



PLANETA Rope Winches

Production program and
special solutions

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Note: PLANETA are constantly striving to increase and further improve the product range. Whilst every effort has been made to ensure the accuracy of the specifications and dimensions included at the time of printing, we are unable to warrant the given information. Designs and specifications are subject to change without notice or obligation. The inclusion of any product does not guarantee the availability of that product in the future. Customers should check both the availability and conformance of the product to any critical parameters at the time of ordering! © 2018 by PLANETA – Form 2/RWPaSE

Quality by tradition

Stability and innovation. In truth, they are two sides of the same coin because continuous readiness for innovation enables sustainable developments.

Sustainability, reliability and responsibility are the basic values that we are committed to here at PLANETA. In all periods of the company's history, these values have been personified by our employees and their quest to always do the good things that little bit better.



PLANETA manual chain hoists from 1950 to today

Trust is good – Control is better

PLANETA rope winches are subject to the strictest quality controls and are also designed with high functionality for the toughest operating conditions.

Only quality products that have been tested with an appropriate excess load in compliance with all standards are supplied.



Quality means safety

Reliability and responsibility are the values that we are particularly committed to.

This begins with work safety during production, up to certification of all processes as part of the annual TÜV DIN EN ISO 9000:2001 audit or membership in the GKS.

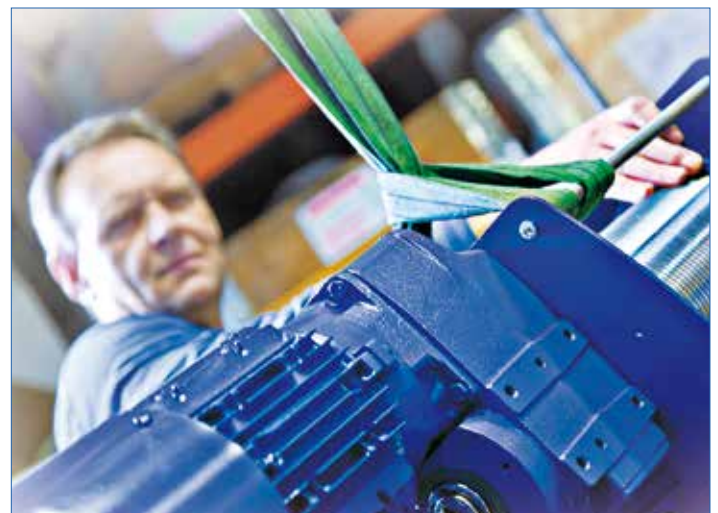


Your satisfaction is our success

A large network of consultants, service technicians and specialist dealers trained by PLANETA is available to you.

We strive to provide you with the best solution at the best possible price, and this goes well beyond the product itself. To us, best quality means always showing you the solution which corresponds to your requirements.

As one of Germany's oldest lifting device manufacturers, we strive to do this for you each and every day.



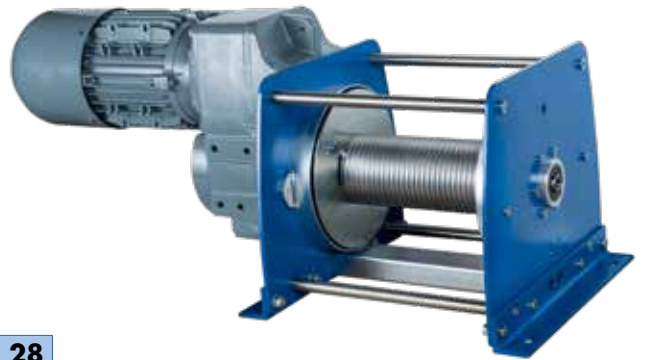
Electric rope winch PLANETA-PFW

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Load bearing capacity to 3,000 kg

The PFW electrical rope winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads.

In addition, the PFW rope winch can be adapted to further and more specific applications through the varied fabrication capabilities and many other options and parameters. This includes multiple rope applications and applications in explosionproof areas and on ships, or for platforms and studios.



Rope winch PLANETA-SB

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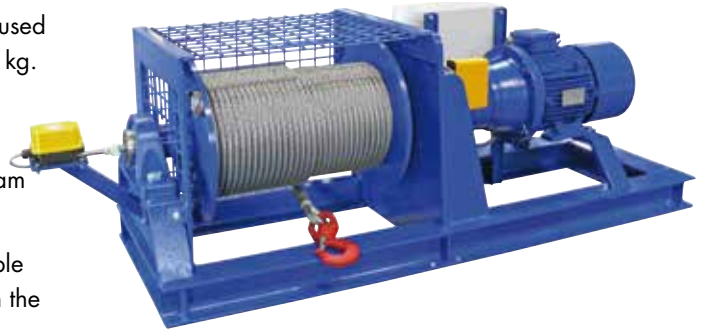
Load bearing capacity to 37,000 kg in the standard

The SB type rope winch forms the basis for many designs and variants used for the lifting and pulling of loads, even for loads of more than 37,000 kg. The SB series is modular by design.

One drum side is retained by a pillow block bearing and its drive shaft penetrates the flange-mounted planetary gear, which is installed upstream of a three-phase braking motor.

Where installation length poses a problem, the SB series is also available with an angular drive on request. Selection of the rope is dependent on the pulling force on the 5th rope layer, whereby the drum diameter must be a min. 16 times the rope diameter (drive mechanism group 1Am).

However, we are only illustrating some of the options here because alternative flange and drum sizes, additional gear stages and numerous types of motor can be incorporated, in order to configure winches precisely in accordance with your requirements.



Compact rope winch PLANETA-FD

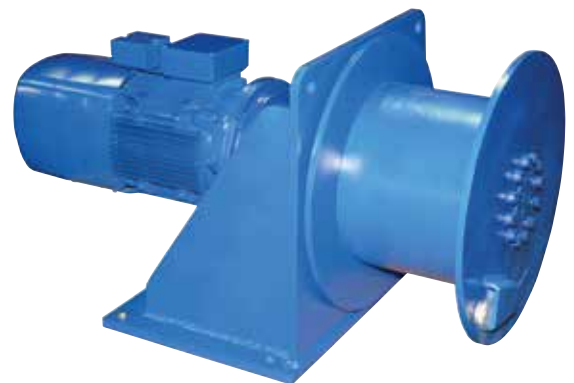
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Capacity up to 5,250 kg

The FD („Flying Drum“) winch has compact multi-stage planetary gear, installed inside the drum. As such, the installation length of the winch is very short.

The FD is primarily used when the required rope length is short and the drum is therefore only small. This saves the second outer bearing, because all of the forces are absorbed by the transmission bearing.

The FD is available with an electric, hydraulic or compressed air motor. In special cases, special gears are also an option.



PLANETA-PRAKTi battery-operated rope winch

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Capacity up to 50 kg

This lightweight and compact rope winch lifts your loads of up to 50 kg to heights of up to 150 m. In doing so, the winch itself weighs just 9.5 kg. It can be either erected or optionally suspended, and is therefore the ideal helper during assembly, construction and service, and at home.

You receive a manual spooling aid for the correct winding of the rope onto the drum as standard.



Our range is as broad as our customers' standards and requirements. In addition to complete standard systems, as an experienced manufacturer of rope winches, we construct special solutions suitable for every application; they are individual and tailor-made thanks to the modular design of our winches. In addition, many options can be added at a later date and this generates the optimum result.



PLANETA as trace parts – Your 3D model already online!

As a product developer or engineer, you can considerably accelerate the flow of your projects using TracePartsOnline.net.

It is a powerful tool that offers you instant access to more than 100 million 3D models and 2D CAD drawings free of charge.

As of now, PLANETA-PFW winches can now also be configured for Traceparts online by everyone. The complete 3D-CAD data can be integrated in your design in just a few steps.

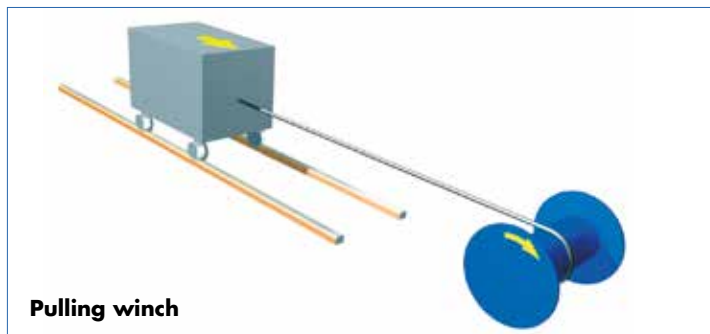
A brief visual assessment is possible before the download: All 3D models can be viewed in the desired configuration in a viewer – and all this in your browser.

Save precious time during development work, because there is no need to trace purchased components.

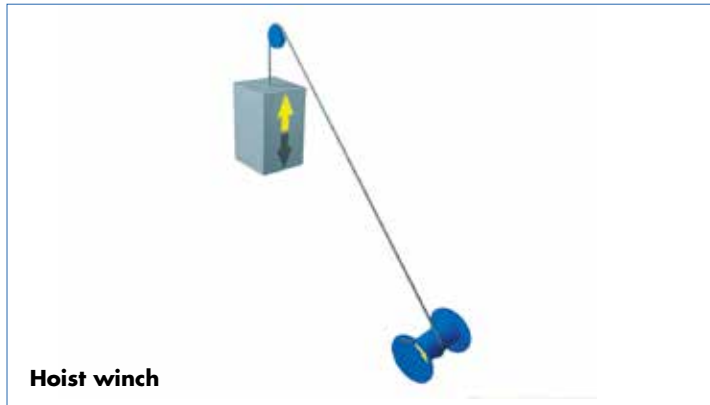


Mode of application and load bearing capacity

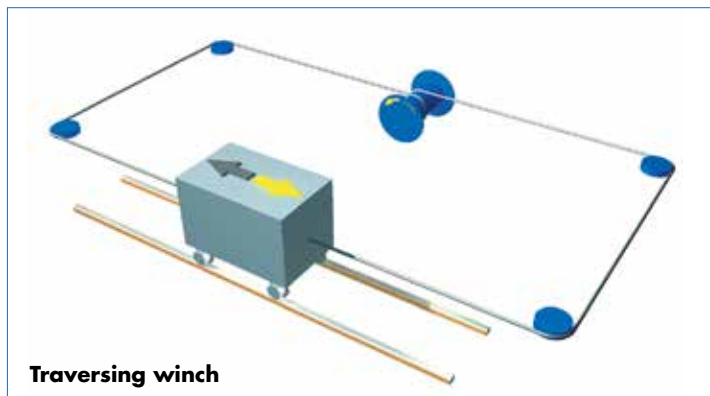
Pulling winches are designed to pull loads on a 100 % flat surface. The pulling force is calculated from the mass of the load to be pulled multiplied by the load's rolling resistance. The rolling resistances for the typical applications are around 0.150 for rubber wheels on concrete surfaces and around 0.005 for steel wheels mounted on an anti-friction bearing that are on tracks. If the load is hoisted on an angled surface, the cable winch must be designed as a hoist winch.



Hoist winches must be used if a load is to be raised and held by the cable winch. This applies to hoisting vertically and also to pulling the load along an angled track. Cable winches for hoisting are equipped with spring-loaded brakes on the motor as standard and therefore guarantee that the load will be held securely. In addition, cable winches for hoisting are equipped with higher safety factors than cable winches that are used purely for pulling for example.



A **traversing winch** can be used to move a load in two directions on a level. You can therefore move a carriage forwards and backwards for example. The cable drum is designed for two cables, is scored and winds in only one layer.



Capstan winches are endless winches that do not store the cable on a cable drum but allow the cable to run through "endlessly". A counterforce such as the operator's manual force is multiplied by winding the cable around the capstan head several times. In this way, a much larger pulling force can be achieved from manual force.

For example, they stand on deck on a ship and are used to pull cables and ropes in many different directions.



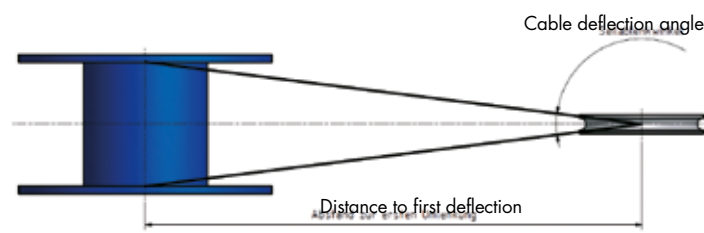
Traction winches are endless winches like the capstan winches. They work on the same principle of increasing force due to winding friction. The cable is better fed and protected thanks to their design with two traction sheaves and multiple scores.

Traction winches are normally located on carriages that travel forwards and backwards. The pulling cable is stretched between the two ends of the guide rail.



Information for safe operation:

To ensure that the cable is wound onto the cable drum in an orderly manner, the cable's permitted angle of deflection must not be exceeded. For this reason, the cable is normally guided from the cable drum over a fixed deflection roller at first. This is aligned in the centre of the drum at a specified distance from the cable drum. This prevents the angle of deflection being exceeded. This distance mainly depends on the drum length and the relationship between the drum diameter and the cable diameter, and is specified in each quotation.



Drive type

Manually operated cable winches are operated by the operator's manual force via a crank handle. The power is therefore limited to a certain value which is mainly generated by the pulling force and the cable speed. The higher the pulling force, the lower the cable speed if the power remains the same.

Electrically-operated cables are driven by three-phase motors or alternating current motors. Three-phase motor powers of up to 30 kW are available in our standard version. Higher powers are available on request.

Due to the mains-related limitations, the power is limited to 2.2 kW when using alternating current motors.

Hydraulically-operated cable winches are operated by orbital motors or radial piston motors depending on the power.

We will either work with your existing hydraulic supply or we will provide a unit. In the standard version, we install brake valves for a secure hold.

Pneumatically-operated cable winches are operated by multi-disc motors or radial piston motors depending on the power.

We can provide compressed air cable winches with power of up to 22 kW. Please specify your compressed air supply data. Depending on the design, we will equip the cable winches with pneumatic allyactuated spring-loaded brakes.

Cable speed

PLANETA cable winches normally have a constant cable speed. The PFW, FD and SB PLANETA cable winches can be designed for virtually any cable speed.

Thanks to appropriate motors that can operate at two speeds or thanks to freely-programmable frequency converter controllers, multiple speeds can also be achieved.

Site of operation

Do you have a height restriction, such as a maximum distance to the first deflection? In that case, we can construct the cable winch to fit as well as possible. If the winch has to be protected against wind and weather, or even against salt water, we can provide motors with higher protection classes, special thick protective coatings or complete housings.

Load type

There are four different safety classes for PLANETA cable winches. These start with the standard cable winch according to DGUV norm 54 (D8) (German employers' insurance association), which you can use to transport or lift goods. You must prevent people standing in the region of or under the load. Next, we have the BGV D8+ cable winch designs, which guarantee safety for people under a suspended load if the cable winch is electrically shut down. Cable winches in accordance with DGUV norm 17 (C1) also allow people to remain under the suspended load safely. In the highest safety classes, people may also be carried.

Two or more cable outflows

In order to be able to lift long cross beams or frames with large bases, you require several lifting points on the load to ensure that the load does not tip.

We can equip our cable winches with multi-cable drums for this purpose. Please let us know the number of load points and the distance between them.

Explosion protection class



The PFW, FD and SB cable winches can be designed for use in locations at risk of explosion.

Please inform us of the explosion protection class required. Further information can be found in our catalogue for ATEX hoists.

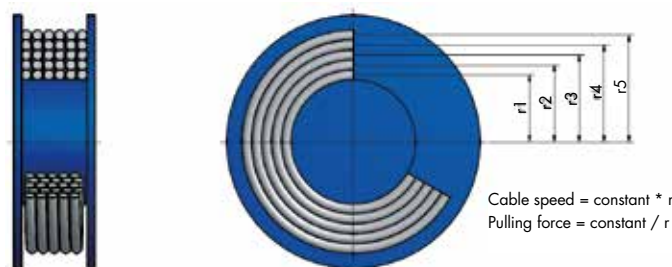
Information on multi-layer wound cable drums:

Cable drums are normally wound in multiple layers; i.e. the cable is wound around the cable drum layer by layer.



The lever that the cable uses to transfer the pulling force to the cable drum becomes larger with each cable layer.

However, the gear data such as the driving torque and the driving speed remain constant. Due to this, the cable speed increases and the pulling force decreases with each cable layer that is wound up.



Information on applicable law

The following applies according to the machinery directive:



- ⚠ Overrunning structural or required limits whose movement is generated by the cable winch must be prevented by limit switches. (Normally by spindle limit switches)
- ⚠ The cable drum and other moving parts must be inaccessible or protected against drawing in. (Normally by covers)
- ⚠ Cable winches with a lifting capacity of over 1.000 kg must be protected against an overload. (Normally by electrical overload protection in the switch cabinet)
- ⚠ The electrical controller must be able to be powered off. (Normally by a mains plug or a mains isolator)
- ⚠ The customer must ensure that the base to which the winch is fixed is structurally stable.



