

# **Lift components**

Trade catalogue



# W+W Aufzugkomponenten

On January 1<sup>st</sup>, 2003 W+W Aufzugkomponenten, based in Düsseldorf, left the WINDSCHEID & WENDEL lift factory, founded in 1855, to become an independent company.

W+W's workforce has devoted itself to the development and sale of lift components since 1990.

With over 25 years of experience and a multitude of newly developed products and merchandise W+W is currently one of the leading lift component manufacturers.

With extensive building and modernisation measures the production site in Düsseldorf was expanded significantly in the past few years.

New production halls were built for the cable assembly, for the dispatch department and a new high bay warehouse.

Qualified staff and modern machinery guarantee a constantly high quality level in the manufacturing of the W+W products.













W+W sets the greatest value on top product quality in development and manufacture and in merchandise.

Extensive internal testing, test documentation and certificates ensure constant and reliable delivery quality.

Since July 2018 W+W Aufzugkomponenten has been certified ISO 9001:2015 by TÜV Rheinland.

This means that by complying with the standard, a high standard of quality in operational processes is ensured.

Thanks to sales partners in many European countries W+W guarantees direct contact with the customer.

W+W feels confident, that their products fulfill exactly the high demands of the lift manufacturers.



**Boris Furthmann** Managing director

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Universal car aprons / Landing door apron

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Finger protection Traction sheave covers Control covers

# Protective covers + Hoods





Diverter pulley hoods



Universal hoods



Double pulley cover

## Universal finger + rope jump off protection for traction sheaves + diverter pulleys

Construction according to EN 81-20 5.5.7

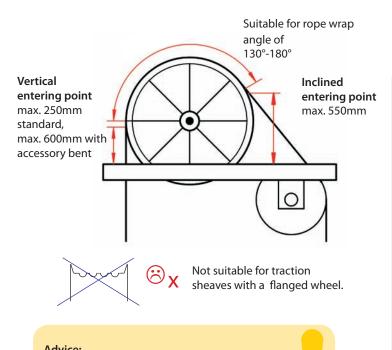


Suitable for traction sheave



With extension plates suitable for traction sheave width





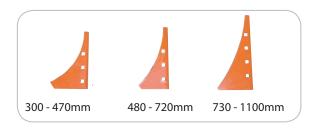
#### Description

The universal finger and rope jump off protection substantially decreases the danger of accidentally grabbing into rotating parts.

The arched cutouts are suitable to prevent shearing points. High form stability by means of double angle fixation.

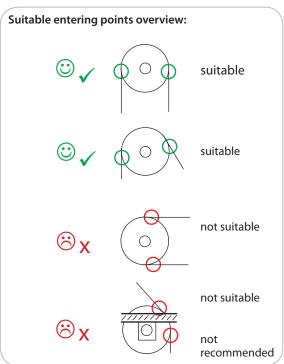
The protection is suitable for different traction sheave widths and rope departures.

#### Diameter of traction sheave



#### Double angle fixation





Please note the advice "Protective covers on

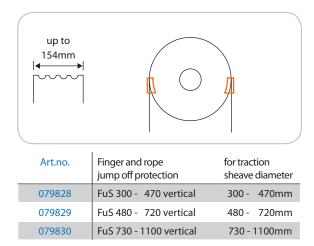
rotating parts" on page 178.



A detailed mounting instruction is included in every delivery.

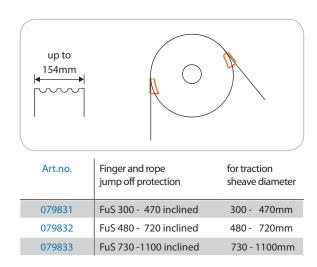
## Scope of delivery

for bilateral vertical rope departure



## Scope of delivery

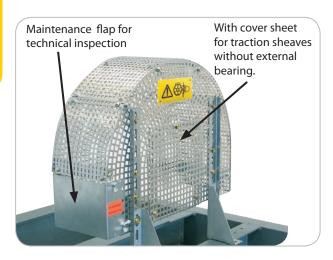
for one vertical + one inclined rope departure



## Accessories, individual parts

Art.no.	Traction sheave extension plate up to 218mm	for traction sheave diameter
079835	FuS Tv 218/300 - 470	300 - 470mm
079836	FuS Tv 218/480 - 720	480 - 720mm
079837	FuS Tv 218/730 - 1100	730 - 1100mm
up to 218mm	One package for both sid	les
Art.no.	Heightening bent for vertical rope departure	for entering point height
Art.no.	3	٥.

## Universal aluminium traction sheave cover

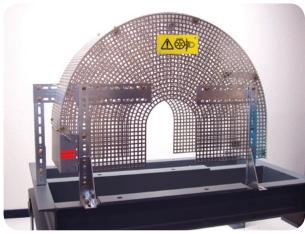


#### Description

The traction sheave cover prevents that extremities are accidentally dragged in, according to EN 81-20 5.5.7a.

The maintenance flap is equipped with captive screws in conformity with EN 81-20 0.4.21.

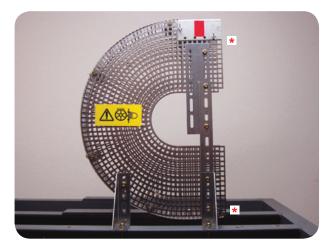
Openings for rope jump off protection and inclined rope departures can be cut out on-site.



Mounting example for large traction sheaves (For large traction sheaves an auxiliary holding device is included in delivery)



Mounting example for inclined rope departure (shown here with additional diverter pulley protection, art.no. 078626)



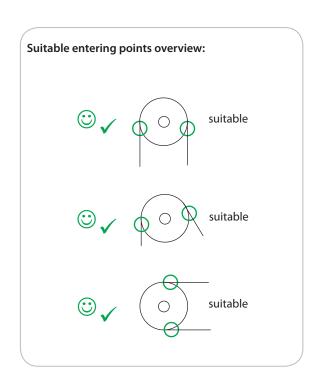
Mounting example for horizontal rope departure \* The entering points are additionally secured with protective covers.



#### Advice

Please note the advice "Protective covers on rotating parts" on page 178.

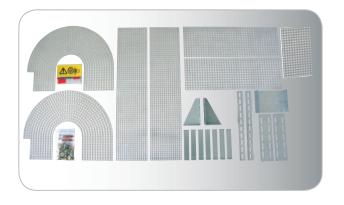


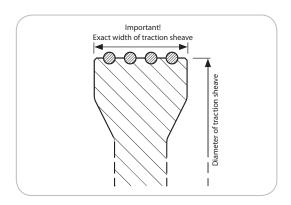


# Scope of delivery Traction sheave cover

A detailed mounting instruction for the different traction sheave types is included in delivery.

The table below contains the order numbers for traction sheave covers. Therefor the exact traction sheave width and diameter have to be known.

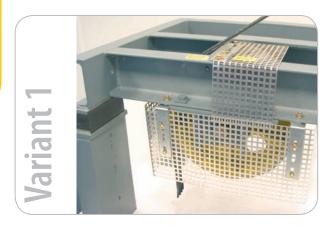




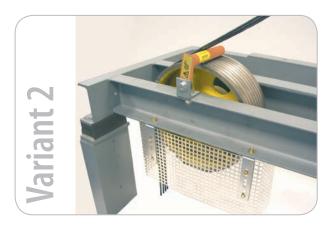
Up to traction sheave width	Up to tract	ion sheave dia	meter (mm):					
(mm):	360	390	420	450	480	510	540	
55	078000	078001	078002	078003	078004	078005	078006	
79	078014	078015	078016	078017	078018	078019	078020	
103	078028	078029	078030	078031	078032	078033	078034	
127	078042	078043	078044	078045	078046	078047	078048	
139	078056	078057	078058	078059	078060	078061	078062	
151	078070	078071	078072	078073	078074	078075	078076	
163	078084	078085	078086	078087	078088	078089	078090	
175	078098	078099	078100	078101	078102	078103	078104	
187	078112	078113	078114	078115	078116	078117	078118	
199	078126	078127	078128	078129	078130	078131	078132	
211	078140	078141	078142	078143	078144	078145	078146	
223	078154	078155	078156	078157	078158	078159	078160	
235	078168	078169	078170	078171	078172	078173	078174	
290	078182	078183	078184	078185	078186	078187	078188	

Up to traction sheave width	Up to tract	ion sheave dia	meter (mm):					
(mm):	570	600	630	660	720	780	840	970
50	078007	078008	078009	078010	078011	078012	078013	078196
74	078021	078022	078023	078024	078025	078026	078027	078197
98	078035	078036	078037	078038	078039	078040	078041	078198
122	078049	078050	078051	078052	078053	078054	078055	078199
134	078063	078064	078065	078066	078067	078068	078069	078200
146	078077	078078	078079	078080	078081	078082	078083	078201
158	078091	078092	078093	078094	078095	078096	078097	078202
170	078105	078106	078107	078108	078109	078110	078111	078203
182	078119	078120	078121	078122	078123	078124	078125	078204
194	078133	078134	078135	078136	078137	078138	078139	078205
201	078147	078148	078149	078150	078151	078152	078153	078206
213	078161	078162	078163	078164	078165	078166	078167	078207
225	078175	078176	078177	078178	078179	078180	078181	078208
280	078189	078190	078191	078192	078193	078194	078195	078209

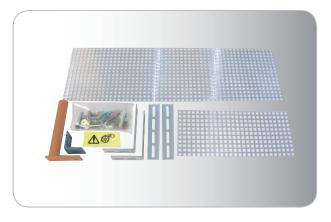
## **Diverter pulley cover / Finger protection** for inclined rope departure



Mounting example of **finger protection variant 1**, if the diverter pulley is below the engine frame.



Mounting example of **finger protection variant 2**, if the diverter pulley top is max. 100mm above the engine frame.



A detailed mounting instruction is included in delivery.

#### Advice:

Please note the advice "Protective covers on rotating parts" on page 178.



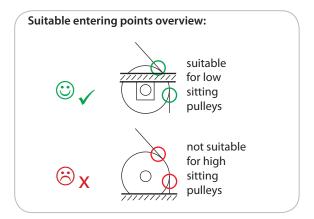
#### Description

The diverter pulley protection consists of two protection variants for the upper part as well as a sheet-metal cover for the lower part.

**Variant 1** is mounted in case of diverter pulleys situated below in the engine frame.

**Variant 2** (tube deflector) is needed for diverter pulleys situated max. 100mm above the engine frame. If there is enough space, we recommend to use protection hoods as upper cover (see page 14), which provide even more protection than the finger protection.

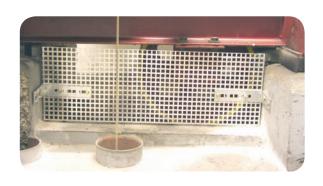
The diverter pulley cover prevents that extremities are accidentally dragged in.



Both variants are included in delivery!

## Scope of delivery

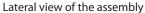
Art.no.	Description
078626	Pulley protection URSS-B200 maximum width of pulley: 200mm, maximum diameter of pulley: 500mm
078285	Pulley protection URSS-B300 maximum width of pulley: 300mm, maximum diameter of pulley: 500mm



Mounting example for the lower pulley cover on a concrete base.

## **Double pulley cover**







Front view of the assembly

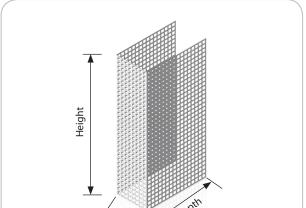
#### Description

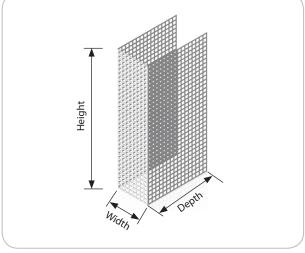
The diverter pulley cover is suitable for the protection of two pulleys on top of each other. This can often be found when the machine room is at the bottom.

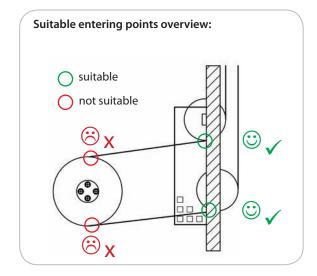
Through the 8mm perforated sheet it is possible to make a sight check of the running grooves without disassembling the cover. The cover can alternatively be attached to a concrete wall or to an iron frame. Both attachment variants are included in delivery. The openings for the rope are cut out on-site by the assembler. For this purpose a usual side cutter can be

Plate shears, art.no. 063550, for cutting out the rope slot can be ordered additionally



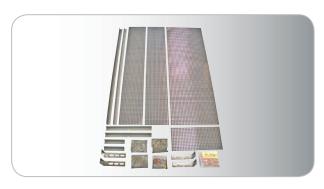






The top of the cover hood is open, so that it can also be used if there is a larger separation distance between the pulleys.





A detailed mounting instruction is included in delivery.

Height 1000	Width				
Depth	500	400	300	250	200
100	078448	078400	078406	078412	078418
150	078449	078401	078407	078413	078419
200	078450	078402	078408	078414	078420
250	078451	078403	078409	078415	078421
300	078452	078404	078410	078416	078422
400	078453	078405	078411	078417	078423

Height 1200	Width					
Depth	500	400	300	250	200	
100	078454	078424	078430	078436	078442	ĺ
150	078455	078425	078431	078437	078443	
200	078456	078426	078432	078438	078444	
250	078457	078427	078433	078439	078445	
300	078458	078428	078434	078440	078446	
400	078459	078429	078435	078441	078447	

## **Diverter pulley hood** for different rope departures



Mounting example on an engine frame with **inclined rope departure**.

For low sitting pulleys additional cover sheets for the lower entering point are necessary, see page 21.

#### Advice:

Please note the advice "Protective covers on rotating parts" on page 178.

#### Description

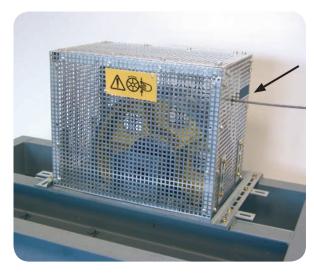
The cover hoods are universally usable.

They can alternatively be attached to the engine frame or to the concrete footing.

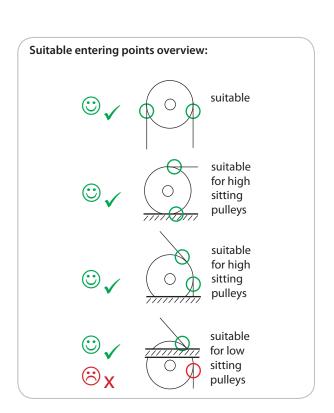
Depending on the rope position it is possible to make a sight check of the running grooves through the 8mm perforated sheet.

The openings for the rope are cut out on-site by the assembler. For this purpose a usual side cutter can be used.

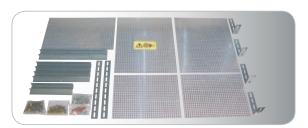
Plate shears, art.no. 063550, for cutting out the rope slot can be ordered additionally on request.



Mounting example on an engine frame with horizontal rope departure.



## Diverter pulley hood



	i		
Width 100	Length		
Height	800	700	600
100	079545	079544	079543
200	079551	079550	079549
300	079557	079556	079555
400	079562	079561	079560
500	079566	079565	079564
600	079569	079568	079567

Width 150	Length		
Height	500	400	300
100	078802	078801	078800
200	078808	078807	078806
300	078814	078813	078812
400	078819	078818	
500	078823		
600			

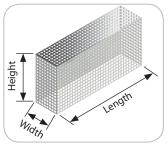
Width 200	Length		
Height	800	700	600
100	079575	079574	079573
200	079581	079580	079579
300	079587	079586	079585
400	079592	079591	079590
500	079596	079595	079594
600	079599	079598	079597

Width 250	Length		
Height	800	700	600
100	078835	078834	078833
200	078841	078840	078839
300	078847	078846	078845
400	078852	078851	078850
500	078856	078855	078854
600	078859	078858	078857

Width 300	Length		
Height	800	700	600
100	079605	079604	079603
200	079611	079610	079609
300	079617	079616	079615
400	079622	079621	079620
500	079626	079625	079624
600	079629	079628	079627

## Scope of delivery

A detailed mounting instruction is included in delivery.



Width 100	Length		
Height	500	400	300
100	079542	079541	079540
200	079548	079547	079546
300	079554	079553	079552
400	079559	079558	
500	079563		
600			

Width 150	Length		
Height	800	700	600
100	078805	078804	078803
200	078811	078810	078809
300	078817	078816	078815
400	078822	078821	078820
500	078826	078825	078824
600	078829	078828	078827

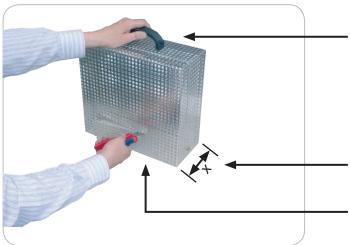
Width 200	Length		
Height	500	400	300
100	079572	079571	079570
200	079578	079577	079576
300	079584	079583	079582
400	079589	079588	
500	079593		
600			

Width 250	Length		
Height	500	400	300
100	078832	078831	078830
200	078838	078837	078836
300	078844	078843	078842
400	078849	078848	
500	078853		
600			

Width 300	Length		
Height	500	400	300
100	079602	079601	079600
200	079608	079607	079606
300	079614	079613	079612
400	079619	079618	
500	079623		
600			

# **Universal hoods** for overspeed governors and shaft copying system pulleys Construction according to EN 81-20 5.5.7





#### Description

The universal hoods are suitable for covering overspeed governors and shaft copying system pulleys.

The cover consists of 8mm aluminium perforated sheet. Through this it is possible to make a sight check of the overspeed governor or of the shaft copying pulley at any time

With the provided butterfly nuts the hoods can quickly and easily be disassembled in case of inspections and maintenance.

The hoods from type A to type C2 will be fixed with loss-proof screws at the overspeed governor according to EN 81-20 0.4.21.

Handle for easy removal in case of maintenance and Technical Inspection Authority checks.

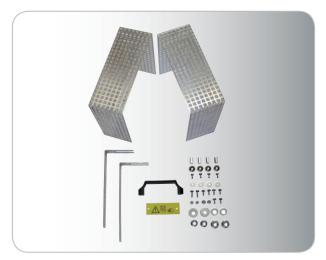
X = The cover width is variably adjustable from 100mm to 175mm.

Openings for overlapping mounting parts can be cut out on-site with a side cutter.

## Scope of delivery

for types A, B, C, C1, C2

A mounting instruction is included in delivery.



#### Advice:

Please note the advice "Protective covers on rotating parts" on page 178.



for types D, E

A mounting instruction is included in delivery.



## **Universal** hoods



B = Width, L = Length, H = Height

**Type A** Governor hood for Ø200 pulley, W=100-175, L=250, H=230 Art.no. 078627 Governor hood type A



#### Standard 200

**Type B** Governor hood for Ø200 pulley, tall version, basically suitable for all standard governors W=100-175, L=250, H=350

Art.no. 078210 Governor hood type B



#### Standard 300

**Type C** Governor hood for Ø300 pulley, suitable for all standard governors W=100-175, L=350, H=300 Art.no. 078628 Governor hood type C



Type C1 Governor hood for Ø200 and Ø300 pulley W=100-175, L=350, H=430 Art.no. 078293 Governor hood type C1

The internal dimensions of the hoods are indicated in mm.



**Type C2** Governor hood for Ø300 and Ø400 pulley W=100-175, L=540, H=350 Art.no. 078294 Governor hood type C2



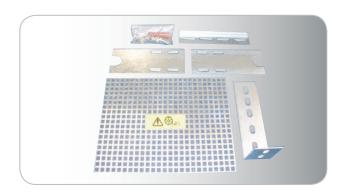
**Type D** Hood for Ø200 governor or shaft copying pulley. The hood can be fixed to the floor with dowels, angles and butterfly nuts (included in delivery). W=100-175, L=250, H=680 Art.no. 078273 Cover hood type D



**Type E** Hood for Ø300 governor or shaft copying pulley. The hood can be fixed to the floor with dowels, angles and butterfly nuts (included in delivery). W=100-175, L=350, H=800, Art.no. 078274 Cover hood type E

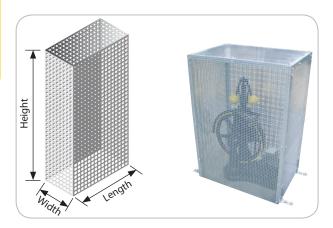
## Cover for governor tension weight pulley





Art.no.	Description
078270	Contaminant deflector 300 for pulleys Ø 200-300mm Cover for governor tension weight pulley
078271	Contaminant deflector 400 for pulleys Ø 200-400mm Cover for governor tension weight pulley

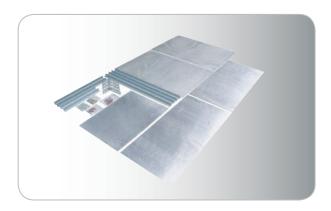
## Floor-mounted hood



Height 500	Width	All measur	es are indica	ated in mm.
Length	200	300	400	500
700	079455	079460	079464	079467
600	079454	079459	079463	079466
500	079453	079458	079462	079465
400	079452	079457	079461	
300	079451	079456		
200	079450			

Height 600	Width			
Length	200	300	400	500
700	079473	079478	079482	079485
600	079472	079477	079481	079484
500	079471	079476	079480	079483
400	079470	079475	079479	
300	079469	079474		
200	079468			

## Scope of delivery



#### Advice

Please note the advice "Protective covers on rotating parts" on page 178.

#### Description

The floor-mounted hood is universally usable.
Through the 8mm aluminium perforated sheet, a sight check of the covered component is possible at any time.
The hoods can easily and quickly be assembled.
For fastening them to the floor there are two mounting

options (see illustration below). The first variant gives the possibility of a quick removal in

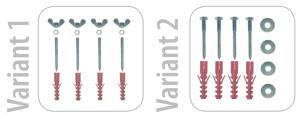
The first variant gives the possibility of a quick removal ir case of inspections, malfunctions and maintenance purposes.

#### Floor attachment variant 1,

with dowels of Ø 10mm, hanger bolts, M6 wing nuts and M6 nuts

#### Floor attachment variant 2,

with dowels of Ø 12mm, screws and plain washers



#### Both variants are included in delivery!

Height 800	Width			
Length	200	300	400	500
700	079491	079496	079500	079503
600	079490	079495	079499	079502
500	079489	079494	079498	079501
400	079488	079493	079497	
300	079487	079492		
200	079486			

Height 1000	Width			
Length	200	300	400	500
700	079509	079514	079518	079521
600	079508	079513	079517	079520
500	079507	079512	079516	079519
400	079506	079511	079515	
300	079505	079510		
200	079504			

Height 1200	Width			
Length	200	300	400	500
700	079527	079532	079536	079539
600	079526	079531	079535	079538
500	079525	079530	079534	079537
400	079524	079529	079533	
300	079523	079528		
200	079522			

## Control cover for wall mounting

## Scope of delivery



A screw set, dowel screws, butterfly nuts for the removable wall mounting and a grounding wire with grommets are included in delivery.

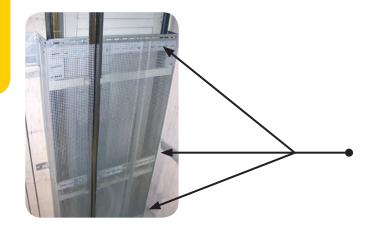
The angles and metal sheets are delivered pre-assembled.

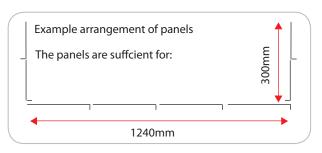


Depth: 300	Width							
Height	300	400	500	600	700	800	1000	1200
300	079240	079248	079256	079264	079272	079280	079288	079294
400	079241	079249	079257	079265	079273	079281	079289	079295
500	079242	079250	079258	079266	079274	079282	079290	079296
600	079243	079251	079259	079267	079275	079283	079291	079297
700	079244	079252	079260	079268	079276	079284	079292	079298
800	079245	079253	079261	079269	079277	079285	079293	079299
1000	079246	079254	079262	079270	079278	079286		
1200	079247	079255	079263	079271	079279	079287		
1500	079420	079421	079422	079423	079424	079425		
1800	079426	079427	079428	079429	079430	079431		
Depth: 400								
	Width							
Height	300	400	500	600	700	800	1000	1200
300	079300	079308	079316	079324	079332	079340	079348	079354
400	079301	079309	079317	079325	079333	079341	079349	079355
500	079302	079310	079318	079326	079334	079342	079350	079356
600	079303	079311	079319	079327	079335	079343	079351	079357
700	079304	079312	079320	079328	079336	079344	079352	079358
800	079305	079313	079321	079329	079337	079345	079353	079359
1000	079306	079314	079322	079330	079338	079346		
1200	079307	079315	079323	079331	079339	079347		
1500	079432	079433	079434	079435	079436	079437		
1800	079438	079439	079440	079441	079442	079443		
Depth: 500	Width							
Height	300	400	500	600	700	800	1000	1200
300	079360	079368	079376	079384	079392	079400	079408	079414
400	079361	079369	079377	079385	079393	079401	079409	079415
500	079362	079370	079378	079386	079394	079402	079410	079416
600	079363	079371	079379	079387	079395	079403	079411	079417
700	079364	079372	079380	079388	079396	079404	079412	079418
800	079365	079373	079381	079389	079397	079405	079413	079419
1000	079366	079374	079382	079390	079398	079406		
1200	079367	079375	079383	079391	079399	079407		

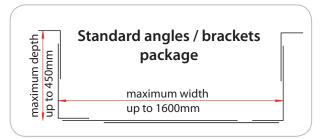
## Universal counterweight cover

Construction according to EN 81-20 5.2.5.5.1



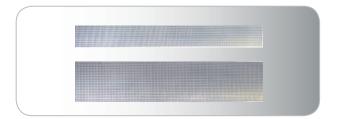








Example: quick mounting



#### Description

Due to the adjustable angles and brackets as well as the corresponding perforated sheets the counterweight cover virtually fits in every concrete lift shaft.

The counterweight cover is 2m high.

High form stability due to three surrounding brackets and 1.5mm thick galvanised perforated sheet panels.

The depth and the width of the fastening angles and brackets are universally adjustable.

#### Mounting advice

To mount this cover a water level, a drilling machine and a portable ladder are required.

In some cases a cut-off grinder is needed additionally.

The delivery is effected in manageable packages. The transport to the building site is possible with a regular estate car.

## **Scope of delivery**

Standard package Angles, brackets, screw and dowel set for: Width up to 1600mm Depth up to 450mm including:

4 panels of 2m x 0.31m

4 panels of 2m	4 panels of 2m x 0.15m		
Art.no.	Counterweight cover Standard package		
078550	Counterweight cover-VK-SP		

## **Accessories**

Art.no.	Single panel 2m x 0.31m
078551	Single panel 310
Art.no.	Single panel 2m x 0.15m
078552 Single panel 150	
Art.no. Single panel/ bracket package	
078553	Counterweight cover WB-package

20

## Perforated sheets, angles and fastening parts

for the production of universal covers for drums, shaft copying systems and other constructions



Perforated aluminium sheets, t=1mm, with holes 8 x 8mm and grid of 12mm

Width mm	Length mm 1200	1000	800	700	600	500	400	300	200
100	078708	078707	078706	078705	078704	078703	078702	078701	078700
200	078717	078716	078715	078714	078713	078712	078711	078710	078709
300	078725	078724	078723	078722	078721	078720	078719	078718	
400	078732	078731	078730	078729	078728	078727	078726		
500	078738	078737	078736	078735	078734	078733			
600	078743	078742	078741	078740	078739				
700	078747	078746	078745	078744					
800	078750	078749	078748						



Sheet metal angle, galvanised, 28 x 28mm, t=1mm with holes for fastening with tapping screws, suitable for above-mentioned perforated sheet metal panels of 8 x 8mm.



Sheet metal connecting plates, galvanised, width 60mm, t=1mm with holes for fastening with tapping screws, suitable for abovementioned perforated sheet metal panels of 8 x 8mm.

Length mm	Angle	Length mm	Angle
1152	078760	456	078755
960	078759	360	078754
756	078758	264	078753
660	078757	156	078752
564	078756	60	078751

Length mm	Sheet metal	Length mm	Sheet metal
1116	078770	420	078765
924	078769	324	078764
720	078768	228	078763
624	078767	120	078762
528	078766	24	078761



Fastening sets

Art.no.

078771 Fastening set type A
50 pcs. special tapping screws
5.5 x 8mm for 8 x 8 perforated
sheets with special head Ø=14mm
and self-locking

078772 Fastening set type B
20 pcs. self-locking screws M6x12
20 pcs. self-locking nuts M6

078773 Fastening set type C 8 pcs. self-locking screws M8x35, 8 pcs. self-locking screws M8x20, 16 pcs. self-locking nuts M8 4 wedge washers A9 for U-profile



Art.no.

078774 Fastening set type D 4 pcs. dowels 12 x 60mm 4 pcs. screws 8 x 70mm 4 large washers

078775 Fastening set type E 20 pcs. nail dowels

078776 Fastening set type F
4 pcs. dowels 10 x 50mm
4 pcs. hanger bolts M6
suitable for dowels
4 pcs. butterfly nuts M6

Accessories



063550 Plate shears

078399 1 pc. warning sign 14 x 6.5cm incl. 2 cable ties





078284 160 x 100mm, width 40mm, t= 3mm, galvanised, with slots 30 x 9mm

078777 160 x 100mm, width 40mm, t= 3mm, reinforced galvanised version, with slots 30 x 9mm

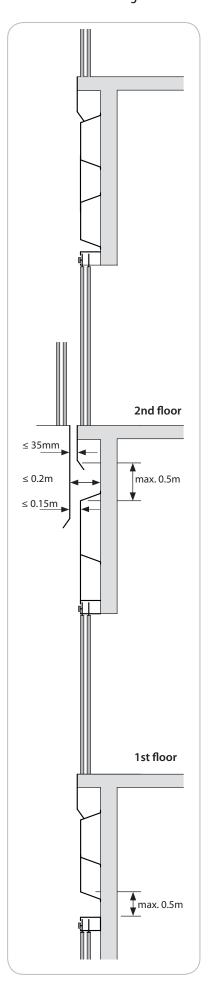
78278 40 x 14 x 2mm, 410mm long, galvanised, with slots 30 x 9mm

078279  $40 \times 40 \times 4mm$ , 500mm long, galvanised, with slots  $25 \times 11mm$  078280  $40 \times 40 \times 4mm$ , 1100mm long, galvanised, with slots  $25 \times 11mm$ 

078781  $50 \times 50 \times 50$ mm, 500mm long, galvanised, with slots  $25 \times 11$ mm 078782  $50 \times 50 \times 50$ mm, 1100mm long, galvanised, with slots  $25 \times 11$ mm

## Shaft wall panelling

Construction according to EN 81-20 5.2.5.3.1



#### Description

The horizontal distance between the inner shaft wall and the door sill or the door frame of the car or the closing edge of a sliding car door must not exceed 0.15m over the entire shaft height.

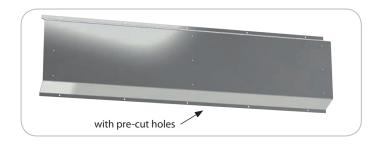
The distance indicated above may be scaled up to 0.20m, if the height does not exceed 0.50 m.

Between two successive landing doors there must not be more than one recess

The shaft wall panelling consists of 1.5mm hot-dip galvanised sheet steel and it is available in two sizes.

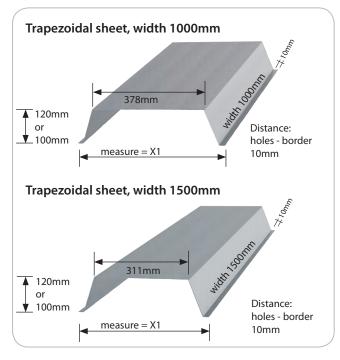
The metal sheets can be stacked into each other and therefore can be transported easily. With the extension sheets a continuous surface between two doors can be realised.

With the flat tapping screws, art.no. 050781, a safe connection of the individual sheet metal parts is possible without problems.



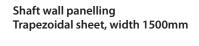


## Trapezoidal and extension sheets for shaft wall panelling



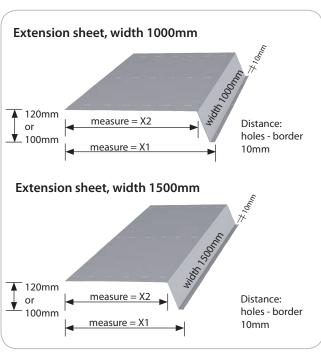


Art.no.	Description	Height mm	X1 mm
078560	Trapezoidal sheet 1000mm	100	487
078555	Trapezoidal sheet 1000mm	120	502





Art.no.	Description	Height   mm	X1 mm
078559	Trapezoidal sheet 1500mm	100	420
078556	Trapezoidal sheet 1500mm	120	435



#### Shaft wall panelling Angled extension sheets, width 1000 mm



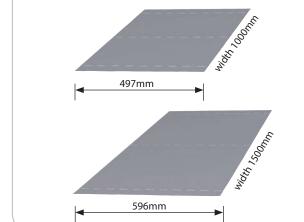
Art.no.	Description	Height mm	X1 mm	X2 mm
078796	Angled extension sheet 1000mm	100	596	541
078794	Angled extension sheet 1000mm	120	582	520

#### Shaft wall panelling Angled extension sheets, width 1500 mm



Art.no.	Description	Height mm	X1 mm	X2 mm
078797	Angled extension sheet 1500mm	100	529	474
078795	Angled extension sheet 1500mm	120	515	453

#### Extension sheet flat, width 1000 and 1500mm



#### Shaft wall panelling Extension sheets flat

Art.no.	Description
078798	Extension sheet flat 1000mm x 497mm
078799	Extension sheet flat 1500mm x 596mm

#### Fastening screws for the shaft wall panelling

Art.no.	Description	PU
063558	Special nail dowels 6 x 40mm	100
050781	Tapping screw with flat head 4.8 x 9.5mm	100

## **Shaft separation** hot-dip galvanised wire netting and fastening variants

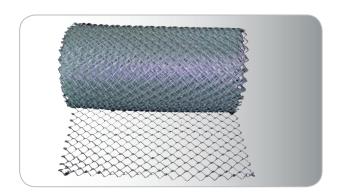
#### Indication to EN 81-20 5.2.5.5.2:

In case of interrupted separations, EN ISO 13857, 4.2.4.1, must be observed:

- → Mesh size 40 means a distance to moving parts of at least 200mm
- → Mesh size 30 means a distance to moving parts of at least 120mm

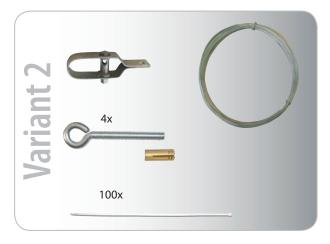
The separation must have sufficient stability to ensure that it is not deformed to the extent that it causes a collision with moving parts (cabin or counterweight) when a force of 300N is applied equally distributed at right angles at any point on a round or square surface of 5cm<sup>2</sup>.

Choose the correct fixation. Here the distance between the crossbars (cross beams) is decisive. If the wire netting can be pushed through too far, it can be stabilised with the tension wire









If beam clamps (art.no. 083437) are used, the cross beam must have a C- or U-profile which is open at the top or bottom.

The width must be chosen so that it prevents access from one pit to another. The width of the separation must be at least the width of the moving part plus 0.10m on each side over the entire height of the shaft. Additionally, the guide rails often run in the middle. It generally makes sense to lay a strip of wire netting in front of and behind the guide rails.

#### Wire netting, hot-dip galvanised

Art.no.	Description	PU
007600	Wire netting 40 x 40, width 800mm,	25m
007601	Wire netting 40 x 40, width 1000mm,	25m
007602	Wire netting 40 x 40, width 1250mm,	25m
007603	Wire netting 40 x 40, width 1500mm,	25m
007604	Wire netting 40 x 40, width 1750mm,	25m
007605	Wire netting 40 x 40, width 2000mm,	25m
Art.no.	Description	PU
Art.no. 007630	Description Wire netting 30 x 30, width 800mm,	PU 25m
007630	Wire netting 30 x 30, width 800mm,	25m
007630 007631	Wire netting 30 x 30, width 800mm, Wire netting 30 x 30, width 1000mm,	25m 25m
007630 007631 007632	Wire netting 30 x 30, width 800mm, Wire netting 30 x 30, width 1000mm, Wire netting 30 x 30, width 1250mm,	25m 25m 25m

No.art.	Description	PU
078880	Compact bolt cutter	1
050271	Pictogram warning sign Danger of crushing in shaft separation	1

#### Variant 1

#### Fixation kit for wire netting

for the fixation at U-profile or C-profile crossbars by means of beam clamps.

Art.no.	Description	PU
083437	Fixation kit for wire netting	10

#### Variant 2

No.art.	Description	PU
007607	Tension wire	110m
007606	Tightener	1
052000	Set of tenterhooks	1
051129	Ties 780 x 9mm	100

Tension wire Ø 3mm, length= 110m

Tightener for 3mm tension wire

Set of tenterhooks: 4 pcs. tenterhooks M10 x 80mm

4 pcs. brass dowels M10

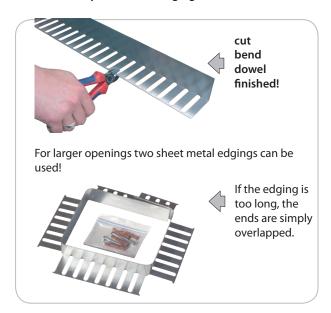
#### Cable ties, extra long

for fastening the wire netting at the intermediate beams in the lift shaft

## Universal floor edging suitable for square breaks in ceiling

Construction according to EN 81-20 5.2.6.3.3

#### Quick assembly of the floor edging





#### Description

The universal floor edging is suitable for square breaks in the ceiling up to  $200 \times 200 \text{mm}$  or  $100 \times 100 \text{mm}$ .

It prevents objects from falling through openings in floors and foundations of machine and pulley rooms.

It consists of a single shanked, galvanised angle plate with slots.

For retrofitting we recommend the edging 50mm high. For new lifts, mounting before screed is laid, you need the edging 100mm high.

#### For retrofitting

edging 50mm high

Art.no.	Description	
078631	Floor edging 840/50, 840 x 50 x 58mm, for openings up to 200 x 200mm	
078632	Floor edging 440/50, 440 x 50 x 58mm, for openings up to 100 x 100mm	

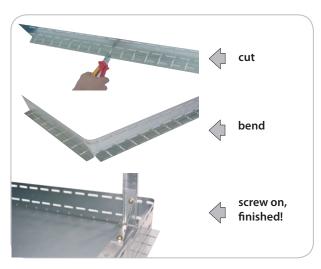
#### For new lifts

edging 100mm high, (mounting before the screed is laid)

Art.no.	Description
078633	Floor edging 840/100, 840 x 100 x 58mm, for openings up to 200 x 200mm
078634	Floor edging 440/100, 440 x 100 x 58mm, for openings up to 100 x 100mm

## Baseboard/floor safety device 1150 and 1300mm

suitable for car roofs, construction according to EN 81-20 5.4.7.2



#### Description

The baseboard/ floor safety device can be universally screwed to the guard rail or to the car roof with the enclosed tapping screws.

#### Consisting of:

Angle sheet 100mm x 30mm, 1150mm long, with slots for the universal mounting on car roofs or on guard rail stakes, including a screw fastening set.



Art.no.	Description
078219 Baseboard 115	
078967	Baseboard 130, suitable for W+W Guard rail acc. to EN 81-20

#### Advice:

According to EN 81-20 (5.4.7.2) the car roof has to be equipped with a baseboard at least 0.10m high at the outer edge of the roof, or between the outer edge of the roof and the guard rail, if there is one.



The construction and stability of the guard rails of the new series are according to EN 81-20.

With four screws in each case the solid bases will be fixed on the car roof.

In order to be able to withstand a force of 1000N acting anywhere on the upper part of the railing without an elastic deformation of more than 50mm depending on the structure of the ceiling, our optionally available mounting kit with mounting rails has to be used.

On these then the railing is fixed. Due to this kind of fixation the larger surface improves the force absorption. It may be necessary to fix an additional tensioning rope. It will be fixed in the upper area of the guard rail and at a strong position (e.g. support frame) of the lift cabin. The rail system and the tensioning rope are included in the optional mounting kit.



The guard rail is 0.70m respectively 1.10m high and the maximum width is 1.30m.

The width is variably adjustable. The handrail and the cross bar will be customized locally to the necessary length with a power cutter or hack saw.

With the extension package (VP), the rigid railing can be extended by a further 1.30m.

The guard rail acc. to EN 81-20 is available in a rigid, foldable and telescopic version.

The baseboard (optional to order) as well is necessary for the complete construction of the guard rail according to EN 81-20.









FOLDABLE Guard rail EN 81-20

TELESCOPIC Guard rail EN 81-20

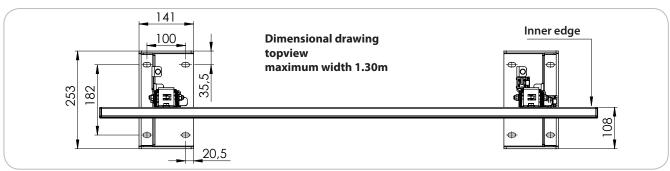
RIGID Guard rail EN 81-20

#### Important advice!

When choosing the railing, the free distances acc. to EN 81-20 5.4.7.4 are to be considered:

- 0.70m height at distances 0.30m up to 0.50m (interior edge hand rail shaft wall)
- 1.10m height at distances beyond 0.50m (interior edge hand rail shaft wall)
- 10cm distance between outer edge hand rail and any parts in the shaft.





#### Advice:

When the car is in its highest position, according to EN 81-20 5.2.5.7.2 the free distance between the lowest part of the shaft ceiling and the highest part of the guard rail shall be at least 0.30 m.



Mounting example: FOLDABLE and TELESCOPIC guard rail



Mounting example: post fixed on mounting rail and fixation tensioning rope



## 0.70m and 1.10m RIGID

Scope of delivery basic package (GP) RIGID Guard rail

- 2 pcs. posts rigid
- 1 pc. handrail 1.30m
- 1 pc. cross bar 1.30m
- 1 set fastening screws consisting of: locking tooth-screws and nuts M12
- 1 pc. sign "falling / crushing"

Depending on the structure of the ceiling, our mounting kit for handrails rails has to be used as well as maybe other individual measures for an appropriate fixation.

Art.no.	Description	Weight
078960	Guard rail EN 81-20 0.70m rigid / GP	17kg
078961	Guard rail EN 81-20 1.10m rigid / GP	18kg
078962	Guard rail EN 81-20 0.70m rigid / VP	12kg
078963	Guard rail EN 81-20 1.10m rigid / VP	13kg

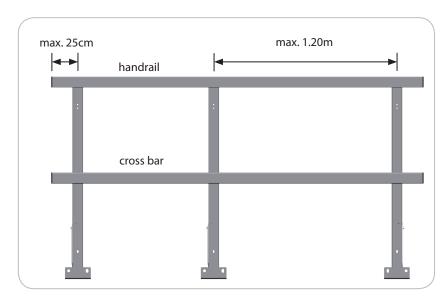
GP = basic package / VP = extension package

#### Position of the posts and length of the guard rail

Generally, the posts must be positioned as far as possible at the outer ends of the handrail or the cross bar. The handrail and the cross bar may protrude at most 25cm over the post. The distance between two posts must not exceed 1.20m.

