

**Industrial price list 02-22.1**

**Valid from 01.06.2022**

**Loading technology**

# Hörmann international sales companies and sales partners



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Hörmann international sales companies  
 International sales partners

## Hörmann international sales companies

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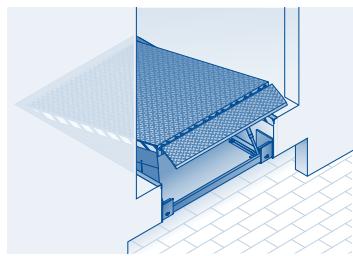
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# Hinged lip dock leveller HLS

Self-supporting steel articulated design  
in accordance with EN 1398 and BGR 233.



**HLS**

## Rated load acc. to EN 1398 as standard 60 kN

The following load limitation is recommended in order to avoid lane grooves with hard (PU/Vulkollan) wheels: for electric industrial trucks with tandem rollers: 50 kN, for reach lift trucks: 30 kN.

## Gradient / tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range

## Construction

Torsionally flexible dock leveller construction with 2-cylinder technology, platform and hinged lip made of moulded anti-slip steel, platform 6/8 mm thick (S 235), hinged lip 12/14 mm thick (S 355), 405 mm long, with gradient, with open, self-cleaning lip hinge.

**Attention: The dimensions are not fitting dimensions. Note the fitting drawings for pit dimension and ordering!**

Ordering length	Dock leveller exterior length	Installation height	Transport height	Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
3000	2985	650	385	<b>6355</b>	<b>6647</b>	<b>6731</b>	<b>1157</b>	<b>1263</b>	<b>1372</b>
2750	2735	650	385	<b>6306</b>	<b>6395</b>	<b>6538</b>	<b>1092</b>	<b>1191</b>	<b>1294</b>
2500	2485	650	385	<b>6025</b>	<b>6245</b>	<b>6367</b>	<b>1024</b>	<b>1119</b>	<b>1220</b>
2000	1985	650	385	<b>5903</b>	<b>6063</b>	<b>6220</b>	<b>891</b>	<b>983</b>	<b>1064</b>
<b>Ordering width</b> 				2000	2100	2250	2000	2100	2250
Dock leveller exterior width 				2020	2120	2270	2020	2120	2270

## Special sizes (please note the extended delivery times!)

Deviating width, special widths from 1750 mm in 50 mm grid (1750, 1800, etc.) up to 2250 mm maximum

**On request**

**Fitting**

Fitting by welding  
Accessories for further fitting variants  
(e.g. for fitting by casting) are optionally available.

**Surfaces**

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017, RAL to choose or galvanized on request.

**Temperature range**

Standard version suited for temperature range (under the dock leveller) of approx. -10°C to +50°C. Special oil required for colder temperatures, see accessories.

**Anti-slip**

Platform and lip made of anti-slip running plate. On request, anti-slip coating class R11 acc. to DIN 51130, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black).

**Acoustic insulation**

Identical to anti-slip coating, but approx. 3–4 mm thick.

**Operator**

Electro-hydraulic operator, motor power 0.75 kW as standard, connecting voltage 400 V/50 Hz (for other frequencies, see page 16), protection category IP 54. Connection cable minimum 7.5 m long as standard.

**Control 420 S (standard)**

Protected control housing, protection category IP 65, connecting voltage 400 V or 230 V/50 Hz or 60 Hz. Membrane push button integrated in housing for actuation with press-and-hold actuation and "Auto" button for automatic return to home position. Emergency-off switch (all-pole switch-off), restart inhibition.

**Hinged lip variants**

**Type R**, straight (up to 2000 mm wide as standard with no surcharge)

€ 161



**Type S**, chamfered 100 mm on each side (over 2000 mm wide as standard with no surcharge)

€ 161

**Type SG**

Not available

**Special equipment**

**Note the possible longer delivery time!**

Ordering length	Anti-slip coating <sup>1)</sup> (class R11)			Acoustic insulation <sup>1)</sup>			Pre-treatment		
	Approx. 1–2 mm thick, on platform and lip made of running plate			Approx. 3–4 mm thick, on platform and lip made of running plate			Required for galvanized version	No. of dock levellers	
	1	2–10	> 10						
3000	1489	1549	1663	2117	2209	2368	667	406	374
2750	1376	1432	1538	1958	2040	2188	667	406	374
2500	1266	1317	1409	1795	1872	2004	667	406	374
2000	1035	1079	1154	1475	1533	1644	667	406	374
Ordering width	2000	2100	2250	2000	2100	2250			

1) Pre-treatment required for galvanized version.

**Special equipment**

Ordering length	Thermal insulation			Gap sealing			RAL to choose
	At least 30 mm thick Gap sealing recommended!			230			
3000	519	589	725				
2750	475	539	660				
2500	429	487	601				
2000	339	387	476				
Ordering width	2000	2100	2250				

Surface coating in RAL  
to choose, see page 17.

**Optional extras and special versions**

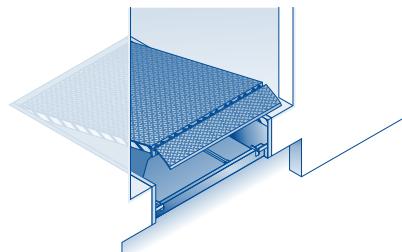
See page 16

**Controls and control accessories**

See from page 18

# Hinged lip dock leveller HLS 2

Self-supporting steel articulated design  
in accordance with EN 1398 and BGR 233.



HLS 2

## Rated load acc. to EN 1398 as standard 60 kN

The following load limitation is recommended in order to avoid lane grooves with hard (PU/Vulkollan) wheels: for electric industrial trucks with tandem rollers: 50 kN, for reach lift trucks: 30 kN.

## Gradient/tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range

## Construction

Torsionally flexible dock leveller construction with 2-cylinder technology, platform and hinged lip made of moulded anti-slip steel, platform 6/8 mm thick (S 235), hinged lip 12/14 mm thick (S 355), 405 mm long, with gradient, with open, self-cleaning lip hinge.

## Fitting

### Pit model P

Fitting by welding. Equipped with 30 mm thick flat steel on rear. From 3500 m length and with higher rated loads, support profiles are required on site.

**Attention: The dimensions are not fitting dimensions. Note the fitting drawings for pit dimension and ordering!**

Ordering length	Installation height <sup>1)</sup>	Pit model P <sup>2)</sup> Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
5000	745	<b>14931</b>	<b>15351</b>	<b>15760</b>	<b>3009</b>	<b>3248</b>	<b>3463</b>
4500	745	<b>11016</b>	<b>11423</b>	<b>11717</b>	<b>2236</b>	<b>2427</b>	<b>2566</b>
4000	745	<b>10553</b>	<b>10900</b>	<b>11179</b>	<b>2040</b>	<b>2212</b>	<b>2332</b>
3500	745	<b>9265</b>	<b>9529</b>	<b>9787</b>	<b>1840</b>	<b>1991</b>	<b>2107</b>
3000	645	<b>7453</b>	<b>7747</b>	<b>7930</b>	<b>1525</b>	<b>1629</b>	<b>1730</b>
2750	645	<b>7422</b>	<b>7503</b>	<b>7739</b>	<b>1439</b>	<b>1542</b>	<b>1643</b>
2500	595	<b>7101</b>	<b>7296</b>	<b>7533</b>	<b>1352</b>	<b>1445</b>	<b>1543</b>
2000	595	<b>6621</b>	<b>6777</b>	<b>7027</b>	<b>1172</b>	<b>1263</b>	<b>1352</b>
<b>Ordering width</b>	→	2000	2100	2250	2000	2100	2250
Dock leveller exterior width	→	2020	2120	2270			

1) For fitting in pedestal: tailboard slot height for dock levellers up to 90 kN = ramp height -859 mm

2) **If renovating, indicate the available pit dimensions. Adjustments may be necessary (surcharge).**

**Attention:** In the size range shaded in blue, pit model P requires on-site support at the cylinder support points!

Ordering length	Exterior length	Installation height	Frame model FR <sup>3)</sup> Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
5000	5070	745	<b>16122</b>	<b>16541</b>	<b>16927</b>	<b>3265</b>	<b>3489</b>	<b>3673</b>
4500	4570	745	<b>11850</b>	<b>12256</b>	<b>12536</b>	<b>2422</b>	<b>2608</b>	<b>2718</b>
4000	4070	745	<b>11732</b>	<b>12082</b>	<b>12337</b>	<b>2201</b>	<b>2384</b>	<b>2475</b>
3500	3570	745	<b>9639</b>	<b>9904</b>	<b>10144</b>	<b>1983</b>	<b>2148</b>	<b>2234</b>
3000	3070	645	<b>7800</b>	<b>8098</b>	<b>8263</b>	<b>1618</b>	<b>1725</b>	<b>1808</b>
2750	2820	645	<b>7575</b>	<b>7657</b>	<b>7881</b>	<b>1526</b>	<b>1627</b>	<b>1707</b>
2500	2570	595	<b>7346</b>	<b>7565</b>	<b>7770</b>	<b>1410</b>	<b>1506</b>	<b>1583</b>
2000	2070	595	<b>6954</b>	<b>7110</b>	<b>7347</b>	<b>1225</b>	<b>1325</b>	<b>1385</b>
<b>Ordering width</b>	→	2000	2100	2250	2000	2100	2250	
Dock leveller exterior width	→	2160	2260	2410				

3) **Attention: Indicate casting height!**

Standard casting height FR: 100 mm, max. 250 mm

## Special sizes (note the longer delivery time!)

Other length, width, working range or fitting height	On request
<b>Fitting variants</b>	
<b>Frame model F:</b> Hang in preassembled frame and weld all-round. Version identical to model FR, but without anchors. Preassembled frame provided on-site or must be ordered separately, see page 16	Same price as frame model FR
<b>Box model B:</b> Cast in during ramp construction using on-site formwork and base construction. Version identical to model FR, but frame is closed on 3 sides, with additional reinforcement profiles on the sides. Delivered with protective film.	Surcharge on frame model FR

## Frame model FR

Fitting by casting.

Laterally closed base frame with 3-sided all-round edge bracket, fitted with ventilation holes as well as anchors for setting in concrete, with adjustment angles to screw for adjusting to the casting height. Suitable for in-line fitting with prefabricated concrete components, as long as the casting height does not exceed 250 mm. Use of protective film (optional) recommended.

Further fitting variants (e.g. model F, B) optionally available.

## Surfaces

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017, RAL to choose or galvanized on request.

## Temperature range

Standard version suited for temperature range (under the dock leveller) of approx. -10°C to +50°C. Special oil required for colder temperatures, see accessories.

## Anti-slip

Platform and lip made of anti-slip running plate. On request, anti-slip coating class R11 acc. to DIN 51130, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black).

## Acoustic insulation

Identical to anti-slip coating, but approx. 3–4 mm thick.

## Operator

Electro-hydraulic operator, motor power 0.75 kW with a rated load of 60 kN for lengths up to 3.5 m, increases with higher rated loads and longer dock levellers, depending on requirements. Connecting voltage 400 V / 50 Hz (for other frequencies, see page 16), protection category IP 54. Connection cable minimum 7.5 m long as standard.

## Control 420 S (standard)

Protected control housing, protection category IP 65, connecting voltage 400 V or 230 V / 50 Hz or 60 Hz. Membrane push button integrated in housing for actuation with press-and-hold actuation and "Auto" button for automatic return to home position. Emergency-off switch (all-pole switch-off), restart inhibition.

## Hinged lip variants

	Type R, straight (up to 2000 mm wide as standard with no surcharge)	161
	Type S, chamfered 100 mm on each side (over 2000 mm wide as standard with no surcharge)	161
	Type SG, segmented (straight hinged lip shape), segment width approx. 145 mm – Only for dock levellers with a rated load of up to 60 kN! Segment load max. 600 kg! –	747
Hinged lip type R or S 500 mm long – Rated load 60 kN!	Ordering width 2000 mm	1060

Ordering width 2100 / 2250 mm

1334

## Special equipment

Note the possible longer delivery time!

Ordering length	Anti-slip coating <sup>1)</sup> (class R11)			Acoustic insulation <sup>1)</sup>			Pre-treatment		
	Approx. 1–2 mm thick, on platform and lip made of running plate			Approx. 3–4 mm thick, on platform and lip made of running plate			Required for galvanized version	No. of dock levellers	
5000	2384	2493	2671	3401	3555	3811	750	489	458
4500	2158	2261	2421	3079	3218	3448	750	489	458
4000	1936	2020	2164	2756	2882	3090	750	489	458
3500	1711	1788	1915	2436	2546	2730	667	406	374
3000	1489	1549	1663	2117	2209	2368	667	406	374
2750	1376	1432	1538	1958	2040	2188	667	406	374
2500	1266	1317	1409	1795	1872	2004	667	406	374
2000	1035	1079	1154	1475	1533	1644	667	406	374
Ordering width	2000	2100	2250	2000	2100	2250			

1) Pre-treatment required for galvanized version.

## Special equipment

Note the possible longer delivery time!

Ordering length	Thermal insulation At least 30 mm thick Gap sealing recommended!			Higher rated load up to 90 kN <sup>2)</sup>	Gap sealing	RAL to choose		
5000	874	992	1222	7077	288			
4500	782	889	1098	5820	285			
4000	696	788	976	4618	258			
3500	607	690	851	2628	241			
3000	519	589	725	2154	230			
2750	475	539	660	2088	222			
2500	429	487	601	2010	216			
2000	339	387	476	1828	216			
Ordering width	2000	2100	2250					

Surface coating in RAL to choose, see page 17.

2) Hinged lip 402 mm long, 15 / 17 mm thick, platform 8 / 10 mm thick. Pit models P require on-site support at the cylinder support points!

## Optional extras and special versions

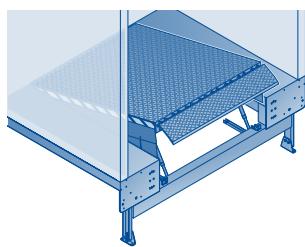
See page 16

## Controls and control accessories

See from page 18

# Loading platform HRS

Loading platform with hydraulic dock leveller in accordance with EN 1398 and BGR 233 and side elements that can be fitted in front of the hall opening.



**HRS**

**Rated load acc. to EN 1398 as standard 60 kN**  
Side element loading capacity of up to 1000 kg/m<sup>2</sup> (not suitable for driving over). The following load limitation is recommended in order to avoid lane grooves with hard (PU / Vulkollan) wheels: for electric industrial trucks with tandem rollers: 50 kN, for reach lift trucks: 30 kN.

## Gradient / tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range

## Construction

Steel construction with adjustable galvanized pedestal feet. Torsionally flexible dock leveller construction with 2-cylinder technology, side elements, platform and hinged lip made of moulded, anti-slip steel, side elements and platform 6 / 8 mm thick (S 235), hinged lip 12 / 14 mm thick (S 355), 405 mm long, with slope, with open, self-cleaning lip hinge.

Ordering length	Exterior length / depth	Ramp height <sup>1)</sup>	Platform and lip coated in RAL 9017, galvanized side elements and front beam			Surcharge Galvanized platform and lip		
			10321	10611	10698	1157	1263	1372
3000	2985	875 <sup>2)</sup> – 1360	10321	10611	10698	1157	1263	1372
2750	2735	875 <sup>2)</sup> – 1360	10178	10273	10413	1092	1191	1294
2500	2485	875 <sup>2)</sup> – 1360	9798	10021	10142	1024	1119	1220
2000	1985	875 <sup>2)</sup> – 1360	9493	9654	9810	891	983	1064
<b>Ordering width</b>	→		2000	2100	2250	2000	2100	2250
<b>Total width of loading platform</b>	3500 mm							

1) Ramp height measured from the top edge of the platform (not top edge of the running plate) to the bottom edge of the base on the front side.

Note the required slope of 1% (for drainage) from the outer wall of the building! Tailboard slot height = ramp height – 690 mm

2) For angled arrangement min. 977 mm

## RAL to choose

See page 17

## Hinged lip



**Type R**, straight, standard up to 2000 mm width

€

161



**Type S**, chamfered 100 mm on each side (over 2000 mm wide as standard with no surcharge)

161

## Type SG

Not available

## Coupling element for coupling HRS loading platforms

Ordering length	Exterior length / depth	Width			
		50 up to and incl. 70	Over 70 up to and including 100	Over 100 up to and including 300	Over 300 up to and including 500
3000	2985	336	666	1273	1609
2750	2735	336	660	1211	1522
2500	2485	334	658	1145	1434
2000	1985	312	618	1019	1260
<b>Distance centre – centre of the dock leveller</b>		3500 up to and incl. 3570	Over 3570 up to and including 3600	Over 3600 up to and including 3800	Over 3800 up to and including 4000

## Surfaces

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017, RAL to choose or galvanized on request. Side elements and front beam galvanized as standard.

## Temperature range

Standard version suited for temperature range (under the dock leveller) of approx. -10°C to +50°C. Special oil required for colder temperatures, see accessories.

## Hole pattern

Side elements pre-drilled for fitting of buffers, docking assistant DAP, CPB support brackets for inflatable dock seal, Light Guide LG, as well as fitting of the carrier's lorry security belts.

## Anti-slip

Platform and lip made of anti-slip running plate. On request, anti-slip coating class R11 acc. to DIN 51130, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black), not available on side elements for technical reasons.

## Acoustic insulation

Identical to anti-slip coating, but approx. 3–4 mm thick on the platform.

Not available on side elements for technical reasons.

## Operator

Electro-hydraulic operator, motor power 0.75 kW as standard, connecting voltage 400 V / 50 Hz (for other frequencies, see 16), protection category IP 54. Connection cable minimum 7.5 m long as standard.

## Control 420 S (standard)

Protected control housing, protection category IP 65, connecting voltage 400 V or 230 V / 50 Hz or 60 Hz. Membrane push button integrated in housing for actuation with press-and-hold actuation and "Auto" button for automatic return to home position. Emergency-off switch (all-pole switch-off), restart inhibition.

## Special equipment

Ordering length	Anti-slip coating <sup>1)</sup> (class R11)			Acoustic insulation <sup>1)</sup>			Note the possible longer delivery time!		
	Approx. 1–2 mm thick, on running plate of dock leveller platform and lip			Approx. 3–4 mm thick, on running plate of dock leveller platform and lip			Required for galvanized version	Pre-treatment	
	1	2–10	> 10	No. of dock levellers	1	2–10	> 10	1	2–10
3000	<b>1489</b>	<b>1549</b>	<b>1663</b>	<b>2117</b>	<b>2209</b>	<b>2368</b>	<b>667</b>	<b>406</b>	<b>374</b>
3750	<b>1376</b>	<b>1432</b>	<b>1538</b>	<b>1958</b>	<b>2040</b>	<b>2188</b>	<b>667</b>	<b>406</b>	<b>374</b>
2500	<b>1266</b>	<b>1317</b>	<b>1409</b>	<b>1795</b>	<b>1872</b>	<b>2004</b>	<b>667</b>	<b>406</b>	<b>374</b>
2000	<b>1035</b>	<b>1079</b>	<b>1154</b>	<b>1475</b>	<b>1533</b>	<b>1644</b>	<b>667</b>	<b>406</b>	<b>374</b>
Ordering width	2000	2100	2250	2000	2100	2250			

1) Pre-treatment required for galvanized version. Not available for side elements and pedestal add-ons for angled arrangement.