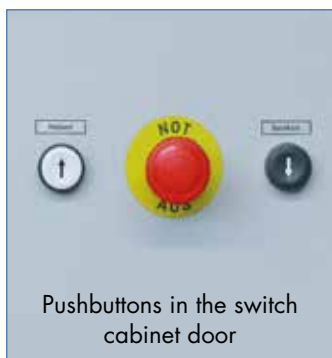
Manual control button for direct controller



Contactor controller



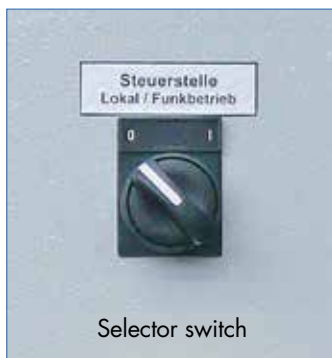
Radio control



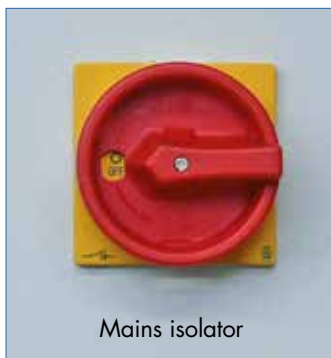
Pushbuttons in the switch cabinet door



Manual control button for contactor controller



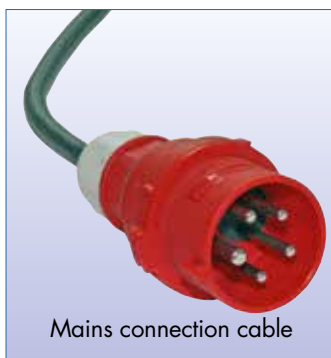
Selector switch



Mains isolator



Wall-mounted switch



Mains connection cable



Device attachment plug

Control

Up to a power of 1.85 kW, the PLANETA PORTY and MC cable winches can be equipped with a direct controller.

The motor current is switched directly in the manual control button. However, options such as the spindle limit switch or the overload protection cannot be used with the direct controller.

A contactor controller must be used for this because the control circuit is low voltage (42 V). This is also part of the optional manual control button and therefore also increases your safety. You can use a frequency converter controller to move at two adjustable speeds as standard. Braking and start-up ramps are freely programmable.

As standard, contactor controllers and frequency converter controllers are not designed for operation; you select this in the next step. The switch cabinets are enclosed loose for installation on the wall.

We will attach the switch box to the winch frame and establish the electrical connections to the components upon request.

Operation

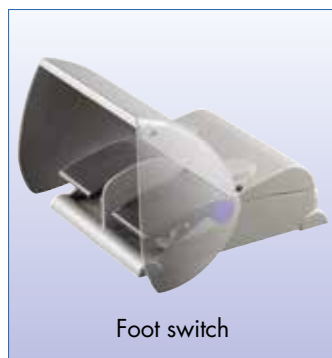
You have the option of controlling the cable winch using pushbuttons in the switch cabinet door, using a manual control button, a wallmounted switch, a foot switch, a radio controller or a combination of several operations.

The prerequisite for this is that you use a contactor controller or a frequency converter controller. Each of the operations contains the "UP" and "DOWN" pushbuttons and an "EMERGENCY STOP" palm switch. If you require additional operating points, you can select the desired operating point on a selector switch on the switch cabinet door.

Control options

The power cord or the device attachment plug provide the winch with an electrical connection to the mains and consist of the desired length of connection cable and one of the plugs that correspond to the cable winch's operating voltage and power. A mains isolator can be used to power off the cable winch (e.g. for servicing purposes) in the same way as a mains connection plug also can.

The electrical overload protection is integrated into the motor circuit and switches the winch off automatically if the load is too great.



Foot switch

Grooved drum

This is beneficial when a non-rotating wire rope is specified. Right or left hand helical grooving of drum core to suit specified rope diameter regulates spooling of first rope layer and assists in higher layers. It enables fleet angle to be increased from 1.5 to 2.5 degrees. Even higher fleet angles can be reached with an additional spooling device (only upon request).



Drum pressure roller

The rope keeps tight on the drum as long as it is under tension. But if it becomes slack, e.g. during shunting applications, when the waggon runs faster than the winch is able to store, a drum pressure roller can help. It presses the rope onto the drum core and maintains it in a tidy condition. The drum pressure roller is also recommended if a free spooling clutch is used.



Drum protection

Covering the cable drum prevents objects or items of the operator's clothing entering the cable drive. This reduces the risk of accidents and damage to the winch.



Brake active on drum

The (manual and automatic) cable drum brake is an additional brake that only applies to the cable drum. It can be an additional piece of safety equipment; e.g. for hoist winches with a free-wheeling coupling or for hoist winches to transport people.

Emergency hand crank

Up to a certain size, we can equip the PLANETA PFW and PKW cable winches with emergency crank handles. Therefore, if there is a loss of electrical power, you can raise or lower the load by hand.

Manual brake venting

The PLANETA SB cable winches can be equipped with manual brake venting. Therefore, if there is a loss of electrical power, you can lower the load by hand by bleeding the spring-loaded brake using the release lever.

Spindle limit switch

The spindle limit switch is coupled directly to the cable drum and determines the drum's revolutions. You can determine the cable winch's shut-off positions as required by adjusting the switching cam inside the switch. As standard, our spindle limit switches have two contacts, in order to limit the top and bottom hook position for example. We can equip the switch with up to five contacts on request. Therefore, you can switch something at interim positions (e.g. the alarm horn) or switch to a lower speed with cable winches that have two speeds.



Slack wire switch

A slack wire switch determines whether the cable is laden or unladen. The cable winch is switched off automatically once the load is set down. This is advantageous for example in filling stations.



Disengaging clutch

You can couple cable drums for the PLANETA PFW, PKW and SB cable winch types with the free-wheeling coupling of a braked drive.

The cable can then be easily wound by hand and does not have to be unwound at cable speed using a motor. Freewheeling couplings are only permissible for traction winches.

The scored drum and cable contact roller options are recommended in order to ensure that the unladen cable is wound in an orderly manner.



Spooling device

If you cannot comply with the distance to the first deflection due to space limitations, we can offer an optional spooling device. The cable is fed through a reel that moves forwards and backwards in a line in front of the cable drum, thereby ensuring that the cable is wound around the cable drum in an orderly manner.

The reel is coupled to the cable drum mechanically. The system works automatically. In this way, the spooling device increases the cable's angle of deflection and shortens the distance to the first deflection.





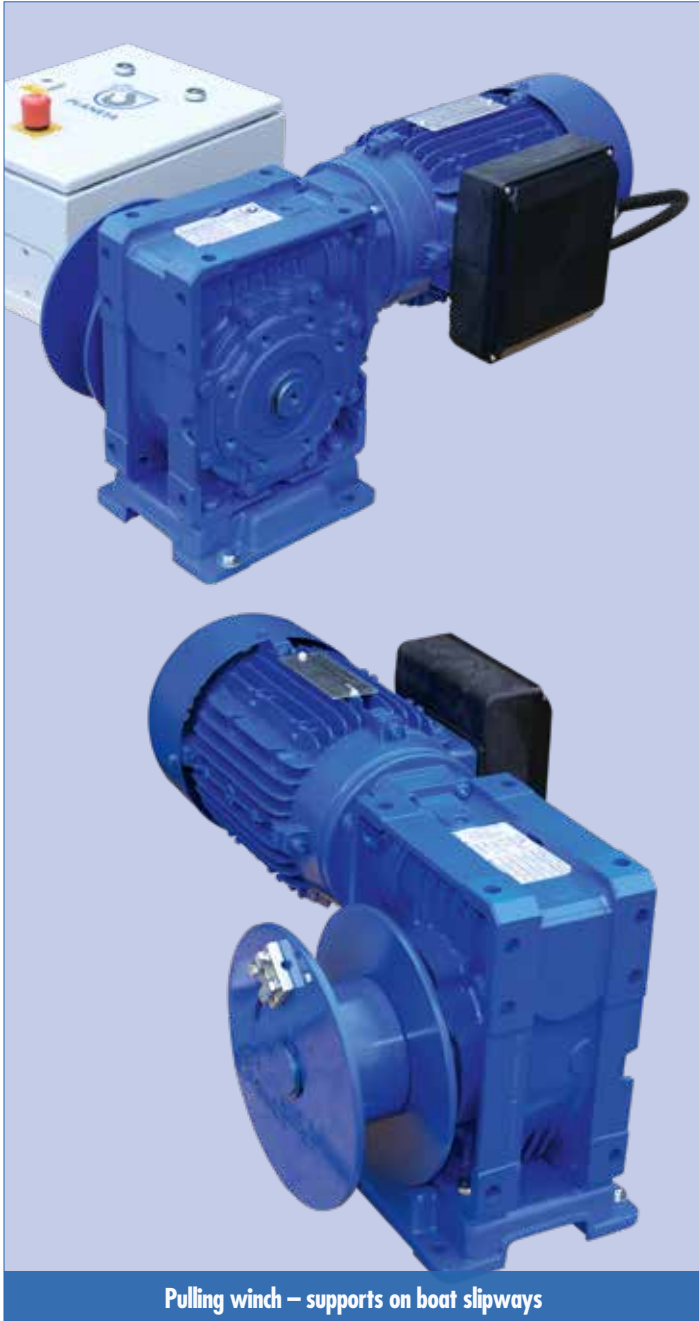
Holding winch – in extremely compact design



Pulling winch - for mobile use



Traction winch - optimum winding result due to rope pretensioning



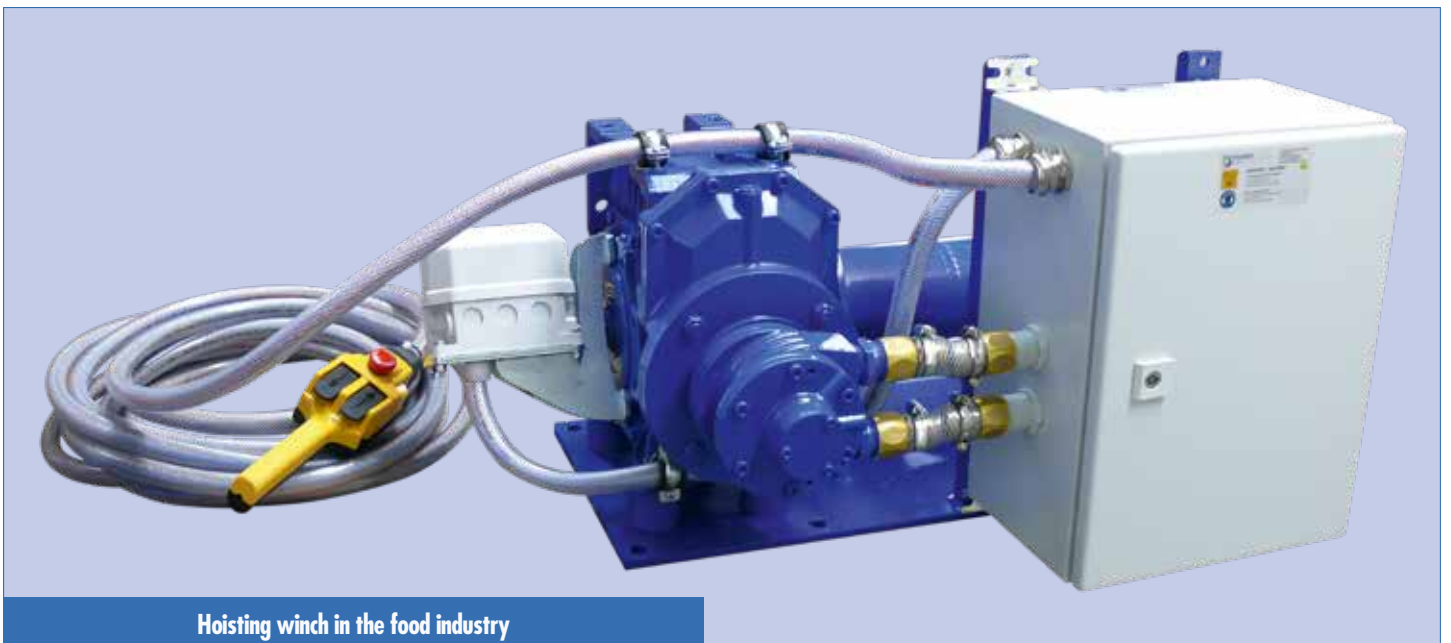
Pulling winch – supports on boat slipways



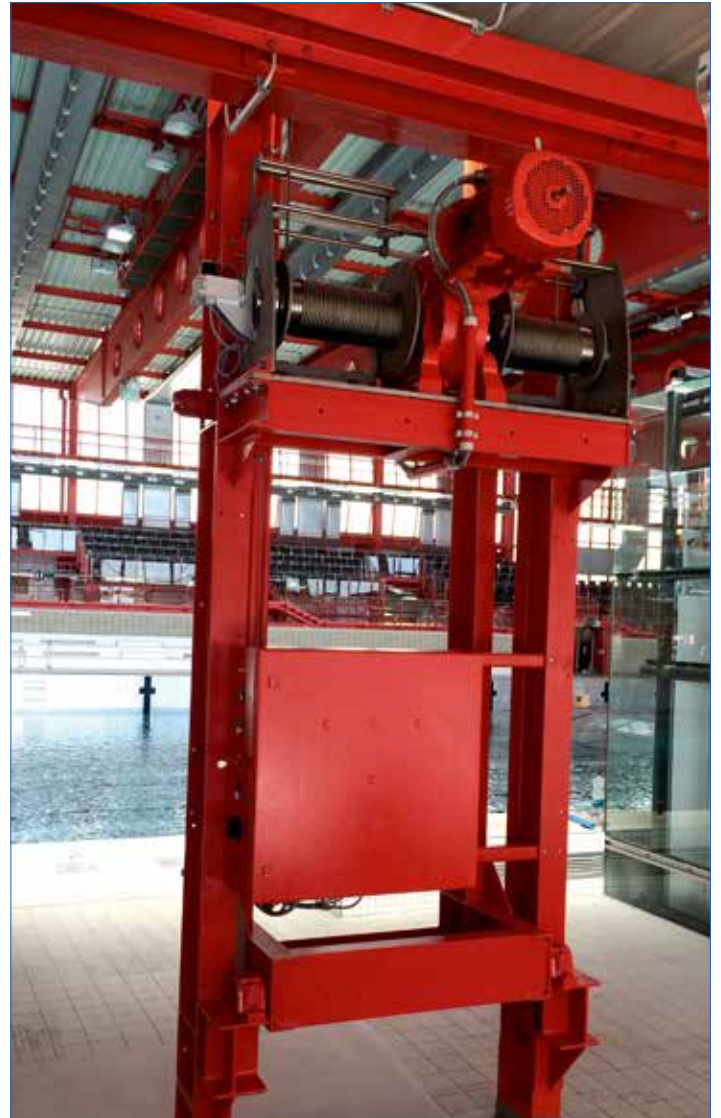
Hoist winch of a cherry picker vehicle



Lifting winch on a rail laying vehicle



Hoisting winch in the food industry



Double drum hoist winch - in the swimming pool



Application video:

PLANETA rope winch MC-E 2800 with double drum in stainless steel

<https://www.youtube.com/watch?v=jRDyPJhCfaw>



Hoist winch in a gas container



Capstan winch - pulls ships in the harbour area



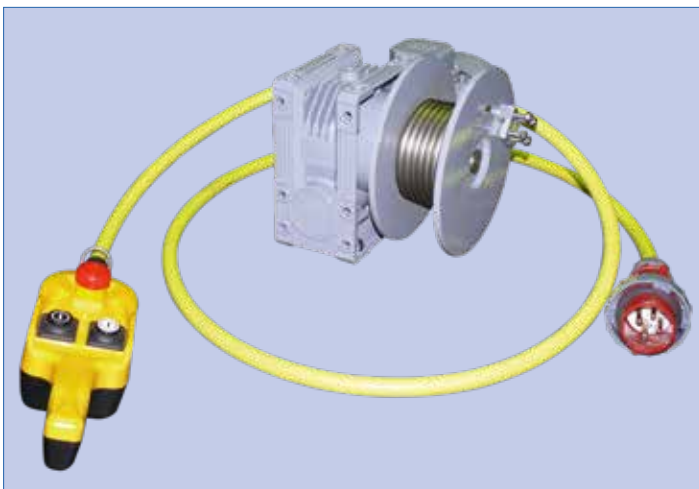
Capstan winch on the wharf



Hoist winch on a cruise ship



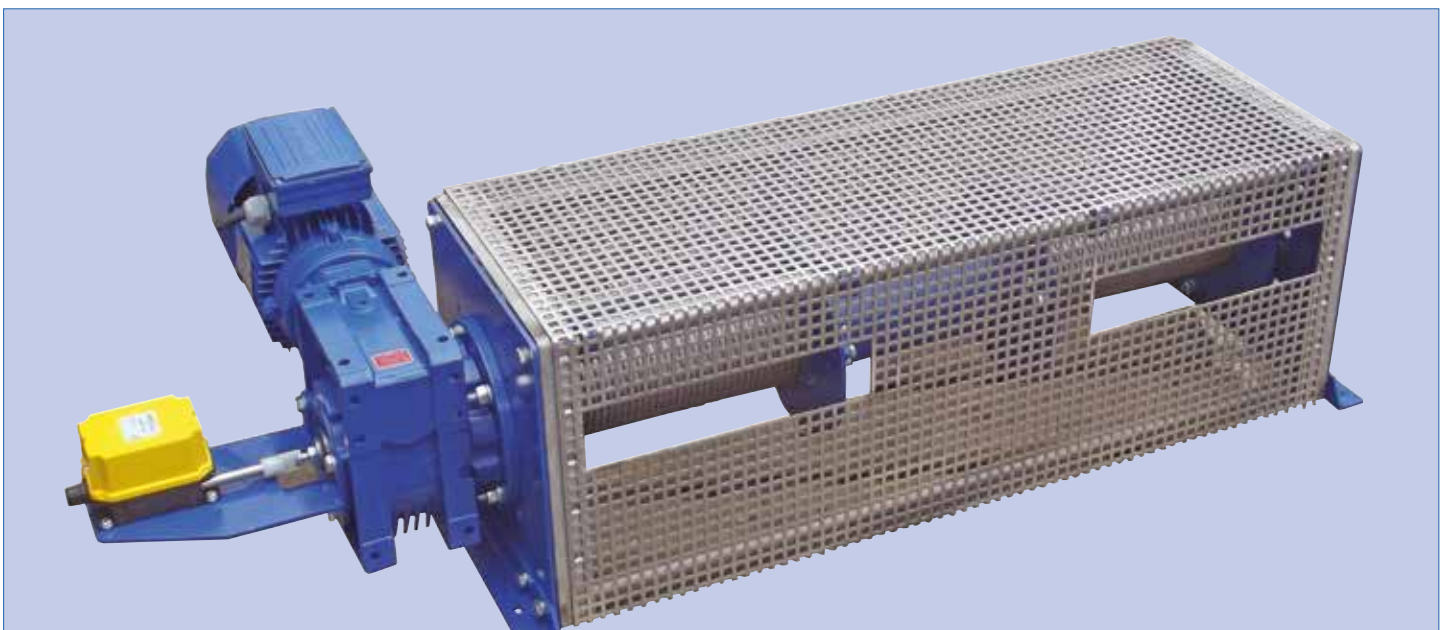
Hoist winch in a wind turbine



Hoist winch - for mobile use



Pulling winch for forestry operations



Hoist winch – inclined elevator for material line

Electric rope winch PFW

With a load bearing capacity from 250 to 3.000 kg this electrical cable winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads. With its extensive range of configuration and finishing options it can be adapted to suit almost any installation situation.

