



STRACK
LIFT AUTOMATION

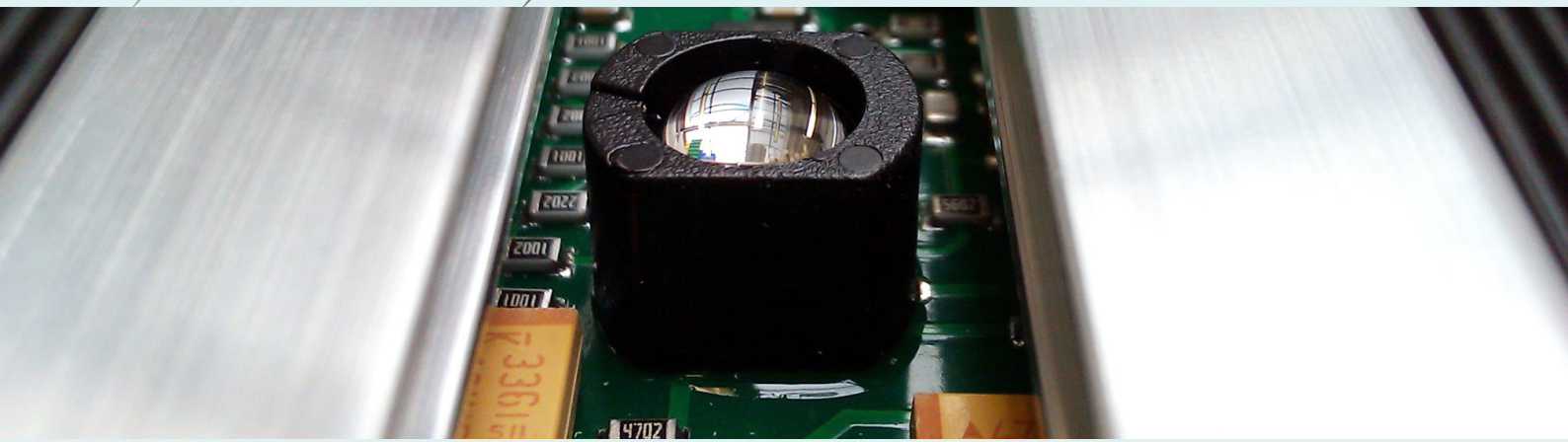
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LTÜ²



LTÜ² at a glance:

LTÜ² without edge prevention (simple version)

- *corresponds fully to the DAA resolution No. 6/34 with TÜV certified safety*
- *pluggable with plug-and-socket connectors immune to vibration*
- *each light beam is controllable without auxiliary aid*
- *emergency operation for failing light beams*
- *monitoring of the full car height up to 3.75 m*
- *quick installation with a behind-the-wall and on-the-wall assembly kit (optional)*
- *drilling template and buzzer included within the scope of delivery*
- *manual testing device OptoControl displaying infrared light beams (optional)*
- *plastic lenses (standard) or scratch-resistant antistatic lenses thus less soiling of the lenses*
- *potential-free „reverse door“ outputs for automatic shaft doors*
- *outputs for red/green lamps in the car as a load control device*
- *7 meter connection cable long enough even for large cars*

LTÜ² with edge prevention (full version), in addition

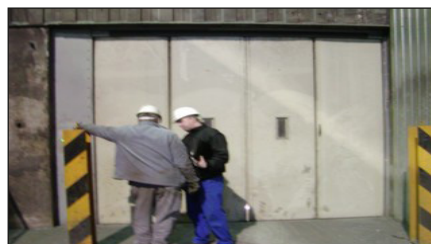
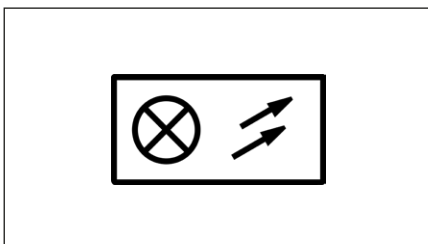
- *automatic edge prevention*
- *detection of the wrong interlocking release zone*
- *blocking of the shaft doors after an interruption of the light grid*
- *blocking of re-levelling after an interruption of the light grid*

Safety light grid for goods lifts.



