimension b4 (mm)
3	7	**294**	20	114	..-03/05..	25	0	244	0	25	M4x15	15	0	0	0
4	10	**341**	20	161	..-04/05..	25	0	291	0	25	M4x15	15	0	0	0
5	13	**388**	20	208	..-05/05..	25	0	338	0	25	M4x15	15	0	0	0
6	16	**435**	20	255	..-06/05..	25	0	385	0	25	M4x15	15	0	0	0
7	19	**482**	20	302	..-07/05..	25	0	432	0	25	M4x15	15	0	0	0
8	22	**529**	20	349	..-08/05..	25	0	479	0	25	M4x15	15	0	0	0
10	28	**623**	20	443	..-10/05..	25	286,5	0	286,5	25	M4x15	15	0	0	0
11	31	**670**	20	490	..-11/05..	25	310	0	310	25	M4x15	15	200	0	0
12	34	**717**	20	537	..-12/05..	25	333,5	0	333,5	25	M4x15	15	200	0	0
13	37	**764**	20	584	..-13/05..	25	357	0	357	25	M4x15	15	200	0	0
14	40	**811**	20	631	..-14/05..	25	380,5	0	380,5	25	M4x15	15	200	0	0
15	43	**858**	20	678	..-15/05..	25	404	0	404	25	M4x15	15	200	0	0
16	46	**905**	20	725	..-16/05..	25	427,5	0	427,5	25	M4x15	15	200	0	0
18	52	**999**	20	819	..-18/05..	25	474,5	0	474,5	25	M4x15	15	200	0	0
19	55	**1046**	20	866	..-19/05..	25	498	0	498	25	M4x15	15	200	0	0
20	58	**1093**	20	913	..-20/05..	25	521,5	0	521,5	25	M4x15	15	200	0	0
21	61	**1140**	20	960	..-21/05..	25	545	0	545	25	M4x15	15	200	0	0
22	64	**1187**	20	1007	..-22/05..	25	568,5	0	568,5	25	M4x15	15	200	0	0
23	67	**1234**	20	1054	..-23/05..	25	592	0	592	25	M4x15	15	200	0	0
24	70	**1281**	20	1101	..-24/05..	25	615,5	0	615,5	25	M4x15	15	200	0	0
26	76	**1375**	20	1195	..-26/05..	25	662,5	0	662,5	25	M4x15	15	200	0	0
27	79	**1422**	20	1242	..-27/05..	25	686	0	686	25	M4x15	15	200	0	0
28	82	**1469**	20	1289	..-28/05..	25	709,5	0	709,5	25	M4x15	15	200	0	0
29	85	**1516**	20	1336	..-29/05..	25	733	0	733	25	M4x15	15	200	0	0
30	88	**1563**	20	1383	..-30/05..	25	756,5	0	756,5	25	M4x15	15	200	0	0
31	91	**1610**	20	1430	..-31/05..	25	780	0	780	25	M4x15	15	200	0	0
32	94	**1657**	20	1477	..-32/05..	25	803,5	0	803,5	25	M4x15	15	200	0	0
34	100	**1751**	20	1571	..-34/05..	25	850,5	0	850,5	25	M4x15	15	200	0	0
35	103	**1798**	20	1618	..-35/05..	25	583	582	583	25	M4x15	15	200	0	0
36	106	**1845**	20	1665	..-36/05..	25	598	599	598	25	M4x15	15	200	0	0
37	109	**1892**	20	1712	..-37/05..	25	614	614	614	25	M4x15	15	200	0	0
38	112	**1939**	20	1759	..-38/05..	25	630	629	630	25	M4x15	15	200	0	0
39	115	**1986**	20	1806	..-39/05..	25	645	646	645	25	M4x15	15	200	0	0
40	118	**2033**	20	1853	..-40/05..	25	661	661	661	25	M4x15	15	200	0	0
42	124	**2127**	20	1947	..-42/05..	25	692	693	692	25	M4x15	15	200	0	0
43	127	**2174**	20	1994	..-43/05..	25	708	708	708	25	M4x15	15	200	0	0
44	130	**2221**	20	2041	..-44/05..	25	724	723	724	25	M4x15	15	200	0	0
45	133	**2268**	20	2088	..-45/05..	25	739	740	739	25	M4x15	15	200	0	0
46	136	**2315**	20	2135	..-46/05..	25	755	755	755	25	M4x15	15	200	0	0
47	139	**2362**	20	2182	..-47/05..	25	771	770	771	25	M4x15	15	200	0	0
48	142	**2409**	20	2229	..-48/05..	25	786	787	786	25	M4x15	15	200	0	0
50	148	**2503**	20	2323	..-50/05..	25	818	817	818	25	M4x15	15	200	0	0
51	151	**2550**	20	2370	..-51/05..	25	833	834	833	25	M4x15	15	200	0	0
52	154	**2597**	20	2417	..-52/05..	25	849	849	849	25	M4x15	15	200	0	0
53	157	**2644**	20	2464	..-53/05..	25	865	864	865	25	M4x15	15	200	0	0
54	160	**2691**	20	2511	..-54/05..	25	880	881	880	25	M4x15	15	200	0	0
55	163	**2738**	20	2558	..-55/05..	25	896	896	896	25	M4x15	15	200	0	0
56	166	**2785**	20	2605	..-56/05..	25	912	913	912	25	M4x15	15	200	0	0
58	172	**2879**	20	2699	..-58/05..	25	943	943	943	25	M4x15	15	200	0	0
59	175	**2926**	20	2746	..-59/05..	25	959	958	959	25	M4x15	15	200	0	0
60	178	**2973**	20	2793	..-60/05..	25	974	975	974	25	M4x15	15	200	0	0
61	181	**3020**	20	2840	..-61/05..	25	990	990	990	25	M4x15	15	200	0	0
62	184	**3067**	20	2887	..-62/05..	25	1006	1005	1006	25	M4x15	15	200	0	0
63	187	**3114**	20	2934	..-63/05..	25	1021	1022	1021	25	M4x15	15	200	0	0
64	190	**3161**	20	2981	..-64/05..	25	1037	1037	1037	25	M4x15	15	200	0	0

