

### Loading technology economic · strong · safe

Quality has a name.



# STRONGER TOGETHER.



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Products having this symbol are available in our webshop on **promstahl-shop.de** 

FROM HANNOVER TO EVERY PLACE AROUND THE WORLD.

# PROMStahl sets new standards for docking equipment.

PROMStahl is an internationally recognised expert in docking equipment. Continuous improvement of the tried and tested technology together with designing new products leads to creation of innovative and cost-effective docking systems that are tailored to individual requirements of customers.

We focus on certified production and professional installation of docking systems as much as we do on providing reliable servicing and scheduled maintenance of the sold equipment.

# From Hannover to every place around the world

PROMStahl is a worldwide company with an international distribution network, cooperating with servicing partners. Customers from all over the world make use of the indepth specialised knowledge and many years of experience the experts from Gehrden have. Since 2010 the company has been successful in conquering international markets. PROMStahl products are available in many countries around the globe.





Loading technology

Accessoires

Sectional door

Further information









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# OUR LOADING TECHNIQUE IS ASTONISHING.

PROMStahl loading technique is based on high quality, durable and safe solutions for loading vehicles or containers. By deciding to purchase PROMStahl product, you make a right choice: innovative product development works, individual planning, competent advisors, certified production and professional assembly, as well as reliable service and regular maintenance of your equipment are integral parts of our assortment.



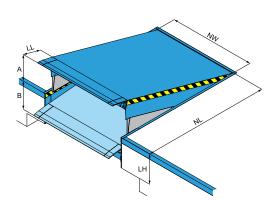
More information



Stationary dock leveller with hinge lip

The stationary dock leveller with swing lip (PS) is a new product of PROMStahl's wide product range. This top-quality product benefits from over 25 years of experience in designing and manufacturing docking systems. The electro-hydraulic PS leveller is operated at the touch of a button. As soon as the platform has reached its highest position the lip swings out automatically and comes to rest on the lorry bed. During loading and unloading the PROMStahl dock leveller follows the movements of the vehicle (automatic floating position).

#### Type PS



Dock le	eveller	LL = 400		LL =	500
NL	LH	А	В	А	В
1.750	700	250	325	185	345
2.000	600	290	270	-	-
2.000	700	290	350	190	340
2.500	600	360	260	-	-
2.500	700	380	315	260	326
3.000	600	305	255	-	-
3.000	700	450	305	305	317
3.500	800	380	325	310	310
4.000	900	570	300	460	300
4.500	900	530	290	430	300
	<b>NW</b> = 1	.750, 2.000, 2.2	200, 2.250 for a	all sizes	

All dimensions in mm.

Load capacity for all sizes: 60 kN (dynamic), 84 kN (static).

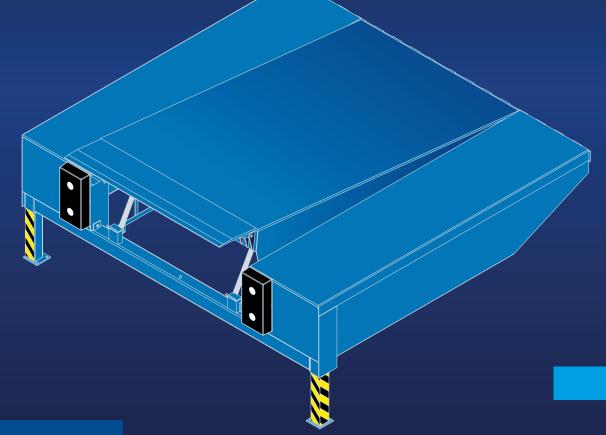
NL = Nominal length, NW = Nominal width, LL = Lip length, LH = Leveller height,

A = Level equalisation above dock, B = Level equalisation below dock.

Other load capacities and sizes are available on request.



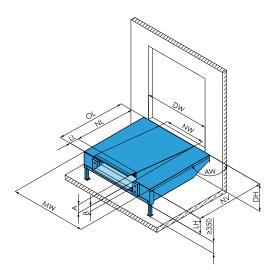




# Stationary dock shelter with swing lip

#### Type PAS

The **PAS ramp** is a complete loading system which is mounted in front of a door opening or a building as a self-supporting unit. It consists of a hydraulic dock leveller with a swing lip and lateral treads which are reinforced on their bottom side. The PS leveller of the PAS system is operated at the touch of a button. As soon as the platform has reached its highest position the lip swings out automatically and comes to rest on the lorry bed. It optimally adapts to all lorry types both with respect to width as well as with respect to height. During loading and unloading the PROMStahl dock leveller follows the movements of the vehicle (automatic floating position).

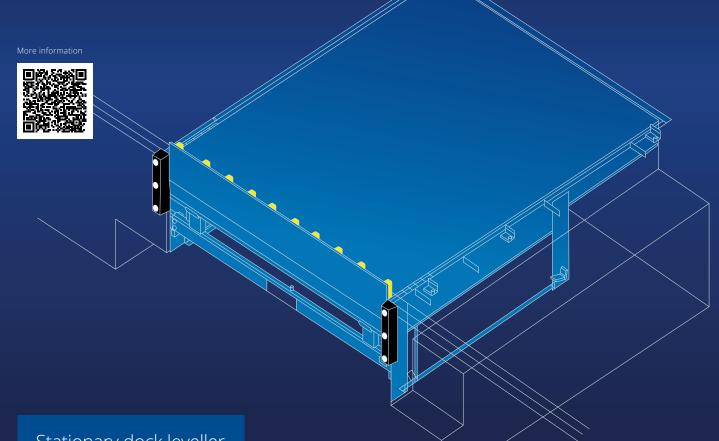


Dock l	eveller		LL = 400			LL = 500	
NL	LH	А	В	OL	А	В	OL
2.000	700	290	350	2.400	190	340	2.500
2.450	700	380	315	2.850	250	330	2.950
3.000	700	450	305	3.400	305	317	3.500
3.500	800	380	325	3.900	310	310	4.000
<b>NW</b> = 2.000, 2.200 for all sizes							

MW = 3.300, 3.500, 3.600 for all sizes

All dimensions in mm. Load capacity for all dimensions: 60 kN (dynamic), 84 kN (static). NV = Loading ramp nominal length (NL + 20), NL = Dock leveller nominal length, NW = Dock leveller nominal width, OL = Overall length (NL + LL), LL = Lip length, LH = Leveller height, DH = Dock height, DW = Dock width, MW = Loading ramp module width, A = Level equalisation above dock, B = Level equalisation below dock, AW = Installation angle.

(All loading ramps are available with standard installation angles of 90°, 45°/135°, 60°/120° and 75°/105°. Further angles are available on request.)



#### Stationary dock leveller with hinge lip and Fall Guard lock

#### Type PSS

The **PSS-type dock leveller with hinge lip and Fall Guard safety device** is a new design in the wide range of PROMStahl products which has been designed to provide optimal safety for the loading house staff. The rapid pace of work involving handling systems in storage places or warehouses can lead to many dangerous and even life-threatening accidents with fork lift trucks. That is why the PSS-type dock leveller is equipped with the Fall Guard safety device. When the dock leveller is in its rest position, a 90 mm section of hinge lip is raised vertically above the platform surface, thus creating an obstacle and preventing the fork lift truck and the warehouse personnel from falling from the ramp.