The safety light grid LTÜ² serves as a replacement for cabin doors of goods lifts with a travel speed of no more than 0.85 m/s. Basis for this is the resolution of the German Lift Committee (Deutscher Aufzugausschuss - DAA) no. 6/34, which is fully met.

The proven LTÜ² system is easy to integrate in all existing lift control systems. And accompanied by a clever mounting kit and adjustment auxiliaries, it is convenient to use. The integration into the respective lift control system is largely identical, since only signals are used which are available in all control systems.



Product specification

The proven LTÜ² system is to integrate easily in all existing lift control systems. And accompanied by a clever mounting kit and adjustment auxiliaries, it is convenient to use. The integration into the respective control system is largely identical, since only signals are used which are available in all control systems. In the case of open-through lifts, the connection is identical to lifts with a door side. Here too, only one control device is required.

The LTÜ² safety light grid is fully designed and type-tested as a safety circuit according to the Lift Directive.

As the EN 81-1/-2 do not know any lifts without lift car doors, various additional requirements are placed on the lift, depending on the application, by the authorised expert responsible if safety light grids are integrated. These can be e.g. a restriction of the travel speed, the user group, or the type of use of the lift. Before remodelling the lift system, ask your responsible NB expert (TÜV/DEKRA/...).

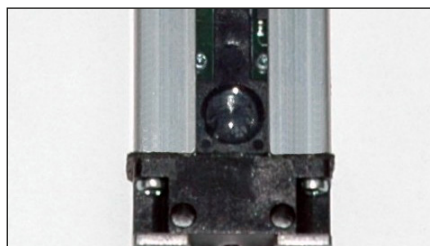
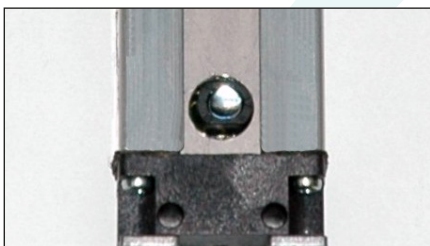
LTÜ² without edge prevention (simple version)

The LTÜ² without edge prevention can be used in cases in which the lift is already provided with a safety circuit or a safety switch monitoring the unlocking zone of the door, i.e. this includes all hydraulic lifts and lifts with the function „doors opening early“.

LTÜ² with edge prevention (full version)

If the light grid is interrupted shortly before reaching the designated landing and within the interlocking release zone of the door the lift must not stop but continue the last centimetres of its travel so the lift cage comes to a flush level stop. This prevents the development of a dangerous edge (stumbling edge). For this purpose the LTÜ² with an integrated edge prevention is provided with a safety circuit monitoring the unlocking zone of the door and, in connection with other signals of the control system and the light grid, preventing the development of an edge.

With regard to technology and mode of operation the LTÜ² exceeds the requirements of the DAA. Provided are standard outputs such as „Magnetic interlocking device“, „Permit re-levelling“, „Reverse landing door“ and „Load control“.



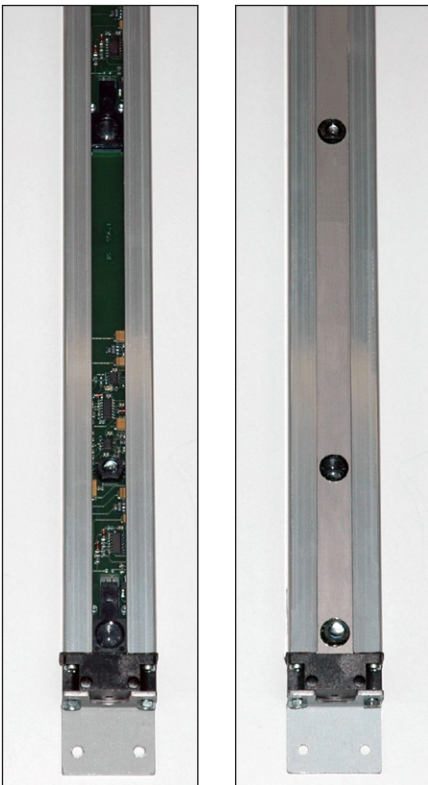
Sensor strips

The sensor strips are shipped as a standard with a plastic lens cover (left figure) and with real glass lens cover (right figure).