preperred type EN 81-20

preferred type EN 81-70

Length variants ILG with channel grid 40 mm

Grid code 04 / channels at heigth (mm): 20, 60, 100, 140, ...

Number of channels	Number of light rays	Overall length h (mm)	Lowest channel at height (mm)	Highest channel at heigth (mm)	ILG variant	Dimension a1 (mm)	Dimension a2 (mm)	Dimension a3 (mm)	Dimension a4 (mm)	Dimension a5 (mm)	Bolt size (mm)	Dimension b1 (mm)	Dimension b2 (mm)	Dimension b3 (mm)	Dimension b4 (mm)
3	7	**280**	20	100	..-03/04..	25	0	230	0	25	M4x15	15	0	0	0
4	10	**320**	20	140	..-04/04..	25	0	270	0	25	M4x15	15	0	0	0
5	13	**360**	20	180	..-05/04..	25	0	310	0	25	M4x15	15	0	0	0
6	16	**400**	20	220	..-06/04..	25	0	350	0	25	M4x15	15	0	0	0
7	19	**440**	20	260	..-07/04..	25	0	390	0	25	M4x15	15	0	0	0
8	22	**480**	20	300	..-08/04..	25	0	430	0	25	M4x15	15	0	0	0
10	28	**560**	20	380	..-10/04..	25	255	0	255	25	M4x15	15	0	0	0
11	31	**600**	20	420	..-11/04..	25	275	0	275	25	M4x15	15	0	0	0
12	34	**640**	20	460	..-12/04..	25	295	0	295	25	M4x15	15	0	0	0
13	37	**680**	20	500	..-13/04..	25	315	0	315	25	M4x15	15	200	0	0
14	40	**720**	20	540	..-14/04..	25	335	0	335	25	M4x15	15	200	0	0
15	43	**760**	20	580	..-15/04..	25	355	0	355	25	M4x15	15	200	0	0
16	46	**800**	20	620	..-16/04..	25	375	0	375	25	M4x15	15	200	0	0
18	52	**880**	20	700	..-18/04..	25	415	0	415	25	M4x15	15	200	0	0
19	55	**920**	20	740	..-19/04..	25	435	0	435	25	M4x15	15	200	0	0
20	58	**960**	20	780	..-20/04..	25	455	0	455	25	M4x15	15	200	0	0
21	61	**1000**	20	820	..-21/04..	25	475	0	475	25	M4x15	15	200	0	0
22	64	**1040**	20	860	..-22/04..	25	495	0	495	25	M4x15	15	200	0	0
23	67	**1080**	20	900	..-23/04..	25	515	0	515	25	M4x15	15	200	0	0
24	70	**1120**	20	940	..-24/04..	25	535	0	535	25	M4x15	15	200	0	0
26	76	**1200**	20	1020	..-26/04..	25	575	0	575	25	M4x15	15	200	0	0
27	79	**1240**	20	1060	..-27/04..	25	595	0	595	25	M4x15	15	200	0	0
28	82	**1280**	20	1100	..-28/04..	25	615	0	615	25	M4x15	15	200	0	0
29	85	**1320**	20	1140	..-29/04..	25	635	0	635	25	M4x15	15	200	0	0
30	88	**1360**	20	1180	..-30/04..	25	655	0	655	25	M4x15	15	200	0	0
31	91	**1400**	20	1220	..-31/04..	25	675	0	675	25	M4x15	15	200	0	0