## Special equipment

Ordering length	Thermal insulation		Gap sealing	RAL to choose		Note the possible longer delivery time!		
	At least 30 mm thick, under the dock leveller and side elements, gap sealing recommended!							
3000	<b>828</b>		<b>230</b>					
2750	<b>753</b>		<b>222</b>					
2500	<b>685</b>		<b>216</b>					
2000	<b>540</b>		<b>216</b>					

## Special equipment

Side elements pre-drilled for fitting of docking assistant DAP, DAS "Crash Protection Bar" support brackets, Light Guide LG, as well as fitting of the carrier's lorry securing belts

Per dock leveller

**31**

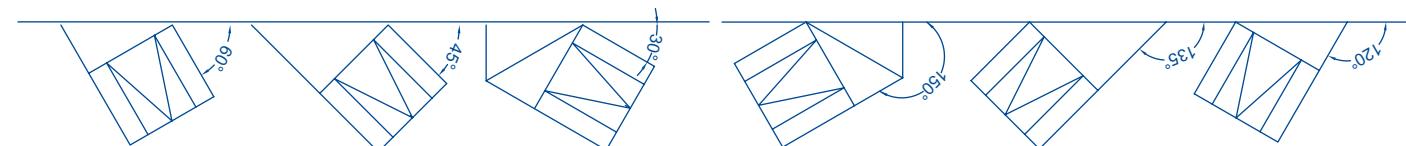
## Pedestal add-ons for angled arrangement (include drawing with order!)

Attention:

When ordering, make sure that a 7.5 m connection cable is long enough. Otherwise order a 12 m cable separately!

Anti-slip coating or acoustic insulation for pedestal add-ons not possible for technical reasons.

	Galvanized	Thermal insulation
30 / 150° arrangement	<b>9269</b>	<b>660</b>
45 / 135° arrangement	<b>6711</b>	<b>572</b>
60 / 120° arrangement	<b>4949</b>	<b>334</b>



Other versions and special equipment on request.

## Optional extras and special versions

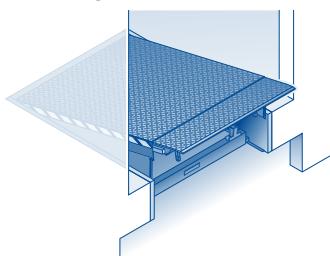
See page 16

## Controls and control accessories

See from page 18

# Telescopic lip dock leveller HTL 2

Self-supporting steel articulated design in accordance with EN 1398 and BGR 233, also for fitting behind the door.



HTL 2

## Rated load acc. to EN 1398 as standard 60 kN

The following load limitation is recommended in order to avoid lane grooves with hard (PU/Vulkollan) wheels: for reach lift trucks 40 kN.

## Gradient / tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range.

## Construction

Torsionally flexible dock leveller design with 2-cylinder technology, platform made of moulded anti-slip steel, 8 / 10 mm thick, (S 235) with lip made of moulded anti-slip steel, 12 / 14 mm thick (S 355), 500 mm long, optionally 1000 mm (rated load 60 kN) or 1200 mm (rated load 50 kN), with slope.

**Attention: The dimensions are not fitting dimensions. Note the fitting drawings for pit dimension and ordering!**

Ordering length	Installation height <sup>1)</sup>	Pit model P <sup>2)</sup> Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
5000	745	17675	17934	18479	3873	4027	4242
4500	745	13070	13351	13725	2770	2875	3025
4000	745	12144	12374	12721	2513	2618	2755
3500	745	11208	11422	11745	2258	2349	2483
3000	645	9246	9508	9829	1878	1964	2087
2750	645	9153	9232	9509	1767	1849	1967
2500	595	8678	8926	9196	1646	1728	1843
2000	595	8280	8470	8716	1427	1500	1605
<b>Ordering width</b>	→	2000	2100	2250	2000	2100	2250
Dock leveller exterior width	→	2020	2120	2270			

1) For fitting in pedestal: tailboard slot height for dock levellers up to 90 kN = ramp height – 859 mm

2) **If renovating, indicate the available pit dimensions. Adjustments may be necessary (surcharge).**

**Attention:** In the size range shaded in blue, pit model P requires on-site support at the cylinder support points!

Ordering length	Exterior length	Installation height	Frame model FR <sup>3)</sup> Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
5000	5070	745	18641	18904	19437	4107	4260	4448
4500	4570	745	13827	14116	14481	2958	3057	3191
4000	4070	745	13253	13487	13827	2681	2776	2900
3500	3570	745	11396	11616	11933	2413	2505	2619
3000	3070	645	9472	9740	10063	1979	2067	2169
2750	2820	645	9262	9344	9621	1863	1951	2045
2500	2570	595	8903	9156	9428	1725	1802	1900
2000	2070	595	8556	8757	8999	1494	1570	1658
<b>Ordering width</b>	→	2000	2100	2250	2000	2100	2250	
Dock leveller exterior width	→	2160	2260	2410				

3) **Attention: Indicate casting height!**

Standard casting height FR: 100 mm, max. 250 mm

Special sizes (note the longer delivery time!)	€
Other length, width, working range or fitting height	On request
<b>Fitting variants</b>	€
<b>Frame model F:</b> Hang in preassembled frame and weld all-round. Version identical to model FR, but without anchors. Preassembled frame provided on-site or must be ordered separately, see page 16	Same price as frame model FR -
<b>Box model B:</b> Cast in during ramp construction using on-site formwork and base construction. Version identical to model FR, but frame is closed on 3 sides, with additional reinforcement profiles on the sides. Delivered with protective film.	Surcharge on frame model FR 337

**Fitting****Pit model P**

Fitting by welding. Equipped with 30 mm thick flat steel on rear.

From 3500 m length and with higher rated loads, support profiles are required on site.

**Frame model FR**

Fitting by casting.

Laterally closed base frame with 3-sided all-round edge bracket, fitted with ventilation holes as well as anchors for setting in concrete, with adjustment angles to screw for adjusting to the casting height. Suitable for in-line fitting with prefabricated concrete components, as long as the casting height does not exceed 250 mm.

Use of protective film (optional) recommended.

Further fitting variants (e.g. model F, B) optionally available.

**Surfaces**

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017, RAL to choose or galvanized on request.

**Temperature range**

Standard version suited for temperature range (under the dock leveller) of approx. –10°C to +50°C. Special oil required for colder temperatures, see accessories.

**Anti-slip**

Platform and lip made of anti-slip running plate. On request, anti-slip coating class R11 acc. to DIN 51130, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black).

**Acoustic insulation**

Identical to anti-slip coating, but approx. 3–4 mm thick on the platform.

**Operator**

Electro-hydraulic operator, motor power 1.1 kW as standard, connecting voltage 400 V/50 Hz (for other frequencies, see 16), protection category IP 54. Connection cable minimum 7.5 m long as standard.

**Control 420 T (standard)**

Protected control housing, protection category IP 65, connecting voltage 400 V or 230 V/50 Hz or 60 Hz. Membrane push buttons integrated in housing for separate actuation of the dock leveller and telescopic lip with press-and-hold actuation and "Auto" button for automatic return to home position. Emergency-off switch (all-pole switch-off), restart inhibition.

**Telescopic lip versions**

	Type <b>R</b> , straight (up to 2000 mm wide as standard with no surcharge)	161
	Type <b>S</b> , chamfered 100 mm on each side (over 2000 mm wide as standard with no surcharge)	161
	Type <b>SG</b> , segmented (straight telescopic lip shape), segment width approx. 170 mm, for telescopic lip length 1200 mm, segments without running plate profiling	494
	<b>- Only for dock levellers with a rated load of up to 60 kN! Segment load max. 600 kg! -</b>	
<b>Telescopic lip 1000 mm</b>	Rated load max. 60 kN	<ul style="list-style-type: none"> <li>– Coated in RAL 9017</li> <li>– Galvanized</li> <li>– Additional surcharge for anti-slip coating/acoustic insulation</li> </ul>
<b>Telescopic lip 1200 mm</b>	Rated load max. 50 kN, dock leveller ordering length min. 2500 mm	<ul style="list-style-type: none"> <li>– Coated in RAL 9017</li> <li>– Galvanized</li> <li>– Additional surcharge for anti-slip coating/acoustic insulation</li> </ul>

**Special equipment****Note the possible longer delivery time!**

<b>Ordering length</b>	<b>Anti-slip coating<sup>1)</sup> (class R11)</b>			<b>Acoustic insulation<sup>1)</sup></b>			<b>Pre-treatment</b>		
	Approx. 1–2 mm thick, on running plate of platform and lip			Approx. 3–4 mm thick, on running plate of platform, approx. 1–2 mm thick, on running plate of lip			Required for galvanized version	No. of dock levellers	
5000	2384	2493	2671	3401	3555	3811	750	489	458
4500	2158	2261	2421	3079	3218	3448	750	489	458
4000	1936	2020	2164	2756	2882	3090	750	489	458
3500	1711	1788	1915	2436	2546	2730	667	406	374
3000	1489	1549	1663	2117	2209	2368	667	406	374
2750	1376	1432	1538	1958	2040	2188	667	406	374
2500	1266	1317	1409	1795	1872	2004	667	406	374
2000	1035	1079	1154	1475	1533	1644	667	406	374
<b>Ordering width</b>	2000	2100	2250	2000	2100	2250			

1) Pre-treatment required for galvanized version.

**Special equipment****Note the possible longer delivery time!**

<b>Ordering length</b>	<b>Thermal insulation</b> at least 30 mm thick			<b>Higher rated load</b> Up to 90 kN <sup>3)</sup> telescopic lip 500 mm	<b>Gap sealing</b>	Not in combination with DOBO system	<b>RAL to choose</b>		
	<b>Note:</b> Gap sealing recommended! Insulation of the platform in the front area (lip length +650 mm) not possible for technical reasons.								
5000	874	992	1222	2999	288		<b>Surface coating in RAL to choose, see page 17.</b>		
4500	782	889	1098	2744	285				
4000	696	788	976	2574	258				
3500	607	690	851	2393	241				
3000	519	589	725	2222	230				
2750	475	539	660	2146	222				
2500 <sup>2)</sup>	429	487	601	2059	216				
2000 <sup>2)</sup>	339	387	476	1936	216				
<b>Ordering width</b>	2000	2100	2250						

2) Thermal insulation for telescopic lip 1200 possible from ordering length 2750, for telescopic lip 1000 from ordering length 2500.

3) Pit model P requires on-site support at the cylinder support points!

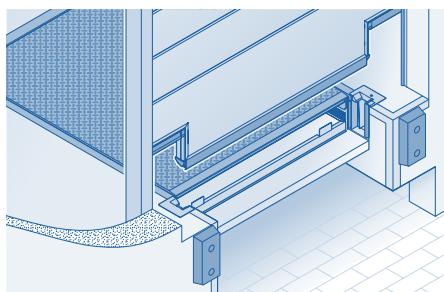
**Optional extras and special versions**

See page 16

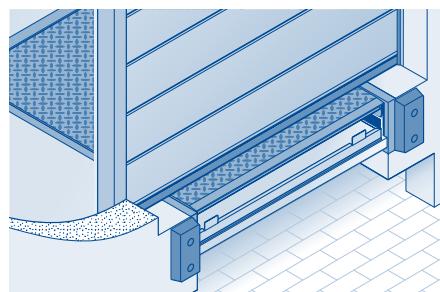
**Controls and control accessories**

See from page 18

# Telescopic lip dock leveller HTL 2 ISO



**HTL 2 ISO**, situation with low-track sectional door in front of dock leveller, insulation panel protruding



**HTL 2 ISO**, situation with door on dock leveller

Insulated, self-supporting steel articulated design in accordance with EN 1398 and BGR 233.

## Rated load acc. to EN 1398 as standard 60 kN

The following load limitation is recommended in order to avoid lane grooves with hard (PU / Vulkollan) wheels: for reach lift trucks 40 kN.

## Gradient / tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range.

## Construction

Torsionally flexible dock leveller design with 2-cylinder technology, platform made of moulded anti-slip steel, 8 / 10 mm thick (S 235), with telescopic lip made of moulded anti-slip steel, 15 / 17 mm thick (S 355), 650 mm long as standard, optionally 1150 mm, limited to 950 mm for ordering length 2000 mm, clear overlap length 390 mm.

**Attention: The dimensions are not fitting dimensions. Note the fitting drawings for pit dimension and ordering!**

Ordering length	Telescopic lip length	Installation height	Pit model <b>P</b> coated RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
3000	650	645	<b>13340</b>	<b>13559</b>	<b>13867</b>	<b>2362</b>	<b>2456</b>	<b>2364</b>
2750	650	645	<b>13125</b>	<b>13339</b>	<b>13637</b>	<b>2045</b>	<b>2135</b>	<b>2249</b>
2500	650	595	<b>12874</b>	<b>13072</b>	<b>13357</b>	<b>1925</b>	<b>2009</b>	<b>2126</b>
2000	650	595	<b>12419</b>	<b>12615</b>	<b>12883</b>	<b>1603</b>	<b>1774</b>	<b>1876</b>
<b>Ordering width</b>			2000	2100	2250	2000	2100	2250
Dock leveller exterior width			2020	2120	2270			

Ordering length	Exterior length	Telescopic lip length	Installation height	Frame model <b>FR</b> coated RAL 9017 Indicate casting height: 100 to 250 mm			Surcharge for galvanized version (note the longer delivery time)		
3000	3070	650	645	<b>13530</b>	<b>13751</b>	<b>14026</b>	<b>2246</b>	<b>2336</b>	<b>2418</b>
2750	2820	650	645	<b>13306</b>	<b>13566</b>	<b>13787</b>	<b>2116</b>	<b>2236</b>	<b>2303</b>
2500	2570	650	595	<b>13026</b>	<b>13230</b>	<b>13484</b>	<b>1984</b>	<b>2064</b>	<b>2165</b>
2000	2070	650	595	<b>12571</b>	<b>12767</b>	<b>13004</b>	<b>1663</b>	<b>1837</b>	<b>1921</b>
<b>Ordering width</b>				2000	2100	2250	2000	2100	2250
Dock leveller exterior width				2160	2260	2410			

<b>Fitting variants</b>		€
<b>Frame model F:</b> Hang in preassembled frame and weld all-round. Version identical to model FR, but without anchors. Preassembled frame provided on-site or must be ordered separately, see page 10	Same price as frame model FR	-
<b>Box model B:</b> Cast in during ramp construction using on-site formwork and base construction. Version identical to model FR, but frame is closed on 3 sides, with additional reinforcement profiles on the sides. Delivered with protective film.	Surcharge on frame model FR	<b>337</b>

<b>Telescopic lip versions</b>		€
 <b>Type R</b> , straight (up to 2000 mm wide as standard with no surcharge)		<b>161</b>
 <b>Type S</b> , chamfered 100 mm on each side (over 2000 mm wide as standard with no surcharge)		<b>161</b>
<b>Telescopic lip 1150 mm for ordering length from 2500 mm</b>	- Coated in RAL 9017	<b>944</b>
<b>Telescopic lip 950 mm for ordering length 2000 mm</b>	- Galvanized	<b>1330</b>
	- Additional surcharge for anti-slip coating / acoustic insulation	<b>239</b>

<b>Panel variant</b>		€
<b>Insulation panel under platform protruding 160 mm</b>	Required if the door closes on the panel surface in front of the dock leveller. Combination with low-track sectional door with sealing and centring unit recommended.	<b>No surcharge</b>

## Insulation and seal

Insulation panels, 50 mm thick, directly below the platform and lip, preassembled. Panel under lip moves when extending. Optional protruding panel under platform for combination with a low-track sectional door. Vertical and horizontal gap sealing, brush seals, seals made of tarpaulin material.

## Fitting

### Pit model P

Fitting by welding. Equipped with 30 mm thick flat steel on rear.

### Frame model FR

Fitting by casting. Laterally closed base frame with 3-sided all-round edge bracket, fitted with ventilation holes as well as anchors for setting in concrete, with adjustment angles to screw for adjusting to the casting height. Suitable for in-line fitting with prefabricated concrete components, as long as the casting height does not exceed 250 mm. Use of protective film (optional) recommended.

Further fitting variants (e.g. model F, B) optionally available.

## Surfaces

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017, RAL to choose or galvanized on request.

## Temperature range

Standard version suited for temperature range (under the dock leveller) of approx. -10°C to +50°C. Special oil required for colder temperatures, see accessories.

## Anti-slip

Platform and lip made of anti-slip running plate. On request, anti-slip coating class R11 acc. to DIN 51130, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black).

## Acoustic insulation

Identical to anti-slip coating, but approx. 3–4 mm thick on the platform.

## Operator

Electro-hydraulic operator, motor power 1.1 kW as standard, connecting voltage 400 V/50 Hz (for other frequencies, see 16), protection category IP 54. Connection cable minimum 7.5 m long as standard.

## Control 420 T (standard)

Protected control housing, protection category IP 65, connecting voltage 400 V or 230 V/50 Hz or 60 Hz. Membrane push buttons integrated in housing for separate actuation of the dock leveller and telescopic lip with press-and-hold actuation and "Auto" button for automatic return to home position. Emergency-off switch (all-pole switch-off), restart inhibition.

## Special equipment

Note the possible longer delivery time!

Ordering length	Anti-slip coating <sup>1)</sup> (class R11)			Acoustic insulation <sup>1)</sup>			Pre-treatment		
	Approx. 1–2 mm thick, on running plate of platform and lip			Approx. 3–4 mm thick, on running plate of platform, approx. 1–2 mm thick, on running plate of lip			Required for galvanized version	No. of dock levellers	
1	2–10	> 10							
3000	<b>1489</b>	<b>1549</b>	<b>1663</b>	<b>2117</b>	<b>2209</b>	<b>2368</b>	<b>667</b>	<b>406</b>	<b>374</b>
2750	<b>1376</b>	<b>1432</b>	<b>1538</b>	<b>1958</b>	<b>2040</b>	<b>2188</b>	<b>667</b>	<b>406</b>	<b>374</b>
2500	<b>1266</b>	<b>1317</b>	<b>1409</b>	<b>1795</b>	<b>1872</b>	<b>2004</b>	<b>667</b>	<b>406</b>	<b>374</b>
2000	<b>1035</b>	<b>1079</b>	<b>1154</b>	<b>1475</b>	<b>1533</b>	<b>1644</b>	<b>667</b>	<b>406</b>	<b>374</b>
Ordering width	2000	2100	2250	2000	2100	2250			

1) Pre-treatment required for galvanized version.