The rigid guard rails can be extended as needed with the extension packages (by 1.30m each).

Handrail and cross bar may be shortened (with an angle grinder or iron saw) to obtain the correct length for the guard rail.



#### Example

Guard rail basic package 1.10m RIGID (GP, art.no. 078961) with an extension package (VP, art.no. 078963)



Front view RIGID Guard rail EN 81-20 with extension package

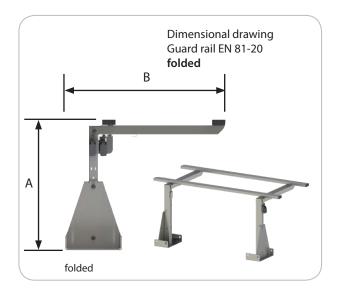


Back view RIGID Guard rail EN 81-20 with extension package





Mounting example: guard rail folded



## 1.10m FOLDABLE

Two different sizes of the foldable guard rail are available. When two guard rails are mounted on two sides of the lift cabin it is possible to fold them onto one another. The opened as well as the turned down position is monitored by contacts.

The locking clicks into place automatically during opening. The unlocking to turn down is done by pulling up the cross bar.

#### Scope of delivery FOLDABLE Guard rail

2 pcs. foldable posts, pre-mounted

1 pc. handrail 1.30m

1 pc. cross bar 1.30m

1 set monitoring switches (1NC 1NO) incl. 5m supply line

1 set fastening screws consisting of:

locking tooth-screws and nuts M12

1 pc. sign "falling / crushing"

Depending on the structure of the ceiling, our mounting kit for handrails rails has to be used as well as maybe other individual measures for an appropriate fixation.

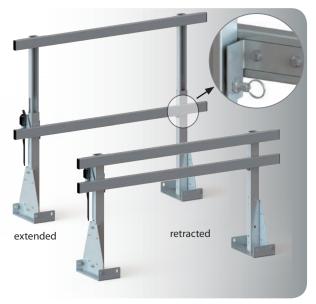
The weight is 21kg.

Art.no.	Description	meas. A	meas. B
078964	Guard rail EN 81-20 1.10m, foldable 528	528mm	760mm
078965	Guard rail EN 81-20 1.10m, foldable 578	578mm	710mm



Mounting example: guard rail opened

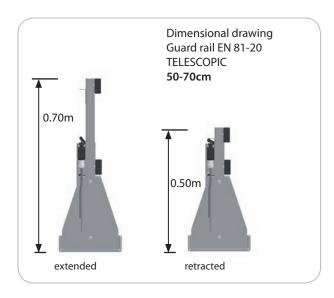




To unlock the guard rail actuate the snap-action mechanism. Please see the detail above.



Mounting example: guard rail retracted



## **TELESCOPIC**

The telescopic guard rail is available in two sizes. The guard rail EN 81-20 up to a width of 1.30m is available with telescopic posts with a height of 50-70cm or 70-110cm.

In the extended position the locking device engages automatically. For retraction unlock the guard rail manually. Both end positions are monitored by a contact.

#### Scope of delivery TELESCOPIC Guard rail

2 pcs. telescopic posts, pre-mounted

1 pc. handrail 1.30m

1 pc. cross bar 1.30m

1 set monitoring switches (1NC 1NO) incl. 5m supply line

1 set fastening screws consisting of: locking tooth-screws and nuts M12

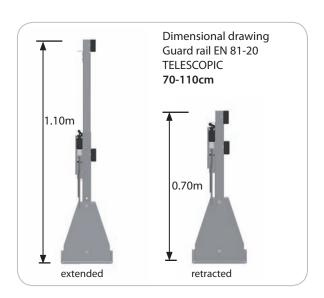
1 pc. sign "falling / crushing"

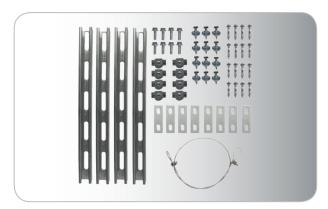
Depending on the structure of the ceiling, our mounting kit for handrails rails has to be used as well as maybe other individual measures for an appropriate fixation.

Art.no.	Description	Weight
078970	Guard rail EN 81-20, telescopic 50-70cm	20kg
078971	Guard rail EN 81-20, telescopic 70-110cm	22kg



Mounting example: guard rail extended

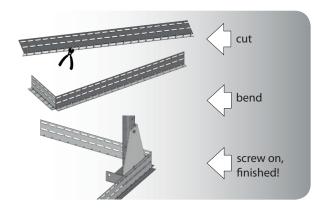




Example: Scope of delivery guard rail GP

#### Advice

According to EN 81-20 5.4.7.2 the car roof has to be equipped with a baseboard at least 0.10m high at the outer edge of the roof, or between the outer edge of the roof and the guard rail, if there is one.



## Mounting kit

#### Scope of delivery of mounting kit (GP)

- 4 pcs. mounting rails 50cm
- 1 pcs. tensioning rope 1m
- 1 set mounting material: guard rail / mounting rails
- 1 set mounting material: mounting rails / ceiling

	Art.no.	Description
Ī	078966	Guard rail EN 81-20 mounting kit GP
	078968	Guard rail EN 81-20 mounting kit VP

Mounting kit VP is only suitable for art.no. 078962 and 078963

Depending on the structure of the ceiling, it could be that other individual measures need to be taken to attach the mounting rails safely on the roof for an appropriate fixation.

The professional attachment is incumbent on the user in all cases.

## **Basebord** and floor safety device for car roofs acc. to EN 81-20 5.4.7.2

The baseboard/ floor safety device can be universally screwed to the guard rail or to the car roof with the enclosed tapping screws.

Consisting of:

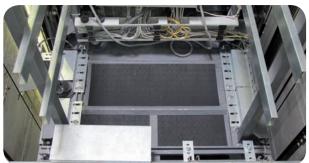
Angle sheet 100mm x 30mm, 1300mm long, with slots for the universal mounting on car roofs or on guard rail stakes, including a screw fastening set.

Art.no.	Description
078967	Baseboard 130

## Anti-slip mats for car roofs according to EN 81-20 5.4.7.1



Car roof without anti-slip mats



Car roof with anti-slip mats

According to EN 81-20 5.4.7.1, the surface on the car roof on which a person works or moves between working areas must be slip-resistant.

The anti-slip mats have a thickness of 1.8mm. They can easily be cut to size on site by means of scissors or a cutter knife. The back is self-adhesive. This way, within a few minutes a cabin roof can be made slip-resistant. Three different mat sizes are available.

According to EN 81-20 5.2.5.7.3 there must be a single continuous surface on the car roof on which one person can stand. This surface must have a free area of at least 0.12m<sup>2</sup> and a minimum of 0.25m on the narrowest side. This safe standing area can be marked with the green anti-slip mat.

#### Material:

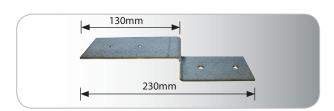
NBR-based solid rubber (acrylonitrile butadiene rubber) Double-sided adhesive tape: Tesa 4970

No.art.	Description
077050	Anti-slip mat 172 x 265mm, black
077051	Anti-slip mat 265 x 345mm, black
077052	Anti-slip mat 345 x 530mm, black
077053	Anti-slip mat 480 x 250mm, green

## Holding fixture for fall protection

When constructing new installations or during the retrofitting of old lifts, all entrances to the lift shaft have to be secured. The protection has to be at the height of the feet, the knees and the chest.









## Z-profile,

#### holding fixture for fall protection

#### Description

For retaining the boards holding fixtures with a Z-profile can be used.

One bracket of the holding fixture has two holes (Ø 8.5mm) for screwing it to the wall.

The other bracket also has two holes (Ø 4.2mm) for fastening the wooden boards with two nails.

The holding fixture is designed for 30mm thick boards. **Material** 

laterial

Hot-dip galvanised steel, 3mm w= 60mm

#### Fall protection Z-profile

No.art.	Description	PU
079630	Fall protection Z-profile	1
079631	Fall protection Z-profile	6
079632	Fall protection Z-profile	36
079638	Fall protection Z-profile V2 (for a board thickness of 40mm)	36

## Retaining sheet,

holding fixture for fall protection

#### Description

The retaining sheets are fixed at the walls on the left and on the right side of the door opening. In this position the plastering and painting works on the front wall are not impeded.

Due to the long holes the holding fixture for fall protection can be adjusted without drilling after applying the first layer of plaster.

At the lower end of the sheet plate there is a small extension. When the screed is laid, the profile does not have to be removed, it can easily be pulled out, when the mounting is finished.

The holding fixture is designed for 30mm thick boards.

Hot-dip galvanised steel, 3mm

#### Fall protection

Art.no.	Description	PU
079636	Fall protection (1 pair)	1
079637	Fall protection (3 pairs)	3

#### Advice:

When using wooden boards, planks or other protections, these have to fulfil certain requirements according to the current safety regulations (e.g. DGUV information 209-053 / 201-023).

The responsibility for which safety measures are used as fall protection and for the compliance with the current rules and safety regulations is in all cases incumbent on the user.



## Door closing weight kit

#### Intended use

The door closing weight is only suitable for retrofitting on exisiting lift landing doors.

It serves to implement the specification of EN 81-20 5.3.9.3.4:



Mounting example



Mounting example

In the case of landing doors operated by the car door, a device (spring or weight) has to ensure that the landing door closes when, for whatever reason, it is opened when the car is outside the unlocking zone.

#### Description

The closing weight ensures a permanent and constant (linear) closing force of 2kg.

Thus the doors close automatically until the door bolt engages, which is a great advantage compared to closing springs. These often have too little tension and force when the door is closing or they have too much tension when the door is open, so that it is difficult for older door motors to keep the doors open.

The closing weight is attached to the landing door carriage by means of a PP cord over a diverter pulley and universal mounting angles. The door weight is constructed so that even older door motors can open the doors completely.

#### Scope of delivery

1 pc. Door closing weight 2kg

1 pc. PP-cord, black, Ø 3mm, length 4m

1 pc. Diverter pulley and several mounting angles

2 pcs. Plastic tubes M40, length 4m

2 pcs. bags with small parts for fixation

Art.no.	Description
079445	Door closing weight 2kg kit



Mounting example

## General operating mode of the door closing weight kit

The cord is prepared at both ends by means of a rope thimble and a wire rope clamp. The weight is fastened at the thimble using a flat shackle.







Fixation diverter pulley on angle for roller fastening







Fixation cord and weight



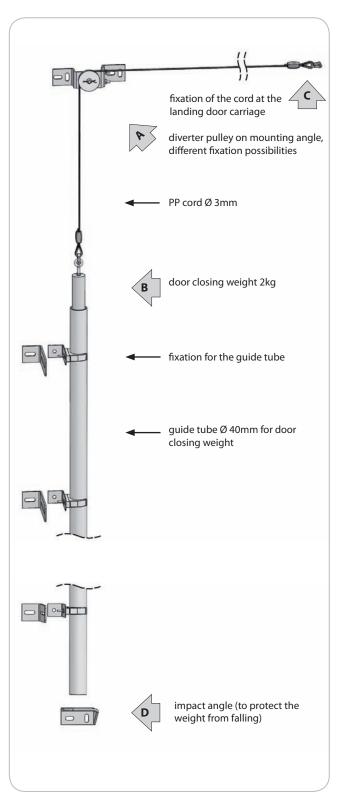
Fixation cord at landing door - carriage





impact angle (to protect the weight from falling)

Fixation and operating mode of the door closing weight kit



## Landing door unlocking device

#### Intended use

The landing door unlocking device for the pit is suitable for the use in new and existing lift systems.

It serves to fulfil the requirements of EN 81-20 5.3.9.3.5:







If the landing door is the only access to the pit, according to 5.2.2.3 the door locking device must be safely accessible within a height of 1.80m and at a horizontal distance of not more than 0.80m from the pit ladder, or a permanently installed device must make it possible for a person in the pit to unlock the door.

#### Description

The landing door locking device must be stored permanently in the pit. It is fastened to the shaft wall by means of a pipe clamp.

If necessary the telescopic bar is taken off the wall and extended.

Depending on the locking device, it can now be unlocked by pushing or pulling the corresponding pulleys.

Then it is possible to open the landing door manually.

#### Dimensions of the unlocking bar:

retracted: 1.18m extended: 2.09m

#### Scope of delivery of landing door locking device

1 piece unlocking bar

1 piece pipe clamp

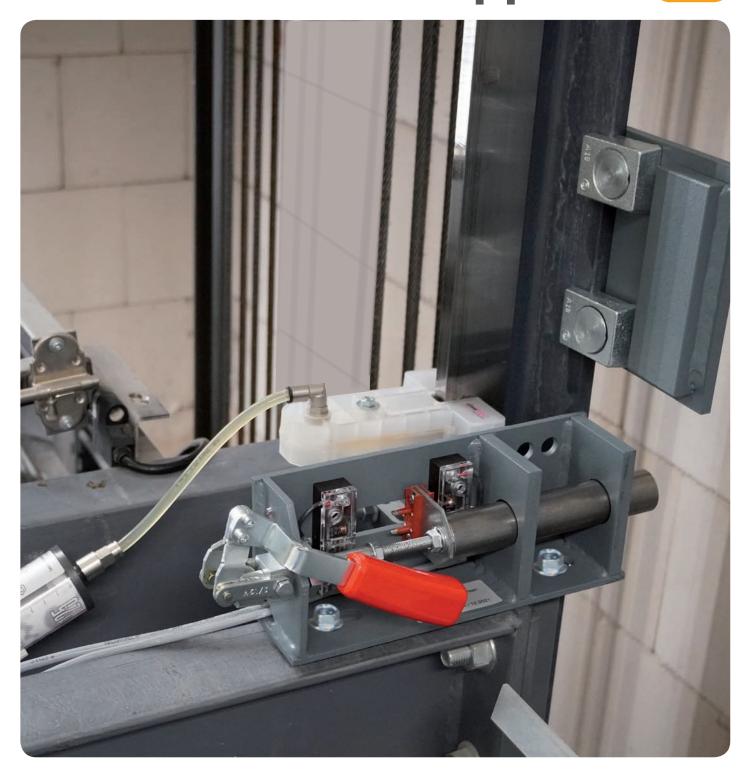
1 piece screw and dowel

No.art.	Description
078295 Landing door unlocking device for the pit	



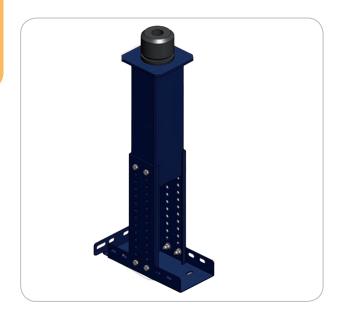


# Travel path limitation + Buffer support



Buffer Buffer support Maintenance support Travel path limitation

## **Buffer support and lift buffer**





Mounting examples: buffer support size 3 with buffer

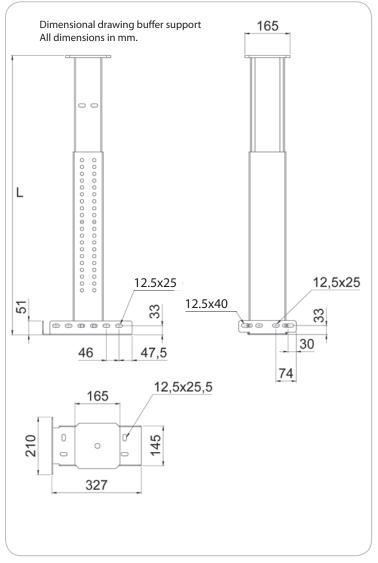


#### Description

The adjustable buffer supports are excellently suitable for new construction and modernisation in the shaft pit. The exact height can be adjusted in the pit. The buffer height can also be modified, e.g. if the distance, which the lift can be moved below the lowest landing, is changed.

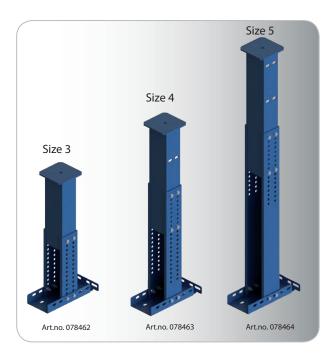
The buffer supports consist of powder coated steel sheet. The buffer can be screwed to the floor with anchor bolts or it can be fixed in the pit with other stationary parts of the lift

Size	Height L
1	193 - 293mm
2	290 - 415mm
3	416 - 716mm
4	696 - 1021mm
5	1005 - 1405mm
Maximum charge	2000kg (per support)
Maximum rated velocity	1m/s



# **Buffer supports**









# Scope of delivery

for all buffer supports

Art.no.	Description
078460	Buffer support size 1 193- 293mm
078461	Buffer support size 2 290- 415mm
078462	Buffer support size 3 416- 716mm
078463	Buffer support size 4 696-1021mm
078464	Buffer support size 5 1005-1405mm

1 pc. floor plate

1 pc. U-profile part 1

1 pc. U-profile part 2 with buffer plate

1 pc. bag with small parts

1 pc. detailed mounting instruction, German, English, French, Spanish



# Lift buffer

acc. to EN 81-20 / 50 and EN 81-1/2

The prototype test for the lift buffer was carried out in accordance with the lift directive.

The certification number documents the admissible load range of each lift buffer type.

Art.no.	Description
078471	Lift buffer type D1, EN 81-20/50 and EN 81-1/2 100 x 80mm, 220 - 700kg
078472	Lift buffer type D5, EN 81-20/50 and EN 81-1/2 165 x 80mm, 650 - 2700kg

#### **Technical data**

Art.no.	maximum rated velocity	minimum charge	maximum charge	Diameter Ø
078471	1.00m/s 0.63m/s	220kg 200kg	700kg 1500kg	100mm 100mm
078472	1.00m/s 0.63m/s	650kg 600kg	2700kg 7500kg	165mm 165mm

# Maintenance support for a temporary protected space in the pit



# Dimensional drawing maintenance support vertical H 356 488 All dimensions in mm.

#### Description

The folding maintenance support is ideal for creating a temporary protected space in the pit. During normal operation the support lies on the floor. With a height of only 140mm it can be mounted in very small pits.

When entering the pit for maintenance or other works, the support has to be folded up. The support automatically locks into place when it reaches a vertical position. To fold it again, the locking bolt has to be released.

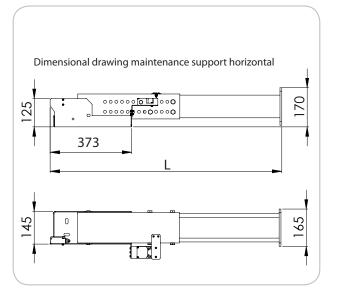
Both positions of the maintenance support are monitored by a safety switch with forced disconnection. The length of the support can be adjusted. Optionally a lift buffer can be mounted.

When the car rests on its fully compressed buffers, one size of the following safety spaces (per person) must be available, according to EN 81-20 5.2.5.8.1

Floor area 0.4m x 0.5m / height 2m (position: upright) Floor area 0.5m x 0.7m / height 1m (position: crouching) Floor area 0.7m x 1.5m / height 0.5m (position: lying)

# Maintenance support sizes

Size	Height H vertical	Length L horizontal
1	499 - 774mm	630 - 900mm
2	694 - 1019mm	820 - 1150mm
Maximum static load		2000kg (per support)
Maximum velocity		1m/s



# Folding maintenance support

# **Scope of delivery**

Art.no.	Description
078466	Folding maintenance support 50 - 70cm
078467	Folding maintenance support 70 -100cm

#### Scope of delivery:

1 pc. maintenance support, pre-mounted

1 pc. bag with small parts, with screws for fixation

1 pc. detailed mounting instruction

According to EN 81-21 5.7.2.1 the maintenance support has to be equipped with a buffer (see page 37)



# Examples: Fixation of the maintenance support at the piston support



#### Electrical data for the switch:

#### 1. Safety disconnector IP67

for monitoring the horizontal state of the maintenance

support.

Rated operational current: AC-15 4A for 230V

DC-13 4A for 24V

Contact: 1NC / 1NO

with screw terminals

# 2. Position switch IP67 with positive opening operation

for monitoring the vertical state of the maintenance support.

Rated operational current: AC-15 3A for 230V

DC-13 0.27A for 24V

Contact: 1NC / 1NO

with screw terminals





# W+W Travel path limitation

for the protection of the safety space in the shaft head





Mounting example travel path limitation



#### Intended use

If the shaft head is reduced in cable lift installations, there is not enough protective space for maintenance and inspection staff when the car reaches its mechanically highest possible position (counterweight is on the buffer).

Therefore, equivalent substitute measures must be created to guarantee this protective space in order to prevent personal injury even in case of malfunction.

If a general malfunction leads to a movement exceeding the travel path of the defined inspection travel, a mechanical protection limiting the travel path is required, which can be provided e.g. by a maintenance support under the counterweight.

As this solution is not very practical, it is recommended to install the protection at the required position on the car roof.

40

# W+W Travel path limitation

for the protection of the safety space in the shaft head



Release lever for the inspection travel is up, bolt is retracted



Release lever for the inspection travel is down, bolt is extended



Functional example travel path limitation



#### **Functional description**

In case of a reduced shaft head it is necessary to create the protective space required by the standard with suitable substitute measures and to limit the inspection travel upwards. This is achieved at first by a limit switch for the inspection travel or another electronic switch-off (e.g. ELGO Limax 3CP Safe, Kübler PSU02\*). If, in the rare event of a malfunction, the electronic switch-off does not stop the inspection travel, a mechanical protection must end this journey so that no personal injury can occur under any circumstances. \* SIL3- systems are comparably safe as limit switches.

The W+W travel path limitation is the mechanical part of this protective space protection in the shaft head. The device consists of two holders, which are mounted on the car roof at the supporting frame, each with a bolt which can be manually extended and retracted. Additionally, a limit stop plate is mounted on each of the rails.

In lift systems according to EN 81-20 or in the presence of a UCM system, the moment when the user enters the car roof (static situation) can be considered sufficiently safe.

The bolts must then be extended manually. Only when both bolts are fully extended is the inspection travel released via the safety contacts.

If the inspection travel is not stopped electrically in the case of a malfunction, the bolts hit the limit stop plates which end the upward movement. The stop plates are positioned in a way that the distances in the shaft head correspond at least to the requirements of EN 81-20 point 5.2.5.7.

Before leaving the car roof, both bolts must be fully retracted again. Only in this state a reset and thus a return to normal operation is possible.

#### **Installation conditions:**

The specified nominal load ranges (page 43) are valid for:

- counterweight compensation 50%
- max. release speed from 2.1m/s

#### 1000 - 1600kg:

- car empty weight F from 0.8 to 1.4 x nominal load Q (but F<sub>max</sub> = 1900kg)

### 400 - 600kg / 600 - 1000kg:

- car empty weight F from 1.0 to 1.4 x nominal load Q

#### In general:

The device is mounted on the left and right directly on or under the head beam of the support frame.

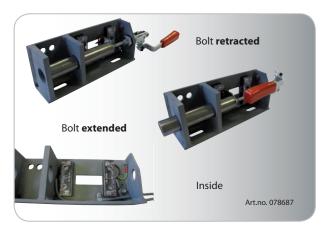
The angle with the bolt must make full contact with the support frame. A mounting on the cabin is not permissible.

After a case of damage has occurred and the protective space system has been used, it must be completely replaced!

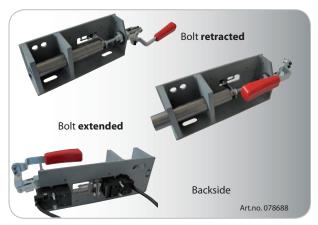


# W+W Travel path limitation

for the protection of the safety space in the shaft head

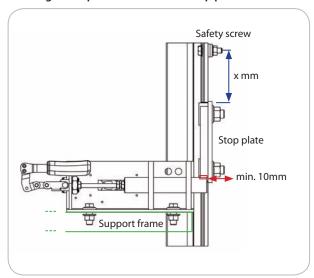


Example travel path limitation IP20, art.no. 078687



Example travel path limitation IP67, art.no. 078688

#### Drawing travel path limitation and stop plate



The stop plates are attached to the guide rails by means of clamping plates. When the bolts hit the stop plates, the clamping plates slide up on the rail, which provides a defined deceleration path.

In the most unfavourable case, a locking screw stops the movement completely.

max. release speed	max. nominal speed	distance x
1.3 m/s	1.0 m/s	250mm
1.7 m/s	1.2 m/s	400mm
2.1 m/s	1.6 m/s	600mm



#### Requirement according to EN 81-20

As this is not an automatic system, precautions must be made to prevent car movement before stepping onto the car roof and activating the inspection travel release device.

Entering the car must be reliably detected and all travel functions must be deactivated by this detection. In new installations, this is usually done by monitoring the emergency release. For retrofitting, for example, a contact mat or a light grid on the car can also be used for detection.

Inspection operation must then be possible only when the protective space system is activated and normal operation must be possible only after a reset.

The pre-release stop system required by EN 81-21 point 5.5.2.2 can be the same system used for the UCM system.

The system may only be reset to normal operation by actuating an electrical reset device conforming to FN 81-21

Since this variant is a deviation from EN 81-20, a hazard analysis with the contents specified above has to be made.

# Important mounting advice

for the travel path limitation

# Mounting advice, nominal load 400 - < 600kg and 600 - 1600kg

1. When the bolts hit the stop plates at release speed, high forces are transmitted to the device and consequently also to the support frame.

Therefore, these must be mounted in a suitable place. The device is mounted on the left and right directly on or under the head beam of the support frame.

The angle with the bolt must make **full contact** with the **support frame**. A mounting on the cabin is not permissible.

2. The safety screws are positioned so that the distances in the shaft head comply at least with the requirements of EN 81-20 point 5.2.5.7. The stop plates are mounted with the distance x below.

The **release speed** is relevant for the distance! Before mounting, clean the rails (**free of grease and oil**)!

3. The bolt must hit the stop plate with a length of at least **10mm** in the extended state.

#### Advice on the deceleration:

For 400 - < 600kg the stop plates are attached to the rail via 2 clamping plates each and for 600 - 1600kg via 4 clamping plates each.

A controlled slipping of the stop plates is achieved by means of the tightening torques (deceleration <1g)

The distance between the locking screw <-> stop plate is determined by the release speed!

# W+W Travel path limitation, sets above

400kg - 1600kg, IP20 and IP67





Scope of delivery travel path limitation art.no. 078684 IP20



Scope of delivery travel path limitation art.no. 078685 IP67



Scope of delivery travel path limitation art.no. 078687 IP20



Scope of delivery travel path limitation art.no. 078688 IP67

If you have any questions about deviations, please contact W+W Aufzugkomponenten.

# Complete sets 400 - < 600kg

W+W Travel path limitation IP20 and IP67

Art.no.	Description
078684	Travel path limitation above, IP20, 400-<600kg set
078685	Travel path limitation above, IP67, 400-<600kg set

- 1 x Travel path limitation bolts on the left
- 1 x Travel path limitation bolts on the right
- 2 x Limit stop plates, 4x Adhesive labels
- 1 x Fixation material (various clamping plates, screws)
- 1 x Mounting instruction

#### **Technical data**

max. nominal load: 400 - <600kg\*

max. release speed: 2.1m/s (overspeed governor)

max. nominal speed: 1.6m/s stroke length bolt: 30mm

stop plate suitable for rail backs: T90/75/16 | T89/62/16

Art.no. 078684 IP20

Voltage / Current AC: 230V AC-15 2A / Voltage / Current DC: 200V DC-13 2A

Supply cable bolt **retracted**Supply cable bolt **extended**Supply cable bolt **extended** 

Art.no. 078685 IP67

Spannung / Strom AC: 230V AC-15 4A /
Spannung / Strom DC: 200V DC-13 4A

Supply cable bolt retracted 5m H05VV-F 2x1mm²

Supply cable bolt extended 5m H05VV-F 2x1mm²

# Complete sets 600 - 1600kg

W+W Travel path limitation IP20 and IP67

Art.no.	Description
078687	Travel path limitation above, IP20, 600-1600kg set
078688	Travel path limitation above, IP67, 600-1600kg set

- 1 x Travel path limitation bolts on the left
- 1 x Travel path limitation bolts on the right
- 2 x Limit stop plates, 4x Adhesive labels
- 1 x Fixation material (various clamping plates, screws)
- 1 x Mounting instruction

#### **Technical data**

max. nominal load: 400 - 1600kg\*

max. release speed: 2.1m/s (overspeed governor)

max. nominal speed: 1.6m/s stroke length bolt: 30mm

stop plate suitable for rail backs: T125/82/16 | T90/75/16 |

T89/62/16 | T70/70/16

Art.no. 078687 IP20

Voltage / Current AC: 230V AC-15 2A / Voltage / Current DC: 200V DC-13 2A

Supply cable bolt **retracted**Supply cable bolt **extended**Supply cable bolt **extended**Art.no. 078688 IP67

Sm 3G1mm² halogen-free
5m 2x1mm² halogen-free

Spannung / Strom AC: 230V AC-15 4A /
Spannung / Strom DC: 200V DC-13 4A
Supply cable bolt retracted 5m H05VV-F 2x1mm²
Supply cable bolt extended 5m H05VV-F 2x1mm²

<sup>\*</sup>Please observe the installation conditions on page 41!



TekoS-265



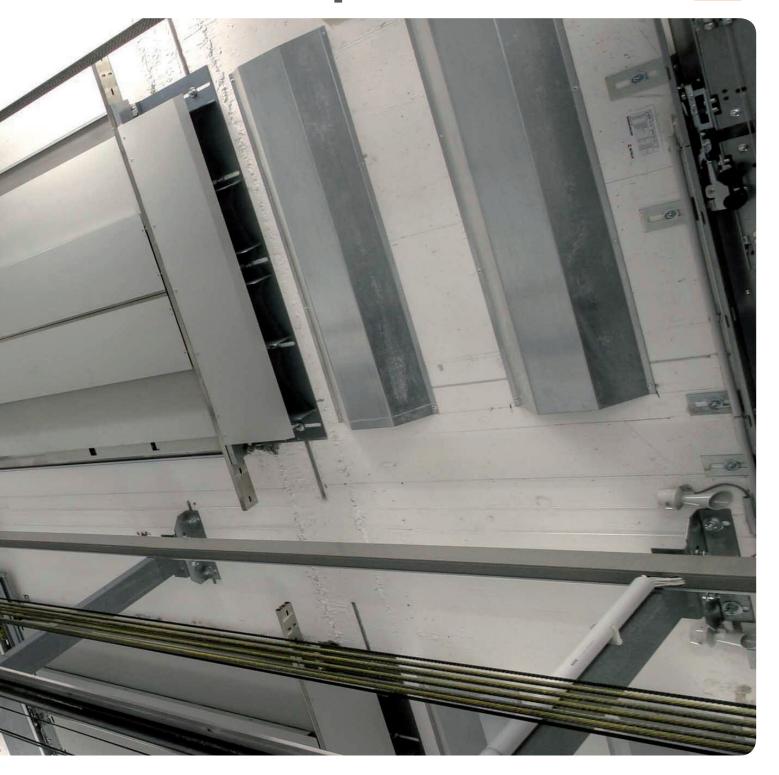
TekoS-286 automatic



TekoS-350

# Telescopic + universal car aprons





TekoS-450

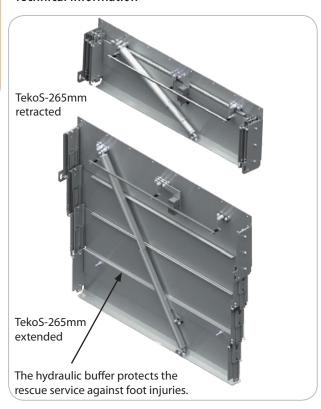
Universal car apron

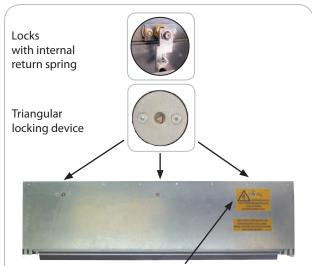


Landing door apron

# TekoS-265mm Telescopic apron, four-part

Technical information





The safety label has to be placed where it can be seen if the landing door is opened only a few centimetres.

Safety disconnector



#### Cabin door locking device

The manufacturer categorically recommends an additional cabin door locking device, if the client does not provide for equivalent safety measures, in order to prevent the endangerment of locked in persons when they release themselves. E.g. in case of revolving doors due to the construction it is often not possible to release oneself even when there is no cabin door locking device.

#### Intended use

The four-part telescopic car apron prevents the inadvertent fall of persons into the lift shaft beneath the car

#### **Functional description**

In its normal state the four-part telescopic apron is retracted. Therefore no touch-down or grinding noises occur when the car reaches or leaves the lowest landing.

The total height is only 265mm (Extended: 286mm) in the retracted state of the apron.

If passengers have to be released, the apron is unlocked with a triangular key directly on the apron.

To avoid accidents when releasing passengers, the landing door has to be opened just for a few centimetres. There-fore every apron is equipped with three triangular locks for left, right or centrally closing doors. To extend the apron only one lock has to be used.

#### Prevention of foot injuries

The triangular locks are connected by a rod on the backside of the apron. So if the apron is unlocked by the rescue service, the extension process is damped to avoid foot injuries.

#### Locking in the extended state

In the extended state the telescopic apron locks itself. According to EN81-21 the apron can only be reset manually from the shaft pit.

#### Safety advice

In the extended state the telescopic apron locks itself. According to EN81-21 the apron can only be reset manually from the shaft pit.



#### **Switch supervision**

A switch supervises the **retracted** state. The apron automatically locks into its normal position when pushing it upwards.

#### Safety disconnector IP67

for monitoring the retracted state of the apron, pre-installed with a 5m long supply line 4 x 1mm<sup>2</sup> Rated operational current: AC-15 4A for 230V

DC-13 4A for 24V

Contact: 2NC

closed in the retracted state

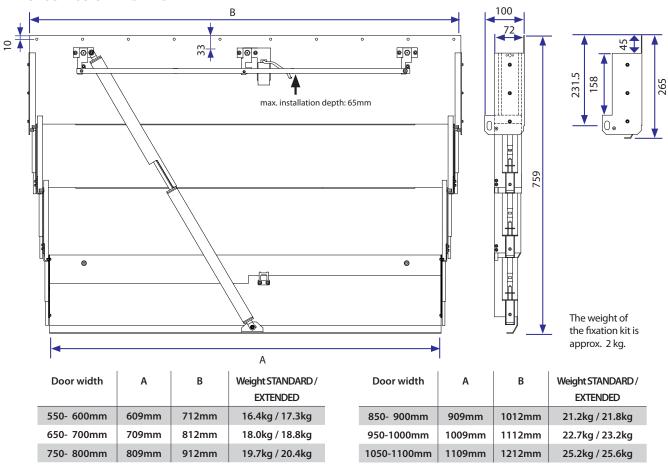
#### **Collision prevention**

When going down, a directional switch has to prevent that the lift can be moved with the control of inspection operation and the lift return control in the area, where an apron, which is not retracted, may collide with the pit floor.

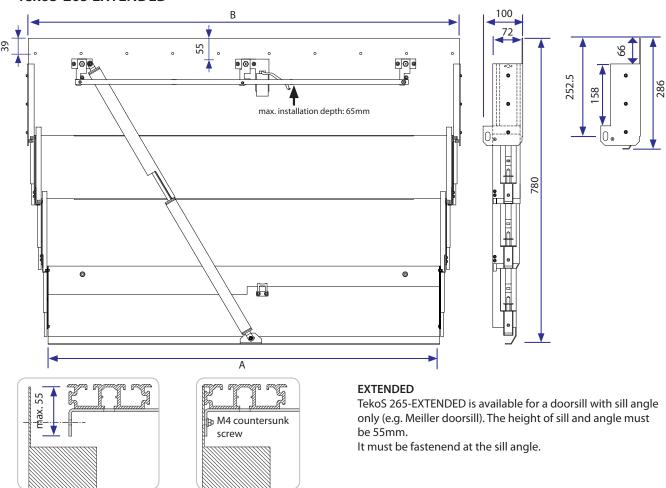
# TekoS-265mm

# **Dimensional drawings**

# **TekoS-265 STANDARD**



#### **TekoS-265 EXTENDED**



# Scope of delivery





- 1 pc. telescopic apron, 2mm galvanised steel sheet, incl. monitoring switch
- 1 pc. yellow adhesive label for machine room (German) 80 x 120
- 1 pc. yellow adhesive label for apron (German) 115 x 75mm
- 1 pc. yellow adhesive label for apron (German) 130 x 40mm
- 2 pcs. angles for fixing the telescopic apron at the doorsill of the car
- 2 sets fixation material (angles, diagonal struts)
- 1 pc. small parts bag (screws, nuts, etc.)
- 1 pc. detailed mounting instruction, German

# Fixation of the mounting angle at the doorsill Fixation of the telescopic apron at the doorsill and the mounting angles

# **TekoS 265 STANDARD**

Art.no.	Description
079845	TekoS-265 Door width 550- 600mm
079920	TekoS-265 Door width 650- 700mm
079921	TekoS-265 Door width 750- 800mm
079922	TekoS-265 Door width 850- 900mm
079923	TekoS-265 Door width 950-1000mm
079924	TekoS-265 Door width 1050-1100mm

### **TekoS 265 EXTENDED**

Art.no.	Description
079846	TekoS-265 Door width 550- 600mm extended
079925	TekoS-265 Door width 650- 700mm extended
079926	TekoS-265 Door width 750- 800mm extended
079927	TekoS-265 Door width 850- 900mm extended
079928	TekoS-265 Door width 950-1000mm extended
079929	TekoS-265 Door width 1050-1100mm extended

In the planning stage it has to be made sure that the doorsill and the fixation construction of the doorsill have sufficient stability, so that the forces acting on the extracted apron in case of rescuing persons are safely absorbed.

# Fixation with cross-strut 340mm long and universal angle 200 x 150mm.

Art.no.	Description
079908	TekoS-265 Door width 550- 600mm VA*
079930	TekoS-265 Door width 650- 700mm VA*
079931	TekoS-265 Door width 750- 800mm VA*
079932	TekoS-265 Door width 850- 900mm VA*
079933	TekoS-265 Door width 950-1000mm VA*
079934	TekoS-265 Door width 1050-1100mm VA*
Version in	

Art.no.	Description	
079839	TekoS-265 Door width 550- 600mm VA* extended	
079840	TekoS-265 Door width 650- 700mm VA* extended	
079841	TekoS-265 Door width 750- 800mm VA* extended	
079842	TekoS-265 Door width 850- 900mm VA* extended	
079843	TekoS-265 Door width 950-1000mm VA* extended	
079844	TekoS-265 Door width 1050-1100mm VA* extended	
Version in stainless steel	rione sineet in stanness steel, ground men grain size	

# TekoS-265mm



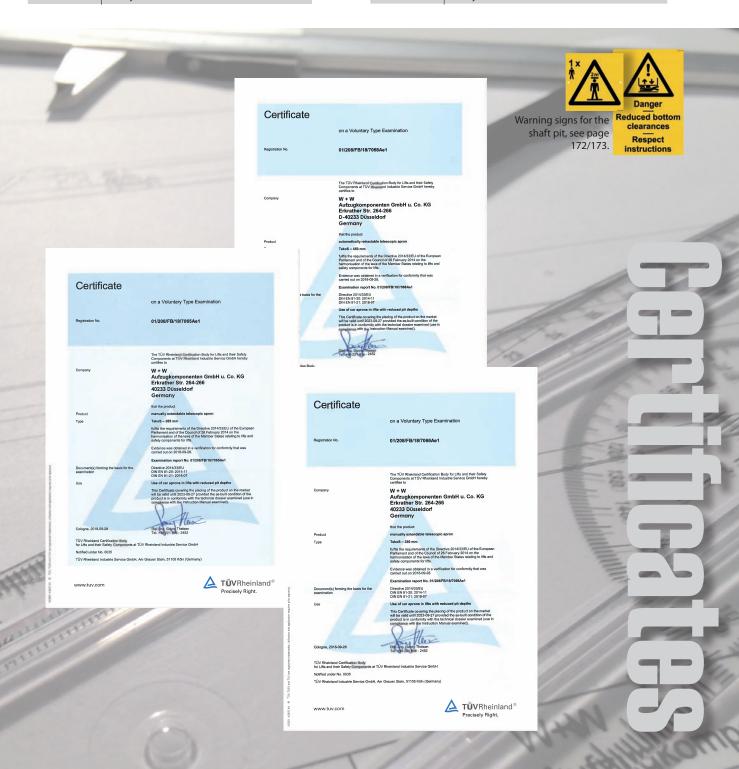
Art.no.	Description
079971	Safety label TekoS-265 English
079972	Safety label TekoS-265 French
079973	Safety label TekoS-265 Italian

# **Safety labels**

Safety labels TekoS-265 Foreign countries Adhesive labels for apron + machine room + mounting instruction

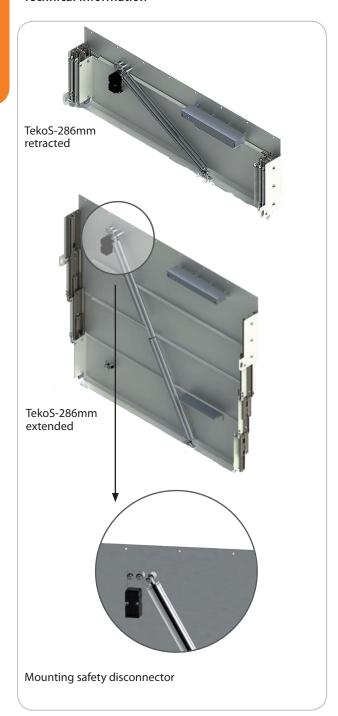
If the apron is used in non-German speaking countries, the safety labels to be glued on the apron and the machine room have to be ordered separately for the respective national language.

Art.no.	Description
079974	Safety label TekoS-265 Spanish
079975	Safety label TekoS-265 Portuguese
079976	Safety Jahel TekoS-265 Russian



# TekoS-286mm Telescopic apron, four-part, automatic

Technical information





#### Cabin door locking device

The manufacturer categorically recommends an additional cabin door locking device, if the client does not provide for equivalent safety measures, in order to prevent the endangerment of locked in persons when they release themselves. E.g. in case of revolving doors due to the construction it is often not possible to release oneself even when there is no cabin door locking device.

#### Intended use

The four-part telescopic car apron prevents the inadvertent fall of persons into the lift shaft beneath the car.

#### **Functional description**

In its normal state the four-part telescopic apron is retracted. Therefore no touch-down or grinding noises occur when the car reaches or leaves the lowest landing.

The total height is only 286mm in the retracted state.

The holding magnet opens, if the emergency unlocking device is activated in the landing doors or in case of a power failure. The apron extends automatically.

#### **UCM** - Unintended car movement

In case of lifts with a protective device against uncontrolled movements of the car, the lift control has to trigger the holding magnet in a way that the apron is released and extends, if the protective device responds.

#### Locking in the extended state

In the extended state the telescopic apron locks itself. According to EN81-21 the apron can only be reset manually from the shaft pit.

#### **Switch supervision**

A switch supervises the **retracted** state. The apron automatically locks into its normal position when pushing it upwards, as soon as the magnet is energised once again.

