





# Electric rope winch PLANETA-PFW 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 explosion proof areas and on ships, or for platforms and studios.



# Compact rope winch PLANETA-PCW Capacity up to 5.250 kg

The PCW winch has compact multi-stage planetary gear, installed inside the drum. As such, the installation length of the winch is very short. The PCW 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 PCW is available with an electric, hydraulic or compressed air motor. In special cases, special gears are also an option.



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# Rope winch PLANETA-PHW Load bearing capacity to 37.000 kg in the standard

The PHW 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 PHW 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 threephase braking motor.



Where installation length poses a problem, the PHW 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).

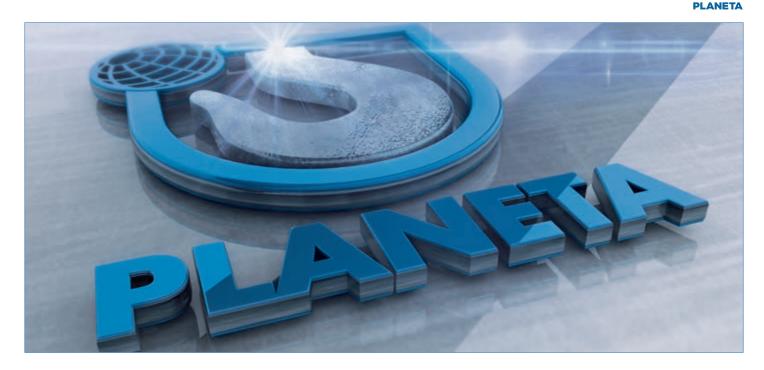
However, we are only illustrating some of the options here because alternative flange and drum sizes, additional gear stages and numerous types of motor can be incorporated, in order to configure winches precisely in accordance with your requirements.

# PLANETA-PRAKTi battery-operated rope winch 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.



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### **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 hoists from 1861 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.















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.

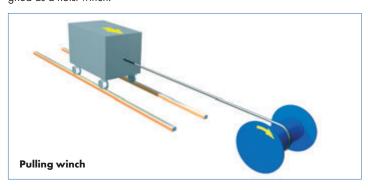
**Save precious time during development work**, because there is no need to trace purchased components.





#### Mode of application and load bearing capacity

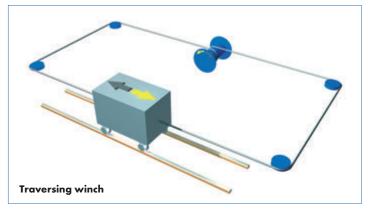
Pulling winches are designed to pull loads on a 100 % flat surface. The pulling force is calculated from the mass of the load to be pulled multiplied by the load's rolling resistance. The rolling resistances for the typical applications are around 0.150 for rubber wheels on concrete surfaces and around 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, rope winches for hoisting are equipped with higher safety factors than rope 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.

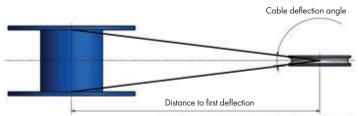
Traction winches are normally located on carriages that travel forwards and backwards. The pulling cable is stretched between the two ends of the guide rail.



#### 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 non 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.



### Rope winch types



#### **Drive type**

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

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

#### Cable speed

PLANETA rope winches normally have a constant cable speed. The PFW, PCW and PHW PLANETA rope 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 rope 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 rope 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, PCW and PHW rope 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:

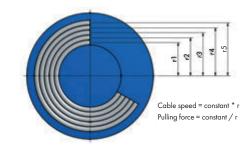
Cable drums are normally wound in multiple layers; i.e. the cable is wound around the cable drum layer by layer.



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.

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### Extra equipment and options for winches





















#### Control

**PLANETA** control systems provide the optimum interface between your **PLANETA** winch and your application or safety concept. In the basic version with constant speed the following sources of error are automatically monitored and safely blocked:

- Mains monitoring: phase failure, undervoltage and phase sequence (series, always)
- Thermal overload of the motor (from 2.000 W motor power)
- Torque overload (too high load, from 1.000 kg)

Further safety aspects are the control circuit with low-voltage voltage, which is galvanically isolated from the power supply system, and the stable control boxes with a high protection class. You can choose

between various operating options, including several, the control of different winches, individually and simultaneously, versions according to UL/CSA GOST or ATEX guidelines. If your application requires exact positioning, particularly smooth acceleration, variable speeds, automatic travel cycles, variable tensioning forces, even when the winch is at a standstill, we can extend your control system with a

frequency converter. The parameterization comes directly from our company, based on many years of experience with the top product of the hoisting industry.