Drive

In standard form the spur gear transmission is equipped with a 3-phase braked motor. The standard operating voltage is 3 Ph / 400 V / 50 Hz. The duty cycle is around 60% thus enabling operation to continue almost without a break in the most difficult of conditions. For unprotected use outdoors the braked motor fulfils **protection class IP55**. Other operating voltages, alternative types of drive, higher duty cycles and protection classes are also available on request.

End position switch-off

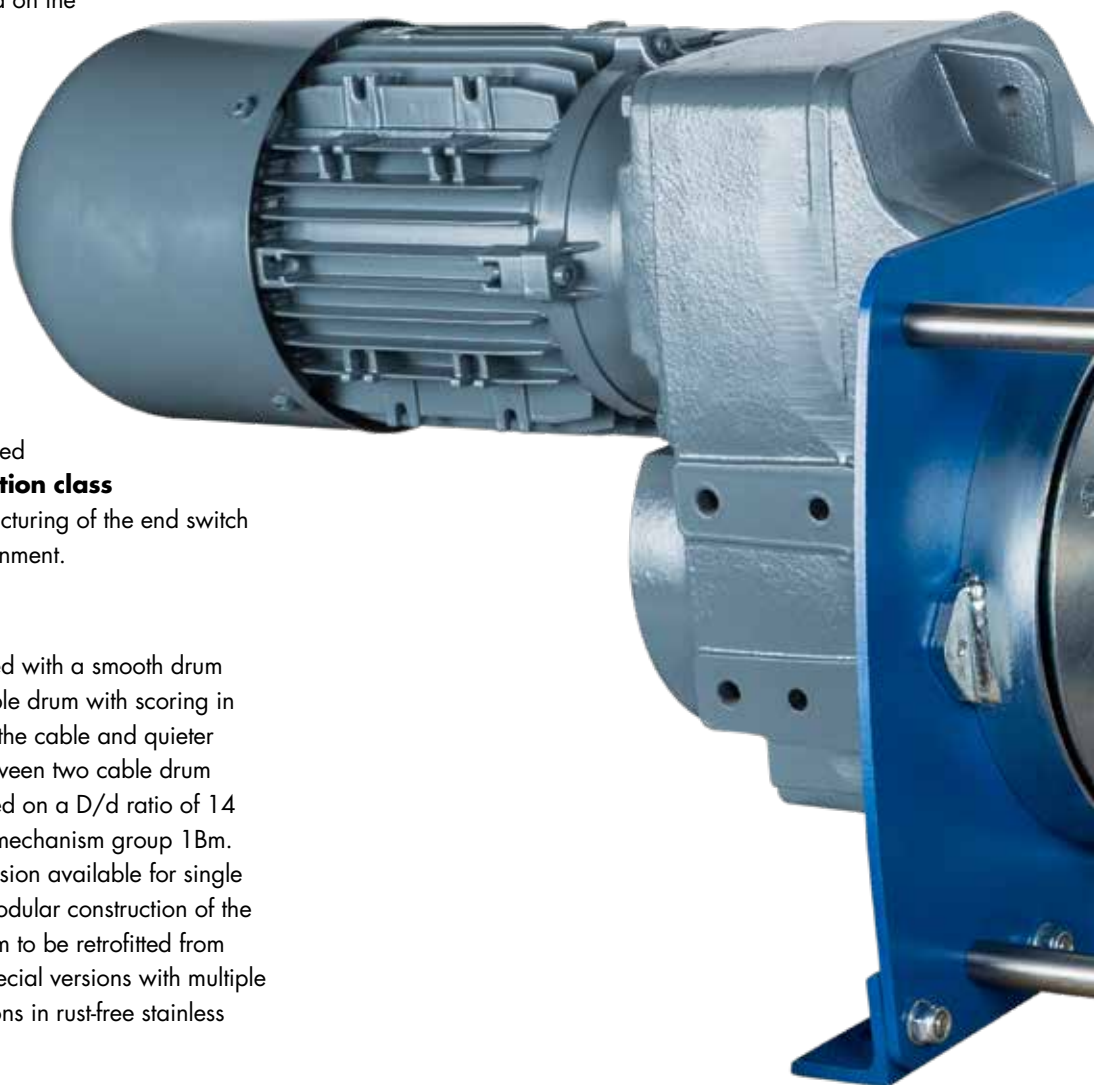
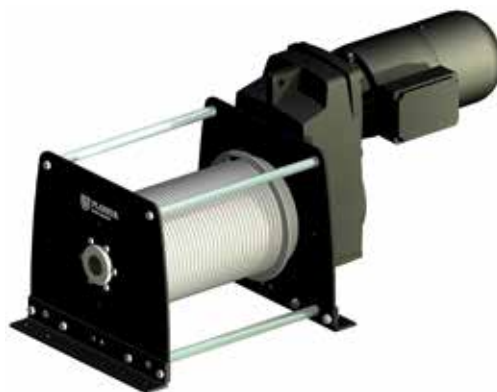
In standard configuration the end switch is installed on the drive side to save space. If desired, or when using the manual free-wheeling coupling, it can be installed on the opposite side, mounted above the drum bearing. Alongside the standard design as emergency end switch, we also offer the end switch as an option with 4 contacts as an operational end switch, in order to be sure that the emergency end switch is not reached during normal operation, as required in the machinery directive. When operating the **PFW**, for example, in combination with a frequency converter controller, the end switch can be equipped with an integrated incremental sensor at the factory. **Protection class IP 65** as well as the high quality manufacturing of the end switch enables deployment in almost any environment.

Cable drum

In the basic version your **PFW** is delivered with a smooth drum surface. If desired we can deliver the cable drum with scoring in order to achieve a longer service life for the cable and quieter running for the cable. You can select between two cable drum diameters. The standard diameter is based on a D/d ratio of 14 and thus fulfils the requirements of drive mechanism group 1Bm. There is also a double drum diameter version available for single layer, high precision applications. The modular construction of the cable drum even enables your **PFW** drum to be retrofitted from smooth to scored by us in the factory. Special versions with multiple cable outflows, drum separators or versions in rust-free stainless steel are also available on request!

Base frame

Torsionally rigid and yet flexible, it is well suited to almost any sub-structure. Many accessory parts can be retrofitted and can thus be changed throughout the course of the use of the winch. In standard form the winch has side guards that effectively prevent the cable jumping off. Alongside the facility to allow the cable to run in almost any direction from the drum, the rust-proof frame bars also enable easy handling during transportation or mounting.



Options

Thanks to the modular construction, for the first time it is possible to retrofit or change many options. Foremost of these is the manual **free-wheeling coupling**, which de-couples the cable drum from the drive and the brake for a rapid reeling off of the cable.

Simply select **scored** or **extended drums**, **end switches**, **cable contact rollers**, **slack cable switches**, **protective drum covers**, **two or more cable outflows**, **manual brake venting**, with or without **emergency hand crank** and **various protective paint systems** from our options catalogue.

Thus with our C5 painting per ISO 12944, in combination with a higher protection class for the motor and connecting elements made from rustproof stainless steel, the offshore variant of the **PFW** can also be used in salty sea-air environments or on ships. Other custom solutions are also possible on request. In standard configuration the end switch is installed on the drive side. If desired, or when using the manual free wheeling coupling, it can be installed on the opposite side, mounted above the drum bearing.



Versions

The cable winch can also be appropriately equipped to allow use in explosive atmospheres or for use in theatres, stages and studios where persons can be underneath the load whilst the hoist is operating. Special versions such as two or multiple cable applications and transverse winches are likewise available from the standard range.

Made in Germany

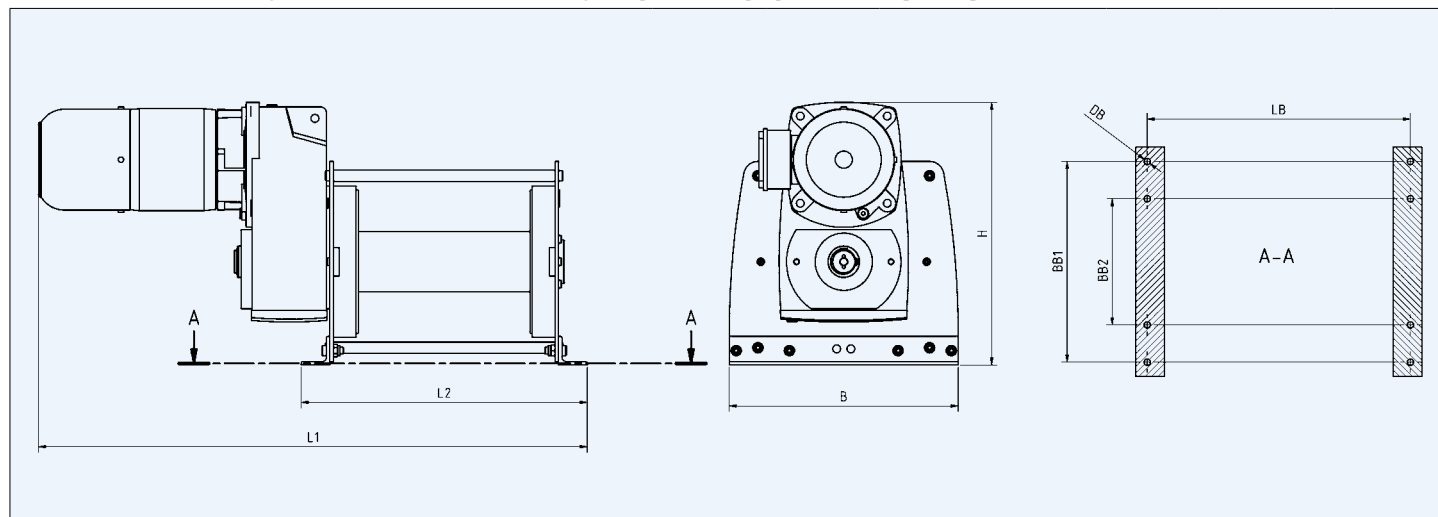
The **PFW** range combines a modern design, innovative technology and superlative components, which are produced exclusively in Germany. Prior to shipping, each winch is tested dynamically with 125% of the nominal load and leaves our factory with a 24 month guarantee.



Basic design

TYPE	PFW-1D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	750	1000	1500	2000	3000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1270	1920
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	11	11	11	10	10	9	9
Rope length in 5th rope layer	m	75	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	8	8	8	8	8	8	8
Rope speed in 5th rope layer	approx. m/min	12	12	12	12	12	12	12
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-1D with standard speed	Order No.	H62101	H62111	H62121	H62131	H62141	H62151	H62161
Rope speed in 1st rope layer	approx. m/min	4/8	4/8	4/8	4/8	4/8	4/8	4/8
Rope speed in 5th rope layer	approx. m/min	6/12	6/12	6/12	6/12	6/12	6/12	6/12
Motor power	kW	0.25/0.37	0.37/0.55	0.55/1.0	0.7/1.4	1.1/2.2	1.5/2.5	2.9/4.4
PFW-1D with two speeds	Order No.	H62102	H62112	H62122	H62132	H62142	H62152	H62162
Rope speed in 1st rope layer	approx. m/min	12	12	12	12	12	12	12
Rope speed in 5th rope layer	approx. m/min	19	19	19	19	19	19	19
Motor power	kW	0.55	1.1	1.5	2.1	3.2	4	5.5
PFW-1D with faster speed	Order No.	H62103	H62113	H62123	H62133	H62143	H62153	H62163
Options								
Grooved drum	Order No.	H62800	H62801	H62802	H62803	H62804	H62805	H62806
Longer drum each 100 mm	Order No.	H62810	H62810	H62811	H62811	H62812	H62812	H62813
Second rope outflow	Order No.	H62820	H62821	H62822	H62823	H62824	H62825	H62826
Manual free-wheeling coupling	Order No.	-	H62831	H62832	H62833	H62834	H62835	H62836
Protective drum cover	Order No.	H62840	H62841	H62842	H62843	H62844	H62845	H62846
Drum pressure roller	Order No.	H62850	H62851	H62852	H62853	H62854	H62855	H62856
Emergency limit switch	Order No.	H62861	H62861	H62861	H62862	H62862	H62863	H62863
Operational limit switch	Order No.	H62864	H62864	H62864	H62865	H62865	H62866	H62866
Emergency limit switch with incremental sensor	Order No.	H62867	H62867	H62867	H62868	H62868	H62869	H62869
Slack wire switch	Order No.	H62870	H62871	H62872	H62873	H62874	H62875	H62876
Manual brake release	Order No.	H62881	H62881	H62881	H62882	H62882	H62882	H62883
Manual brake release with crank	Order No.	H62884	H62884	H62884	H62885	H62885	H62885	H62886
Protective paint per ISO12944 C4 (high)	Order No.	H62891	H62891	H62892	H62892	H62893	H62893	H62894
Protective paint per ISO12944 C5 (very high / marine)	Order No.	H62895	H62895	H62896	H62896	H62897	H62897	H62898

Dimensions and weights of the standard design (special equipment may vary)



L1	mm	860	910	910	1020	1060	1200	1300
L2	mm	460	460	460	500	500	570	570
B	mm	270	320	360	400	460	550	620
H	mm	310	340	420	460	550	630	690
LTR	mm	300	300	300	300	300	300	300
DTR	mm	65	80	92	105	130	155	185
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	-	-	-	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5	17.5
Weight without accessories	approx. kg	35	60	75	110	155	240	380

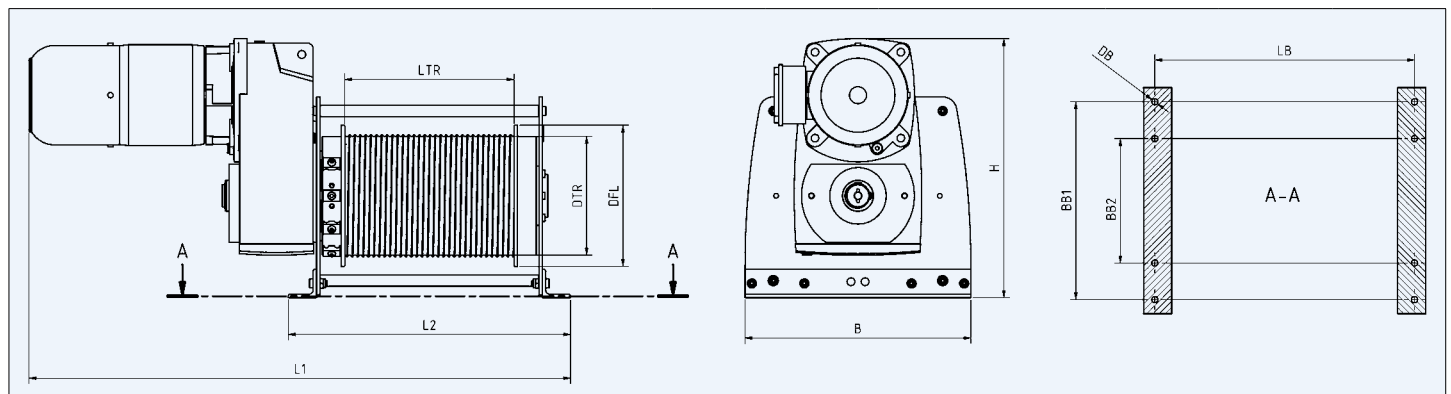
Double diameter drum, stage & studios

TYPE	PFW-2D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	750	1000	1500
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	20	20	20	20	19	18	17
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	15	15	15	15	15	15	15
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-2D with standard speed	Order No.	H62201	H62211	H62221	H62231	H62241	H62251	H62261
Rope speed in 1st rope layer	approx. m/min	7/15	7/15	7/15	7/15	7/15	7/15	7/15
Motor power	kW	0.25/0.37	0.37/0.55	0.55/1.0	0.7/1.4	1.1/2.2	1.5/2.5	2.9/4.4
PFW-2D with two speeds	Order No.	H62202	H62212	H62222	H62232	H62242	H62252	H62262
Rope speed in 1st rope layer	approx. m/min	22	22	22	22	22	22	22
Motor power	kW	0.55	1.1	1.5	2.1	3.2	4	5.5
PFW-2D with faster speed	Order No.	H62203	H62213	H62223	H62233	H62243	H62253	H62263