#### Safety disconnector IP67

for monitoring the retracted state of the apron, pre-installed with a 5m long supply line 4x1mm<sup>2</sup> Rated operational current: AC-15 4A for 230V

DC-13 4A for 24V

Contact: 2NC

closed in the retracted state

#### **Holding magnet**

for keeping the apron closed,

pre-installed with a 5m long supply line 2x1mm<sup>2</sup> Voltage: 12V DC/ 24V DC

Current consumption: 500mA/ 250mA

Duty ratio: 100%

Warning signs for the shaft pit, see page 172/173.

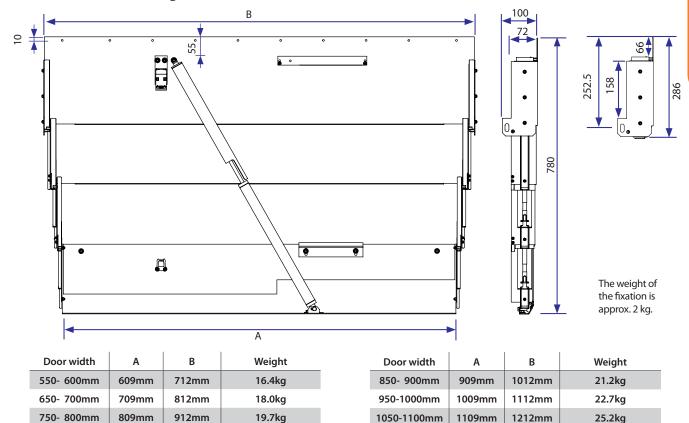
#### **Collision prevention**

When going down, a directional switch has to prevent that the lift can be moved with the control of inspection operation and the lift return control in the area, where an apron, which is not retracted, may collide with the pit floor.

# **TekoS-286mm automatic**

# **Dimensional drawings**

# **Dimensional drawing 286 automatic**





# **TekoS 286 automatic**

Art.no.	Description
079870	TekoS-286 Door width 550- 600mm automatic
079871	TekoS-286 Door width 650- 700mm automatic
079872	TekoS-286 Door width 750- 800mm automatic
079873	TekoS-286 Door width 850- 900mm automatic
079874	TekoS-286 Door width 950-1000mm automatic
079875	TekoS-286 Door width 1050-1100mm automatic

Art.no.	Description
079883	Safety label TekoS-286 English
079884	Safety label TekoS-286 French
079885	Safety label TekoS-286 Italian
079886	Safety label TekoS-286 Spanish
079887	Safety label TekoS-286 Portuguese
079888	Safety label TekoS-286 Russian

# Scope of delivery

- 1 pc. telescopic apron, 2mm galvanised steel sheet, incl. monitoring switch and magnet
- 1 pc. yellow adhesive label for machine room (German) 80 x 120mm
- 1 pc. yellow adhesive label for apron (German)
- 1 set fixation material (angle, diagonal strut)
- 1 pc. small parts bag (screws, nuts, etc.)
- 1 pc. detailed mounting instruction, German

Art.no.	Description		
079876	TekoS-286 Door width 550- 600mm VA* automatic		
079877	TekoS-286 Door width 650- 700mm VA* automatic		
079878	TekoS-286 Door width 750- 800mm VA* automatic		
079879	TekoS-286 Door width 850- 900mm VA* automatic		
079880	TekoS-286 Door width 950-1000mm VA* automatic		
079881	TekoS-286 Door width 1050-1100mm VA* automatic		
Version in stainless steel	* Front sheet in stainless steel, ground with grain size 240, the rest is made of galvanised steel sheet.		

# Safety labels

TekoS-286 Foreign countries

If the apron is used in non-German speaking countries, the safety label and the mounting instruction have to be ordered separately for the respective national language.

# TekoS-350mm Telescopic apron, three-part

Technical information



Safety disconnector



### Cabin door locking device

The manufacturer categorically recommends an additional cabin door locking device, if the client does not provide for equivalent safety measures, in order to prevent the endangerment of locked in persons when they release themselves. E.g. in case of revolving doors due to the construction it is often not possible to release oneself even when there is no cabin door locking device.

#### Intended use

The three-part telescopic car apron prevents the inadvertent fall of persons into the lift shaft beneath the car.

#### **Functional description**

In its normal state the three-part telescopic apron is retracted. Therefore no touch-down or grinding noises occur when the car reaches or leaves the lowest landing. The total height is only 350mm, 366mm for the EXTENDED version.

If passengers have to be released, the apron is unlocked with a triangular key directly on the apron.

To avoid accidents when releasing passengers, the landing door has to be opened just for a few centimetres. Therefore every apron is equipped with three triangular locks for left, right or centrally closing doors. To extend the apron only one lock has to be used.

#### Prevention of foot injuries

The triangular locks are connected by a rod on the backside of the apron. So if the apron is unlocked by the rescue service, the extension process is damped to avoid foot injuries.

#### Locking in the extended state

In the extended state the telescopic apron locks itself. According to EN81-21 the apron can only be reset manually from the shaft pit.

#### Safety advice

An adhesive label in the machine room and on the apron informs the rescue service about the retracted apron.

#### **Switch supervision**

A switch supervises the **retracted** state. The apron automatically locks into its normal position when pushing it upwards.

#### Safety disconnector IP67

for monitoring the retracted state of the apron, pre-installed with a 5m long supply line 4x1mm<sup>2</sup> Rated operational current: AC-15 4A for 230V

DC-13 4A for 24V

Contact: 2NC

closed in the retracted state



Warning signs for the shaft pit, see page 172/173.

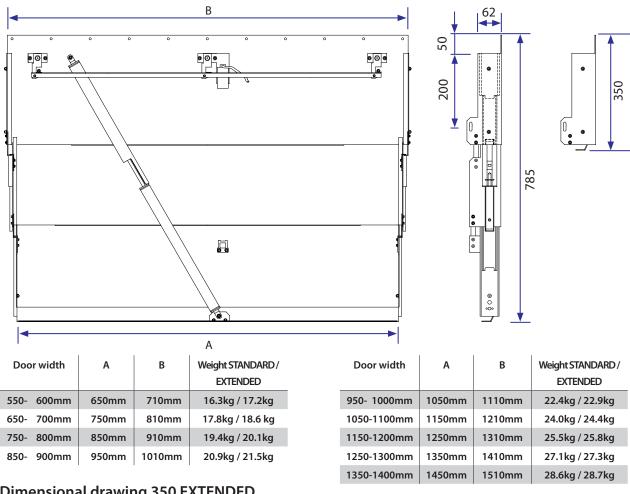
#### **Collision prevention**

When going down, a directional switch has to prevent that the lift can be moved with the control of inspection operation and the lift return control in the area, where an apron, which is not retracted, may collide with the pit floor.

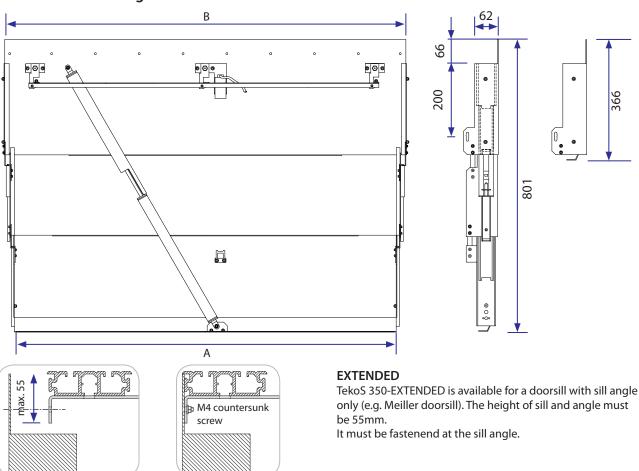
# TekoS-350mm

# **Dimensional drawings**

# **Dimensional drawing 350 STANDARD**



# **Dimensional drawing 350 EXTENDED**



# TekoS-350mm



# Mounting example

# Scope of delivery 1

- 1 pc. telescopic apron, 2mm galvanised steel sheet, incl. monitoring switch width, according to order specification
- 1 pc. yellow adhesive label for machine room (German)  $80 \times 120 \text{mm}$
- 1 pc. yellow adhesive label for the apron (German) 115 x 75mm
- 1 pc. yellow adhesive label for the apron (German) 130 x 40mm
- 2 pcs. diagonal struts 410 x 40 x 15mm
- 2 pcs. angles 180 x 55mm for fixing the diagonal struts at the car
- 1 set fixation material
- 1 pc. detailed mounting instruction, German

The fixation is effected by cross struts and universal angles on the bottom side of the cabin.



### **TekoS 350 STANDARD**

Art.no.	Description
079909	TekoS-350 Door width 550- 600mm
079900	TekoS-350 Door width 650- 700mm
079901	TekoS-350 Door width 750- 800mm
079902	TekoS-350 Door width 850- 900mm
079903	TekoS-350 Door width 950-1000mm
079904	TekoS-350 Door width 1050-1100mm
079905	TekoS-350 Door width 1150-1200mm
079906	TekoS-350 Door width 1250-1300mm
079907	TekoS-350 Door width 1350-1400mm

# **TekoS 350 EXTENDED**

Art.no.	Description
078480	TekoS-350 Door width 550- 600mm extended
078481	TekoS-350 Door width 650- 700mm extended
078482	TekoS-350 Door width 750- 800mm extended
078483	TekoS-350 Door width 850- 900mm extended
078484	TekoS-350 Door width 950-1000mm extended
078485	TekoS-350 Door width 1050-1100mm extended
078486	TekoS-350 Door width 1150-1200mm extended
078487	TekoS-350 Door width 1250-1300mm extended
078488	TekoS-350 Door width 1350-1400mm extended

Art.no.	Description
079918	TekoS-350 Door width 550- 600mm VA*
079910	TekoS-350 Door width 650- 700mm VA*
079911	TekoS-350 Door width 750- 800mm VA*
079912	TekoS-350 Door width 850- 900mm VA*
079913	TekoS-350 Door width 950-1000mm VA*
079914	TekoS-350 Door width 1050-1100mm VA*
079915	TekoS-350 Door width 1150-1200mm VA*
079916	TekoS-350 Door width 1250-1300mm VA*
079917	TekoS-350 Door width 1350-1400mm VA*
Version in stainless steel	

Art.no.	Description
078489	TekoS-350 Door width 550- 600 VA* extended
078490	TekoS-350 Door width 650- 700 VA* extended
078491	TekoS-350 Door width 750- 800 VA* extended
078492	TekoS-350 Door width 850- 900 VA* extended
078493	TekoS-350 Door width 950-1000 VA* extended
078494	TekoS-350 Door width 1050-1100 VA* extended
078495	TekoS-350 Door width 1150-1200 VA* extended
078496	TekoS-350 Door width 1250-1300 VA* extended
078497	TekoS-350 Door width 1350-1400 VA* extended
Version in stainless steel	* Front sheet in stainless steel, ground with

\* Front sheet in stainless steel, ground with grain size 240, the rest is made of galvanised steel sheet. Non deliverable from stock!

# TekoS-350mm

# Note allower Note them supproper Labeling fished Do not going of the Supproper of the Sup



Mounting example

# Safety advice: Passengers' release if a flush landing or an emergency release upstains is not possible: 1. Open the door ajar (approx.15cm) 2. Unlock the telescopic door apron with a triangular key 3. Release passengers Putting back the apron into the retracted position has to be done from the pit floor!





# Scope of delivery 2

**Warning notices for landing doors**, necessary for all landing doors, <u>not</u> necessary with cabin door locking device, consisting of:

1 pc. yellow adhesive label 80x120mm

1 pc. plastic sign

1 pc. tapping screw

The yellow adhesive label must be affixed completely to the door frame in the shaft, directly above the respective locking device. As in many cases there is no smooth surface, a solid plastic sign is generally provided.

Art.no.	Description
079940	Warning notice for landing doors TekoS-350 in German, English, Dutch
079941	Warning notice for landing doors TekoS-350 in German, French, Italian
079942	Warning notice for landing doors TekoS-350 Spanish, Portuguese, English
079943	Warning notice for landing doors TekoS-350 Russian, English, German

# Safety labels TekoS-350

Foreign countries, adhesive labels for apron + machine room + mounting instruction

If the apron is used in non-German speaking countries, the safety labels to be glued on apron and machine room have to be ordered separately for the respective national language.

Art.no.	Description	
079944	Safety label TekoS-350 English	
079945	Safety label TekoS-350 French	
079946	Safety label TekoS-350 Italian	
079947	Safety label TekoS-350 Spanish	
079948	Safety label TekoS-350 Portuguese	
079949	Safety label TekoS-350 Russian	

Warning signs for the shaft pit, see page 172/173.

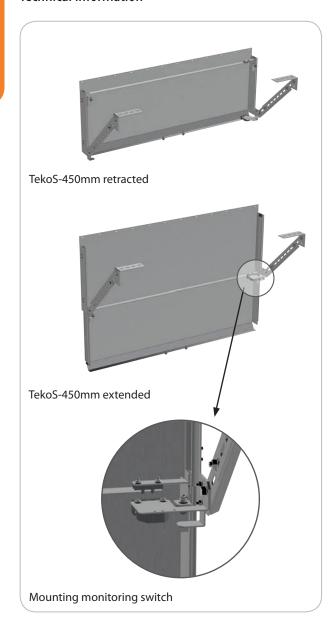
#### Landing door warning notices

The manufacturer **categorically** recommends an additional cabin door locking device, if the client does not provide for equivalent safety measures, in order to prevent the endangerment of locked in persons when they release themselves. According to the manufacturer's prototype certificate this residual risk can be covered alternatively by affixing warning notices to every landing door, when a cabin door locking device is not possible due to technical reasons. The responsibility for the choice of the safety measure which guarantees sufficient safety in each case is incumbent on

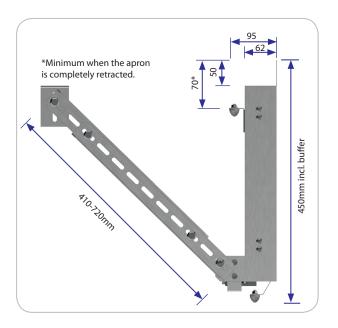
When planning, we recommend to consult the respective technical inspection agency.

# TekoS-450mm Telescopic apron, two-part

Technical information



#### TekoS-450 lateral view



#### Intended use

The two-part telescopic car apron prevents the inadvertent fall of persons into the lift shaft beneath the car.

If, deviating from EN 81, the pit depth\* is reduced, the apron is suitable for a minimum pit depth of 550mm (EN 81-20 5.2.5.8.2 Reduction of the distance to the pit floor to 100 mm, if the distance to the pit wall is smaller than 150 mm).

If measures are taken, which equivalently replace the clearance required by EN 81-20 (for example fold-out supports) the apron is suitable for pit depths up to 450mm.

The use of the apron during docking operations is not allowed.

\*Pit depth = Space between the top edge of the cabin doorsill and the shaft floor, when buffers are completely compressed.

#### **Functional description**

The telescopic apron is always extended. When the car reaches the lowest landing, the apron retracts.

High quality guide rails and rubber buffers on the intermediate elements and on the lower edge of the apron provide for a smooth retraction and extension!

#### Monitoring switch

TekoS-450 mm is provided with an electric safety contact designed to monitor the extended position of the apron.

#### Safety disconnector IP20

for monitoring the extended state of the apron, pre-installed with a 5m long supply line 3G1mm<sup>2</sup> Rated operational current: AC-15 2A for 230V

DC-13 2A for 200V

Contact: 1NC closed in the extended state

If the apron is not in the extended position and if the car is not in a range of 1 m above the lowest landing door level, the electric safety device has to render the normal use of the lift impossible.



Warning signs for the shaft pit, see page 172/173.

# TekoS-450mm

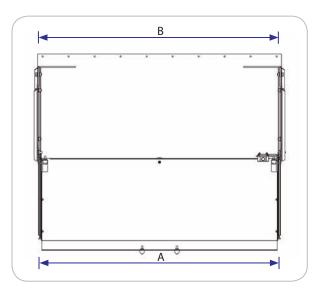


Door width	A	В	Weight STANDARD / VA
450- 500mm	550mm	580mm	11,0kg / 11.3kg
550- 600mm	650mm	680mm	13.0kg / 12.7kg
650- 700mm	750mm	780mm	14.9kg / 14.1kg
750- 800mm	850mm	880mm	16.9kg / 15.5kg
850- 900mm	950mm	980mm	18.9kg / 17.0kg
950- 1000mm	1050mm	1080mm	20.9kg / 18.4kg
1050-1100mm	1150mm	1180mm	22.9kg / 19.8kg



Art.no.	Description
079640	TekoS 450 Door width 450- 500mm
079641	TekoS 450 Door width 550- 600mm
079950	TekoS 450 Door width 650- 700mm
079951	TekoS 450 Door width 750- 800mm
079952	TekoS 450 Door width 850- 900mm
079953	TekoS 450 Door width 950-1000mm
079954	TekoS 450 Door width 1050-1100mm
079955	TekoS 450 Door width 1150-1200mm
079956	TekoS 450 Door width 1250-1300mm
079957	TekoS 450 Door width 1350-1400mm
079958	TekoS 450 Door width 1450-1500mm
079959	TekoS 450 Door width 1550-1600mm
079960	TekoS 450 Door width 1650-1700mm

# **Dimensional drawing**



Door width	Α	В	Weight STANDARD / VA
1150-1200mm	1250mm	1280mm	24.8kg / 21.2kg
1250-1300mm	1350mm	1380mm	26.8kg / 22.6kg
1350-1400mm	1450mm	1480mm	28.8kg / 24.1kg
1450-1500mm	1550mm	1580mm	30.8kg / 25.5kg
1550-1600mm	1650mm	1680mm	32.8kg / 26,9kg
1650-1700mm	1750mm	1780mm	34.7kg / 28.3kg

# **Scope of delivery**

1 pc. telescopic apron, 1.5mm galvanised steel sheet, width according to order specification

4 pcs. diagonal struts 410 x 40 x 15mm

2 pcs. angles 180 x 55mm for fastening the diagonal struts at the car  $\,$ 

1 pc. monitoring switch

1 set fastening material

1 pc. warning sign for the pit

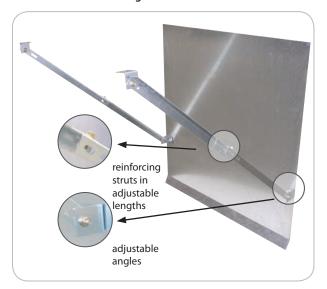
1 pc. detailed mounting instruction

Art.no.	Description
079642	TekoS 450 Door width 450- 500mm VA*
079643	TekoS 450 Door width 550- 600mm VA*
079980	TekoS 450 Door width 650- 700mm VA*
079981	TekoS 450 Door width 750- 800mm VA*
079982	TekoS 450 Door width 850- 900mm VA*
079983	TekoS 450 Door width 950-1000mm VA*
079984	TekoS 450 Door width 1050-1100mm VA*
079985	TekoS 450 Door width 1150-1200mm VA*
079986	TekoS 450 Door width 1250-1300mm VA*
079987	TekoS 450 Door width 1350-1400mm VA*
079988	TekoS 450 Door width 1450-1500mm VA*
079989	TekoS 450 Door width 1550-1600mm VA*
079990	TekoS 450 Door width 1650-1700mm VA*
Version in stainless steel	* Front sheet in stainless steel, ground with grain size 240. Struts and angles made of galvanised ste

sheet. Non deliverable from stock!

# **Universal car apron**

Construction according to EN 81-20 5.4.5





A	Autoria	Description
Art.no.	Art.no.	Description
078530	063452	750mm wide, for DW 700mm
063194	063453	800mm wide, for DW 750mm
078531	063454	850mm wide, for DW 800mm
063195	063455	900mm wide, for DW 850mm
078532	063456	950mm wide, for DW 900mm
063196	063457	1000mm wide, for DW 950mm
063197	063458	1050mm wide, for DW 1000mm
063198	063459	1100mm wide, for DW 1050mm
063199	063460	1150mm wide, for DW 1100mm
063200	063461	1200mm wide, for DW 1150mm
063201	063462	1250mm wide, for DW 1200mm
063336	063463	1300mm wide, for DW 1250mm
063337	063464	1350mm wide, for DW 1300mm
063338	063465	1400mm wide, for DW 1350mm
063339	063466	1450mm wide, for DW 1400mm
063340	063467	1500mm wide, for DW 1450mm
063341	063468	1550mm wide, for DW 1500mm*
063342	063469	1600mm wide, for DW 1550mm*
063343	063470	1650mm wide, for DW 1600mm*
	Version in stainless steel	Front sheet in stainless steel, ground with grain size 240. Fixation struts made
		of hot-dip galvanised steel sheet.

#### Description

#### Car apron for lift cabins

The apron is only suitable for mounting at the door sill of a lift cabin. The car apron must overlap at least 25mm on the right and on the left side of the cabin door.

It is made of galvanised metal sheet 1.5mm, 750mm long with chamfer at lower edge, incl. fastening angles and reinforcing struts, as well as tapping and wood screws, for fixation under the doorsill.

From a door width of 1500mm a third reinforcing strut is supplied.

Easy mounting with reinforcing struts in adjustable length and adjustable angles.



Warning signs for the shaft pit, see page 172/173.

# Scope of delivery

- 1 pc. car apron, galvanised metal sheet 1.5mm
- 4 pcs. reinforcing struts
- 4 pcs. fastening angles for mounting the reinforcing struts at the car
- 1 set fastening material
- 1 pc. detailed mounting instruction

\*From a door width of 1500mm a third reinforcing strut is supplied.

Art.no.	Art.no.	Description
063344	063471	1700mm wide, for DW 1650mm*
063345	063472	1750mm wide, for DW 1700mm*
063346	063473	1800mm wide, for DW 1750mm*
063347	063474	1850mm wide, for DW 1800mm*
063348	063475	1900mm wide, for DW 1850mm*
063349	063476	1950mm wide, for DW 1900mm*
063350	063477	2000mm wide, for DW 1950mm*
063351	063478	2050mm wide, for DW 2000mm*
063352	063479	2100mm wide, for DW 2050mm*
063353	063480	2150mm wide, for DW 2100mm*
063354	063481	2200mm wide, for DW 2150mm*
063355	063482	2250mm wide, for DW 2200mm*
063356	063483	2300mm wide, for DW 2250mm*
063357	063484	2350mm wide, for DW 2300mm*
063358	063485	2400mm wide, for DW 2350mm*
063359	063486	2450mm wide, for DW 2400mm*
063360	063487	2500mm wide, for DW 2450mm*
063361	063488	2550mm wide, for DW 2500mm*
	Version in	Front sheet in stainless steel, ground
	stainless steel	with grain size 240. Fixation struts
		made of hot-dip galvanised steel sheet.  Non deliverable from stock!



# **Landing door apron**Construction according to EN 81-20 5.2.5.3.2

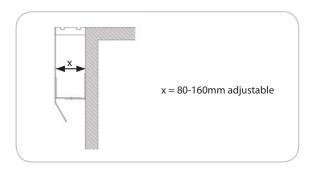
#### Description

Landing door aprons are made of solid 1.5mm thick hot-dip galvanised sheet steel.

# Scope of delivery

1 pc. landing door apron, width according to order specifications.

Art.no.	Description
050470	Mounting set landing door apron
050068	100 pcs. tapping screws 4.8 x 12mm



# **Accessories**

To achieve a suffient stability it might be neccessary to use the mounting kit. By means of the adjustable angles the apron is stabilised at the shaft wall.

Tapping screws with extra flat head for the fixation of the apron.

Art.no.	Art.no.	Description
050450	050431	750mm wide, for DW 700mm
050050	050350	800mm wide, for DW 750mm
050451	050432	850mm wide, for DW 800mm
050051	050351	900mm wide, for DW 850mm
050452	050433	950mm wide, for DW 900mm
050052	050352	1000mm wide, for DW 950mm
050453	050434	1050mm wide, for DW 1000mm
050053	050353	1100mm wide, for DW 1050mm
050454	050435	1150mm wide, for DW 1100mm
050054	050354	1200mm wide, for DW 1150mm
050455	050436	1250mm wide, for DW 1200mm
050055	050355	1300mm wide, for DW 1250mm
050456	050437	1350mm wide, for DW 1300mm
050056	050356	1400mm wide, for DW 1350mm
050457	050438	1450mm wide, for DW 1400mm
050057	050357	1500mm wide, for DW 1450mm
050458	050439	1550mm wide, for DW 1500mm
050058	050358	1600mm wide, for DW 1550mm
050459	050440	1650mm wide, for DW 1600mm
	Version in stainless steel	Front sheet in stainless steel, ground with grain size 240.

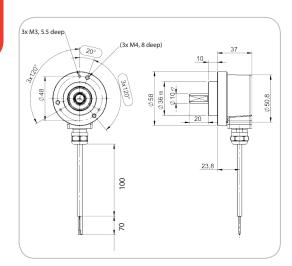
	Non	deliverab	le from	stock!
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Art.no.	Art.no.	Description
050059	050359	1700mm wide, for DW 1650mm
050460	050441	1750mm wide, for DW 1700mm
050060	050360	1800mm wide, for DW 1750mm
050461	050442	1850mm wide, for DW 1800mm
050061	050361	1900mm wide, for DW 1850mm
050462	050443	1950mm wide, for DW 1900mm
050062	050362	2000mm wide, for DW 1950mm
050463	050444	2050mm wide, for DW 2000mm
050063	050363	2100mm wide, for DW 2050mm
050464	050445	2150mm wide, for DW 2100mm
050064	050364	2200mm wide, for DW 2150mm
050465	050446	2250mm wide, for DW 2200mm
050065	050365	2300mm wide, for DW 2250mm
050466	050447	2350mm wide, for DW 2300mm
050066	050366	2400mm wide, for DW 2350mm
050467	050448	2450mm wide, for DW 2400mm
050067	050367	2500mm wide, for DW 2450mm
050468	050449	2550mm wide, for DW 2500mm
	Version in	Front sheet in stainless steel, ground
	stainless steel	with grain size 240.
		Non deliverable from stock!

# Incremental encoders with clamping flange

suitable for W+W incremental encoder mounting kits for lift motors

# 1024 / 2048 pulses per revolution





#### Electrical specifications HTL/TTL universal

Power supply  $U_B$ Power consumption  $I_0$  4.7 ... 30V DC typ. 50 mA

(no load) **Output** 

Output type push-pull, incremental Load current max. per channel ±20 mA ,

short-circuit proof max. 300 kHz

Pulse frequency **Connection** 

Cable 3 x 2 x 0.14 mm<sup>2</sup>, 10 m

# Mechanical specifications HTL / TTL universal

Rotational speed max. 6000 min<sup>-1</sup>

3000 min<sup>-1</sup>

(Continuous operation)

Shaft load

- Radial 80N - Axial 40N Protection type IP65

Working temperature

range -20°C ... +70°C

# Supply cable



All encoders are delivered with a 10m supply cable and suitable plug (if necessary)!

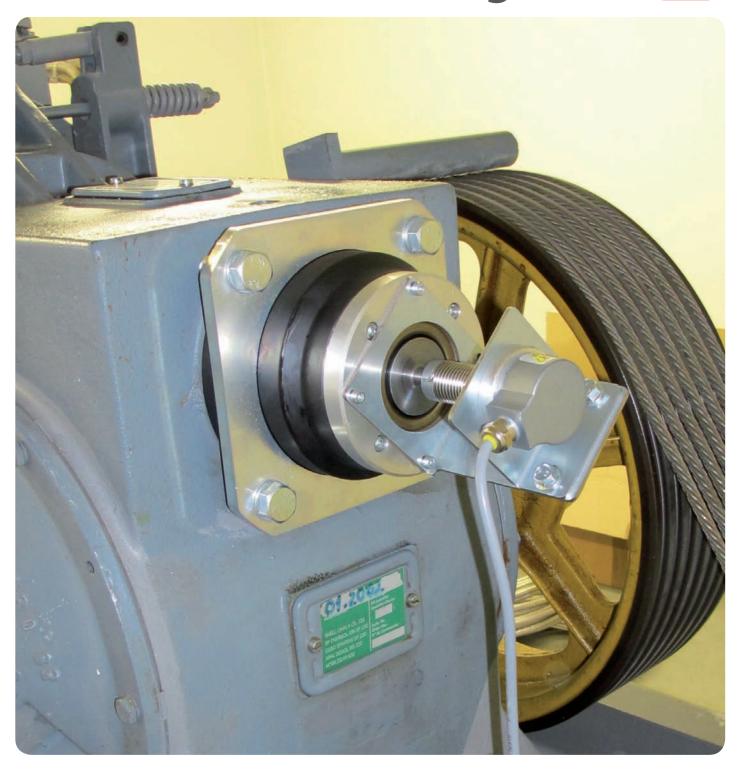
Incremental encoders for frequency	pulses per	Clamping flange W+W mounting kit
controls of the following companies:	revolution	Art.no.
OSCENTONIC GERATEBAL-GMBH	1024pulses	007211
Motion Control	1024pulses + plug	054261
BIODYN	2048pulses + plug	007590
<b>DIETZ</b> electronic	1024pulses + plug	007213
KEB	2048pulses + plug	007217
Aufzugstechnik GmbH	1024pulses	007404
LittEquip® MFC / CPI	1024pulses + plug	063619
with PG Speed control cards	1024pulses	050700
RST ELEKTRONIC GABH	1024pulses	007221
CONTROL LittEquip E300	1024pulses + plug	050825
VARIODYN VF20/30	2048pulses	007402
VARIODYN VFxxBR	2048pulses + plug	007589
<b>IIIILIFTCORE</b> LCDR	1024pulses + plug	007232
ZIEHL-ABEGG 2CF, 3C, 3BF, 4C	1024pulses	007223
ZIEHL-ABEGG 2CF	2048pulses	063045
ZIEHL-ABEGG 🛣 4C	1024pulses + plug	052631
UNIVERSAL 4.7 - 30V, 4 tracks	1024pulses	063620
UNIVERSAL 4.7 - 30V, 4 tracks	2048 pulses	063621

Signal	Cable	
+Ub	brown / green	
GND	white / green	
Α	brown	
<u>B</u>	grey	
<u>A</u>	green	
В	pink	
Screen	_	

The table is valid for all incremental encoders.

60

# Incremental encoder+ mounting kits



Mounting kit THYSSEN KASPER SASSI / Liftmaterial OTIS

# **Hollow shaft encoders**

to control frequency converters of lift motors



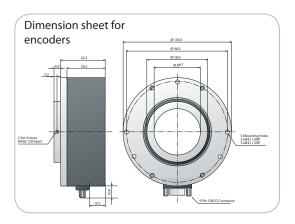
**Fixation variant 1** 



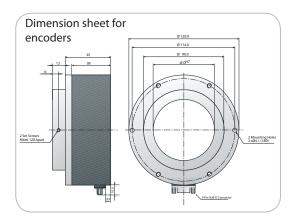
**Fixation variant 2** 







Shaft diameter: 23, 25, 28, 30, 32, 38 and 42mm.



Shaft diameter: 40, 45, 48, 55 and 65mm.

# Scope of delivery Hollow shaft encoder mounting kit

Hollow shaft encoder Fixation material 10m supply cable

#### Advice

The encoder line is delivered ready for connection to the frequency converters on the right side. A mounting instruction and a connection plan for the respective converter is included in delivery.

#### Electrical data hollow shaft encoder

4.75 ... 30V DC, 5V DC for RS 422 Operating voltage U No-load supply current I max. 40 mA

Output

Output type push-pull, incremental, 4 tracks IP65 Protection type

Output frequency max. 200 kHz

# **Accessory** mounting kit

Art.no.	Description
054192	10m extension cable

# Hollow shaft encoders

#### Art.no. Description + shaft-Ø

Art.no. Description + shaft-Ø

Art.no. Description + shaft-Ø

#### Art.no. Description + shaft-Ø

Art.no. Description + shaft-Ø

All types can be supplied ex stock!

# ascentronic

GERAT	EBAL - Gr
1024 puls	es
054000	HWG-ASC-

1024 pulses	
054000	HWG-ASC-23
054001	HWG-ASC-25
054002	HWG-ASC-28
054003	HWG-ASC-30
054004	HWG-ASC-32
054005	HWG-ASC-38
054006	HWG-ASC-40
054007	HWG-ASC-42
054008	HWG-ASC-45
054009	HWG-ASC-48
054010	HWG-ASC-55

054011 HWG-ASC-65

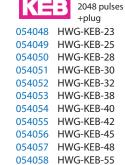
#### 1024 pulses +plug 054590 HWG-B&F-23 054591 HWG-B&F-25 054592 HWG-B&F-28 054593 HWG-B&F-30 054594 HWG-B&F-32 054595 HWG-B&F-38 054596 HWG-B&F-40 054597 HWG-B&F-42 054598 HWG-B&F-45 054599 HWG-B&F-48

# DIODAN

RIODAN	
es+plug	
HWG-BIO-23	
HWG-BIO-25	
HWG-BIO-28	
HWG-BIO-30	
HWG-BIO-32	
HWG-BIO-38	
HWG-BIO-40	
HWG-BIO-42	
HWG-BIO-45	
HWG-BIO-48	
HWG-BIO-55	

DIETZ	electronic	
1024 pulses+ <sub>l</sub>	olug	
054012 HW	/G-DI7-23	

1024 puises+piug		
054012	HWG-DIZ-23	
054013	HWG-DIZ-25	
054014	HWG-DIZ-28	
054015	HWG-DIZ-30	
054016	HWG-DIZ-32	
054017	HWG-DIZ-38	
054018	HWG-DIZ-40	
054019	HWG-DIZ-42	
054020	HWG-DIZ-45	
054021	HWG-DIZ-48	
054022	HWG-DIZ-55	
054023	HWG-DIZ-65	



054059 HWG-KEB-65



	- Conacn
Aufzugstechnik Gmbi	1024 pulses
054210	HWG-KW-23
054211	HWG-KW-25
054212	HWG-KW-28
054213	HWG-KW-30
054214	HWG-KW-32
054215	HWG-KW-38
054216	HWG-KW-40
054217	HWG-KW-42
054218	HWG-KW-45
054219	HWG-KW-48
054220	HWG-KW-55
054221	HWG-KW-65

# 054601 HWG-B&F-65 LiftEquip MFC/CPI

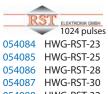
054600 HWG-B&F-55

SLEVATOR COMP.	ONENTS
1024 pul	ses+plug
054108	HWG-THY-23
054109	HWG-THY-25
054110	HWG-THY-28
054111	HWG-THY-30
054112	HWG-THY-32
054113	HWG-THY-38
054114	HWG-THY-40
054115	HWG-THY-42
054116	HWG-THY-45
054117	HWG-THY-48
054118	HWG-THY-55
054119	HWG-THY-65

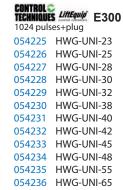
OMRON + PG Spe	N 1024 pulses
054072	HWG-OMR-23
054073	HWG-OMR-25
054074	HWG-OMR-28
05/1075	HWG-OMR-30

054260 HWG-BIO-65

054072	HWG-OMR-23
054073	HWG-OMR-25
054074	HWG-OMR-28
054075	HWG-OMR-30
054076	HWG-OMR-32
054077	HWG-OMR-38
054078	HWG-OMR-40
054079	HWG-OMR-42
054080	HWG-OMR-45
054081	HWG-OMR-48
054082	HWG-OMR-55
054083	HWG-OMR-65







# Variodyn VF20/30

2048 pulses

054120	HWG-VF20/30-23
054121	HWG-VF20/30-25
054122	HWG-VF20/30-28
054123	HWG-VF20/30-30
054124	HWG-VF20/30-32
054125	HWG-VF20/30-38
054126	HWG-VF20/30-40
054127	HWG-VF20/30-42
054128	HWG-VF20/30-45
054129	HWG-VF20/30-48
054130	HWG-VF20/30-55
054131	HWG-VF20/30-65

# Variodyn VFxxBR

2048 puls	ses+plug
054320	HWG-VFxxBR-23
054321	HWG-VFxxBR-25
054322	HWG-VFxxBR-28
054323	HWG-VFxxBR-30
054324	HWG-VFxxBR-32
054325	HWG-VFxxBR-38
054326	HWG-VFxxBR-40
054327	HWG-VFxxBR-42
054328	HWG-VFxxBR-45
054329	HWG-VFxxBR-48
054330	HWG-VFxxBR-55
054331	HWG-VFxxBR-65

# ZIEHL-ABEGG 👗

1024 pul	ses
054144	HWG-ZA1-23
054145	HWG-ZA1-25
054146	HWG-ZA1-28
054147	HWG-ZA1-30
054148	HWG-ZA1-32
054149	HWG-ZA1-38
054150	HWG-ZA1-40
054151	HWG-ZA1-42
054152	HWG-ZA1-45
054153	HWG-ZA1-48
054154	HWG-ZA1-55
054155	HWG-7A1-65

# **ZIEHL-ABEGG** 2CF

2048 puls	ses
054156	HWG-ZA2-23
054157	HWG-ZA2-25
054158	HWG-ZA2-28
054159	HWG-ZA2-30
054160	HWG-ZA2-32
054161	HWG-ZA2-38
054162	HWG-ZA2-40
054163	HWG-ZA2-42
054164	HWG-ZA2-45
054165	HWG-ZA2-48
054166	HWG-ZA2-55
054167	HWG-ZA2-65

# ZIEHL-ABEGG 🚵 4C

1024 pulses+plug 052637 HWG-ZA4C-23 052638 HWG-ZA4C-25 052639 HWG-ZA4C-28 052640 HWG-ZA4C-30 052641 HWG-ZA4C-32 052642 HWG-ZA4C-38 052643 HWG-ZA4C-40 HWG-ZA4C-42 052644 052645 HWG-ZA4C-45 052646 HWG-ZA4C-48 052647 HWG-ZA4C-55 052648 HWG-ZA4C-65

#### Universal encoder

1024 puls	es
054168	HWG-UG1-23
054169	HWG-UG1-25
054170	HWG-UG1-28
054171	HWG-UG1-30
054172	HWG-UG1-32
054173	HWG-UG1-38
054174	HGW-UG1-40
054175	HWG-UG1-42
054176	HWG-UG1-45
054177	HWG-UG1-48
054178	HWG-UG1-55
054179	HWG-UG1-65

#### Universal encoder

2048 puise	25
054180	HWG-UG2-23
054181	HWG-UG2-25
054182	HWG-UG2-28
054183	HWG-UG2-30
054184	HWG-UG2-32
054185	HWG-UG2-38
054186	HWG-UG2-40
054187	HWG-UG2-42
054188	HWG-UG2-45
054189	HWG-UG2-48
054190	HWG-UG2-55
054191	HWG-UG2-65

# Incremental encoder mounting kit - toothed belt version

to control frequency converters of lift motors



Mounting example: Encoder mounting kit with toothed belt and initial spring tension







Mounting example: Mounting kit with special handwheel (with crush protection distance)

#### Description

Universal incremental encoder mounting kit with toothed belt and initial spring tension to control frequency converters of lift motors.

#### They are needed:

- 1. Mounting kit with encoder (selection by table p. 65)
- 2. Toothed disc for motor shafts
- 3. Toothed belt, endless

#### Advice

The encoder cable is delivered ready for connection to the frequency converters on the right, page 65. A mounting instruction and a connection plan for the respective converter is included in delivery.

# 1. Mounting kit with encoder

Included in delivery:
Encoder mounting kit with initial spring tension,
with selected or without encoder,
kit with mounting material,
mounting instruction with connection plan.
You can find the table with the article numbers of the
mounting kits on the right, page 65.

# 2. Toothed discs

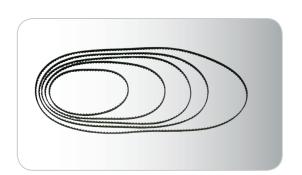
#### Toothed discs for motor shafts

Art.no.	Description
007173	Toothed disc, diameter Ø 23mm
007174	Toothed disc, diameter Ø 25mm
007175	Toothed disc, diameter Ø 28mm
007176	Toothed disc, diameter Ø 30mm
007177	Toothed disc, diameter Ø 32mm
007178	Toothed disc, diameter Ø 38mm
007179	Toothed disc, diameter Ø 42mm
007180	Toothed disc, diameter Ø 45mm
007181	Toothed disc, diameter Ø 48mm
007182	Toothed disc, diameter Ø 55mm
007183	Toothed disc, diameter Ø 60mm
007184	Toothed disc, diameter Ø 65mm
051528	Special dimensions up to 75mm on request

Outer diameter with flanged pulley 103mm, Outer diameter without flanged pulley 95mm. Width 16mm.

You can find the description and articles numbers to the hand wheels with crush protection distance on page 69.

# 3. Toothed belts



#### Toothed belt, endless

1		Distance shaft - shaft
Art.no.	Description	shaft - shaft
007197	Toothed belt, length 680mm	185mm
007198	Toothed belt, length 980mm	340mm
007199	Toothed belt, length 1220mm	455mm
007200	Toothed belt, length 1380mm	530mm
007201	Toothed belt, length 1680mm	685mm

# **Accessories**

# Advice:

Suitable handwheels can be found on page 69.



Protective cover for toothed belt



Art.no.	Description
007202	Protective cover for mounting kit



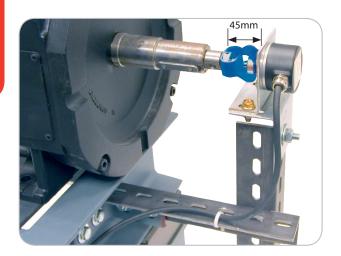
Mounting example: Mounting kit with additional protective cover

# **Mounting kits**

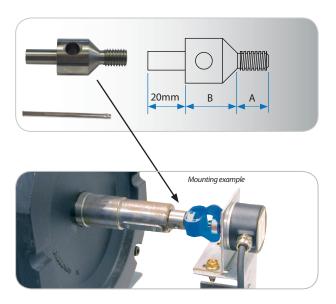
Mounting kits with encoder for:	Pulses per revolution	Art.no.
OSCENITONIC GERATEBAL GMBH	1024pulses	007204
B&F Motion Control	1024pulses + plug	050826
BIODYN	2048pulses + plug	007591
electronic	1024pulses + plug	007205
KEB	2048pulses + plug	007207
Goliath	1024 pulses	054208
LittEquip® MFC / CPI	1024pulses + plug	063617
<b>ONRON</b> with PG Speed control cards	1024 pulses	063038
RST ELECTRONIC GARBH	1024 pulses	007209
CONTROL LIFTEQUIP E300	1024pulses + plug	054224
VARIODYN VF20/30	2048pulses	052211
VARIODYN VFxxBR	2048pulses + plug	007588
<b>IIILIFTCORE</b> <sub>®</sub> LCDR	1024pulses + plug	054274
ZIEHL-ABEGG 2CF, 3C, 3BF, 4C	1024 pulses	007210
ZIEHL-ABEGG 2CF	2048 pulses	063040
ZIEHL-ABEGG 🛣 4C	1024pulses + plug	052633
UNIVERSAL 4.7 - 30V, 4 tracks	1024 pulses	063615
UNIVERSAL 4.7 - 30V, 4 tracks	2048 pulses	063616
without encoder		007203

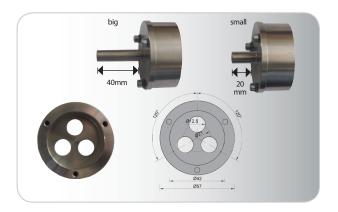
# Incremental encoder mounting kit - flex coupling version

to control frequency converters of lift motors









#### Description

Universal mounting kit with encoder for flex coupling version to control frequency converters of lift motors.