#### **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.







#### **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 rope 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 PHW rope 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 shutoff 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 rope 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 PLA-NETA PFW, PKW and PHW 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.



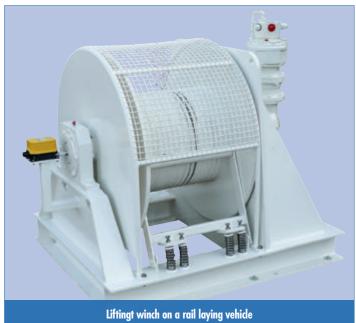






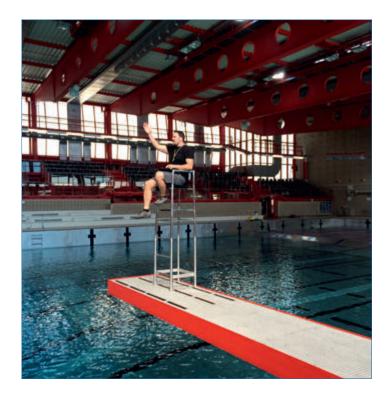


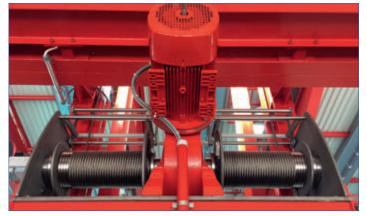


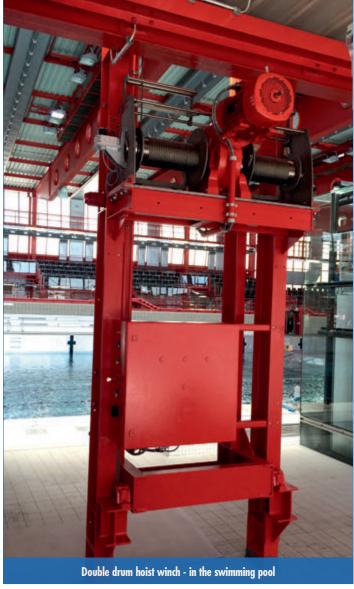












### **Application video:**

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

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



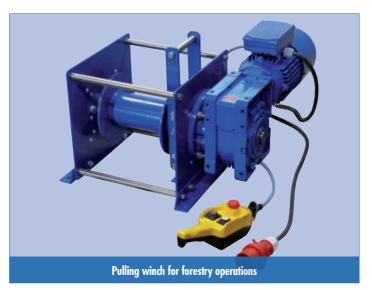








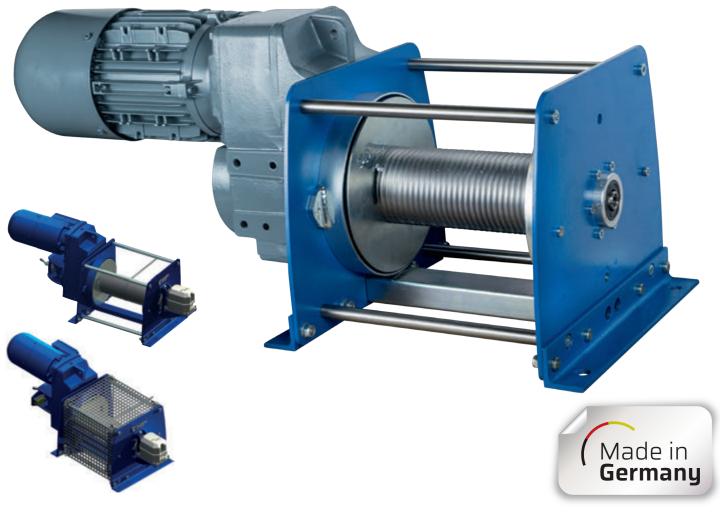






### Electric rope winch PFW





#### **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 1 Bm. 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

**Electric rope winch PFW** 

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.