32	94	**1440**	20	1260	..-32/04..	25	695	0	695	25	M4x15	15	200	0	0
34	100	**1520**	20	1340	..-34/04..	25	735	0	735	25	M4x15	15	200	0	0
35	103	**1560**	20	1380	..-35/04..	25	755	0	755	25	M4x15	15	200	0	0
36	106	**1600**	20	1420	..-36/04..	25	775	0	775	25	M4x15	15	200	0	0
37	109	**1640**	20	1460	..-37/04..	25	795	0	795	25	M4x15	15	200	0	0
38	112	**1680**	20	1500	..-38/04..	25	815	0	815	25	M4x15	15	200	0	0
39	115	**1720**	20	1540	..-39/04..	25	835	0	835	25	M4x15	15	200	0	0
40	118	**1760**	20	1580	..-40/04..	25	855	0	855	25	M4x15	15	200	0	0
42	124	**1840**	20	1660	..-42/04..	25	895	0	895	25	M4x15	15	200	0	0
43	127	**1880**	20	1700	..-43/04..	25	915	0	915	25	M4x15	15	200	0	0
44	130	**1920**	20	1740	..-44/04..	25	635	600	635	25	M4x15	15	200	0	0
45	133	**1960**	20	1780	..-45/04..	25	655	600	655	25	M4x15	15	200	0	0
46	136	**2000**	20	1820	..-46/04..	25	650	650	650	25	M4x15	15	200	0	0
47	139	**2040**	20	1860	..-47/04..	25	670	650	670	25	M4x15	15	200	0	0
48	142	**2080**	20	1900	..-48/04..	25	690	650	690	25	M4x15	15	200	0	0
50	148	**2160**	20	1980	..-50/04..	25	705	700	705	25	M4x15	15	200	0	0
51	151	**2200**	20	2020	..-51/04..	25	725	700	725	25	M4x15	15	200	0	0
52	154	**2240**	20	2060	..-52/04..	25	745	700	745	25	M4x15	15	200	0	0
53	157	**2280**	20	2100	..-53/04..	25	765	700	765	25	M4x15	15	200	0	0
54	160	**2320**	20	2140	..-54/04..	25	760	750	760	25	M4x15	15	200	0	0
55	163	**2360**	20	2180	..-55/04..	25	780	750	780	25	M4x15	15	200	0	0
56	166	**2400**	20	2220	..-56/04..	25	800	750	800	25	M4x15	15	200	0	0
58	172	**2480**	20	2300	..-58/04..	25	815	800	815	25	M4x15	15	200	0	0
59	175	**2520**	20	2340	..-59/04..	25	835	800	835	25	M4x15	15	200	0	0
60	178	**2560**	20	2380	..-60/04..	25	855	800	855	25	M4x15	15	200	0	0
61	181	**2600**	20	2420	..-61/04..	25	875	800	875	25	M4x15	15	200	0	0
62	184	**2640**	20	2460	..-62/04..	25	870	850	870	25	M4x15	15	200	0	0
63	187	**2680**	20	2500	..-63/04..	25	890	850	890	25	M4x15	15	200	0	0
64	190	**2720**	20	2540	..-64/04..	25	910	850	910	25	M4x15	15	200	0	0

Length variants ILG with channel grid 20 mm

Grid code 02 / channels at heigth (mm): 20, 40, 60, 80, ...