Dock le	eveller	LL = 400		LL = 500	
NL	LH	А	В	А	В
2.000	600	290	270	-	-
2.000	700	290	350	190	340
2.500	600	360	260	-	-
2.500	700	380	315	260	326
3.000	600	305	255	-	-
3.000	700	450	305	305	317
3.500	800	380	325	310	310

NW = 1.750, 2.000, 2.200, 2.250 for all sizes

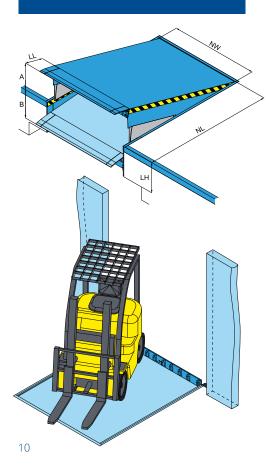
All dimensions in mm.

Load capacity for all sizes: 60 kN (dynamic), 84 kN (static).

NL = Nominal length, NW = Nominal width, LL = Lip length, LH = Leveller height,

A = Level equalisation above dock, B = Level equalization below dock.

Other load capacities and sizes are available on request.



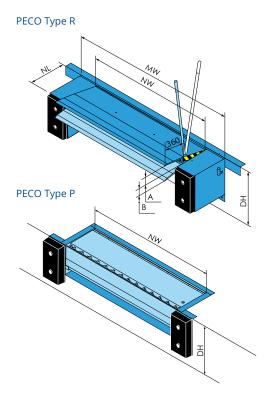
More information



#### Mechanical eco leveller

The **PECO mechanical eco leveller** (PROMStahl ECONOMICAL) belongs to PROMStahl's wide product range and is especially suited for loading and unloading vehicles with beds the height of which only slightly differs from that of the dock. The PECO leveler is therefore the perfect solution for fleets with vehicles of nearly identical lorry bed heights.

#### Type PECO



		Type R	
Nominal length (NL)		485	
Nominal width (NW)	1.750	2.000	2.250
Modular width (MW)	2.300	2.550	2.800
Load capacity (kN)		60	

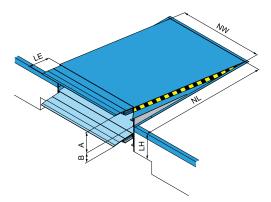
		Type P	
Nominal length (NL)		485	
Nominal width (NW)	1.750	2.000	2.250
Load capacity (kN)		60	

All dimensions in mm.



# Hydraulic dock leveller with telescopic lip

#### Туре РТ



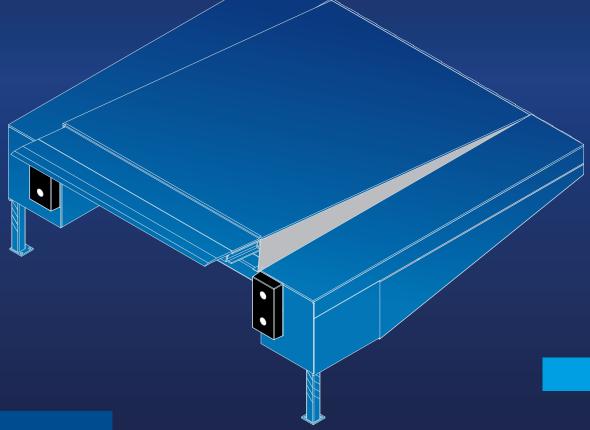
The **PT** stationary dock leveller with telescopic lip is a new product of PROMStahl's wide product range. This top-quality product benefits from over 25 years of experience in the field of design and manufacture of docking technology. The hydraulic version of the PT leveller is operated at the touch of a button and after exact positioning of the telescopic lip automatically follows the movements of the vehicle during the loading or unloading process (automatic floating position). The big advantage of this type of dock leveller is the maximum flexibility of the lip length. Thanks to this feature effective loading and unloading even of vehicles that are not completely correctly positioned can be guaranteed and time-consuming and complicated repositioning of the vehicle is not necessary.

Dock l	eveller	LE =	500	LE = 1	1.000		
NL	LH	А	В	А	В		
1.750	700	300	340	-	-		
2.000	600	310	280	400	330		
2.000	700	315	405	380	480		
2.500	600	450	285	510	300		
2.500	700	450	400	520	460		
3.000	600	430	285	500	280		
3.000	700	430	380	500	430		
3.500	800	500	500	590	500		
4.000	800	530	480	590	530		
4.500	800	490	470	520	510		
	NW = alle Größen 1 750-2 000-2 100-2 200-2 250-2 400						

NW = alle Größen 1.750, 2.000, 2.100, 2.200, 2.250, 2.400

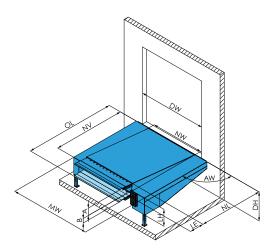
All dimensions in mm. Load capacity for all sizes: 60 kN (dynamic), 84 kN (static). NL = Nominal length, NW = Nominal width, LE = Lip extension, LH = Leveller height, A = Level equalisation above dock, B = Level equalisation below dock. Other load capacities and sizes are available on request.





# Loading ramp with telescopic lip leveller

#### Туре РАТ



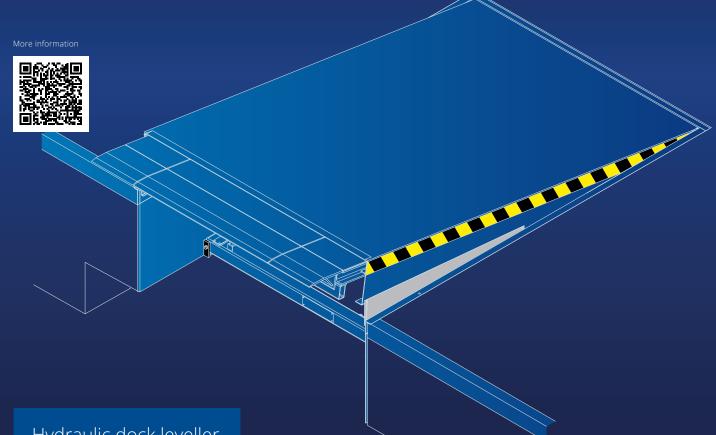
The **PAT** ramp is a complete loading system which is mounted in front of a door opening or a building as a self-supporting unit. It consists of a hydraulic dock leveller with a telescopic lip and lateral treads which are reinforced on their bottom side. The PT leveller of the PAT system is operated at the touch of a button and after exact positioning the telescopic lip automatically follows the movements of the vehicle during the loading or unloading process (automatic floating position). The big advantage of this type of dock leveller is the maximum flexibility of the lip contact length. Thanks to this feature effective loading and unloading even of vehicles that are not completely correctly positioned can be guaranteed and time-consuming and complicated repositioning of the vehicle is not necessary.

Dock le	ck leveller LE = 500 LE = 1.000			LE = 500			
NL	LH	А	В	OL	А	В	OL
2.000	700	315	405	2.500	380	480	3.000
2.450	700	470	400	2.950	560	470	3.450
3.000	700	430	380	3.500	500	430	4.000
3.500	800	500	500	4.000	590	500	4.500
<b>NW</b> = 2.000, 2.200, 2.250, 2.400 for all sizes							

MW = 3.300, 3.500, 3.600 for all sizes

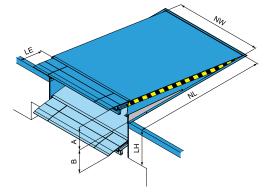
All dimensions in mm. Load capacity for all dimensions: 60 kN (dynamic), 84 kN (static). NV = Loading ramp nominal length (NL + 20), NL = Dock leveller nominal length,

NW = Dock leveller nominal width, OL = Overall length, LE = Lip extension, LH = Leveller height,DH = Dock height, DW = Dock width, MW = Loading ramp module width, A = Level equalisation above dock, B = Level equalisation below dock, AW = Installation angle. (All loading ramps available standard installation angles of 90°, 45°/135°, 60°/120° and 75°/105°. Further angles are available on request.)