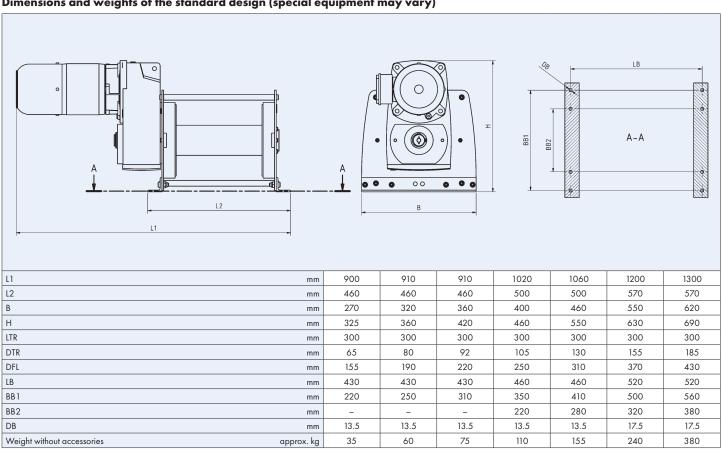




#### **Basic design**

ТҮРЕ	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	4	4	4	4	4	4
Rope speed in 5th rope layer	approx. m/min	6	6	6	6	6	6	6
Motor power	kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
PFW-1D with half speed	Order No.	H62104	H62114	H62124	H62134	H62144	H62154	H62164
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.	H62865						
Emergency limit switch with incremental sensor	Order No.	H62866						
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 ISO 12944 C4 (high)	Order No.	H62891	H62891	H62892	H62892	H62893	H62893	H62894
Protective paint per ISO 12944 C5 (very high / marine)	Order No.	H62895	H62895	H62896	H62896	H62897	H62897	H62898

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



### **Electric rope winch PFW**

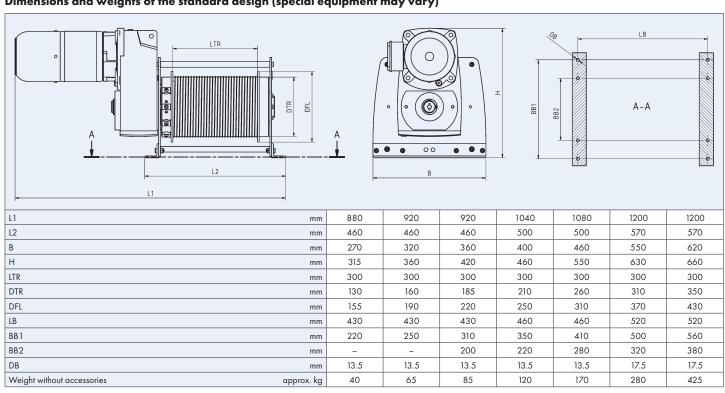


#### Double diameter drum, stage & studios

TYPE	PFW-2D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	<i>7</i> 50	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	7	8	9	8	7	7
Motor power	kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
PFW-2D with half speed	Order No.	H62204	H62214	H62224	H62234	H62244	H62254	H62264
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

ТҮРЕ	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								
Grooved drum	Order No.	inkl.	inkl.	inkl.	inkl.	inkl.	inkl.	inkl.
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 studio	os) 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.	H62865	H62865	H62865	H62865	H62865	H62865	H62865
Emergency limit switch with incremental sensor	Order No.	H62866	H62866	H62866	H62866	H62866	H62866	H62866
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 ISO 12944 C4 (high)	Order No.	H62891	H62891	H62892	H62892	H62893	H62893	H62894
Protective paint per ISO 12944 C5 (high)	Order No.	H62895	H62895	H62896	H62896	H62897	H62897	H62898