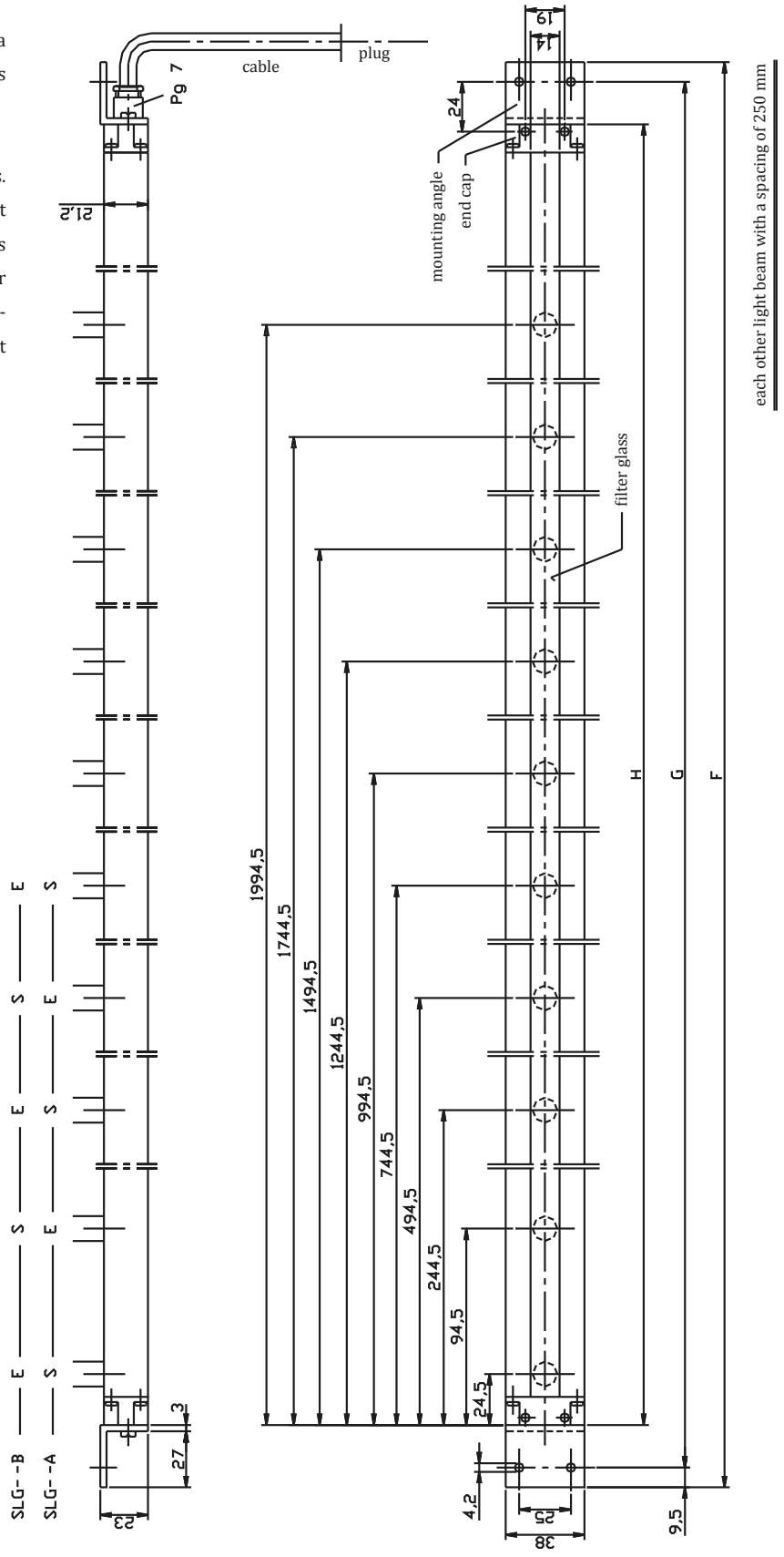
The standard version can be used in all goods lifts. However, for lifts in a very dirty (dusty) environment such as production lifts in saw mills and some plants of the chemical industry we recommend the sensor strips with silicate glass. They are equipped with antistatic lenses of silicate glass which are very resistant against scratching and frequent cleaning.