TYPE	PFW stages and studios	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	100	200	300	400	630	900	1200
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	19	19	19	19	18	17	16
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	7/15	7/15	7/15	7/15	7/15	7/15	7/15
Motor power	kW	0.18/0.25	0.37/0.55	0.4/0.75	0.55/1.0	1.0/1.6	1.5/2.5	2.2/3.4
	Order No.	H62301	H62311	H62321	H62331	H62341	H62351	H62361

Options	Order No.	incl.	incl.	incl.	incl.	incl.	incl.	incl.
Grooved drum	Order No.	incl.	incl.	incl.	incl.	incl.	incl.	incl.
Longer drum	Order No.	H62814	H62814	H62815	H62815	H62816	H62816	H62817
Second rope outflow	Order No.	H62820	H62821	H62822	H62823	H62824	H62825	H62826
Manual free-wheeling coupling (not for stages and studios)	Order No.	-	H62831	H62832	H62833	H62834	H62835	H62836
Protective drum cover	Order No.	H62840	H62841	H62842	H62843	H62844	H62845	H62846
Drum pressure roller	Order No.	H62850	H62851	H62852	H62853	H62854	H62855	H62856
Emergency limit switch	Order No.	H62861	H62861	H62861	H62862	H62862	H62863	H62863
Operational limit switch	Order No.	H62864	H62864	H62864	H62865	H62865	H62866	H62866
Emergency limit switch with incremental sensor	Order No.	H62867	H62867	H62867	H62868	H62868	H62869	H62869
Slack wire switch	Order No.	H62870	H62871	H62872	H62873	H62874	H62875	H62876
Manual brake release	Order No.	H62881	H62881	H62881	H62882	H62882	H62882	H62883
Manual brake release with crank	Order No.	H62884	H62884	H62884	H62885	H62885	H62885	H62886
Protective paint per ISO12944 C4 (high)	Order No.	H62891	H62891	H62892	H62892	H62893	H62893	H62894
Protective paint per ISO12944 C5 (high)	Order No.	H62895	H62895	H62896	H62896	H62897	H62897	H62898

Dimensions and weights of the standard design (special equipment may vary)



L1	mm	840	920	920	1040	1080	1200	1200
L2	mm	460	460	460	500	500	570	570
B	mm	270	320	360	400	460	550	620
H	mm	300	340	420	460	550	630	660
LTR	mm	300	300	300	300	300	300	300
DTR	mm	130	160	185	210	260	310	350
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	-	-	200	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5	17.5
Weight without accessories	approx. kg	40	65	85	120	170	280	425

Electric rope winch PLANETA – PFW-C

With a load bearing capacity from 250 to 2.000 kg this electrical rope winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads. With its extensive range of configuration and finishing options it can be adapted to suit almost any installation situation.



Standard equipment

- Disk brake and spur gear motor
- Grooved drum
- Safety contactor control with low control voltages
- Electric overload protection (over 1.000 kg load capacity)
- Pendant remote control with 3 m cable
- Power supply cable with 3 m cable
- Documentation in German or English
- Test certificate and EC installation declaration

Technical data

- Operating voltage 3 Phases / 400 Volt / 50 Hz or 1 Phases / 230 Volt / 50 Hz (alternating current)
- Duty cycle 60% (reference cycle 10 min.)
- Up to 150 starts per hour
- Protection class: IP 55 (jet-water from all sides)
- FEM classification: M3 (1Bm)
(e.g. 10 years one hour daily with medium loads)
- Ambient temperature during operation: -10 °C to +40 °C

Winch control system

Out standard contactor control with control voltage of 42 V combines a lot of security features in a compact housing. By using low control voltage the operator is protected in a case of possible damages like a contact with a broken cable isolation. Generally the control will be delivered with a separate control of the brake. Because of that down sliding of the load will be prevented in a case of emergency stop.

Additional versions

Thanks to the modular construction, for the first time it is possible to retrofit or change many options.

Foremost of these is the manual free-wheeling coupling, which de-couples the rope drum from the drive and the brake for a rapid reeling off of the rope.



Figure shows optional equipment

Optional equipment

- Lifting- or pulling rope with security hook
- Operational limit switch
- Protective drum cover
- Drum pressure roller
- CE-Label by full equipment

Spindle limit switch

The spindle limit switch is coupled directly to the rope drum and determines the drum's revolutions. You can determine the rope winch's shut-off positions as required by adjusting the switching cam inside the switch. As standard, our spindle limit switches have two contacts, in order to limit the top and bottom hook position for example.

Drum protection

Covering the rope drum prevents objects or items of the operator's clothing entering the rope drive. This reduces the risk of accidents and damage to the winch.

Drum pressure roller

The rope keeps tight on the drum as long as it is under tension. But if it becomes slack, e.g. during shunting applications, when the waggon runs faster than the winch is able to store, a drum pressure roller can help. It presses the rope onto the drum core and maintains it in a tidy condition. The drum pressure roller is also recommended if a free spooling clutch is used.



Made in Germany

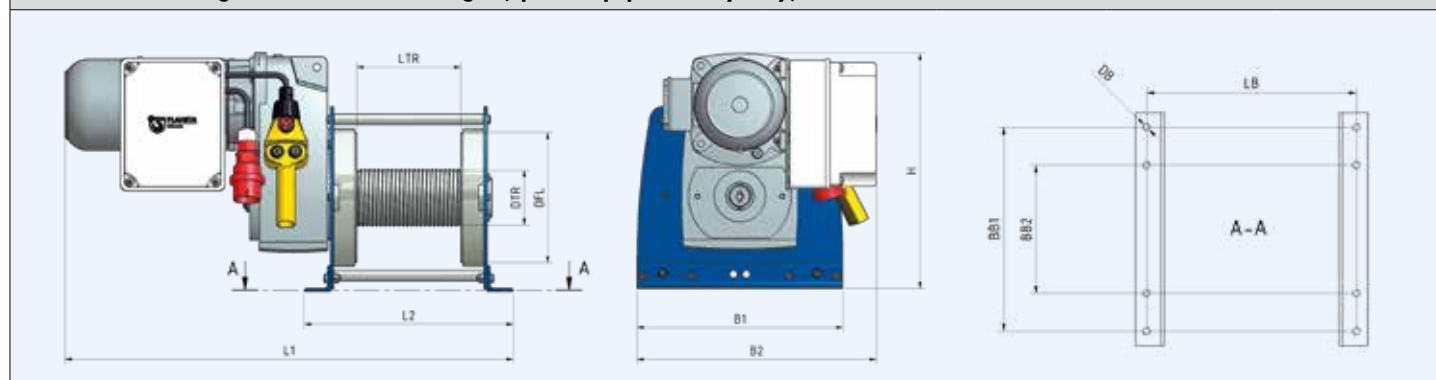
The PFW range combines a modern design, innovative technology and superlative components, which are produced exclusively in Germany. Prior to shipping, each winch is tested dynamically with 125% of the nominal load and leaves our factory with a 24 month guarantee.

Basic design

TYPE	PFW-C ...	250	500	1000	2000
Lifting capacity in 1st rope layer to max. hoisting-/pulling distance	kg/m	250/7	500/7	990/6	2000/5
Lifting capacity in 2nd rope layer to max. hoisting-/pulling distance	kg/m	220/16	440/16	865/16	1750/14
Lifting capacity in 3rd rope layer to max. hoisting-/pulling distance	kg/m	195/27	390/27	770/26	1550/24
Lifting capacity in 4th rope layer to max. hoisting-/pulling distance	kg/m	175/38	350/39	695/39	1400/35
Lifting capacity in 5th rope layer to max. hoisting-/pulling distance	kg/m	160/51	320/52	630/51	1270/48
Lifting capacity in 6th rope layer to max. hoisting-/pulling distance	kg/m	145/65	295/65	580/65	1165/61
Lifting capacity in 7th rope layer to max. hoisting-/pulling distance	kg/m	135/81	270/81	535/80	1075/75
Rope diameter	mm	5	6	8	12
Required rope length remaining on drum	m	1.0	1.2	1.6	2.4
Rope speed 1st rope layer	approx. m/min	8	8	8	8 (4)*
Rope speed 2nd rope layer	approx. m/min	9	9	9	9 (4)*
Rope speed 3rd rope layer	approx. m/min	10	10	10	10 (5)*
Rope speed 4th rope layer	approx. m/min	11	11	11	11 (5)*
Rope speed 5th rope layer	approx. m/min	12	12	12	12 (6)*
Rope speed 6th rope layer	approx. m/min	13	13	13	13 (6)*
Rope speed 7th rope layer	approx. m/min	14	14	14	14 (7)*
Motor power	kW	0.37	0.75	1.5	2.6 (1.5)*
PFW-C with 3PH / 400 V	Order No.	H62100	H62110	H62130	H62150
PFW-C with 1PH / 230 V (*)	Order No.	H62109	H62119	H62139	H62159

Options					
Protective drum cover	Order No.	H62840	H62841	H62843	H62845
Operational limit switch	Order No.	H62864	H62864	H62865	H62866
Drum pressure roller	Order No.	H62850	H62851	H62853	H62855
Pulling rope not rotation-resistant with eye hook 8 m *	Order No.	C62101	C62111	C62131	C62151
Additional pulling rope per m	Order No.	C05619	C06619	C08619	C12636
Hoisting rope rotation resistant with swivel hook 8 m **	Order No.	C62102	C62112	C62132	C62152
Additional hoisting rope per m	Order No.	C05177	C06177	C08177	C12177

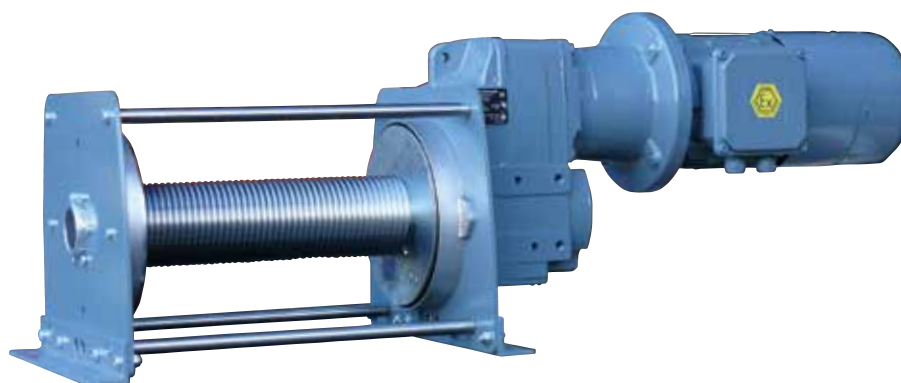
Dimensions and weights of the standard designs (Special equipment may vary).



L1	mm	700	770	860	1000 (1050)*
L2	mm	360	360	400	470
B1	mm	270	320	400	550
B2	mm	380	420	470	550
H	mm	300	335	460	620
LTR	mm	200	200	200	200
DTR	mm	65	80	105	155
DFL	mm	155	190	250	370
LB	mm	330	330	360	420
BB1	mm	220	250	350	500
BB2	mm	-	-	220	320
DB	mm	11	12	12	16
Weight without accessories	approx. kg	40	65	110	240 (250)*

** Rope supplied loose as a coil

More capacities and options on request.



Electric rope winch PFW-EX

With a load bearing capacity from 250 to 3000 kg this electrical rope winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads. With its extensive range of configuration and finishing options it can be adapted to suit almost any installation situation. The PFW-EX version is build according the CE directive 2006/42/EC and European ATEX-guidelines 2014/34/EU. With its special equipment and configuration these winches can be used in areas at risk of explosion.

Made in Germany

The PFW range combines a modern design, innovative technology and superlative components, which are produced exclusively in Germany. Prior to shipping, each winch is tested dynamically with 125% of the nominal load and leaves our factory with a 24 month guarantee.

Equipment

- Electrical control in pressure-resistant casing
EX II 2 GD de IIB T4 T 135°C
- Standard Protection Classification IP55 with isolation F
- Standard ambient temperature from -10 °C to +40 °C
- Standard mechanism group acc. FEM 1.001: M3 (1Bm)
- Standard supply voltage of 3 PH / 400 Volt / 50 Hz Preisvorteil
- Contactor control available for areas at risk of explosion or standard version for installation in safe areas to combine safe equipment with price advantages

Basic design

TYPE	PFW-1D-EX	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	750	1000	1500	2000	3000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1270	1920
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	11	11	11	10	10	9	9
Rope length in 5th rope layer	m	75	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	8	8	8	8	8	8	8
Rope speed in 5th rope layer	approx. m/min	12	12	12	12	12	12	12
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-1D-EX with standard speed	Order No.	H62401	H62411	H62421	H62431	H62441	H62451	H62461

- Pendant remote control and radio remote control available for areas at risk of explosion

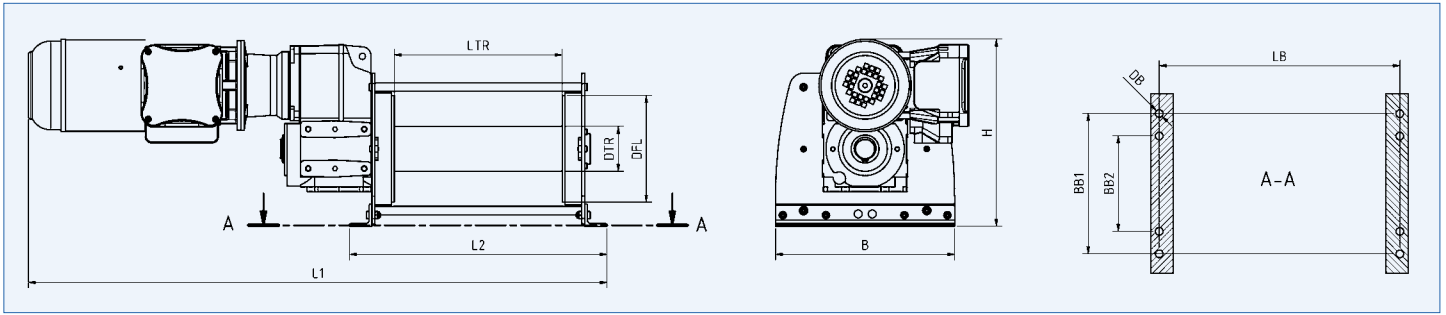
Available options

- Grooved drum with drum length on customer demand for higher rope storage and better spooling
- Different voltage and frequency
- Adjustable speed with frequency converter
- Free spooling clutch
- Special paintings and higher protection class of electrical equipment for outdoor and offshore applications
- Drum pressure roller
- Multi rope strands or drum divider
- Drum cover
- Limit switches according to ATEX guidelines
- Overload protection
- Special ropes with bronze coated hooks or solid steel version

Classification

II 2 GD de IIB T4 T 135 °C

Dimensions and weights – PFW-1D-EX



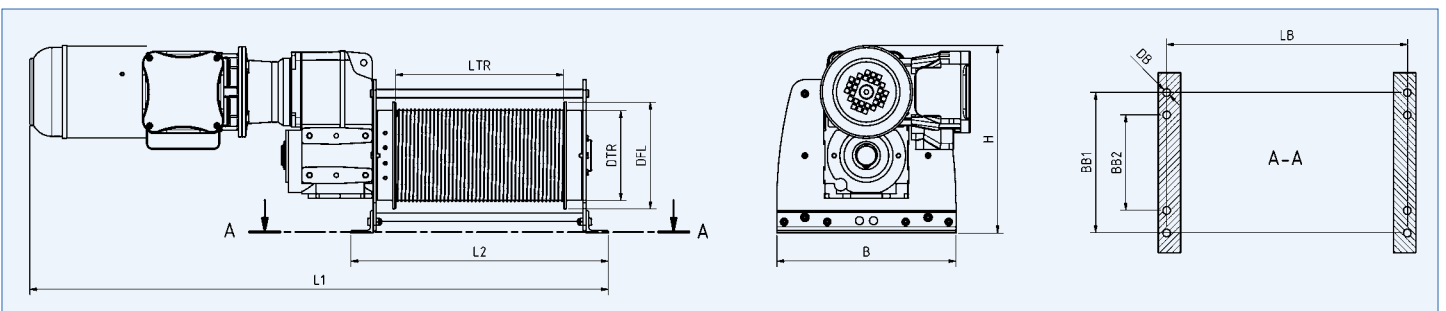
TYPE	PFW-1D-EX	250	500	750	1000	1500	2000	3000
L1 *	approx. mm	1000	1050	1070	1160	1180	1300	1350
L2	mm	460	460	460	500	500	570	570
B	mm	270	320	360	400	460	550	620
H	approx. mm	310	340	420	460	550	630	690
LTR	mm	300	300	300	300	300	300	300
DTR	mm	65	80	92	105	130	155	185
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	–	–	–	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5	17.5
Weight without accessories	approx. kg	35	60	75	110	155	240	380

* Length can vary according to configuration.