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



# 1861

### **Electric rope winch PFW-C**

#### **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.



#### **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.



#### 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.

#### **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.

# Electric rope winch PFW-C



#### Basic design

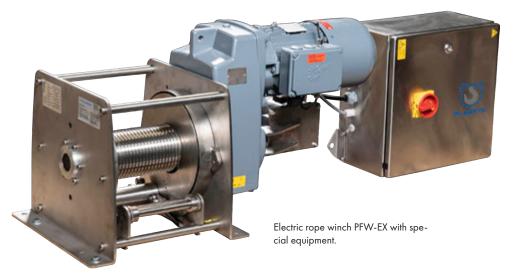
	PFW-C	250	500	990	2000
Lifting capacity in 1st rope layer to max. hoisting-/pulling distance	kg/m	250/7	500/7	990/6	2000/5
Lifting capacity in 2nd rope layer to max. hoisting-/pulling distance	kg/m	220/16	440/16	865/16	1750/14
ifting capacity in 3rd rope layer to max. hoisting-/pulling distance	kg/m	195/27	390/27	770/26	1550/24
ifting capacity in 4th rope layer to max. hoisting-/pulling distance	kg/m	175/38	350/39	695/39	1400/35
ifting capacity in 5th rope layer to max. hoisting-/pulling distance	kg/m	160/51	320/52	630/51	1270/48
ifting capacity in 6th rope layer to max. hoisting-/ pulling distance	kg/m	145/65	295/65	580/65	1165/61
ifting capacity in 7th rope layer to max. hoisting-/ pulling distance	kg/m	135/81	270/81	535/80	1075/75
Rope diameter		5	6	8	10/3/73
·	mm	1.0		1.6	
Required rope length remaining on drum	m		1.2		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)*
lope speed 3rd rope layer	approx. m/min	10	10	10	10 (5)*
lope speed 4th rope layer	approx. m/min	11	11	11	11 (5)*
lope speed 5th rope layer	approx. m/min	12	12	12	12 (6)*
lope 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					
rotective drum cover	Order No.	H62840	H62841	H62843	H62845
Operational limit switch	Order No.	H62861	H62861	H62862	H62863
Orum 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
	Order No.	C05619 C62102	C06619 C62112	C08619 C62132	C12636 C62152
Hoisting rope rotation resistant with swivel hook 8 m ** Additional hoisting rope per m	Order No.				
Additional pulling rope per m  Hoisting rope rotation resistant with swivel hook 8 m **  Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipm	Order No. Order No. ent may vary).	C62102	C62112 C06177	C62132	C62152
Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipment)  LIR	Order No. Order No. ent may vary).	C62102 C05177	C62112 C06177	C62132 C08177	C62152 C12177
Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipment of the standard designs)  LIR	Order No. Order No. ent may vary).  B1 B2 mm mm	<b>C62102 C05177</b> 740 360	C62112 C06177	C62132 C08177	C62152 C12177
Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipm	Order No. Order No. ent may vary).	C62102 C05177	C62112 C06177	C62132 C08177	C62152 C12177
Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipm  LTR  LTR  LTR  LTR  LTR  LTR  LTR  LT	Order No. Order No. ent may vary).  B1 B2  mm mm	740 360 270 380 315	C62112 C06177	C62132 C08177 A-A 860 400 400	C62152 C12177
doisting rope rotation resistant with swivel hook 8 m **  additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipm  LTR  LTR  LTR  LTR  LTR  LTR  LTR  LT	Order No. Order No. ent may vary).  B1 B2 mm mm mm	740 360 270 380 315 200	770 360 320 420 355 200	C62132 C08177  B60 A-A  860 400 470 460 200	C62152 C12177
Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipment)  LTR  LTR  LTR  LTR  LTR  LTR  LTR  LT	Order No. Order No. ent may vary).  B1 B2  mm mm mm mm mm mm	740 360 270 380 315 200 65	770 360 320 420 355 200 80	C62132 C08177 A-A  860 400 400 470 460 200 105	C62152 C12177
doisting rope rotation resistant with swivel hook 8 m ** Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipm  LTR  LTR  LTR  LTR  LTR  LTR  LTR  LT	Order No. Order No. ent may vary).  B1  B2  mm  mm  mm  mm  mm  mm  mm  mm  mm	740 360 270 380 315 200 65	770 360 320 420 355 200 80 190	C62132 C08177  B60 A-A  860 400 400 470 460 200 105 250	1000 (1050) <sup>2</sup> 470 550 620 200 155 370
Additional hoisting rope per m  Dimensions and weights of the standard designs (Special equipment)  LTR  LTR  LTR  LTR  LTR  LTR  LTR  LT	Order No. Order No. ent may vary).  B1 B2  mm mm mm mm mm mm	740 360 270 380 315 200 65	770 360 320 420 355 200 80	C62132 C08177 A-A  860 400 400 470 460 200 105	C62152 C12177
doisting rope rotation resistant with swivel hook 8 m ** Additional hoisting rope per m  Pimensions and weights of the standard designs (Special equipm  LTR  LTR  LTR  LTR  LTR  LTR  LTR  LT	Order No. Order No. ent may vary).  B1 B2  mm	740 360 270 380 315 200 65 155 330	770 360 320 420 355 200 80 190 330	C62132 C08177  B60 A-A  860 400 400 470 460 200 105 250 360	1000 (1050)* 470 550 620 200 155 370 420

<sup>\*\*</sup> Rope supplied loose as a coil

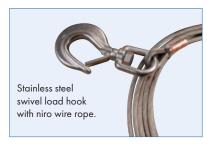
More capacities and options on request.