left figure:
with plastic lens cover

right figure:
with silicate glass lenses



Number of light beams	Length (mm)			Description
	F	G	H	
8	1650	1631	1590	SLG-08-A / SLG-08-B
9	1900	1881	1840	SLG-09-A / SLG-09-B
10	2150	2131	2090	SLG-10-A / SLG-10-B
11	2400	2381	2340	SLG-11-A / SLG-11-B
12	2650	2631	2590	SLG-12-A / SLG-12-B
13	2900	2881	2840	SLG-13-A / SLG-13-B
14	3150	3131	3090	SLG-14-A / SLG-14-B
15	3400	3381	3340	SLG-15-A / SLG-15-B
16	3650	3631	3590	SLG-16-A / SLG-16-B



Order data**LTÜ² without integrated edge prevention**

Scope of delivery:

1 x control unit (IP54) WITHOUT integrated circuit for edge prevention

2 respectively 4 x sensor strips (IP54), 1x drilling template for sensor strips, 1x 24V buzzer for car operating panel, instruction manual, 3x ZÜS documents at order confirmation

Lenses with transparent plastic cover

Number of light beams	Behind-the-wall assembly: recommended for car entrance height / mm	On-the-wall assembly: recommended for car entrance height / mm	One access side		Two access sides	
			Type	Item No.	Type	Item No.
8	up to 1770	1910 - 2159, altern. to 9 beams	682-LTÜ2-1-08/SLG	00012440	682-LTÜ2-2-08/SLG	00012471
9	1771-2020	1910 - 2159	682-LTÜ2-1-09/SLG	00012444	682-LTÜ2-2-09/SLG	00012475
10	2021-2270	2160 - 2409	682-LTÜ2-1-10/SLG	00012448	682-LTÜ2-2-10/SLG	00012479
11	2271-2520	2410 - 2659	682-LTÜ2-1-11/SLG	00012452	682-LTÜ2-2-11/SLG	00012483
12	2521-2770	2660 - 2909	682-LTÜ2-1-12/SLG	00012456	682-LTÜ2-2-12/SLG	00012487
13	2771-3020	2910 - 3149	682-LTÜ2-1-13/SLG	00012460	682-LTÜ2-2-13/SLG	00012491
14	3021-3270	3150 - 3409	682-LTÜ2-1-14/SLG	00022397	682-LTÜ2-2-14/SLG	00022403
15	3271-3520	3410 - 3659	682-LTÜ2-1-15/SLG	00022398	682-LTÜ2-2-15/SLG	00022404
16	3521-3770	3660 - 3770	682-LTÜ2-1-16/SLG	00022399	682-LTÜ2-2-16/SLG	00022405