### They are needed:

- 1. Mounting kit with encoder (selection by table p. 67)
- **2. Adapter end piece** (for individual cases coupling piece)
- 3. Assembly set for fastening to the engine frame

#### Advice

The encoder line is delivered ready for connection to the frequency converters listed on the right, page 67. A mounting instruction and a connection plan for the respective converter is included in delivery.

# 1. Mounting kit with encoder

Included in delivery:

Mounting kit with flex coupling and angle, fixation material,

mounting instruction with connection plan. You can find the table with the article numbers of the mounting kits on the right, page 67.

# 2. Adapter end piece

#### Adapter end piece with mounting tool

Art.no.	Thread	A (mm)	B (mm)
052427	M8 long	21.5	29
052428	M10 long	26.5	28
052429	M12 long	27.5	27
052430	M14 long	31.5	31
052431	M16 long	29.5	27
052432	M20 long	35.5	37
052403	M8 short	11.5	29
052404	M10 short	16.5	28
052405	M12 short	17.5	27
052408	M14 short	21.5	31
052406	M16 short	19.5	27
052407	M20 short	25.5	37

# **Coupling piece**

(for individual cases only)

In individual cases the coupling pieces for a fixation with 3 screws at motors instead of the thread in the shaft is neccessary.

Art.no.	Description
064025	Coupling piece for motors small
064026	Coupling piece for motors big

# 600mm



Solid, 5mm thick angles and struts provide for a fixed fastening on the engine frame or concrete bottom.

# **Replacement parts**

### Flex coupling and angle

Art.no.	Description
063618	Flex coupling 10/10,
	length 45mm, outer Ø 47mm
063622	Angle with screw set



# 3. Universal assembly set

Universal assembly set for fastening the flex coupling version to small and large engine frames of lift motors.

Consisting of solid, 5mm thick angles and struts.

Included in delivery: Mounting angles, cross strut, struts, kit with mounting material, mounting instruction.

Art.no.	Description
052402	Universal motor mounting kit

# **Mounting kits**

Mounting kits with encoder for:	Pulses per revolution	Art.no.
OSCENITONIC GERATEBAL GMBH	1024pulses	007570
Motion Control	1024pulses + plug	054262
BIODYN	2048pulses + plug	007592
electronic	1024pulses + plug	007571
KEB	2048pulses + plug	007573
Goliath  Aufzugstechnik GmbH	1024pulses	054209
LittEquip® MFC / CPI	1024pulses + plug	007585
ONRON with PG Speed control cards	1024pulses	007580
RST ELEKTRONY GMBH	1024pulses	007575
CONTROL LIFTEquip E300	1024pulses + plug	007586
VARIODYN VF20/30	2048pulses	007576
VARIODYN VFxxBR	2048pulses + plug	007587
<b>IIILIFTCORE</b> ® LCDR	1024pulses + plug	054275
ZIEHL-ABEGG 2CF, 3C, 3BF, 4C	1024pulses	007578
ZIEHL-ABEGG 2CF	2048 pulses	007582
ZIEHL-ABEGG 🛣 4C	1024pulses + plug	052632
UNIVERSAL 4.7 - 30V, 4 tracks	1024pulses	007583
UNIVERSAL 4.7 - 30V, 4 tracks	2048 pulses	007584

# Incremental encoder mounting kit with adapter plate

for gears with tachogenerator, e.g. Thyssen W149



Mounting example at gear and encoder with adapter plate

# Ø 115 Ø 84.8 O O Dimensional drawing adapter plate







#### Description

Incremental encoder mounting kit with adapter plate for gears with tachogenerator to control frequency converters of lift motors.

# They are needed:

- 1. Mounting kit with encoder (selection by table page 69)
- 2. Matching spring coupling



#### Advice

The encoder line is delivered ready for connection to the frequency converters listed on the right, page 69. A mounting instruction and a connection plan for the respective converter is included in delivery.

# 1. Mounting kit with encoder

Included in delivery:
Encoder with 10m supply line,
adapter plate with mounting material,
mounting instruction,
connection plan for the respective converter.
The article numbers of the encoder mounting kits can
be found in the table on page 69 left.

# 2. Spring coupling

#### Matching spring coupling

Art.no.	Description
007560	Spring coupling 6/10
007561	Spring coupling 7/10
007562	Spring coupling 10/10
007564	Spring coupling 11/10
007565	Spring coupling 12/10
007566	Spring coupling 16/10

# Accessory

#### Single adapter plate

Art.no.	Description
007563	Adapter plate with screws

# Mounting kit with adapter plate

for gears with tachogenerator

Gear mounting kits with encoder for:	Pulses per revolution	Art.no.		
<b>OSCENITONIC</b> GERATEBAL-GMBH	1024pulses	007540		
Motion Control	1024pulses + plug	054268		
BIODYN	2048pulses + plug	007557		
CONTROL LIFTE GUID E300	1024pulses + plug	007549		
DISTZ electronic	1024pulses + plug	007541		
KEB	2048pulses + plug	007543		
Goliath	1024pulses	007544		
LITEQUIP® MFC / CPI	1024pulses + plug	007548		
onron with PG Speed control cards	1024pulses	007545		
RST ELECTRONIC CARRY	1024pulses	007546		
VARIODYN VF20/30	2048pulses	007550		
VARIODYN VFxxBR	2048pulses + plug	007551		
<b>IIIILIFTCORE</b> ® LCDR	1024pulses + plug	054273		
ZIEHL-ABEGG 2CF, 3C, 3BF, 4C	1024pulses	007553		
ZIEHL-ABEGG 2CF	2048pulses	007554		
ZIEHL-ABEGG 🛣 4C	1024pulses + plug	052634		
UNIVERSAL 4.75-30V, 4 tracks	1024pulses	007555		
UNIVERSAL 4.75-30V, 4 tracks	2048pulses	007556		

# Handwheel

with crush protection distance

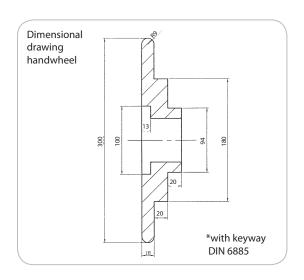
The handwheel is constructed in a way that it provides a big enough crush protection distance to the toothed belt. Material PA6G

Matching a contact monitored wall holder for hand wheels, with monitoring switch with 1 NO/ 1 NC, 5m supply cable.





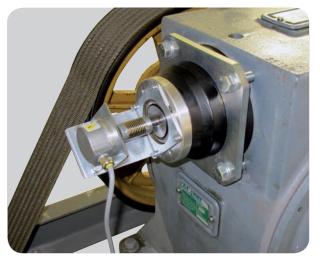
Art.no.	Handwheel	Art.no.	Handwheel	
007185	Ø 23mm	007191	Ø 42mm	
007186	Ø 25mm	007192	Ø 45mm	
007187	Ø 28mm	007193	Ø 48mm	
007188	Ø 30mm	007194	Ø 55mm	
007189	Ø 32mm	007195	Ø 60mm	
007190	Ø 38mm	007196	Ø 65mm	
051529	Special dimensions up to 75mm on request			
007329	Holder for handwheel with 5m supply line			



# Incremental encoder mounting kit for THYSSEN

of the series W149, W149B and W191



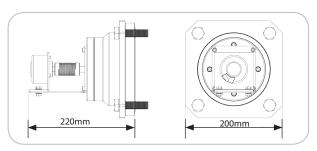


Example: THYSSEN W191 drive with encoder mounting



Example: THYSSEN drive W191 without encoder mounting





#### Description

Incremental encoder mounting kit for Thyssen drives of the series W149, W149B and W191.

Mounted in the thrust bearing.

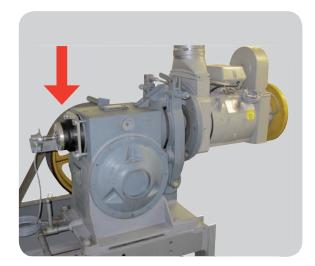
The existing cover is removed and replaced with a new cover. The incremental encoder can be mounted at this new cover

Gasket and mounting tool are included in delivery.

#### **Advice**

Please check whether the existing drive is type W149 or type W149 B before ordering.





Example: THYSSEN drive W191 with encoder mounting

# Scope of delivery

Encoder with 10m supply line, adapter plate with mounting material, spring coupling 12/10, mounting angle, mounting instruction, connection plan for the respective converter.

#### Advice

The encoder cable is delivered ready for connection to different frequency converters (see table on page 71). A mounting instruction and a connection plan for the respective converter is included in delivery.

# **Dimensional drawing**

# adapter plate

Incremental encoder mounting kit with W+W adapter plate for mounting of an incremental encoder on a Thyssen gear W191.

# Incremental encoder mounting kits for THYSSEN drives W149, W149B and W191

Mounting kits with encoder for:	Pulses per revolution	Art.no. Thyssen W149	Art.no. Thyssen W149B S01F	Art.no. Thyssen W191
DSCENITONIC GERATEBAU-GMBH	1024pulses	008171	008191	008151
Motion Control	1024pulses + plug	008172	008192	008152
BIODYN	2048pulses + plug	008173	008193	008153
CONTROL LiftEquip	1024pulses + plug	008174	008194	008154
electronic electronic	1024pulses + plug	008175	008195	008155
KEB	2048pulses + plug	008176	008196	008156
Aufrugstechnik GmbH	1024pulses	008177	008197	008157
LittEquip® MFC / CPI	1024pulses + plug	008178	008198	008158
with PG Speed control cards	1024pulses	008179	008199	008159
RST ELECTRONICOMBIL	1024pulses	008180	008200	008160
VARIODYN VF20/30	2048 pulses	008181	008201	008161
VARIODYN VFxxBR	2048pulses + plug	008182	008202	008162
<b>IIIILIFTCORE</b> <sub>®</sub> LCDR	1024pulses + plug	008183	008203	008163
ZIEHL-ABEGG 2CF, 3C, 3BF, 4C	1024pulses	008184	008204	008164
ZIEHL-ABEGG 2CF	2048 pulses	008185	008205	008165
ZIEHL-ABEGG 4C	1024pulses + plug	008186	008206	008166
UNIVERSAL 4.7 - 30V, 4 tracks	1024pulses	008187	008207	008167
UNIVERSAL 4.7 - 30V, 4 tracks	2048pulses	008188	008208	008168
without encoder		008189	008209	008169



# Incremental encoder mounting kits for KASPER drives

of the series KP120, KP150, KP155, KP130 and KP140, also suitable for OSMA drives



Example: KASPER drive with encoder mounting

Example: KASPER drive KP120 without encoder mounting





#### Description

Incremental encoder mounting kit for Kasper drives of the series KP120, KP150, KP155, KP130 and KP140.

Mounted in the thrust bearing.

The existing cover is removed and replaced with a new cover. The incremental encoder can be mounted at this new cover.

Gasket and mounting tool are included in delivery.



Example: KASPER drive KP120 with encoder mounting

# Scope of delivery

Incremental encoder with 10m supply line, mounting kit for the thrust bearing, mounting tool, mounting instruction, connection plan for the respective converter

#### Advice

The encoder cable is delivered ready for connection to different frequency converters (see table on page 73). A mounting instruction and a connection plan for the respective converter is included in delivery.

# Advice on the type design:

The design (KP...) of the drive is always stamped on the blue cast housing.

Alternatively, the outside diameter of the cover can be measured on the thrust bearing.

type KP120/ 150/ 155: x = 115mm type KP130: x = 138mm type KP140: x = 158mm



# Hollow shaft encoder mounting kits for SASSI / Liftmaterial

for SASSI / Liftmaterial drives of the series MF25, MF58 and MF82



Example: encoder mounting



SASSI / Liftmaterial drive without encoder mounting



#### Description

Hollow shaft encoder mounting kit for SASSI / Liftmaterial drives of the series MF25, MF58 and MF82.

Mounted in the thrust bearing.

The existing encoder is removed and replaced with a new coupling. The hollow shaft encoder can be mounted at this new coupling.

Gasket and mounting tool are included in delivery.



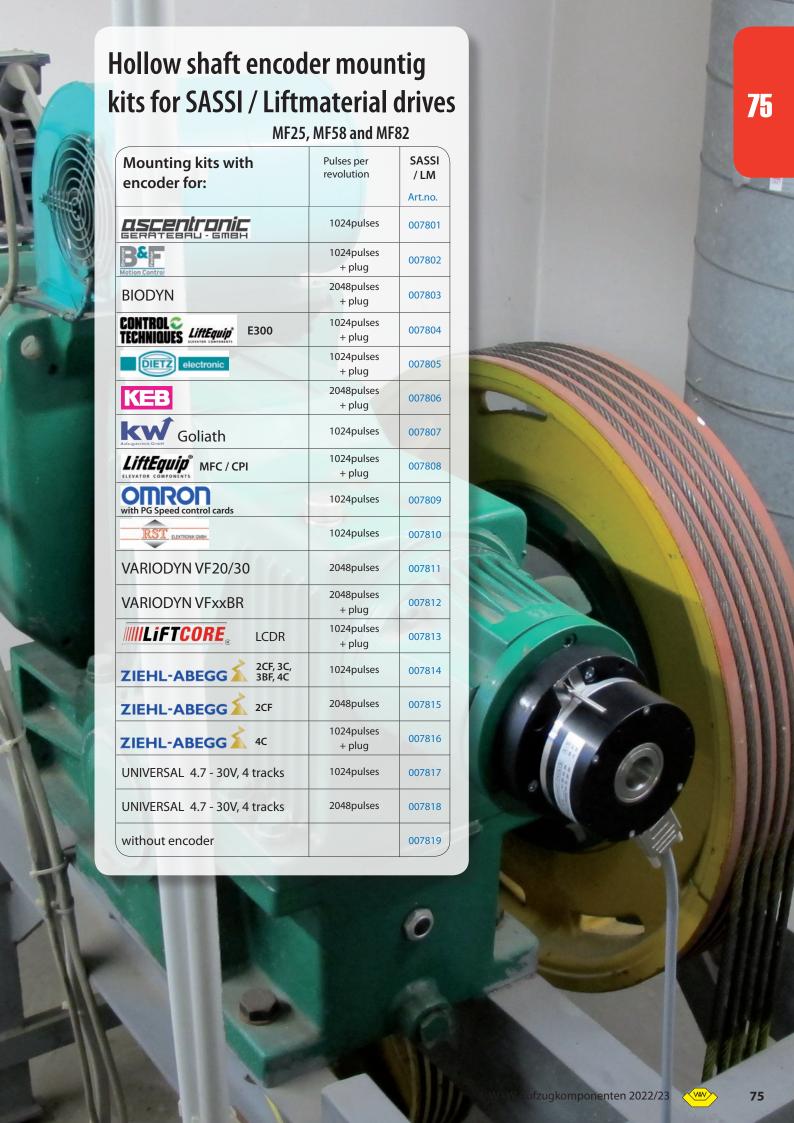
SASSI / Liftmaterial drive with encoder mounting

# Scope of delivery

Incremental encoder with 10m supply line, mounting kit for the thrust bearing, rubber coupling, mounting instruction, connection plan for the respective converter.

#### Advice

The encoder cable is delivered ready for connection to different frequency converters (see table on page 75). A mounting instruction and a connection plan for the respective converter is included in delivery.



# Incremental encoder mounting kits for OTIS 10AT(L) and 15AT(L)

for OTIS drives of the series 10AT(L) and 15AT(L)



Example: encoder mounting



OTIS drive without encoder mounting



#### Description

Incremental encoder mounting kit for OTIS drives of the series 10AT(L) and 15AT(L).

Mounted on the ventilator side.

The existing cover is removed and replaced with a new cover. The incremental encoder will be mounted on this new cover and will be connected to the motor shaft by special adapters. Drills and tapping drills are included in delivery.



OTIS drive with encoder mounting

# Scope of delivery

Incremental encoder with 10m supply line, mounting kit for the motor shaft on the ventilator side, new ventilator plate, mounting instruction, connection plan for the respective converter.

#### Advice

The encoder cable is delivered ready for connection to different frequency converters (see table on page 77). A mounting instruction and a connection plan for the respective converter is included in delivery.

# Incremental encoder mounting kits for OTIS drives 10AT(L) and 15 AT(L)

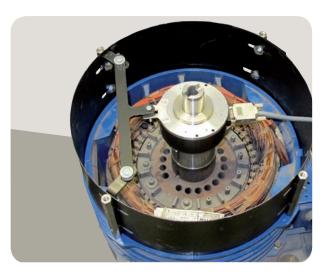
Mounting kits with encoder for:	Pulses per revolution	OTIS 10/15AT
1		Art.no.
GSCENTONIC GERATEBAL-GMBH	1024pulses	007761
Motion Control	1024pulses + plug	007762
BIODYN	2048pulses + plug	007763
CONTROL LIFTEQUIP E300	1024pulses + plug	007764
electronic electronic	1024pulses + plug	007765
KEB	2048pulses + plug	007766
Autruguechnik GmbH Goliath	1024pulses	007767
LiftEquip® MFC / CPI	1024pulses + plug	007768
ONRON with PG Speed control cards	1024pulses	007769
RST RENTRONG GMBH	1024pulses	007770
VARIODYN VF20/30	2048 pulses	007771
VARIODYN VFxxBR	2048pulses + plug	007772
<b>IIILIFTCORE</b> ® LCDR	1024pulses + plug	007773
ZIEHL-ABEGG 2CF, 3C, 3BF, 4C	1024pulses	007774
ZIEHL-ABEGG 2CF	2048pulses	007775
ZIEHL-ABEGG AC	1024pulses + plug	007776
UNIVERSAL 4.7 - 30V, 4 tracks	1024pulses	007777
UNIVERSAL 4.7 - 30V, 4 tracks	2048pulses	007778
without encoder		007779

# Hollow shaft encoder OTIS 140VAT

for OTIS drives of the series 140VAT



Example: encoder mounting



OTIS drive 140VAT encoder mounting

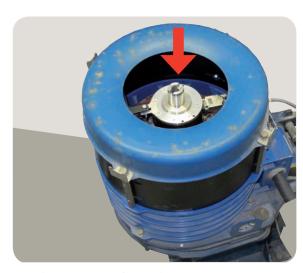


#### Description

Hollow shaft encoder mounting kit for OTIS drives of the series 140VAT.

It is mounted on the upper side of the motor. The existing cover and the hand wheel are removed. The shaft adapter is inserted into the motor shaft, then the hollow shaft encoder is mounted on the shaft adapter.

Then follows a protective ring made of sheet metal with torque support, an adapter for the hand wheel and the original motor cover.



OTIS drive 140VAT with encoder mounting

# Scope of delivery

Hollow shaft encoder with 10m supply line, mounting kit with protective ring, shaft adapter, mounting instruction, connection plan for the respective converter.

#### **Advice**

The encoder cable is delivered ready for connection to different frequency converters (see table on page 79). A mounting instruction and a connection plan for the respective converter is included in delivery.



# Hollow shaft encoder OTIS 11VTR

for OTIS drives of the series 11VTR



Example: encoder mounting



OTIS drive 11VTR encoder mouting



#### Description

Hollow shaft encoder mounting kit for OTIS Drives of the series 11VTR.

It is mounted on the upper side of the motor. The existing cover and the hand wheel are removed. The shaft adapter is inserted into the motor shaft, then the hollow shaft encoder is mounted on the shaft adapter.

Then follows a protective ring made of sheet metal with torque support, an adapter for the hand wheel and the original motor cover.



OTIS drive11VTR with encoder mounting

# Scope of delivery

Hollow shaft encoder with 10m supply line, mounting kit with protective ring, shaft adapter, mounting instruction, connection plan for the respective converter.

#### Advice

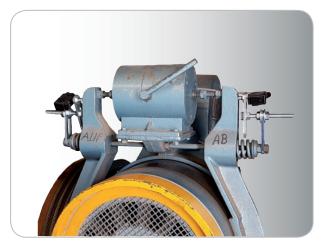
The encoder cable is delivered ready for connection to different frequency converters (see table on page 81). A mounting instruction and a connection plan for the respective converter is included in delivery.



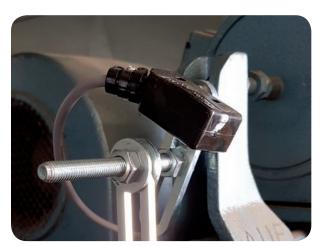
# **Brake monitoring for lift drives**

Brake monitoring for lift drives





Mounting example brake monitoring on KASPER drive



Detail on KASPER drive



#### Description

Especially in case of older drive motors it often happens that the motor is so strong that it can start against the closed brake.

To avoid this, two micro switches are mounted to monitor the position of the brake arms. Thus the position of the brake (open/closed) can be determined. With the supplied parts in the mounting kits different mounting possibilities can be realised.

The mounting kits are available in a universal version and especially for different drives (Thyssen W191, TW63, TW130, TW160, Kasper KP130). Due to the quick and uncomplicated installation, the mounting kits are excellently suited for retrofitting at older drives.



Mounting example on an old drive

# Scope of delivery

Included in delivery:

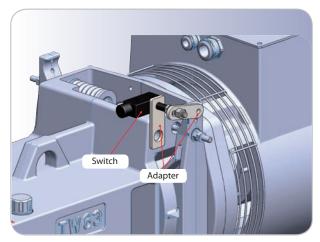
- 1 x Various mounting parts (depending on article number)
- 2 x Microswitch Cherry 250VAC 15A
- 2 x Supply cable YSLY-OZ 2x1mm<sup>2</sup>
- 1 x Mounting instruction

Art.no.	Description
007884	Mounting kit for brake monitoring universal
007885	Mounting kit for brake monitoring Thyssen W191
007886	Mounting kit for brake monitoring Thyssen TW63 TW130 and TW160
007887	Mounting kit for brake monitoring Kasper KP130

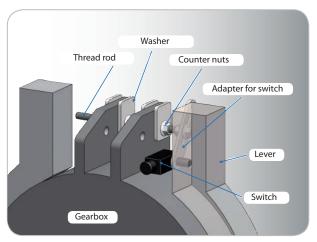
# Brake monitoring for lift drives Brake monitoring for lift drives



Mounting example brake monitoring on an old drive



Mounting example brake monitoring on THYSSEN TW63 drive



Mounting example brake monitoring on THYSSEN W191 drive

# **Round travelling cables**

#### Round travelling cable, PVC and halogen-free



Maximum rated speed: 2m/s

Temperature range: -15°C up to +70°C

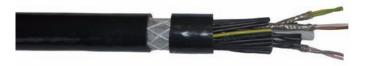
#### **PVC** round travelling cables

_	Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer - Ø mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
	064060	12G1	max. 100m*	approx. 15.7	approx. 415	115	80m	052603**
	051278	18G1	max. 100m*	approx. 16.6	approx. 450	173	70m	052606**
	051280	24G1	max. 80m*	approx. 19	approx. 605	230	60m	052607**
	051282	30G1	max. 60m*	approx. 25	approx. 690	288	60m	064058**

#### Halogen-free round travelling cable

051290	24G1	max. 60m*	approx. 22	approx. 580	230	45	052608**
			- F F	1111			

#### PVC round travelling cable, shielded pairs 30G1+3x(2x0.5)C



max. hoisting height: 90m

Maximum rated speed: 1.6m/s

Temperature range: -30°C up to +70°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer - Ø mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
051286	30G1+3x(2x0.5)C	max. 50m*	approx. 26.0	approx. 861	354	50m	064056**

#### PVC telephone and emergency call travelling cable, with shielding (4x2x0.34)C



max. hoisting height: 110m Maximum rated speed: 1.6m/s

Temperature range: -15°C up to +70°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer - Ø mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
051312	(4x2x0.34)C	max. 150m*	approx. 9.3	approx. 123	48	60m	064171**

#### Round travelling cable with shielded pairs, 3x(2x0.75)C, PVC and halogen-free

PVC round travelling cable 3(2x0.75)C



max. hoisting height: 70m

Maximum rated speed: 1.6m/s

Temperature range: -5°C up to +70°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer -Ø mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
051313	3x(2x0.75)C	max. 100m*	approx. 13.9	approx. 226.1	105	40m	052611**

#### Halogen-free round travelling cable 3(2x0.75)C

063975	3x(2x0.75)C	max. 100m*	approx. 12.1	approx. 175	81	40m	064257**
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#### Halogen-free round travelling cable with shielded pairs 6x(2x0.75)C



max. hoisting height: 70m Maximum rated speed: 1.6m/s

Temperature range: -25°C up to +90°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer - Ø mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
063663	6x(2x0.75)C	max. 100m*	approx. 16.0	approx. 370	158	40m	052612**

<sup>\*</sup>For larger lengths it is necessary to roll the cable up on a drum.

<sup>\*\*</sup>Optionally the cable can be assembled on both sides. The insulation of both sides will be stripped off, the leads become fitted with wire end sleeves. Side A 300mm, Side B 400mm. No extra charge for individual lengths between 100mm and 450mm.



# Flat travelling cables

#### Flat travelling cable, PVC H05VVH6-F and halogen-free 05ZZH6-F



max. hoisting height: 80m

Maximum rated speed: 1.6m/s acc. to EN 50214 (4m/ acc. to producer)

Temperature range: -15°C up to +70°C

#### PVC flat travelling cable H05VVH6-F

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
052196	18G0.75	max. 80m*	approx. 4.1 x 48.0	approx. 359	129.6	45m	064072**
051524	24G0.75	max. 80m*	approx. 4.1 x 64.0	approx. 482	172.8	45m	052619**
051525	28G0.75	max. 80m*	approx. 4.1 x 74.5	approx. 555	201.6	45m	064097**
051296	12G1.0	max. 80m*	approx. 4.3 x 35.0	approx. 281	115.2	45m	064059**
051298	18G1.0	max. 80m*	approx. 4.3 x 51.0	approx. 416	172.8	45m	064062**
051300	24G1.0	max. 70m*	approx. 4.3 x 68.0	approx. 558	230.4	45m	063847**

#### Halogen-free flat travelling cable 05ZZH6-F

051516	12G1	max. 80m*	approx. 4.3 x 35.0	approx. 237	115.2	45m	052614**
051518	18G1	max. 70m*	approx. 4.3 x 51.0	approx. 351	172.8	45m	on request
051520	24G1	max. 70m*	approx. 4.3 x 68.0	approx. 471	230.4	45m	052615**

#### Flat travelling cable, 28G0.75+4x(2x0.34)ST, PVC and halogen-free



max. hoisting height: 80m

Maximum rated speed: 1.6m/s acc. to EN 50214

Temperature range: -15°C up to +70°C

(4m/s acc. to producer)

**PVC** flat travelling cable 28G0.75+4x(2x0.34)ST

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
064010	28G0.75+4x(2x0.34)ST	max. 80m*	approx. 4.7 x 86.4	approx. 735	208.7	45m	052616**

#### Halogen-free flat travelling cable 28G0.75+4x(2x0.34)ST

064036	28G0.75+4x(2x0.34)ST	max. 50m*	approx.4.7 x 86.4	approx. 611	208.7	45m	050717**
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#### PVC flat travelling cable 24G1+4x(2x0.5)C



max. hoisting height: 80m

Maximum rated speed: 1.6m/s acc. to EN 50214

(4m/s acc. to producer)

Temperature range: -15°C up to +70°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
051522	24G1+4x(2x0.5)C	max. 50m*	approx. 5.3 x 83.0	approx. 845	267.1	45m	063585**

#### Flat travelling cable, PVC and halogen-free, 1G1.5+39x1+4x(2x0.34)ST



max. hoisting height: 80m Maximum rated speed: 4.0m/s

Temperature range: -20°C up to +70°C

#### PVC flat travelling cable 1G1.5+39x1+4x(2x0.34)ST

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
050005	1G1.5+39x1+4x(2x0.34)ST	max. 25m*	approx. 10.5 x 69	approx. 1122	428,0	45m	053074**

#### Halogen-free flat travelling cable 1G1.5+39x1+4x(2x0.34)ST

050006	1G1.5+39x1+4x(2x0.34)ST	max. 25m*	approx. 10.5 x 69	approx. 1016	428,0	45m	053074**
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#### PVC flat travelling cable 35G1+(2x2x0.5)C



# Flat travelling cables

max. hoisting height: approx. 60m Maximum rated speed: 4m/s

Temperature range: -15°C up to +70°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
050007	35G1+(2x2x0.5)C	max. 25m*	approx. 10.0 x 61	approx. 1023	379	35m	on request**

#### PVC flat travelling cable 16G0.75+2x(2x0.34)C



max. hoisting height: approx. 80m Maximum rated speed: 4m/s

Temperature range: -15°C up to +70°C

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension length	Assembling
050008	16G0.75+2x(2x0.34)C	max. 80m*	approx. 5.6 x 53	approx. 512	153	45m	052755

#### CAT-7-cable steel carrier element, PVC + halogen-free

#### 4 x CAT-7-cable PVC



max. hoisting height: 90m / 80m Maximum rated speed: 4m/s Temperature range:

-15°C up to +60°C



PVC CAT-7-cable 4x2x0.14mm<sup>2</sup>

PVC	: CAT-7-cable	4x(4x2x0.14mm²)

Art.no.	Dimensions mm <sup>2</sup>	Deliverable as ring	Outer dim. mm	Weight kg/km	Copper kg/km	Suspension height	Assembling
064110	4 x 2 x 0.14	max. 60m*	approx. 8.0 x 17.6	approx. 218	26	50m	see table below
064115	4x (4 x 2 x 0.14mm²)	max. 50m*	approx. 8.4 x 27.5	approx. 312	104	45m	see table below

#### Halogen-free CAT-7-cable 4x2x0.14mm<sup>2</sup>

064113   4 x 2 x 0.14   max. 60m*   approx. 8.0 x 17.6   approx. 164   26   50m   see table below
---

Art.no.

064215

052578

052554

# **Assembling CAT-7 cable**







052556 Assembling on both sides with RJ45 sockets
052558 Assembling with RJ45 plug and wire end sleeves

Art.no. Assembling of cable 064115
053056 Strip off 25cm on both sides, with wire end sleeves
053057 Assembling on both sides with RJ45 plugs

Assembling of cables 064110 and 064113

Assembling on both sides with RJ45 plugs

Assembling with RJ45 plug and socket

Strip off 25cm on both sides, with wire end sleeves

**Various cables** for the installation of e.g. door and locking contacts, STOP switches and LIGHT pushbuttons

Art.no.	Flexible control cables PVC and halogen-free
051178	3x1mm² YSLY-JZ, PVC
051180	5x1mm² YSLY-JZ, PVC
051182	7x1mm² YSLY-JZ, PVC
051186	12x1mm²YSLY-JZ, PVC
051218	3x1mm² HSLH-JZ, halogen-free
051375	5x1mm² HSLH-JZ, halogen-free
051222	7x1mm² HSLH-JZ, halogen-free
051224	12x1mm² HSLH-JZ, halogen-free

	Art.no.	Solid sheathed cables PVC and halogen-free
	051132	1x1.5mm <sup>2</sup> NYM green/yellow, PVC
	051160	1x1.5mm² NYM black, PVC
	051134	3x1.5mm² NYM, PVC
	051138	5x1.5mm² NYM, PVC
	051162	1x1.5mm <sup>2</sup> NHXMH green/yellow, halogen-free
	051176	1x1.5mm² NHXMH black, halogen-free
	051164	3x1.5mm² NHXMH, halogen-free
	051357	5x1.5mm <sup>2</sup> NHXMH, halogen-free

<sup>\*</sup>for larger lengths it is necessary to roll the cable up on a drum

<sup>\*\*</sup>Optionally the cable can be assembled on both sides. The insulation of both sides will be stripped off, the leads become fitted with wire end sleeves. Side A 300mm, Side B 400mm. No extra charge for individual lengths between 100 and 450mm.

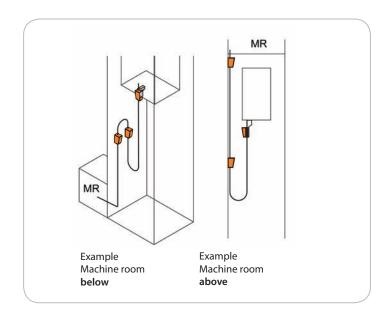
# Art.no. 008001

# Art.no. 008001 suitable for two cables suitable for one cable

# **Round cable suspension**

Technical data	
Suspension for 1-2 round cables	
Maximum cable hang up weight	35kg
Material	PA6.6 (halogen-free)
Temperature range	PA6.6 (halogen-free) -20°C up to +50°C

Please note the cable manufacturer's indications.



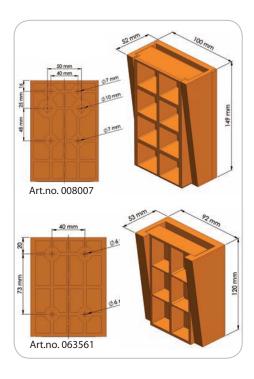
Art.no.	Description
008001	Suitable for two cables with an outer diameter of 7.0-10.0mm and 8.0-11.0mm
008006	Suitable for one cable with an outer diameter 11.5-14.0mm
008000	Suitable for one cable with an outer diameter 15.0-21.5mm
008002	Suitable for one cable with an outer diameter 18.0-21.5mm
008005	Suitable for one cable with an outer diameter 19.0-24.0mm
008004	Suitable for one cable with an outer diameter 24.5-26.0mm

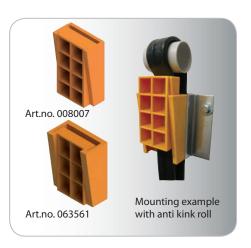
# **Round cable suspension sets**

Suspension set for machine room **above and below** 

	Art.no.	Description
(	080800	Cable suspension set 7.0-10.0+8.0-11.0mm
(	008079	Cable suspension set 11.5-14.0mm
(	008078	Cable suspension set 15.0-21.5mm
(	008077	Cable suspension set 18.0-21.5mm
(	008074	Cable suspension set 19.0-24.0mm
(	008075	Cable suspension set 24.5-26.0mm

# Flat cable suspension big





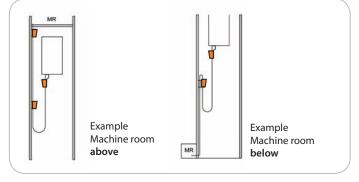
#### **Technical data**

Art.no. 008007
17.0 x 90.0mm
800N max. clamping force
1100N max. clamping force
60% (=90mm)
50kg
PA6.6 (halogen-free)

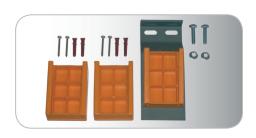
Suspension for 1-3 flat cables	Art.no. 063561
Maximum cable size	17.0 x 80.0mm
Total cable thickness 2.0-4.0mm and 15.0-17.0mm	800N max. clamping force
Total cable thickness 5.0-14.0mm	920N max. clamping force
Minimum insertion depth of the wedge	60% (=72mm)
Maximum hang up weight	42kg
Material	PA6.6 (halogen-free)

Please note the cable manufacturer's indications.

Art.no.	Description
008007	Flat cable suspension 17 x 90mm
063561	Flat cable suspension 17 x 80mm
	·



# Flat cable suspension sets





Suspension set with 008007/063561 for machine room **above** (alternatively also **below\*** with a cable thickness of max. 8mm)

Art.no.	Description
008086	Suspension set 17 x 90mm, universal
008084	Suspension set 17 x 80mm, universal

Max. suspension weight 008086: 50kg Max. suspension weight 008084: 42kg

Suspension set with 008007/063561 for machine room below

Art.no.	Description
008085	Suspension set 17 x 90mm, below
008083	Suspension set 17 x 80mm, below

Max. suspension weight 008085: 50kg Max. suspension weight 008083: 42kg

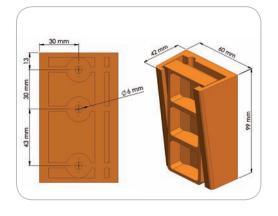




# Special cable suspension

Cable suspension for flat travelling cables with carrier element LZ 4001

Art.no.	Description
050016	Flat cable suspension LZ4001



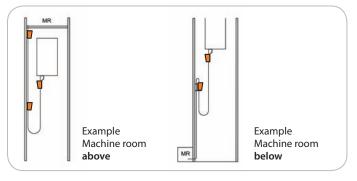
# Flat cable suspension small

lechnical data		
	1	
Suspension for 1-2 flat cables	Art.no. 008008/ 006008	
Maximum cable size	10.0 x 50.0mm	
Minimum insertion depth of the wedge	60% (=60mm)	
Maximum hang up weight	30kg	
Material	PA6.6 (halogen-free)	

Please note the cable manufacturer's indications.



Art.no.	Description
008008	Flat cable suspension 10 x 50mm
006008	Flat cable suspension 10 x 50mm, grey



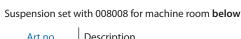


# Flat cable suspension sets

Suspension set with 008008 for machine room above (alternatively also below\* with a cable thickness of max. 5mm)

Art.no.	Description
008082	Suspension set 10 x 50mm, universal
006001	Suspension set 10 x 50mm, universal, grey

Max. suspension weight 008082: 30kg



	Art.no.	Description	
	008081	Suspension set 10 x 50mm, below	
	006002	Suspension set 10 x 50mm, below, grey	
٨	May suspension weight 008081: 30kg		

Max. suspension weight 008081: 30kg



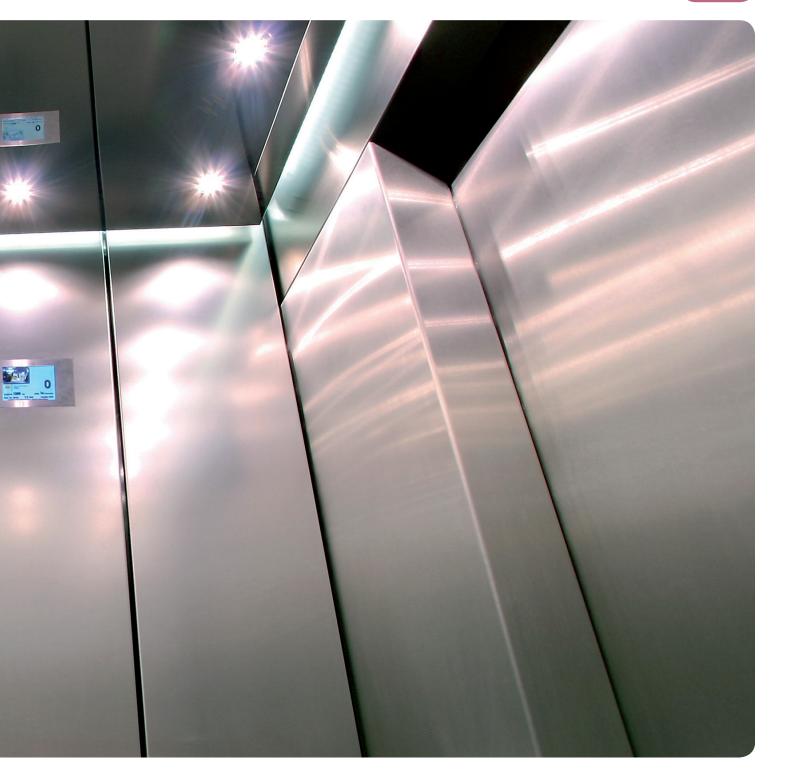




Lighting at landing doors CabinLED Emergency lighting

# Lighting for lifts





Lighting for cabin ceilings



**SQUARE-LED** 



LED tubes

# 50 lux lighting at landing door frames LED - 0.8W

for the lighting at landing doors



**Built-in variant** 



Surface mounted variant

# Only 0.8W!

Line for the floor 2m

Line for the door 400mm

#### Retrofitting

In order to guarantee the required lighting power, in the medium term many lifts have to be retrofitted with lighting at the entrances.

The lighting at landing doors consists of one LED lamp with 6 diodes, with an acrylic glass front cover and a stainless steel border. The light eye is screwed to one side of the door frame, 25cm above the floor, and is suitable for door widths up to 1.0m. In case of larger widths up to 2.4m, lamps have to be installed on both sides of the door frame.

The build-up height of the compact light eye adds up to only 16mm, the outer diameter is 64.5mm.

Extract from the norm (EN 81-20 5.3.7.1)

"The natural or artificial lighting of the landings in the vicinity of landing doors shall be at least 50 lux at floor level, such that a user can see ahead when he is opening the landing door to enter the lift, even if the car light has failed"

#### **New installations**

For newly built lifts the lighting is also a simple possibility to illuminate the landing entrances conforming to standards and cost-effective at the same time. The build-up height of the the built-in light eye adds up to only 3.5mm onto the frame and 15mm behind the frame.

#### **Technical Advice**

The supply voltage is 12V.

The power supply unit is delivered in a housing for surface mounting together with a time limit relay. Due to the universal triggering of the time limit relay the lighting is switched off automatically, when the lift is not in use. When the door latch is opened, the light is switched on.

The simple and fast mounting with nylon/ brass thread inserts provides for a firm and durable connection with the door frame. A detailed mounting instruction is included in delivery. The fully pluggable wiring is effected in the lift shaft.

The power of one light eye is only **0.8W**. The illuminant can be changed easily and quickly and has a high durability.

#### Advice

If power supply units from the client are used, please note:  $U=12V^{+0.5/-0V}$ 

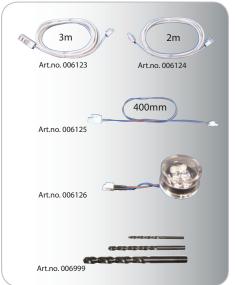
 $I_{Nmax.} = 2.1A$ 

# Art.no. 006121









# Scope of delivery basic package

The basic package is suitable for the installation of one landing with a maximum floor distance of 3m. Max. 20 lamps at one supply line. Light eye incl. illuminant,

line for the shaft 3m with triple socket, line for the floor 2m, line for the door 400mm, mounting material, mounting instruction.

Art.no.	Description	
006120	SZB-LED-GP-NB Built-in variant (new installations)	
006121	SZB-LED-GP-RF Surface-mounted variant (retrofitting)	

# Power supply unit for door frames LED

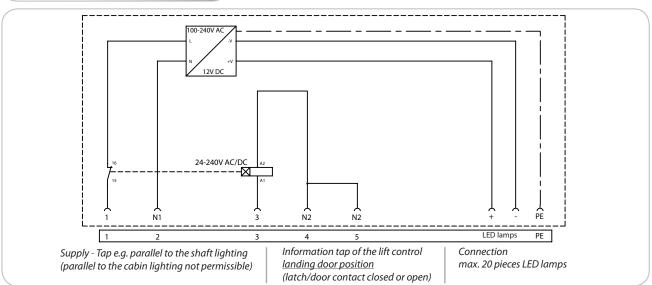
Voltage supply with supply line for the shaft

Art.no.	Description	
006998	SZB-LED-NT	Power supply unit 12V loose
006164	SZB-LED-B12	Power supply unit 12V in housing
006122	SZB-LED-CB	Power supply unit 12V in housing

# **Accessories**

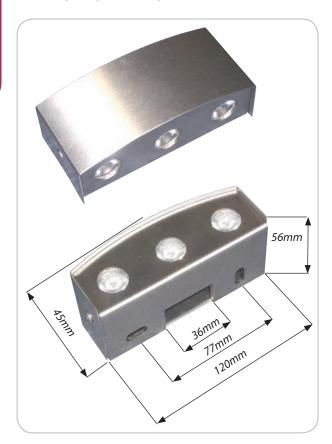
	Art.no.	Description	
Ī	006170	SZB-LED-10m	Line for the shaft 10m with socket
	006123	SZB-LED-3m	Line for the shaft 3m with triple plug
	006124	SZB-LED-2m	Line for the floor 2m
	006125	SZB-LED-0.4m	Line for the door 400mm
	006126	SZB-LED-0.8W	Illuminant 0.8W
	006999	SZB-LED-BS	Set of drills

## Circuit diagram power supply unit with time limit relay for switching off when not in use



# 50 lux lighting at landing doors LineLED 3 x 1W

for the lighting at landing doors



#### **Mounting examples LineLED**





#### Description

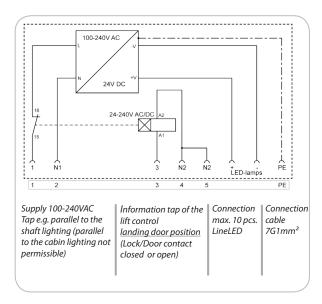
The lighting at landing doors **LineLED 3x1W** is suitable for illuminating landing doors with a height of up to 2.6m with 50 lux at the bottom, according to EN 81-20 5.3.7.1.