### **Electric rope winch PFW-EX**









#### **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 may 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  $^{\circ}$ C to +40  $^{\circ}$ 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
- 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

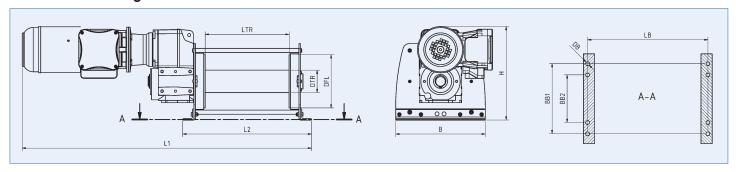
#### **Basic design**

ТҮРЕ	PFW-1D-EX	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	<i>7</i> 50	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

# Electric rope winch PFW-EX



#### **Dimensions und weights - PFW-1D-EX**



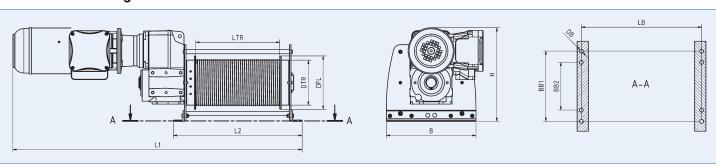
ТҮРЕ	PFW-1D-EX	250	500	750	1000	1500	2000	3000
L1*	approx. mm	1000	1050	1070	1160	1180	1300	1350
L2	mm	460	460	460	500	500	570	570
В	mm	270	320	360	400	460	550	620
Н	approx. mm	310	340	420	460	550	630	690
LTR	mm	300	300	300	300	300	300	300
DTR	mm	65	80	92	105	130	155	185
DFL	mm	155	190	220	250	310	370	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

 $<sup>\</sup>ensuremath{^{\star}}$  Length can vary according to configuration.

#### Double diameter drum

ТҮРЕ	PFW-2D-EX	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	<i>7</i> 50	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 und weights - PFW-2D-EX



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

 $<sup>\</sup>ensuremath{^{\star}}$  Length can vary according to configuration.

### **Pneumatic winch PFW-L**





#### **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

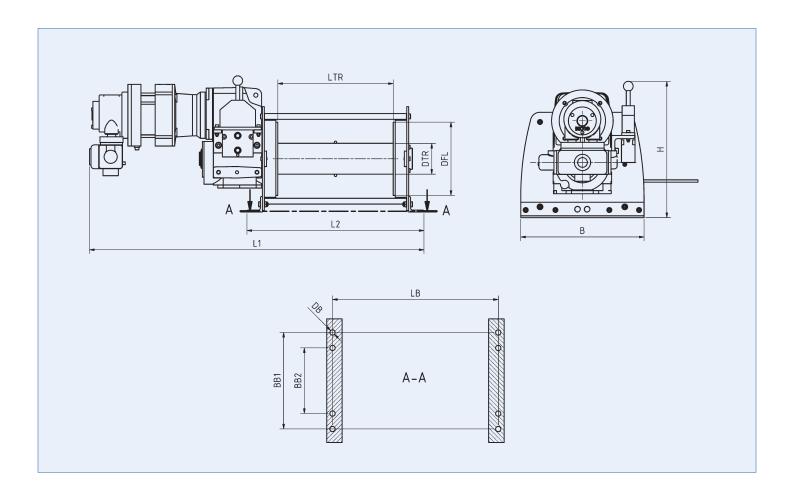
€ II 2 GD c T4 135°C

ТҮРЕ	PFW-L-1D	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	500	<i>7</i> 50	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 1 st/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

# Pneumatic winch PFW-L



ТҮРЕ	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**

ТҮРЕ	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
В	mm	320	360	400	460	550	620
Н	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





#### **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

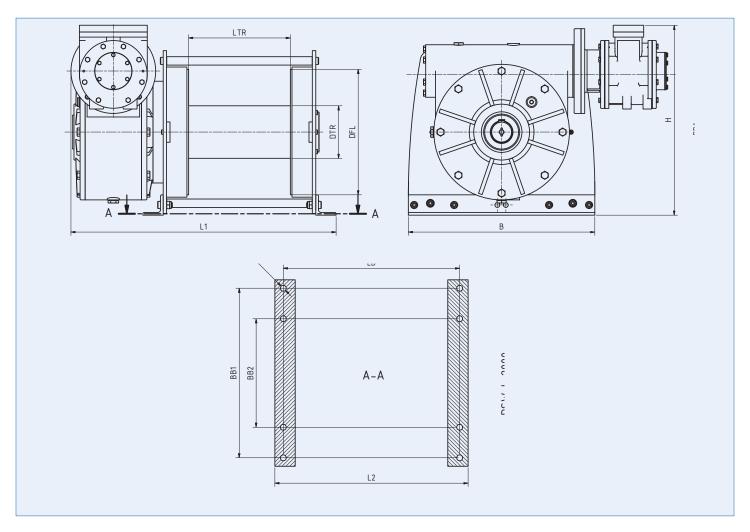
#### Also available in hydraulic version!