Double diameter drum

TYPE	PFW-2D-EX	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	750	1000	1500
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	20	20	20	20	19	18	17
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	15	15	15	15	15	15	15
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-2D-EX with standard speed	Order No.	H62501	H62511	H62521	H62531	H62541	H62551	H62561

Dimensions and weights – PFW-2D-EX



TYPE	PFW-2D-EX	250	500	750	1000	1500	2000	3000
L1 *	approx. mm	1000	1050	1070	1160	1180	1300	1350
L2	mm	460	460	460	500	500	570	570
B	mm	270	320	360	400	460	550	620
H	approx. mm	300	340	420	460	550	630	660
LTR	mm	300	300	300	300	300	300	300
DTR	mm	130	160	185	210	260	310	350
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	–	–	200	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5	17.5
Weight without accessories	approx. kg	40	65	85	120	170	280	425

* Length can vary according to configuration.



PFW-L-1D 500

Pneumatic winch PFW-L-Series

For pneumatic winch applications, demanding a modular and solid design, this range of explosion proof winches provides the solution.

The use of vane type motors and spring applied pneumatic disc brakes ensures trouble free operation and low maintenance requirements.

These winches find their use in general industry, oil and gas exploration and in many places where compact, explosion proof hoisting gear is required. Because of the modular design of the PFW winch also the pneumatic version can be delivered with advantageous delivery times.

Faster rope speeds are available upon request.

Standard features

- High efficiency spur gear box
- Rotary vane motor with pneumatic fail-safe disc brake
- Steel drum (not grooved) with rope fixing point at flange
- Two drum supports
- Double layer 2 component coating, colour RAL 5010

Available options

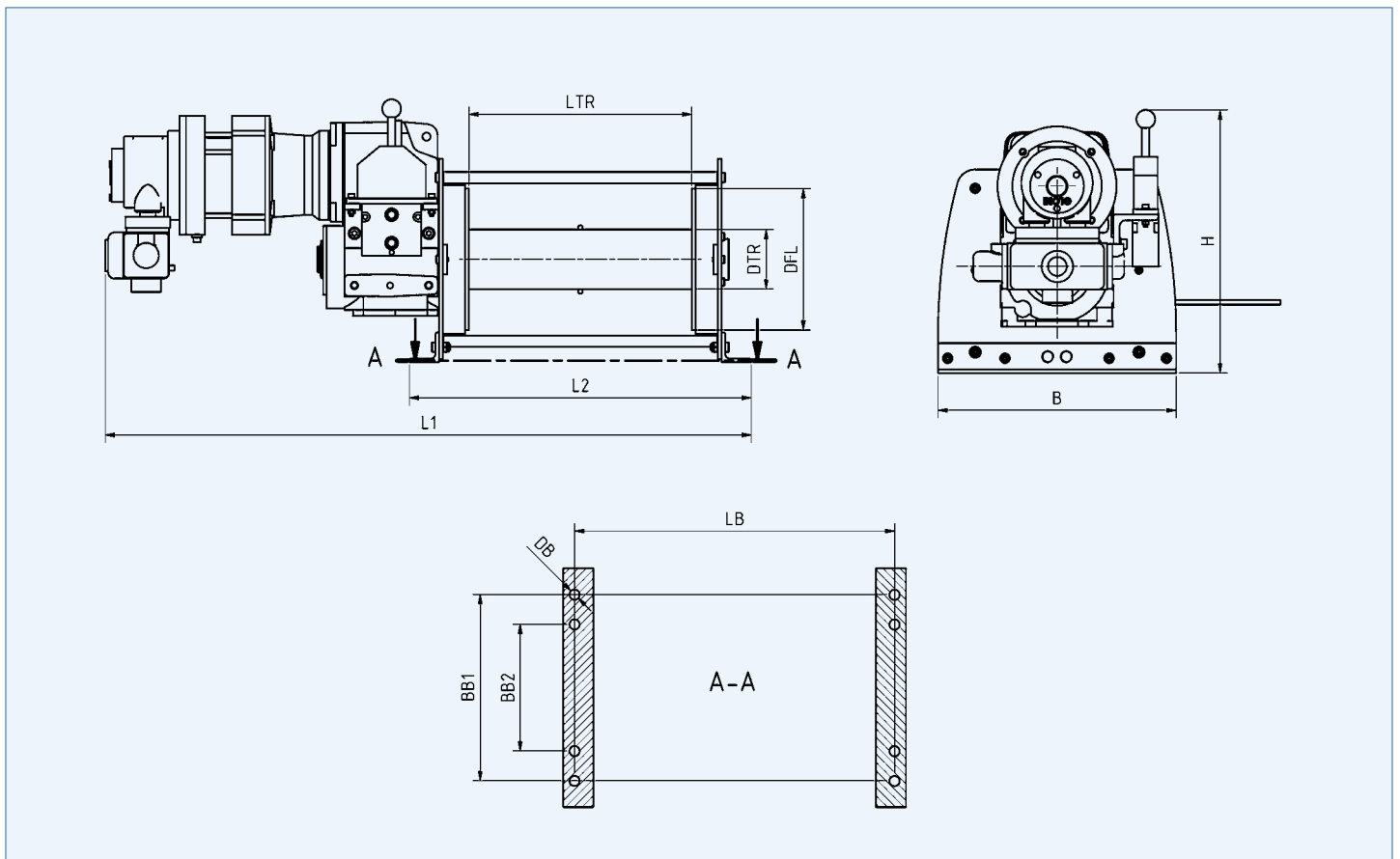
- Manual disengaging clutch
- Grooved drum
- Drum pressure roller
- Alternative speeds
- Alternative drum dimensions / split drums / additional rope anchors / etc.
- Drum guard
- Marine / offshore coating systems
- Proportional control valve, local or remote
- Pneumatic limit switch
- Pneumatic slack wire switch

Classification

 II 2 GD c T4 135°C

TYPE	PFW-L-1D	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	500	750	1000	1500	2000	3000
Lifting capacity in 5th rope layer	kg	320	480	640	950	1270	1920
Rope diameter	mm	6	7	8	10	12	14
Rope length in 1st rope layer	m	11	11	10	10	9	9
Rope length in 5th rope layer	m	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	9	10	8	12	8	5
Rope speed in 5th rope layer	approx. m/min	14	15	13	18	12	8
Motor power	kW	1.8	2.2	2.2	3.5	3.5	3.5
Air pressure	bar	6	6	6	6	6	6
Air consumption	l/min	45	55	55	80	80	80
PFW-L-1D with standard speed	Order No.	H62611	H62621	H62631	H62641	H62651	H62661

TYPE	PFW-L-2D	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	375	500	750	1000	1500
Rope diameter	mm	6	7	8	10	12	14
Rope length in 1st rope layer	m	20	20	20	19	18	17
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	18	19	15	22	15	9
Motor power	kW	1.8	2.2	2.2	3.5	3.5	3.5
Air pressure	bar	6	6	6	6	6	6
Air consumption	l/min	45	55	55	80	80	80
PFW-L-2D with standard speed	Order No.	H62711	H62721	H62731	H62741	H62751	H62761



Dimensions and weights

TYPE	PFW-L-1D/ PFW-L-2D	500	750	1000	1500	2000	3000
L1	approx. mm	890	980	1050	1110	1210	1275
L2	mm	460	460	500	500	570	570
B	mm	320	360	400	460	550	620
H	approx. mm	330	410	460	540	620	680
LTR	mm	190	220	250	310	370	430
DTR 1D/2D	mm	80/160	92/185	106/210	130/260	155/310	186/350
DFL	mm	190	220	250	310	370	430
LB	mm	430	430	460	460	520	520
BB1	mm	250	310	350	410	500	560
BB2	mm	-	-	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	17.5	17.5
Weight	approx. kg	50	80	105	140	230	355



PSW-L-1D (image shows options)

Pneumatic winch PSW-L-Series

For pneumatic winch applications, demanding a modular and solid design, this range of explosion proof winches provides the solution.

The use of vane type motors in combination with a self-braking worm gearbox ensures trouble free operation and low maintenance requirements without the need of an additional brake. These winches find their use in general industry, oil and gas exploration and in many places where compact, explosion proof hoisting gear is required. Because of the modular design of the PSW winch it can be delivered with advantageous delivery times. Upon request faster or slower rope speeds are available.

Standard features

- Self-braking worm gearbox
- Low maintenance vane air motor
- Steel drum (not grooved) with cable fixing point at flange
- Two drum supports
- Double layer 2 component conservation, colour RAL 5010

Available options

- Manual disengaging clutch
- Grooved drum
- Drum pressure roller
- Alternative speeds
- Alternative drum dimensions / split drums / additional rope anchors / etc.
- Drum guard
- Marine / offshore coating systems
- Proportional control valve, local or remote
- Pneumatic limit switch
- Pneumatic slack wire switch

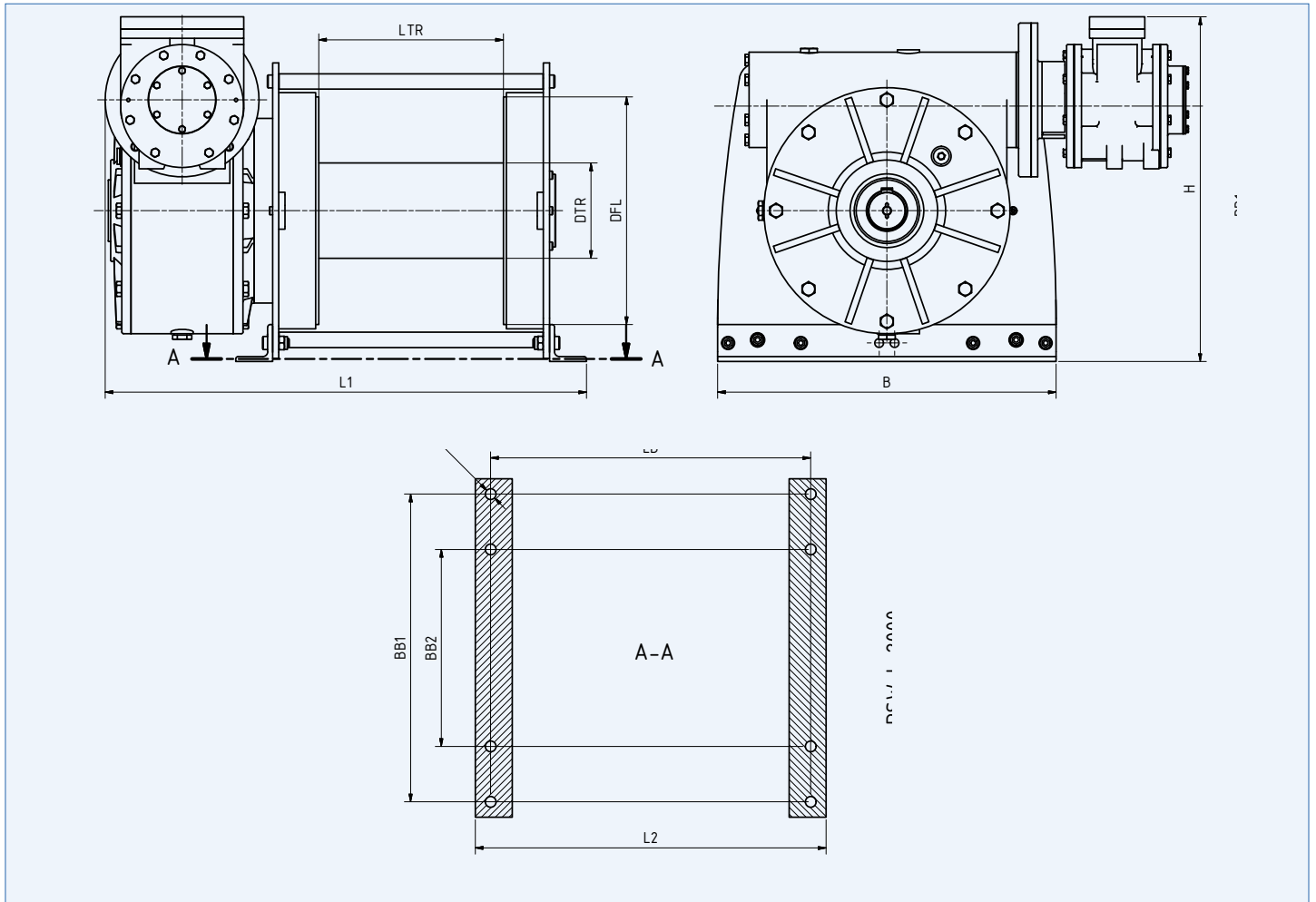
Classification

 II 2 GD c T4 135 °C

Also available in hydraulic version!

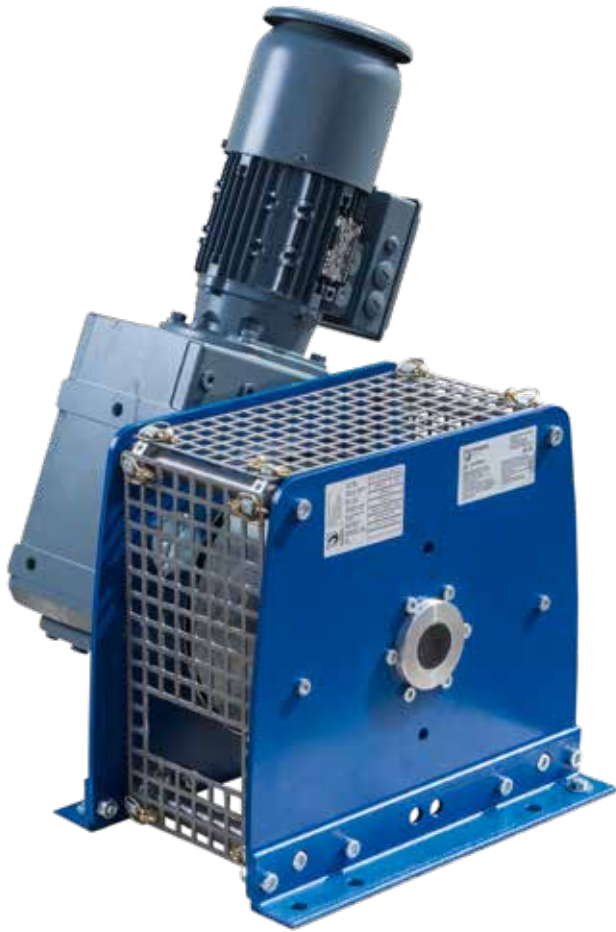
TYPE	PSW-L-1D	250	500	750	1000	1500	2000
Lifting capacity in 1st rope layer	kg	250	500	750	1000	1500	2000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1270
Rope diameter	mm	11	6	7	8	10	12
Rope length in 1st rope layer	m	75	11	11	10	10	9
Rope length in 5th rope layer	m	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	8	8	8	8	8	8
Rope speed in 5th rope layer	approx. m/min	12	12	12	12	12	12
Air pressure	bar	6	5	6	6.5	6	5
Air consumption	l/min	35	45	80	90	120	190
PSW-L-1D with standard speed	Order No.	H64601	H64611	H64621	H64631	H64641	H64651

TYPE	PSW-L-2D	250	500	750	1000	1500	2000
Lifting capacity in 1st rope layer	kg	125	250	375	500	750	1000
Rope diameter	mm	5	6	7	8	10	12
Rope length in 1st rope layer	m	20	20	20	20	19	18
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	15	15	15	15	15	15
Air pressure	bar	6	5	6	6.5	6	5
Air consumption	l/min	35	45	80	90	120	190
PSW-L-2D with standard speed	Order No.	H64701	H64711	H64721	H64731	H64741	H64751



Dimensions and weights

TYPE	PSW-L-1D/ PSW-L-2D	250	500	750	1000	1500	2000
L1	approx. mm	552	563	624	667	707	782
L2	mm	460	460	460	500	500	570
B	mm	270	320	360	400	460	550
H	approx. mm	234	283	368	410	485	560
LTR	mm	300	300	300	300	300	300
DTR 1D/2D	mm	65/130	80/160	92/185	105/210	130/260	155/310
DFL	mm	155	190	220	250	310	370
LB	mm	430	430	430	460	520	520
BB1	mm	220	250	310	350	410	500
BB2	mm	-	-	-	220	280	320
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5
Weight	approx. kg	35	50	88	120	172	250



Electric rope winch PKW-E-Serie

As a variation of the PFW-E rope winch, the PKW-E rope winch is equipped with a bevel-helical gear unit.