#### Hydraulic dock leveller with segmented telescopic lip

#### Type PTU



PROMStahl's new product, the **PTU**, is a stationary electro-hydraulic dock leveller with a segmented telescopic lip. It represents the optimal solution for loading and unloading different types of vehicles like for example lorries and vans. This versatility leads to enormous cost savings.

The most important feature of this type of leveller is its segmented (3-part) telescopic lip. Depending on the type of vehicle docked (lorry or van) the operator chooses the related mode of operation on the control unit. For vans, only the 1.200 mm segment in the middle of the telescopic lip is extended. In this case the leveller's load capacity is 20 kN. Thanks to the PTU's special design, the weight on the van is hydraulically reduced to about 100 kg.

	Dock leveller		LE =	500	LE = 1	1.000
NL	NW	LH	А	В	А	В
3.000	2.000	800	470	550	550	620
3.500	2.000	900	500	580	570	645
4.000	2.000	950	550	650	620	720
4.500	2.000	950	540	650	600	710

All dimensions in mm.

$$\label{eq:NL} \begin{split} \text{NL} = \text{Nominal length}, \text{NW} = \text{Nominal width}, \text{LE} = \text{Lip extension}, \text{LH} = \text{Leveller height}, \\ \text{A} = \text{Level equalisation above dock}, \text{B} = \text{Level equalisation below dock}. \\ \text{Load capacity for vans: 20 kN; load capacity for lorries: 60 kN}. \end{split}$$

Other load capacities and sizes are available on request.



Stationary dock leveller with telescopic lip and Fall Guard safety device

#### **Type PTS**

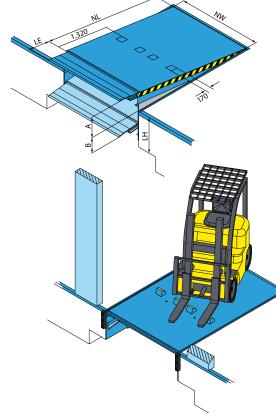
The PTS-type stationary dock leveller with telescopic lip and additional Fall Guard lock is a new design belonging to the wide range of PROMStahl products to further increase safety during loading and unloading. The rapid pace of work involving handling systems in storage places or warehouses can lead to many dangerous and even life-threatening situations. Bearing this in mind, PROMStahl decided to prevent this type of hazard by introducing the Fall Guard lock. When the dock leveller is in its rest position, four blocking chocks integrated into the platform, move upwards and hence form a stable safety device protecting forklift trucks and the loading staff from falling from the open ramp.

Dock le	eveller	LE =	= 500
NL	LH	А	В
3.000	700	430	380
3.500	800	500	500

Nominal width (NW) 2.000, 2.250 for both sizes. All dimensions in mm.

NL = Nominal length, NW = Nominal width, LE = Lip extension, LH = Leveller height, A = Level equalization above dock, B = Level equalization below dock.

Other load capacities and sizes are available on request.



#### Vehicle restraint system GuardBLOCK

Type PSB





The manual vehicle restraint system GuardBLOCK is a new product of PROMStahl's wide product range and optimizes safety during your loading and unloading process.

The manual blocking system GuardBLOCK consists of a fixed part anchored to the ground by means of rawl bolts, a mobile part for correct vehicle positioning and blocking, and an electromechanical part with external traffic lights for signal processing and signaling.

This system eliminates the risk of vehicles leaving the docking station accidentally during loading/unloading. The blocking unit is equipped with a sensor and connected to the dock leveller control unit by means of a resistant cable. The dock leveller is released for loading / unloading only after activation of the vehicle restraint system. Furthermore, a special mechanism prevents the deactivation of the blocking system until completion of the loading/unloading process.

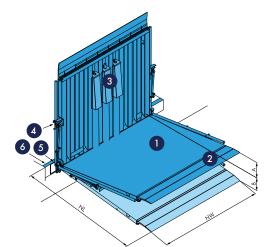
The complete PSB kit also comprises the PROMStahl wheel guides which allow for a fast and easy truck dock-in process. However, to upgrade existing loading stations, the PSB vehicle restraint system is also available without the PROMStahl wheel guides; existing wheel guides can also be used. In this case, the existing wheel guides have to be repositioned according to our requirements.

#### Operation

- The external traffic lights are green, the docking station is free and ready for dock-in.
- After vehicle dock-in, the truck driver positions the movable part of the PSB such that it is located between the wheels hence blocking the truck.
- As soon as the external traffic lights have become red, the door of the building can be opened and the dock leveller operated. As of this moment the vehicle restraint system cannot be unlocked until the completion of the loading/unloading process.
- After completion of the loading/unloading process, the dock levellers returns to its resting position and the industrial door is closed (red/green blinking traffic light signal). It is only now that the vehicle restraint system can be unlocked
- As soon as the blocking system is completely unlocked the external traffic lights become green and the truck can leave the docking station..

Stationary drawbridge leveller with steel lip

Type PPF



- 1 = Platform 2 = Steel lip
- 2 = Steel lip
- 3 = Pressure spring unit 4 = Operating rod
- 5 = Safety device
- 6 = Ramp head

The **PPF stationary drawbridge leveller** is suited for internal as well as for external docks and is used if small or medium differences in height between the dock edge and the lorry bed are to be compensated for. The drawbridge leveller is fixed to the ramp head by means of a steel hinge; for the loading or unloading process it is lowered onto the lorry bed by means of an operating rod. The leveller's weight is compensated for by means of pressure springs so that the PPF can be operated without any problems by one person only. For a nominal width and a nominal length of 2.000 mm the drawbridge leveller is always equipped with 2 operating rods to allow operation by two persons.

When not in use the leveller is fixed in vertical position at the ramp edge and locked in this position by means of an automatic safety device. All steel parts of the PPF leveller are available hot-dip galvanized.

NL	NW	А	В
1.250	1.500, 1.750, 2.000	175	245
1.500	1.500, 1.750, 2.000	225	295
1.750	1.500, 1.750, 2.000	265	340
2.000	1.500, 1.750, 2.000	310	390

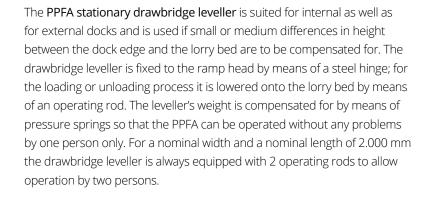
All dimensions in mm. Load capacity for all sizes: 60 kN.

NL = Nominal length, NW = Nominal width, A = Lev. equal. above dock, B = Lev. equal. below dock.

ary drawbridge

Stationary drawbridge leveller with aluminium segments

**Type PPFA** 



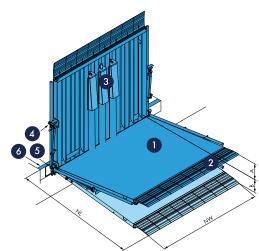
When not in use the leveller is fixed in vertical position at the ramp edge and locked in this position by means of an automatic safety device. The PPFA version is equipped with a segmented aluminium lip to guarantee an optimal adaptation to vehicles that are not perfectly docked in. All steel parts of the PPFA leveller are available hot-dip galvanized.