Lenses with real glass cover

Number of light beams	Behind-the-wall assembly: recommended for car entrance height / mm	On-the-wall assembly: recommended for car entrance height / mm	One access side		Two access sides	
			Type	Item No.	Type	Item No.
8	up to 1770	1910 - 2159, altern. to 9 beams	682-LTÜ2-1-08/SLG/G	00022459	682-LTÜ2-2-08/SLG/G	00022447
9	1771-2020	1910 - 2159	682-LTÜ2-1-09/SLG/G	00022460	682-LTÜ2-2-09/SLG/G	00022451
10	2021-2270	2160 - 2409	682-LTÜ2-1-10/SLG/G	00022461	682-LTÜ2-2-10/SLG/G	00022452
11	2271-2520	2410 - 2659	682-LTÜ2-1-11/SLG/G	00022462	682-LTÜ2-2-11/SLG/G	00022453
12	2521-2770	2660 - 2909	682-LTÜ2-1-12/SLG/G	00022463	682-LTÜ2-2-12/SLG/G	00022454
13	2771-3020	2910 - 3149	682-LTÜ2-1-13/SLG/G	00022464	682-LTÜ2-2-13/SLG/G	00022455
14	3021-3270	3150 - 3409	682-LTÜ2-1-14/SLG/G	00022465	682-LTÜ2-2-14/SLG/G	00022456
15	3271-3520	3410 - 3659	682-LTÜ2-1-15/SLG/G	00022466	682-LTÜ2-2-15/SLG/G	00022457
16	3521-3770	3660 - 3770	682-LTÜ2-1-16/SLG/G	00022467	682-LTÜ2-2-16/SLG/G	00022458

LTÜ² with integrated edge prevention

Scope of delivery:

1 x control unit (IP54) WITH integrated circuit for edge prevention

2 respectively 4 x sensor strips (IP54), 1x drilling template for sensor strips, 1x 24V buzzer for car operating panel, instruction manual, 3x ZÜS documents at order confirmation