ТҮРЕ	PSW-L-1D	250	500	750	1000	1500	2000
Hubkraft 1. Lage	kg	250	500	<i>7</i> 50	1000	1500	2000
Hubkraft 5. Lage	kg	160	320	480	640	950	1270
Seildurchmesser	mm	11	6	7	8	10	12
Seilaufnahme 1. Lage	m	75	11	11	10	10	9
Seilaufnahme 5. Lage	m	75	75	75	75	75	75
Erw. je 100 mm verl. Trommel 1./5. Lage	ca. m	4/25	4/25	4/25	4/25	4/25	4/25
Seilgeschwindigkeit 1. Lage	ca. m/min	8	8	8	8	8	8
Seilgeschwindigkeit 5. Lage	ca. m/min	12	12	12	12	12	12
Luftdruck	bar	6	5	6	6.5	6	5
Luftverbrauch	l/min	35	45	80	90	120	190
PSW-L-1D mit Standardgeschwindigkeit	Order No.	H64601	H64611	H64621	H64631	H64641	H64651

# Pneumatic winch PSW-L



ТҮРЕ	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

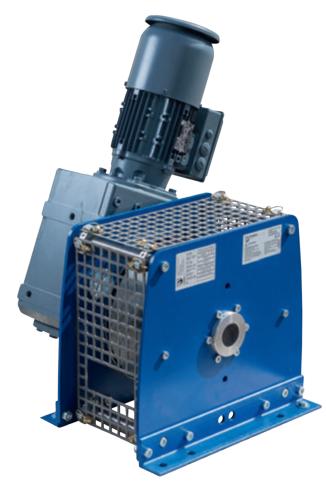


#### **Dimensions and weights**

ТҮРЕ	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
В	mm	270	320	360	400	460	550
Н	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**





#### **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**

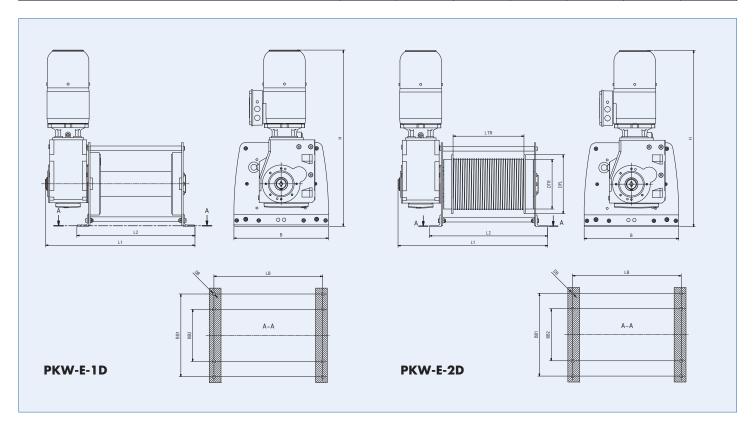
ТҮРЕ	PKW-E-1D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	750	1000	1500	2000	3000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1270	1920
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1 st rope layer	m	11	11	11	10	10	9	9
Rope length in 5th rope layer	m	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 1 st 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 1 st rope layer	approx. m/min	4	4	4	4	4	4	4
Rope speed in 5th rope layer	approx. m/min	6	6	6	7	6	7	6
Motor power	kW	0.25	0.37	0.55	0.75	1.1	1.5	2.1
PKW-E-1D with half speed	Order No.	H63104	H63114	H63124	H63134	H63144	H63154	H63164
Rope speed in 1 st 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

# Electric rope winch PKW-E



#### Double diameter drum

ТҮРЕ	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	8	7	7	8	8	9	7
Motor power	kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
PKW-E-2D with half speed	Order No.	H63204	H63214	H63224	H63234	H63244	H63254	H63264
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	<i>7</i> 50	1000	1500	2000	3000
L1	approx. mm	570	575	580	635	670	770	820
L2	mm	460	460	460	500	500	570	570
В	mm	270	320	360	400	460	550	620
Н	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

### **Compact rope winch PCW-Series**



#### **Planetary crane winches PCW-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 PCW 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
- PCW-E; IP 54 aluminium braked motor 400 VAC/3 phase/50 Hz
- PCW-H; orbit or radial piston type hydraulic motor complete with brake valve
- PCW-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 PCW-Series electric**