The lamp is made of stainless steel, ground with 240 grain. The lamp consists of three 1W LED illuminants.

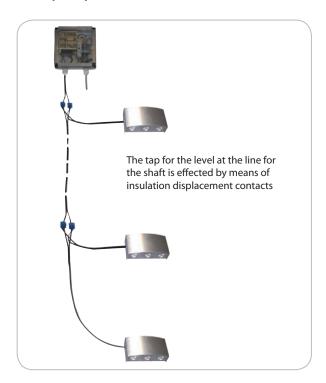
The wiring is completely pluggable and is run in the lift shaft. A 15V DC power supply unit can be used as supply voltage parallelly to the feeder of the shaft lighting. It is not permissible to operate the landing door lighting parallelly to the cabin lighting.

The lighting can be triggered 24 hours a day or switched off alternatively when not in use.

# **Circuit diagram** power supply unit with time limit relay for switching off when not in use



#### **Example tap for the level LineLED**

















# Basic package LineLED

Scope of delivery

Art.no. Description		
006110	LineLED-GP-E Stainless steel	ED-GP-E Stainless steel

Lamp incl. illuminant, line for the level 3m, 2 insulation displacement contacts, mounting material, mounting instruction

# **Power supply and supply lines**

Art.no.	Description		
006189	LineLED-PS	Power supply unit 24V, loose	

Art.no.	Description
006112	LineLED-PSB Power supply unit in housing+3m
006177	LineLED-PSB halogen-free

Art.no.	Description
006113	LineLED-CB
006178	LineLED-CB halogen-free

Power supply unit with time limit relay for switching off when not in use.

Art.no.	Description	
006114	LineLED-SL10m 10m line for the shaft halogen-free	
006118	LineLED-SL20m 20m line for the shaft halogen-free	
006119	LineLED-SL30m 30m line for the shaft halogen-free	
006155	LineLED-SL40m 40m line for the shaft halogen-free	
006156	LineLED-SL50m 50m line for the shaft halogen-free	

Order the **line for the shaft** according to the shaft height + to the length of the supply line to the shaft.

# **Accessories LineLED**

Art.no.	Description	
006115	LineLED-FC6m Line for level 6m + insulation displ. contacts	
006116	LineLED-FC10m Line for level 10m + insulation displ. contact	

The lines are halogen-free.

Art.no.	Description
006117	LineLED-3x1W illuminant 120mA
063112	Cable quick connectors PU 100



# **LED-Technology**

#### Lift cabin lighting with LED-technology

LEDs (light-emitting diode) are electrical components composed of special semiconductor crystals. These are coated with plastic, thus protecting them from external influences and improving the light emission. If current now flows through these crystals, they begin to glow. As hardly any energy is lost during the conversion from electricity to light, LEDs are extremely energy-saving.

Due to a higher degree of efficiency compared to conventional lamps, LEDs also have significantly lower waste heat. A further positive feature is the very long durability and the omission of maintenance costs.

#### Important terms in LED technology

#### Colour temperature / light colour

Specifying the colour temperature in Kelvin (K) is particularly important for white LED light, as it indicates whether the colour range is warm or cold light. This is important for the area of application of the LEDs.

White: 5600 Kelvin Neutral white: 4000 Kelvin Warm white: 3000 Kelvin

#### Luminous flux

The luminous flux (Lumen) is the unit for all the light emitted by a lamp to all sides. It describes the brightness of the lamp.

#### Illuminance

Illuminance (E) indicates the luminous flux (Im) with the measurement unit (lux), emanating from a light source and hitting on a specific surface.

For the illuminance of one lux, an area of 1 m<sup>2</sup> is uniformly illuminated by a luminous flux of 1 lumen.



Light colour: white (5600K)
The cabin is illuminated in bright white (not bluish)



Light colour: neutrall white (4000K)
The cabin is illuminated in neutral white

### W+W CabinLED

#### Lift cabin lighting programme

In the year 2007 W+W presented the cabin lighting programme CabinLED for the first time. Since then they have continuously invested in new technologies and products. Recently, the subject of energy efficiency is becoming more and more important for the lift industry.

Not only because of directives like VDI 4707, sheet 1 and 2, but also due to financial and visual reasons, a cabin lighting with LED technology is getting more and more attractive. In the following, we present you the current W+W lighting programmes CabinLED, SquareLED, cabin ceilings made to measure, LED-tubes and fastening for LED-tubes.

#### Bright and friendly cabin illumination

In contrast to the usual LED lamps in the market with an angle of reflection of 35°-60°, the 1 Watt Power LEDs from W+W have an angle of reflection of 120°. Through this a homogeneous illumination of the cabin until shortly below the cabin ceiling is created.

#### Theft protection and lamp replacement

The lamps are fixed by means of a deep sitting allen screw. For the replacement the cabin ceiling does not have to be opened. Theft is practically impossible, as a special tool and a detailed knowledge are required.

#### Easy to mount

The whole CabinLED programme can easily be mounted by a 3-pole pluggable system, which is protected against reverse polarity. The highly efficient current controller is integrated in all lamps. The operating voltage is 24V for all CabinLED types. That means, that different sizes can be combined with each other in one cabin ceiling.

#### **Emergency light connection**

Due to the low consumption of power the lamps are excellently suitable for an emergency lighting. You will find the corresponding current change-over switch units and emergency power modules on pages 106.

#### Dimmer

Due to the 3-pole system the dimmer can be plugged into a system at any position, which makes it also possible to install the dimmer later.

#### **General conditions for the CabinLED series**

#### Intended use

The lamp programme CabinLED has been checked and adjusted to the use in lift cabins. The employment in other areas is not permissible.

#### Brightness and cabin illumination

Large leaps in technology are taking place in short intervals in the area of Power LEDs. W+W reserve themselves the right to adjust their products to the state of the art. Recent cognitions and information to luminous flux, light colour and dimensioning of cabin lightings are available on our web site www.wwlift.de.

#### Warranty

Potential indications regarding the product life are based on technical data given by the LED manufacturer and do not extend the general warranty period granted by W+W Aufzugkomponenten.

# **Cabin lighting**





CabinLED Emergency lighting Lift cabin ceiling SQUARE-LED

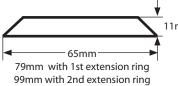
# CabinLED3 on-surface mounting, -built-in variant, -ESG built-in variant





CabinLED3- on-surface mounting

Mounting at ceiling cutouts with 1st extension ring



11mm 14mm with 1st extension ring 16mm with 1st and 2nd extension ring

#### Required ceiling cutout

CabinLED3-on-surface mounting: with 1st extension ring: with 1st and 2nd extension ring:

12mm - 59mm up to 69.5mm up to 84mm













Mounting in case of ceiling cutouts of 53-59mm

#### Required ceiling cutout

CabinLED3-built-in variant: 53 - 59mm with 1st extension ring: 60 - 69.5mm with 1st and 2nd extension ring: 70 - 84mm











Mounting in ceiling cutouts of 59-68.5mm (also suitable for "over head mounting")

#### Required ceiling cutout

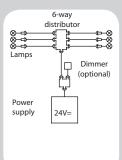
CabinLED3-ESG-built-in variant:

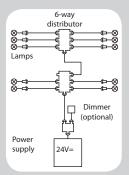
59 - 68.5mm

with extension ring: 70 - 84mm

#### Functional description and accessories

At most 6 lamps can be plugged into a sixfold distributor. The dimmer is plugged into the T-piece or into a free output of the sixfold distributor. For more than 6 lamps, a second sixfold distributor is needed.





Wiring example CabinLED3 with max. 6 lamps and dimmer

Wiring example CabinLED3 with max. 10 lamps and dimmer

Number CabinLED3-3030	Light colour white	Light colour neutral white	Light colour warm white
Cabin-floor space up to 1.0m <sup>2</sup>	2	2	2
up to 1.5m <sup>2</sup>	4	4	4
up to 2.0m <sup>2</sup>	6	6	6
for every additional square metre	2	2	2

The preceding table data are based on measurements in a stainless steel lift cabin with the dimensions L=1400 x W=1100 x H=2200mm. The prescriptions according to EN 81-20 5.4.10.1 were clearly exceeded in all measurements. (Ceiling height up to 2.2m) All indications are without engagement.

#### **Technical data**

#### Switching power supply standard:

100-240V AC 50Hz/60Hz Input:

2m supply line H05VV-F 2x0.75mm<sup>2</sup>

Output: 24VDC / 2.0A 50W

1.5m outgoing line with T-piece

3m connecting cable

LIYY 3x0.34mm<sup>2</sup> with 6-way distributor

max. 10 pcs. (power supply 50W) Lamps per supply unit:

Efficiency: Protection type power supply: IP20

Technical data switching power supply with emergency supply see page 106.

#### Lamp Cabin-LED3-3030 all versions:

Operating current: 180mA Power per lamp:

Luminous flux + brightness: 480lm for light colour white (w)

490lm for light colour neutral white (nw) 468lm for light colour warm white (ww)

IP20, ESG visible side IP54 Protection type:

Protection class:

Housing: Aluminium nickel-plated Lamp Cabin-LED3-3030-for on-surface mounting:

Mounting depth: 30mm Cable on lamp: 17cm, pluggable

Lamp Cabin-LED3-3030 built-in variant:

Mounting depth: 35mm Housing diameter: 52.5mm (built-in side)

65.00mm (outside) Cable on lamp: 17cm, pluggable

Lamp Cabin-LED3-3030-ESG-built-in:

Tempered safety glass (ESG) Protective glass: \*Fire resistance: equated EN 81-71 5.4.4 cat 1 \*Shock resistance: equated EN 81-71 5.4.4 cat 1

Mounting depth: 45mm

Housing diameter: 58mm (built-in side) 79mm (outside) Cable on lamp: 17cm, pluggable















# CabinLED3-3030 - on-surface mounting

#### Basic package CabinLED3-3030-AB-3pol

Art.no.	Description
020450	CabinLED3-3030-AB-3pol-w
020451	CabinLED3-3030-AB-3pol-nw
020452	CabinLED3-3030-AB-3pol-ww

1x LED-lamp with 17cm connecting cable

1x connecting line 1m LIYY 3x0.34mm<sup>2</sup> to 6-way distributor

2x distance plates, 2x clamps, 1x speed nut for fixation in sheet metal ceilings,

1x fitting for fixation in wood ceilings

# CabinLED3-3030 - built-in variant

#### Basic package CabinLED3-3030-EB-3pol

Art.no.	Description
020453	CabinLED3-3030-EB-3pol-w
020454	CabinLED3-3030-EB-3pol-nw
020455	CabinLED3-3030-EB-3pol-ww

1x LED-lamp with 17cm connecting cable

1x connecting line 1m LIYY 3x0.34mm<sup>2</sup> to 6-way distributor

# CabinLED3-3030 -ESG built-in variant

#### Basic package CabinLED3-3030-EB-ESG-3pol

	Art.no.	Description
020456 CabinLED3-3030-EB-ESG-3pol-w		CabinLED3-3030-EB-ESG-3pol-w
	020457	CabinLED3-3030-EB-ESG-3pol-nw
	020458	CabinLED3-3030-EB-ESG-3pol-ww

1x LED-lamp with protective glass and 17cm connecting cable 1x connecting line 1m LIYY 3x0.34mm² to 6-way distributor

# **Switching power supply 24V**

Art.no.	Description
020441	CabinLED-PS-24V-50W-3pol-NF

1x power supply 230VAC/24VDC, 2A 50W

1x supply line with line filter 2m H05VV-F 2x0.75mm<sup>2</sup>

1x outgoing line 1.5m with T-piece

1x connecting line 1m LIYY 3x0.34mm² with 6-way distributor

# Switching power supply 24V, 60W

#### IP33, with emergency supply

Art.no.	Description
020421	CabinLED-NSG-24V-60W-3pol

1x emergency power supply IP33 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- emergency supply with capacity monitoring acc. to EN 81-28
- 2x battery 12V/1.2Ah, 1x outgoing line 3m LIYY 3x0.34mm² with 6-way distributor, 1x outgoing line 3m LIYY 3x0.34mm² with connector

### **Accessories**

Art.no.	Description
020416	CabinLED-Dimmer-3pol, with 1m connecting line
020418	CabinLED-VL-3pol-3m LIYY 3x0.34mm <sup>2</sup>
020419	CabinLED-6-way-distributor-3pol, 3m LIYY 3x0.34mm <sup>2</sup>
020004	CabinLED3-ring 1, for ceiling cutouts of 60-69.5mm
020005	CabinLED3-ring 2, 70-84mm
020044	CabinLED3-ESG-ring 70-84mm

# Cabin lighting CabinLED5 - built-in variant, - ESG - built-in variant





CabinLED5- built-in variant

CabinLED5-built-in variant with extension ring







Mounting in ceiling cutouts of 66-70mm

Required ceiling cutout

CabinLED5-built-in variant: 66mm – 70mm with extension ring: 70mm – 84mm



Mounting in ceiling cutouts of 66-70mm (also suitable for "over head mounting")







Insert the protective glass of CabinLED5-ESG





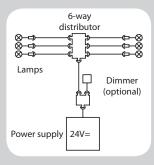




Required ceiling cutout CabinLED5-ESG-built-in variant: 66 – 70mm, with extension ring: 70 – 84mm

#### **Functional description and accessories**

At most 6 lamps can be plugged into a sixfold distributor. The dimmer is plugged into the T-piece or into a free output of the sixfold distributor.



Wiring example CabinLED5 with max. 6 lamps and dimmer

Number CabinLED5-3030	Lightcolour white	Lightcolour neutral white	Lightcolour warm white
Cabin-floor space up to 1.0m <sup>2</sup>	2	2	2
up to 1.5m <sup>2</sup>	4	4	4
up to 2.0m <sup>2</sup>	6	6	6
for every additional square metre	2	2	2

The preceding table data are based on measurements in a stainless steel lift cabin with the dimensions L=1400 x W=1100 x H=2200mm. The prescriptions according to EN 81-20 5.4.10.1 were clearly exceeded in all measurements. (Ceiling height - 2.2m) All indications are without engagement.

Data are not valid for LED5-diffus. For that a double amount is needed.

#### Technical data

#### Switching power supply standard:

Input: 100-240V AC 50Hz/60Hz

2m supply line H05VV-F 2x0.75mm<sup>2</sup>

Output: 24VDC / 2.0A 50W

1.5m outgoing line with T-piece

3m connecting cable

LIYY 3x0.34mm<sup>2</sup> with 6-way distributor

Lamps per supply unit: max. 6 pcs. (power supply 50W)

Efficiency: > 88% Protection type power supply: IP20

Technical data switching power supply with emergency supply see page 106.

#### Lamp Cabin-LED5-3030-built-in variant and ESG built-in variant:

Operating current: 260mA Power per lamp: 5x1W

Luminous flux + brightness: 805lm for light colour white (w)

830lm for light colour neutral white (nw) 780lm light colour warm white (ww)

Protection type: IP20, ESG visible side IP54

Protection class:

Housing: Aluminium nickel-plated

Lamp CabinLED5-3030 built-in variant: Mounting depth: 36mm

Housing diameter: 65mm (built-in side) 80mm (outside)

Cable on lamp: 17cm, pluggable Lamp CabinLED5-3030 ESG built-in variant:

Protective glass: Tempered safety glass (ESG)

\*Fire resistance: equated EN 81-71 5.4.4 cat 1

\*Shock resistance: equated EN 81-71 5.4.4 cat 1

Mounting depth: 45mm

Housing diameter: 65mm (built-in side) 80mm (outside)

Cable on lamp: 17cm, pluggable





# CabinLED5-3030 - built-in variant

#### Basic package CabinLED5-3030-EB-3pol

Art.no.	Description
020459	CabinLED5-3030-EB-3pol-w
020460	CabinLED5-3030-EB-3pol-nw
020461	CabinLED5-3030-EB-3pol-ww

1x LED-lamp with 17cm connecting cable 1x connecting line 1m LIYY 3x0.34mm<sup>2</sup> to 6-way distributor

## CabinLED5-3030 - ESG - built-in variant

#### with protective glass

#### Basic package CabinLED5-3030-EB-ESG-3pol

Art.no.	Description
020462	CabinLED5-3030-EB-ESG-3pol-w
020463	CabinLED5-3030-EB-ESG-3pol-nw
020464	CabinLED5-3030-EB-ESG-3pol-ww
020465	CabinLED5-3030-EB-diffus-3pol-w*

<sup>\* 1</sup>x basic package the same as 020462, but with white diffuser panel instead of protective glass. Produces antiglare light.

1x LED-lamp with protective glass with 17cm connecting cable 1x connecting line 1m LIYY  $3x0.34mm^2$  to 6-way distributor

# Switching power supply 24V

Art.no.	Description
020441	CabinLED-PS-24V-50W-3pol-NF

1x power supply 230VAC/24VDC, 2A 50W

1x supply line with line filter 2m H05VV-F 2x0.75mm<sup>2</sup>

1x outgoing line 1.5m with T-piece

1x connecting line 1m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor

# Switching power supply 24V, 60W

#### IP33, with emergency supply

Art.no.	Description
020421 CabinLED-NSG-24V-60W-3pol	

1x emergency power supply IP33 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- emergency supply with capacity monitoring acc. to EN 81-28
- 2x battery 12V/1.2Ah, 1x outgoing line 3m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor, 1x outgoing line 3m LIYY 3x0.34mm<sup>2</sup> with connector

# **Accessories**

	Art.no.	Description
	020416	CabinLED-Dimmer-3pol, with 1m connecting line
	020418	CabinLED-VL-3pol-3m LIYY 3x0.34mm²
	020419	CabinLED-6-way-distributor-3pol, 3m LIYY 3x0.34mm <sup>2</sup>
	020004	CabinLED3-ring 1, for ceiling cutouts of 60-69.5mm
	020005	CabinLED3-ring 2, 70-84mm
	020044	CabinLED3-ESG-ring 70-84mm

# **Cabin lighting**



Lift cabin ceiling with CabinLED7 built-in variant



Mounting in ceiling cutouts of 70mm-74.5mm









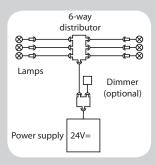
Required ceiling cutout CabinLED7-built-in variant: with extension ring:

70mm – 74.5mm 74mm – 86mm

# CabinLED7 built-in variant

#### Functional description and accessories

At most 6 lamps can be plugged into a sixfold distributor. The dimmer is plugged into the T-piece or into a free output of the sixfold distributor.



Wiring example CabinLED7 with max. 6 lamps and dimmer

Number CabinLED7-3030	Light colour white	Light colour neutral white	Light colour warm white
Cabin- floor space up to 1.5m <sup>2</sup>	2	2	2
up to 2.0m <sup>2</sup>	4	4	4
for every additional square metre	1-2	1-2	1-2

The preceding table data are based on measurements in a stainless steel lift cabin with the dimensions L=1400 x W=1100 x H=2200mm. The prescriptions according to EN 81-20 5.4.10.1 were clearly exceeded in all measurements. All indications are without engagement.

#### **Technical data**

Switching power supply standard:

Input: 100-240V AC 50Hz/60Hz

2m supply line H05VV-F 2x0.75mm<sup>2</sup>
Output: 24VDC / 2.5A 60W

1.5m outgoing line with T-piece

3m connecting cable

LIYY 3x0.34mm<sup>2</sup> with 6-way distributor

Lamps per supply unit: max. 6 pcs. (power supply 60W)

Efficiency: > 88% Protection type power supply: IP20

Technical data switching power supply with emergency supply see page 106.

Lamp Cabin-LED7-3030-built-in variant:

Operating current: 350mA Power per lamp: 7x1W

 $Luminous \ flux + brightness: \quad 840 Im \ for \ light \ colour \ white \ (w)$ 

865lm for light colour neutral white (nw) 847lm for light colour warm white (ww)

Protection type: IP20

Protection class:

Housing: Aluminium nickel-plated

Mounting depth: 35mm

Housing diameter: 69mm (built-in side)

79mm (outside)

Cable on lamp: 17cm, pluggable

# CabinLED7 - 3030 - built-in variant

















#### Basic package CabinLED7-3030-EB-3pol

No.art.	Description
020466	CabinLED7-3030-EB-3pol-w
020467	CabinLED7-3030-EB-3pol-nw
020468	CabinLED7-3030-EB-3pol-ww

1x LED-lamp with 17cm connecting cable

1x connecting line 1m LIYY 3x0.34mm<sup>2</sup> to 6-way distributor

# **Switching power supply 24V**

Art.no.	Description
020442	CabinLED-PS-24V-60W-3pol-NF

1x power supply 230VAC/24VDC, 2.5A 60W

1x supply line with line filter 2m H05VV-F 2x0.75mm<sup>2</sup>

1x outgoing line 1.5m with T-piece

1x connecting line 1m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor

# Switching power supply 24V, 60W

IP33, with emergency supply

Art.no.	Description
020421	CabinLED-NSG-24V-60W-3pol

1x emergency power supply IP33 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- emergency supply with capacity monitoring acc. to EN 81-28
- 2x battery 12V/1.2Ah
- 1x outgoing line 3m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor
- 1x outgoing line 3m LIYY 3x0.34mm<sup>2</sup> with connector

## **Accessories**

#### Dimmer

Art.no.	Description
020416	CabinLED-Dimmer-3pol

1x Dimmer with 1m connecting line

#### Connecting line

Art.no.	Description
020418	CabinLED-VL-3pol-3m

1x connecting cable 3m LIYY 3x0.34mm<sup>2</sup>

Connection between lamp and 6-way distributor is necessary with large lamp distances

#### 6-way distributor

Art.no.	Description
020419	CabinLED-6-way-distributor-3pol

1x 6-way distributor with 3m connecting line LIYY 3x0.34mm<sup>2</sup>

#### **Extension ring CabinLED7**

Art.no.	Description
020020	CabinLED7-ring 74-86mm

Vandal protection category 2! **Highest protection level!** 





Lift cabin ceiling with CabinLED7-vandal proof



Mounting in case of ceiling cutouts of 85mm-87mm



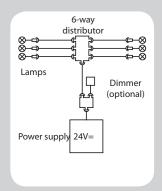


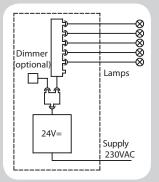


Required ceiling cutout CabinLED7-vandal proof:

85mm - 87mm

# CabinLED7 - vandal proof





Wiring example CabinLED7 with max. 6 lamps and dimmer

Wiring example CabinLED7 with max. 6 lamps, dimmer and power supply with housing IP65

#### Planning advice for the vandal protection

The lamp is conform with the EN 81-71: 2007

Safety rules for the construction and installation of lifts -

Particular applications to passenger lifts and goods passenger lifts -Part 71:

Protective measures against intentional destruction.

The technical requirements according to EN 81-71: 2007

5.4.4 Car lighting and Annex B (impact test) and Annex F

(flammability test) are entirely fulfilled.

The Cabin-LED7-vandal proof lamp corresponds to the vandal protection category 2 (highest protection level).

#### **Technical data**

Switching power supply standard:

100-240V AC 50Hz/60Hz Input:

Output: 24VDC / 2.0A 50W

24VDC / 2.5A 60W

1.5m outgoing line with T-piece

2m supply line H05VV-F 2x0.75mm<sup>2</sup>

3m connecting cable

LIYY 3x0.34mm<sup>2</sup> with 6-way distributor

Lamps per supply unit: max. 4 pcs. (power supply 50W) max. 6 pcs. (power supply 60W)

Efficiency:

Protection type power supply: IP20

Technical data switching power supply with emergency supply see page 106.

#### Lamp Cabin-LED7-vandal proof:

Operating current: Power per lamp:

Luminous flux + brightness: 700lm for light colour white (w)

Protection type: Protection class:

Housing: Stainless steel on visible cabin,

Aluminium on built-in side

Glass: 6mm Tempered safety glass (ESG)

Mounting depth:

84.5mm (built-in side) Housing diameter:

99mm (outside)

Cable on lamp: 5m 3x0.34mm<sup>2</sup>

Power supply IP65:

Protection type:

100-240V AC 50Hz/60Hz Input:

2m supply line H05VV-F 2x0.75mm<sup>2</sup>

Output: 24VDC / 2.5A 60W

1.5m outgoing line with T-piece

3m connecting cable

LIYY 3x0.34mm<sup>2</sup> with 6-way distributor max. 6 pcs. (power supply 60W) Lamps per supply unitl: L:255 x W:180 x H:90mm



# **CabinLED7-vandal proof**

for sheet metal ceilings 1mm - 8mm

CabinLED7-3030-vandal proof IP65

Art.no.	Description
020469	CabinLED7-3030-EB-vandal-3pol-w

1x LED-lamp, vandal proof, IP65 connection line 5m LIYY 3x0.34mm<sup>2</sup> with plug



# Switching power supply 24V

Art.no.	Description
020442	CabinLED-PS-24V-60W-3pol-NF

1x power supply 230VAC/24VDC, 2.5A 60W

1x supply line with line filter 2m H05VV-F 2x0.75mm<sup>2</sup>

1x outgoing line 1.5m with T-piece

1x connecting line 3m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor



# Switching power supply 24V, IP65

Art.no.	Description
020420	CabinLED-PS-24V-60W-3pol-IP65

1x Control box, dimensions: L:255 x W:180 x H:90mm IP65 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- internal 6-way distributor for max. 6 CabinLED7 lamps



# Switching power supply 24V, 60W

IP33, with emergency supply

Art.no.	Description
020421	CabinLED-NSG-24V-60W-3pol

1x emergency power supply IP20 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- emergency supply with capacity monitoring acc. to EN 81-28
- 2x battery 12V/1.2Ah
- 1x outgoing line 3m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor
- 1x outgoing line 3m LIYY 3x0.34mm<sup>2</sup> with connector



#### **Accessories**

Art.no.	Description
020416	CabinLED-Dimmer-3pol

1x Dimmer with 1m connecting line



# Replacement parts

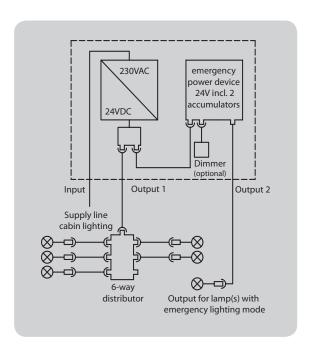
Art.no.	Description
020051	CabinLED7-vandal Glass + O-Ring
020052	CabinLED7-vandal-bottom part

Replacement-glass + O-Ring and Replacement bottom part for CabinLED-LED7 vandal proof



#### Operating mode:

The emergency power unit is suitable for the illumination during normal operation and during emergency power operation. Output 2 is supplied with power without interruptions. The capacity of the interior lead accumulators is controlled in compliance with EN 81-28. If the rated capacity is not reached, this is indicated by a potential free contact. During emergency power operation, the accumulators are protected against being destroyed by a deep discharge. During mains operation they are continuously charged with a trickle charge.







# **Emergency power supply**

according to EN 81-20 5.4.10.4

Through an input, the emergency power unit can be informed about an intended disconnection of the cabin light. If the light voltage is interrupted and the input is triggered at the same time, the emergency power unit does not switch to emergency power supply.

Optionally a dimmer can be connected to the emergency power unit. During normal operation all lamps are lighted with the adjusted brightness. During emergency power operation the emergency lamps are lighted without being dimmed. In general the emergency power unit is suitable for operating one emergency lamp. By means of a 6-way distributor (which is not included in the delivery) several lamps can be triggered. (see the "Technical data").

#### **Technical data**

Switching power supply with NSG

Input: 100-240V AC 50Hz/60Hz, 2m supply line

Output 1: 24VDC with 3m connecting line to 6-way distributor

(Lamps **don't lit up** during emergency mode)
Output 2: 24VDC with 3m connecting line to lamp

(Lamps do lit up during emergency mode)
Lamps per power LED3 max.12 pcs. among those max. 6 with emerg. mode

supply: LED5 max. 6 pcs. among those max. 4 with emerg. mode

LED5 max. 6 pcs. among those max. 4 with emerg. mode

Input: for cabin light switch-off on purpose

(potential-free contact in the control system)

Output: potential-free signal contact "Battery capacity low"

1x changer, 30VDC 1A SELV

Battery: 2x lead fleece gel accumulator 12V 1.2Ah connection

in series

Protection type: IP33

Operating

temperature: -10°C up to 50°C

Dimensions: length: 255 x width: 180 x height: 90mm

#### Switching power supply 24V IP20 with emergency supply

Art.no.	Description
020421	CabinLED-NSG-24V-60W-3pol

1x emergency power supply IP33 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- emergency supply with capacity monitoring acc. EN 81-28  $\,$
- 2x battery 12V/1.2Ah
- 1x outgoing line 3m LIYY 3x0.34mm² with 6-way distributor
- 1x outgoing line 3m LIYY  $3x0.34mm^2$  with connector

Art.no.	Description
020419	CabinLED-6-way distributor-3pole

1x 6-way distributor with with 3m connecting line LIYY 3x0.34mm<sup>2</sup>

# **Emergency lamp**

**LED-emergency lamp for on-surface mounting 12V-30V DC** suitable for ceiling cutouts of 12 - 59mm

Art.no.	Description
020471	CabinLED3-3030-AB-12V-30V-3pol-w

1x LED-lamp for on-surface mounting with 17cm connecting cable, IP40, 1x connecting line 1m LIYY  $2x0.34mm^2$  with ferrules, 2x distance plates, 2x clamps, 1x speed nut for fixation in sheet metal ceilings 1x fitting for fixation in wooden ceilings









Art.no.	Description
020433	W+W LightWatcher



020434 W+W LightWatcher in a case

1x LightWatcher in a case pre-wired for the installation with 3m supply line



020435 W+W LightWatcher in a case for CabinLED-NSG

1x LightWatcher in a case for W+W emergency power supply pre-wired for the installation with 3m supply line and 2m control cable

# **Emergency lamps**

#### LED-Strip 24V

020109

The LED strip can be glued on the LED tiles.

Charging rate: 65mA
Power: 1.6W

Art.no. Description

Circuit board strip 24 x 2.5cm equipped with 12 LEDs incl. 5m supply line

#### LED light 24V, 2.5W with magnetic base

H-LED-24V-N

The W+W LED light 24V 2.5W is equipped with a magnetic base and 2 m supply line. Thereby it is possible to fix the light at different places on the car roof (e.g. used as emergency lamp), for example at the guard rail or at the roof control box.

Charging rate: 103mA (with 24V DC), power: 2.5W (with 24V DC), illuminance: 65 lux (in 1m distance).

Art.no.	Description
052293	LED light 24V, 2.5W with magnetic base, 2m supply line

#### LED light, round 360°, IP67

LED light 360°, Ø 45mm, height 23mm, fully encapsulated, with 5m supply line. Protection type: IP67, current consumption: 40mA (with 24V DC), power: 1W (with 24V DC), 5000K, 83lm.

Art.no.	Description
020447	LED light 360°, 24V, IP67, 5m supply line

# **LightWatcher** for cabin lighting switching off

The LightWatcher has to be mounted directly onto the car roof. Any movements of the car can be detected by three integrated acceleration sensors. The sensors are sensitive enough to recognize also door movements.

As soon as a movement in the car is perceived, the cabin light is switched on. The switching threshold for sensing movements can be set directly on the LightWatcher gadget. Provided that no further car or door movements are sensed, a certain time will elapse before the cabin light is switched off again. To install the LightWatcher, the lighting branch circuit is simply cut and the LightWatcher is put in. The LightWatcher can, apart from the cabin light, switch off an additional consumer. Moreover, for the powersaving mode a third contact has been provided that can switch on a consumer so as to activate the emergency light for example.

For special applications that require the cabin light to be activated not only by the movement sensors but also by other sensors or functions, four potentional-free inputs have been provided, that can be used reversely as well. All relay contacts are closed, if the LightWatcher is not supplied with operating voltage.

#### **Technical data Lightwatcher**

Supply voltage: 230V AC 50Hz/60Hz

Power received: 2 VA Relay outputs: 3

Max. Switching voltage: 250V AC or 30V DC

Max. continuous current: 8A (AC) or 5A (DC)

Max. switching capacity: 2000 VA (AC) or 150W (DC)

Supplementary control 4

Control voltage (E1-E4): 12V - 230V AC/DC Type of protection: IP20 (020433)

Dimensions: L: 106 x W: 90 x H: 48mm

#### Lightwatcher in a case article 020434 + 020435

Case: L: 200 x W: 200 x H: 130mm

Type of protection: IP65

Supply line: YSLY-JZ 3x1.5mm<sup>2</sup>
Control cable (only 020435) YSLY-JZ 2x1.0mm<sup>2</sup>



# 230VAC emergency power device 24V incl. 2 batteries output terminal 24V DC supply line 230V AC



# **Emergency power supply**

according to EN 81-20 5.4.10.4

According to EN 81-20 5.4.10.4:

There shall be an automatically rechargeable emergency supply, which is capable of ensuring at least a lighting intensity of 5 lux for 1 h. The measurements are taken in the centre of the car one meter above the floor, on the car roof and at the alarm initiation device in the car.

The power supply unit (NSG) is suitable for the emergency lighting in and on the car in case of power failure. If the supply voltage drops out, a direct-current voltage with 24V will be available at the output terminals. The capacity of the internal lead accumulators is monitored according to EN 81-28. If the rated capacity is not reached, this is indicated by a potential free contact. During emergency power operation, the accumulators are protected against being destroyed by a deep discharge. During mains operation they are continuously charged with a trickle charge.

Through an input, the emergency power unit can be informed about an intended disconnection of the cabin light. If the supply voltage is interrupted and the input is triggered at the same time, the emergency power unit does not switch to emergency power supply.

#### **Technical data**

Switching power supply with NSG

Input: 100-240V AC 50Hz/60Hz, 2m supply line

Output 1: 24V DC, 1.2Ah

Input: for switch-off on purpose

(potential-free contact in the control system)

Output: potential-free signal contact "Battery capacity low"

1x changer, 30VDC 1A SELV

Batteries: 2x lead fleece gel accumulator 12V

1.2Ah connection in series

Protection type: IP33

Operating temperature: -10°C up to 50°C

Diemensions: Length: 255 x width: 180 x height: 90mm

# Scope of delivery

#### **Emergency power supply NSG**

Art.no.	Description
020446	Emergency power supply NSG 24VDC / 1.2Ah

1x emergency power supply IP33 equipped and pre-wired with:

- power supply 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
- emergency supply with capacity monitoring acc. EN 81-28
- 2x batteries12V/1.2Ah
- output terminal 24V DC

# **Emergency lighting**



#### Extract from the norm EN 81-20 5.4.10.4:

"There shall be an automatically rechargeable emergency supply, which is capable of ensuring at least a lighting intensity of 5 lux for 1 h:

a) at the alarm initiation device in the car and on the car roof;  $[\ldots]$  c) in the centre of the car roof one meter above the floor."



Fixation at the guard rail for car roofs.



Fixation at the control box.



# LED emergency lighting 230V

with magnet, according to EN 81-20

#### Description

The W+W LED emergency light is equipped with a magnetic base and 2 m supply line. Thereby it is possible to fix the light at different places on the car roof, for example at the guard rail or at the roof control box. Of course it is possible to change the fixation position at any time.

The emergency light automatically comes on upon failure of the supply voltage. If the voltage goes off for a longer period, an integrated protection of depth discharge prevents a damage of the battery.

#### **Function**

- Applying voltage: LED light does not lit.
- Loss of voltage: LED light is lit.
- The emergency light can be switched on and off with a button.
- If the voltage goes off for a longer period, an integrated protection of depth discharge prevents damage of the battery.
- Status indication via LED.

#### **Technical data**

Supply voltage: 220-240V / 50Hz
Protection type: IP20
Power trickle charge: 1.7VA (~0.007A)
Luminous flux: 450 lumen

Illuminance: 140 lux (in 1m distance)

Luminous colour: 6500K

Supply line: 2m, H03VVH2-F 2x0.75mm<sup>2</sup>

Case: Aluminium / Polycarbonat (PC)
Battery: Lithium ion 3.7V 2Ah
Charging rate: approx. 0.016A (grid side
230V, charging rate)

Duration of lighting: >1.5h Loading time: >12h Protection of depth discharge: yes

Operation temerature: 0°c up to 40°C

Dimensions with magnetic base: 310 x 39 x 34mm (LxWxH)







# LED emergency light 2W, 230V,

acc. to EN 81-20

Art.no. Description	
052294	LED emergency light 230V, magnet, 2m

LED emergency light 230V with magnetic base and 2m supply line.



# Lift cabin ceilings



Mounting example: Cabin ceiling, brushed stainless steel

#### **Important advice!**

The production and delivery of the cabin ceilings is made exactly to your specifications of the dimensions. When planning please consider potential diminutions e.g. because of shadow gaps.

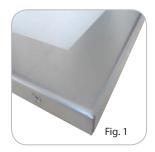
# When ordering the following specifications are neccessary:

External dimensions of the ceiling: Length x width
 Material frame: (Standard stainless steel, grain 240)

- Light colours: Choice see table on the right

Integrated emergency light: yes / no
 Dimmer: yes / no
 Panel for protection (VSG): yes / no





# Lighting made to measure

#### Description

This new cabin lighting is suitable for retrofitting existing lift cabins as well as for the use in new installations.

The suspended ceiling is made to measure and is mounted under the existing cabin ceiling. The maximum dimensions of the ceilings are: length 2200mm and width 1400mm. The frame consists of 2mm stainless steel. Seven different surfaces and four different light colours are available.

Optionally an emergency light can be installed. The brightness of the normal lighting and of the emergency light is compliant with the EN 81-20.

The frame with the luminous field has a very small build-up height of 30mm, including the mounting bracket. It is screwed to the real cabin ceiling with the delivered fastening material. The very small mounting depth makes retrofitting in existing installations very easy.

You will find a suitable emergency power supply NSG (art.no. 020446) on page 108.

#### **Technical data**

The illuminance is measured in a lift cabin with the dimensions: L= 1400 x W=1100 x H=2380mm. one metre above the floor: approx. 450 Lux on the floor: approx. 125 Lux

Emergency light at the alarm button: approx. 70 Lux on the floor: approx. 20 Lux

#### Light colours

The LED lighting is available in different light colours.

#### Luminous flux, colour temperature and power:

Light colour warm white: 1153lm/m, 3000K, 13.3W/m
Light colour neutral white: 1280lm/m, 4000K, 13.3W/m
Light colour neutral white: 1280lm/m, 5000K, 13.3W/m
Light colour daylight: 1280lm/m, 6500K, 13.3W/m
The irradiation occurs on both sides on the longer side.

#### Material luminous field:

Makrolon®, fire protection class B1

Weight cabin ceiling: approx. 22kg/m<sup>2</sup>

# **Versions** of the lift cabin ceilings

#### Surfaces

In general the ceilings are available in the following versions:

Brushed stainless steel, grain 240 
STANDARD

Bead blasted stainless steel (figure 1) Stainless steel H8 mirror Brushed stainless steel black Bead blasted stainless steel black Brushed stainless steel golden Stainless steel H8 mirror golden Stainless steel frame, width: 55mm

# Lift cabin ceilings

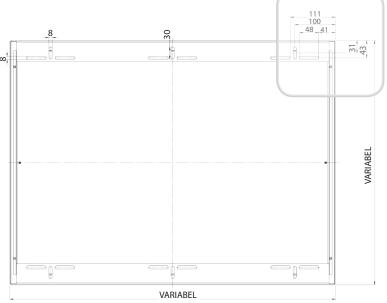
Back side with mounting brackets

# Mounting of the ceilings

The frame of the cabin ceiling is fastened under the existing cabin ceiling with mounting brackets and screws.



# **Dimensonal drawing**



Dimensional drawing cabin ceiling

# 111 100 48 41

# Scope of delivery cabin ceilings

020445 Cabin ceiling made to measure*	Art.no.	Description
3	020445	Cabin ceiling made to measure*

1x Cabin ceiling made to measure

1x Set of fastening material

1x Power supply unit 230V / 24V with 2m supply line

1x Integrated emergency light 12V / 24V DC(optional)

\*maximum dimensions of the ceilings:

length = 2200mm x width= 1400mm

#### Reference to further complete cabin ceilings

You can find pre-installed cabin ceilings with W+W LED lamps on our website under:

"Complete ceilings with CabinLED5" and "Complete ceilings with SQUARE-LED".

The ceilings are suitable for the mounting in existing cabins as well as in new installations.



# SQUARE-LED round, built-in lamps

#### SQUARE-LED-EB-Ø180mm



Art.no.	Description
020310	SQUARE-LED-EB-Ø180-w
020311	SQUARE-LED-EB-Ø180-nw
020312	SQUARE-LED-EB-Ø180-ww

#### Scope of delivery

1x lamp including an electronic ballast 1x fastening set 1x switching power supply 1x mounting instruction

#### SQUARE-LED built-in lamp Ø240mm



Art.no.	Description
020313	SQUARE-LED-EB-Ø240-w
020314	SQUARE-LED-EB-Ø240-nw
020315	SQUARE-LED-EB-Ø240-ww

#### Scope of delivery

1x lamp including an electronic ballast 1x f 1x switching power supply 1x r

1x fastening set 1x mounting instruction

#### **Technical data**

**Switching power supply:** Input 100-240V AC 50Hz/60Hz,

Output 24V- / 1A

Lamp SQUARE-LED-EB-Ø180

Power per lamp: 10W, 24V DC

Luminous flux + brightness:

Light colour white (w): 622lm, 6000-7000K Light colour natural white (nw): 616lm, 4000-5000K Light colour warm white (ww): 410lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting depth: 16mm
Required ceiling cutout: Ø165mm

Illuminance

measured in a lift cabin, LxWxH 1400 x 1100x 2200mm, according to EN 81-20 5.4.10.1

 2x SQUARE-LED-EB-Ø180
 250 Lux

 3x SQUARE-LED-EB-Ø180
 400 Lux

 4x SQUARE-LED-EB-Ø180
 550 Lux

dimmable (optional)

#### **Technical data**

Switching power supply: Input 100-240V AC 50Hz/60Hz,

Output 24V- / 1A

Lamp SQUARE-LED-EB-Ø240

Power per lamp: 14W, 24V DC

Luminous flux + brightness:

Light colour white (w): 870lm, 6000-7000K Light colour natural white (nw): 856lm, 4000-5000K Light colour warm white (ww): 580lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting depth: 16mm
Required ceiling cutout: Ø225mm

#### Illuminance

measured in a lift cabin, LxWxH 1400 x 1100x 2200mm, according to EN 81-20 5.4.10.1

1x SQUARE-LED-EB-Ø240 220 Lux 2x SQUARE-LED-EB-Ø240 500 Lux

dimmable (optional)

# **Attachment features**







# **SQUARE-LED** angular, built-in lamps

#### SQUARE-LED built-in lamp 200 x 200 x 16mm



	Art.no.	Description
Ī	020316	SQUARE-LED-EB-200-w
	020317	SQUARE-LED-EB-200-nw
	020318	SQUARE-LED-EB-200-ww

#### Scope of delivery

1x lamp including an electronic ballast 1x fastening set 1x switching power supply 1x mounting instruction

#### SQUARE-LED built-in lamp 300 x 300 x 16mm



Art.no.	Description
020319	SQUARE-LED-EB-300-w
020320	SQUARE-LED-EB-300-nw
020321	SQUARE-LED-EB-300-ww

#### Scope of delivery

1x lamp including an electronic ballast 1x fastening set 1x switching power supply 1x mounting instruction

#### **Dimmer**



Art.no.	Description
020416	CabinLED-Dimmer-3pol
020419	CabinLED-6-way-distributor-3pol*
020432	Additional cable for the dimmer*

<sup>\*</sup> Necessary when using one dimmer for several SQUARE-LEDs.