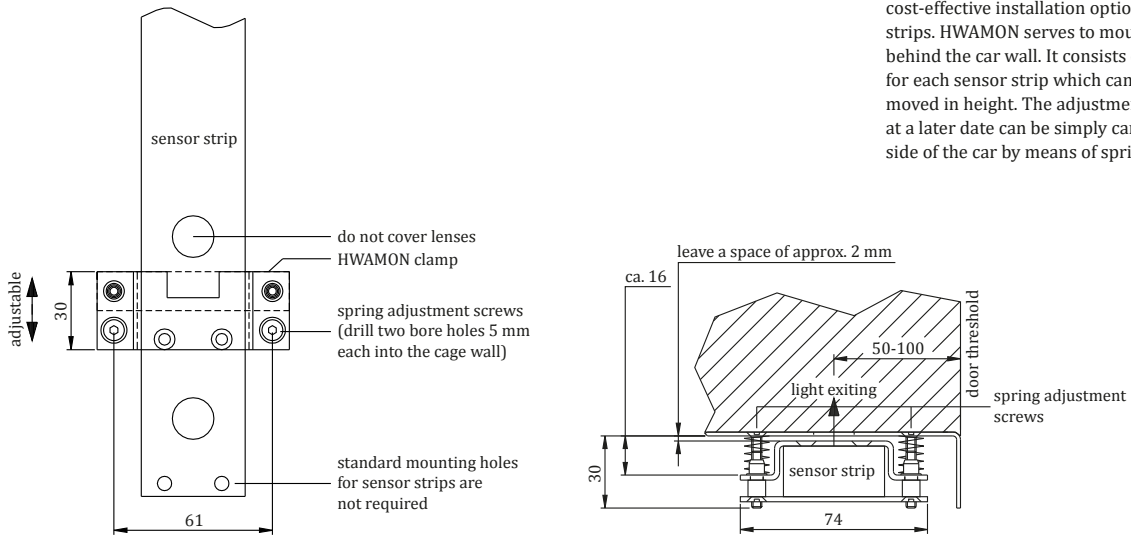
Lenses with transparent plastic cover

Number of light beams	Behind-the-wall assembly: recommended for car entrance height / mm	On-the-wall assembly: recommended for car entrance height / mm	One access side		Two access sides	
			Type	Item No.	Type	Item No.
8	up to 1770	1910 - 2159, altern. to 9 beams	682-LTÜ2-1-08/SLG-STV	00012441	682-LTÜ2-2-08/SLG-STV	00012472
9	1771-2020	1910 - 2159	682-LTÜ2-1-09/SLG-STV	00012445	682-LTÜ2-2-09/SLG-STV	00012476
10	2021-2270	2160 - 2409	682-LTÜ2-1-10/SLG-STV	00012449	682-LTÜ2-2-10/SLG-STV	00012480
11	2271-2520	2410 - 2659	682-LTÜ2-1-11/SLG-STV	00012453	682-LTÜ2-2-11/SLG-STV	00012484
12	2521-2770	2660 - 2909	682-LTÜ2-1-12/SLG-STV	00012457	682-LTÜ2-2-12/SLG-STV	00012488
13	2771-3020	2910 - 3149	682-LTÜ2-1-13/SLG-STV	00012461	682-LTÜ2-2-13/SLG-STV	00012492
14	3021-3270	3150 - 3409	682-LTÜ2-1-14/SLG-STV	00022400	682-LTÜ2-2-14/SLG-STV	00022406
15	3271-3520	3410 - 3659	682-LTÜ2-1-15/SLG-STV	00022401	682-LTÜ2-2-15/SLG-STV	00022407
16	3521-3770	3660 - 3770	682-LTÜ2-1-16/SLG-STV	00022402	682-LTÜ2-2-16/SLG-STV	00022408

Lenses with real glass cover

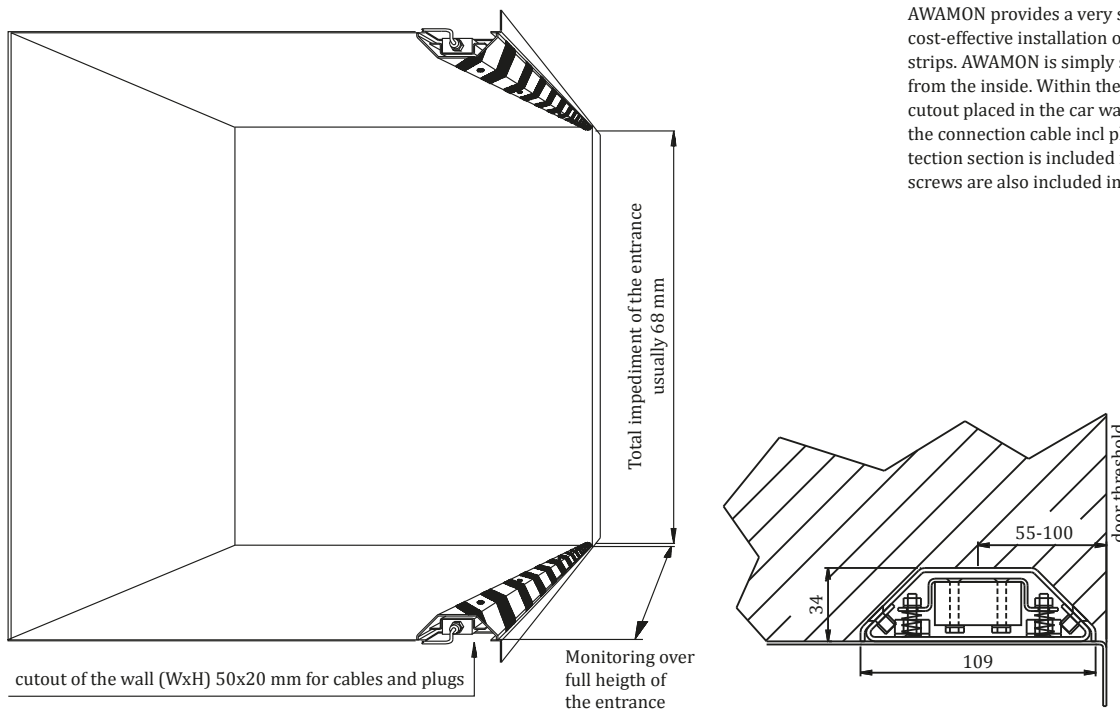
Number of light beams	Behind-the-wall assembly: recommended for car entrance height / mm	On-the-wall assembly: recommended for car entrance height / mm	One access side		Two access sides	
			Type	Item No.	Type	Item No.
8	up to 1770	1910 - 2159, altern. to 9 beams	682-LTÜ2-1-08/SLG/G-STV	00022468	682-LTÜ2-2-08/SLG/G-STV	00022477
9	1771-2020	1910 - 2159	682-LTÜ2-1-09/SLG/G-STV	00022469	682-LTÜ2-2-09/SLG/G-STV	00022478
10	2021-2270	2160 - 2409	682-LTÜ2-1-10/SLG/G-STV	00022470	682-LTÜ2-2-10/SLG/G-STV	00022479
11	2271-2520	2410 - 2659	682-LTÜ2-1-11/SLG/G-STV	00022471	682-LTÜ2-2-11/SLG/G-STV	00022480
12	2521-2770	2660 - 2909	682-LTÜ2-1-12/SLG/G-STV	00022472	682-LTÜ2-2-12/SLG/G-STV	00022481
13	2771-3020	2910 - 3149	682-LTÜ2-1-13/SLG/G-STV	00022473	682-LTÜ2-2-13/SLG/G-STV	00022482
14	3021-3270	3150 - 3409	682-LTÜ2-1-14/SLG/G-STV	00022474	682-LTÜ2-2-14/SLG/G-STV	00022483
15	3271-3520	3410 - 3659	682-LTÜ2-1-15/SLG/G-STV	00022475	682-LTÜ2-2-15/SLG/G-STV	00022484
16	3521-3770	3660 - 3770	682-LTÜ2-1-16/SLG/G-STV	00022476	682-LTÜ2-2-16/SLG/G-STV	00022485