ТҮРЕ	Max. capacity 1 st layer kg	Max. capacity top layer kg/layers	Recomm. rope diam. mm	Speed 1 st layer m/min.	Speed top layer m/min.	Drum storage 1 st layer m	Drum cap. all layers m/layers	Motor power 400 V AC kW	Order No.
PCW 300-E	950	800/4	8	8.5	10	15	70/4	1.5	H50330
PCW 301-E	1850	1470/4	11	9	11	10	53/4	3	H50331
PCW 303-E	2300	1970/3	12	7	8.5	11	41/3	3	H50332
PCW 305-E	3350	2800/3	14	9	11	10	40/3	5.5	H50333
PCW 306-E	4100	3500/3	16	7	8.5	15	56/3	5.5	H50334
PCW 307-E	5250	4490/3	18	12	14	18	67/3	11	H50335

#### **TYPE PCW-Series pneumatic**

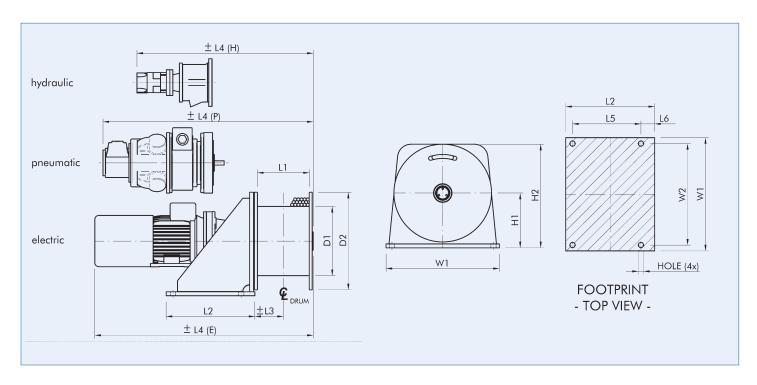
TYPE	Max. capacity 1 st layer kg	Max. capacity top layer kg/layers	Recomm. rope diam. mm	Speed 1 st layer m/min.	Speed top layer m/min.	Drum storage 1 st layer m	Drum cap. all layers m/layers	Air pressure bar	Air consumption I/sec.	Order No.
PCW 300-LPR1	800	675/4	8	8	10	15	70/4	7	30	H50342
PCW 300-LPR2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

### **Compact rope winch PCW-Series**



#### **TYPE PCW Series hydraulic**

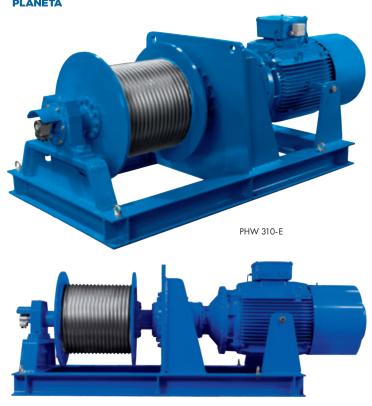
ТҮРЕ	Max. capacity 1 st layer kg	Max. capacity top layer kg/layers	Recomm. rope diam. mm	Speed 1 st layer m/min.	Speed top layer m/min.	Drum storage 1 st layer m	Drum cap. all layers m/layers	Air pressure bar	Flow in I/min.	Order No.
PCW 300-H	950	800/4	8	30	35	15	70/4	140	35	H50336
PCW 301-H	1850	1470/4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



TVDF	Weight							Dii	mensions (m	nm)						
TYPE	kg	D1	D2	L1	L2	L3	L4(E)	L4(H)	L4(L)	L5	L6	Н1	H2	W1	W2	Hole-Ø
PCW 300	125	244	380	176	310	93	<i>7</i> 36	520	765	240	44	215	405	440	400	18
PCW 301	130	244	380	176	310	93	796	558	785	240	44	215	405	440	400	18
PCW 303	175	272	410	191	350	106	818	595	905	275	50	235	440	500	450	22
PCW 305	240	272	410	210	350	116	1030	625	950	275	50	235	440	500	450	22
PCW 306	330	355	500	266	455	146	1100	<i>7</i> 80	1110	350	70	285	535	580	520	27
PCW 307	590	406	625	310	510	175	1313	885	1215	400	75	348	660	<i>7</i> 50	680	27







#### **PHW-Series**

The standard build PHW 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 PHW 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 1 Am. 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
- PHW-E; IP 54 aluminium braked motor 400 VAC/3 phase/50 Hz
- PHW-H; orbit or radial piston type hydraulic motor complete with brake valve
- PHW-LPR; radial piston type air motor complete with hand control valve and mufflers
- PHW-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