NL	NW	А	В
1.250	1.500, 1.750, 2.000	175	245
1.500	1.500, 1.750, 2.000	225	295
1.750	1.500, 1.750, 2.000	265	340
2.000	1.500, 1.750, 2.000	310	390

All dimensions in mm. Load capacity for all sizes: 60 kN.

NL = Nominal length, NW = Nominal width, A = Lev. equal. above dock,

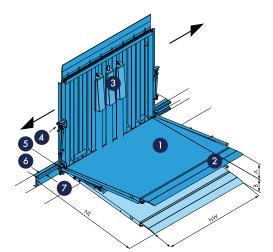
B = Lev. equal. below dock.



- 1 = Platform
- 2 = Aluminium segments
- 3 = Pressure spring unit
- 4 = Operating rod
- 5 = Safety device 6 = Ramp head

Laterally slid-able drawbridge leveller with steel lip

Type PPV



- 1 = Platform 2 = Steel lip
- 3 = Pressure spring unit
- 4 = Operating rod
- 5 = Safety device
- 6 = Ramp head
- 7 = Guide rail

The PPV drawbridge leveller with steel lip is suited for internal as well as for external docks and is used if small or medium differences in height between the dock edge and the lorry bed are to be compensated for. The drawbridge leveller is guided in a rail fixed to the head of the ramp and can be moved laterally. The PPV leveller can be delivered for the most common competitor profiles, i.e. complicated and cost- effective replacement of existing guide rails is not necessary. The leveller's weight is compensated for by means of pressure springs so that the PPV can be operated without any problems by one person only. For a nominal width and a nominal length of 2.000 mm the drawbridge leveller is always equipped with 2 operating rods to allow operation by two persons. When not in use the leveller is fixed in vertical position at the ramp edge and locked in this position by means of an automatic safety device. All steel parts of the PPV leveller are available hot-dip galvanized.

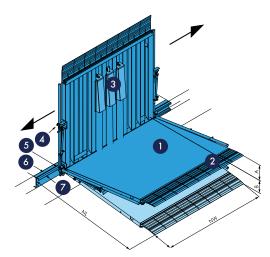
NL	NW	А	В
1.250	1.500, 1.750, 2.000	175	245
1.500	1.500, 1.750, 2.000	225	295
1.750	1.500, 1.750, 2.000	265	340
2.000	1.500, 1.750, 2.000	310	390

All dimensions in mm. Load capacity for all sizes: 60 kN.

NL = Nominal length, NW = Nominal width, A = Lev. equal. above dock, B = Lev. equal. below dock.

Laterally slid-able drawbridge leveller with aluminium segments

#### Type PPVA



- 1 = Platform
- 2 = Aluminium segments
- 3 = Pressure spring unit 4 = Operating rod
- 5 = Safety device
- 6 = Ramp head
- 7 = Guide rail

The PPVA laterally slid-able drawbridge leveller is suited for internal as well as for external docks and is used if small or medium differences in height between the dock edge and the lorry bed are to be compensated for. The drawbridge leveller is guided in a rail fixed to the head of the ramp and can be moved laterally. The PPVA leveller can be delivered for the most common competitor profiles, i.e. complicated and cost-effective replacement of existing guide rails is not necessary. The leveller's weight is compensated for by means of pressure springs so that the PPVA can be operated without any problems by one person only. For a nominal width and a nominal length of 2.000 mm the drawbridge leveller is always equipped with 2 operating rods to allow operation by two persons. When not in use the leveller is fixed in vertical position at the ramp edge and locked in this position by means of an automatic safety device. All steel parts of the PPVA leveller are available hot-dip galvanized. Moreover, the PPVA version is provided with a segmented aluminium lip which guarantees a perfect adaption to vehicles even if they are not perfectly positioned.

NL	NW	А	В
1.250	1.500, 1.750, 2.000	175	245
1.500	1.500, 1.750, 2.000	225	295
1.750	1.500, 1.750, 2.000	265	340
2.000	1.500, 1.750, 2.000	310	390

All dimensions in mm. Load capacity for all sizes: 60 kN.

NL = Nominal length, NW = Nominal width, A = Lev. equal. above dock,

B = Lev. equal. below dock.



#### Mobile container dock plate

#### Type PQM

The **PQM dock plate** belongs to PROMStahl's wide product range and has been designed for container loading and unloading. It compensates for the difference in height between yard level and the container bed. The PQM dock plate is made of durable welded steel provided with an anti-slip tear plate. It is moved to the container by means of an industrial truck. This dock plate is provided with slots to enable quick and easy transport.

For loading and unloading the dock plate is placed directly next to the rear edge of the container; subsequently, its lip is swung out and positioned on the container bed. The plate is then fixed against slipping away by means of the safety chains included in the delivery.

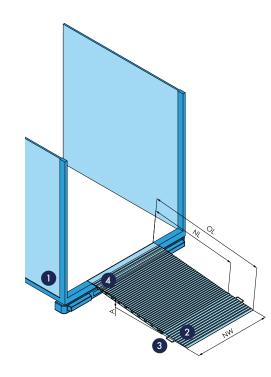
NL	NW	OL	A min.	A max.
1.435	1.500, 1.750, 2.000, 2.250, 2.300, 2.400	1.935	150	240
2.000	1.500, 1.750, 2.000, 2.250, 2.300, 2.400	2.500	150	300
2.450	1.500, 1.750, 2.000, 2.250, 2.300, 2.400	2.950	150	360
2.900	1.500, 1.750, 2.000, 2.250, 2.300, 2.400	3.400	150	410

All dimensions in mm. Load capacity for all sizes: 60 kN.

NL = Nominal length, NW = Nominal width, A = min. / max. rise, OL = Overall length.

1 = Container

- 2 = Rear lip
- 3 = Handle
- 4 = Front lip



#### Aluminium drawbridge levellers

#### Cover the distance.

Our aluminium drawbridge levellers are an economic and reliable solution for loading operations where small differences in height between the heavy-duty vehicle and the ramp are bridged or when loading is performed at the same level. They are made of an aluminium alloy ensuring high strength and resistance to weather conditions.

By deciding to purchase PROMStahl products, you make a right choice: individual product development works, individual planning, competent advisors, certified production and professional assortment, as well as reliable service and regular maintenance of your equipment are integral parts of our assortment. Take advantage of our expertise we have gained over a number of years.



#### **Type PKBS** Laterally sliding drawbridge leveller

The PKBS laterally sliding drawbridge leveller manufactured by PROMStahl is designed for bridging loading areas with small or medium differences in height and may be operated by one person. This leveller slides laterally and is stored vertically at the edge of the dock when not in use; its load capacity is 40 kN; the maximum difference in height that can be compensated for amounts to 135 mm.

This type of drawbridge leveller is made of durable weatherproof aluminium alloy and meets the highest requirements of modern goods traffic. The automatic lock/release system prevents accidental fall-down of the device.



#### **Type PSKB** Slidable aluminium drawbridge leveller

PSKB slidable drawbridge levellers are designed for bridging medium differences in height and can be operated by just one person. The platform made of high-quality aluminium and a track carriage fixed in a ball bearing guarantee easy operation and lateral sliding.