As such, the device is much narrower and can operate in even the tightest of spaces.

Due to the close relationship with the PFW rope winch, its performance data and equipment features are identical.

Standard features

- Capacity of 250 kg to 3,000 kg
- Bevel-helical gear unit and brake motor
- AC or three-phase motor
- Different speeds and rope capacities
- Protection class IP55 - 66. Duty cycle 60% - 100%
- Low-maintenance with lifetime lubrication
- Mechanism group M3 (1Bm)
- Documentation optionally in German or English
- Log book and EC Declaration of Incorporation

Options

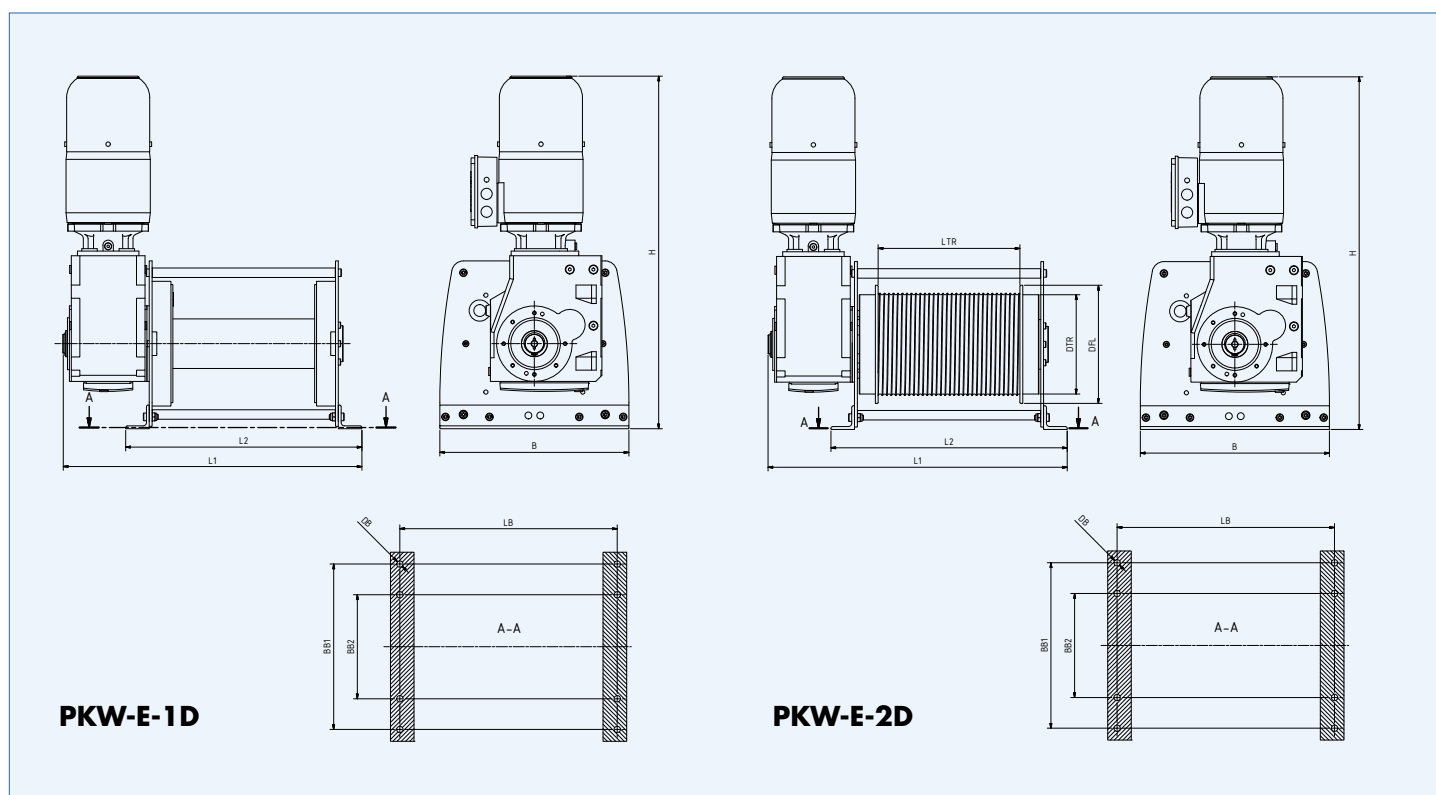
- Rope and hook fully installed, multiple rope lead-offs
- Grooved and extended drum, manual free-wheeling coupling
- Drum pressure roller and slack wire switch
- Protective drum cover and special paint finishes
- Further speeds and drum versions
- Versions for ATEX and stages / studios
- Versions for marine / offshore areas

Basic design

TYPE	PKW-E-1D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	750	1000	1500	2000	3000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1270	1920
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	11	11	11	10	10	9	9
Rope length in 5th rope layer	m	75	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	8	8	8	8	8	8	8
Rope speed in 5th rope layer	approx. m/min	12	12	12	12	12	12	12
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PKW-E-1D with standard speed	Order No.	H63101	H63111	H63121	H63131	H63141	H63151	H63161
Rope speed in 1st rope layer	approx. m/min	4/8	4/8	4/8	4/8	4/8	4/8	4/8
Rope speed in 5th rope layer	approx. m/min	6/12	6/12	6/12	6/12	6/12	6/12	6/12
Motor power	kW	0.25/0.37	0.37/0.55	0.55/1.0	0.7/1.4	1.1/2.2	1.5/2.5	2.9/4.4
PKW-E-1D with two speeds	Order No.	H63102	H63112	H63122	H63132	H63142	H63152	H63162
Rope speed in 1st rope layer	approx. m/min	12	12	12	12	12	12	12
Rope speed in 5th rope layer	approx. m/min	19	19	19	19	19	19	19
Motor power	kW	0.55	1.1	1.5	2.1	3.2	4	5.5
PKW-E-1D with faster speed	Order No.	H63103	H63113	H63123	H63133	H63143	H63153	H63163

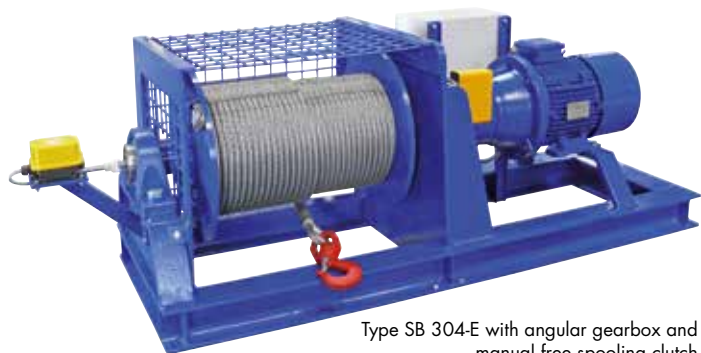
Double diameter drum

TYPE	PKW-E-2D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	750	1000	1500
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	20	20	20	20	19	18	17
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	15	15	15	15	15	15	15
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PKW-E-2D with standard speed	Order No.	H63201	H63211	H63221	H63231	H63241	H63251	H63261
Rope speed in 1st rope layer	approx. m/min	7/15	7/15	7/15	7/15	7/15	7/15	7/15
Motor power	kW	0.25/0.37	0.37/0.55	0.55/1.0	0.7/1.4	1.1/2.2	1.5/2.5	2.9/4.4
PKW-E-2D with two speeds	Order No.	H63202	H63212	H63222	H63232	H63242	H63252	H63262
Rope speed in 1st rope layer	approx. m/min	22	22	22	22	22	22	22
Motor power	kW	0.55	1.1	1.5	2.1	3.2	4	5.5
PKW-E-2D with faster speed	Order No.	H63203	H63213	H63223	H63233	H63243	H63253	H63263



Dimensions and weights

TYPE	PKW-E-1D/ PKW-E-2D	250	500	750	1000	1500	2000	3000
L1	approx. mm	570	575	580	635	670	770	820
L2	mm	460	460	460	500	500	570	570
B	mm	270	320	360	400	460	550	620
H	approx. mm	530	630	660	750	790	890	890
LTR	mm	300	300	300	300	300	300	300
DTR 1D/2D	mm	65/130	80/160	92/185	105/210	130/260	155/310	185/350
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	-	-	-	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5	17.5
Weight	approx. kg	35/40	55/60	75/85	110/120	200/215	250/290	350/395



Type SB 304-E with angular gearbox and manual free spooling clutch

SB-Series

The standard build SB type winch provides the basis of the solution to many pulling and lifting winch applications. The winch is constructed in the conventional manner with motor, gearbox and drum in line. When it comes to the need of a shorter design the SB winch is available with a angular gearbox. The choice of the rope complies with the pulling force in the 5th rope layer. The drum is build according classification 1Am. The drum diameter is at least 16-times bigger than the diameter of the indicated rope diameter. Although the name of this winch indicates different, these winches are very suitable to fit to your specific winch application and can be equipped with different drums, other gearboxes or motors. Many options can be offered on these highly versatile winches. The standard version comes without a rope and control.

Standard winch features:

- Heavy duty planetary gearbox
- SB E; IP 54 aluminium braked motor 400 VAC/ 3 phase / 50 Hz
- SB H; orbit or radial piston type hydraulic motor complete with brake valve
- SB LPR; radial piston type air motor complete with hand control valve and mufflers
- SB LG; gear type air motor complete with hand or remote control valve and mufflers
- Steel drum with cable fixing point at flange
- Two drum supports
- Double layer 2 component conversation, colour RAL 5010

TYPE SB-Series electric

TYPE	Max. capacity 1st layer kg	Max. capacity 5th layer kg	Recomm. rope diam. mm	Rope speed 1st layer m/min.	Rope speed 5th layer m/min.	Drum storage 1st layer m	Drum storage 5th layer m	Motor power 3-ph kW	Order No.
SB 300-E	1250	875	9	8,5	12,5	24	155	2,2	H50091
SB 301-E	2000	1400	11	8,5	12,5	24	155	3	H50092
SB 304-E	3000	2100	14	8,5	12,5	24	155	5,5	H50175
SB 305-E	4000	2800	16	8	11,5	24	155	5,5	H50071
SB 306-E	5500	3800	19	8	11,5	24	155	7,5	H50072
SB 307-E	7000	4900	22	8	11,5	24	155	11	H50073
SB 309-E	9000	6300	24	10	14	24	155	15	H50074
SB 310-E	12000	8400	28	8	11,5	24	155	18,5	H50093
SB 311-E	15000	10400	32	7,5	11	23	154	22	H50075
SB 313-E	18000	12400	34	6	9	22	153	22	H50076
SB 314-E	23000	16000	38	6	9	22	153	30	H50177
SB 315-E	30000	20400	44	6	9	20	145	30	H50094
SB 316-E	37000	24500	48	6	9	18	137	45	H50095

Available winch options

- IP 56 TENV cast iron motor for marine applications
- Alternative drum dimensions / split drums /additional rope anchors /etc.
- Explosion proof motors
- Protective steel motor cover
- Drum pressure roller, spooling gears, grooved drums
- Band brakes (manual or failsafe automatic)
- Manual disengaging clutch
- Alternative speeds
- Alternative supply voltages
- Drum guards
- Manual emergency crank
- Slip ring mounting
- Warping head
- Angular gear

Available control options

- Control box IP 55 with pushbuttons and emergency stop
- Control box IP 55 with low voltage IP 65 remote control
- Load limiter (required by CE for applications exceeding 1000 kg W.L.L.)
- Frequency inverter for variable speed control
- Wireless radio remote control systems
- Limit switches (electric, pneumatic)
- Slack wire switches (electric, pneumatic)
- Proportional local or remote control valve (pneumatic or hydraulic)
- Motor overheating protection



SB 301-E with AISV

TYPE SB-Series pneumatic

TYPE	Max. capacity 1st layer	Max. capacity 5th layer	Recomm. rope diam. mm	Rope speed 1st layer m/min.	Rope speed 5th layer m/min.	Drum storage 1st layer m	Drum storage 5th layer m	Air pressure drop in bar	Air flow in l/min.	Order No.
	kg	kg		m/min.	m/min.	m	m			
SB 300-LPR2	1200	845	10	11	16	26	168	7	90	H50119
SB 301-LPR2	2100	1435	12	7	10	24	157	7	90	H50121
SB 303-LPR2	2500	1740	14	6	9	26	165	7	90	H50084
SB 303-LPR3	2500	1740	14	12	17	26	165	7	140	H50122
SB 305-LPR3	4000	2770	16	9	13	25	161	7	150	H50085
SB 305-LPR4	4000	2770	16	15	21	25	161	7	240	H50123
SB 306-LPR4	5500	3970	18	10	14	28	181	7	240	H50086
SB 307-LPR4	7000	4960	22	8	11	26	171	7	240	H50087
SB 307-LG6	7000	4960	22	13	18	26	171	7	350	H50124
SB 309-LPR4	9000	6285	26	6	9	24	163	7	220	H50125
SB 309-LG6	9000	6285	26	10	14	24	163	7	350	H50088
SB 310-LG6	12000	8460	28	7	10	24	168	7	350	H50126
SB 311-LG6	16000	10655	34	5	7,5	19	144	7	350	H50089
SB 313-LG6	20000	13610	38	4	6	19	151	7	350	H50090

TYPE SB-Series hydraulic

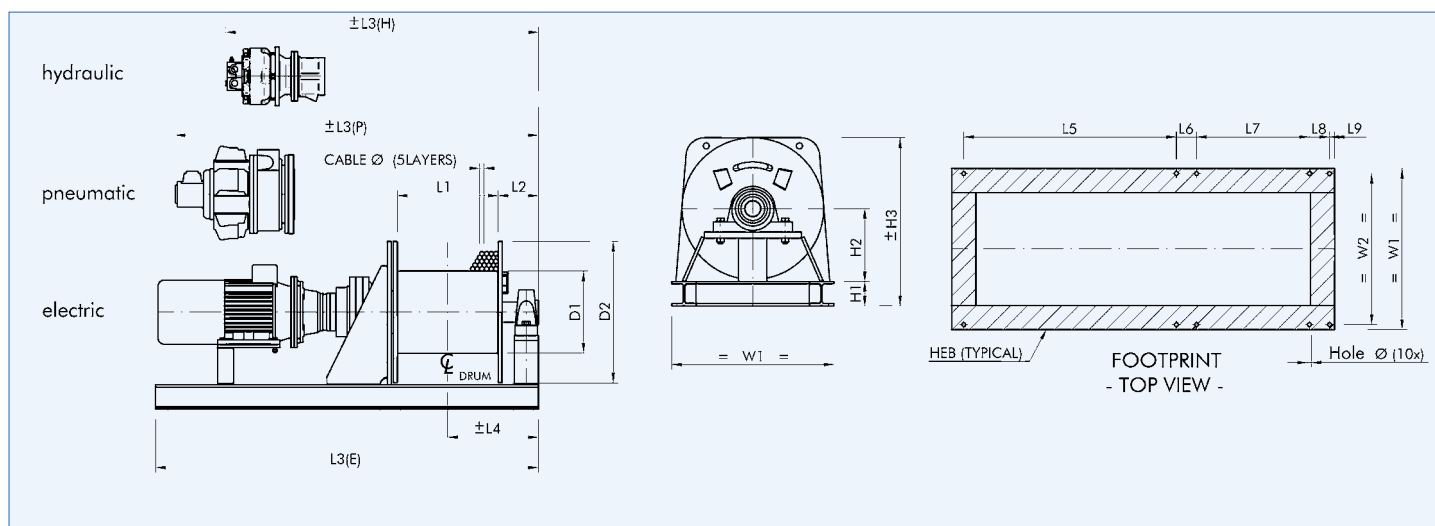
TYPE	Max. capacity 1st layer	Max. capacity 5th layer	Recomm. rope diam. mm	Rope speed 1st layer	Rope speed 5th layer	Drum storage 1st layer	Drum storage 5th layer	Oil pressure drop in bar	Oil flow in l/min.	Order No.
	kg	kg		m/min.	m/min.	m	m			
SB 303-H	2500	1740	14	18	26	26	165	140	60	H50077
SB 305-H	4000	2770	16	18	26	25	161	160	80	H50078
SB 306-H	5500	3970	18	25	35	28	181	225	95	H50079
SB 307-H	7000	4960	22	20	28	26	171	230	100	H50080
SB 309-H	9000	6285	26	13	18	24	163	190	100	H50081
SB 310-H	12000	8460	28	11	16	24	168	230	95	H50096
SB 311-H	16000	10655	34	10	15	19	144	230	110	H50082
SB 313-H	20000	13610	38	8	12	19	151	210	120	H50083
SB 315-H	30500	20800	44	8	12	19	151	235	165	H50097
SB 316-H	37000	24570	48	6	9	17	141	225	160	H50098