Surface coating in RAL to choose

See page 17

Optional extras and special versions

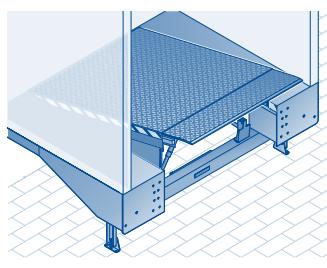
See page 16

Controls and control accessories

See from page 18

# Loading platform HRT

Loading platform with hydraulic dock leveller in accordance with EN 1398 and BGR 233 and side elements that can be fitted in front of the hall opening.



**HRT**

**Rated load acc. to EN 1398 as standard 60 kN**  
Side element loading capacity of up to 1000 kg/m<sup>2</sup> (not suitable for driving over). The following load limitation is recommended in order to avoid lane grooves with hard (PU / Vulkollan) wheels: for reach lift trucks 40 kN.

## Gradient / tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range

## Construction

Steel construction with adjustable galvanized pedestal feet. Torsionally flexible dock leveller construction with 2-cylinder technology, side elements, platform and telescopic lip made of moulded, anti-slip steel, side elements 6/8 mm, platform 8/10 mm thick (S 420 and S 235 combined), telescopic lip 12/14 mm thick (S 420 and S 355 combined), 500 mm long, optionally available with 1000 mm, with slope.

Ordering length	Exterior length / depth	Ramp height <sup>1)</sup>	Platform and lip coated in RAL 9017, galvanized side elements and front beam			Surcharge Galvanized platform and lip		
			13194	13476	13725	1315	1374	1445
3000	2985	975 <sup>2)</sup> – 1425	<b>13194</b>	<b>13476</b>	<b>13725</b>	<b>1315</b>	<b>1374</b>	<b>1445</b>
2750	2735	975 <sup>2)</sup> – 1425	<b>12899</b>	<b>13181</b>	<b>13236</b>	<b>1237</b>	<b>1298</b>	<b>1370</b>
2500	2485	975 <sup>2)</sup> – 1425	<b>12388</b>	<b>12722</b>	<b>12778</b>	<b>1164</b>	<b>1156</b>	<b>1287</b>
2000	1985	975 <sup>2)</sup> – 1425	<b>11791</b>	<b>11962</b>	<b>12111</b>	<b>1017</b>	<b>1070</b>	<b>1126</b>
<b>Ordering width</b>		→	2000	2100	2250	2000	2100	2250

1) Ramp height measured from the top edge of the platform (not top edge of the running plate) to the bottom edge of the base on the front side.  
Note the required slope of 1% (for drainage) from the outer wall of the building! Tailboard slot height = ramp height – 800 mm

2) For angled arrangement min. 977 mm

RAL to choose	See page 17
<b>Telescopic lip versions</b>	
	<b>Type R</b> , straight (up to 2000 mm wide as standard with no surcharge) <b>161</b>
	<b>Type S</b> , chamfered 100 mm on each side (over 2000 mm wide as standard with no surcharge) <b>161</b>
	<b>Type SG</b> , segmented (straight telescopic lip shape), segment width approx. 170 mm <b>Segment load max. 600 kg!</b> <b>494</b>
<b>Telescopic lip 1000 mm</b>	Rated load max. 60 kN – Coated in RAL 9017 <b>944</b> – Galvanized <b>1198</b> – Additional surcharge for anti-slip coating / acoustic insulation <b>284</b>

## Coupling element for the coupling of HRT loading platforms

Ordering length	Exterior length / depth	Width			
		50 up to and incl. 70	Over 70 up to and including 100	Over 100 up to and including 300	Over 300 up to and including 500
3000	2985	<b>336</b>	<b>666</b>	<b>1273</b>	<b>1609</b>
2750	2735	<b>336</b>	<b>660</b>	<b>1211</b>	<b>1522</b>
2500	2485	<b>334</b>	<b>658</b>	<b>1145</b>	<b>1434</b>
2000	1985	<b>312</b>	<b>618</b>	<b>1019</b>	<b>1260</b>
<b>Distance centre – centre of the dock leveller</b>		3500 up to and incl. 3570	Over 3570 up to and including 3600	Over 3600 up to and including 3800	Over 3800 up to and including 4000

## Surfaces

Steel surfaces of platform and lip blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017, RAL to choose or galvanized on request. Side elements and front beam galvanized as standard.

## Temperature range

Standard version suited for temperature range (under the dock leveller) of approx. -10°C to +50°C. Special oil required for colder temperatures, see accessories.

## Hole pattern

Side elements pre-drilled for fitting of buffers, docking assistance DAP, CPB support brackets for inflatable dock seal, Light Guide LG, as well as fitting of the carrier's lorry securing belts.

## Anti-slip

Platform and lip made of anti-slip running plate. On request, anti-slip coating class R11 acc. to DIN 51130, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black), not available on side elements for technical reasons.

## Acoustic insulation

Identical to anti-slip coating, but approx. 3–4 mm thick on the platform. Not available on side elements for technical reasons.

## Operator

Electro-hydraulic operator, motor power 1.1 kW as standard, connecting voltage 400 V/50 Hz (for other frequencies, see 16), protection category IP 54. Connecting cable from motor at least 7.5 m long.

## Control 420 T (standard)

Protected control housing, protection category IP 65, connecting voltage 400 V or 230 V/50 Hz or 60 Hz. Membrane push buttons integrated in housing for separate actuation of the dock leveller and telescopic lip with press-and-hold actuation and "Auto" button for automatic return to home position. Emergency-off switch (all-pole switch-off), restart inhibition.

## Special equipment

Ordering length	Anti-slip coating <sup>1)</sup> (class R11)			Acoustic insulation <sup>1)</sup>			Note the possible longer delivery time!		
	Approx. 1–2 mm thick, on running plate of dock leveller platform and lip			Approx. 3–4 mm thick, on running plate of dock leveller platform, approx. 1–2 mm thick, on running plate of lip			Required for galvanized version	Pre-treatment	
	1	2–10	> 10	No. of dock levellers	1	2–10	> 10	1	2–10
3000	1489	1549	1663	2117	2209	2368	667	406	374
2750	1376	1432	1538	1958	2040	2188	667	406	374
2500	1266	1317	1409	1795	1872	2004	667	406	374
2000	1035	1079	1154	1475	1533	1644	667	406	374
Ordering width	2000	2100	2250	2000	2100	2250			

1) Pre-treatment required for galvanized version. Not available for side elements and pedestal add-ons for angled arrangement.

## Special equipment

Ordering length	Thermal insulation			Gap sealing			Note the possible longer delivery time!		
	At least 30 mm thick, under the dock leveller and side elements			Gap sealing			RAL to choose		
	<b>Note:</b> Gap sealing recommended! Insulation of the platform in the front area (lip length + 650 mm) not possible for technical reasons.								
3000	828			230			Surface coating in RAL to choose, see page 17.		
2750	753			222					
2500	685			216					
2000 <sup>2)</sup>	540			216					

2) Thermal insulation for telescopic lip 1000 possible from ordering length 2500.

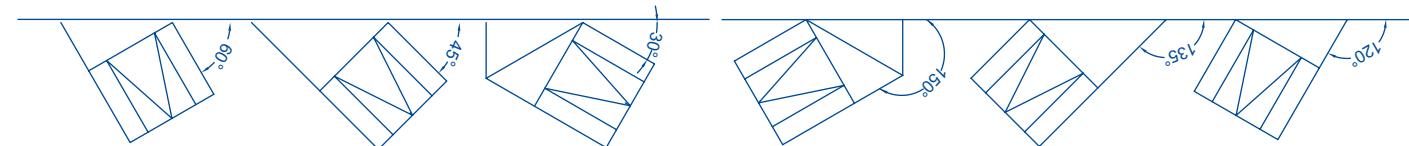
## Pedestal add-ons for angled arrangement, galvanized surface (include drawing with order!)

Attention:

When ordering, make sure that a 7.5 m connection cable is long enough. Otherwise order a 12 m cable separately!

Anti-slip coating or acoustic insulation for pedestal add-ons not possible for technical reasons.

	Galvanized	Thermal insulation
30 / 150° arrangement	9269	Min. 30 mm thick, below pedestal add-ons
45 / 135° arrangement	6711	660
60 / 120° arrangement	4949	572



Other versions and special equipment on request.

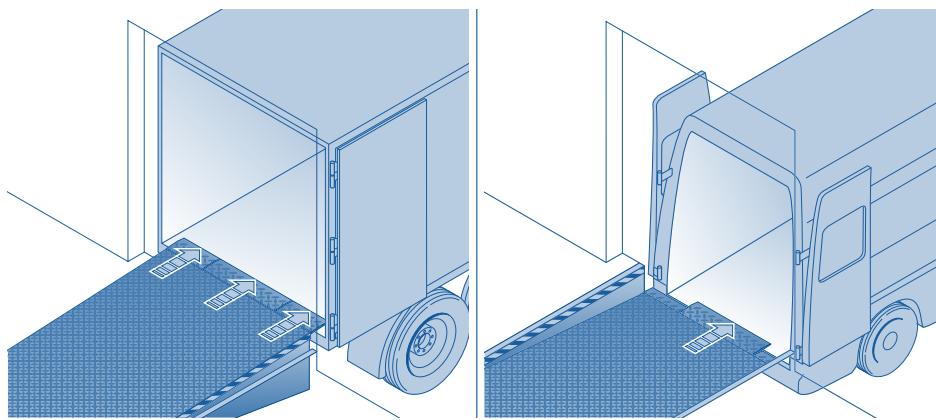
## Optional extras and special versions

See page 16

## Controls and control accessories

See from page 18

# Telescopic lip dock leveller HTLV 4



Hydraulic dock leveller, with 3-part telescopic lip and weight compensation for either loading or unloading of lorries and transit vans

Self-supporting steel joint design, in accordance with EN 1398, also for fitting behind the door

## Rated load acc. to EN 1398

20 kN in transit van operating mode, 60 kN in lorry operating mode.

The following load limitation is recommended in order to avoid lane grooves with hard (PU/Vulkollan) wheels: for reach lift trucks: 40 kN.

## Gradient / tilt

Up to 12.5% (approx. 7°) acc. to EN 1398, see the sales documents for the working range.

## Construction

Torsionally flexible dock leveller construction with 2-cylinder technology, platform made of moulded, anti-slip steel, 8/10 mm thick, with telescopic lip made of moulded, anti-slip steel

## HTLV 4

**Attention: The dimensions are not fitting dimensions. Note the fitting drawings for ordering!**

Ordering length	= Exterior length	Installation height	Pit model <b>P</b> <sup>1)</sup> Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
			23478	24561	25542	3401	3526	3702
4500		895	<b>23478</b>	<b>24561</b>	<b>25542</b>	<b>3401</b>	<b>3526</b>	<b>3702</b>
4000		895	<b>22600</b>	<b>23613</b>	<b>24558</b>	<b>2897</b>	<b>3147</b>	<b>3305</b>
3500		795	<b>21719</b>	<b>22666</b>	<b>23573</b>	<b>2707</b>	<b>2834</b>	<b>2975</b>
3000		795	<b>20703</b>	<b>21787</b>	<b>22658</b>	<b>2330</b>	<b>2455</b>	<b>2578</b>
<b>Ordering width</b>		→	2000	2100	2250	2000	2100	2250
Dock leveller exterior width		→	2020	2120	2270			
Width of centre module of telescopic lip		→	1090	1190	1190			

### 1) If renovating, indicate the available pit dimensions. Adjustments may be necessary (surcharge)

**Attention:** In the size range shaded in blue, pit model P requires on-site support at the cylinder support points!

Ordering length	Exterior length	Installation height	Frame model <b>FR</b> <sup>2)</sup> Coated in RAL 9017			Surcharge for galvanized version (note the longer delivery time)		
			24008	25169	26177	3652	3777	3966
4500	4570	895	<b>24008</b>	<b>25169</b>	<b>26177</b>	<b>3652</b>	<b>3777</b>	<b>3966</b>
4000	4070	895	<b>23139</b>	<b>24155</b>	<b>25122</b>	<b>3211</b>	<b>3337</b>	<b>3503</b>
3500	3570	795	<b>22193</b>	<b>23139</b>	<b>24066</b>	<b>2834</b>	<b>2960</b>	<b>3108</b>
3000	3070	795	<b>21110</b>	<b>22193</b>	<b>23081</b>	<b>2393</b>	<b>2518</b>	<b>2644</b>
<b>Ordering width</b>		→	2000	2100	2250	2000	2100	2250
Dock leveller exterior width		→	2160	2260	2410			
Width of centre module of telescopic lip		→	1090	1190	1190			

### 2) Attention: Indicate casting height!

Standard casting height FR: 100 mm, max. 250 mm

Fitting variants			€
<b>Frame model F:</b> Hang in preassembled frame and weld all round, version identical to model FR, but without anchors, preassembled frame provided on-site or must be ordered separately, see page 16.			Same price as frame model FR
<b>Box model B:</b> Cast in during ramp construction using on-site formwork and base construction, version identical to model FR, but frame is closed on 3 sides, with additional reinforcement profiles on the sides, delivered with protective film			Surcharge on frame model FR

Steel, 15/17 mm thick, 500 mm long, optionally 1000 mm, with slope, 3-part, side modules up to 500 mm less extended than centre module in transit van operating mode, adjustable offset. Note: 1000 mm telescopic lip required for transit vans if the vehicle doors cannot be opened 270°.

#### Fitting

##### Pit model P

Fitting by welding, dock leveller equipped with 30 mm thick flat steel on rear, support profile is required on site from 3500 mm length.

##### Frame model FR

Fitting by casting, laterally closed base frame with 3-sided all-round edge bracket, fitted with ventilation holes as well as anchors for setting in concrete, with adjustment angles to screw for adjusting to the casting height, model suitable for in-line fitting with prefabricated concrete components as long as the casting height does not exceed 250 mm, use of protective film (optional) recommended.

Further fitting variants (e.g. F, B model) optionally available

#### Surfaces

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017; RAL to choose or galvanized on request

#### Temperature range

Standard version suited for temperature range (under the dock leveller) of approx. -25°C to +50°C

#### Anti-slip

Platform and lip made of anti-slip running plate, anti-slip coating class R11 acc. to DIN 51130 on request, approx. 1–2 mm thick, made of polyurethane with injected Twaron fibres, black surface finish, available for dock leveller in RAL 9017 (black)

#### Acoustic insulation

Identical to anti-slip coating, but approx. 3–4 mm thick on the platform

#### Operator

Motor power with a rated load of 60 kN, 1.5 kW, connecting voltage 400 V/50 Hz, other frequencies on request, protection category IP 54. Connection cable at least 12 m long

#### Control

Protected control housing, protection category IP 65, connecting voltage 400 V/50 Hz or 60 Hz, buttons integrated in housing for separate actuation of the dock leveller and telescopic lip with press-and-hold actuation and "Auto" button for automatic return to home position, switch for toggling between lorry and transit van operating modes, emergency-off switch (all-pole switch-off), restart inhibition

### Telescopic lip versions

	<b>Type R</b> , side segments straight on outside, up to 2000 mm wide as standard with no surcharge	161
	<b>Type S</b> , side segments chamfered on outside by 100 mm on each side, over 2000 mm width as standard with no surcharge	161
<b>Telescopic lip 1000 mm</b>	– Coated in RAL 9017	1271
	– Galvanized	1637
	– Additional surcharge for anti-slip coating/acoustic insulation	384

### Special equipment, optional extras

Note the possible longer delivery time!

Ordering length	Anti-slip coating <sup>1)</sup> (Class R11)			Acoustic insulation <sup>1)</sup> Approx. 3–4 mm thick, on running plate of platform and lip			Gap sealing	Pre-treatment		
								Required for galvanized version	No. of dock levellers	
	1	2–10	> 10							
4500	2158	2261	2421	3079	3218	3448	285	750	489	458
4000	1936	2020	2164	2756	2882	3090	258	750	489	458
3500	1711	1788	1915	2436	2546	2730	241	667	406	375
3000	1489	1549	1663	2117	2209	2368	230	667	406	375
<b>Ordering width</b>	2000	2100	2250	2000	2100	2250				

1) Pre-treatment required for galvanized version.

### Surface coating in RAL to choose

See page 17

### Further optional extras

See page 16

**Thermal insulation not available!**

# Further optional extras and special versions

		HLS	HLS 2	HRS	HTL 2	HTL 2 ISO	HRT	HTLV 4
<b>Electro-hydraulic unit</b>								
Hydraulic system for temperatures below the dock leveller up to $-25^{\circ}\text{C}$ . Adjustment using special oil for a larger temperature range, as standard and with no surcharge for HTLV 4	Per dock leveller	51	•	•	•	•	•	•
Operator with 230 V 1-phase current motor 50 / 60 Hz, up to 1.1 kW	For hinged lip dock levellers up to 60 kN	485	•	•	•			
	For telescopic lip dock levellers up to 90 kN	485			•	•	•	
Operator with 230 V 3-phase current motor 50 / 60 Hz, up to 1.1 kW	For hinged lip dock levellers up to 60 kN	No surcharge	•	•	•			
	For telescopic lip dock levellers up to 90 kN	No surcharge			•	•	•	
Other operator voltages and frequencies (a transformer may be required)	On request							
Drip pan for hydraulic oil, retractable, dock leveller is prepared accordingly (included in the price).		252	•		•			
<b>Reinforced platform</b>								
Running plate 8 / 10 instead of 6 / 8, e.g. for the use of forklifts with PU / Vulkollan tyres, such as reach lift trucks, etc. (for HRS only on dock leveller platform), not required for pedestal add-ons due to design reasons	Per m <sup>2</sup>	104	•	•	•			
<b>Further optional extras</b>								
<b>Preassembled frame for dock levellers</b> (frame model), 3-part (separate), made of steel profiles, galvanized, for casting in concrete, including anchor, suitable for dock levellers up to 90 kN	Per m (2 x length + 1 x width)	127		•		•	•	•
<b>Platform provided with protective film</b>								
Standard and at no surcharge with	Per dock leveller	96	•	•	•	•	•	•
– All box models								
– As well as all models with anti-slip coating or acoustic insulation.								
<b>Controls and control accessories</b>								
See page 18								
<b>Dock leveller with RFID technology</b>								
Dock leveller equipment with 3 antennas and slots in the platform, running plate 8 / 10 required.								3359
Max. rated load 60 kN. Please inquire for higher rated loads (up to max. 90 kN).								
Unavailable:								
- HTL 2 / HRT with nominal length < 2500 mm and 1000 mm telescopic lip								
- HTL 2 with nominal length < 2750 mm and 1200 mm telescopic lip								
- Thermal insulation in the antenna area.								
Equipment and price are non-binding. Delivery only on a project basis with testing at the customer's premises.								
<b>Lift leveller HLL</b>								
Combination of hydraulic scissors lift table and telescopic lip dock leveller								On request

# Surface coating

## RAL to choose

### RAL to choose

#### Notes:

- Not available in combination with anti-slip coating or acoustic insulation!
- The following metal and signal colours are not available:  
RAL 1026 Luminous yellow, RAL 2005 Luminous orange  
RAL 2007 Luminous bright orange, RAL 3024 Luminous red,  
RAL 3026 Luminous bright red, RAL 9006 White aluminium,  
RAL 9007 Grey aluminium
- The RAL colours of group 2 require additional primer coating.