This type of dock leveller has a load capacity up to 40 kN and can bridge differences in height of up to about 200 mm. This dock leveller is made of durable weatherproof a aluminium alloy and meets the highest requirements of modern goods traffic. If not in use, the leveller is in its vertical rest position at the ramp edge. An automatic lock/release system prevents accidental fall-down of the leveller.



**Type PHFB** Mobile dock plate

The PHFB mobile dock plate is designed to bridge differences in height of up to about 145 mm. The dock plate is made of a durable aluminium alloy with an anti-slip layer; thanks to its light weight it can be used for a wide range of applications. This mobile dock plate can also be delivered with rolls facilitating transport between varying loading areas.

Load capacity for all sizes: 40 kN.



**Type PSKBS** Fixed aluminium drawbridge leveller

PSKBS fixed drawbridge levellers are designed for bridging medium differences in height and can be operated by just one person. The aluminium platform guarantees easy operation and when the leveller is not used, it is positioned vertically on the ramp edge. The dock leveller has a load capacity up to 40 kN and can bridge differences in height of up to about 200 mm.

This dock leveller is made of a durable weatherproof aluminium alloy and meets the highest requirements of modern goods traffic. An automatic lock system, which can be easily released, prevents accidental fall-down of the leveller.



More information can be found here.



#### **Type PHF** Mobile aluminium drawbridge leveller

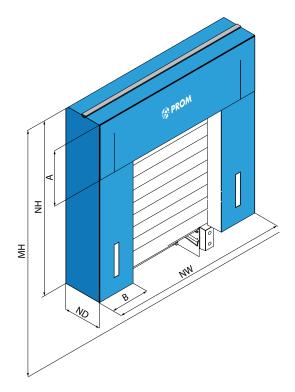
PHF mobile drawbridge levellers are made of a 40 mm thick weatherproof chamber profile with an anti-slip layer. A mobile ramp compensates height differences and ensures a smooth ramp angle. As a standard, a rubber profile is located at the bottom of the leveller to prevent displacement during loading operations. Optionally, it is possible to equip the drawbridge leveller with protecting arms. More information





# Mechanical dock shelter

#### **Type PMV**



The front and the rear frame of the **PMV dock shelter** consist of high-stability extruded aluminum sections connected to each other by bracing arms. The curtain is 3 mm thick, made of highly wear and tear resistant double-layer PVC-coated cloth and mounted on the flexible frame. Thanks to the adaptable roof and the parallel guide systems the front structure moves backward in the case of inaccurate docking, hence preventing damage to the dock shelter. The front part of the dock shelter is provided with warning stripes to facilitate the docking process. An integrated rain channel allows lateral drainage of rainwater (optional). The standard version of the dock shelter is provided with a slit in the left and right-hand corner. Partially or completely slit top curtains are available at little surcharge.

NW	NH	ND	А	В
3.250	3.200, 3.400, 3.500, 3.600	600	1.000	600
3.300	3.200, 3.400, 3.500, 3.600	600	1.000	600
3.400	3.200, 3.400, 3.500, 3.600	600	1.000	600
3.450	3.200, 3.400, 3.500, 3.600	600	1.000	700

All dimensions in mm.

NW = Nominal width, NH = Nominal height, ND = Nominal depth, MH = Installation height (recommendation 4.500 mm), A = Top curtain height, B = Side curtain width Other sizes available upon request. Plan material in black.

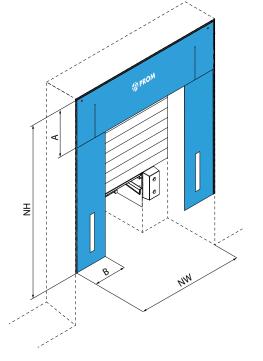




#### Alcove-mounted curtain-type dock shelter

#### **Type PMN**

This type of dock shelter consists of aluminum profiles which are mounted to both sides and to the top edge of the alcove. The shelter can be set in concrete, steel or installed using a special fixing system. The high- durability, 3 mm thick curtains are made of 2-layer, PVC-coated fabrics. Warning stripes at the front section of the dock shelter facilitate the vehicle dock-in procedure. The PMN dock shelter is pre-mounted and con- sists of just three parts; therefore, it can be mounted to the façade very fast and easily. Considerable savings regarding time and money are the decisive advantages of this design.



	Standard dimensions
Nominal width (NW)	3.250, 3.300, 3.400, 3.450
Nominal height (NH)	3.200, 3.400, 3.500, 3.600
Dock height (A)	1.000
Side curtain width (B)	600 (≤ NW 3.400) and 700 (> NW 3.450)

All dimensions in mm.

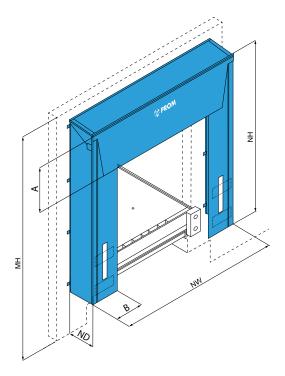
Other sizes available upon request. Plan material in black.



# is mon

#### Mechanical dock shelter with side cushions

#### Type PMSK



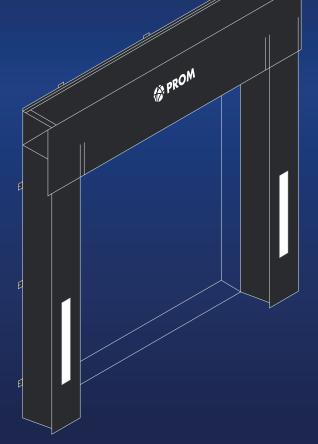
The **mechanical dock shelter PMSK** is a new product of PROMStahl's wide product range. It mainly consists of an height-adaptable roof part and two side parts. These side parts are made of a special foam material. If a vehicle does not dock in perfectly, these foam side parts are compressed and then move to the sides. Therefore, the dock shelter is not damaged even if the truck does not reverse centrically. Thanks to the special design of the height-adaptable roof part, damage is avoided even for very high trucks like jumbo vehicles or demountable containers. If the vehicle is lifted, the roof automatically follows this upward movement. The roof returns to its original position after the vehicle has left the docking station.

	Standard dimensions
Nominal width (NW)	3.250, 3.300, 3.400, 3.450
Nominal height (NH)	3.200, 3.400, 3.500, 3.600
Nominal depth (ND)	550
Dock height (A)	1.000
Side curtain width (B)	600 (≤ NW 3.400) and 700 (> NW 3.450)
Installation height (MH)	4.500 (recommandation)

All dimensions in mm.

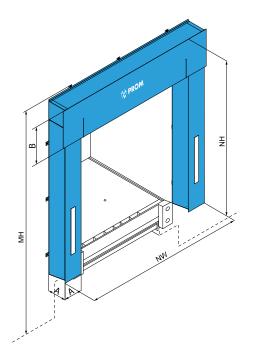
NW = Nominal width, NH = Nominal height, ND = Nominal depth, MH = Installation height (recommendation 4.500 mm), A = Top curtain height, B = Side curtain width. Other sizes available upon request. Plan material in black. More informatior





# Mechanical cushion seal dock shelter

#### Туре РМК



The PROMStahl **PMK dock seal** is designed for loading and unloading truck fleets consisting of vehicles almost identical in width and height. It guarantees perfect protection from draught, rain and wind and thus prevents energy losses.