Options

TYPE	Grooved drum	Cable tensioning device with scored cable drum	Longer cable drum, up to 500 mm	Electric rope winch SB-E			
				3-layer paint coating*	Drum cover	Spindle limit switch (as an operating limit switch)	
SB 300	Order No.	H50206	H50208	H50231	H50450	H50454	H50210
SB 301	Order No.	H50207	H50209	H50232	H50450	H50454	H50210
SB 303	Order No.	H50219	H50217	H50212	H50450	H50454	H50210
SB 305	Order No.	H50219	H50217	H50238	H50450	H50454	H50210
SB 306	Order No.	H50220	H50217	H50213	H50451	H50455	H50210
SB 307	Order No.	H50220	H50218	H50239	H50451	H50455	H50210
SB 309	Order No.	H50221	H50218	H50214	H50452	H50456	H50210
SB 310	Order No.	H50222	H50218	H50215	H50452	H50456	H50210
SB 311	Order No.	H50222	H50218	H50247	H50452	H50456	H50210
SB 313	Order No.	H50223	H50392	H50216	H50452	H50456	H50210
SB 315	Order No.	H50390	H50233	H50393	H50453	H50457	H50210
SB 316	Order No.	H50391	H50233	H50394	H50453	H50457	H50210

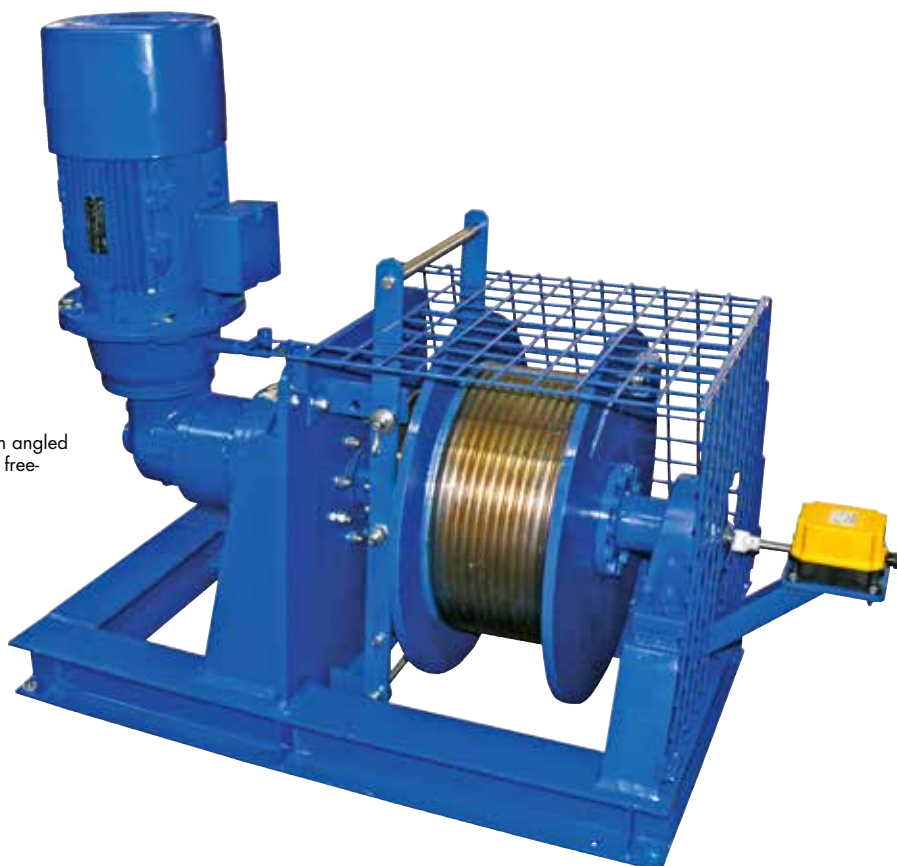
We can offer an adapted control for the SB winches according to your directions!

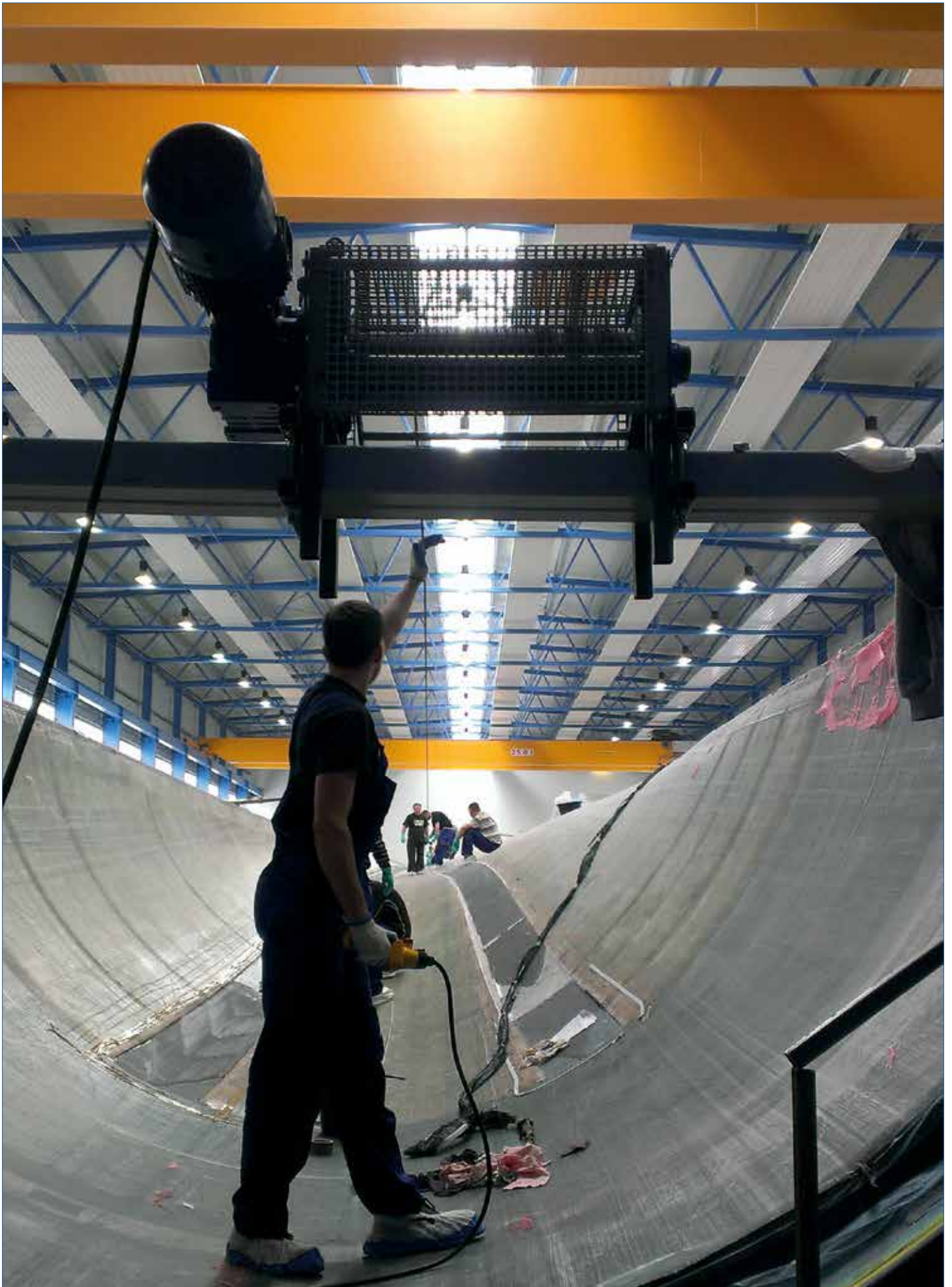
* Acc. ISO 12944 C4 (high) – System C5-M-Marine (very high), quoted price x 2 according to your directions!

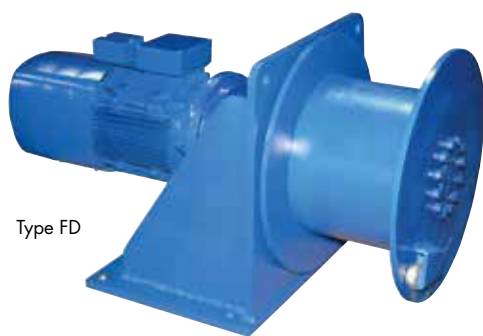


TYPE	Weight kg	Dimensions (mm)																		
		D1	D2	L1	L2	L3(E)	L3(H)	L3(L)	L4	L6	L7	L8	L9	H1	H2	H3	W1	W2	HEB	Hole-Ø
SB 300	250	152	325	500	135	1450	-	1450	385	80	540	80	20	100	215	520	500	460	100	14
SB 301	250	191	375	500	155	1450	-	1450	405	80	540	80	20	100	215	520	500	460	100	14
SB 304	400	241	430	500	155	1600	1350	1650	405	80	550	80	20	100	260	610	600	560	100	14
SB 305	400	273	490	500	155	1650	1350	1800	405	80	550	80	20	100	260	610	600	560	100	14
SB 306	510	324	580	500	165	1800	1450	1850	415	80	560	80	20	100	310	710	700	660	100	18
SB 307	790	394	680	500	200	1950	1550	1900	450	100	560	100	25	120	360	830	800	750	120	20
SB 309	1100	419	730	500	230	2000	1550	1900	480	110	560	110	30	140	435	1000	1000	940	140	22
SB 310	1420	495	860	500	235	2100	1600	1950	485	120	590	120	40	160	460	1070	1100	1040	160	26
SB 311	1740	546	960	500	259	2150	1600	1950	509	120	590	120	40	160	510	1170	1150	1090	160	30
SB 313	2320	572	1020	500	260	2150	1700	1950	510	120	590	120	40	180	585	1340	1350	1280	180	32
SB 315	3400	711	1350	500	299	2600	2050	-	549	140	590	140	40	200	685	1560	1550	1470	200	36
SB 316	2900	711	1400	500	299	2650	2100	-	549	140	590	140	40	200	710	1610	1600	1520	200	36

Typ SB 304-E with angled gear and manual free-wheel clutch







Type FD

Planetary crane winches FD-Series

Specially designed for applications where space is at a premium, these compact and lightweight lifting winches are ideally suited for installation on cranes, davits and derricks. The single drum support enables the rope to leave the drum at any angle. The heavy duty planetary drive is partly located within and protected by the drum core. The large drum diameters ensure a healthy drum to cable diameter ratio and sufficient working length despite the short drums.

Three engine types

The FD is available with electric, hydraulic or compressed air motor. The load capacities range from 800 kg to 5250 kg. In special cases, special gears are also possible.

Standard features

- Heavy duty planetary gearbox
- FD E; IP 54 aluminium braked motor 400 VAC / 3 phase/ 50 Hz
- FD H; orbit or radial piston type hydraulic motor complete with brake valve
- FD LPR; radial piston type air motor complete with hand control valve and mufflers

- Steel drum with cable fixing point at flange
- Single drum support
- Double layer 2 component conservation, colour RAL 5010

Available options

- IP 56 TENV cast iron motor for marine applications
- Explosion proof motors
- Protective steel motor cover
- Drum pressure roller
- Alternative speeds
- Alternative supply voltages
- Drum guards
- Marine / offshore coating systems
- Tubular offshore frame construction with lifting eyes

Available control options

- Control box IP 55 with pushbuttons and emergency stop
- Control box IP 55 with low voltage IP 65 remote control
- Load limiter (required by CE)
- Frequency inverter for variable speed control
- Wireless radio remote control system
- Limit switches
- Slack wire switches
- Radio / Infra-red remote control

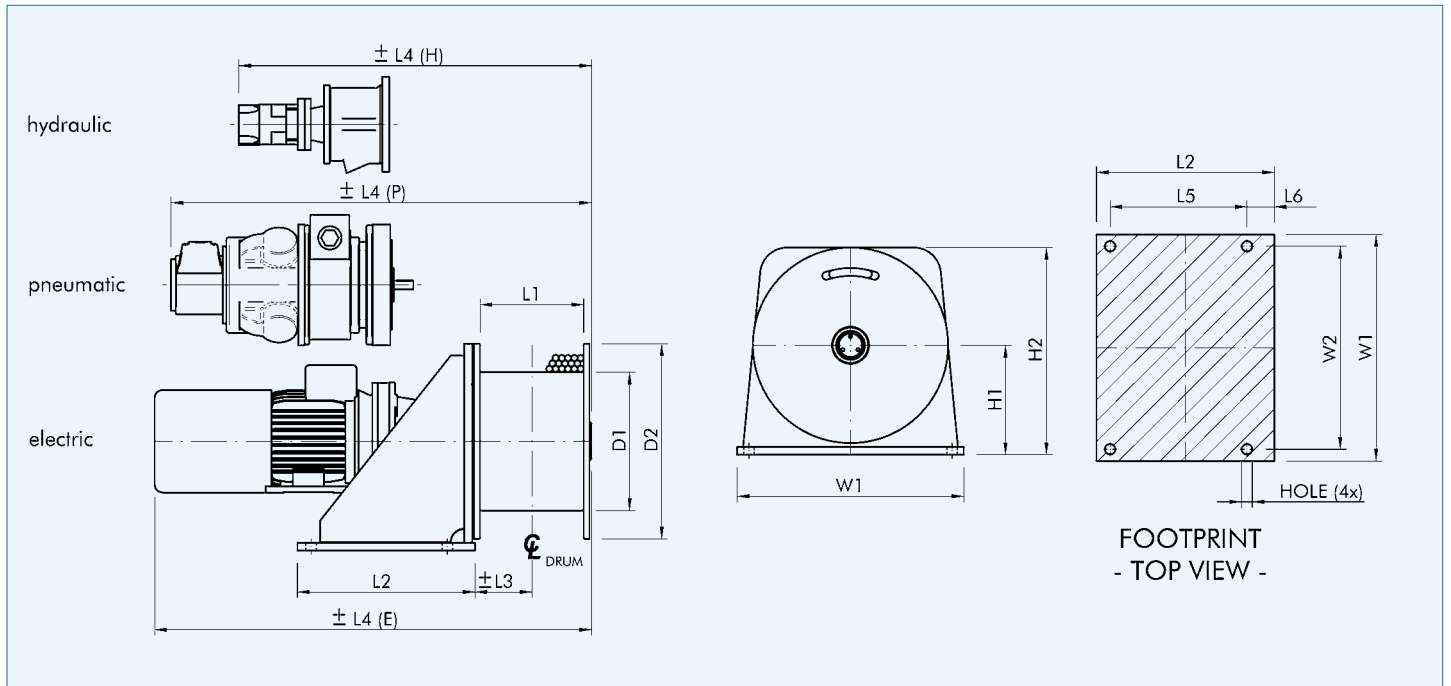
TYPE FD-Series electric

TYPE	Max. capacity 1st layer kg	Max. capacity top layer kg/layers	Recomm. rope diam. mm	Speed 1st layer m/min.	Speed top layer m/min.	Drum storage 1st layer m	Drum cap. all layers m/layers	Motor power 400 V AC kW	Order No.
FD 300-E	950	800/4	8	8,5	10	15	70/4	1,5	H50330
FD 301-E	1850	1470/4	11	9	11	10	53/4	3	H50331
FD 303-E	2300	1970/3	12	7	8,5	11	41/3	3	H50332
FD 305-E	3350	2800/3	14	9	11	10	40/3	5,5	H50333
FD 306-E	4100	3500/3	16	7	8,5	15	56/3	5,5	H50334
FD 307-E	5250	4490/3	18	12	14	18	67/3	11	H50335

TYPE FD-Series pneumatic

TYPE	Max. capacity 1st layer kg	Max. capacity top layer kg/layers	Recomm. rope diam. mm	Speed 1st layer m/min.	Speed top layer m/min.	Drum storage 1st layer m	Drum cap. all layers m/layers	Air pressure bar	Air consumption l/sec.	Order No.
FD 300-LPR1	800	675/4	8	8	10	15	70/4	7	30	H50342
FD 300-LPR2	950	800/4	8	18	21	15	70/4	7	90	H50343
FD 301-LPR2	1850	1470/4	11	9	11	10	53/4	7	90	H50344
FD 303-LPR2	2300	1970/3	12	7	8	11	41/3	7	90	H50345
FD 303-LPR3	2300	1970/3	12	15	18	11	41/3	7	150	H50346
FD 305-LPR3	3350	2800/3	14	10	12	10	40/3	7	150	H50347
FD 306-LPR4	4100	3500/3	16	15	18	15	56/3	7	225	H50348
FD 307-LPR4	5250	4490/3	18	12	14	18	67/3	7	240	H50349

TYPE	Max. capacity 1st layer kg	Max. capacity top layer kg/layers	Recomm. rope diam. mm	Speed 1st layer m/min.	Speed top layer m/min.	Drum storage 1st layer m	Drum cap. all layers m/layers	Air pressure bar	Flow in l/min.	Order No.
FD 300-H	950	800/4	8	30	35	15	70/4	140	35	H50336
FD 301-H	1850	1470/4	11	20	25	10	53/4	130	55	H50337
FD 303-H	2300	1970/3	12	15	17	11	41/3	130	50	H50338
FD 305-H	3350	2800/3	14	13	16	10	40/3	135	60	H50339
FD 306-H	4100	3500/3	16	13	15	15	56/3	140	70	H50340
FD 307-H	5250	4490/3	18	13	15	18	67/3	170	70	H50341



TYPE	Weight kg	Dimensions (mm)														
		D1	D2	L1	L2	L3	L4(E)	L4(H)	L4(L)	L5	L6	H1	H2	W1	W2	Hole-Ø
FD 300	125	244	380	176	310	93	736	520	765	240	44	215	405	440	400	18
FD 301	130	244	380	176	310	93	796	558	785	240	44	215	405	440	400	18
FD 303	175	272	410	191	350	106	818	595	905	275	50	235	440	500	450	22
FD 305	240	272	410	210	350	116	1030	625	950	275	50	235	440	500	450	22
FD 306	330	355	500	266	455	146	1100	780	1110	350	70	285	535	580	520	27
FD 307	590	406	625	310	510	175	1313	885	1215	400	75	348	660	750	680	27



FD with options





PLANETA-PRAKTi battery-operated rope winch

- Aluminium-plastic lightweight construction
- Self-locking worm gear
- Hexagon for retaining a cordless screwdriver or drill

This lightweight and compact rope winch lifts your loads of up to 50 kg to heights of up to 150 m. In doing so, the winch itself weighs just 9.5 kg. It can be either erected or optionally suspended, and is therefore the ideal helper during assembly, construction and service, and at home. You receive a manual spooling aid for the correct winding of the rope onto the drum as standard.