Number of channels	Number of light rays	Overall length h (mm)	Lowest channel at height (mm)	Highest channel at heigth (mm)	ILG variant	Dimension a1 (mm)	Dimension a2 (mm)	Dimension a3 (mm)	Dimension a4 (mm)	Dimension a5 (mm)	Bolt size (mm)	Dimension b1 (mm)	Dimension b2 (mm)	Dimension b3 (mm)	Dimension b4 (mm)
4	10	**240**	20	80	685-ILG-04/02..	25	0	190	0	25	M4x15	15	0	0	0
5	13	**260**	20	100	685-ILG-05/02..	25	0	210	0	25	M4x15	15	0	0	0
6	16	**280**	20	120	685-ILG-06/02..	25	0	230	0	25	M4x15	15	0	0	0
7	19	**300**	20	140	685-ILG-07/02..	25	0	250	0	25	M4x15	15	0	0	0
8	22	**320**	20	160	685-ILG-08/02..	25	0	270	0	25	M4x15	15	0	0	0
12	34	**400**	20	240	685-ILG-12/02..	25	0	350	0	25	M4x15	15	0	0	0
13	37	**420**	20	260	685-ILG-13/02..	25	0	370	0	25	M4x15	15	0	0	0
14	40	**440**	20	280	685-ILG-14/02..	25	0	390	0	25	M4x15	15	0	0	0
15	43	**460**	20	300	685-ILG-15/02..	25	0	410	0	25	M4x15	15	0	0	0
16	46	**480**	20	320	685-ILG-16/02..	25	0	430	0	25	M4x15	15	0	0	0
20	58	**560**	20	400	685-ILG-20/02..	25	255	0	255	25	M4x15	15	0	0	0
21	61	**580**	20	420	685-ILG-21/02..	25	265	0	265	25	M4x15	15	0	0	0
22	64	**600**	20	440	685-ILG-22/02..	25	275	0	275	25	M4x15	15	0	0	0
23	67	**620**	20	460	685-ILG-23/02..	25	285	0	285	25	M4x15	15	0	0	0
24	70	**640**	20	480	685-ILG-24/02..	25	295	0	295	25	M4x15	15	0	0	0
28	82	**720**	20	560	685-ILG-28/02..	25	335	0	335	25	M4x15	15	200	0	0
29	85	**740**	20	580	685-ILG-29/02..	25	345	0	345	25	M4x15	15	200	0	0
30	88	**760**	20	600	685-ILG-30/02..	25	355	0	355	25	M4x15	15	200	0	0
31	91	**780**	20	620	685-ILG-31/02..	25	365	0	365	25	M4x15	15	200	0	0
32	94	**800**	20	640	685-ILG-32/02..	25	375	0	375	25	M4x15	15	200	0	0
36	106	**880**	20	720	685-ILG-36/02..	25	415	0	415	25	M4x15	15	200	0	0
37	109	**900**	20	740	685-ILG-37/02..	25	425	0	425	25	M4x15	15	200	0	0
38	112	**920**	20	760	685-ILG-38/02..	25	435	0	435	25	M4x15	15	200	0	0
39	115	**940**	20	780	685-ILG-39/02..	25	445	0	445	25	M4x15	15	200	0	0
40	118	**960**	20	800	685-ILG-40/02..	25	455	0	455	25	M4x15	15	200	0	0
44	130	**1040**	20	880	685-ILG-44/02..	25	495	0	495	25	M4x15	15	200	0	0
45	133	**1060**	20	900	685-ILG-45/02..	25	505	0	505	25	M4x15	15	200	0	0
46	136	**1080**	20	920	685-ILG-46/02..	25	515	0	515	25	M4x15	15	200	0	0
47	139	**1100**	20	940	685-ILG-47/02..	25	525	0	525	25	M4x15	15	200	0	0
48	142	**1120**	20	960	685-ILG-48/02..	25	535	0	535	25	M4x15	15	200	0	0
52	154	**1200**	20	1040	685-ILG-52/02..	25	575	0	575	25	M4x15	15	200	0	0
53	157	**1220**	20	1060	685-ILG-53/02..	25	585	0	585	25	M4x15	15	200	0	0
54	160	**1240**	20	1080	685-ILG-54/02..	25	595	0	595	25	M4x15	15	200	0	0
55	163	**1260**	20	1100	685-ILG-55/02..	25	605	0	605	25	M4x15	15	200	0	0
56	166	**1280**	20	1120	685-ILG-56/02..	25	615	0	615	25	M4x15	15	200	0	0
60	178	**1360**	20	1200	685-ILG-60/02..	25	655	0	655	25	M4x15	15	200	0	0
61	181	**1380**	20	1220	685-ILG-61/02..	25	665	0	665	25	M4x15	15	200	0	0
62	184	**1400**	20	1240	685-ILG-62/02..	25	675	0	675	25	M4x15	15	200	0	0
63	187	**1420**	20	1260	685-ILG-63/02..	25	685	0	685	25	M4x15	15	200	0	0
64	190	**1440**	20	1280	685-ILG-64/02..	25	695	0	695	25	M4x15	15	200	0	0