#### Surcharge per dock leveller:

Group 1		
No. of dock levellers		
1	2–10	>10
1444	522	389
1416	494	362
1386	462	332
1358	429	301
1327	400	272
1315	387	257
1296	373	241
1267	339	215

#### All ordering lengths

Ordering length
5000
4500
4000
3500
3000
2750
2500
2000

#### RAL 5002 Ultramarine blue

No. of dock levellers		
1	2–10	> 10
30	30	30

#### Group 2

No. of dock levellers		
1	2–10	> 10
1855	926	799
1795	868	739
1732	809	679
1675	747	616
1614	687	558
1582	654	528
1551	623	497
1489	562	433

#### Group 1:

All available RAL colours with the exception of the RAL colours of group 2.

#### Group 2:

RAL 1000	Green beige	RAL 1033	Dahlia yellow
RAL 1001	Beige	RAL 1034	Pastel yellow
RAL 1002	Sand yellow	RAL 2000	Yellow orange
RAL 1003	Signal yellow	RAL 3015	Light pink
RAL 1004	Golden yellow	RAL 6019	White green
RAL 1005	Honey yellow	RAL 6021	Pale green
RAL 1006	Maize yellow	RAL 6027	Light green
RAL 1007	Daffodil yellow	RAL 6034	Pastel turquoise
RAL 1012	Lemon yellow	RAL 7032	Pebble grey
RAL 1013	Oyster white	RAL 7035	Light grey
RAL 1014	Ivory	RAL 7038	Agate grey
RAL 1015	Light ivory	RAL 7044	Silk grey
RAL 1016	Sulfur yellow	RAL 7047	Telegrey 4
RAL 1017	Saffron yellow	RAL 9001	Cream
RAL 1018	Zinc yellow	RAL 9002	Grey white
RAL 1021	Rape yellow	RAL 9003	Signal white
RAL 1023	Traffic yellow	RAL 9010	Pure white
RAL 1028	Melon yellow	RAL 9016	Traffic white
RAL 1032	Broom yellow	RAL 9018	Papyrus white

# Basic controls 420 S and 420 T

**-Included in the basic price of the dock leveller as standard-**

## Control

- Control in a separate housing
- Emergency-off switch (all-pole switch-off)
- Protection category IP 65 (jet-water protected)
- Red / green LED as an operation indicator
- Restart inhibition
- Housing size (W x H x D)  
approx. 200 x 160 x 130 mm

## Operation

### Control 420 S for hinged lip dock levellers

- Membrane push buttons integrated in housing for actuation via press-and-hold actuation and an "Auto" button for automatic return to home position

### Control 420 T for telescopic lip dock levellers

- Membrane push buttons integrated in the housing for separate actuation of dock leveller and telescopic lip with press-and-hold actuation and "Auto" button for automatic return to home position

## Function

- Prepared for dock leveller release function
- Energy-saving function\*
- Automatic return of the dock leveller to the home position

### 420 S

- Automatic hinged lip movement

### 420 T

- Direction-bound extension and retraction of the telescopic lip

\* Adjustable if maximum load of 60 kN is not exceeded in home position (even for dock levellers with higher rated load).

Control	Version	Article no.	Surcharge
<b>Control 420 S</b> 400 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 1-phase current	In housing with main switch and 2 membrane push buttons	–	–
<b>Control 420 T</b> 400 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 1-phase current	In housing with main switch and 4 membrane push buttons	–	–

## Optional extras for controls 420 S and 420 T

Prices are only in conjunction with a dock leveller order.

### Dock leveller release function

Dock leveller can only be operated when the door is open. Door position must be queried.

- Magnet switch for fitting to the sectional door boom
- Magnet switch for fitting to the rolling shutter side guide
- Position switch with roller for fitting to the door locking (only possible for manually operated door)
- Limit switch reporting of the operator control (only possible for power-operated door) via
  - Option relay HOR1-300
  - Travel limit circuit board article no. 637028 or for connection of an LED docklight to travel limit circuit board article no. 637052
  - Multi-function circuit board article no. 637026.

Take into account when ordering the operator control.

### Door release function

Door only closes when the dock leveller is in home position. Dock leveller position must be queried.

- Activating kit for door release (connected to the operator control), incl. proximity switch DR (fitting to the dock leveller). PR 1, article no. 637614, required.
- Relay circuit board PR 1 with hat rail for the door release function

### Article no.

### €

192

637614

45

On request

### Control accessories

See page 21

# Combination controls 420 Si and 420 Ti

**- Dock leveller control with integrated door operation for operator WA 300 S4 or WA 300 R S4 -**

Control	Operation	Function
<ul style="list-style-type: none"> <li>Control in a separate housing</li> <li>Emergency-off switch (all-pole switch-off)</li> <li>Protection category IP 65 (jet-water protected)</li> <li>Red / green LED as an operation indicator</li> <li>Restart inhibition</li> <li>Housing size (W x H x D) approx. 200 x 330 x 130 mm</li> </ul>	<p><b>Control 420 Si for hinged lip dock levellers</b></p> <ul style="list-style-type: none"> <li>Membrane push buttons integrated in housing for actuation via press-and-hold actuation and an "Auto" button for automatic return to home position</li> <li>Membrane push buttons integrated in the housing for door operation</li> </ul> <p><b>Control 420 Ti for telescopic lip dock levellers</b></p> <ul style="list-style-type: none"> <li>Membrane push buttons integrated in the housing for separate actuation of dock leveller and telescopic lip with press-and-hold actuation and "Auto" button for automatic return to home position</li> <li>Membrane push buttons integrated in the housing for door operation</li> </ul>	<ul style="list-style-type: none"> <li>Prepared for dock leveller release function</li> <li>Energy-saving function*</li> <li>Automatic return of the dock leveller to the home position</li> <li>Door opening with impulse</li> <li>Door closing with impulse</li> </ul> <p><b>420 Si</b></p> <ul style="list-style-type: none"> <li>Automatic hinged lip movement</li> </ul> <p><b>420 Ti</b></p> <ul style="list-style-type: none"> <li>Direction-bound extension and retraction of the telescopic lip</li> </ul> <p>* Adjustable if maximum load of 60 kN is not exceeded in home position (even for dock levellers with higher rated load).</p>

Control	Version	Article no.	Surcharge
<b>Control 420 Si</b> 400 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 1-phase current	In housing with main switch and 5 membrane push buttons		<b>65</b>
<b>Control 420 Ti</b> 400 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 3-phase current 230 V / 50 Hz or 60 Hz 1-phase current	In housing with main switch and 7 membrane push buttons		<b>65</b>

## Optional extras for controls 420 Si and 420 Ti

Prices are only in conjunction with a dock leveller order.

Dock leveller release function	Article no.	€
Dock leveller can only be operated when the door is open. Door position must be queried.		
• Option relay HOR1-300 for integrated locking, with 10 m system cable		<b>68</b>
• Magnet switch for fitting to the sectional door boom	436339	<b>73</b>
• Magnet switch for fitting to the rolling shutter side guide	637743	<b>63</b>
Door release function	Article no.	€
Door only closes when the dock leveller is in home position. Dock leveller position must be queried.		
• Activating kit for door release (connected to the operator control), incl. proximity switch DR (fitting to the dock leveller). PR 1, article no. 637614, required.		<b>192</b>
• Relay circuit board PR 1 with hat rail for the door release function	637614	<b>45</b>
Special solutions and controls	On request	

Control accessories	See page 21
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# Multi-controls 460 S and 460 T

## Control

- Micro-processor control in separate housing
- Emergency-off switch (all-pole switch-off).
- Protection category IP 65 (jet-water protected)
- Restart inhibition
- Housing size (W x H x D)  
approx. 200 x 330 x 130 mm

## Operation

### Control 460 S for hinged lip dock levellers

- Membrane push buttons integrated in housing for dock leveller actuation via press-and-hold actuation, for actuation of the inflatable dock seal and / or roll-up flap and "Auto" button for automatic return to home position.

### Control 460 T for telescopic lip dock levellers

- Membrane push buttons integrated in housing for separate actuation of the dock leveller and telescopic lip with press-and-hold actuation, for actuation of the inflatable dock seal and / or roll-up flap and "Auto" button for automatic return to the home position

## Function

- Prepared for dock leveller release and door release function. Sensor fitted in the dock leveller at the factory and included in the control price.
- Integrated control of inflatable dock seal and / or roll-down top flap. Additional print required for roll-up flap function (see below)

- Automatic return of the dock leveller to the home position. Sensor fitted in the dock leveller at the factory and included in the control price.
- Semi-operation: Sequence control for automatic actuation of the door, dock leveller and inflatable dock seal or roll-up flap. Additional print required! (See below)
- Energy-saving function\*

### 460 S

- Automatic hinged lip movement

### 460 T

- Direction-bound extension and retraction of the telescopic lip

\* Adjustable if maximum load of 60 kN is not exceeded in home position (even for dock levellers with higher rated load).

Control	Version	Article no.	Surcharge
<b>Control 460 S</b> 400 V/50 Hz or 60 Hz 3-phase current 230 V/50 Hz or 60 Hz 3-phase current 230 V/50 Hz or 60 Hz 1-phase current	In housing with main switch and 3 membrane push buttons		<b>526</b>
<b>Control 460 T</b> 400 V/50 Hz or 60 Hz 3-phase current 230 V/50 Hz or 60 Hz 3-phase current 230 V/50 Hz or 60 Hz 1-phase current	In housing with main switch and 5 membrane push buttons		<b>526</b>

## Optional extras for controls 460 S and 460 T

Prices are only in conjunction with a dock leveller order.

### Dock leveller release function

Dock leveller can only be operated when the door is open. Door position must be queried.

- Magnet switch for fitting to the sectional door boom
- Magnet switch for fitting to the rolling shutter side guide
- Position switch with roller for fitting to the door locking (only possible for manually operated door)
- Limit switch reporting of the operator control (only possible for power-operated door) via
  - Option relay HOR1-300
  - Travel limit circuit board article no. 637028 or for connection of an LED docklight to travel limit circuit board article no. 637052
  - Multi-function circuit board article no. 637026.

Take into account when ordering the operator control.

### Door release function

Door only closes when the dock leveller is in home position. Dock leveller position must be queried.

Proximity switch DR, already fitted in the dock leveller

### Roll-up flap function (not required for rolling flap RCP)

Lower in press-and-hold operation, raise with impulse. If available, combined operation of the roll-up flap and inflatable dock seal via a membrane push button.

Travel limit circuit board with 2 relays and fuse. Only 1 additional print required in conjunction with semi-operation

### Article no.

### €

436339

**73**

637743

**63**

**92**

### Semi-operation function

Door opens automatically if the roll-up flap is down or the dock seal has been inflated. Door closes automatically, dock seal stops and/or flap rolls up when the dock leveller is returned to the home position. Door limit switch reporting (Open + Closed) required. Not recommended in conjunction with the DOBO system as automatic door closing not possible!

Multi-function circuit board with 2 relays. Required if there are no warning lights (otherwise use a travel limit circuit board).

### Article no.

### €

637026

**107**

Travel limit circuit board with 2 relays and fuse. Required in conjunction with warning lights (otherwise use a multi-function circuit board).

637052

**76**

### Connection of further accessories

Activating kit for wheel chock, photocell, driver registration, etc.

### Article no.

### €

637257

**101**

### Special solutions and controls

On request

### Control accessories

See page 21

# Control accessories

<b>Warning light sets / alarm horn for control 460 S/T</b>		<b>Article no.</b>	<b>€</b>
	1 warning light set with 1 red LED light, for inside or outside, 230 V LED, Ø 170 mm, incl. traffic control circuit board and semi-housing	637645	<b>261</b>
	1 warning light set with 1 red/green LED light, for inside or outside, 230 V LED, Ø 170 mm, incl. traffic control circuit board and semi-housing	637646	<b>329</b>
	2 red/green warning lights, for inside and outside, 230 V LED, Ø 170 mm, incl. traffic control circuit board in semi-housing	637532	<b>621</b>
<b>Post</b> Key switch post STI 1 without control, to hold max. 2 controls and an extension housing		<b>Article no.</b>	<b>€</b>
		437083	<b>252</b>
<b>Dock leveller control</b> External control in Signal yellow, RAL 1003, for dock levellers in loading house, with 15 m connection cable for permanent wiring, required if dock leveller is not completely visible from the control housing		<b>Article no.</b>	<b>€</b>
	DTH-T for telescopic lip dock levellers	637893	<b>258</b>
	DTH-S for hinged lip dock levellers	637894	<b>250</b>
<b>Door operation</b> Push button control 300 U for the operation of Hörmann industrial doors ► See the corresponding Hörmann industrial door price list		<b>Article no.</b>	<b>€</b>
Push button control 400 U for the operation of doors of other makes, in a semi-housing, Open-Close-Stop button with volt-free contacts, power supply 24 V DC		637116	<b>On request</b>
<b>Transformer</b> Transformer (required if there is no neutral conductor available on site) Additional feed-in of 3 L without N for 400 V industrial door controls		637101	<b>On request</b>
<b>Housing heater</b> Housing heater for fitting in industrial controls		637422	<b>237</b>
<b>Additional accessories</b>			<b>On request</b>

# Pedestals

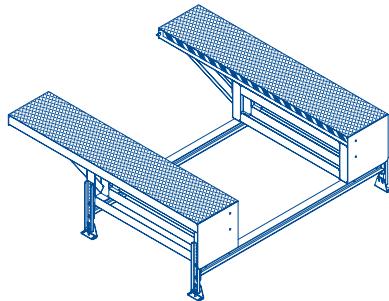
## Pedestals PS 2 and PT 2

- 3-part construction made of steel profiles with 2 transverse profiles certified acc. to EN 1090
- Platform made of moulded, anti-slip steel, 6/8 mm thick, galvanized
- Adjustable pedestal feet, galvanized
- Loading capacity up to 1000 kg/m<sup>2</sup> as standard (side elements not suitable for driving over)
- Delivery incl. (provisional) profile for positioning the pedestal and dock leveller.

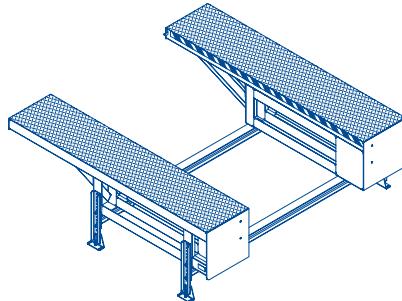
## Suitable for the following dock levellers:

- HLS 2 and HTL 2 from ordering length 3500 mm
  - As pit model P
  - with 30 mm thick flat steel on rear ("receiver plate detail")
  - With standard height
  - With a rated load of 60 kN, higher on request
- Up to and incl. 3000 mm ordering length and a rated load of 60 kN, we recommend the use of loading platforms HRS/HRT.

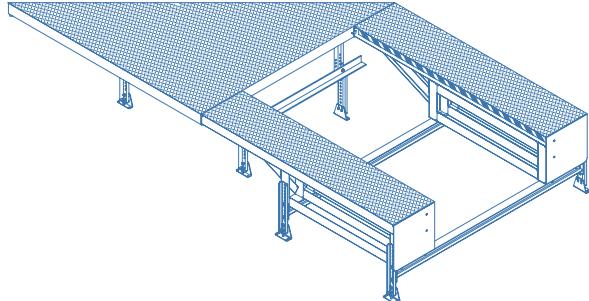
### Pedestal type PS 2 For dock leveller HLS 2



### Pedestal type PT 2 For dock leveller HTL 2



### Angled arrangement (here for HLS 2)



For dock leveller model "P" with "receiver plate detail" With ordering length	Exterior length / depth Dock leveller / pedestal	Ramp height <sup>1)</sup> Min. – max.	PS 2 for dock leveller HLS 2	PT 2 for dock leveller HTL 2	Thermal insulation min. 30 mm thick, below pedestal side elements		
			Standard width 3500 mm	Standard width 3500 mm	Dock leveller ordering width 2000 mm	2100 mm	2250 mm
5000	4985	1100 – 1600 <sup>2)</sup>	8182	8334	691	647	574
4500	4485	1100 – 1600 <sup>2)</sup>	7874	8029	622	580	518
4000	3985	1100 – 1600 <sup>2)</sup>	7563	7719	555	517	461
3500	3485	1100 – 1600 <sup>2)</sup>	6919	7074	486	452	404

1) Ramp height measured from the top edge of the platform (not top edge of the running plate) to the bottom edge of the base on the front side.

Note the required slope of 1% (for drainage) from the outer wall of the building!

Tailboard slot height for dock levellers up to 90 kN = ramp height –859 mm

2) Lower ramp height on request

### Special equipment

Pedestal pre-drilled for fitting of docking assistant DAP, DAS "Crash Protection Bar" support brackets, Light Guide LG, as well as fitting of the carrier's lorry securing belts

Per pedestal

31

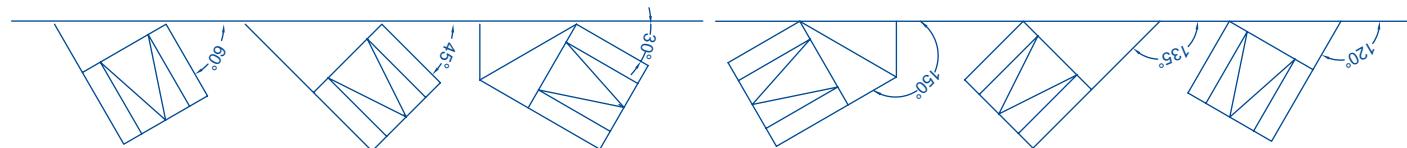
### Pedestal add-ons for angled arrangement, galvanized surface (include drawing with order!)

Attention:

When ordering, make sure that a 7.5 m connection cable is long enough. Otherwise order a 12 m cable separately!

Anti-slip coating or acoustic insulation for pedestal add-ons not possible for technical reasons.

	Surcharge	Thermal insulation Min. 30 mm thick, below pedestal add-ons
30 / 150° arrangement	9269	660
45 / 135° arrangement	6711	572
60 / 120° arrangement	4949	334



Other versions and special equipment on request.