Technical Specifications

- Hoisting power 50 kg
- Lifting height 150 m
- Rope speed \varnothing up to 11 m/min (at a drive speed of 2,000 rpm)
- Hexagon retainer 10 mm
- Net weight without drive 9.5 kg
- Dimensions: (LxWxH) 285 mm x 271 mm x 265 mm

Standard features

- Non-slip feet
- Eye suspension
- Carry handle
- Manual rope guidance
- 150 m hoist rope with thimble and hook

Available options

- Belt transmission ratio for lower drive speed
- Shorter rope lengths
- Transport case

Wire cable blocks

With rotatable load hook in accordance with DIN 15401, with hook clip

GG/PA = with polyamide roller(s) with slide bearing up to 150 mm external roller diameter

ST/R = with steel roller(s) with plain bearing

ST/K = with steel roller(s) with ball bearing

Wire cable block, single-roll

Load bearing capacity at hook t	Roller outer Ø mm	Roller basic Ø mm	Max. wire rope Ø mm	Housing-width mm	Base width mm	Axis length mm	Installation length at hook mm	Weight approx. kg	Order No. GG/PA	Order No. ST/R	Order No. ST/B
0.5	100	80	7	130	25	55	385	3.5	D01500	D01508	D01516
1	125	105	9	150	30	55	430	4.5	D01501	D01509	D01517
2	150	125	11	165	33	65	500	7.5	D01502	D01510	D01518
3	175	145	12	210	41	82	640	15	-	D01511	D01519
3	200	170	15	210	41	82	640	15.5	-	D01512	D01520
5	225	185	16	265	45	85	740	24	-	D01513	D01521
5	250	210	18	265	45	85	740	25	-	D01514	D01522
8	310	260	23	325	52	110	890	45	-	D01515	D01523



Wire cable block, double-roll

Load bearing capacity at hook t	Roller outer Ø mm	Roller basic Ø mm	Max. wire rope Ø mm	Housing-width mm	Base width mm	Axis length mm	Installation length at hook mm	Weight approx. kg	Order No. GG/PA	Order No. ST/R	Order No. ST/B
1	100	80	7	130	30	81	410	5	D01530	D01537	D01544
1.6	125	105	9	150	33	86	440	7	D01531	D01538	D01545
3	150	125	11	165	41	113	525	12	D01532	D01539	D01546
5	175	145	12	210	45	130	680	23	-	D01540	D01547
5	200	170	15	210	45	130	680	24	-	D01541	D01548
8	225	185	16	265	52	150	785	38.5	-	D01542	D01549
8	250	210	18	265	52	150	785	40.5	-	D01543	D01550



Wire cable block, single-roll, hinged

Load bearing capacity at hook t	Roller outer Ø mm	Roller basic Ø mm	Max. wire rope Ø mm	Housing-width mm	Base width mm	Axis length mm	Installation length at hook mm	Weight approx. kg	Order No. GG/PA	Order No. ST/R	Order No. ST/B
0.5	100	80	7	130	25	55	350	3.5	D01560	-	D01576
1	125	105	9	150	30	61	390	4.5	D01561	-	D01577
2	150	125	11	165	33	73	435	7.5	D01562	-	D01578
3	175	145	12	210	41	90	580	15	-	D01571	D01579
3	200	170	15	210	41	90	580	15.5	-	D01572	D01580
5	225	185	16	265	45	105	700	24	-	D01573	D01581
5	250	210	18	265	45	105	700	25	-	D01574	D01582
8	310	260	23	325	52	120	810	41	-	D01575	D01583

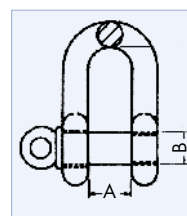


Other sizes on request.

High-strength galvanised shackle

Capacity t	Nominal size, inches	Bore (A) mm	Bolt Ø (B) mm	Order No. design A	Order No. design B	Order No. design C	Order No. design D
*0.33	3/16	9.65	6.35	D00278	-	D00312	-
0.5	1/4	11.9	7.87	D00279	D00296	D00313	D01191
0.75	5/16	13.5	9.65	D00280	D00297	D00314	D01192
1	3/8	16.8	11.2	D00281	D00298	D00315	D01193
1.5	7/16	19.1	12.7	D00282	D00299	D00316	D01194
2	1/2	20.6	16	D00283	D00300	D00317	D01195
3.25	5/8	26.9	19.1	D00284	D00301	D00318	D01196
4.75	3/4	31.8	22.4	D00285	D00302	D00319	D01197
6.5	7/8	36.6	25.4	D00286	D00303	D00320	D01198
8.5	1	42.9	28.7	D00287	D00304	D00321	D01199
9.5	1 1/8	46	31.8	D00288	D00305	D00322	D01200
12	1 1/4	51.5	35.1	D00289	D00306	D00323	D01201
13.5	1 3/8	57	38.1	D00290	D00307	D00324	D01202
17	1 1/2	60.5	41.4	D00291	D00308	D00325	D01203
25	1 3/4	73	51	D00292	D00309	D00326	D01204
35	2	82.5	57	D00293	D00310	D00327	D01205
55	2 1/2	105	70	D00294	D00311	D00328	D01206

Design A
G 209
(curved)
with eye bolt



Design B
G 210
(straight)
with eye bolt
(Dimensions the same as design A)



Design C
G 2130
(curved with nut and cotter pin)
(Dimensions the same as design A)



Design D
G 2150
(straight with nut and cotter pin)
(Dimensions the same as design A)



* Only as eye bolt available.

Wire ropes and limit stop equipment

We mostly use steel wire ropes according DIN EN 12385-4 for PLANETA-winch. But some applications require higher tensile strengths or a durable corrosion protection. Then steel with 1960 N/mm² or higher, stainless steel wires and nylon ropes have to be used. They differ much in way of twisting, flexibility, duration, breaking strength or twist-free characteristic.

Winches with one rope only that lifts unguided loads have to use a wire rope which does not twist open under tension.

Those ropes belong to the group of twist-poor ropes. Ropes are selected according their future use. It is most helpful to know in advance as many parameters as possible to make the correct decision.

We offer PLANETA-winch basically without ropes because there are so many rope types possible.

Our winches PFW, FD and SB can be used for much different applications what makes it difficult for the factory to decide about the necessary rope type if the intended use is unknown.

SIKA swivel load hook, grade 8



TYPE	Capacity kg	Weight kg	Order No.
WHS-1,25	1250	0,4	D00150
WHS-1,6	1600	0,9	D00151
WHS-3,2	3200	1,6	D00152
WHS-5,4	5400	3,5	D00153
WHS-8-8	8000	6,5	D00154
WHS-11,5	11500	8,5	D00155

SIKA hook with eye, grade 8



TYPE	Capacity kg	Weight kg	Order No.
OHS-06	1120	0,6	D00160
OHS-08	2000	1,0	D00161
OHS-10	3150	1,5	D00162
OHS-13	5300	3,5	D00163
OHS-16	8000	5,5	D00164
OHS-20	12500	7,6	D00165

Stainless steel swivel load hook



TYPE	Capacity kg	Weight kg	Order No.
WHN-025	250	0,2	D02150
WHN-05	500	0,3	D02151
WHN-1	1000	1,0	D02152
WHN-2,4	2400	1,4	D02153
WHN-3,8	3850	2,3	D02154
WHN-5	5000	3,8	D02155

Stainless steel hook with eye,



TYPE	Capacity kg	Weight kg	Order No.
OHN-025	250	0,1	D02160
OHN-045	450	0,2	D02161
OHN-1,5	1500	0,8	D02162
OHN-2,4	2400	1,4	D02163
OHN-3,8	3850	3,0	D02164
OHN-5	5000	4,8	D02165

We give below a choice of recommended wire ropes to be used for frequent common tasks.

Rope ends can be equipped as follow: flat welded to prevent fraying, eye thimble or thimble with load hook. If there is no customer request, we supply the wire rope lose in a bundle with welded ends. If mentioned in order, we spool it also on the drum for you.

Wire ropes

Rope diameter mm	TYPE 6 x 19 + IWRC 6 x 36 + IWRC (as of 10 mm) 1960 N/mm ² galvanised, non-rotation resistant		TYPE 17 x 7 + IWRC 1960 N/mm ² galvanised, rotation resistant		Plus tailoring of rope Order No. One side welded, other side with thimble
	Min. breaking force kN	Order No. per meter	Min. breaking force kN	Order No. per meter	
4	10,4	C04619	10,3	C04177	C04001
5	16,2	C05619	16,1	C05177	C05001
6	23,4	C06619	23,1	C06177	C06001
7	31,8	C07619	31,5	C07177	C07001
8	41,6	C08619	41,1	C08177	C08001
9	52,7	C09619	52,1	C09177	C09001
10	69,8	C10636	64,3	C10177	C10001
11	84,4	C11636	77,8	C11177	C11001
12	100,5	C12636	92,6	C12177	C12001
13	118	C13636	109	C13177	C13001
14	136,8	C14636	126	C14177	C14001
16	178,7	C16636	165	C16177	C16001
18	226,2	C18636	208	C18177	C18001
20	279,3	C20636	257	C20177	C20001
22	337,9	C22636	-	-	C22001
24	402,2	C24636	-	-	C24001
26	472	C26636	-	-	C26001
28	547,4	C28636	-	-	C28001

Stainless steel wire ropes

Rope diameter mm	TYPE 7 x 19 1570 N/mm ² stainless steel (V4A) non-rotation resistant		TYPE 18 x 7 1570 N/mm ² stainless steel (V4A) rotation resistant		Plus tailoring of rope Order No. One side welded, other side with thimble
	Min. breaking force kN	Order No. per meter	Min. breaking force kN	Order No. per meter	
4	8,34	C04719	9	C04187	C04002
5	13	C05719	13	C05187	C05002
6	18,7	C06719	19	C06187	C06002
8	33,3	C08719	34	C08187	C08002
9	-	-	-	-	-
10	52,1	C10719	53	C10187	C10002
11	-	-	-	-	-
12	75	C12719	77	C12187	C12002
13	-	-	-	-	-
14	102	C14719	107	C14187	C14002
16	133	C16719	135	C16187	C16002

Design:

6x19+IWRC, 6x36+IWRC: Robust winch rope with independent wire rope core

17x7+IWRC: High tensile lifting rope, twist-poor

7x19, 18x7: Stainless Steel: Corrosion free rope from material 1.4401

Please photocopy and send a FAX!

Winch Inquiry Checklist

1. Kind of drive and quantity *

- manually
 - electric, Operating voltage Phases / V AC / Hz
 - pneumatic, Flow volume l/sec bar
 - hydraulic, Flow volume l/min bar
- Quantity: pieces

2. Site of Operation and capacity *

- Pulling winch with daN pulling force and m rope length
- Lifting winch with kg lifting capacity and m rope length
- Traversing winch with daN pulling force and m rope length
- Capstan winch with daN pulling force
- Traction winch with daN pulling force

If the pulling or lifting capacity is not known, please describe your application with the length of the path, weight of load and rolling conditions for your pulling applications. For lifting applications please also describe the angle or slope of the path.

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3. Rope speed

- slow (1-5m/min) medium (5-15m/min)
- fast (>15m/min) exactly m/min
- adjustable from m/min up to m/min
- 2-speed m/min and m/min

4. Site of Operation

- Distance to the first reeving m
- inside outside outside with seawater

5. Load type

- Goods Pending goods above people
- Goods to be moved above people People

6. Winch options

- Rope m Seil lose beigelegt Seil aufgespult
- Rope-end, plain Rope-end with thimble Load hook
- Grooved drum Pressure roller Spindle limit switch
- Slack wire switch Disengaging clutch Spooling gear
- Drum guard Brake acting on drum
- mechanic automatic
- Emergency crank Manual brake release
- Two rope exits with m distance
- More rope exits like shown on sketch
- Explosion-proof protection class

Please see backside of catalogue for FAX-Number!

7. Location of control

- Direct control on m control cable
- Low voltage control box
 - Panel mounted on winch frame
 - for mounting on walls, with m distance to winch
- Frequency inverter
 - mounted on winch frame
 - for mounting on walls, with m distance to winch

8. Operation

- Push buttons in the control panel door
- Pendant control with m control cable
- Radio Remote control
- Wall-mounted push-button
- Foot pedal
- Several with selector switch in the control panel door

9. Options for control

- Panel mounting appliance inlet
- Power supply cable with m cable
- Power shut-off switch
- Electric overload protection
- Full motor protection (Temperature monitoring)

10. Other requirements

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11. Please sketch your application here

* Please note the required fields!

Please note our notes and explanations on the following pages.

Company name:

Company stamp:

Personal name:

Phone:

Fax:





PLANETA
winches are
unique.

Individual
and for the
toughest use
designed.



SB-E 306 as a surveying winch with 1,800 m data cable



SB-E 304 as a traversing winch for a water treatment plant



MC-E 2200 as a hoist winch for lane milling on ski jumps



PFW-L 1500 V12 as a pulling winch for the steel industry



PKW-E 1500 V04 as a hatch opener on a cruise ship



SK-E 07 as a traversing winch and deflection roller block for an endurance test bench for cable entries on port cranes



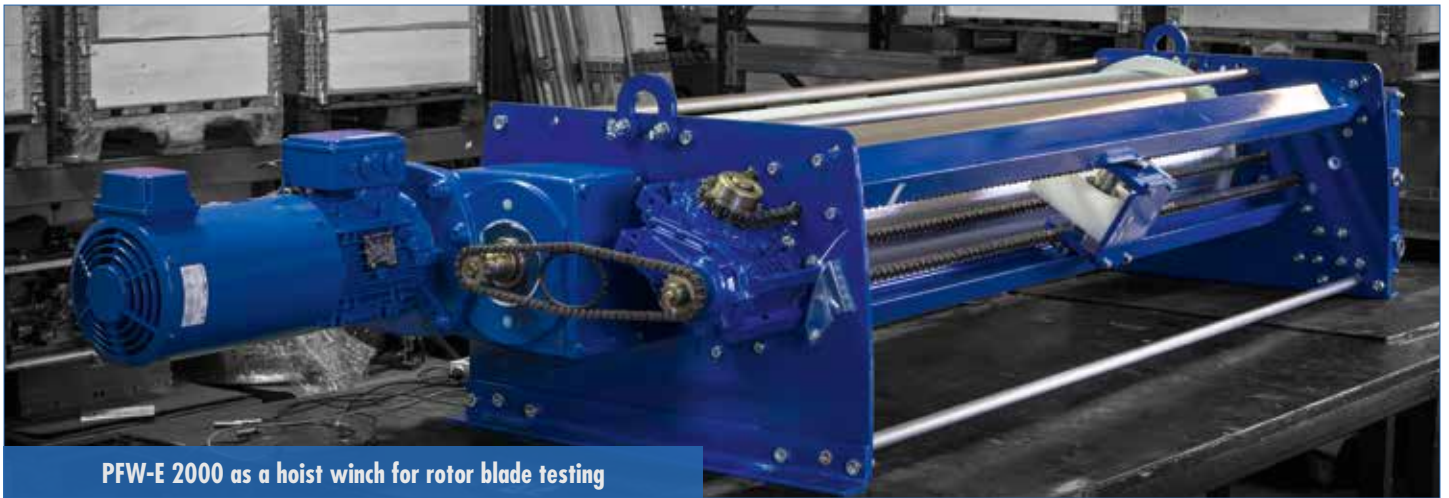
SB-E 307 as a hoist / traversing winch for regulating the flow rate at a dam



PFW-E 1000 as a pulling winch for railway carriages



PFW-E 1000 as a double winch block for a test bench



PFW-E 2000 as a hoist winch for rotor blade testing



PFW-E 1000 as the drive of an inclined elevator



SB-E 305 as a traversing winch on a wagon filling station



PFW-E 3000 as a mobile pulling winch for railway maintenance



SB-E 309 as a slipway winch for sports boats



SB-E307 as a mobile rope hoist



SB-E 316 as a hoist winch for a pump line



Complete group drive system in accordance with BGV-C1 including installation and commissioning. Consisting of five rope winches and spool winders, synchronous control, programmable via touch panel for a shopping centre in Macau

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