HAWAMON Behind-the-wall assembly kit.



HWAMON provides a very simple and therefore quick, cost-effective installation option of the LTÜ² sensor strips. HWAMON serves to mount the sensor strips behind the car wall. It consists of 2 or 3 clamp holders for each sensor strip which can be almost randomly moved in height. The adjustment of the sensor strips at a later date can be simply carried out from the inside of the car by means of spring adjustment screws.

AWAMON On-the-wall assembly kit.



AWAMON provides a very simple and therefore quick, cost-effective installation option of the LTÜ² sensor strips. AWAMON is simply screwed onto the car wall from the inside. Within the top area there must be a cutout placed in the car wall enabling a penetration of the connection cable incl plug. For this an edge protection section is included in the delivery. Required screws are also included in the delivery.

Order data

Type	Item No.	Description
682-Hwamon-2100	00012432	LTÜ ² behind-the-wall assembly kit „Hwamon“: 2x fixation clamp for 1 sensor strip (not pair) up to L=2100mm (8 to 10 channels) cpmplete incl. spring adjusting screws; pre-assembled
682-Hwamon-2101	00012434	LTÜ ² behind-the-wall assembly kit „Hwamon“: 3x fixation clamp for 1 sensor strip (not pair) up to L=2101mm (11 to 16 channels) cpmplete incl. spring adjusting screws; pre-assembled
682-Awamon-SLG-08/9	00021993	On-the-wall assembly kit „Awamon“ for 1 sensor strip; with 45° fender profile made of 2,0mm steel with ye/bk signal colour ...with 8 or 9 channels; WxDxH(mm) 109x34x1900
682-Awamon-SLG-10	00021994	...with 10 channels; WxDxH(mm) 109x34x2150
682-Awamon-SLG-11	00021995	...with 11 channels; WxDxH(mm) 109x34x2400
682-Awamon-SLG-12	00021996	...with 12 channels; WxDxH(mm) 109x34x2650
682-Awamon-SLG-13	00021997	...with 13 channels; WxDxH(mm) 109x34x2900
682-Awamon-SLG-14	00022448	...with 14 channels; WxDxH(mm) 109x34x3150
682-Awamon-SLG-15	00022449	...with 15 channels; WxDxH(mm) 109x34x3400
682-Awamon-SLG-16	00022450	...with 16 channels; WxDxH(mm) 109x34x3650

FTV

Additional car operating panel.



IP30

IP54

The control panel is used as an additional control panel in the car. It includes the indicator lamp „light grid interruption“ and the „continue“ pushbutton. The cover plate consists of V2A, grain 240, including engraving and M4 Torx screws with internal pin.