Technical data

General

nominal range	m	5 or 10 (plus reserve)
ambient temperature	°C	operation/storage -25 to +55, transportation -25 to +70 (without icing and condensation)
ambient relative humidity		operation/storage/transportation 5% to 95%
connecting cable		standard cable: material PVC / structure LIYY (fine wire, unshielded) / good resistance to oil highly flexible cable: material PUR / flame retarding / silicone, halogen and PVC free / good resistance to chemicals and oil / resistant to microbes and hydrolysis / good resistance to welding sparks / very good weather resistance / drag chain suitable
max response time (independent of the number of channels)	ms	with parallel beam configuration: light path becomes obstructed: 50 / light path becomes unobstructed: 72 / test input set: 90 / free again: 112 / operating voltage switch-on: 300 with crossed beam configuration (standard): light path becomes obstructed: 140 / light path becomes unobstructed: 220 / test input set: 180 / free again: 260 / operating voltage switch-on: 300
mounting position		arbitrary

Mechanics

weight per sensor strip	g	440 je m without cable + 32 additionally per m of cable
housing material of sensor strip		sensor strip made of mill-finished aluminium, end caps made of black plastic
material front pane		acryl glass
system of protection EN 60529		IP54

Optics

wavelength of the light rays	nm	880
clock frequency of the light rays	kHz	91
opening angle of the light rays	°	± 10
interfering light tolerance	Lux	200.000 @ 20° (d.c. and low-frequency light sources)

Electronics

operating voltage (min. - max.)	V	without heater: 10-30 DC, residual ripple max. 10% with heater: 11-30 DC, residual ripple max. 10% ILG-LED: 11-30 DC, residual ripple max. 10%
current consumption per pair	mA	standard: 63 (with 8 channels) 84 (with 16 channels) 105 (with 24 channels) 126 (with 32 channels) 147 (with 40 channels) 168 (with 48 channels) 189 (with 56 channels) 210 (with 64 channels) ILG with heater additionally to the standard (@TU less than 10-15°C): at 12VDC: + 100 mA per 8 channels at grid 02, 04, 05, 06 at 12VDC: + 100 mA per 4 channels at grid 12 at 24VDC: + 200 mA per 8 channels at grid 02, 04, 05, 06 at 24VDC: + 200 mA per 4 channels at grid 12 ILG-LED additionally to the standard (with active illumination): + 80 mA per 8 channels at grid 02, 04, 05, 06 + 80 mA per 4 channels at grid 12
switching manner		either 1 potential-free closing contact: electronic “contact” closed when light path is unobstructed or 1 potential-free opening contact: electronic “contact” closed when light path is interrupted
max switching voltage	V	35 AC / DC (resistive load)
max switching current	mA	150 @ TU=20°C / 100 @ TU=55°C (resistive load)
brownout at closed “contact” min / typ / max	V	1,12 / 1,5 / 2,5 (depends on temperature and current)
max leakage current with open “contact”	mA	0,02 @ 20°C / 0,2 @ 60°C
EMC conformity		EN 12015:2021 / EN 12016:2013 / EN 61000-6-1:2007 / EN 61000-6-2:2005 / EN 61000-6-3:2007 + A1:2011 / EN 61000-6-4:2007 + A1:2011

Status indicators

transmitter

yellow LED	Description
off	transmitter is off (no voltage)
on	transmitter is operating
flashing	test input is active