#### **Technical data**

**Switching power supply:** Input 100-240V AC 50Hz/60Hz,

Output 24V- / 1A

Lamp SQUARE-LED-EB-200

Power per lamp: 10W, 24V DC

Luminous flux + brightness:

Light colour white (w): 950lm, 6000-7000K Light colour natural white (nw): 950lm, 4000-5000K Light colour warm white (ww): 800lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting depth: 16mm
Required ceiling cutout: 185 x 185mm

#### Illuminance

measured in a lift cabin, LxWxH  $1400 \times 1100 \times 2200$ mm, according to EN  $81-20 \cdot 5.4.10.1$ 

 2x SQUARE-LED-EB-200
 350 Lux

 3x SQUARE-LED-EB-200
 400 Lux

 4x SQUARE-LED-EB-200
 500 Lux

dimmable (optional)

#### **Technical data**

Switching power supply: Input 100-240V AC 50Hz/60Hz,

Output 24V- / 1A

Lamp SQUARE-LED-EB-300

Power per lamp: 18W, 24V DC

Luminous flux + brightness:

Light colour white (w): 1100lm, 6000-7000K Light colour natural white (nw): 1085lm, 4000-5000K Light colour warm white (ww): 720lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting depth: 16mm
Required ceiling cutout: 285 x 285mm

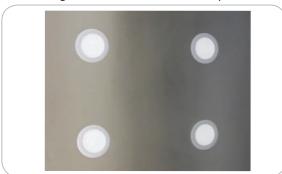
#### Illuminance

measured in a lift cabin, LxWxH 1400 x 1100x 2200mm, according to EN 81-20 5.4.10.1

1x SQUARE-LED-EB-300 400 Lux 2x SQUARE-LED-EB-300 700 Lux

dimmable (optional)

#### Cabin ceiling with SQUARE-LED built-in lamps





# SQUARE-LED angular for on-surface mounting

#### SQUARE-LED surface mounted 300 x 300 x 16mm



	Art.no.	Description
Ī	020322	SQUARE-LED-AB-300-w
	020323	SQUARE-LED-AB-300-nw
	020324	SQUARE-LED-AB-300-ww

#### Scope of delivery

1x lamp including an electronic ballast 1x switching power supply

1x mounting instruction 1x mounting plate incl. fastening set

#### **Technical data**

Switching power supply: Input 100-240V AC 50Hz/60Hz,

Output 24V- / 1A

Lamp SQUARE-LED-AB-300

Power per lamp: 18W, 24V DC

 $Luminous\ flux + brightness:$ 

Light colour white (w): 1100lm, 6000-7000K Light colour natural white (nw): 1085lm, 4000-5000K Light colour warm white (ww): 720lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting height: 16mm

#### Illuminance

measured in a lift cabin, LxWxH 1400 x 1100x 2200mm, according to EN 81-20 5.4.10.1

1x SQUARE-LED-AB-300 400 Lux 2x SQUARE-LED-AB-300 700 Lux

dimmable (optional)

#### Required ceiling cutout

4 holes of 8mm, for the fixation of the mounting plate 1 hole of at least Ø51mm, in the middle below the lamp for the electronic ballast

#### Dimmer



Art.no.	Description
020416	CabinLED-Dimmer-3pol
020419	CabinLED-6-way-distributor-3pol*
020432	Additional cable for the dimmer*

<sup>\*</sup> Necessary when using one dimmer for several SQUARE-LEDs.

#### Cabin ceiling with SQUARE-LED on-surface mounting lamp



# Mounting plates, included in delivery







# SQUARE-LED angular for on-surface mounting

#### SQUARE-LED surface mounted 300 x 600 x 16mm



Art.no.	Description
020325	SQUARE-LED-AB-300/600-w
020326	SQUARE-LED-AB-300/600-nw
020327	SQUARE-LED-AB-300/600-ww
602377	Frame plate 380 x 680mm suitable for SOUARE-LED-AB-300/600

#### Scope of delivery

1x lamp including an electronic ballast 1x switching power supply

1x mounting instruction 1x mounting plate incl. fastening set

#### SQUARE-LED surface mounted 600 x 600 x 16mm



Art.no.	Description
020328	SQUARE-LED-AB-600-w
020329	SQUARE-LED-AB-600-nw
020330	SQUARE-LED-AB-600-ww
602378	Frame plate 680 x 680mm suitable for SQUARE-LED-AB-600

#### Scope of delivery

1x lamp including an electronic ballast 1x switching power supply

1x mounting instruction 1x mounting plate incl. fastening set

#### **Technical data**

**Switching power supply:** Input 100-240V AC 50Hz/60Hz,

Output 24V- / 2A

#### Lamp SQUARE-LED-AB-300/600

Power per lamp: 39W, 24V DC

Luminous flux + brightness:

Light colour white (w): 2420lm, 6000-7000K Light colour natural white (nw): 2391lm, 4000-5000K Light colour warm white (ww): 1564lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting height: 16mm

#### Illuminance

measured in a lift cabin, LxWxH 1400 x 1100 x 2200mm,

according to EN 81-20 5.4.10.1

1x SQUARE-LED-AB-300/600 700 Lux

dimmable (optional)

#### Required ceiling cutout

4 holes of 8mm, for the fixation of the mounting plate 1 hole of at least Ø51mm, below the lamp for the electronic ballast

#### Optional

Frame plate for additional use in larger ceiling cutouts than the SQUARE-LED-AB-300/600 lamp size.

#### **Technical data**

Switching power supply: Input 100-240V AC 50Hz/60Hz,

Output 24V- / 2A

Lamp SQUARE-LED-AB-600

Power per lamp: 39W, 24V DC

Luminous flux + brightness:

Light colour white (w): 2420lm, 6000-7000K Light colour natural white (nw): 2391lm, 4000-5000K Light colour warm white (ww): 1564lm, 2700-3300K

Protection type: IP20
Protection class: III
Mounting height: 16mm

#### Illuminance

measured in a lift cabin, LxWxH 1400 x 1100 x 2200mm,

according to EN 81-20 5.4.10.1

1x SQUARE-LED-AB-600/600 700 Lux

dimmable (optional)

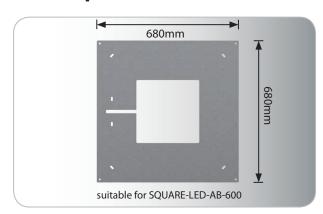
#### Required ceiling cutout

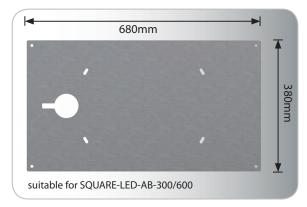
4 holes of 8mm, for the fixation of the mounting plate 1 hole of at least Ø51mm, below the lamp for the electronic ballast

#### Optiona

Frame plate for additional use in larger ceiling cutouts than the SQUARE-LED-AB-600 lamp size.

# Frame plates, material: stainless steel V2A grain size 240, optional for larger ceiling cutouts





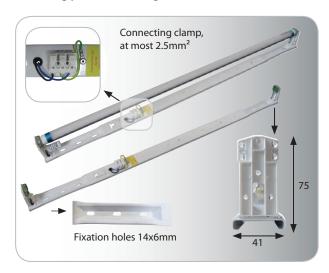
# Fastening for LED tubes T8

#### **Technical data**

Voltage: 110V - 240V Profile: steel sheet, white

Lamp holder: G13 Protection class: I

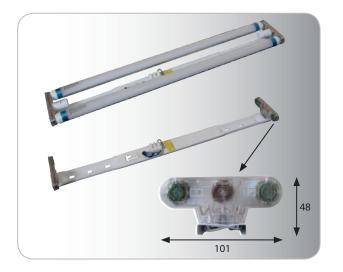
#### Mounting profile 1 tube high



#### Mounting profile 1 tube flat



#### Mounting profile 2 tubes



#### Description

The mounting profiles are suitable for holding LED tubes T8. So they can not only be used for the exchange of lamps with magnetic ballast, but also for new installations of cabin lighting.

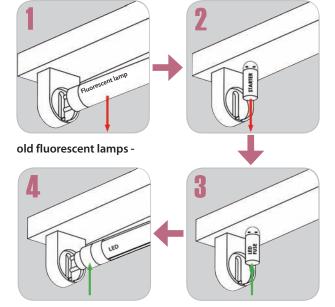
The mounting profiles are equipped with a support for the fuse (substitute for the starter). The connection is made with double clamps without screws.

Art.no.	Description	Length tube	Length profile
020170	LED mounting profile 1x 600mm high	600mm	620mm
020171	LED mounting profile 1x 900mm high	900mm	925mm
020172	LED mounting profile 1x1200mm high	1200mm	1230mm
020173	LED mounting profile 1x1500mm high	1500mm	1530mm

Art.no.	Description	Length tube	Length profile
020178	LED mounting profile 1x 600mm flat	600mm	620mm
020179	LED mounting profile 1x 900mm flat	900mm	925mm
020180	LED mounting profile 1x1200mm flat	1200mm	1230mm
020181	020181 LED mounting profile 1x1500mm flat		1530mm

Art.no.	Description	Length tube	Length profile
020174	LED mounting profile 2x 600mm	600mm	620mm
020175	LED mounting profile 2x 900mm	900mm	925mm
020176	LED mounting profile 2x1200mm	1200mm	1230mm
020177	LED mounting profile 2x1500mm	1500mm	1530mm

#### Simple replacement of



against new LED tubes T8

### Description

LED tubes T8

This high quality LED tube T8 20W is an alternative to the fluorescent tube T8 36W with magnetic ballast. E.g. it is suitable for subsequently converting to LED technology. The wiring does not have to be changed. Only the starter is exchanged against a fuse (included in the delivery). The energy saving is around 50% compared with a traditional 36W fluorescent tube with a conventional ballast. The tube can be adjusted 180° in the lamp holder. The solid aluminium body provides stability and guarantees an optimal heat dissipation.

The LED tube is VDE, UL and TÜV certified.

#### **Technical data**

Lamp holder: G13, tube 180°

pivoting in the lamp holder

Diameter: 26mm Length: see table

Aluminium / plastic material Housing:

Protection type: IP20 Protection class

220V - 240V Voltage: Power: see table

4000K (neutral white) Light colour:

Luminous intensity: see table Luminous efficacy: 120lm/W Colour rendering: >80Ra Angle of radiation: 120° Durability: ≈ 50.000h Ambient temperature: -20° up to +40°C

Dimmable: no



# Scope of delivery

LED Tube

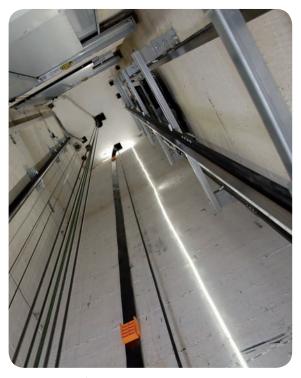
Fuse as replacement for the starter

Art.no.	Description	Power	Luminous flux	Length
020144	LED tubeT8 24W 1500mm 4000K	24W	2880lm	1500mm
020145	LED tube T8 20W 1200mm 4000K	20W	2400lm	1200mm
020146	LED tubeT8 17W 900mm 4000K	17W	2040lm	900mm
020147	LED tubeT8 11W 600mm 4000K	11W	1320lm	600mm

# W+W FixLED® IP65 Shaft lighting according to EN 81-20 5.2.1.4.1

#### General information

The LED shaft lighting is appropriate for the homogeneous illumination of the lift shaft. The LED band runs in one piece from the shaft ceiling to the pit, thereby avoiding horizontal shadows which are usually generated by the distance between the lamps.



Mounting example

The coating of the W+W FixLED® shaft lighting consists of self-extinguishing PVC. In the glare-reduced version, the PVC coating is designed so that the bright LED light is softened, thereby reducing direct glare.

The LED band is delivered ready for connection with a 10m supply cable. The LED band is assembled in intervals of 1m. The longest piece possible is 100m. The supply cable consists of a cable H05VV-F 2x1.5mm<sup>2</sup> (or 3G1.5mm<sup>2</sup>) including an electronic ballast (rectifier, fuse and overvoltage protection). This way the LED band can be protected with a maximum of 16A (e.g. with a common fuse for pit socket and shaft lighting).

The integrated overvoltage protection makes sure that there are no failures during voltage peaks caused by drills, vacuum cleaners or frequency converters.

The offered plugs are required if the shaft lighting has to be plugged into a normal socket. This is the case e.g. for mounting new installations or for big modernisations. When mounting a lift, the shaft lighting is usually installed first. At the beginning of the mounting the lift control is not yet installed. The lighting can be plugged e.g. into a construction site power distributor (fuse protection up to max. 16A, see type examination certificate under www.wwlift.de). After mounting the lift control, the plug can be cut off and the supply cable can be clamped to the corresponding terminals in the lift control.

The W+W FixLED® shaft lighting is certified by TÜV Rheinland according to EN 81-20.





#### **Technical data**

#### W+W FixLED® glare-reduced V2

Protection type: IP65

Material coating: PVC, self-extinguishing Voltage: 220V-240V AC 50-60Hz

Power:  $9W/m \pm 10\%$ 

Max. charge/string:  $450W \pm 10\%$  with 50m

Protection class: II
Light colour: 4000K
Luminous flux: 600lm
Angle of radiation: 120°

Supply cable 1 - 50m:  $10m H05VV-F 2 x 1.5mm^2$ 

with plug

Supply cable 51 - 100m: 10m H05VV-F 3G1.5mm<sup>2</sup>

with plug

Length LED band: maximum 100m
Ambient temperature: -30°C up to +45°C
Dimensions PVC coating: 14 x 7,5mm
Weight (without cable): 115g/m

Circuit breaker: maximum 16A, B characteristics

Illuminance: distance 1.5m 210 lux (examples) distance 2.5m 130 lux

#### Technical data

#### W+W FixLED® Standard

Protection type: IP65

Material coating: PVC, self-extinguishing Voltage: 220V-240V AC 50-60Hz Power: 8.5W/m - 9W/m ±10% Max. charge/string: 450W ±10% with 50m

Protection class: II
Light colour: 4000K
Luminous flux: 600lm
Angle of radiation: 120°

Supply cable 1 - 50m:  $10m H05VV-F 2 x 1.5mm^2$ 

with plug

Supply cable 51 - 100m: 10m H05VV-F 3G1.5mm<sup>2</sup>

with plug

Length LED band: maximum 100m Ambient temperature: -30°C up to +45°C

Dimensions PVC coating: 13 x 8mm Weight (without cable): 111g/m

Circuit breaker: maximum 16A, B characteristics

Illuminance: distance 1.5m 230 lux (examples) distance 2.5m 150 lux **Suitable for permanent lighting (24/7)!** 

# Shaft lighting





W+W FixLED® Glare reduced Standard Pull cord switches

# W+W FixLED® V2, IP65 Glare-reduced, length 1m - 50m



In the glare-reduced version V2 of W+W FixLED, the PVC sheathing is construed in a way that the bright LED light is softened and direct glare is reduced.

In general it is sufficient to choose the length of the shaft lighting next smaller than the shaft height.

If there are devices like for example the frequency converter in the shaft head or the pit, it is recommended to fasten the LED band also horizontally at the wall or the ceiling, in order to achieve a better illumination (e.g. shaft height + 2m).

# Scope of delivery 1m - 50m

LED band ready for connection with 10m supply cable and power plug (plug type see table).

Length of the LED band according to the table.

Bag with small parts with 40 cable ties, cable fixing dowels Ø 6mm and mounting instruction.

The plug can be cut off as needed.

In this case the supply line is connected to the terminal strip in the lift control.

### Accessories

Art.no.	Description
020500	Extension cable schuko, 10m, 3 x 1.5mm <sup>2</sup>

Length LED band	Plug <b>CEE 7/17</b>	Plug GB <b>BS 1363</b>	Plug T12 (CH)	halogen- free*
26m	021626	021726	021826	021926
27m	021627	021727	021827	021927
28m	021628	021728	021828	021928
29m	021629	021729	021829	021929
30m	021630	021730	021830	021930
31m	021631	021731	021831	021931
32m	021632	021732	021832	021932
33m	021633	021733	021833	021933
34m	021634	021734	021834	021934
35m	021635	021735	021835	021935
36m	021636	021736	021836	021936
37m	021637	021737	021837	021937
38m	021638	021738	021838	021938
39m	021639	021739	021839	021939
40m	021640	021740	021840	021940
41m	021641	021741	021841	021941
42m	021642	021742	021842	021942
43m	021643	021743	021843	021943
44m	021644	021744	021844	021944
45m	021645	021745	021845	021945
46m	021646	021746	021846	021946
47m	021647	021747	021847	021947
48m	021648	021748	021848	021948
49m	021649	021749	021849	021949
50m	021650	021750	021850	021950

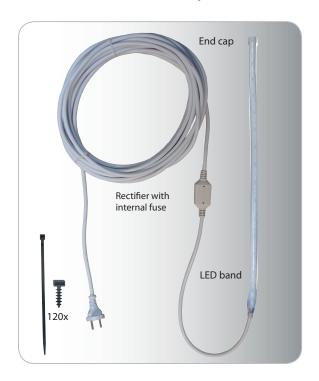
Other plugs on demand.

Length LED band	Plug CEE 7/17	Plug GB BS 1363	Plug T12 (CH)	halogen- free*
1m	021601	021701	021801	021901
2m	021602	021702	021802	021902
3m	021603	021703	021803	021903
4m	021604	021704	021804	021904
5m	021605	021705	021805	021905
6m	021606	021706	021806	021906
7m	021607	021707	021807	021907
8m	021608	021708	021808	021908
9m	021609	021709	021809	021909
10m	021610	021710	021810	021910
11m	021611	021711	021811	021911
12m	021612	021712	021812	021912
13m	021613	021713	021813	021913
14m	021614	021714	021814	021914
15m	021615	021715	021815	021915
16m	021616	021716	021816	021916
17m	021617	021717	021817	021917
18m	021618	021718	021818	021918
19m	021619	021719	021819	021919
20m	021620	021720	021820	021920
21m	021621	021721	021821	021921
22m	021622	021722	021822	021922
23m	021623	021723	021823	021923
24m	021624	021724	021824	021924
25m	021625	021725	021825	021925



120

# W+W FixLED® V2, IP65 Glare-reduced, length 51m - 100m



In general it is sufficient to choose the length of the shaft lighting next smaller than the shaft height. If there are devices like for example the frequency converter in the shaft head or the pit, it is recommended to fasten the LED band also horizontally at the wall or the ceiling, in order to achieve a better illumination (e.g. shaft height + 2m).

# Scope of delivery 51m-100m

LED band ready for connection with 10m supply cable and power plug (plug type see table).

Length of the LED band according to the table.

Bag with small parts with 120 cable ties, cable fixing dowels Ø 6mm and mounting instruction.

#### The LED band is delivered on a one-way drum.

The plug can be cut off as needed.

In this case the supply line is connected to the terminal strip in the lift control.

### **Accessories**

Art.no.	Description
020500	Extension cable schuko, 10m, 3 x 1.5mm <sup>2</sup>

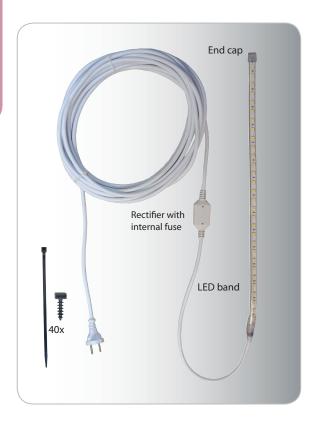
Length LED band	Plug CEE 7/7	Plug GB BS 1363	Plug <b>T12 (CH)</b>
76m	021676	021776	021876
77m	021677	021777	021877
78m	021678	021778	021878
79m	021679	021779	021879
80m	021680	021780	021880
81m	021681	021781	021881
82m	021682	021782	021882
83m	021683	021783	021883
84m	021684	021784	021884
85m	021685	021785	021885
86m	021686	021786	021886
87m	021687	021787	021887
88m	021688	021788	021888
89m	021689	021789	021889
90m	021690	021790	021890
91m	021691	021791	021891
92m	021692	021792	021892
93m	021693	021793	021893
94m	021694	021794	021894
95m	021695	021795	021895
96m	021696	021796	021896
97m	021697	021797	021897
98m	021698	021798	021898
99m	021699	021799	021899
100m	021551	021552	021553

Length LED band	Plug CEE 7/7	Plug GB BS 1363	Plug T12 (CH)
51m	021651	021751	021851
52m	021652	021752	021852
53m	021653	021753	021853
54m	021654	021754	021854
55m	021655	021755	021855
56m	021656	021756	021856
57m	021657	021757	021857
58m	021658	021758	021858
59m	021659	021759	021859
60m	021660	021760	021860
61m	021661	021761	021861
62m	021662	021762	021862
63m	021663	021763	021863
64m	021664	021764	021864
65m	021665	021765	021865
66m	021666	021766	021866
67m	021667	021767	021867
68m	021668	021768	021868
69m	021669	021769	021869
70m	021670	021770	021870
71m	021671	021771	021871
72m	021672	021772	021872
73m	021673	021773	021873
74m	021674	021774	021874
75m	021675	021775	021875

Other plugs on demand.



# W+W FixLED®IP65 Standard, length 1m - 50m



In general it is sufficient to choose the length of the shaft lighting next smaller than the shaft height.

If there are devices like for example the frequency converter in the shaft head or the pit, it is recommended to fasten the LED band also horizontally at the wall or the ceiling, in order to achieve a better illumination (e.g. shaft height + 2m).

# Scope of delivery 1m - 50m

LED band ready for connection with 10m supply cable and power plug (plug type see table).

Length of the LED band according to the table.

Bag with small parts with 40 cable ties, cable fixing dowels  $\emptyset$  6mm and mounting instruction.

The plug can be cut off as needed.

In this case the supply line is connected to the terminal strip in the lift control.

## **Accessories**

Art.no.	Description
020500	Extension cable schuko, 10m, 3 x 1.5mm <sup>2</sup>

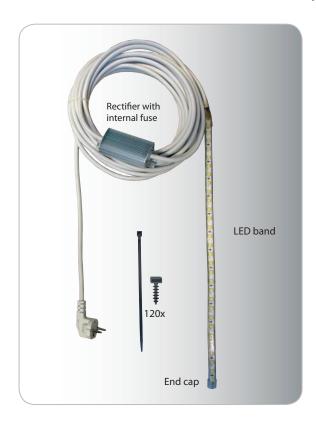
Length LED band	Plug CEE 7/17	Plug GB BS 1363	Plug T12 (CH)
1m	020501	020601	020701
2m	020502	020602	020702
3m	020503	020603	020703
4m	020504	020604	020704
5m	020505	020605	020705
6m	020506	020606	020706
7m	020507	020607	020707
8m	020508	020608	020708
9m	020509	020609	020709
10m	020510	020610	020710
11m	020511	020611	020711
12m	020512	020612	020712
13m	020513	020613	020713
14m	020514	020614	020714
15m	020515	020615	020715
16m	020516	020616	020716
17m	020517	020617	020717
18m	020518	020618	020718
19m	020519	020619	020719
20m	020520	020620	020720
21m	020521	020621	020721
22m	020522	020622	020722
23m	020523	020623	020723
24m	020524	020624	020724
25m	020525	020625	020725

Length LED band	Plug <b>CEE 7/17</b>	Plug GB BS 1363	Plug <b>T12 (CH)</b>
26m	020526	020626	020726
27m	020527	020627	020727
28m	020528	020628	020728
29m	020529	020629	020729
30m	020530	020630	020730
31m	020531	020631	020731
32m	020532	020632	020732
33m	020533	020633	020733
34m	020534	020634	020734
35m	020535	020635	020735
36m	020536	020636	020736
37m	020537	020637	020737
38m	020538	020638	020738
39m	020539	020639	020739
40m	020540	020640	020740
41m	020541	020641	020741
42m	020542	020642	020742
43m	020543	020643	020743
44m	020544	020644	020744
45m	020545	020645	020745
46m	020546	020646	020746
47m	020547	020647	020747
48m	020548	020648	020748
49m	020549	020649	020749
50m	020550	020650	020750

Other plugs on demand



# W+W FixLED®IP65 Standard, length 51m - 100m



In general it is sufficient to choose the length of the shaft lighting next smaller than the shaft height. If there are devices like for example the frequency converter in the shaft head or the pit, it is recommended to fasten the LED band also horizontally at the wall or the ceiling, in order to achieve a better illumination (e.g. shaft height + 2m).

# Scope of delivery 51m -100m

LED band ready for connection with 10m supply cable and power plug (plug type see table).

Length of the LED band according to the table.

Bag with small parts with 120 cable ties, cable fixing dowels Ø 6mm and mounting instruction.

The LED band is delivered on a one-way drum.

The plug can be cut off as needed. In this case the supply line is connected to the terminal strip in the lift control.

# Accessories

Art.no.	Description
020500	Extension cable schuko, 10m, 3 x 1.5mm <sup>2</sup>

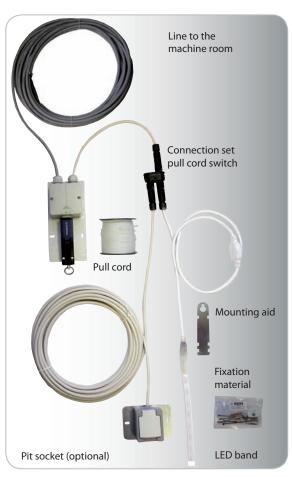
Length LED band	Plug CEE 7/7	Plug GB BS 1363	Plug <b>T12 (CH)</b>
51m	020551	020651	020751
52m	020552	020652	020752
53m	020553	020653	020753
54m	020554	020654	020754
55m	020555	020655	020755
56m	020556	020656	020756
57m	020557	020657	020757
58m	020558	020658	020758
59m	020559	020659	020759
60m	020560	020660	020760
61m	020561	020661	020761
62m	020562	020662	020762
63m	020563	020663	020763
64m	020564	020664	020764
65m	020565	020665	020765
66m	020566	020666	020766
67m	020567	020667	020767
68m	020568	020668	020768
69m	020569	020669	020769
70m	020570	020670	020770
71m	020571	020671	020771
72m	020572	020672	020772
73m	020573	020673	020773
74m	020574	020674	020774
75m	020575	020675	020775

Length LED band	Plug CEE 7/7	Plug GB BS 1363	Plug <b>T12 (CH)</b>
76m	020576	020676	020776
77m	020577	020677	020777
78m	020578	020678	020778
79m	020579	020679	020779
80m	020580	020680	020780
81m	020581	020681	020781
82m	020582	020682	020782
83m	020583	020683	020783
84m	020584	020684	020784
85m	020585	020685	020785
86m	020586	020686	020786
87m	020587	020687	020787
88m	020588	020688	020788
89m	020589	020689	020789
90m	020590	020690	020790
91m	020591	020691	020791
92m	020592	020692	020792
93m	020593	020693	020793
94m	020594	020694	020794
95m	020595	020695	020795
96m	020596	020696	020796
97m	020597	020697	020797
98m	020598	020698	020798
99m	020599	020699	020799
100m	020800	020801	020802

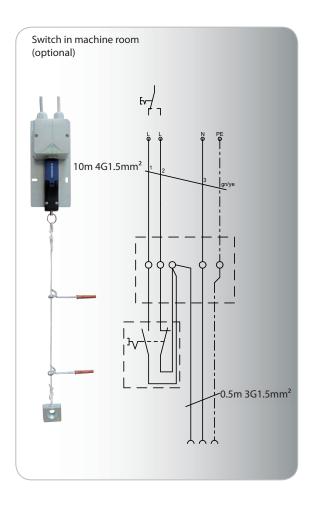
Other plugs on demand

# W+W FixLED®IP65 with pull cord switch, pluggable





The example shows the connection with LED band and with the optional pit socket.



#### Description

Due to its quick installation, the complete set with LED band and pull cord switch facilitates optimal illumination of the lift shaft during the construction phase as well as during retrofitting.

At first the pull cord switch is mounted in the shaft head. Then the LED band is plugged into the pull cord switch and attached to the shaft wall. Connect the pull cord switch - ready!

Optionally, a pit socket can also be plugged in.

The LED band is available up to a maximum length of 60m, in steps of 3m each.

The complete sets consist of LED band, pull cord switch with pull cord, mounting aid and fixation material.

The complete system is designed for a voltage of 230V and a maximum fuse rating of C10A.

# Scope of delivery complete packages

consisting of: LED band, pull cord switch with pull cord, mounting aid, fixation material

Art.no.	Description	Length LED band
022306	LED band 6m with pull cord switch	6m
022309	LED band 9m with pull cord switch	9m
022312	LED band 12m with pull cord switch	12m
022315	LED band 15m with pull cord switch	15m
022318	LED band 18m with pull cord switch	18m
022321	LED band 21m with pull cord switch	21m
022324	LED band 24m with pull cord switch	24m
022327	LED band 27m with pull cord switch	27m
022330	LED band 30m with pull cord switch	30m
022333	LED band 33m with pull cord switch	33m
022336	LED band 36m with pull cord switch	36m
022339	LED band 39m with pull cord switch	39m
022342	LED band 42m with pull cord switch	42m
022345	LED band 45m with pull cord switch	45m
022348	LED band 48m with pull cord switch	48m
022351	LED band 51m with pull cord switch	51m
022354	LED band 54m with pull cord switch	54m
022357	LED band 57m with pull cord switch	57m
022360	LED band 60m with pull cord switch	60m

# Circuit diagram for W+W FixLED® band

with pull cord switch

#### Pull cord switch IP65

- with pull cord
- supply line 10m 4G1.5mm<sup>2</sup>
- 0.5m tap line 3G1.5mm<sup>2</sup> with RSTi3 socket
- incl. fixation material

# W+W FixLED®IP65 with pull cord switch, pluggable





Surface mounted socket Schuko (CEE 7/3) IP44, pre-assembled with supply and socket RSTi3, including splitter (T-piece)

# Surface mounted socket IP44

Art.no.	Description
050132	AP socket IP44 Schuko 10m pluggable
050133	AP socket IP44 Schuko 15m pluggable
050134	AP socket IP44 Schuko 20m pluggable
050135	AP socket IP44 Schuko 25m pluggable
050136	AP socket IP44 Schuko 30m pluggable
050137	AP socket IP44 Schuko 35m pluggable
050138	AP socket IP44 Schuko 45m pluggable
050139	AP socket IP44 Schuko 55m pluggable
050140	AP socket IP44 Schuko 65m pluggable
050141	AP socket IP44 Schuko 75m pluggable

AP = surface mounted Other, country-specific socket types on request.

# **Accessories**

#### Supply line

Art.no.	Description
022200	Supply line 3G1.5 with socket RSTi3
Supply line 2.5m H05\N/-E 3v1.5mm <sup>2</sup> with Schuke plug	

Supply line 2.5m H05VV-F 3x1.5mm<sup>2</sup> with Schuko plug and socket RSTi3.

During the construction phase, the LED band can be directly from a socket during the construction phase.

#### Surface-mounted toggle switch / mini circuit breaker

Art.no.	Description
051354	Surface-mounted toggle switch IP44
083368	Mini circuit breaker 1P B10A





# Mounting aid for LED band



# **Spare parts**

#### Mounting aid for W+W FixLED®

Art.no.	Description
605080	Mounting aid for W+W FixLED®

#### Advice:

The mounting aid is not suitable for permanent fastening.

For this purpose, the LED band must be fixed to the shaft wall every 2 m.

#### Pull cord for pull cord switch

Art.no.	Description
063924	Cord for pull cord switch, drum with 20m
063925	Cord for pull cord switch, drum with 38m
063993	Cord for pull cord switch, drum with 60m
018722	Cord for pull cord switch, drum with 250m

# **Accessories for shaft lighting**







**Distribution box, 3-pole, IP54** with 5m supply line, mini circuit breaker 6A or 10A, light pushbutton (latching relay with pushbutton function), indicating lamp 230V. You will find connection diagrams under www.wwlift.de

Art.no.	Description
050914	Distribution box 3P1, 10A
051109	Distribution box 3P1, 6A
051127	Distribution box 3P1, Residual current device RCB (B10A/30mA)

#### Mini circuit breaker + remote light switch IP20

in housing with 3m supply line 3x1.5mm<sup>2</sup> and 2 nail dowels

Art.no.	Description
018701	MC-LR 10A-SH
018703	MC-LR 6A-SH

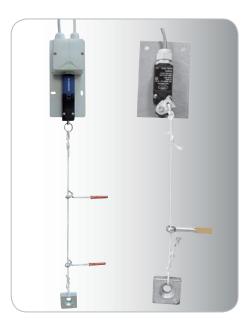
The remote switch can also be used as shaft light switch in the machine room. The switch position of the relay is visually indicated.

#### **Light pushbutton IP54**

Shaft light pushbutton 1NO in housing

 Art.no.	Description
051050	Light pushbutton without supply line
050913	Light pushbutton with 2m supply line
009350	Light pushbutton with 12m supply line
063245	Latching relay / remote light switch, 2-pole, with switch position indication, additional function as manual switch

# Pull cord switches + buttons / LED machine room light IP65







#### Pull cord switch

in housing with 10m supply line  $4 \times 1.5 \text{mm}^2$ , wall fastening, cord weight and 2 nail dowels. The pull cord switch is made for ropes up to a length of 60m. Electrical data: 240 VAC/AC-15, max. 3A

Art.no.	Art.no.	Description
(standard)	(halogen-free)	
018711	018713	Pull cord switch without cord
018721	018714	Pull cord switch with a 20m cord
018710	018715	Pull cord switch with a 38m cord

#### **Pull cord button**

In housing with 10m supply line, wall fastening, cord weight and 2 nail dowels. The pull cord button is made for ropes up to a length of 60m.

	Art.no.	Description
Ī	018712	Pull cord button without cord
	018800	Pull cord button with a 20m cord
	018720	Pull cord button with a 38m cord

#### Cord for pull cord switches and pull cord buttons

Art.no.	Description
063924	Cord, 20m drum
063925	Cord, 38m drum
063993	Cord, 60m drum
018722	Cord. 250m drum

#### Machine and pulley room lighting IP65

LED machine room light 230V 28W and 56W, (with 56W suitable for lighting 9-12m<sup>2</sup> with 200 lux, according to EN 81-20 5.2.1.4.2)



Art.no.	Description
051100	LED machine room light 230V 28W, IP65, Dimensions: 600 x 98 x 68mm, 2500 lumen
051101	LED machine room light 230V, 56W, IP65, Dimensions: 1200 x 98 x 68mm, 5000 lumen

# Inspection boxes

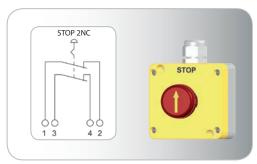




STOP-switches Signal Bypass Main switch Magnetic switch

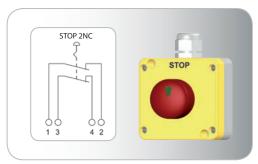
# **Emergency braking switch IP54** optional with supply line, acc. EN 81-20 with switch position indication, case made out of ABS-V0 (UL94), halogen-free and silicon-free

STOP-PT Push turn type



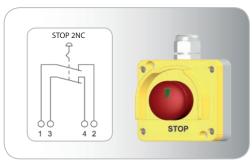
Art.no.	Supply line	Contacts
051034	without	1 NC
051055	without	2 NC
063119	5m 1.0mm <sup>2</sup>	1 NC
063183	5m 1.0mm <sup>2</sup>	2 NC
063118	10m 1.0mm <sup>2</sup>	1 NC
018600	20m 1.0mm <sup>2</sup>	1 NC
018601	28m 1.0mm <sup>2</sup>	1 NC
018602	37m 1.0mm <sup>2</sup>	1 NC
018603	46m 1.5mm <sup>2</sup>	1 NC
018604	55m 1.5mm <sup>2</sup>	1 NC
018605	64m 1.5mm <sup>2</sup>	1 NC
018606	73m 2.5mm²	1 NC
018607	82m 2.5mm <sup>2</sup>	1 NC

STOP-PP Push pull type



Art.no.	Supply line	Contacts
018300	without	1 NC
018301	without	2 NC
018302	5m 1.0mm <sup>2</sup>	1 NC
018303	5m 1.0mm <sup>2</sup>	2 NC
018304	10m 1.0mm <sup>2</sup>	1 NC
018610	20m 1.0mm <sup>2</sup>	1 NC
018611	28m 1.0mm <sup>2</sup>	1 NC
018612	37m 1.0mm <sup>2</sup>	1 NC
018613	46m 1.5mm <sup>2</sup>	1 NC
018614	55m 1.5mm <sup>2</sup>	1 NC
018615	64m 1,5mm²	1 NC
018616	73m 2.5mm <sup>2</sup>	1 NC
018617	82m 2.5mm <sup>2</sup>	1 NC

STOP-PPC Push pull type with collar



Art.no.	Supply line	Contacts
018305	without	1 NC
018306	without	2 NC
018307	5m 1.0mm <sup>2</sup>	1 NC
018308	5m 1.0mm <sup>2</sup>	2 NC
018309	10m 1.0mm <sup>2</sup>	1 NC
018620	20m 1.0mm <sup>2</sup>	1 NC
018621	28m 1.0mm²	1 NC
018622	37m 1.0mm <sup>2</sup>	1 NC
018623	46m 1,5mm²	1 NC
018624	55m 1.5mm <sup>2</sup>	1 NC
018625	64m 1.5mm <sup>2</sup>	1 NC
018626	73m 2.5mm <sup>2</sup>	1 NC
018627	82m 2.5mm <sup>2</sup>	1 NC

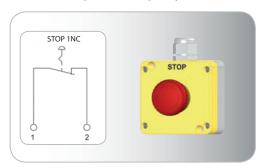
Halogen-free wiring on request!

# Emergency braking switch IP54 optional with supply line, acc. to EN 81-20

with switch position indication, case made out of ABS-V0 (UL94), halogen-free and silicon-free

#### STOP-PPT

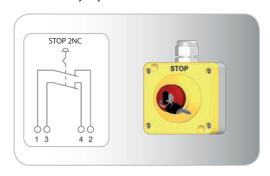
with combined pull-turn and push-pull



Art.no.	Supply line	Contacts
018780	without	1 NC
018783	5m	1 NC
018784	10m	1 NC
018785	20m	1 NC

#### STOP-PK

with release by key



Art.no.	Supply line	Contacts
018320	without	1 NC
018321	without	2 NC
018322	5m 1.0mm <sup>2</sup>	1 NC
018323	5m 1.0mm <sup>2</sup>	2 NC
018324	10m 1.0mm <sup>2</sup>	1 NC
018325	20m 1.0mm <sup>2</sup>	1 NC
018326	28m 1.0mm <sup>2</sup>	1 NC
018327	37m 1.0mm <sup>2</sup>	1 NC
018328	46m 1.5mm <sup>2</sup>	1 NC
018329	55m 1.5mm <sup>2</sup>	1 NC
018330	64m 1.5mm <sup>2</sup>	1 NC
018331	73m 2.5mm <sup>2</sup>	1 NC
018332	82m 2.5mm <sup>2</sup>	1 NC

#### **Technical data**

# Stop-PT / PP / PPC / PK (Manufacturer Fa. Schlegel) Mechanical operation acc. to EN 60947-5-5 Electrical data acc. to IEC / EN 60947-5-1 (VDE 0660 part 200)

alternating current direct current
Utilisation category: AC15 A600 DC13 Q300
Rated insulation voltage U<sub>i</sub>: 600V 400V

Rated operational voltage U<sub>e</sub>: 240V / 380V 250V / 125 V / 60V / 24V Rated operational current I<sub>e</sub>: 3A / 1.9A 0.27A / 0.55A / 1A / 2A

Switching capacity: 10I<sub>e</sub>
Thermal continuous current: 16A

#### Electrical data acc. to IEC / EN 61058-1 (VDE 0630 part1)

Rated voltage  $U_e$ : 240V~ / 380V ~ Rated current  $I_e$ : 16 (10) A / 10 (5)A

NC contact positive opening: acc. to EN 60947-5-1, annex K

Operating temperature: -25°C ... +55°C

Version / connections: spring-type terminal 0.08 - 2.5mm

#### Stop-PPT acc. to EN 21-20 5.12.1.11 (Manufacturer Fa. IDEC) Mechanical operation acc. to EN 60947-5-5

#### Electrical data acc. to IEC / EN 60947-5-1 (VDE 0660 part 200)

alternating current direct current

Utilisation category:AC15DC13Rated insulation voltage Ui:600V300V

Rated operational voltage  $U_e$ : 240V / 380V 240V / 120 V / 24V Rated operational current  $I_e$ : 3A / 1.9A 0.55A / 1.1A / 4A

Thermal continuous current: 10A

NC contact positive opening: acc. to EN 60947-5-1, annex K

Operating temperature: -25°C ... +55°C

Version / connections: screw terminal max. 2mm<sup>2</sup>

# Signal Bypass and alarm button

according to EN 81-20, for mounting under the car



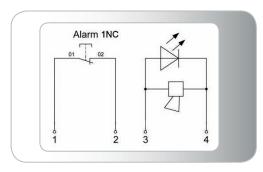
#### SIGNAL BYPASS and alarm button

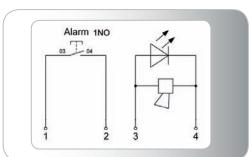
alarm button 1NO or 1NC or 1NO /1NC, ready assembled (optional)



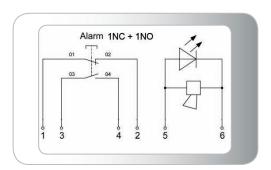
Housing 2 holes with alarm button and flashing light buzzer 24V

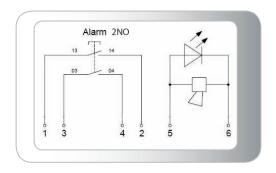
The signal bypass and alarm button are in a housing 2 holes made of ABS (V0 acc. to UL 94, halogen-free and no silicone). Versions with 1 NC or 1 NO contact or 1 NC/ 1 NO contact, optionally without cable or with 5m or 10m cable.