The dock seal is equipped with a horizontal cushion and two vertical cushions consisting of foam material completely covered by a PVC-coated high-resistance Trevira fabric. The dimensions of the dock seals are defined depending on the individual characteristics of your loading bay and the vehicle types to be loaded/unloaded i.e. your PROMStahl dock seal is always tailor-made.

The PMK dock shelter is pre-mounted and consists of just three parts; therefore, it can be mounted to the façade very fast and easily. Considerable savings regarding time and money are the decisive advantages of this design.

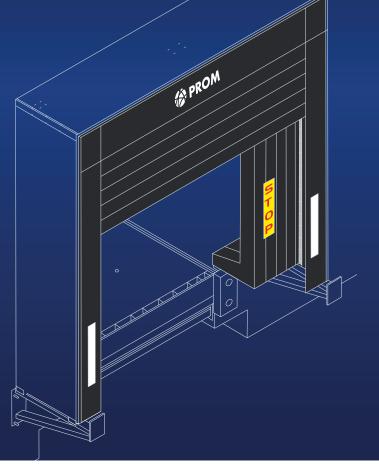
	Standard dimensions
Nominal width (NW)	2.600, 2.800
Nominal height (NH)	2.500, 2.700, 2.900
Cushion cross section (A)	300 × 300
Top curtain height (B)	600
Installation heigh (MH)	4.100 (recommandation)

All dimensions in mm.

Other sizes available upon request. Plan material in black.

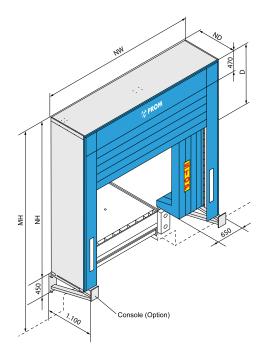
More information





#### Inflatable dock shelter

#### Type PWI



PROMStahl's series of **inflatable dock shelters** combines optimum sealing with the greatest possible variety of applications. The inflatable side and top cushions provide airtight contact with the vehicle. This type of shelter is thus ideal for temperature-controlled warehouses to seal against summer heat, winter cold, draught, dust and insects. The results are substantial savings on energy, improved working environment, production and safety. Moreover, the shelter reduces the possibility of unauthorized personnel entering the warehouse through the loading bay doorway, hence considerably reducing loss through theft. The inflatable top and side cushions not only guarantee optimum sealing but also automatically adapt to the truck measurements. This feature means that trucks of varying sizes can be sealed effectively. Offering a very good payback period PROMStahl dock shelters are a highly costeffective investment.

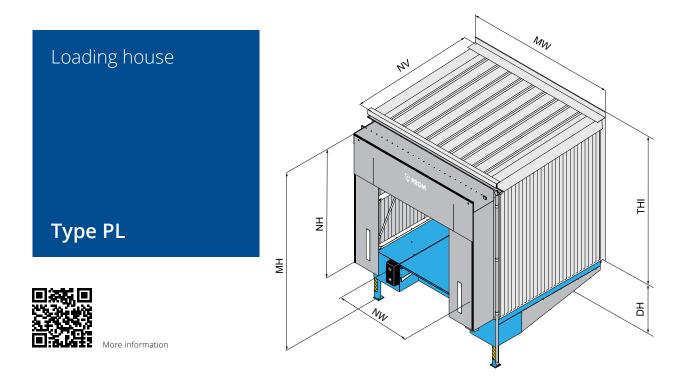
NW	NH	ND	D
3.500, 3.600, 3.700	3.600, 4.000, 4.700	920	1.350, 1.750

All dimensions in mm.

NW = Nominal width, NH = Nominal height, ND = Nominal depth, D = Height of top seal (inflated), MH = Installation height (recommendation 4.700 mm).

\*Console (option) only for outside height (3.600 and 4.000 mm).

Plan material in black.



The **loading house** is a housing system that combined with the loading ramp forms a stand-alone docking system that can be attached to the building. It comprises all the components of a complete docking system: dock leveller, dock shelter and sectional door: These elements represent a complete and sophisticated docking system that depending on the individual loading situation offers decisive advantages over conventional internal ramps. They extend the available storage space and at the same time provide the building with thermal insulation.

Hot-dip galvanization of the whole steel frame system is standard. Water drainage systems and façade elements matched to your building are also available as optional equipment.

			Load house Type PL			
NV		2.020			2.470	
DH	950 - 1.050	1.100 - 1.250	1.300 - 1.500	950 - 1.050	1.100 - 1.250	1.300 – 1.500
THI*	4.040	3.840	3.640	4.065	3.865	3.665
MW			All dimensions 3.	.300, 3.500, 3.600		
NV		3.020			3.520	
DH	950 - 1.050	1.100 - 1.250	1.300 - 1.500	950 - 1.050	1.100 - 1.250	1.300 - 1.500
THI*	4.000	3.890	3.690	4.115	3.915	3.715
	4.090	3.690	5.650	4.115	5.515	5.715
MW	4.090	3.690		.300, 3.500, 3.600	5.515	5.715

#### \* Dimension for insulated design.

All dimensions in mm.

MW = Loading house module width, NV = Loading house nominal length (NL+20), NW = Dock leveller nominal width, THI = Wall connection height, insulated (panels), THU = Wall connection height, without insulation (trapezoidal sheet) THX = Wall connection height (without cladding), DH = Dock height, NH = Nominal height of the dock shelter, MH = Dock shelter installation height, Recommendation: MH = 4.500 for truck heights up to 4.000.

#### Aviable versions:

PLSU / PLMU – single/multiple systems without insulation (trapezoidal sheet)

PLSI / PLMI – single/multiple systems, insulated (panels)

PLSX / PLMX – single/multiple systems (frame only)

#### Mobile yard ramp

#### Type PAR Type PARP



The **mobile yard ramps** are part of PROMStahl's wide product range. They offer the possibility of loading and unloading trucks, containers or wagons directly from yard level. The whole maneuvering and loading process can be managed by just one person.

The ramps are made of robust welded steel and the whole driving range consists of stable grids that are optimally dimensioned and suited for heavy loads. For accident prevention the ramp is equipped with lateral protection bars on the left and right side.

The mobile yard ramp is available in its standard version (type PAR) or with an additional horizontal platform (type PARP). For loading and unloading of high loads the PARP version is recommended with the forklift truck safely entering the lorry via the horizontal part of the ramp.

	Type PAR	Type PARP
Overall width for load capacity of 7 t	2.340 mm	2.360 mm
Overall width for load capacity of 10 t	-	2.380 mm
Height adjustment range	850 - 1.	750 mm
Overall length	9.500 mm	11.500 mm







More information

#### Technical details

- robust steel
- optimal manoeuverability even for small spaces
- Sheavy-duty wheels
- anti-slip and open hot-dip galvanized grids
- Load capacities: 7 t and 10 t
- infinitely variable height adjustment of the ramp by means of a manual hydraulics pump
- high-stability safety chain for fixing the mobile yard ramp to the truck, container and wagon
- floating position for optimal adaption of the vehicles during the loading or unloading process
- high-quality corrosion protection (available in RAL colours or hot-dip galvanised version)
- movable by means of forklift truck
- load hook for forklift truck (for fast moving of the yard ramp)



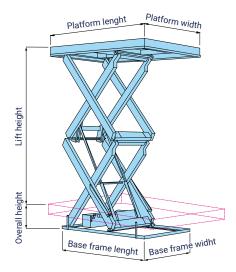
PROMStahl's type **PSH scissor lifts** are used on loading ramps for lorry loading and unloading; they compensate for the difference in height between the vehicle and the loading ramp. PSH scissor lifts are available as single-scissor or double-scissor systems and stand out for their robustness and their excellent price/performance ratio. Extremely high elevations can be reached by providing the lift platform with several scissor packages. The vertical double-scissor lift, for example, can be used as a working platform, installation table or machinery platform.