## Notes and sketches

# Loading Houses

## Loading house (roof and side construction only)

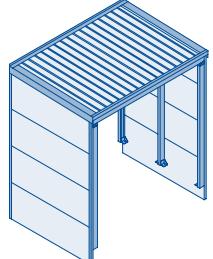
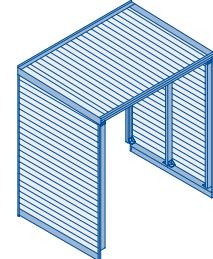
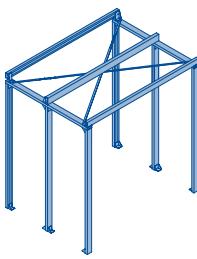
- Designed for HRS / HRT loading platforms as well as dock levellers in combination with pedestals PS 2 / PT 2. Important: The prices are valid for all stated combinations.
- Static calculation according to EN 1990
- Frame construction certified acc. to EN 1090
- Galvanized steel frame construction, delivered as separate parts, 1 roof panel must be cut on site!
- Roof with slope to the front to drain off rainwater
- Roof load bearing capacity
  - For type LHF 2 / LHC 2 max. 1 kN/m<sup>2</sup>
  - For type LHP 2 max. 3 kN/m<sup>2</sup>
  - For coupled LHP 2 / LCP 2 / LHF 2 1.75 kN/m<sup>2</sup>
- Max. wind load 0.65 kN/m<sup>2</sup>
- Cladding (type LHC 2 / LHP 2) complete with edge profile strips

- Cladding LHP 2 lined on inside and outside (profile LL)
- Surface primer-coated, as standard in Grey white, based on RAL 9002, exterior also available in White aluminium on request, based on RAL 9006 (same price)
- A fully equipped loading house consists of:
  - Roof and side construction
  - Loading platform (HRS / HRT) or pedestal and dock leveller
  - Dock seal / shelter
  - Buffers

## Notes:

- When ordering, please specify the subsurface for fitting or select suitable fixing material.
- Make sure that a perpendicular and flat wall connection is available.
- Loading houses require extensive consultation. Please contact us!
- Up to and incl. 3000 mm ordering length and a rated load of 60 kN, we recommend the use of loading platforms HRS / HRT.
- Loading houses can be combined with these dock seals:
  - DSL / DSS / DSSR, ordering width 3500 mm
  - DAS 3, ordering width 3600 mm
- Loading houses without gutter can also be combined with:
  - DSLR, ordering width 3500 mm
- Loading houses in recess version can be combined with:
  - DAS 3-L

## Loading houses without pedestal (only roof and side construction)



For loading platforms or dock levellers with ordering lengths	Exterior length	Arrange-ment	LHF 2 For on-site horizontal cladding (W x H) 3500 x 3600 mm Frame height 3600 mm	LHC 2 With single-skinned cladding (W x H) 3590 x 3645 mm Frame height 3600 mm	LHP 2 Cladding with sandwich panels, 60 mm thick (W x H) 3625 x 3680 mm Frame height 3600 mm
5000	4985	90°	<b>3536</b>	<b>7375</b>	<b>11758</b>
4500	4485	90°	<b>2906</b>	<b>6466</b>	<b>10662</b>
4000	3985	90°	<b>2875</b>	<b>6045</b>	<b>9768</b>
3500	3485	90°	<b>2845</b>	<b>5627</b>	<b>8645</b>
3000	2985	90°	<b>2149</b>	<b>4664</b>	<b>7299</b>
2750	2735	90°	<b>2133</b>	<b>4451</b>	<b>6853</b>
2500	2485	90°	<b>2120</b>	<b>4244</b>	<b>6285</b>
2000	1985	90°	<b>2087</b>	<b>3823</b>	<b>5402</b>

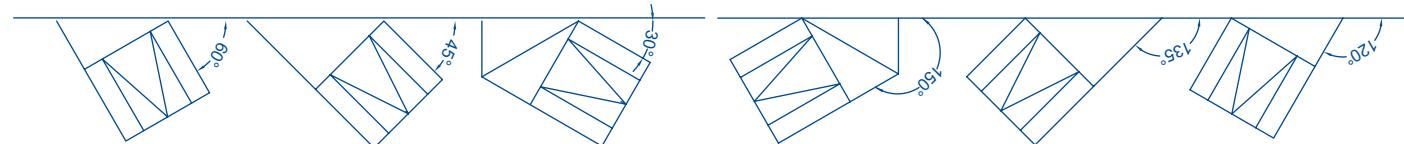
## Loading houses with special length in 5 mm grid

Exterior length	Arrange-ment			
Over 4985 up to 5235	90°	<b>3773</b>	<b>7918</b>	<b>12547</b>
Over 4670 up to 4985	90°	<b>3773</b>	<b>7850</b>	<b>12133</b>
Over 4485 up to 4670	90°	<b>3172</b>	<b>7008</b>	<b>11450</b>
Over 4235 up to 4485	90°	<b>3172</b>	<b>6937</b>	<b>11038</b>
Over 3985 up to 4235	90°	<b>3142</b>	<b>6586</b>	<b>10557</b>
Over 3735 up to 3985	90°	<b>3142</b>	<b>6517</b>	<b>10144</b>
Over 3485 up to 3735	90°	<b>3081</b>	<b>6169</b>	<b>9432</b>
Over 3170 up to 3485	90°	<b>3081</b>	<b>6100</b>	<b>9020</b>
Over 2985 up to 3170	90°	<b>2385</b>	<b>5203</b>	<b>8088</b>
Over 2735 up to 2985	90°	<b>2370</b>	<b>4993</b>	<b>7674</b>
Over 2485 up to 2735	90°	<b>2356</b>	<b>4786</b>	<b>7227</b>
Over 2235 up to 2485	90°	<b>2356</b>	<b>4714</b>	<b>6660</b>
Over 1985 up to 2235	90°	<b>2324</b>	<b>4364</b>	<b>6189</b>
1735 to 1985	90°	<b>2324</b>	<b>4295</b>	<b>5776</b>

#### Angled arrangement (include drawing with order!), delivered separately

	LHF 2 For on-site horizontal cladding (W×H) 3500×3600 mm Frame height 3600 mm	LHC 2 With single-skinned cladding (W×H) 3590×3645 mm Frame height 3600 mm	LHP 2 Cladding with sandwich panels, 60 mm thick (W×H) 3625×3680 mm Frame height 3600 mm
Arrangement	Surcharge on 90° arrangement		
30 / 150°	1704	4131	5645
45 / 135°	1111	2880	4264
60 / 120°	1047	2174	2979

Roof cladding must be sawed at an angle on-site.



**Higher roof load bearing capacity up to max. 4.5 kN/m<sup>2</sup> on request.**

Other versions and special equipment on request.

#### External control for dock levellers

See page 21

Required if the area of travel of the dock leveller, in particular the overlap of the lip on the lorry, is not easily visible, e.g. when the dock leveller control is fitted within the building.

#### Coupled loading house without pedestal

Only roof and side construction, roof cladding with sandwich panels, 90° arrangement only.

See HRS on page 6 or HRT on page 12 for coupling elements for the pedestal.

Calculation: basic price plus the price per loading point × number of loading sites

Indicate distance centre – centre of the dock leveller including panel thickness on order. Dimensional grid: 5 mm

Ordering length of loading platform or dock leveller	Basic price per row	Price per loading site	
		Max. roof load bearing capacity 3.00 kN/m <sup>2</sup>	Max. roof load bearing capacity 1.75 kN/m <sup>2</sup>
<b>LHF 2 – distance centre – centre of the dock leveller:</b>			
3000	477	2376	2682
2750	477	2352	2656
2500	477	2169	2475
2000	477	2141	2445
<b>LHC 2 – distance centre – centre of the dock leveller:</b>			
3000	3182	5280	5524
2750	3100	5048	5292
2500	3015	4675	4918
2000	2845	4227	4470
<b>LHP 2 – distance centre – centre of the dock leveller:</b>			
3000	3926	5432	5685
2750	3777	5196	5447
2500	3628	4810	5061
2000	3330	4350	4601

#### Higher roof load bearing capacity for coupled loading houses, distance centre to centre of dock leveller over 3600 mm

	Surcharge per loading site
3000	1679
2750	1679
2500	1679
2000	1679

#### Accessories and special versions for loading houses

See page 26

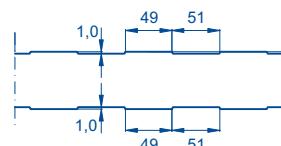
# Accessories and special versions for loading houses

Special versions and other optional extras		€
Gutter with drainpipe, on one side		Surcharge <b>607</b>
<b>Note:</b> If combined with a dock seal DAS 3, the frame of the loading house is 50 mm higher.		
Installation frame for doors in loading houses, only for Decotherm SB rolling shutter, ordering size:		Surcharge <b>442</b>
• 2880 x 2900 mm		Surcharge <b>442</b>
• 2880 x 3100 mm for DOBO version		
LHF 2 prepared for vertical cladding	Ordering length ≤ 3000 mm	Surcharge <b>285</b>
	Ordering length > 3000 mm ≤ 4500 mm	Surcharge <b>426</b>
	Ordering length > 4500 mm	Surcharge <b>564</b>
LHC 2 / LHP 2 side panelling up to the lower edge of the dock leveller, LHF 2 prepared for side cladding up to the lower edge of the dock leveller	For LHP 2 the bottom and top panel must be cut to size	Surcharge <b>On request</b>
LHF 2 with higher roof load bearing capacity up to a max. of 3 kN/m <sup>2</sup>	LHF 2 ordering length ≤ 3000 mm	Surcharge <b>218</b>
	LHF 2 ordering length > 3000 mm ≤ 4500 mm	Surcharge <b>391</b>
	LHF 2 ordering length > 4500 mm	Surcharge <b>745</b>
	Angled arrangement add-on parts surcharge on 90° version	<b>No surcharge</b>
LHC 2 with increased roof load bearing capacity, up to max. 3 kN/m <sup>2</sup> , roof cladding with sandwich panels	LHC 2 ordering length ≤ 3000 mm	Surcharge <b>1346</b>
	LHC 2 ordering length > 3000 mm ≤ 4500 mm	Surcharge <b>2177</b>
	LHC 2 ordering length > 4500 mm	Surcharge <b>2768</b>
	Angled arrangement add-on parts surcharge on 90° version	Surcharge <b>784</b>
Version with recess for fitting an inflatable dock seal DAS 3 L (3500 x 3500 x 850 mm), cladding 850 mm longer corresponding to the depth of the dock seal.	LHC 2	Surcharge <b>504</b>
	LHP 2	Surcharge <b>1129</b>
Bottom roof bracket with 150-mm-high upward canting		Per loading house <b>69</b>
Roof girder to relieve the facade for 90° arrangement (standard connection profile omitted)		Per loading house <b>87</b>
Roof panels with foam-free protrusion against ice formation, for loading house lengths from 2500 mm or in combination with dock seal DAS 3 L		Surcharge <b>53</b>
Preformed gasket for sealing between the loading house and the facade		<b>41</b>
Show protection		Per loading house <b>134</b>
Cover strip including facade putty (free of silicone and isocyanate)		Per loading house <b>115</b>

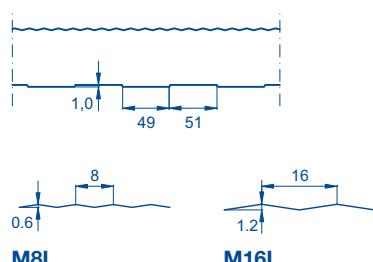
LHC 2 – roof interior in a version to prevent condensation (unnecessary in version with higher roof load bearing capacity)			LHC 2 / LHP 2 – alternative cladding Exterior in special colour and / or with special lining (see below)			
For loading platforms or dock levellers with ordering lengths	Arrangement	LHC 2 Surcharges	Surcharge per loading house			Number 1 2 – 10 > 10
			1	2 – 10	> 10	
5000	90°	<b>563</b>	<b>406</b>	<b>311</b>	<b>231</b>	
4500	90°	<b>506</b>	<b>389</b>	<b>291</b>	<b>214</b>	
4000	90°	<b>454</b>	<b>370</b>	<b>276</b>	<b>195</b>	
3500	90°	<b>400</b>	<b>351</b>	<b>255</b>	<b>175</b>	
3000	90°	<b>343</b>	<b>334</b>	<b>238</b>	<b>158</b>	
2750	90°	<b>319</b>	<b>325</b>	<b>229</b>	<b>150</b>	
2500	90°	<b>289</b>	<b>316</b>	<b>218</b>	<b>140</b>	
2000	90°	<b>233</b>	<b>297</b>	<b>200</b>	<b>123</b>	
Surcharge for version with 90°	30 / 150°	<b>240</b>	<b>131</b>	<b>131</b>	<b>131</b>	
	45 / 135°	<b>208</b>	<b>106</b>	<b>106</b>	<b>106</b>	
	60 / 120°	<b>126</b>	<b>67</b>	<b>67</b>	<b>67</b>	
For version with recess: Surcharge for recess area		<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	

## Special lining for sandwich panels LHP 2:

### LL (standard)



### M8L (exterior micro-profiled) M16L (exterior V-profiled)



## Special colours including edge profile strip coating for exterior LHC 2 and LHP 2:

RAL 1015 Light ivory	RAL 7032 Pebble grey
RAL 3000 Flame red	RAL 7035 Light grey
RAL 3009 Oxide red	RAL 8004 Copper brown
RAL 5003 Sapphire blue	RAL 8011 Nut brown
RAL 5009 Azure blue	RAL 8012 Red brown
RAL 5010 Gentian blue	RAL 9001 Cream
RAL 6005 Moss green	RAL 9002 Grey white (standard)
RAL 6009 Fir green	RAL 9005 Jet black
RAL 6011 Reseda green	RAL 9006 White aluminium (standard)
RAL 6020 Chrome green	RAL 9007 Grey aluminium
RAL 7000 Squirrel grey	RAL 9010 Pure white
RAL 7005 Mouse grey	
RAL 7012 Basalt grey	
RAL 7016 Anthracite grey	

# Mechanical dock leveller MLS / mechanical loading platform MRS

Self-supporting steel articulated design in accordance with EN 1398.

**Rated load acc. to EN 1398:**

**Up to 1500 mm width 45 kN,**

**From 1750 mm width 60 kN**

The following load limitation is recommended in order to avoid lane grooves with hard (PU / Vulkollan) wheels: for electric industrial trucks with tandem rollers: 50 kN (only applicable for nominal load of 60 kN), for reach lift trucks: 30 kN.

**Gradient / tilt**

Up to 12.5% (approx. 7°) in acc. with EN 1398, working range +68/-106 mm

**Construction**

Platform and hinged lip made of moulded, anti-slip steel, platform 6/8 mm thick (S 235), hinged lip 12/14 mm thick (S 355 JO), 405 mm long, with slope, with open, self-cleaning lip hinge. Loading platform MRS with 2 galvanized steel support brackets to hold buffers. Operation via a control bar with chain, counterbalance via gas spring.

**Fitting**

Dock leveller MLS

Fitting by welding in a prepared pit.

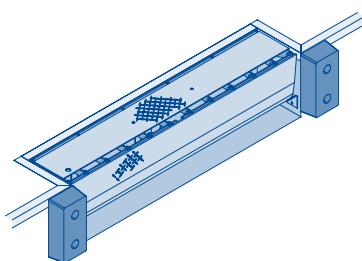
Loading platform MRS

Fitting by welding in front of the loading platform.

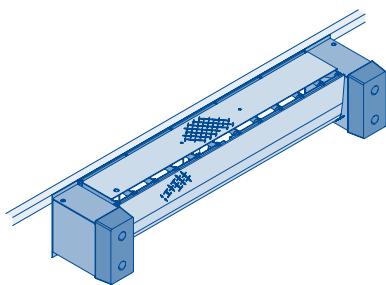
**Surfaces**

Steel surfaces blasted, 2C PU-coated (layer thickness 60–80 µm) in Traffic black, RAL 9017 or on request in Ultramarine blue, RAL 5002 (same price) or RAL to choose (for a surcharge).

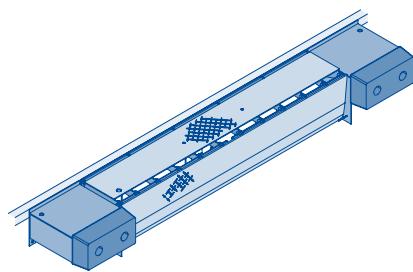
**Mechanical dock leveller type MLS**



**Mechanical loading platform type MRS V with vertical support brackets**



**Mechanical loading platform type MRS H with horizontal support brackets**



**Attention: prices without buffers. The dimensions are not fitting dimensions. Note the fitting drawings!**

	Dock leveller exterior length	Coated in RAL 9017						Surcharge for galvanized version			
		2010	2220	2234	2281	2430	229	243	257	307	348
<b>MLS</b>	435	2010	2220	2234	2281	2430	229	243	257	307	348
<b>MLS B</b>	435	2328	2470	2662	2713	2862	351	368	387	461	532
<b>MRS V *</b>	435	2647	2839	2871	2919	3062	370	382	402	452	499
<b>MRS H *</b>	435	2803	2874	2909	2959	3102	376	389	408	458	504
Ordering width (without support brackets)	1250	1500	1750	2000	2250	1250	1500	1750	2000	2250	

\* Support brackets galvanized as standard, minimum dock seal depth 900 mm

**Special equipment**

	Anti-slip coating <sup>1)</sup> Class R11					Acoustic insulation <sup>1)</sup>					Pre-treatment		
											Required for galvanized version	Number of dock levellers / loading platforms	
	1	2–10	> 10										
<b>MLS / MRS</b>	775	789	810	834	862	891	909	932	977	1018	476	216	184
Ordering width (without support brackets)	1250	1500	1750	2000	2250	1250	1500	1750	2000	2250			

1) Possible for dock leveller in RAL 9017 (black), pre-treatment required with galvanized version.

**Coating**

RAL 5002 Ultramarine blue	Surcharge	30
RAL to choose, colours of group 1 (see page 17)	Surcharge	115
RAL to choose, colours of group 2 (see page 17)	Surcharge	170

**Buffers**

		Dimensions (W x H x D) in mm		
DB 15	Rubber buffers, without fixing material	250 x 500 x 100	Each	221
DB 15 PU	PU buffers, without fixing material	250 x 500 x 100	Each	449
SB 15	Steel buffer, galvanized, fully damped (not possible for MRS H), without fixing material	277 x 518 x 112	Each	468
Fitting set for 1 buffer	DB 15 (PU) / SB 15	Directly on concrete	Per set	29
	DB 15 (PU)	To steel bracket	Per set	9
	SB 15	To steel bracket	Per set	14

**Further optional extras**

**On request**

# Flap dock shelters

## Frame construction

- 3-sided front and rear frame made of galvanized steel profiles
- Flexible frame connection thanks to link arms or scissors arms made of galvanized steel profiles
  - Link arms: marking "L"
  - Scissors arms: marking "S", delivery preassembled on front and rear frame
- The side and top flaps, as well as the side and top cladding are fixed with weather strip rails made of anodised aluminium

## Top part

- Angled top part: no marking, drainage via slope 100 mm
- Straight top part: marking "R", side drainage via water drainage channel

## Top and side flaps

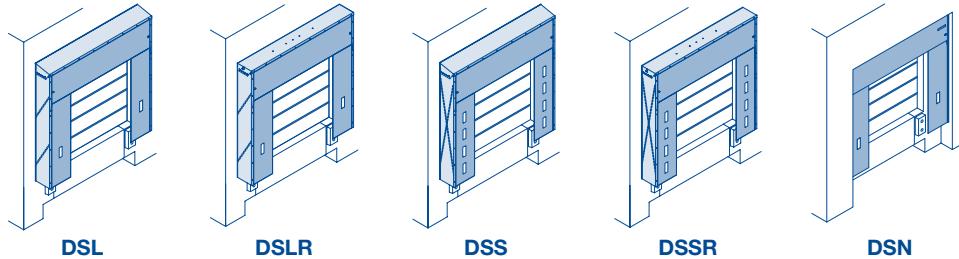
- Delivered separately, scissors arm constructions preassembled for a surcharge
- 2-layer elastic backing fabric made of polyester, approx. 3 mm thick, coated with plastic on both sides, in Graphite black, based on RAL 9011
- For a surcharge in
  - Basalt grey, based on RAL 7012
  - Gentian blue, based on RAL 5010
- Side flaps with transversal strength thanks to monofilament thread insert
- Top flap reinforced with multifilament thread insert
- Side flaps with marker stripes in white, yellow, orange or red.