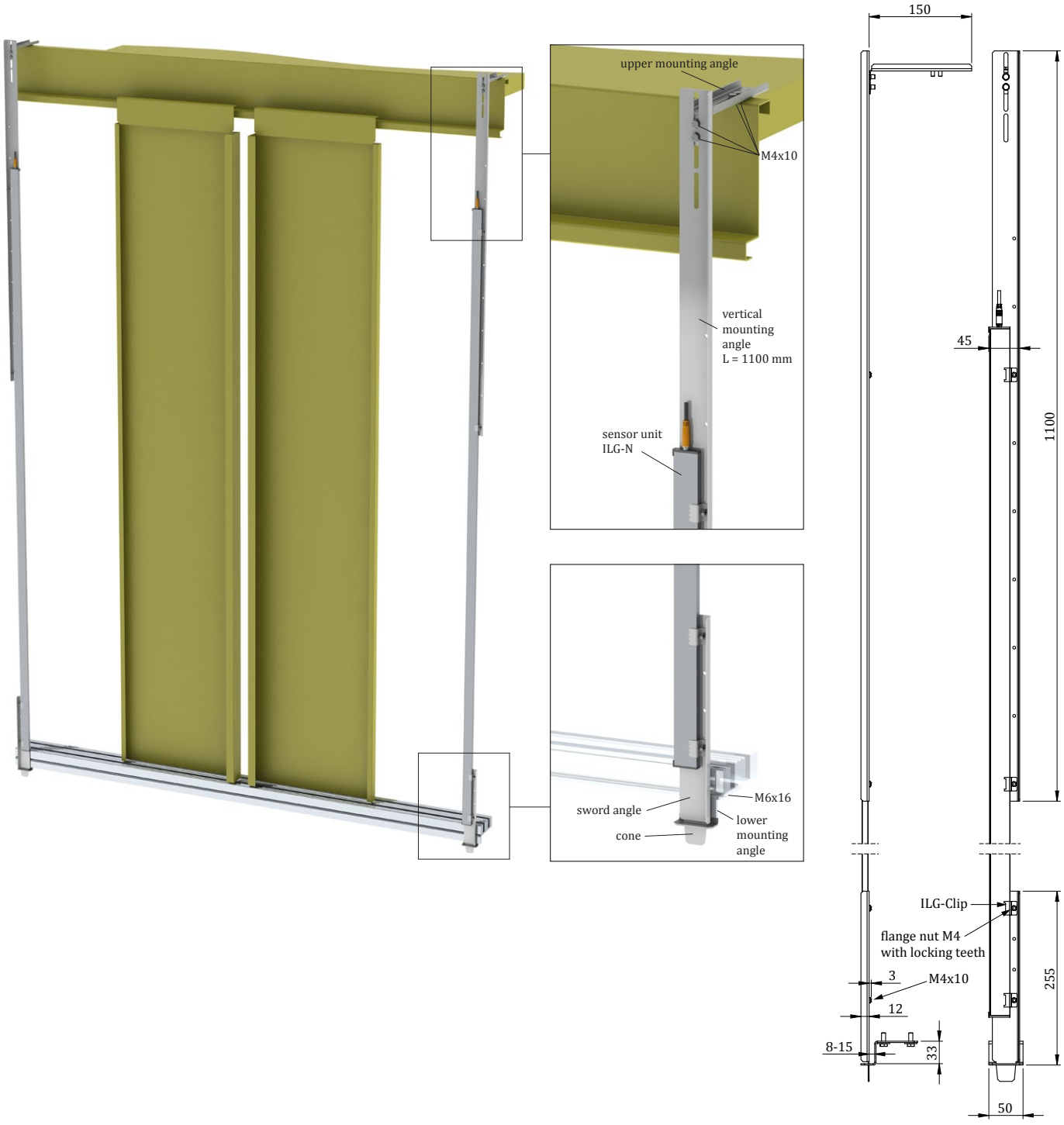
receiver

yellow LED	red LED	Description
off	off	receiver is off (no voltage)
off	on	light path is interrupted (output is not switched)
on	off	light path is unobstructed (output is switched)
on	on	light path is unobstructed, but beam failure tolerance is activated (output is switched)
off	flashing	dirty, incorrectly adjusted or range limit (output is not switched)
on	flashing	dirty, incorrectly adjusted or range limit (output is switched)

UNI-AS2

Installation kit for stationary mounting at lift doors.

The ILG sensor strips are mounted with the help of the universal kit UNI-AS2 in the door operating region between the cabin and the landing door. Thus the ILG-N can be mounted on almost all centrally and laterally opening automatic doors. The mounting kit also serves as an extension of the ILG sensor strips up to 900 mm.



Order data

Type	Item No.	Description
685-UNI-AS2	00078900	UNI-AS2 installation kit for 1 pair of ILG-N for stationary mounting at lift doors