#### Illustration: Single-scissor lift

# Platform lenght Platform width

Distributed load	500 daN – 12.500 daN
Range of application	Medium platform, medium elevation
Platform length	1.250 – 4.500 mm
Platform width	800 – 3.000 mm
Platform cover	Tear-plate or sheet steel
Elevation	800 – 3.000 mm

#### Illustration: Vertical double-scissor lift



Distributed load	500 daN – 8.000 daN
Range of application	Small platform, big elevation
Platform length	1.250 – 3.500 mm
Platform width	800 – 3.000 mm
Platform cover	Tear-plate or sheet steel
Elevation	800 – 4.000 mm

More information



# OUR ACCESSORIES.

Thanks to our sophisticated accessories your loading and unloading procedures will be improved with respect to safety, reliability, and efficiency. Optimize your material handling processes by using PROMStahl accessories.

# Visit our webshop

You will find suitable spare parts, accessories and much more in our webshop.

Open 24 hours for you!



promstahl-shop.de





#### Traffic lights

Inside and outside traffic lights represent a reasonable completion of the docking station. It is recommended to provide the loading station not only with a wheel chock but also with a traffic lights system. PROMStahl **type PBEA** traffic lights systems assure communication between the lorry driver and the warehouse staff. They show the driver when the docking station can be approached and left safely. The traffic lights are connected to the PROMStahl control unit and adjustments/programming can be adapted to your individual requirements.

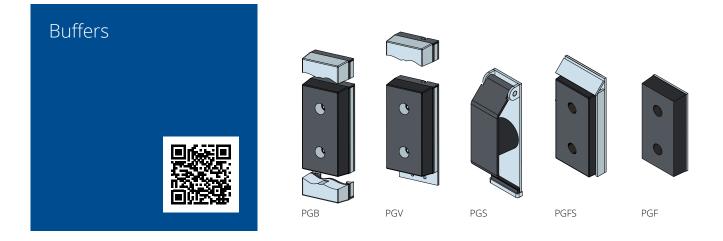


#### Type PBEA Traffic lights 07

- suitable as internal or external traffic lights (red/green) dimensions: 320 x 162 x 85 mm
- strong colours thanks to LEDs
- protection class: IP 65
- service life > 25,000 hours
- traffic lights can be rotated by 180° resulting in optimal visibility of the signal

#### Type Type PBEA Traffic lights 05

- $\cdot\,$  suitable as internal or external traffic lights (red/green)
- strong colours thanks to LEDs
- simple installation by means of integrated bracing arm protection class: IP 65
- service life: up to 50,000 hours
- LED lamp can be rotated by 360° resulting in optimal visibility of the signal



#### Type PBGP

#### Rubber buffer without steel plate

The PBGP products are standard low-cost high-quality rubber buffers with a high resistance to wear and tear. All rubber elements are made of high-quality new rubber material ensuring a long service life. The rubber elements are available in 90 mm and 140 mm thickness.



#### Type PGF

#### Fixed-position buffers

PGF 90 and PGF 140 are designed for extremely high impact forces hence ensuring a long service life. The rubber elements are available in 90 mm and 140 mm thickness.



#### Type PGV

#### Height-adjustable buffers

These buffers are used for loading and unloading of vehicles whose lorry beds are higher than dock level. Height-adjustable buffers can be lifted by up to 250 mm above dock edge. During loading and unloading the buffer adjusts to the lorry's vertical movements. It moves up to 50 mm upwards and 250 mm downwards. Thus, the buffer's wear is reduced to minimum and its durability is extended.

After docking the buffer can be fixed at dock level so that the lorry tailgates can be opened. The rubber elements are available in 90 mm and 140 mm thickness.



# Sensor-controlled safety wheel chock





# Rubber wheel chock (Type PZKE)



# Sensor-controlled safety wheel chock (Type PZK)

The PZK wheel chock equipped with a position-dependent ultrasonic sensor and connected to the control unit via a robust cable guarantees safety during the whole loading and unloading process. As soon as one of the rear wheels of the lorry is blocked by means of the wheel chock, the leveller control function is "released" so that operation of the dock leveller can be started.

# Sequence of operation:

- The dock leveller can only be operated if the lorry is blocked by means of the safety wheel chock.
- With the wheel chock being positioned, the lorry cannot accidentally roll away from the docking station.

The PROMStahl Economy wheel chock consists of volcanized new rubber material and has an excellent slip resistance thanks to its special bottom structure. It stands out for its long service life, its extreme robustness, elasticity and shock absorbing features. It is equipped with a handle for easy use. To fix this wheel chock to the docking station we recommend to equip it with a galvanized support and the knot chain.



# Wheel chock Economy (Type PZKE)

PROMStahl's Economy wheel chock is best suited to prevent big utility vehicles, lorries and trailers from accidentally rolling away from the docking station. It is extremely robust and much more stable than a metal wheel chock. Handling of this type of wheel chock is very easy thanks to the integrated handle. To fasten it to the docking station, we recommend to combine the wheel chock with the galvanized support device and a 5-meter knotted-link chain.





PROMStahl **wheel guides** guarantee precise dock-in at the loading bay and avoid expensive damage to dock shelters, levellers, buildings and to the vehicles caused by imprecise docking processes. Thanks to the wheel guides' smooth surface the vehicles' tires and wheel rims are not subject to any damage.

The wheel guides help the truck driver to reverse to the loading bay without requiring any complicated manoeuvring actions. They are installed on yard level, either by being fixed in concrete (types PEK and PEKE) or by being bolted into the ground (flanged version, type PEF and PEKE) and represent a good and reasonable investment in the safety at your loading bay.

### There are 6 different versions of wheel guides:

### To be fixed in concrete

- PEKE (NL = 2.000 mm straight version)
- PEK (NL = 2.550 mm angled version)

### Flanged version

- PEF (NL = 2.000 mm angled version)
- PEFE (NL = 2.000 mm straight version)
- PEF (NL = 2.550 mm angled version)
- SMART PEF (NL = 2.500 mm angled version)



**Type PAFP** 









PROMStahl **PAFP bollards** represent a simple, durable and inexpensive way to limit and secure roads and passage ways. Thanks to their high-stability structure, these bollards may be used as an effective means to protect machines, racks, pillars or building corners against vehicle collisions.

All protection bollards are stable, hot-dip galvanized steel structures which are also available with an additional safety paint (yellow and black). They can be used inside and outside.

PROMStahl bollards can be safely fixed either by putting them directly into concrete or by means of heavy-duty bolts.

They represent a cost-effective and useful investment for protection against collisions.

## Technical features

- · for protection of door racks or other objects that have to be protected;
- hot-dip galvanized steel
- $\cdot$  high-stability product
- tube dimensions: 139,7 x 4 mm
- base plate 250 x 250 x 10 mm
- overall height: about 830 mm

# Dock lights



In general, the danger of accidents during loading and unloading is very high due to bad lighting of the docking area. PROMStahl dock lights offer the best solution for perfect lighting of the docking area and the lorry bed.