## Side and top cladding with weather strip profile

- Single-layer backing fabric made of polyester fibres, coated with plastic on both sides, black
- In the colour of the top and side flaps for a surcharge.

## Models

- Dock models: no marking, for loading platforms
- Roadway models: marking "G", for hall openings without loading platforms
- Recess versions: marking "N", for fitting in recesses or loading houses, without link arm or scissors arm construction
- For combination with loading houses: ordering width 3500 mm required, DSLR cannot be combined with loading house with gutter.



## Dock models

Type	DSL		DSLR***		DSS		DSSR		DSN (recess fitting)	
Ordering width	Ordering height	€	€	Ordering height	€	€	Ordering height	€	Ordering height	€
2800	2800	<b>1665</b>	<b>1767</b>	2800	–	–	2800	–	2800	–
3000	3000	<b>1665</b>	<b>1767</b>	3000	–	–	3000	–	3000	–
2800	3000	<b>1665</b>	<b>1767</b>	3000	–	–	3000	–	3000	–
3000	2800	<b>1665</b>	<b>1767</b>	2800	–	–	2800	–	2800	–
3350	3500	<b>1842</b>	<b>1943</b>	3500	<b>2767</b>	<b>2865</b>	3500	<b>1259</b>	3500	<b>1259</b>
3500	3500	<b>1842</b>	<b>1943</b>	3500	<b>2767</b>	<b>2865</b>	3500	<b>1259</b>	3500	<b>1259</b>
3350	3750	<b>1975</b>	<b>2076</b>	3750	<b>2891</b>	<b>2993</b>	3750	<b>1300</b>	3750	<b>1300</b>
3500	3750	<b>1975</b>	<b>2076</b>	3750	<b>2891</b>	<b>2993</b>	3750	<b>1300</b>	3750	<b>1300</b>

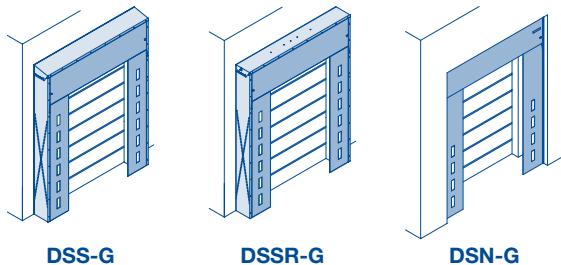
## Special sizes

Price basis for ordering height	Up to 3000	<b>1666</b>	<b>1767</b>	Up to 3750*	<b>2767</b>	<b>2865</b>	Up to 3750*	<b>1259</b>
	Up to 3750*	<b>1842</b>	<b>1943</b>					
Plus surcharge for special width		<b>230</b>	<b>230</b>		<b>230</b>	<b>230</b>		<b>230</b>
Plus surcharge for special height	Min. height 2600**	<b>230</b>	<b>230</b>	Min. height 3200	<b>230</b>	<b>230</b>	Min. height 2600	<b>230</b>
Number of marker stripes per side	1			4			1	
Width of side flap	600 / 700			600 / 700			600 / 700	

\* For higher dock shelters in special sizes, see roadway models

\*\* For depth 900 mm min. 3500 mm

\*\*\* Not suitable for fitting under a canopy and in loading houses



Roadway models							
Type		DSS-G	DSSR-G	DSN-G (recess fitting)			
Ordering width	Ordering height	€	€	Ordering height	€		
3350	4500	<b>3347</b>	<b>3448</b>	4500	<b>1532</b>		
3500	4500	<b>3347</b>	<b>3448</b>	4500	<b>1532</b>		
Special sizes							
Price basis for ordering height	Over 3750	<b>3347</b>	<b>3448</b>	Over 3750	<b>1532</b>		
Plus surcharge for special width		<b>230</b>	<b>230</b>		<b>230</b>		
Plus surcharge for special height		<b>230</b>	<b>230</b>		<b>230</b>		
Number of marker stripes per side		6		4			
Width of side flap		600 / 700					
Optional extras							
Deviating top flap height (standard 900 mm)			1000 mm		<b>98</b>		
			1200 mm		<b>150</b>		
Deviating depth (standard 500 mm)		Height up to 3000 mm	600 mm	<b>No surcharge</b>			
		Height over 3000 mm	600 mm		<b>70</b>		
		Only DSL/DSS/DSS-G	900 mm		<b>143</b>		
If no canopy is present, for a 900 mm depth, a water drainpipe in the top cladding is strongly recommended for water drainage							

# Optional extras for flap dock shelters

Optional extras		€
Telescopic link arms for DSL (R) for 500 mm or 600 mm depth	Surcharge	204
Inflatable corner cushions for DSL (R), DSS (R), per set (2 x)	For 500 mm depth	216
	For 600 mm depth	245
	For 900 mm depth	295
Inflatable corner cushions with mounting strap for DSN, per set (2 x)	500 mm deep	263
	600 mm deep	293
Number on top flap (0...99), approx. 300 mm high, in the colour of the marker stripes (not available for laminated top flap)	Per top flap	119
Side and top flaps in special colour Basalt grey or Gentian blue	Dock model	351
	Roadway model	362
Side cladding in colour of the top and side flaps	Dock model	187
	Roadway model	204
Top cladding with water drainage channel for dock shelters with 500 mm or 600 mm depth. Recommended for situations with high facades and long stoppage times (as standard for type "R")		104
Water drainpipe in the top cladding for dock shelters with 900 mm depth. Recommended for dock shelters that are not placed under a canopy.		140
Sealing set for sealing to the facade, consisting of a preformed gasket and facade putty	Per set	85
Top flap with one side cut on both the right and left side		136
Top flap with corner lamination, 2 side cuts on both the right and left side		143
Top flap fully laminated with 100% overlapping		523
Top flap height < 900 mm (minimum 500 mm)		69
Top and side flap preassembled for scissors arm constructions	Dock model	123
	Roadway model	217
Additional roll-up flap, black, for dock shelter widths 3350 – 3500 mm (other dimensions on request), length 2000 mm, intended for lowering to the roof of small vehicles after docking, electrically operated (230 V press-and-hold operator)	Each	1541
Wind lock for electrically operated roll-up flaps (not possible for recess versions)	Each	307
Removable bottom flap for roadway model, black, in grey or blue on request. State height (max. 1300 mm)		451
"Storm set", not in combination with roll-up flap, not available for laminated top flaps, not available for top flaps higher than 1200 mm	Per dock shelter	319
KTP set, side flap suspension, consisting of 2 pulley blocks, cord and tension spring, instead of tension cables	Per dock shelter	67

## Notes and sketches

# Flap dock shelters DDF 10

## Construction

- Side elements made of foam-filled cushions on a base frame
- Casing made of textile-reinforced plastic flaps, black.
- Flexible roof construction with support yoke that moves upwards with telescopic arms.
- Slope 100 mm to the front, side drainage.

## Top and side flaps

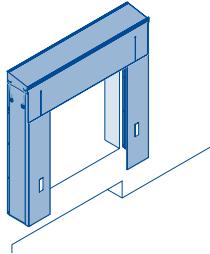
- 2-layer elastic backing fabric made of polyester threads, approx. 3 mm thick, coated with plastic on both sides, black
- Side flaps with 1 marker stripe in white
- Top flaps with corner cut

## Delivery

- Side flaps and side cushions separate (Velcro fastening)
- Roof construction pre-fitted

## Note:

Fixing material for fitting to the facade included in the price if indicated on the order.



DDF 10

## Dock model DDF 10

Side flap 600 mm wide, top flap 900 mm high, depth 600 mm

	Ordering size (W x H)	Front opening (W x H)	€
<b>Dock models</b> <b>(Not suitable for loading houses)</b>	3300 x 3500 mm	2100 x 2450 mm	2326
	3400 x 3500 mm	2200 x 2450 mm	2326
<b>Dock models for loading houses</b>	3500 x 3500 mm	2300 x 2450 mm	2326

## Optional extras

Special height of top flap 500, 550, 600, 700, 800 mm	<b>No surcharge</b>
Special height of top flap 1000, 1100, 1200 mm	Surcharge 142
Inflatable corner cushions	Per set (2 pieces) 245
Number on top flap (0...99), approx. 300 mm high, white	Surcharge per dock shelter / seal 119
Special width up to 3500 mm	Surcharge 142
Special height up to 4300 mm	Surcharge 387
Top flap with corner lamination, 2 side cuts on both the right and left side	Surcharge 22
Top flap fully laminated with 100% overlapping	Surcharge 344
Sealing set for sealing to the facade, consisting of a preformed gasket and facade putty	85

## Notes and sketches

# Inflatable dock seals

Inflatable dock seal as a dock or roadway model for optimum sealing with vehicles with various dimensions

## Design of DAS 3

- Roof and side construction made of double-skinned steel panels, 20 mm thick, coated in Grey white (RAL 9002) or White aluminium (RAL 9006) with anodised, rounded aluminium corner profiles.
- Flexible front strips, made of double-layered polyester monofilament thread backing fabric, approx. 3 mm thick, plastic coated in Graphite black, based on RAL 9011.
- Dock model with separate inflatable corner cushions (foam-filled cushions, suitable in combination with dock levellers up to 2100 mm width).

## Inflatable cushions

- Telescopic extending cushions made of weather-resistant, high-frequency welded PVC.

## DAS 3 blower

- 230 V fan, motor power 0.37 kW, 1340 m<sup>3</sup>/h, total duration approx. 10 s (additional fan required for roadway models with top cushion from 2000 mm height and side cushions from 800 mm width)
- Return of the cushions to home position using tension cables and counter weight.

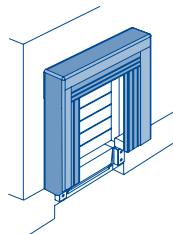
## DAK 3

- Identical to DAS 3, but with foam-filled, angled cushions on the sides, see DFH for material

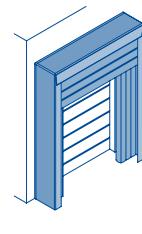
- Side cushion: width at front 500 mm, width at rear 150 mm, depth 350 mm
- 230 V fan max. 500 m<sup>3</sup>/h.

## Note:

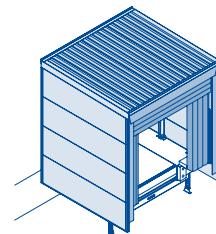
Fixing material for fitting to the facade included in the price if indicated on the order.



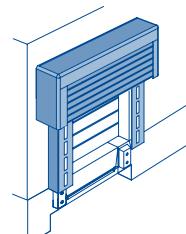
DAS 3



DAS-G 3



DAS 3-L



DAK 3

Type	Width W	Height H	Depth D	Side cushions Width	Front opening				€
					Home position Width	Home position Height	Working position Width	Working position Height	
<b>Dock models</b>									
DAS 3	3600	3550	850	600	3100	3150	2400	2550	<b>7250</b>
DAS 3	3600	3850	850	600	3100	3450	2400	2850	<b>7533</b>
DAK 3	3600	3500	850*	Front 500 Rear 150	2400	3100	2400	2500	<b>7571</b>
<b>Roadway model</b>									
DAS-G 3	3600	4700	850	600	3100	4300	2400	3700	<b>8354</b>
<b>Recess and loading house version, fitting in the opening</b>									
<b>Dock model</b>									
DAS 3-N	3600	3550	-**	600	3100	3150	2400	2550	<b>5265</b>
DAS 3-N	3600	3850	-**	600	3100	3450	2400	2850	<b>5353</b>
<b>Roadway model</b>									
DAS-G 3-N	3600	4700	-**	600	3100	4300	2400	3700	<b>5580</b>
<b>Dock models for special loading house version with integrated recess</b>									
DAS 3-L dock model including steel base construction	3500	3500	850	600	2950	3200	2250	2500	<b>6702</b>

\* Side cushion depth: 350 mm

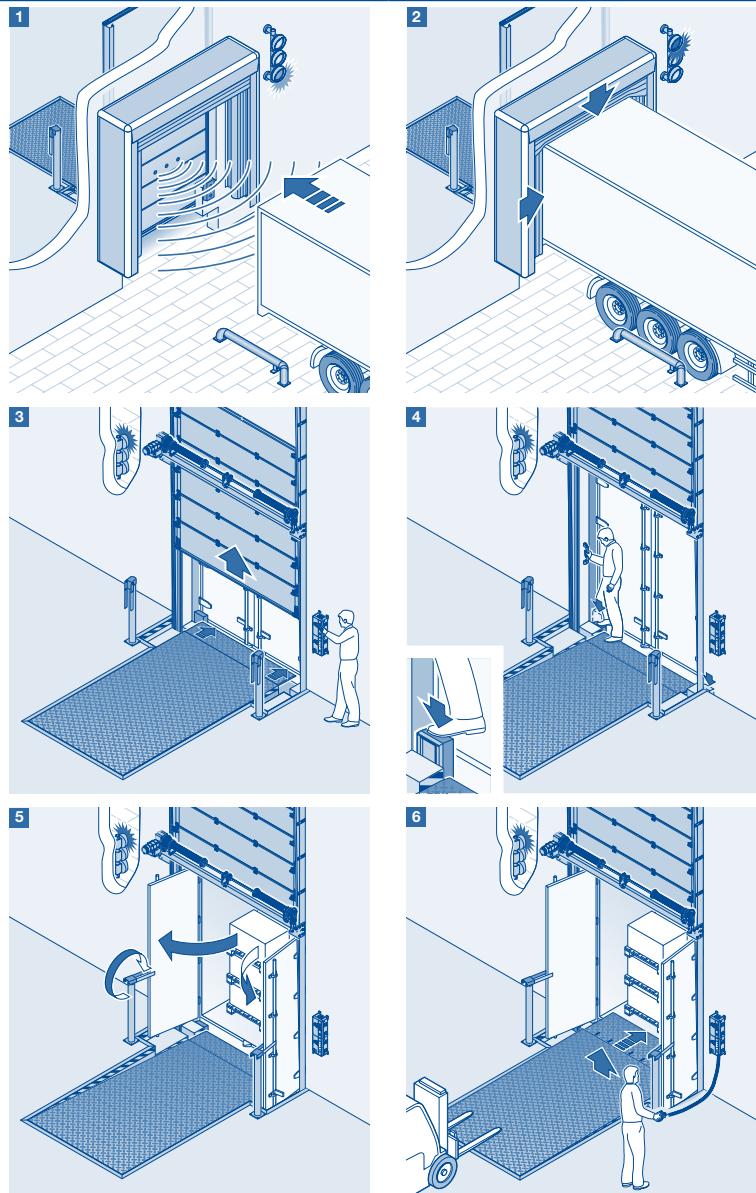
\*\* Recess at least 850 mm deep

<b>Special versions</b>		<b>Surcharge €</b>
Price basis for DAS... with ordering height up to and including 3850 mm: price for ordering height 3550 mm		
Price basis for DAS... with ordering height over 3850 mm: price for ordering height 4700 mm		
Special height max. 300 mm larger or smaller than standard	DAS(-G) 3	Per dock shelter <b>874</b>
	DAS(-G) 3-N / DAS 3-L larger than standard	Per dock shelter <b>579</b>
	DAS(-G) 3-N / DAS 3-L smaller than standard	Per dock shelter <b>428</b>
	DAK 3 larger than standard	Per dock shelter <b>540</b>
Special width max. 300 mm larger or smaller than standard	DAK 3 smaller than standard	Per dock shelter <b>288</b>
	DAS(-G) 3 / DAK 3	Per dock shelter <b>874</b>
	DAS(-G) 3-N larger than standard	Per dock shelter <b>579</b>
	DAS(-G) 3-N smaller than standard	Per dock shelter <b>428</b>
Special depth	DAS 3 in depth 1200 mm with "Crash Protection Bar": support bracket for collision damage protection, galvanized; please order pre-drilled for fitting to HRS / HRT loading platforms, see page 6/12	Per dock shelter <b>1397</b>
Inflatable side cushions		200 mm wider on each side <b>649</b>
		400 mm wider on each side <b>1294</b>
Inflatable top cushion shorter than standard.		200 mm shorter <b>53</b>
Inflatable top cushion longer than standard, with steel tension cables.		200 mm longer <b>481</b>
Note: For long cushions, the front opening height is also reduced in the home position: from 400 mm extension by 50 mm, from 800 mm extension by 100 mm. From 800 mm extension the top cushions are equipped with wind locks. An additional fan is required for DAS-G3(-N) with top cushion from 2000 mm height and side cushions from 800 mm width.		400 mm longer <b>823</b>
		600 mm longer <b>968</b>
		Not for DAK3 800 mm longer <b>1601</b>
		Not for DAK3 1000 mm longer <b>2063</b>
		Not for DAK3 1200 mm longer <b>2387</b>
<b>Optional extras</b>		<b>€</b>
Operation via dock leveller control housing: Take into account when selecting the control for the dock leveller		
Inflatable corner cushion, 550 mm wide, instead of foam-filled version		Depth of dock seal / shelter 850 mm <b>287</b>
► Not suitable for DAS 3-N		Depth of dock seal / shelter 1200 mm <b>357</b>
Number on top flap (0...99), approx. 200 mm high, white		Surcharge per dock shelter / seal <b>119</b>
► Not suitable for DAS(-G) 3-N		
Side flap with marker stripes in white, 3 per side		<b>73</b>
Roll-up RCH flap instead of top cushion, black, 2000 mm long, electrically operated, connecting voltage 230 V, lower in press-and-hold operation, raise with impulse		<b>1318</b>
► Not suitable for DAS(-G) 3-N, DAK 3		
Roll-up flap RCP instead of top cushion, 3000 mm long, electrically operated, with control, impulse operation via dock seal control		For connection to control 460 S/T <b>2511</b>
► Not suitable for DAS(-G) 3-N, DAK 3		With power supply unit and transformer (24 V) <b>2753</b>
Sealing set for sealing to the facade, consisting of a preformed gasket and facade putty		<b>85</b>
CPB support bracket for dock models DAS..., with depth 850 mm for protection against damage caused by moving parts, e.g. lorry doors, galvanized (as standard for depth 1200 mm); please order pre-drilled for fitting to HRS / HRT loading platforms, see page 6/12		Surcharge per set (2 units) <b>229</b>
Additional fan, connecting voltage 230 V, required for DAS-G 3(-N) with top cushion in 2000 or 2200 mm height and side cushions in 800 or 1000 mm width		<b>1344</b>

# DOBO system

## DOBO system

Adjusted to loading site to allow opening of the lorry doors after docking. For special hygienic requirements (meat transports), deep-freeze transports and for customs purposes.