A housing is included.

We will be pleased to produce other sizes and designs on request.

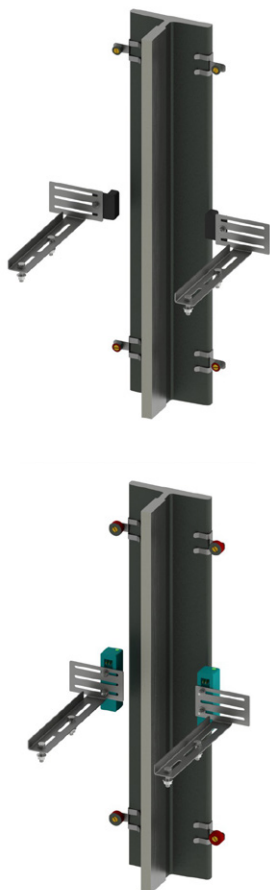
Order data

Type	Item No.	Description
620-FTV-080-0001-001	00009918	IP30 - FTV continue travel car operating panel made of stainless steel grinded with grain 240; incl. housing zinc-plated; for conventional connection
620-FTV-080-0014-001P54	00082598	IP54 - FTV continue travel car operating panel made of stainless steel grinded with grain 240; incl. housing zinc-plated; for conventional connection

AnZü2

Zone switch assembly kit for LTÜ².

If zone switches are required (e.g. in case the full version is used) the STRACK zone switch assembly kit can be used. The zone switch kits are known for their flexibility and very small type of construction. The flange hangers (caddy clamps) with the preassembled solenoids are mounted to the rear of the car rail.



Order data

Type	Item No.	Description
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For LTÜ²-...-STV: zone switch IP33 pre-assembled, consisting of:

2 solenoid switches with holders and 3m cable, 4 solenoids each landing assembled onto clamps

682-AnZü2-BN85-02	00058913	... for 2 landings
682-AnZü2-BN85-03	00058914	... for 3 landings
682-AnZü2-BN85-04	00058915	... for 4 landings
682-AnZü2-BN85-05	00058916	... for 5 landings
682-AnZü2-BN85-06	00058917	... for 6 landings
682-AnZü2-BN85-07	00058918	... for 7 landings
682-AnZü2-BN85-08	00058919	... for 8 landings
682-AnZü2-BN85-09	00058920	... for 9 landings
682-AnZü2-BN85-10	00058921	... for 10 landings
682-AnZü2-BN85-11	00058922	... for 11 landings
682-AnZü2-BN85-12	00058923	... for 12 landings
682-AnZü2-BN85-13	00058924	... for 13 landings
682-AnZü2-BN85-14	00058925	... for 14 landings
682-AnZü2-BN85-15	00058926	... for 15 landings
682-AnZü2-BN85-16	00058927	... for 16 landings

For LTÜ²-...-STV: zone switch IP67 (cable lug IP00) pre-assembled, consisting of:

2 solenoid switches with holders and 3m cable, 4 solenoids each landing assembled onto clamps

682-AnZü2-MKF-02	00058937	... for 2 landings
682-AnZü2-MKF-03	00058938	... for 3 landings
682-AnZü2-MKF-04	00058939	... for 4 landings
682-AnZü2-MKF-05	00058940	... for 5 landings
682-AnZü2-MKF-06	00058941	... for 6 landings
682-AnZü2-MKF-07	00058942	... for 7 landings
682-AnZü2-MKF-08	00058928	... for 8 landings
682-AnZü2-MKF-09	00058929	... for 9 landings
682-AnZü2-MKF-10	00058930	... for 10 landings
682-AnZü2-MKF-11	00058931	... for 11 landings
682-AnZü2-MKF-12	00058932	... for 12 landings
682-AnZü2-MKF-13	00058933	... for 13 landings
682-AnZü2-MKF-14	00058934	... for 14 landings
682-AnZü2-MKF-15	00058935	... for 15 landings
682-AnZü2-MKF-16	00058936	... for 16 landings