	I	
Art.no.	Supply line	Contacts
052150	without	1 NO
052151	5m, 4x1mm²	1 NO
052152	10m, 4x1mm²	1 NO
052154	without	1 NC
052155	5m, 4x1mm²	1 NC
052156	10m, 4x1mm²	1 NC
052157	without	1 NO + 1 NC
052158	5m, 6x1mm²	1 NO + 1 NC
052159	10m, 6x1mm <sup>2</sup>	1 NO + 1 NC
052180	without	2 NO
052181	5m, 6x1mm²	2 NO
052182	10m, 6x1mm <sup>2</sup>	2 NO





#### **Technical data**

Supply voltage: 24V AC / DC Current: 20mA

Protection type housing: IP54 (front face signal element IP40)
Volume: 80dB (measured in 1m distance)
Volume in the lift car: approx. 70dB (for mounting under the car)

Interval time: 2.5 sec.

Ambient temperature: -25°C up to +55°C

Halogen-free wiring on request!

# **Signal Bypass** according to EN 81-20 5.12.1.8.3

#### SIGNAL BYPASS

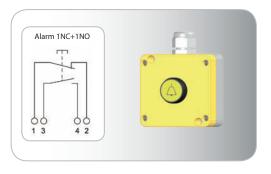
24V AC/DC, LED flashing light buzzer in housing, (80dB measured in a distance of 1m) with supply line (optional)



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Art.no.	Supply line	
052226	without	-
052229	5m	2 x 1mm <sup>2</sup>
052252	10m	2 x 1mm²

#### Alarm button IP54, with supply line (optional)

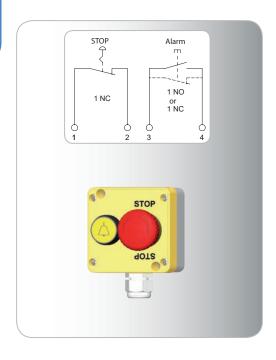


# **Alarm button IP54**

Art.no.	Supply line	Contacts
051033	without	1 NO
052231	without	1 NC
051062	without	1 NC+1 NO
051130	without	2 NO
063120	5m 1.0mm <sup>2</sup>	1 NO
063144	5m 1.0mm <sup>2</sup>	1 NC
063121	5m 1.0mm <sup>2</sup>	1 NC+1 NO
063269	5m 1.0mm <sup>2</sup>	2 NO
064071	10m 1.0mm <sup>2</sup>	1 NC+1 NO

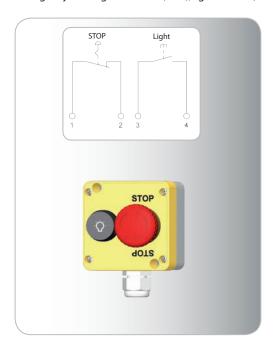
Other lengths on request.

**Pit control box IP54** with: Emergency braking switch PPT (1NC), alarm (1NO **or** 1NC)



Art.no.	Supply line	Contacts Alarm
018400	without	1 NO
018401	10m 1.0mm <sup>2</sup>	1 NO
018402	20m 1.0mm <sup>2</sup>	1 NO
018403	28m 1.0mm <sup>2</sup>	1 NO
018404	37m 1.0mm <sup>2</sup>	1 NO
018405	46m 1.5mm <sup>2</sup>	1 NO
018406	55m 1.5mm <sup>2</sup>	1 NO
018407	64m 1.5mm <sup>2</sup>	1 NO
Art.no.	Supply line	Contacts Alarm
Art.no. 018420	Supply line without	Contacts Alarm
	,	20111200011121111
018420	without	1 NC
018420 018421	without	1 NC 1 NC
018420 018421 018422	without 10m 1.0mm <sup>2</sup> 20m 1.0mm <sup>2</sup>	1 NC 1 NC 1 NC
018420 018421 018422 018423	without 10m 1.0mm <sup>2</sup> 20m 1.0mm <sup>2</sup> 28m 1.0mm <sup>2</sup>	1 NC 1 NC 1 NC 1 NC
018420 018421 018422 018423 018424	without  10m 1.0mm <sup>2</sup> 20m 1.0mm <sup>2</sup> 28m 1.0mm <sup>2</sup> 37m 1.0mm <sup>2</sup>	1 NC 1 NC 1 NC 1 NC 1 NC

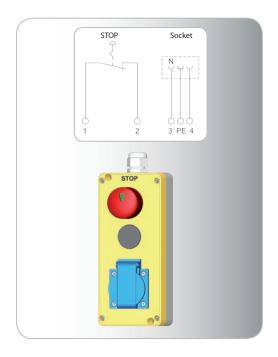
#### Pit control box IP54 with: Emergency braking switch PPT (1NC), light button (1NO)



Art.no.	Supply line			
018310	without			
018177	10m 1.0mm <sup>2</sup>			
018178	20m 1.0mm²			
018179	28m 1.0mm <sup>2</sup>			
018180	37m 1.0mm²			
018181	46m 1.5mm²			
018182	55m 1.5mm²			
018183	64m 1.5mm²			
018184	73m 2.5mm²			
018185	82m 2.5mm <sup>2</sup>			

Further configurations and halogen-free wiring on request!

**Pit control box IP54** with: Emergency braking switch (1NC), different types of spring cover sockets



#### Articles with different sockets:

DE	F+B	CH	UK	AU	Supply line
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	зирріу інте
018545	018555	018565	018575	018585	without
018546	018556	018566	018576	018586	10m 1.0mm <sup>2</sup>
018547	018557	018567	018577	018587	20m 1.0mm <sup>2</sup>
018548	018558	018568	018578	018588	28m 1.0mm²
018549	018559	018569	018579	018589	37m 1.0mm <sup>2</sup>
018550	018560	018570	018580	018590	46m 1.5mm²
018551	018561	018571	018581	018591	55m 1.5mm <sup>2</sup>
018552	018562	018572	018582	018592	64m 1.5mm <sup>2</sup>
018553	018563	018573	018583	018593	73m 2.5mm <sup>2</sup>
018554	018564	018574	018584	018594	82m 2.5mm <sup>2</sup>

#### Advice!

In case of the German socket type DE the emergency braking switch is always designed as push turn type (PT).

All other socket types are equipped with the Stop-PP emergency braking switch.

The socket type F+B is supplemented by an additional protective collar.

Further configurations and halogen-free wiring on request!

# S o c k e t

# v ariants

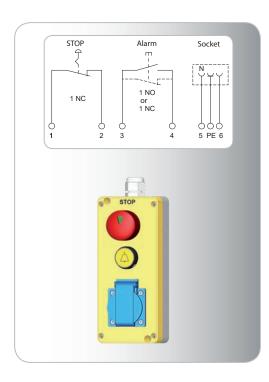




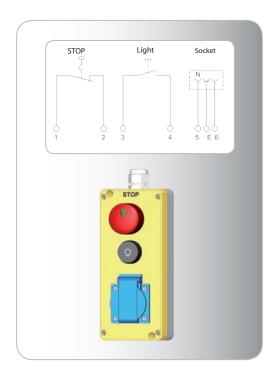
Further configurations and halogen-free wiring on request!



**Pit control box IP54** with: Emergency braking switch (1NC), alarm button (1NO **or** 1NC), different types of spring cover sockets



**Pit control box IP54** with: Emergency braking switch (1NC), light button (1NO), different types of spring cover sockets



Further configurations and halogen-free wiring on request!

#### Articles with different sockets:



#### Alarm button with NO:

Supply line	AU	UK	СН	F+B	DE
зирріу інте	Art.no.	Art.no.	Art.no.	Art.no.	Art.no.
without	018440	018472	018448	018464	018456
10m 1.0mm <sup>2</sup>	018441	018473	018449	018465	018457
20m 1.0mm <sup>2</sup>	018442	018474	018450	018466	018458
28m 1.0mm <sup>2</sup>	018443	018475	018451	018467	018459
37m 1.0mm <sup>2</sup>	018444	018476	018452	018468	018460
46m 1.5mm <sup>2</sup>	018445	018477	018453	018469	018461
55m 1.5mm <sup>2</sup>	018446	018478	018454	018470	018462
64m 1.5mm <sup>2</sup>	018447	018479	018455	018471	018463

#### NC T\_

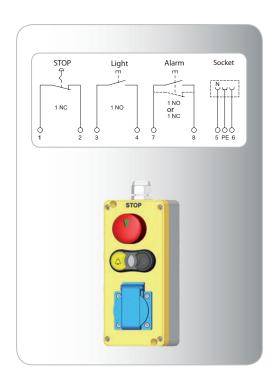
#### Alarm button with NC:

Supply line	AU	UK	СН	F+B	DE
зирріу ііпе	Art.no.	Art.no.	Art.no.	Art.no.	Art.no.
without	018500	018532	018508	018524	018516
10m 1.0mm²	018501	018533	018509	018525	018517
20m 1.0mm²	018502	018534	018510	018526	018518
28m 1.0mm <sup>2</sup>	018503	018535	018511	018527	018519
37m 1.0mm²	018504	018536	018512	018528	018520
46m 1.5mm²	018505	018537	018513	018529	018521
55m 1.5mm <sup>2</sup>	018506	018538	018514	018530	018522
64m 1.5mm <sup>2</sup>	018507	018539	018515	018531	018523

#### Articles with different sockets:

DE	F+B	СН	UK	AU	Cumply line
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	Supply line
009093	051067	051068	051069	018350	without
078513	018007	018016	078237	018025	10m 1.0mm <sup>2</sup>
078514	018008	018017	078238	018026	20m 1.0mm <sup>2</sup>
078515	018009	018018	078239	018027	28m 1.0mm <sup>2</sup>
078516	018010	018019	078240	018028	37m 1.0mm <sup>2</sup>
078517	018011	018020	078241	018029	46m 1.5mm <sup>2</sup>
078518	018012	018021	078242	018030	55m 1.5mm <sup>2</sup>
078519	018013	018022	078243	018031	64m 1.5mm <sup>2</sup>
078520	018014	018023	078244	018032	73m 2.5mm <sup>2</sup>
078521	018015	018024	078245	018033	82m 2.5mm <sup>2</sup>

Pit control box IP54, with: Emergency braking switch (1NC), twin button light (1NO) / alarm (1NO or 1NC), different types of spring cover sockets



Articles with different sockets:



#### Alarm button with NO:

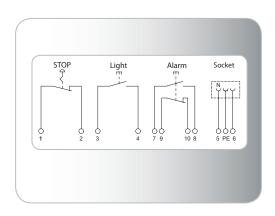
Supply line	AU Art.no.	UK Art.no.	CH Art.no.	F+B Art.no.	DE Art.no.
without	018351	051076	051075	051074	009094
10m 1.0mm <sup>2</sup>	018048	078246	018041	018034	078522
20m 1.0mm <sup>2</sup>	018049	078247	018042	018035	078524
28m 1.0mm <sup>2</sup>	018050	078248	018043	018036	078523
37m 1.0mm <sup>2</sup>	018051	078249	018044	018037	078525
46m 1.5mm <sup>2</sup>	018052	078250	018045	018038	078526
55m 1.5mm <sup>2</sup>	018053	078251	018046	018039	078527
64m 1.5mm <sup>2</sup>	018054	078252	018047	018040	078528



#### Alarm button with NC:

DE Art.no.	F+B Art.no.	CH Art.no.	UK Art.no.	AU Art.no.	Supply line
018360	018361	018362	018363	018364	without
018107	018114	018121	018128	018135	10m 1.0mm <sup>2</sup>
018108	018115	018122	018129	018136	20m 1.0mm <sup>2</sup>
018109	018116	018123	018130	018137	28m 1.0mm <sup>2</sup>
018110	018117	018124	018131	018138	37m 1.0mm <sup>2</sup>
018111	018118	018125	018132	018139	46m 1.5mm <sup>2</sup>
018112	018119	018126	018133	018140	55m 1.5mm <sup>2</sup>
018113	018120	018127	018134	018141	64m 1.5mm <sup>2</sup>

Emergency braking switch (1NC), twin button light (1NO) / alarm (1NO **and** 1NC), socket DE

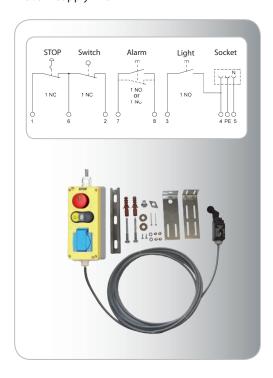




#### STOP switch with NO and NC:

DE Art.no.	Supply line
078890	without
078891	10m 1.0mm²
078892	20m 1.0mm <sup>2</sup>
078893	28m 1.0mm²
078894	37m 1.0mm²
078895	46m 1.5mm <sup>2</sup>
078896	55m 1.5mm <sup>2</sup>
078897	64m 1.5mm²

**Pit control box IP54** with: Emergency braking switch (1NC), double button light (1NO) / alarm (1NO **or** 1NC), different types of spring cover sockets, tension weight switch (1NC) with reset, incl. 5m supply line



Articles with different sockets:



#### Alarm button with NO:

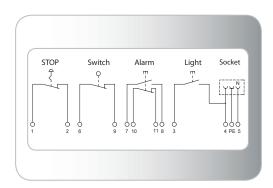
DE	F+B	СН	UK	AU	Cupply line
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	Supply line
078610	018200	018207	078230	018214	10m 1.0mm <sup>2</sup>
078611	018201	018208	078231	018215	20m 1.0mm <sup>2</sup>
078612	018202	018209	078232	018216	28m 1.0mm <sup>2</sup>
078613	018203	018210	078233	018217	37m 1.0mm <sup>2</sup>
078614	018204	018211	078234	018218	46m 1.5mm <sup>2</sup>
078615	018205	018212	078235	018219	55m 1.5mm <sup>2</sup>
078616	018206	018213	078236	018220	64m 1.5mm <sup>2</sup>



#### Alarm button with NC:

DE	F+B	СН	UK	AU	Cumply line
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	Supply line
018228	018242	018235	018249	018221	10m 1.0mm <sup>2</sup>
018229	018243	018236	018250	018222	20m 1.0mm <sup>2</sup>
018230	018244	018237	018251	018223	28m 1.0mm <sup>2</sup>
018231	018245	018238	018252	018224	37m 1.0mm <sup>2</sup>
018232	018246	018239	018253	018225	46m 1.5mm <sup>2</sup>
018233	018247	018240	018254	018226	55m 1.5mm <sup>2</sup>
018234	018248	018241	018255	018227	64m 1.5mm <sup>2</sup>

Emergency braking switch (1NC), double button light (1NO) / alarm (1NO **and** 1NC), Socket DE tension weight switch (1NC) with reset, incl. 5m supply line



# NO+NC

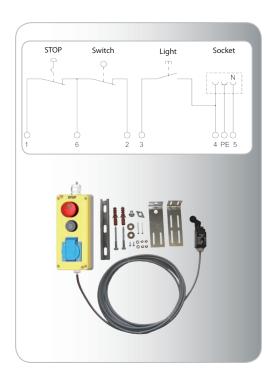
#### Alarm button with NO and NC:

DE	Cupply line		
Art.no.	Supply line		
078931	10m 1.0mm <sup>2</sup>		
078932	20m 1.0mm <sup>2</sup>		
078933	28m 1.0mm²		
078934	37m 1.0mm <sup>2</sup>		
078935	46m 1.5mm²		
078936	55m 1.5mm <sup>2</sup>		
078937	64m 1.5mm²		

Further configurations and halogen-free wiring on request!

#### Pit control box IP54 with:

Emergency braking switch (1NC), light button (1NO), different types of spring cover sockets, tension weight switch (1NC) with reset, incl. 5m supply line

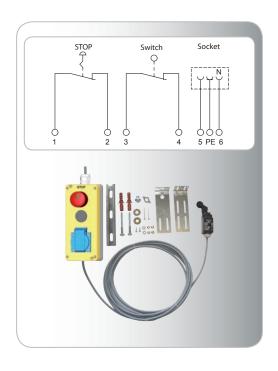


#### Articles with different sockets:

DE	F+B	СН	UK	AU	Cupply line
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	Supply line
078617	018055	018064	078221	018073	10m 1.0mm <sup>2</sup>
078618	018056	018065	078222	018074	20m 1.0mm <sup>2</sup>
078619	018057	018066	078223	018075	28m 1.0mm <sup>2</sup>
078620	018058	018067	078224	018076	37m 1.0mm <sup>2</sup>
078621	018059	018068	078225	018077	46m 1.5mm <sup>2</sup>
078622	018060	018069	078226	018078	55m 1.5mm <sup>2</sup>
078623	018061	018070	078227	018079	64m 1.5mm <sup>2</sup>
078624	018062	018071	078228	018080	73m 2.5mm <sup>2</sup>
078625	018063	018072	078229	018081	82m 2.5mm <sup>2</sup>

#### Pit control box IP54 with:

Emergency braking switch (1NC), different types of spring cover sockets, tension weight switch (1NC) with reset, incl. 5m supply line



#### Articles with different sockets:

DE	F+B	СН	UK	AU	Completing
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	Supply line
078640	078649	078658	078667	078676	10m 1.0mm <sup>2</sup>
078641	078650	078659	078668	078677	20m 1.0mm <sup>2</sup>
078642	078651	078660	078669	078678	28m 1.0mm²
078643	078652	078661	078670	078679	37m 1.0mm <sup>2</sup>
078644	078653	078662	078671	078680	46m 1.5mm <sup>2</sup>
078645	078654	078663	078672	078681	55m 1.5mm²
078646	078655	078664	078673	078682	64m 1.5mm <sup>2</sup>
078647	078656	078665	078674	078683	73m 2.5mm²
078648	078657	078666	078675	078684	82m 2.5mm <sup>2</sup>

Further configurations and halogen-free wiring on request!



# Pit control boxes SKK

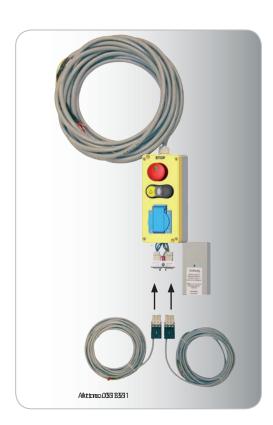
#### Pit control box SKK IP20

Emergency braking switch (1NC), double button light (1NO) / alarm (1NO or 1NC), different types of spring cover sockets, two sockets for security circuit contacts



#### Pit control box SKK IP20

The pit control box SKK IP20 (safety circuit contacts) is optimally suitable for the retrofitting of old installations. The simple connector system facilitates the quick integration of switches and contacts in the safety circuit. Both plug connections are wired independently from each other which enables the utilisation of the active as well as of the passive circuit.



Further configurations and halogen-free wiring on request!

#### Articles with different sockets:



#### Alarm button with NO:

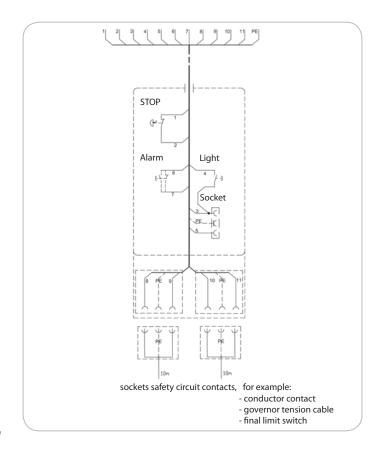
DE	F+B	CH	UK	AU	Supply line
Art.no.	Art.no.	Art.no.	Art.no.	Art.no.	зирріу ііпе
018260	018261	018262	018263	018264	without
063777	018082	018089	018000	018100	10m 1.0mm <sup>2</sup>
063778	018083	018090	018001	018101	20m 1.0mm <sup>2</sup>
063779	018084	018091	018002	018102	28m 1.0mm <sup>2</sup>
063780	018085	018092	018003	018103	37m 1.5mm <sup>2</sup>
063781	018086	018093	018004	018104	46m 1.5mm <sup>2</sup>
063782	018087	018094	018005	018105	55m 1.5mm <sup>2</sup>
063857	018088	018095	018006	018106	64m 1.5mm <sup>2</sup>

# NC NC

#### Alarm button with NC:

DE Art.no.	F+B Art.no.	CH Art.no.	UK Art.no.	AU Art.no.	Supply line
018265	018266	018267	018268	018269	without
018149	018163	018156	018170	018142	10m 1.0mm <sup>2</sup>
018150	018164	018157	018171	018143	20m 1.0mm <sup>2</sup>
018151	018165	018158	018172	018144	28m 1.0mm <sup>2</sup>
018152	018166	018159	018173	018145	37m 1.5mm <sup>2</sup>
018153	018167	018160	018174	018146	46m 1.5mm <sup>2</sup>
018154	018168	018161	018175	018147	55m 1.5mm <sup>2</sup>
018155	018169	018162	018176	018148	64m 1.5mm <sup>2</sup>

Pluggable cable please see page 139.







Further configurations and halogen-free wiring on request!

# Pluggable cable for pit control box SKK

Pluggable safety circuit cable with plug on one side to connect one or two safety switches, (e.g. final limit switch, tension weight switches)

,	
Art.no.	Description
051351	Pluggable cable SKK 1x10m
051352	Pluggable cable SKK 1x20m

#### Pluggable cable for pit control box SKK

with small distribution box to connect **two** safety contacts in series

Art.no.	Description
051353	Pluggable cable SKK 2x10m

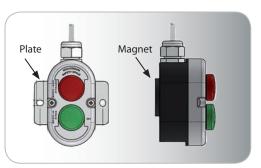
# Safety space signal light

acc. to EN 81-21

Safety space signal light acc. to EN 81-21 Fixation with magnet on the back of the housing or with mounting plate.

Voltage: 12V AC/DC, 24V AC/DC or 230V AC

		green
GOUTZAMAN MEXTY MAN		<del>- M</del>
1000		red
	3 1	2 4



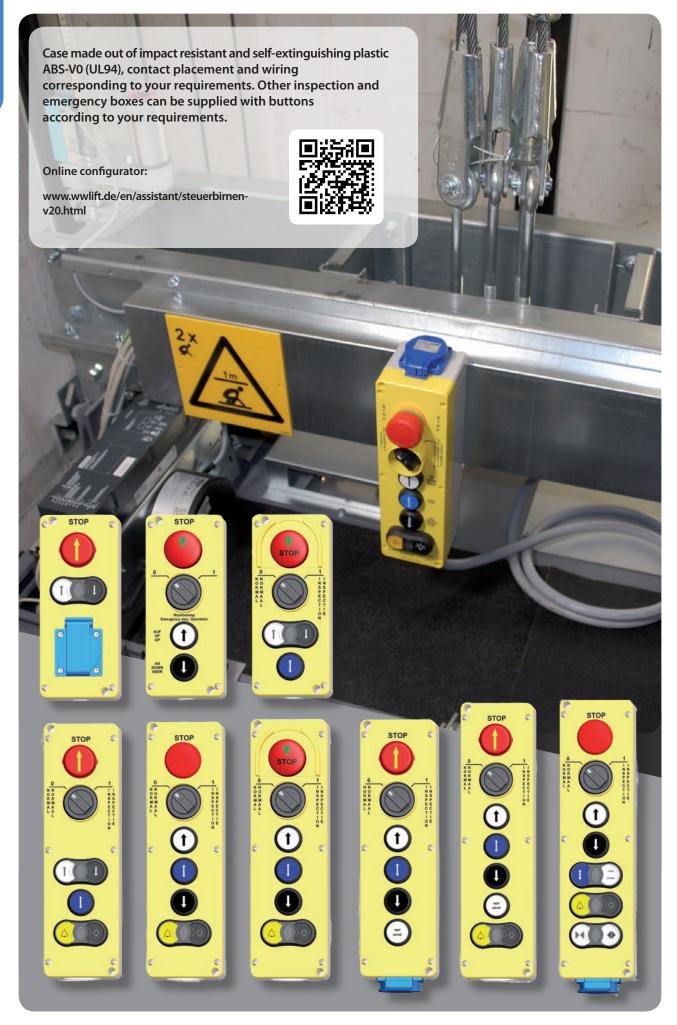
Art.no.	Description
062161	Safety space signal light 12V, unwired with plate
062167	Safety space signal light 12V unwired with magnet
062162	Safety space signal light 12V with plate, 5m cable
062168	Safety space signal light 12V with magnet, 5m cable
062163	Safety space signal light 24V unwired with plate
062169	Safety space signal light 24V unwired with magnet
062146	Safety space signal light 24V with plate, 5m cable
062170	Safety space signal light 24V with magnet, 5m cable
062165	Safety space signal light 230V unwired with plate
062171	Safety space signal light 230V unwired with magnet
062166	Safety space signal light 230V with plate, 5m cable
062172	Safety space signal light 230V with magnet, 5m cable

# **Flush indicator**

with LED

Art.no.	Description
052246	Flush indicator 24V LED, red, 10m
052247	Flush indicator 24V LED, red, 20m
052304	Flush indicator 230V LED, red, 10m
052305	Flush indicator 230V LED, red, 20m
052309	Flush indicator 24V LED, green, 10m

# Standard inspection and emergency controls



140



**Cable duct** 

Cable duct grey (RAL7030), unplasticised PVC, flame retardant, self-extinguishing;

incl. 4 cable clamps apiece (2m)

	I.	
Art.no.	Description (width x height)	PU
053060	Cable duct PVC, 60 x 40mm, length 2m	1
053061	Cable duct PVC 60 x 60mm, length 2m	1
053062	Cable duct PVC 110 x 60mm, length 2m	1
053064	Cable duct PVC 60 x 40mm, length 2m (28m)	14
053065	Cable duct PVC 60 x 60mm, length 2m (24m)	12
053066	Cable duct PVC 110 x 60mm, length 2m (16m)	8



#### Cable duct halogen-free

Cable duct white (RAL9010), PC - ABS (halogen free), the material does not release toxic fumes in case of fire; incl. 4 cable clamps apiece (2m)

Art.no.	Description (width x height)	PU
053067	Cable duct 40 x 40mm halogen-free, length 2m*	1
053068	Cable duct 60 x 40mm halogen-free, length 2m	1
053069	Cable duct 110 x 60mm halogen-free, length 2m	1

<sup>\*</sup>Delivery without cable clamps

# **Accessories**







#### **Nail dowels**

Art.no.	Description	PU
051113	Nail dowels 6 x 40mm	100

#### Cable fixing dowels

Art.no.	Description	PU
051114	Cable fixing dowels Ø 6mm x 40mm	100
063420	Cable fixing dowels Ø 8mm x 40mm	100

#### Cable ties

Art.no.	Description	PU
051125	Cable ties 140 x 3.5mm	100
051126	Cable ties 200 x 4.5mm	100
051131	Cable ties 360 x 7.5mm	100

# Main switch with emergency off function



Lockable main switch with emergency off function in housing, incl. padlock.

No additional terminals necessary as the neutral conductor is also routed via the main switch and as there is a polyethylene feed-through terminal.

#### Function:

3-pole or 4-pole, protection type IP65, red handle, yellow contrast surface, cannot be circumvented with lockable lid.

Main switch 3-pole Art.no.	Main switch 4-pole Art.no.	Rated current* I <sub>th</sub>	Switching capacity AC-23A, 3 x 440V	Connection cross section max.	Dimensions box w x h	Entrees top/ bottom side	suitable lateral auxilary contactor 1NO/ 1NC (mounting at the left) Art.no.
078507	063204	16 A	7.5 kW	6 mm²	85 x 120 mm	per 2 x M20 per 1 x M20	064078
078508	063206	25 A	12 kW	6 mm²	85 x 160 mm	per 2 x M25 per 1 x M20	-
078509	063207	32 A	16 kW	10 mm <sup>2</sup>	100 x 190 mm	per 2 x M25 per 1 x M25	064023
078510	063208	40 A	20 kW	10 mm²	100 x 190 mm	per 2 x M25 per 1 x M25	064023
078511	063209	63 A	30 kW	35 mm²	145 x 250 mm	per 2 x M40 per 1 x M25	064023
078512	063210	80 A	40 kW	35 mm²	145 x 250 mm	per 2 x M40 per 1 x M25	064023
078533	-	125 A	45 kW	50 mm <sup>2</sup>	145 x 250 mm	per 2 x M40 per 1 x M25	064095
078534	-	160 A	55 kW	95 mm²	200 x 300 mm	per 2 x M40 per 3 x M20	064079



Lockable main switch with emergency off function for front or side installation (four-hole mounting) incl. padlock.

The terminals of the switches 16A - 40A are finger protected.

The switches 63A - 125A are supplied with terminal covers.

\*The main switch is dimensioned in a way that in most cases the indicated rated current I<sub>th</sub> can be selected according to the rated current of the motor on the name plate.

Main switch 3-pole Art.no.	Main switch 4-pole Art.no.	Rated current* I <sub>th</sub>	Switching capacity AC-23A, 3 x 440V	Breaking capacity 3 x 440V	Connection cross section max.	Front sign size	Installation depth
078500	063211	16 A	7,5 kW	160 A	6 mm²	64 x 64 mm	49 mm
078501	063205	20 A	10 kW	200 A	6 mm²	64 x 64 mm	49 mm
078502	063212	25 A	12 kW	250 A	6 mm <sup>2</sup>	64 x 64 mm	49 mm
078503	063213	32 A	16 kW	300 A	10 mm <sup>2</sup>	64 x 64 mm	54 mm
078504	063214	40 A	20 kW	380 A	10 mm <sup>2</sup>	64 x 64 mm	54 mm
078505	063215	63 A	30 kW	500 A	35 mm <sup>2</sup>	64 x 64 mm	62 mm
078506	063216	80 A	40 kW	630 A	35 mm <sup>2</sup>	64 x 64 mm	62 mm
078297	-	125A	45 kW	700 A	50 mm <sup>2</sup>	64 x 64 mm	71 mm



Ready for connection, incl. flame-retardant cables 2.5mm<sup>2</sup>, according to VDE 0250 suitable for direct mains connection up to 63A without special pre-fusing (up to 400V). Monitoring of phase sequence with LED display and monitoring of phase failure.



# NYM-J main supply line, solid

Art.no.	Dimensions	Length
078561	5 x 1.5mm <sup>2</sup>	5m
078562	5 x 1.5mm <sup>2</sup>	10m
078563	5 x 2.5mm <sup>2</sup>	5m
078564	5 x 2.5mm <sup>2</sup>	10m
078565	5 x 4.0mm <sup>2</sup>	5m
078566	5 x 4.0mm <sup>2</sup>	10m
078567	5 x 6.0mm <sup>2</sup>	5m
078568	5 x 6.0mm <sup>2</sup>	10m
078569	5 x 10mm <sup>2</sup>	5m
078570	5 x 10mm <sup>2</sup>	10m
078571	4 x 16mm²	5m
078572	4 x 16mm²	10m
078573	4 x 25mm²	5m
078574	4 x 25mm <sup>2</sup>	10m

Halogen-free cables on request.

# Phase monitor 3-phase in

housing + for the installation in the control cabinet

#### **Technical data**

Number of contacts: 1 change-over contact

Max. continuous current: 6A Max. switch-on current: 15A

 $\begin{array}{lll} \text{Max. switching capacity AC1/ AC15:} & 1500\text{VA} / 250\text{VA} \\ \text{Rated voltage } (\text{U}_{\text{N}})\text{:} & 250 / 400\text{V} \\ \text{Inductor regulation:} & \text{AC } (50/60\text{Hz}) \\ \text{Ambient temperature:} & -20...+50^{\circ}\text{C} \\ \text{Cable length:} & 3\text{m } (\text{optional}) \\ \end{array}$ 

Art.no.	Description
063311	Phase monitor
078608	Phase monitor with 3m cable
078609	Phase monitor in housing with 3m cable

# **Run-time monitor**

Construction according to EN 81-20 5.9.2.7.2

Universally suitable for the retrofitting of all standard lift controllers.

#### Advice

The suitable connecting diagram to the run-time monitor on our website www.wwlift.de.

Art.no.	Description
078630	Run-time monitor

# **Connecting cables**

between the main switch and the control

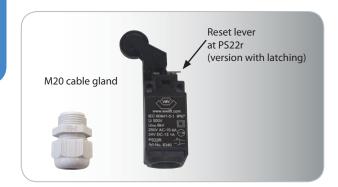


Art.no.	Dimensions	Length
078575	5 x 1.5mm <sup>2</sup>	5m
078576	5 x 1.5mm <sup>2</sup>	10m
078577	5 x 2.5mm <sup>2</sup>	5m
078578	5 x 2.5mm <sup>2</sup>	10m
078579	5 x 4.0mm <sup>2</sup>	5m
078580	5 x 4.0mm <sup>2</sup>	10m
078581	5 x 6.0mm <sup>2</sup>	5m
078582	5 x 6.0mm <sup>2</sup>	10m
078583	5 x 10mm <sup>2</sup>	5m
078584	5 x 10mm <sup>2</sup>	10m
078585	4 x 16mm²	5m
078586	4 x 16mm²	10m
078587	4 x 25mm²	5m
078588	4 x 25mm²	10m

Supplied with ferrules



# Overspeed governor tensioning weight switch



# Position switch with angle lever, latching/normal

#### **Technical data**

Corresponding to: EN 60947-5-1, fixation to EN 50047

suitable as safety switch for lifts

Rated operational current: AC15 4A at 230V

DC13 1A at 24V

1 NC / 1 NO, plastic roll Ø22mm, M20 cable entry, with M20 cable gland

Art.no.	Description
008340	Position switch PS22r (with latching)
008342	Position switch PS22SP (without latching)

# Mounting example

#### Overspeed governor tensioning weight switch set

#### **Technical data**

With latching and reset lever,

incl. mounting sheet plate, C-Profile, dowels and screws

1 NO and 1 NC, snap-action

Rated operational current: AC15 4A at 230V,

DC13 1A at 24V

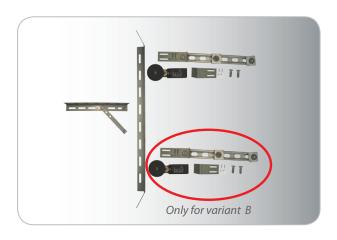
M20 cable gland,

2-hole fixation: 4.2 x 7.2mm with a distance of 22-20mm

Art.no. 078639: Model like above but without latching and reset lever.

Art.no.	Description
078606	Overspeed governor tensioning weight switch set
078639	Overspeed governor tensioning weight switch set without latching
063660	Supply line YSLY-OZ 2x1.0mm <sup>2</sup>

# Final limit switch set



#### **Technical data**

#### Final limit switch set

Variant B

2 pcs. Final limit switches, incl. universal rail fixation

1 pc. Switch curve, effective length = 750mm / 2000mm

1 pc. Fixation kit for switch curve

Variant C:

1 pc. Final limit switch, incl. universal rail fixation

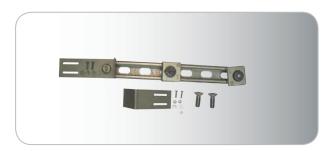
1 pc. Switch curve, effective length = 750mm / 2000mm

1 pc. Fixation kit for switch curve

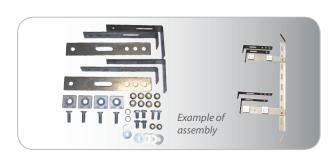
Art.no.		Description
	010182	Final limit switch set 9-B
	010189	Final limit switch set 9-B 2000
	010183	Final limit switch set 9-C
	010199	Final limit switch set 9-C 2000

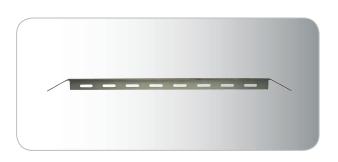
### Final limit / position switch











### **Switches and fastening**

Final limit / position switch PS40SC / PS40SP

### **Technical data**

Approval as safety switch
According to EN 60947-5-1, fixation to EN 50047.
Rated operational current: AC15 4A at 230V
DC13 1A at 24V

Rubber roll Ø 40mm, M20 cable entry, M20 cable gland,

1 million switching cycles at 2m/s and 30° starting angle 20 million switching cycles at 1m/s and 30° starting angle

Art.no.	Description
052213	Position switch PS40SC 1NC 1NO
052208	Position switch PS40SC 2NC
062927	Position switch PS40SP 1NC 1NO

### Universal rail fixation set

### **Technical data**

straight or angled mounting, for final limit/position switch

Art.no.	Description
052215	Fixation set for final limit switch

### Switch curve fastening for mounting at the cabin

### **Technical data**

50 x 50mm, 400mm long with reinforcing strut

for switch curves with a length of 2000mm 2 fastenings are necessary

Art.no.	Description
052217	Switch curve fastening

### Universal rail mounting kit for switch curves

### **Technical data**

2 fixation struts 300mm

2 fixation angles 195 x 110mm

2 fixation angles 255 x 50mm

Art.no.	Description
080005	Universal mounting kit for switch curves

### Switch curve

### **Technical data**

effective length: 300mm / 750mm/ 2000mm with starting angle 30° (90mm length)

Art.no.	Description
052061	Switch curve 300mm
052216	Switch curve 750mm
052062	Switch curve 2000mm

### ELGO

### Sensor head LIMAX 2M



LIMAX 2M is an absolute measuring shaft information system that is used for positioning of lift cabins.

The magnetic measurement principle is extremely robust. Dust, dirt and humidity do not affect the measurement in any way. Also, smoke and even higher temperatures have no influence on the measuring quality. Another advantage of the system is the simple and flexible installation. Typical installation time will take less than an hour by a versed technician.

Travel heights up to 130 metres and speeds up to 4m/s can be covered. The sensor head is always mounted at the car.

The magnetic band is cut and packed according to the length required by the customer.

### **Technical data**

Supply voltage: 10-30V DC Current consumption: at most 0.2A Operating temperature:  $-10^{\circ}$  up to  $+70^{\circ}$ C

Protection type: IP43 Length supply cable: 3m

Art.no.	Description
021205	ELGO LIMAX2M CANopen Lift CiA417, with termination 120Ω, Sub-D 9-pol, amongst others suitable for Böhnke+Partner, Weber
021206	ELGO LIMAX2M CANopen Lift CiA417, without termination Sub-D 9-pol, amongst others suitable for Böhnke+Partner, Weber
021207	ELGO LIMAX2M CANopen Lift CiA417 with termination $120\Omega$ , AMP 4-pol
021208	ELGO LIMAX2M CANopen Lift CiA417 without termination, AMP 4-pol

### **Accessories ELGO**



### Mounting angle for the fixation of the sensor head

With the mounting angle the sensor head can be fixed at the cabin or the car frame.

Art.no.	Description
021210	ELGO mounting angle for sensor head LIMAX2M, replacement
021211	ELGO mounting angle for sensor head LIMAX2M

Article 021210 (replacement bracket) is needed if the sensor head is used in exchange for an existing sensor head Limax02 (predecessor model).



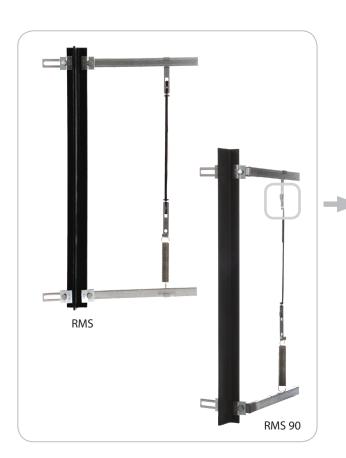
### Magnetic band

The magnetic band is suitable for all types of the sensor head LIMAX 2M. It is delivered cut to length (by metre) and commissioned in a special cardboard box.

The maximum length available is 185m (longer lengths on demand).

Art.no.	Description
021190	ELGO Magnetic band AB20

### **Shaft copying system ELGO**



### **Accessories**

### for the fixation of the magnetic band

The RMS mounting kits are suitable for the installation of the magnetic band in the lift shaft.

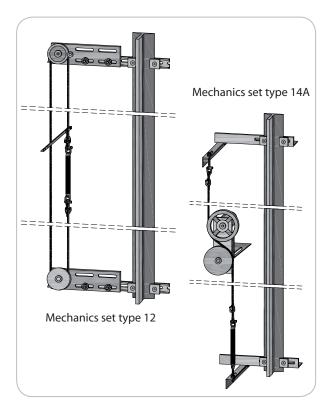
The kit makes the mounting easier and avoids errors in adjusting and re-tensioning the band, which may lead to a higher abrasion of the magnetic material.





Art.no.	Description
021187	ELGO Fixation of magnetic band RMS
021188	ELGO Fixation of magnetic band RMS90 (angled)



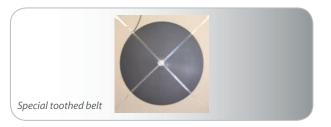


### Shaft copying system W+W

You can find complete mechanics sets, spare parts, toothed belts and round cords for different shaft copying systems from W+W in our "Installation catalogue" or on our website www.wwlift.de.







### Universal magnetic switches with LED display

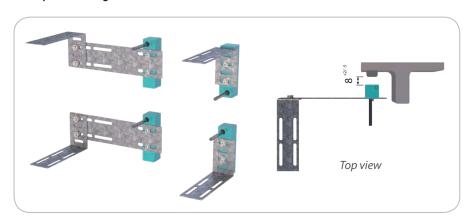


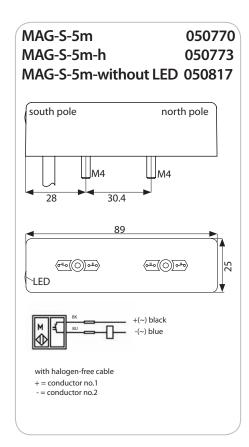


	MAG-S-5m MAG-S-5m-h	050770 050773	MAG-S-5m 3-pole 050813
Switching output	latching		latching
Switching capacity	at most 80W/VA		at most 120VA
Switching voltage	at most 250V AC/DC		at most 250V AC
Switching current	at most 800 mA		at most 3A
Circuit time	3.5ms		at most 1.5ms
Fall-back time	0.2ms		at most 0.5ms
Switching frequency	at most 100Hz		<300Hz
Durability	10⁵ - 10 <sup>6</sup> switching op	perations	10 <sup>6</sup> - 10 <sup>9</sup> switching operations
Temperature range	-25°C +80°C		-25°C +75°C
Switch position indication	LED, south pole side		LED, north pole side
Housing material	PVC		Thermoplast
Protection type	IP20		IP67
Connection	5m cable / south pole	e below	5m cable / south pole below
Switching distance	10mm		17mm
Magnet marking	at the south pole red		at the south pole red

### **Fixation magnetic switches**

Examples of usage





# MAG-S-5m 3-pole 050813 south pole north pole NA4 27.5 85 BK BN BU



with and without LED display

### Universal magnetic switch

Art.no.	Description
050770	MAG-S-5m
050773	MAG-S-5m-H
050817	MAG-S-5m (without LED)

### Universal magnetic switch, 3-pole, IP67

Art.no.	Description
050813	MAG-S-5m 3-pol IP67

### **Accessories**

### Rail clamp with round magnet + round magnet, loose

1x rail clamp 8-14mm with flag 2x round magnets (south pole red) dimensions: Ø=20mm, h=10.5mm





Art.no.	Description
079855	MAG-SK (2x magnets+1x rail clamp)
050771	MAG (1x magnet)

### Magnetic switch fixation

universal incl. magnetic switch

### Scope of delivery

Magnetic switch with LED display Aluminium angle sheet metal Aluminium adjustment sheet Set of fixation screws Tube of superglue

Art.no.	Description
050772	MAG-KON-D-1
050821	MAG-KON-D-1H

### Magnetic switch consoles for rail magnets

Universal magnetic switch console consisting of: 2x magnetic switches

2x magnetic switches

1x sheet plate for magnetic switch, w=85mm

Superglue
1 set of fixation screws

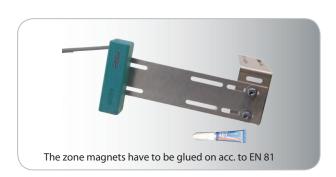
Art.no.	Description
079850	MAG-KON-A-2







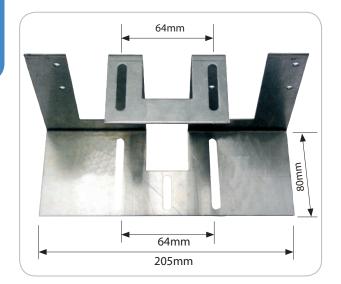






### Magnetic switch consoles for rail magnets

with and without oiler



### Sheet plate for magnetic switch

A tube of superglue is included in every delivery, as the zone magnets have to be fixed very firmly according to EN 81.