### 1 Safe docking

Manoeuvring guides and the Hörmann docking assistant HDA-Pro ensure a safe and centred docking process. The vehicle doors remain closed. Sensors in the door leaf recognise the position of the vehicle. Alternatively, the DAP docking assistant can be used.

### 2 Reliable sealing

As soon as the lorry is docked, the dock seal DAS 3 is inflated and seals the vehicle from 3 sides.

### 3 Opening the loading ramp door

After the door is completely opened, the telescopic lip of the dock leveller is extended to decrease the gap to the vehicle.

### 4 Lowering the buffers

Now the movable VBV 4 or VBV 5 buffers can be lowered manually and locked to open the lorry doors.

### 5 Opening the vehicle doors

The ramp features a recess that provides enough space for the door to open completely. Door holders prevent the vehicle doors from obstructing the loading area.

### 6 Extending the dock leveller

The dock leveller HTL 2 with a 1000 mm long telescopic lip easily bridges the gap between the ramp and the loading surface and can be precisely positioned up to the last centimetre. The external control DTH-T ensures an optimum view of the dock leveller's area of travel.

## Dock levellers HTL 2 and HTL2 ISO, pit model P as a DOBO version

Ordering width up to 2100 mm.

### Note:

- External control required to be able to see the area of travel of the dock leveller.
- For HTL 2 from ordering length 4500 mm, lower working range above the ramp level compared to the standard version.
- Automatic door closing not possible with control 460 T.

HTL 2, HTL 2 ISO	Platform horizontal (h) in home position	Surcharge	290
HTL 2	Platform in the lowest position (s) in home position	Surcharge	290

## Loading platform HRT as a DOBO version

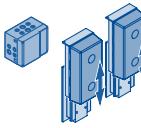
Ordering width up to 2100 mm.

Side element with recess (H x D) 200 x 1250 mm, suitable for loading house body in standard version.

### Note:

- Important: Check whether an external control is required to be able to see the area of travel of the dock leveller.
- Automatic door closing not possible with control 460 T.

Platform horizontal (h) in home position, possible only after structural consultation with the factory	Surcharge	953
Platform in the lowest position (s) in home position. Adjustment of the home position is required when fitting in loading houses with rolling shutter. Note the surcharge!	Surcharge	953
Adjustment of the home position of HRT DOBO-s when fitting in loading houses with rolling shutter Decotherm	Surcharge	390

Article no.	Dock leveller control								€		
	External control DTH-T in Signal yellow, RAL 1003, for telescopic lip dock levellers, required if dock leveller is not completely visible from the control housing										
	637895	For dock levellers in the building, with 2 m spiral cable and magnetic fastener. Always required for HTL2 DOBO due to line-of-sight obstructions caused by opened lorry doors							281		
	637893	For loading houses, with 15 m connection cable for permanent wiring							258		
Pedestal PT 2 as DOBO version									€		
Recess (H x D) 200 x 1250 mm. Dock leveller ordering width up to 2100 mm. Pedestal is suitable for loading house body in standard version.								Surcharge	675		
Loading house preparation for door fitting									€		
Installation frame only for rolling shutter Decotherm SB, 2880 x 3100 mm								Surcharge	442		
Article no.	Door holder for DOBO system to fasten lorry doors								€		
	Post 1000 mm high, made of galvanized steel, with swivelling arm.										
311582	Arm length 580 mm	Fitting on steel						Each	262		
311584		Fitting on concrete									
311583	Arm length 880 mm	Fitting on steel						Each	288		
311585		Fitting on concrete									
Article no.	Docking assistant HDA Pro								€		
637567	Docking assistant HDA-Pro incl. control, 3 sensors, 1 magnet switch, 1 red / yellow / green LED traffic light for outside, connection for 230 V AC yellow warning light for inside, door release function and automatic door opening after docking possible (door leaf activating kit for HDA-Pro required for the door!)								2864		
637549	Door leaf activating kit for HDA-Pro for doors up to 6 m high								135		
Alternative: Docking assistant DAP, see "Safety systems" on page 46											
Article no.	Inflatable dock seal DAS 3 and DAS 3-L in DOBO version								€		
637536	LED traffic light yellow for inside, 230 V AC								112		
	As standard for DOBO version: with inflatable corner cushions										
For a product description, see page 34	Width W	Height H	Depth D	Side cushions Width	Front opening		Working position		€		
Dock model					Home position Width	Height	Width	Height			
DAS 3 DOBO	3600	3850	850	600	3100	3450	2400	2850	7820		
Dock model for special loading house version with integrated recess											
DAS 3-L DOBO, including steel base construction	3500	3800	850	600	2950	3400	2400	2800	7018		
Buffer VBV 4	Dimensions (W x H x D)								€		
	PU buffer on support bracket, spring-loaded movable by 250 mm, lockable at pedestal level, set with grip handle, protective front plate not possible!								250 x 682 x 165 mm		
	Fitting set for 1 buffer								Each 1125		
	Directly on concrete: 6 chemical anchors M16 x 190 with mortar cartridge								Per set 108		
	Directly on the pedestal: 6 cap bolts M16 x 40 with spring washers, plain washers and nuts								Per set 10		
	On screw-in sleeves: 6 cap bolts M16 x 40 with spring washers								Per set 8		
	Cast bolt sleeve M16								Each 7		
Buffer set VBV 5	Dimensions (W x H x D)								€		
	Set, consisting of 2 PU buffers on support bracket, spring-loaded movable by 250 mm, lockable on pedestal level, automatic release after closing the door, with 7.5 m connecting lead, incl. control, connecting voltage 230 V, operating voltage 24 V, 1 magnet switch with 5 m connecting lead, 2 grip handles. Protective front plate not possible!								250 x 682 x 195 mm		
	Fitting set for 2 buffers:								Per set 4707		
	Directly on concrete: 12 chemical anchors M16 x 190 with mortar cartridge								Per set 216		
	Directly on the pedestal: 12 cap bolts M 16 x 40 with spring washers, plain washers and nuts								Per set 20		

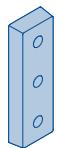
# Buffers for loading sites

## Buffers

Dimensions (W x H x D) in mm



**DB 15**  
250 x 500 x 100  
Rubber buffers



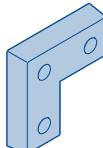
**DB 15 PU**  
250 x 500 x 100  
PU buffers



**DB 20**  
250 x 500 x 140  
Rubber buffer, depth too large  
for combination with mechanical  
dock levellers!



**VB 2**  
250 x 595 x 149  
Rubber buffer DB 15 on support  
bracket, spring-loaded movable  
By 200 mm (+/-100 mm)



**DB 15 XL**  
250 x 750 x 100  
Rubber buffer,  
requires mounting bracket BCV XL!

**DB 25**  
450 / 180 x 450 / 180 x 100  
Rubber buffers



**DB 11**  
80 x 490 x 90  
Rubber buffer

Not recommended in combination  
with dock levellers!

## Buffers

Buffers		<b>DB 11</b>	<b>DB 15</b>	<b>DB 15 PU</b>	<b>DB 15 XL</b>	<b>DB 20</b>	<b>DB 25</b>	<b>VB 2</b>
	Article no.	178679	155382	308998	2011419	155383	155384	
	Each	<b>65</b>	<b>221</b>	<b>449</b>	<b>324</b>	<b>252</b>	<b>374</b>	<b>861</b>

## Fitting set for 1 buffer

Directly on concrete	Per set	<b>8</b>	<b>29</b>	<b>29</b>	-	<b>29</b>	<b>43</b>	<b>37</b>
On filler plate FBC* to concrete	Per set	-	-	-	-	-	-	<b>42</b>
Directly on the pedestal	Per set	-	<b>9</b>	<b>9</b>	-	<b>14</b>	-	<b>7</b>
On mounting bracket* BCH 45–105	Per set	-	<b>4</b>	<b>4</b>	-	<b>7</b>	-	-
On mounting bracket* BCH 150–520	Per set	-	<b>9</b>	<b>9</b>	-	<b>14</b>	-	<b>7</b>
On mounting bracket* BCV (XL)	Per set	-	<b>4</b>	<b>4</b>	<b>6</b>	<b>7</b>	-	-
On mounting plate* BMP (S)	Per set	-	<b>4</b>	<b>4</b>	-	<b>7</b>	-	-
On cast bolt sleeves*	Per set	-	<b>7</b>	<b>7</b>	-	<b>12</b>	-	<b>5</b>

\* Order separately, see page 40

# Buffers for loading sites

## Steel buffers

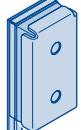
Dimensions (W × H × D) in mm



**SB 15**  
277 × 518 × 112  
Steel buffer, galvanized,  
fully damped



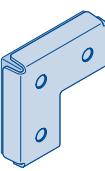
**SB 20**  
277 × 518 × 152  
Steel buffer, galvanized,  
fully damped



**SBM**  
277 × 610 × 161  
Steel buffer SB 15 on support  
bracket, spring-loaded movable  
by 200 mm (+/-100 mm)



**SB 15 XL**  
277 × 768 × 112  
Steel buffer, galvanized,  
fully damped  
Requires mounting bracket BCV XL!



**SB 25**  
490/220 × 490/220 × 115  
Steel buffer, galvanized,  
fully damped

## Steel buffers

	<b>SB 15</b>	<b>SB 15 XL</b>	<b>SB 20</b>	<b>SB 25</b>	<b>SBM</b>
Article no.	178988	2011420	178989		
Each	<b>468</b>	<b>667</b>	<b>500</b>	<b>659</b>	<b>1087</b>

### Fitting set for 1 steel buffer

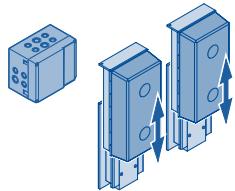
Directly on concrete	Per set	<b>29</b>	-	<b>29</b>	<b>43</b>	<b>37</b>
On filler plate FBC* to concrete	Per set	-	-	-	-	<b>42</b>
Directly on the pedestal	Per set	<b>14</b>	-	<b>14</b>	-	<b>7</b>
On mounting bracket* BCH 45–105	Per set	<b>9</b>	-	<b>5</b>	-	-
On mounting bracket* BCH 150–520	Per set	<b>14</b>	-	<b>14</b>	-	<b>7</b>
On mounting bracket* BCV (XL)	Per set	<b>6</b>	<b>8</b>	<b>11</b>	-	-
On mounting plate* BMP (S)	Per set	<b>6</b>	-	<b>11</b>	-	-
On cast bolt sleeves*	Per set	<b>11</b>	-	<b>12</b>	-	<b>5</b>

\* Order separately, see page 40

# Buffers for loading sites

## Buffer set with control

Dimensions (W x H x D) in mm



### VBV 5

250 x 682 x 195

Set, consisting of 2 PU buffers on support bracket, spring-loaded movable by 250 mm, lockable at pedestal level, automatic unlocking after closing the door, with 7.5 m connecting lead, incl. control, connecting voltage 230 V, operating voltage 24 V, 1 magnet switch with 5 m connecting lead, 2 grip handles. Protective front plate not possible!

## Buffer set VBV 5

Fitting set for 2 buffers

	Per set	<b>4707</b>
Directly on concrete	Per set	<b>192</b>
Directly on the pedestal	Per set	<b>20</b>

## Mounting plates, filler plate

Dimensions (W x H x D) in mm



### BMP

250 x 500 x 5

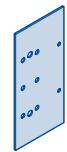
Mounting plate, painted, black, for DB 15/DB 20 and SB 15/SB 20



### BMPS

195 x 500 x 5

Mounting plate, painted, black, for DB 15/DB 20 and SB 15/SB 20. Special version with surface-mounted dock leveller edge bracket.



### FBC

240 x 500 x 5

Filler plate, galvanized, for fitting VB 2/SBM and BCH with surface-mounted dock leveller edge bracket. Not suitable for fitting BCV (XL)!

## Mounting plate / filler plate

	<b>BMP</b>	<b>BMPS</b>	<b>FBC</b>
Article no.	155388	309158	2000848
Each	<b>67</b>	<b>65</b>	<b>65</b>

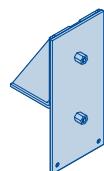
Fitting set for 1 mounting plate

Directly on concrete

Per set	<b>6</b>	<b>6</b>	<b>-</b>
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## Mounting bracket BCV (XL)

Dimensions (W x H x D) in mm

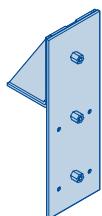


### BCV

250 x 560 x 150 / 200

Mounting bracket, galvanized, for fitting above ramp level, for DB 15/DB 20 and SB 15/SB 20. Note the required fitting area on the ramp!

Weld on all sides for fitting to a steel pedestal and do not combine with steel buffers!



### BCV XL

250 x 760 x 150 / 200

Mounting bracket, galvanized, for fitting above ramp level, for DB 15 XL/SB 15 XL. Note the required fitting area on the ramp!

Weld on all sides for fitting to a steel pedestal and do not combine with steel buffers!

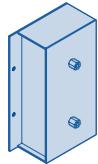
	Height above ramp level (mm)	100	120	150	200	250	300
<b>Mounting bracket BCV</b>	Each	<b>206</b>	<b>206</b>	<b>215</b>	<b>216</b>	<b>239</b>	<b>289</b>
<b>Mounting bracket BCV XL</b>	Each	<b>240</b>	<b>240</b>	<b>254</b>	<b>269</b>	<b>299</b>	<b>331</b>
Fitting set for 1 mounting bracket							
BCV directly on concrete	Per set	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
BCV XL directly on concrete	Per set	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
BCV (XL) directly on pedestal		Fitting by welding required. Please observe the notes in the fitting instructions!					

## Notes and sketches

# Buffers for loading sites

## Mounting bracket BCH

Dimensions (W x H x D) in mm

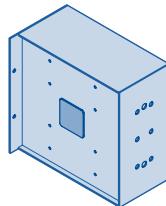


### BCH 45-105

290 x 500

Mounting bracket, galvanized, primarily for tailboards, for DB 15 / DB 20 and SB 15 / SB 20.

Make sure that there is a sufficient dock leveller overlap on the loading surface!



### BCH 150-520

290 x 500

Mounting bracket, galvanized, primarily for tailboards, for DB 15 / DB 20, SB 15 / SB 20 and VB 2 / SBM.

Make sure that there is a sufficient dock leveller overlap on the loading surface!

## Mounting bracket BCH 45-105

	BCH 45	BCH 65	BCH 85	BCH 105
Depth (mm)	45	65	85	105
Each	<b>243</b>	<b>243</b>	<b>251</b>	<b>260</b>

Fitting set for 1 mounting bracket

Directly on concrete	Per set	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
With filler plate* on concrete	Per set	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
Directly on the pedestal	Fitting by welding required. Please observe the notes in the fitting instructions!				

\* Order separately, see page 40.

## Mounting bracket BCH 150-520

	BCH 150	BCH 200	BCH 300	BCH 350	BCH 400	BCH 500	BCH 520
Depth (mm)	150	200	300	350	400	500	520
Each	<b>295</b>	<b>326</b>	<b>366</b>	<b>395</b>	<b>425</b>	<b>474</b>	<b>481</b>

Fitting set for 1 mounting bracket

Directly on concrete	Per set	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
With filler plate* on concrete	Per set	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
Directly on the pedestal	Per set	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>

\* Order separately, see page 40.

## Cast bolt sleeves



### Cast bolt sleeves

Overall length 100 mm  
M16 / M20

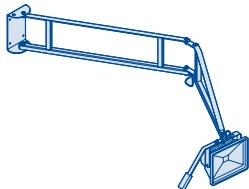
## Cast bolt sleeve, individual

<b>M16</b>	For VB 2, SBM, VBV 4	(4 or 6 required for each buffer)	Each	<b>7</b>
<b>M20</b>	For DB 15, DB 20, SB 15, SB 20	(2 or 3 required for each buffer)	Each	<b>7</b>

# Buffers for loading sites

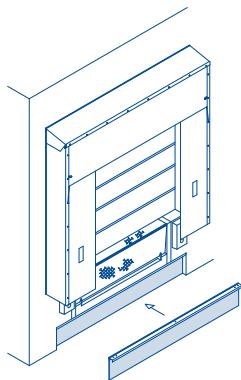
Contents of fitting sets for buffers																													
Fitting set for	DB 11	DB 15 (PU)	DB 15 XL	DB 20	DB 25	VB 2	VBV 4	VBV 5	SB 15	SB 15 XL	SB 20	SB 25	SBM																
Material type	Material quantity																												
On concrete																													
Drill-in anchors																													
M 12 x 120	3																												
M 16 x 135						4							4																
M 20 x 215		2		2	3				2		2	3																	
Chemical anchors with mortar cartridge																													
M 16 x 190							6	12																					
With filler plate FBC on concrete																													
Drill-in anchors																													
M 12 x 120						2							2																
M 16 x 135						4							4																
On pedestal																													
Cap bolts with plain washer and nut																													
M 20 x 80		2																											
M 20 x 100									2																				
M 20 x 130				2							2																		
Cap bolts with spring washer and nut																													
M 16 x 40						4	6	12					4																
On screw-in sleeves																													
Cap bolts																													
M 20 x 80		2																											
M 20 x 100									2																				
M 20 x 130				2							2																		
Cap bolts with spring washer																													
M 16 x 40						4	6						4																
On mounting plate BMP(S) or mounting bracket BCV or BCH 45–105																													
Cap bolts																													
M 20 x 40		2																											
M 20 x 60									2																				
M 20 x 80				2																									
M 20 x 100											2																		
On mounting bracket BCV XL																													
Cap bolts																													
M 20 x 40			3																										
M 20 x 60									3																				
On mounting bracket BCH 150–520																													
Cap bolts with plain washer and nut																													
M 20 x 80		2																											
M 20 x 100									2																				
M 20 x 130				2							2																		
Cap bolts with spring washer, plain washer and nut																													
M 16 x 40						4							4																
Material quantity in fitting sets for mounting plates, filler plate and mounting brackets																													
Fitting set for	Mounting plate BMP(S)	Mounting bracket			BCH 45–105	BCH 150–520	BCV	BCV XL																					
Material type	Material quantity																												
On concrete (also with filler plate FBC for BCH)																													
Drill-in anchors																													
M 12 x 120	2		2		2		2		2		3																		
On pedestal																													
Cap bolts with spring washer, plain washer and nut																													
M 20 x 40						2																							
Only fitting by welding	-		•				•		•		•																		