# Type PV 02

If lighting of the inside and outside loading area is required, we recommend the type PV 02 PROMStahl dock light, a halogen spot light of 150 W. Its housing is made of stainless steel, is dust and waterproof and movable in all directions.

# Advantages

- suitable for outside use (dust and waterproof)
- high lighting efficiency
- long service life

# Type PV 05

The type PV 05 dock light is new in the PROMStahl product range. This LED spotlight is highly energy efficient compared to a standard light bulb. The LED lamp consumes up to 90% less energy to produce the same lighting results. LED lamps provide 100 % luminance immediately after switching them on. This characteristic is very important for docking stations. The spotlight is fixed to the bracing arms by means of a rotating bracket so that it is movable in all directions.

# > Advantages

- extra-long service life
- low heat development
- immediate 100 % lighting effect
- environmentally friendly
- not susceptible to shocks

# Type PV 07

The advantage of the type PV 07 dock light is that it is always equipped with two separate switches to turn on and off the dock light and that it has a higher luminance compared to many other dock lights. This dock light is equipped with an energy saving lamp (36 W) and can be optimally positioned. The plastic housing is completely dust and waterproof.

# > Advantages

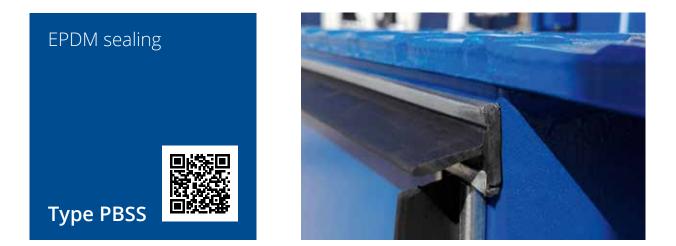
- low energy consumption
- big lighting range
- low heat development
- two separate switches (on/off)



Requirements regarding noise reduction during loading and unloading become more and more demanding in mixed-use areas. To meet these requirements PROMStahl dock levellers can be provided with a special coating on the top side of the platform and the lip. Another important advantage of this type of coating is its excellent anti-slip properties being especially important for outdoor use or for example in food industry where the loading systems are frequently water-cleaned.

The anti-slip/anti-noise coating is applied to profiled material so that even if the coating is damaged, the requirements of DIN EN 1398 regarding its anti-slip characteristics are still observed.

This coating consists of high-elasticity solvent-free polyurethane with a material thickness of 3-4 mm filled with sharp-edge broken basalt (grain size 1-1.6 mm).



The EPDM sealing is used to seal the gap between the dock leveller and the pit so that draught in the warehouse building is reduced, the staffs working conditions are improved and energy can be saved. The lateral sealing lip and the rubber for rear side sealing consist of ethylene propylene diene monomer (M-class) rubber (EPDM) material.



# OUR DOORS ARE ALWAYS OPEN.

At PROMStahl we don't think terms of doors, but in terms of solutions. It is your specific requirements and wishes that are at the forefront of the design and manufacturing process, resulting in doors characterized by their quality and individuality, right down to the smallest detail. These are the doors the market demands and that can be found in any sector and building. In fact, wherever you go you're likely to run into a PROMStahl door.



# ALU sectional door

# **Type PDAA**

ALU 40 mm When natural light and visibility matter

# ALU 60 mm

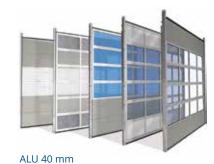
The innovative door with even more insulation

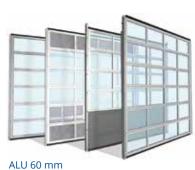
# Panorama door 40/60 mm

Maximum transparency without vertical profiles

ALU sectional doors are designed and manufactured with the latest technologies. They provide almost completely transparent separation between the inner and outer part of the building. These doors are perfect for applications where maximum use of the outside light and transparency are required. The offered doors are characterized by an exceptional strength, large dimensions and a stylish design. Basic and reinforced anodized aluminium profiles are used for the ALU sectional doors. An ALU sectional door will always match the installation site.

All these features make the ALU sectional doors top quality durable products distinguished by their appearance, thermal insulation properties and structural performance. They can constitute an element of the most modern architectural designs that will always comply with technical requirements concerning safety and user-friendly operation. The ALU sectional doors are available with full or transparent bottom sections. They can be controlled manually or electrically.







# ISO sectional door

# **Type PDAI**

ISO 40 mm PROMStahl's all-rounder

ISO 60 mm The effective separation between climate zones **ISO sectional doors** are designed and manufactured with the latest technology. They are of solid workamshop and characterized by incomparable quality. The end covers and reinforcing profiles are made of anodized aluminium. Even invisible elements, such as a solid bottom profile, are anodized. With a top profile of anodized aluminium available in different height versions, an ISO sectional door will always fir perfectly.

All these features make the ISO sectional doors top quality durable products distinguished by their appearance, thermal insulation properties and structural performance. They can constitute an element of the most modern architectural designs that will always comply with technical requirements concerning safety and user-friendly operation. The ISO sectional doors can be controlled manually or electrically.







The superfast and space-saving spiral door

# Helix / S600



The **Helix** is brand-new in our product range: It is a superfast highly insulated sectional door equipped with special rolls that reduce operation noise to a minimum.

Traditionally, two doors are often mounted in frequently used exterior openings; an insulated door for use at night and a high speed door that is used during the day. The new Helix / S600 combines the best of both worlds in a single product. An investment that pays for itself in next to no time!

The S600 has the identical drive system as the Helix Spiral door but has a standard track system. This door opens 6 times faster than a similar sectional door but can be installed into a headroom of only 600 mm. The Helix and S600 have a standard section height of 366 mm. If you have insufficient back room for the S600 you have the solution of the Helix with faster speed!





# Industrial rolling doors

# Type PDR

Type PDR A Roller door profile, aluminium

Type PDR S Roller door profile, galvanized steel

Type PDR A, ISO-SL High-speed door ISO-SL

Type PDR S, SL High-speed door SL The **industrial rolling door** can be precisely and consistently customised for a wide range of users. When the time comes to invest in new doors, especially where space is tight and access is difficult, rolling doors are an excellent choice.

Continuously galvanized, extra-strong steel can be used for stability and safety. For low weight and corrosion resistance, aluminium is a good choice. The industrial rolling doors are available in the following dimensions: height: 1.500 mm – 10.000 mm width: max. 11.800 mm

# A lot of advantages of the industrial rolling doors speak for themselves:

- excellence the heat and sound insulating properties
- extremely robust, durable and high-grade manufacture
- using a range of different roller door profile for better vision and ventilation
- RAL coulours, using a range of coil coating or wet paint systems
- high motor speeds with inverter technology



OUR REPRESENTA-TIVES ARE THERE FOR YOU!

OUR EMPLOYEES STAND BY YOUR SIDE WITH WORDS AND DEEDS.

10

YOU WILL FIND OUR PRODUCTS ALL OVER THE WORLD.

10

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# FURTHER INFORMATI<u>ON.</u>

Innovation is an essential basis for effective loading technique to meet future requirements. Therefore, owing to its convincing assortment of innovative loading solutions, PROMStahl clearly sets current and future standards.

# References



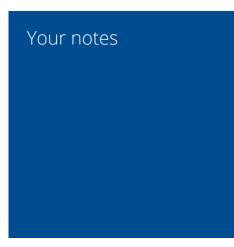
















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