### Universal magnetic switch console

consisting of:

2x magnetic switches

1x sheet plate for magnetic switch, w=205mm

Superglue

1 set of fixation screws

10	

Art.no.	Description
079851	MAG-KON-B-2

### Universal magnetic switch console

consisting of:

4x magnetic switches

1x sheet plate for magnetic switch, w=205mm

Superglue

1 set of fixation screws

40

Art.no.	Description
079852	MAG-KON-B-4

### Universal magnetic switch console with oiler

consisting of:

2x magnetic switches

1x oiler

1x magnetic switches, w=205mm

H 150mm, W=205mm, D=80mm

Superglue

1 set of fixation screws

Art.no.	Description
079853	MAG-KON-B-2-OL
	natic switch cancala with ailar



### Universal magnetic switch console with oiler

consisting of:

4x magnetic switches

1x oiler

1x sheet plate for magnetic switch, w=205mm Superglue

1 set of fixation screws

Art.no.	Description
079854	MAG-KON-B-4-OL

### Lift lubrication systems





Rope lubricator Guide rail lubricator Batteries Lift alarm

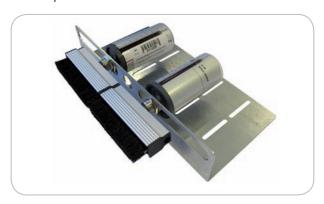
### W+W Automatic rope lubricator and cleaning kit



W+W Rope lubricator kit 100



W+W Rope lubricator kit 140



W+W Rope lubricator kit 200



W+W Rope lubricator kit 300

### Description

With the W+W Rope lubricator it is possible to lubricate and clean lift ropes quickly and easily.

A suspension rope consists of many individual steel strands. These strands slide against each other when they run over the traction sheave or the diverter pulley.

The ropes are lubricated which reduces the friction among the strands. It is important that the lubricator be applied in small quantities but evenly.

Otherwise the traction of the rope may be affected negatively. Furthermore a regular lubrication prevents corrosion and prolongs the durability of the ropes considerably.

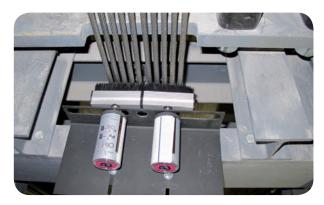
The EN 12385-3 (use and maintenance of steel wire ropes) also recommends the lubrication during operation to achieve the optimal functioning.

The automatic lubrication and cleaning system for ropes from W+W is suitable for the durable and permanent maintenance of the suspension ropes.

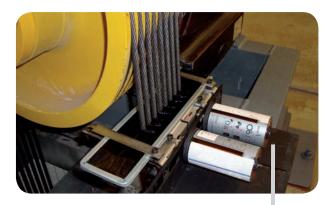
The brushes rub a special treatment continuously into the ropes.

This treatment permeates to the interior of the rope. The dispensed quantity is minor but continuous. It can be adjusted between 1 and 12 months/ 125ml – it depends on the size and the length of the ropes.

The treatment is conform to ISO 4346.



Mounting example: W+W Rope lubricator kit 140



Mounting example: W+W Rope lubricator kit 140 with supplementary cleaning brushes.

Adjustment of the dispensed quantity in months.



Scope of delivery W+W Rope lubricator kit 140mm



Scope of delivery cleaning brushes



Rope lubricator kit 300 with supplementary cleaning brushes



### W+W Rope Iubricator kits

Art.no.	Description
011200	W+W Rope lubricator kit 100mm
011201	W+W Rope lubricator kit 140mm
011202	W+W Rope lubricator kit 200mm
011203	W+W Rope lubricator kit 300mm

### Scope of delivery

- 1 bracket
- 1-3 brushes 70mm or 100mm
- 1-3 cartridges with lubricant, 125ml
- 1-3 screw joints
- 1x mounting instruction

### Cleaning brushes for rope lubricator

The use of cleaning brushes is recommended for installations with a high contamination level, e.g. in the industry or in exterior lifts.

The brush set is suitable for a maximum width of 300mm. It can be cut easily to every length with a side cutter or a small saw. It is fixed to the brushes of the W+W rope lubricator.

Art.no.	Description
011204	Cleaning brushes 300mm

### Scope of delivery

1x cleaning brush 1x bracket set with screws 1x mounting instruction

The additional cleaning brushes are fastened on the brushes of the rope lubricator.

### Spare parts + wear parts

Art.no.	Description
011205	Cartridge 125ml W+W Rope lubricator
011206	Brush 70mm
011207	Brush 100mm
011208	Screw joint

### W+W Guide rail lubricator + maintenance of guide rails



Mounting example with magnetic switch



Mounting example with extension

### Description

With the W+W Guide rail lubricator it is possible to lubricate and clean guide rails quickly and easily.

These are the advantages of the guide rail lubricator:

- Continuous and reliable lubrication of the guide rails of the car and the counterweight, providing a quiet operation of the lift.
  - No more jerking when the lift starts.
- Automatic adjustment of the brushes (three flexible brush pairs),
- · no more oil slicks and splashes,
- · easy retrofitting on existing lift installations,
- · consistent release of the lubricant,
- significant reduction of the maintenance effort.

The dispensed quantity is minor but continuous. It can be adjusted between 1 and 12 months/125ml - depending on the lift type.

The lubricator is mounted on the guide shoes with a universal mounting bracket. In many cases there are holes in the guide shoes designated for this purpose.

On demand we can manufacture other fixation possibilities.

In installations with a small headroom the cartridge can be connected with the guide rail lubricator by means of a hose. Thus the cartridge is not in the way and it is fixed near the lubricator with a magnetic support.

### **Technical data**

Operating temperature:  $-20^{\circ}$  up to  $+55^{\circ}$ C Speed:  $\leq 2.5$ m/s

Connexion cartridge: 1/4"
Lubricant SL16: Water haz

Lubricant SL16: Water hazard class WGK 1
This product is not classified according to the CLP regulation

(EC No. 1272/2008).



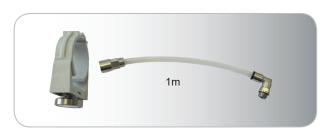




W+W Rope lubricator without fixation sheet plate for the magnetic switch and with fixation sheet plate.

### W+W Guide rail lubricator







### **Basic package**

Art.no.	Description
011220	W+W Guide rail lubricator set 5-16mm
011221	W+W Guide rail lubricator set 5-16mm with MSB
011222	W+W Guide rail lubricator set 16-32mm with MSB

MSB = fixation sheet plate for the magnetic switch

### Scope of delivery

2x guide rail lubricator 5-16mm / 16-32mm

2x mounting angle for guide rail lubricator

2x cartridge lubricant SL16, 125ml

2x small parts bag

2x sheet metal mounting plates for two magnetic switches (optional)

1x small bottle with lubricant SL16, 50ml 1x mounting instruction

### **Rail lubricator extension**

Art.no.	Description
011223	W+W Guide rail lubricator extension

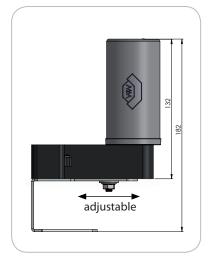
### Scope of delivery

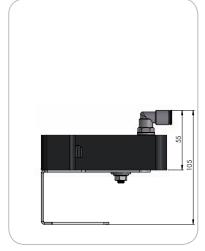
1x clamp for the cartridge 50mm
1x push-in fitting G1/4" internal screw thread
1x angled screw coupling G1/4" external screw thread
1x flexible tube for rail lubricator, length 1m
1x magnetic base for the clamp

### Spare parts + wear parts

Art.no.	Description
011227	W+W Guide rail lubricator cartridge SL16, 125ml
011224	W+W Guide rail lubricator 5-16mm (without MSB)
011225	W+W Guide rail lubricator 5-16mm (for MSB)
011226	W+W Guide rail lubricator 16-32mm
011228	W+W Guide rail lubricator bracket

MSB = fixation sheet plate for the magnetic switch







Dimensional drawing W+W Guide rail lubricator



### Oiler and oil drip pan







### Oil drip pan

Suitable for guide rails of 5-16mm. Mounting example: Guide rail with oil drip pan

Art.no.	Description
063788	Oil drip pan

### Oiler with 2-point fixation

Suitable for guide rails of 5-16mm. Mounting example: Oiler at a guide shoe with 2-point fixation

Art.no.	Description
063879	Oiler-A

### Oiler with central fixation

Suitable for guide rails of 5-16mm. Mounting example: Oiler at a guide shoe with central fixation. \*Variably adjustable for rails of 5-16mm.

Art.no.	Description
063880	Oiler-B

### Lead-fleece batteries with VdS-Certificate

### Suitable for the power supply of

emergency cabin lighting, lift alarm, intercom and other individual applications.

### Characteristics

Maintenance-free and leak-proof, long durability, flat cable plug 4.8mm





optional with holder for the 35mm top hat rail





Lead-fleece batteries for lifts for the initial equipment or exchanging old/ broken batteries.

### Lead-fleece battery 12V 1,2Ah

Dimensions: 97x 43x 53mm plus terminal (and holder)

Weight: approx. 570g

Charging voltage cyclic use: 14.4 - 15.0V
Charging voltage stand-by use: 13.5 - 13.8V
Maximum charge current: 0.36A

Art.no.	Description
020024	Lead-fleece battery 12V 1.2Ah
020028	Lead-fleece battery with holder 12V 1.2Ah

### Lead-fleece battery 12V 2,2Ah

Dimensions: 178 x 35 x 61mm plus terminal

Weight: approx. 1.1Kg

Charging voltage cyclic use: 14.4 - 15.0V Charging voltage stand-by use: 13.5 - 13.8V Maximum charge current: 0.66A

Art.no.	Description
020029	Lead-fleece battery 12V 2.2Ah

### Lead-fleece battery 12V 7,2Ah

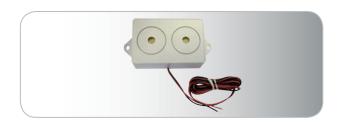
Dimensions: 151 x 65 x 94mm plus terminal

Weight: approx. 2.4Kg

Charging voltage cyclic use: 14.4 - 15.0V Charging voltage stand-by use: 13.5 - 13.8V Maximum charge current: 2.16A

Art.no.	Description
065053	Lead-fleece battery 12V 7.2Ah





### Lift alarm

### Signal horn, KLH

with flare, 92dB, IP43, 12V/24V DC

Art.no.	Description
052219	Horn KLH 12V
052220	Horn KLH 24V

### Signal horn, KDH

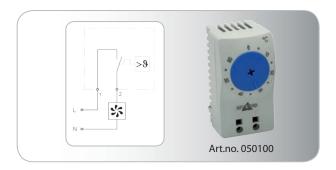
without flare, 92dB, IP43, 12V/24V DC

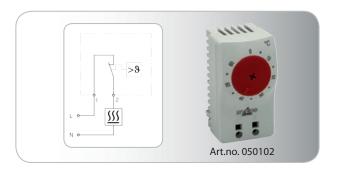
Art.no.	Description
052221	Horn KDH 12V
052222	Horn KDH 24V

### Siren horn

with 1.5m supply line, 110dB,  $\sim$ 80mA, 6-12V/24V DC

Art.no.	Description
052223	Siren horn 12V
052224	Siren horn 24V





The diagrams show the switching status below the adjusted temperature.

### **Thermostat**

### **Technical data**

### Thermostat T1

Tested according to VDE60730 for the use in closed control cabinets.

Mechanical bi-metal thermostat for the temperature control in the control cabinet.

Suitable for ventilations, heatings and for the temperature control, protection type IP20.

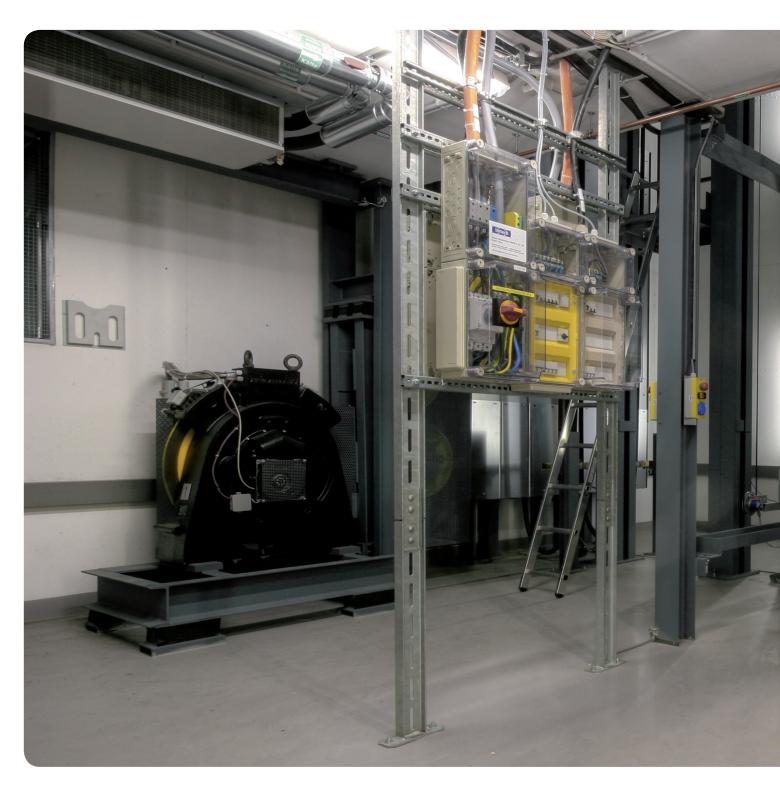
Contacts: NO with snap-action contact or NC with snap-action contact Max. switching capacity: 250V AC / 10A DC 30W

Adjustment range:  $0^{\circ}$ C ... +  $60^{\circ}$ C

Mounting: Fixation for the 35mm top

hat rail

Art.no.	Description
050100	Thermostat T1 1NO
050102	Thermostat T1 1NC



StufiKlapp V3



Rung ladders



Ladder type 5

### Pit ladders + StufiKlapp





Ladder type 7B



TRI-KLAPP 115



Accessories + SETS

### StufiKlapp pit ladder V3

Advantages of the StufiKlapp V3



Example: wall suspension StufiKlapp

## Rung ladder Rungs 30mm Rungs 30mm

### Rung ladders and step ladders

**Rungs** have a general width of 30mm. Descending safely is only possible when the ladder exceeds at least 1.10m above the exit point.

**Steps** have a minimum width of 80mm and are almost horizontal. They assure a safe descending. According to the state-of-the-art it is not necessary that the ladder exceeds above the exit point, if the door frame can be used as support

If the door frame is not suitable as a handle, e.g. in the case of hinged doors, a separate handhold needs to be mounted at the shaft wall.

### Wall fastening and storing position



Wall suspension with control switch **without** ladder

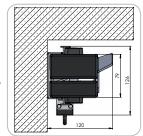


Wall suspension with control switch **with** ladder

In the new version of the StufiKlapp the control switch is directly integrated in the wall suspension.

The ladder is simply hooked into the suspension by means of bolts, so that the switch engages and is actuated automatically.

The external dimensions in storing position are only 120 x 126mm.



Dimonsional drawing Wall suspension with StufiKlapp

### **Description StufiKlapp V3**

The ladder StufiKlapp is a switch-monitored foldable step ladder, which is suitable for shaft pits.

As opposed to other pit ladders, the StufiKlapp offers the following advantages:

It is much shorter, as it is not required for step ladders of this type that they jut out 1.10m above the access point. As the Stufiklapp juts out very little, it is not necessary to fix the lower end of the ladder to prevent it from tilting. Also the Stufiklapp occupies very little space with 120 x 126mm in the folded position.

Thus there is more space in the pit. The two handles on the side avoid the danger of squeezing fingers at folding and unfolding the ladder and they provide a simple handling. The new, improved version of the StufiKlapp corresponds to the EN 81-20 and has a Type Examination Certificate from the Liftinstituut.

The ladder is available in four different sizes.

### Safety when descending into the pit

The ladder StufiKlapp is simply leaning against the lowest shaft access point with the fixation

In the ladder stiles there are pre-drilled holes, so that the fixation sheet can be adjusted according to the local pit depth.

Non-skip rubber coating on the fixation sheet and on the ladder feet inhibits lateral shifting.



### StufiKlapp V3

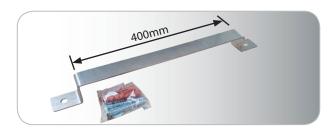








For uneven and oily pit floors, we recommend the installation of an additional floor fixation clamp with levelling sheets.



### Ladder variants





Art.no. 077020 StufiKlapp 89:

Length 96cm, folded 127cm, suitable for pits: 50cm - 89cm Dimensions of the ladder ready to dispatch incl. packaging: Length 129cm, width 10cm, height 9cm

### Art.no. 077021 StufiKlapp117:

Length126cm, folded 157cm, suitable for pits: 60cm - 117cm

Dimensions of the ladder ready to dispatch incl. packaging: Length 159cm, width 10cm, height 9cm

### Art.no. 077022 StufiKlapp 145:

Length 156cm, folded 187cm, suitable for pits: 88cm - 145cm

Dimensions of the ladder ready to dispatch incl. packaging: Length 189cm, width 10cm, height 9cm

### **Art.no. 077023** StufiKlapp 175:

Length 185cm, folded 217cm, suitable for pits: 88cm - 175cm

Dimensions of the ladder ready to dispatch incl. packaging: Length 219cm, width 10cm, height 9cm

Art.no.	Description
077020	Pit ladder StufiKlapp V3 89 EN 81-20
077021	Pit ladder StufiKlapp V3 117 EN 81-20
077022	Pit ladder StufiKlapp V3 145 EN 81-20
077023	Pit ladder StufiKlapp V3 175 EN 81-20

### Scope of delivery

1 piece folding step ladder with mounting material 1 piece wall suspension with control switch IP67:

> 240V AC 15 3A 24V DC 13 1A incl. 5m supply line

### **Accessories**

State of delivery: all accessories are placed inside the ladder.

### Ladder-ACCESSORY SET-E, optional

Floor fixation clamp with levelling sheets up to 10mm

Art.no.	Description
078599	ACCESSORY SET-E Fixation clamp for the floor for StufiKlapp

### Scope of delivery

1 piece floor fixation clamp

3 pieces levelling sheets

1 piece fastening kit

### Handhold for descending into pit, optional

For wall fastening, incl. dowels and screws, mounting depth 50mm. If the door frame is not suitable as a handle, e.g. in the case of hinged doors, a separate handhold for descending into the pit needs to be mounted at the shaft wall.

Art.no.	Description
078341	Handhold



### Ladder typ 1 - Rung ladder

Construction according EN 131 - 2













Application examples ACCESSORY SET-B

Art.no.	Description	Length Num	nber of steps
078300	Ladder type 1	1.12m	4
078301	Ladder type 1	1.40m	5
078601	Ladder type 1	1.96m	7
078602	Ladder type 1	2.24m	8
078603	Ladder type 1	2.52m	9
078604	Ladder type 1	2.80m	10
078605	Ladder type 1	3.08m	11
078302	Ladder type 1*	3.64m	13
078303	Ladder type 1*	3.92m	14

<sup>\*</sup>Depth of ladder stile plus 10mm

### **ACCESSORY SET-A**

Accessory for the ladder type 1 Wall fastening for rung ladders

Art.no.	Description
078304	Ladder-ACCESSORY SET-A

### **ACCESSORY SET-B**

for pit ladders

Floor safety device and door sill holder for lift pit ladders Construction according to EN 81, EN 131-2

Art.no. Description		Description
	078314	Ladder-ACCESSORY SET-B

The ACCESSORY SET-B is suitable for a max. pit depth of 2.80m.

The floor safety device and the door sill holder guarantee a stable ladder position even in case of oily floors.

The door sill holder can be fastened with the enclosed bolt at the door sill, so that the assembler does not have to secure the revolving landing door with additional devices.

The ladder has to be set up in the shaft with an angle of 65°-75°. So a tilting backwards is avoided.

For uneven shaft pit floors additional levelling sheets are supplied.

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### Ladder type 5 - Pit ladder

switched monitored with wall fastening, 3m knotted chain, floor safety device and door sill holder. Construction according EN 81-20 annex F, type 3a and EN 131-2









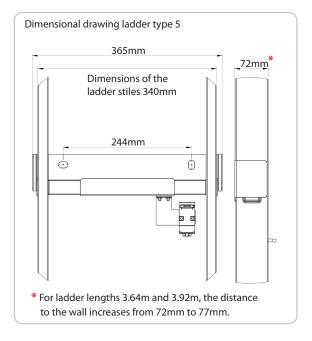






Application examples ladder type 5

Art.no.	Description	Length	max. pit depth
078951	Ladder type 5	1.12m	_
078952	Ladder type 5	1.40m	_
078953	Ladder type 5	1.96m	0.75m
078954	Ladder type 5	2.24m	1.00m
078955	Ladder type 5	2.52m	1.30m
078956	Ladder type 5	2.80m	1.55m
078957	Ladder type 5	3.08m	1.80m
078958	Ladder type 5	3.64m*	2.35m
078959	Ladder type 5	3.92m*	2.60m



### Scope of delivery

Monitoring switch IP67, door sill holder with levelling sheets, 3m knotted chain, floor safety device, wall fastening, mounting material.

### Typical application of ladder type 5

The floor safety device and the door sill holder quarantee a stable ladder position.

The ladder has to be set up with an angle of 65°-75°. So a tilting backwards is avoided.

The door sill holder can be fastened to the door sill by means of the accompanying bolt, so that the assembler does not have to secure the revolving landing door additionally.

### Advice

a) According to EN 81-20 the ladder has to be so long, that the upper end or other suitable handholds reach out at least 1.10m above the landing door sill in the vertical position of the ladder.



### Ladder type 6 - with wall fastening angles

incl. dowels and screws, construction according to EN 81-20, annex F, type 1 and EN 131-2



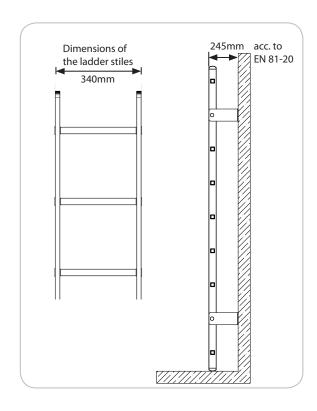


Art.no.	Description	Length	max. pit depth
078941	Ladder type 6	1.12m	_
078942	Ladder type 6	1.40m	_
078943	Ladder type 6	1.96m	0.80m
078944	Ladder type 6	2.24m	1.14m
078945	Ladder type 6	2.52m	1.42m
078946	Ladder type 6	2.80m	1.70m*
078947	Ladder type 6	3.08m	1.98m*
078948	Ladder type 6	3.64m	2.54m*
078949	Ladder type 6	3.92m	2.82m*

### \*Advice

According to EN 81-20 5.2.2.5c) ladder type 6 is only permissibile up to a pit depth of 1.50m.





### Advice:

a) According to EN 81-20 the ladder has to be so long, that the upper end or other suitable handholds reach out at least 1.10m above the landing door sill in the vertical position of the ladder.

### **Ladder type 7B - Pit wall ladder with lever mechanics**

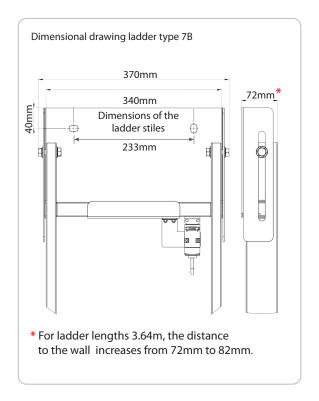
to decrease the wall distance in unused condition, incl. dowels and screws, monitoring switch IP67 Construction according to EN 81-20, annex F, type 2b and EN 131-2





Art.no.	Description	Length	pit depth
078541	Ladder type 7B	1.96m	0.79m
078542	Ladder type 7B	2.24m	1.00m
078543	Ladder type 7B	2.52m	1.30m
078544	Ladder type 7B	2.80m	1.60m
078545	Ladder type 7B	3.08m	1.80m
078546	Ladder type 7B	3.64m*	2.40m





### Ladder type 8 - TRI-KLAPP 115

Three-part folding pit ladder with floor attachment for universal mounting in the pit.

Construction according to EN 131-2, with the addition of ACCESSORY-SET-N according to EN 81-20, annex F, type 4.

### Description

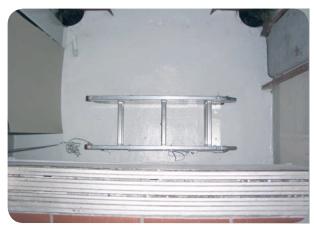
In the unfolded state the ladder length adds up to 2.56m. The ladder has to be set up in the pit with an angle of 65°-75° according to EN 131-2, so a tilting backwards is avoided.

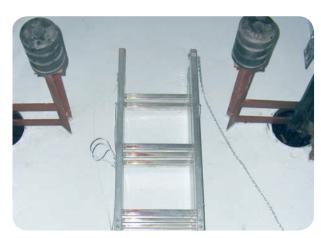
In the pit must be a STOP switch, which has to be operated before unfolding the ladder.

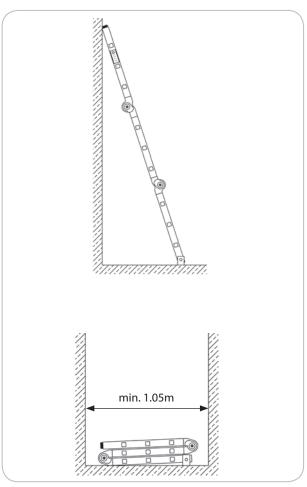
Transverse mounting

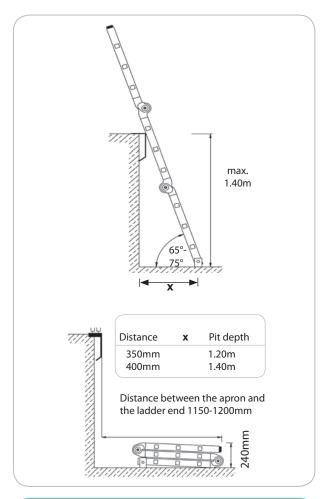
Max. pit depth 1.40m

Longitudinal mounting









### Advice:

a) According to EN 81-20 the ladder has to be so long, that the upper end or other suitable handholds reach out at least 1.10m above the landing door sill in the vertical position of the ladder.

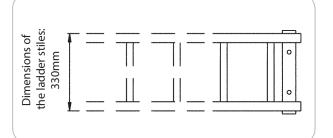
### Ladder type 8 - TRI-KLAPP 115



### Pit ladder TRI-KLAPP 115

Three-part folding pit ladder with floor attachment

	Art.no.	Description	max. pit depth
I	078589	Pit ladder TRI-KLAPP 115	1.40m



The ladder can be folded by means of a chain and pull cords, which are within reach from the shaft entrance.

Width of floor fixation clamp: TRI-KLAPP 115 350mm



### **ACCESSORY SET-N** to TRIKLAPP 115

Accessories to ladder type TRI-KLAPP 115 ACCESSORY SET-N for the mounting or retrofitting of a safety switch IP67 with forced actuation 1NC/NO onto the TRIKLAPP 115.

Construction acc. to EN 81-20, annex F, type 4.

Art.no.	Description
078380	Ladder ACCESSORY SET-N



### **Ladder single parts and ladder ACCESSORY SETS**



### **Ladder ACCESSORY SET-A**

Accessories to ladder type 1 Wall fastening for rung ladders

Art.no.	Description
078304	Ladder ACCESSORY SET-A



### **Ladder ACCESSORY SET-B**

Floor safety device, door sill holder for pit ladders

Art.no.	Description
078314	Ladder ACCESSORY SET-B

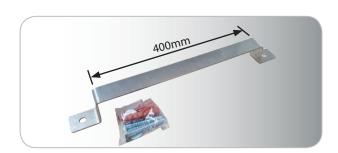


### Ladder ACCESSORY SET-C

### Installation material for the ladder contact

for a simple connection with the STOP switch in the pit (the installation is effected in series with the STOP switch in the pit or the governor tensioning weight switch).

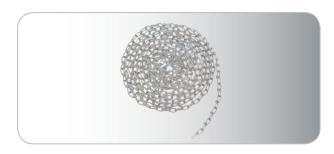
Art.no.	Description
078629	Ladder ACCESSORY SET-C



### Handhold for descending into pit

For wall fastening, incl. dowels and screws mounting depth 50mm

Art.no.	Description
078341	Handhold



### Ladder chain

Knotted chain 3m and 5m

Art.no.	Description
078343	Ladder chain 3m
078344	Ladder chain 5m



### **Fastening clamp**

Self-adhesive with additional fixing screws and drill for mounting



Art.no.	Description		
078339	Fastening clamp		

### Signs + labels for lifts





Warning signs

Information signs



Triangular key

### Warning signs for lifts

The signs are coloured in signal yellow and can be used internationally due to the simple explanatory power of the pictograms. They consist of 1.6mm thick plastic material with black imprint.



### Attention! Danger of crushing! Rotating pulley!

Dimensions: 140 x 65mm

Art.no.	Description	PU
050269*	Sign: Danger of crushing, rotating pulley	1
050270*	Sign: Danger of crushing, rotating pulley	10



### Attention! Extremities can be dragged in at rotating pulley!

Dimensions: 100 x 36mm

Art.no.	Description	PU
050267*	Warning sign Dragging of extremities rp	1
050268*	Warning sign Dragging of extremities rp	10



### Attention! Extremities can be dragged in at rotating pulley pulley with inclined rope departure!

Dimensions: 100 x 36mm

Art.no.	Description	PU
050265*	Warning sign Dragging of extremities ipd	1
050266*	Warning sign Dragging of extremities ipd	10



### Attention! Danger of crushing!

Dimensions: 60 x 40mm

Art.no.	Description	PU
050312	Adhesive label Danger of crushing	10



### Attention Danger of falling+crushing! Do not lean over the guard rail!

Dimensions: 200 x 36mm

Art.no.	Description	PU
050257*	Warning sign Danger of crushing/falling	1
050258*	Warning sign Danger of crushing/falling	10



### Attention! Danger of crushing in the pit!

Dimensions: 148 x 148mm

Art.no.	Description	PU
050259*	Pictogram Danger of crushing in the pit	1
050260*	Pictogram Danger of crushing in the pit	10



### Attention! Danger of crushing shaft separation!

Dimensions: 210 x 148mm

Art.no.	Description	PU
050271*	Warning sign Danger of crushing shaft separation	1

One sign per landing is necessary.

\*The recognition distance of the warning signs is at least 0.5m according to DIN 4844-1.

### Warning signs for lifts

Rail must be completely extended before inspection ride!

Geländer vor Inspektionsfahrt vollständig ausfahren und mit Splinte sichern!

Rail must be complete retracted before switching back to normal ride.

Geländer bei Umschaltung auf Normalfahrt immer einfahren, Schutzraum zu niedrig!

Art.no.	Description	Dimensions	PU
050261	Warning sign for guard rail 3A	200 x 36mm	1
050262	Warning sign for guard rail 3A	200 x 36mm	10

Front side in English / back side in German

The signs are coloured in signal yellow and consist of 1.6mm thick plastic material with black imprint.

Art.no.	Description	Dimensions	PU
050263	Warning sign for guard rail 1B	200 x 36mm	1
050264	Warning sign for guard rail 1B	200 x 36mm	10

Front side in English / back side in German

More signs on our web site: www.wwlift.de



### Indication, Attachment point"

Material: self-adhesive PE foil/plastic

Art.no.	Art.no. Description	
078392	Sign Attachment point Ø 100mm	1
078393	Adhesive label Attachment point Ø 80mm	6



### Pictogram adhesive label: Firemen's lift according to EN 81-72

Art.no.	Description	Dimensions	Place of affixing	PU
050272	Label FW EN 81	100 x 100mm	Stop	1
050273	Label FW EN 81	100 x 100mm	Stop	10
052571	Label FW EN 81	20 x 20mm	Car operating panel	5



### Pictogram adhesive label: Do not use the lift in case of fire according to EN 81-73

Art.no.	Description	Dimensions	Recognition distance	PU
050292	Case of fire EN 81-73	Ø 50mm	2m	10
050293	Case of fire EN 81-73	Ø 50mm	2m	50



### Pictogram adhesive label: Do not smoke

Art.no.	Description	Dimensions	Recognition distance	PU
050220	Adhesive label RV	Ø 50mm	2m	1
050221	Adhesive label RV	Ø 50mm	2m	10
050291	Adhesive label RV	Ø 50mm	2m	50

### Signs and foils for lifts

Texts according to EN 81-21



### Reduced top clearances in the shaft head

Adhesive label for mounting in machine rooms onto devices for the emergency supply. Material: PVC adhesive film

### Adhesive label "Reduced shaft head"

Art.no.	Description	Language	Dimensions
050320	Label	German	130 x 180mm
050322	Label	English	130 x 180mm
050324	Label	French	130 x 180mm
050326	Label	Spanish	130 x 180mm



### Reduced top clearances in the shaft head

Plastic sign for mounting on the cabin roof. Material: plastic

### Sign "Reduced shaft head"

Art.no.	Description	Language	Dimensions
050321	Sign	German	200 x 300mm
050323	Sign	English	200 x 300mm
050325	Sign	French	200 x 300mm
050327	Sign	Spanish	200 x 300mm



### Reduced top clearances in the shaft pit

Adhesive label for mounting in machine rooms onto devices for the emergency supply. Material: PVC adhesive film

### Adhesive label "Reduced shaft pit"

Art.no.	Description	Language	Dimensions
050330	Label	German	130 x 180mm
050332	Label	English	130 x 180mm
050334	Label	French	130 x 180mm
050336	Label	Spanish	130 x 180mm



### Reduced top clearances in the shaft pit

Plastic sign for mounting in the shaft pit. Material: plastic

### Sign "Reduced shaft pit"

	Art.no.	Description	Language	Dimensions
0	50331	Sign	German	200 x 300mm
0	50333	Sign	English	200 x 300mm
0	50335	Sign	French	200 x 300mm
0	50337	Sign	Spanish	200 x 300mm

All signs are made of solid plastic.

### Plastic signs for lifts

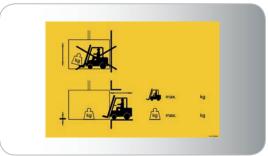
according to EN 81-20













Signs in four languages: German, English, French, Spanish (D, GB, F, E) or Swedish, Norwegian, Finnish, Danish (S, N, FIN, DK).

### Warning signs for safety spaces - person upright

With information about the number of permissible persons: for 1 person, for 2 persons or for individual inscription.

Art.no.	Description	Dimensions	PU
050382	Safety space - person upright, 1P	160 x 160mm	1
050383 Safety s	Safety space - person upright, 1P	160 x 160mm	10
050384	Safety space - person upright, 2P	160 x 160mm	1
050385	Safety space - person upright, 2P	160 x 160mm	10
050380	Safety space - person upright, xP	160 x 160mm	1
050381	Safety space - person upright, xP	160 x 160mm	10

### Warning signs for safety spaces - person crouching

With information about the number of permissible persons: for 1 person, for 2 persons or for individual inscription.

	i		
Art.no.	Description	Dimensions	PU
050376	Safety space - person crouching, 1P	160 x 160mm	1
050377	Safety space - person crouching, 1P	160 x 160mm	10
050378	Safety space - person crouching, 2P	160 x 160mm	1
050379	Safety space - person crouching, 2P	160 x 160mm	10
050374	Safety space - person crouching, xP	160 x 160mm	1
050375	Safety space - person crouching, xP	160 x 160mm	10

### Warning signs for safety spaces - person lying

With information about the number of permissible persons: for 1 person, for 2 persons or for individual inscription.

Art.no.	Description	Dimensions	PU
050370	Safety space - person lying, 1P	160 x 160mm	1
050371	Safety space - person lying, 1P	160 x 160mm	10
050372	Safety space - person lying, 2P	160 x 160mm	1
050373	Safety space - person lying, 2P	160 x 160mm	10
050368	Safety space - person lying, xP	160 x 160mm	1
050369	Safety space - person lying, xP	160 x 160mm	10

### Pictogram at the landings for loading with a loading unit at goods lifts

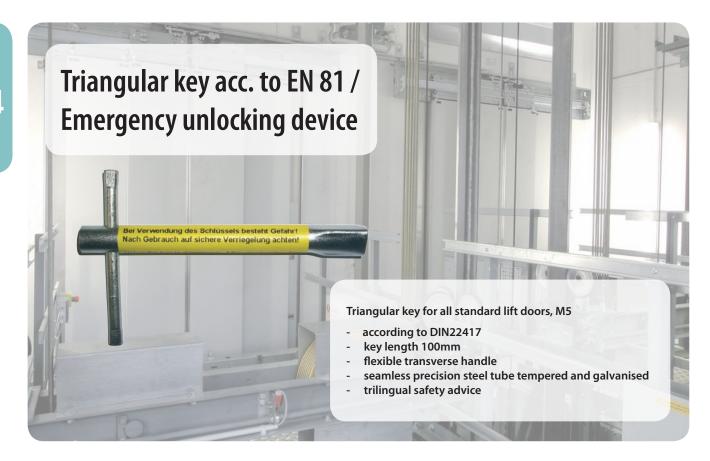
For individual inscription.

Art.no.	Description	Dimensions	PU
050386	Loading unit	300 x 200mm	1

### Pictogram distance counterweight - buffer acc. to EN 81-20 5.2.5.7.1

If a counterweight is used, there has to be a sign at the counterweight separation or next to it, indicating the maximum permissible free distances between the counterweight and the counterweight buffer for the case that the car is at the highest landing, in order to keep the required distances in the shaft head.

Art.no.	Description	Dimensions	PU
050388	Distance CW - buffer, D, GB, F, E	110 x 180mm	1
050389	Distance CW - buffer, D, GB, F, E	110 x 180mm	10
050393	Distance CW - buffer, S, N, FIN, DK	110 x 180mm	1
050394	Distance CW - buffer, S, N, FIN, DK	110 x 180mm	10





### Triangular key M5

Art.	no.	Description	PU
078	260	Triangular key type 100mm, languages: D, GB, NL	10
078	261	Triangular key type 100mm, languages: D, GB, NL	50
080	060	Triangular key type 100mm, languages: D, FR, IT	10
080	061	Triangular key type 100mm, languages: D, FR, IT	50

Bei Verwendung des Schlüssels besteht Gefahrl Nach Gebrauch auf sichere Verriegelung achten!

Using the key is dangerous. After closing the door make sure that it is locked.

Het gebruik van de sleutel kan gevaarlijk zijn. overtuig u zelf dat de deur na het sluiten daadwerkelijk vergrended is!

### Labels for triangular keys

	Art.no.	Description	PU
078299	070200	Adhesive label for emergency unlocking,	10
	0/8299	languages: D, GB, NL	

Bei Verwendung des Schlüssels besteht Gefahr!
Nach Gebrauch auf sichere Verriegelung achten!
L'utilisation de la clé est dangereuse. Après l'usage
il faut s'assurer que la porte est bien fermée.
È pericoloso utilizzare la chiave. Dopd l'uso
accertarsi che la porta sia perfattamente chiusa.

Art.no.	Description	PU
080058	Adhesive label for emergency unlocking, Slanguages: D, FR, IT	10

### MUTES

### NOTES

### 

### **General product advice**

### 1. Normative reference

The development and production of our lift components are based on the Lifts Directive 2014/33/EU and on EN 81-20/50 "Safety rules for the construction and installation of lifts" and on EN 81-21 "New passenger and goods passenger lifts in existing buildings".

Besides the preceding lift prescriptions the following standards, regulations and directives, among others, were considered in the development:

- ProdSG Act on a Technical Work Equipment and Consumer Products (Equipment and Product Safety Act)
- DIN EN ISO 13857 "Safety of machinery Safety distances to prevent hazard zones being reached by upper and lower limbs"
- EN 131-2 Ladders
- DIN EN 60947-5-5 Low-voltage switchgear and controlgear Part 5-5: Control circuit devices and switching elements

### 2. Safety evaluation of the lift components in this catalogue

The products in this catalogue fulfil the preceding standards, laws and directives, provided that they are used correctly, assembled professionally and that the instructions are followed. Products have to be applied by specialised lift companies only. Depending on the site of installation it is possible that the use of our products conflicts with other standards or conditions. The responsibility to check this is incumbent on the user.

In addition, for some products maintenance demands have to be considered. These are indicated in the corresponding mounting instructions.

### Protective covers for rotating parts

All protective covers in this catalogue substantially decrease the danger of accidentally grabbing into rotating parts. The safety distances indicated in EN 81-20 according to table 4 of EN ISO 13857, can be kept with closed traction sheave covers and hoods, if they are flush with the engine frame and both entering points and all internal pulley openings are completely covered. For higher entering points (e.g. at the inclined rope departure), a deliberate grabbing in by twisting the hand cannot be prevented. Due to distances between the ropes as well as between the deflector and the rope transition and depending on the location and the pulley specification, small openings at the product "Finger protection" (pages 8-12) are possible, where fingers could be deliberately put in.

### - ProdSG § 6 (1):

"The manufacturer [...] has to [...] ensure that the user receives the necessary information to enable him to assess and safeguard against the dangers which may emanate from the consumer product during the usual or reasonably forseeable period of use and which are not immediately evident without corresponding instructions."

### **Explanation:**

To avoid accidents, residual risks which cannot be excluded for some products due to the technical feasibility, are clearly marked by signs and warning colour (signal orange for the finger protection). The protective covers must exclusively be used in rooms, where only instructed persons have access to. The decision, which protection measures are appropriate for the location, is finally incumbent on the user. Mounting instructions and expert evaluations for the products can be downloaded from the manufacturer's website www.wwlift.de.

### 3. Languages in our catalogues and mounting instructions / Terms of delivery

All catalogues and mounting instructions are available in German, English and partly in French and in Spanish. If mounting instructions and catalogues are needed in other languages, please contact W+W Aufzugkomponenten. Besides the preceding indications, our general terms of delivery apply in all cases for companies, in the currently valid version on our website www.wwlift.de



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For more products request our:

### "Installation catalogue"

or on our website www.wwlift.de



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All indicated data, electrical values and dimensions as well as illustrations were compiled carefully.

The manufacturer reserves to himself the right to make technical changes and constructional improvements.

Reproductions, in extracts as well, have to be authorised previously.





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