# Equipment for loading sites



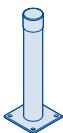
**DL 1400 LED**

Article no.	Swivelling dock lighting, for inside.	€
2001071	DL 1400 LED, 30 W, 100–240 V, 50/60 Hz, IP 65, impact-resistant, with 2 m available connecting lead, without switch, incl. fixing material for fitting to concrete or steel. Switching possible with an external switch or via travel limit circuit board 637052 in combination with dock leveller control 420 S/T or 460 S/T (consider the operator control when ordering)	Each 312
637514	Main switch 230 V, 1-phase, in housing IP 65	Each 56

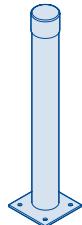


**Tailboard slot cover**

Tailboard slot cover to measurement	€
Made of tarpaulin material (state flap material dimensions on order!) Recommendation: height = height of tailboard slot – 5 mm, width = width of tailboard slot – 10 mm	Each 319
<b>Hydraulic scissors lift tables, tailboards and other accessories</b>	<b>On request</b>



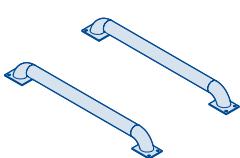
**Post 600 mm high**



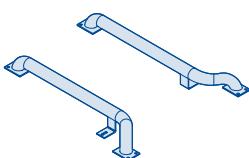
**Post 1200 mm high**

Article no.	Steel protection bollards, galvanized with drill-in anchors	€
178899	Height 1200 mm, Ø approx. 170 mm, with yellow cap, with base plate 300×300×10 mm	Each 245
178633	Height 600 mm, Ø approx. 115 mm, with yellow cap, with base plate 200×200×10 mm	Each 134

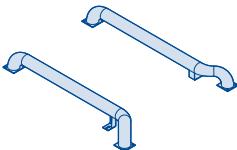
# Equipment for loading sites



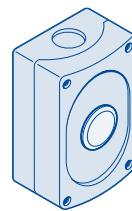
**WSM**



**WBL**

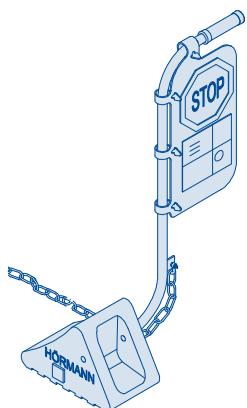


**WBM**



**Light Guide**

Article no.	Steel wheel guides, galvanized, with mounting plate and drill-in anchors			€
178680	WSM	Straight, Ø approx. 115 mm, height approx. 220 mm, length 1640 mm	Each	<b>326</b>
178686	WBL, right	Bent, Ø approx. 115 mm, height approx. 180 mm, length approx. 1900 mm	Each	<b>414</b>
178687	WBL, left	Bent, Ø approx. 115 mm, height approx. 180 mm, length approx. 1900 mm	Each	<b>414</b>
178681	WBM, right	Bent, Ø approx. 170 mm, height approx. 320 mm, length approx. 1900 mm	Each	<b>485</b>
178682	WBM, left	Bent, Ø approx. 170 mm, height approx. 320 mm, length approx. 1900 mm	Each	<b>485</b>
309035	WBM, right	Bent, Ø approx. 170 mm, height approx. 320 mm, length approx. 2500 mm	Each	<b>606</b>
309036	WBM, left	Bent, Ø approx. 170 mm, height approx. 320 mm, length approx. 2500 mm	Each	<b>606</b>
178946	WBM, right	Bent, Ø approx. 170 mm, height approx. 320 mm, length approx. 3000 mm	Each	<b>725</b>
178945	WBM, left	Bent, Ø approx. 170 mm, height approx. 320 mm, length approx. 3000 mm	Each	<b>725</b>
178685	Cast foot, screw-on, for wheel guides (2 feet = 1 set required for each wheel guide)			Per set <b>230</b>
Article no.	Optical manoeuvring guide			€
639783	Light Guide LG as an optical manoeuvring guide (2 LEDs incl. connecting leads, 24 V, 2 x 1.2 W); please order pre-drilled for fitting to loading platforms HRS / HRT, see page 6 / 12			<b>303</b>



**WRH**



**WR**

Wheel chocks			€
WR	Rubber wheel chock with 7 m long chain and wall holder, without sensor	Each	<b>265</b>
WRH	Rubber wheel chock with 7 m long chain and holder, without sensor	Each	<b>221</b>
	Storage bracket for wheel chock WRH	Surcharge each	<b>59</b>

# Safety systems

## Docking assistance DAP

### Docking assistance DAP

Distance-based vehicle detection with signal transmission to driver, can be combined with release and control functions. Arrangement to the right viewed from outside or with a mirrored arrangement, e.g. with limited space or left-hand traffic.

Set with optionally 1 or 2 photocells, 2nd photocell for yellow signal outside with approx. 500 to 1000 mm distance between lorry and ramp, 1st photocell for red light signal at approx. 50 to 100 mm distance.

Photocells 24 V with 10 m connecting lead each, on mounting arm with protective cover. Position and arrangement of the sensor can be adjusted, range can be adjusted up to approx. 1500 mm depending on the arrangement, protective cover Traffic yellow, based on RAL 1023, with reflector.

### Control DAPC

Control for DAP, housing IP 65, connecting voltage 110–230 V, 1 phase, 50/60 Hz.

### Equipment:

- Connections 230 V AC for interior and exterior warning lights
- Connection of outside warning light 24 V DC possible with additional connection relay
- Connection 230 V AC for inflatable dock seal
- Connection of door / dock leveller release function
- Connection for DAP and MWB 2 / WSPG

Connection of DAP to existing control HIB(-Pro) alternatively possible.

### Control MWBC

Control for combination of DAP with wheel-blocking system or wheel chock with sensor, housing IP 65, connecting voltage 110–230 V, 1 phase, 50/60 Hz.

### Equipment:

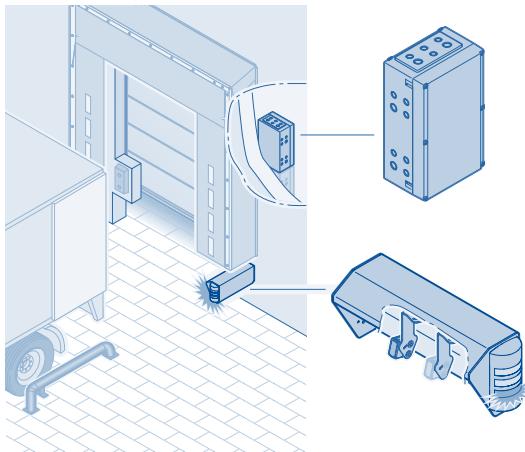
- 5 LED control lights for status and fault reporting
- Key switch to bridge the wheel blocking function in case of swap containers

- Connections 230 V AC for interior, exterior warning lights and for alarm horn
- Connection of outside warning light 24 V DC possible with additional connection relay
- Connection 230 V AC for inflatable dock seal
- Connection of door / dock leveller release function
- Connection for DAP and MWB 2 / WSPG

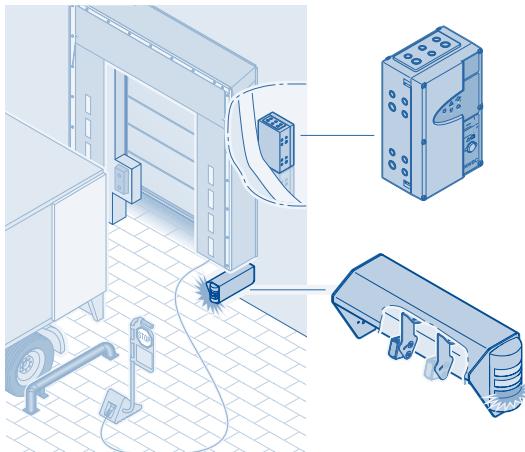
### Additionally required

Order separately, if not present:

- External warning light for 1 or 2 photocells
- If there is no visual contact to the outside, an interior yellow warning light is required for "Vehicle has docked" reporting
- "Close" limit switch reporting, e.g. by magnet switch in the door guide, alternatively "dock leveller in home position" position reporting



DAP with control DAPC



DAP with control MWBC and wheel chock WSPG

### Docking assistance

Docking assistance DAP, for use right or left, incl. fixing material	with 1 photocell for red warning light outside	Standard length 500 mm	Each	757
	with 2 photocells for red and yellow traffic light outside	Special length 1000 mm*	Each	839
		Standard length 500 mm	Each	1083
		Special length 1000 mm*	Each	1168

Control	DAPC for docking assistance DAP	Surcharge	768
	MWBC for combination with the wheel-blocking system or the wheel chock with sensor	Surcharge	952

\* Special length 1000 mm required when using buffer brackets BCH 150–520 or mechanical loading platform MRS

### Required equipment

External LED traffic light	Red, for fitting to the facade, 230 V AC	For 1 photocell	637534	Surcharge	115
	Red/green, for fitting to the facade, 230 V AC	For 1 photocell	637537	Surcharge	195
	Red / yellow / green, for fitting to the facade, 230 V AC	For 2 photocells	637573	Surcharge	304
	Red / yellow / green, on DAP arm, 24 V DC, including connection relay and 10 m connecting lead	If equipped with only 1 photocell, "yellow" is without function		Surcharge	688

"Close" limit switch reporting / "dock leveller in home position" position reporting

See page 49

### Optional extras

LED traffic light for inside	Yellow, 230 V AC	637536	Each	112
Main switch, CEE plug			See page 49	

# Safety systems

## Wheel-blocking system MWB 2 "standalone"

### Manual mechanical

#### wheel-blocking system MWB 2

System to secure the vehicle against unintentional rolling or creeping due to forklift manoeuvres. Wheel guide with manually operated blocking arm on a sideways shifting carriage, length of working range approx. 2800 mm.

Wheel guide protected by concrete block at the front, equipped with maintenance rails for trolleys at the rear. Overall system length approx. 5300 mm. Arrangement to the right viewed from outside; optionally with a mirrored arrangement, e.g. with limited space or left-hand traffic.

#### Blocking arm on carriage

Rotating blocking arm, height 300 mm up to max. 350 mm above the driveway, range into the roadway 350 mm, horizontal loading up to 115 kN. Operated by ergonomic operating lever with operating instruction.

Carriage with yellow / green control light and

sensors for detecting home position, working position and wheel position. Locking/release of the operating lever, coupled to the "Closed" door position (release not possible if door is open). Control (included in scope of delivery) Control in semi-housing, IP 65, connecting voltage 230 V, 1 phase, 50 / 60 Hz.

Equipment:

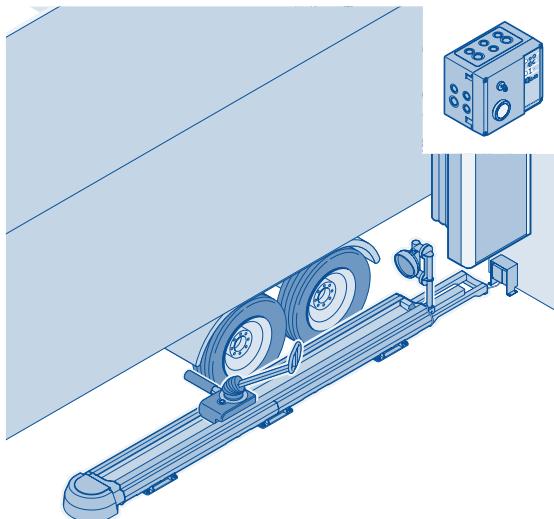
- LED control light for status and fault reporting
- Integrated Piezo signal transmitter for warning signal in case of faults
- Key switch to bridge the wheel blocking function
- External 24 V DC warning light

No connection of signal transmitters 230 V AC or docking assistance possible.

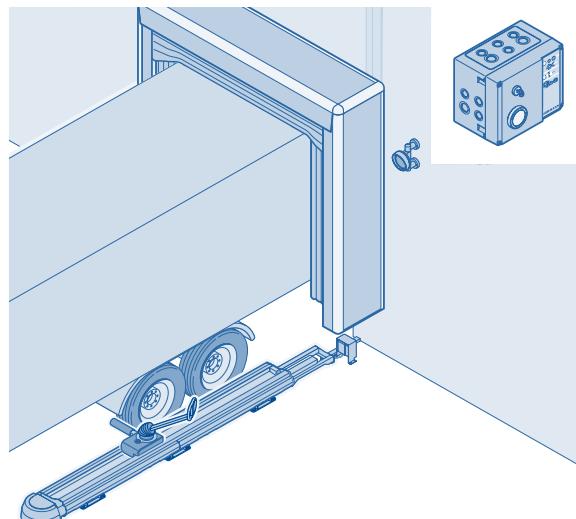
### Additionally required

Order separately, if not present:

- "Close" limit switch reporting, e.g. by magnet switch in the door guide, alternatively "dock leveller in home position" position reporting
- Wheel guide for the opposite side, preferably WBM



MWB 2 with warning light on post



MWB 2 with warning light on facade

Wheel-blocking system	€
Wheel-blocking system MWB 2, right or left, with control and LED traffic light red / yellow / green, 1-arm, for outside	10993
With warning light on post, pre-wired to data box	Each 10659

### Required equipment

"Close" limit switch reporting / "dock leveller in home position" position reporting	See page 49
Wheel guide for the opposite side	See page 45

### Optional extras

Main switch, CEE plug	See page 49
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# Safety systems

## Mechanical wheel-blocking system MWB 2 with control MWBC

### Manual mechanical wheel-blocking system MWB 2

System to secure the vehicle against unintentional rolling or creeping due to forklift manoeuvres.

Wheel guide with manually operated blocking arm on a sideways shifting carriage, length of working range approx. 2800 mm.

Wheel guide protected by concrete block at the front, equipped with maintenance rails for trolleys at the rear. Overall system length approx. 5300 mm. Arrangement to the right viewed from outside; optionally with a mirrored arrangement, e.g. with limited space or left-hand traffic.

### Blocking arm on carriage

Rotating blocking arm, height 300 mm up to max. 350 mm above the driveway, range into the roadway 350 mm, horizontal loading up to 115 kN. Operated by ergonomic operating lever with operating instruction.

Carriage with yellow / green control light and sensors for detecting home position, working position and wheel position. Locking / release of the operating lever, coupled to the "Closed" door position (release not possible if door is open).

### Control MWBC

Control in housing IP 65, connecting voltage 110 – 230 V, 1 phase, 50 / 60 Hz.

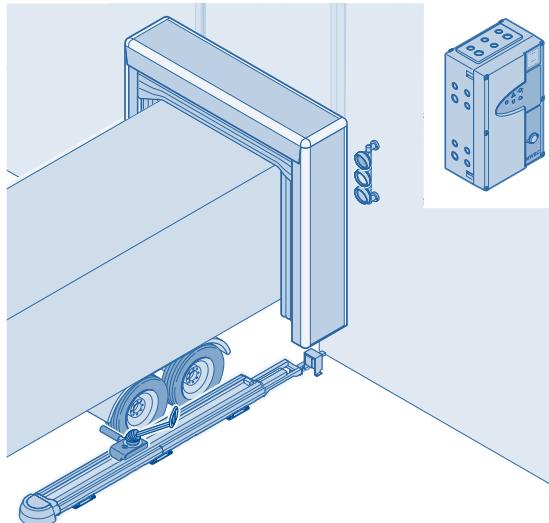
Equipment:

- 5 LED control lights for status and fault reporting
- Key switch to bridge the wheel blocking function
- Connections 230 V AC for interior, exterior warning lights and for alarm horn
- Connection 230 V AC for inflatable dock seal
- Connection of door / dock leveller release function
- Connection for DAP and MWB 2

### Additionally required

Order separately, if not present:

- Red / yellow / green warning light for outside permitted and for release request
- "Close" limit switch reporting, e.g. by magnet switch in the door guide, alternatively "dock leveller in home position" position reporting
- Wheel guide for the opposite side, preferably WBM



Mechanical wheel-blocking system MWB2 with control MWBC

### Wheel-blocking system

€

Wheel-blocking system MWB 2, right or left, without control	Each	9690
Control MWBC	Surcharge	952

### Required equipment

### Art. no.

External LED traffic light	Red / yellow / green for outside, 3-arm, 230 V AC	637573	Surcharge	304
"Close" limit switch reporting / "dock leveller in home position" position reporting				See page 49
Wheel guide for the opposite side				See page 45

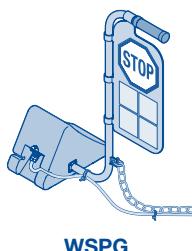
### Optional extras

### Art. no.

LED traffic light for inside	Red, 230 V AC	637534	Surcharge	115
	Yellow, 230 V AC	637536	Surcharge	112
Alarm horn	For warning signal on loss of tyre contact, IP 33, 230 V AC	637197	Surcharge	125
Main switch, CEE plug				See page 49

# Safety systems

## Wheel chock with sensor WSPG, more equipment



**WSPG**



**Control MWBC**

Wheel chock with sensor	€
<b>WSPG</b> , robust PU wheel chock with optical sensor and additional integrated position sensor, with strain relief, red / green LED operation indicator, with holder and 7 m chain, connecting lead, including activating kit PR1	
6 m coiled cable	Each 1241
7.5 m connecting lead	Each 1078
14 m connecting lead	Each 1235

Function: door or dock leveller release after applying wheel chock  
Connection to control for dock leveller or MWBC

Control MWBC	Surcharge	952
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(for MWBC product description, see wheel-blocking system MWB 2 on page 48)  
Possible equipment and additional functions regarding connection to a dock leveller control:

External LED traffic light	Red / yellow / green, 3-arm, 230 V AC	Signal for docking / undocking permitted / not permitted, remove wheel chock permitted – “Close” limit switch reporting or “dock leveller in home position” position reporting required, see below.	637573	Surcharge	304
LED traffic light inside	Red, 230 V AC	Signal for loading not permitted	637534	Surcharge	115
	Yellow, 230 V AC	Signal for wheel chock applied – loading permitted	637536	Surcharge	112

Alarm horn	IIP 33, 230 V AC	Warning signal if the wheel chock is removed when this is not permitted	637197	Surcharge	125
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Connection of docking assistance and inflatable dock seal possible

More equipment	Art. no.	€
Accessories for control	Main switch 230 V, 1-phase, in housing IP 65	637514
	CEE plug, 230 V, 1-phase, with 1 m connecting lead	638095
Door limit switch reporting	Magnet switch for fitting to the sectional door boom	436339
	Magnet switch for fitting to the rolling shutter side guide	637743
	Limit switch reporting of the operator control (only possible for power-operated door via option relay HOR1-300), travel limit circuit board article no. 637052 or multi-function circuit board article no. 637026) – take into account when ordering the operator control	
Dock leveller position reporting	Proximity switch DR – take into account when ordering the dock leveller or retrofitting	

# Brand quality for residential and commercial construction

The family-owned company Hörmann offers all important construction components for building and renovating projects from a single source. We manufacture in highly-specialised factories using state-of-the-art production technologies. Furthermore, our employees work intensively on new products, continual further developments and improvements to details. The results are patents and one-of-a-kind products you can depend on.