#### **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

#### **Electric rope winch PHW-E**

ТҮРЕ	Max. Hubkraft 1. Seillage kg	Max. Hubkraft 5. Seillage kg	Empfohlener Seildurchmesser mm	Geschwindigkeit 1. Seillage m/min	Geschwindigkeit 5. Seillage m/min	Seilaufnahme 1. Seillage m	Seilaufnahme 5. Seillage m	Motor- leistung kW	Order No.
PHW 300-E	1,250	875	9	8.5	12.5	24	155	2.2	H50091
PHW 301-E	2,000	1,400	11	8.5	12.5	24	155	3	H50092
PHW 304-E	3,000	2,100	14	8.5	12.5	24	155	5.5	H50175
PHW 305-E	4,000	2,800	16	8	11.5	24	155	5.5	H50071
PHW 306-E	5,500	3,800	19	8	11.5	24	155	7.5	H50072
PHW 307-E	7,000	4,900	22	8	11.5	24	155	11	H50073
PHW 309-E	9,000	6,300	24	10	14	24	155	15	H50074
PHW 310-E	12,000	8,400	28	8	11.5	24	155	18.5	H50093
PHW 311-E	15,000	10,400	32	7.5	11	23	154	22	H50075
PHW 313-E	18,000	12,400	34	6	9	22	153	22	H50076
PHW 314-E	23,000	16,000	38	6	9	22	153	30	H50177
PHW 315-E	30,000	20,400	44	6	9	20	145	30	H50094
PHW 316-E	37,000	24,500	48	6	9	18	137	45	H50095



#### **TYPE PHW-Series pneumatic**

TYPE	Max. capacity 1 st layer kg	Max. capacity 5th layer kg	Recomm. rope diam. mm	Rope speed 1 st layer m/min.	Rope speed 5th layer m/min.	Drum storage 1 st layer m	Drum storage 5th layer m	Air pressure drop in bar	Air flow in I/min.	Order No.
PHW 300-LPR2	1,200	845	10	11	16	26	168	7	90	H50119
PHW 301-LPR2	2,100	1,435	12	7	10	24	157	7	90	H50121
PHW 303-LPR2	2,500	1, <i>7</i> 40	14	6	9	26	165	7	90	H50084
PHW 303-LPR3	2,500	1, <i>7</i> 40	14	12	17	26	165	7	140	H50122
PHW 305-LPR3	4,000	2,770	16	9	13	25	161	7	150	H50085
PHW 305-LPR4	4,000	2,770	16	15	21	25	161	7	240	H50123
PHW 306-LPR4	5,500	3,970	18	10	14	28	181	7	240	H50086
PHW 307-LPR4	7,000	4,960	22	8	11	26	171	7	240	H50087
PHW 307-LG6	7,000	4,960	22	13	18	26	171	7	350	H50124
PHW 309-LPR4	9,000	6,285	26	6	9	24	163	7	220	H50125
PHW 309-LG6	9,000	6,285	26	10	14	24	163	7	350	H50088
PHW 310-LG6	12,000	8,460	28	7	10	24	168	7	350	H50126
PHW 311-LG6	16,000	10,655	34	5	7.5	19	144	7	350	H50089
PHW 313-LG6	20,000	13,610	38	4	6	19	151	7	350	H50090

#### **TYPE PHW-Series hydraulic**

TYPE	Max. capacity 1 st layer	Max. capacity 5th layer	Recomm. rope diam.	Rope speed 1 st layer	Rope speed 5th layer	Drum storage 1 st layer	Drum storage 5th layer	Oil pressure drop in	Oil flow in	Order No.
	kg	kg	mm	m/min.	m/min.	m	m	bar	l/min.	
PHW 303-H	2,500	1, <i>7</i> 40	14	18	26	26	165	140	60	H50077
PHW 305-H	4,000	2,770	16	18	26	25	161	160	80	H50078
PHW 306-H	5,500	3,970	18	25	35	28	181	225	95	H50079
PHW 307-H	7,000	4,960	22	20	28	26	171	230	100	H50080
PHW 309-H	9,000	6,285	26	13	18	24	163	190	100	H50081
PHW 310-H	12,000	8,460	28	11	16	24	168	230	95	H50096
PHW 311-H	16,000	10,655	34	10	15	19	144	230	110	H50082
PHW 313-H	20,000	13,610	38	8	12	19	151	210	120	H50083
PHW 315-H	30,500	20,800	44	8	12	19	151	235	165	H50097
PHW 316-H	37,000	24,570	48	6	9	17	141	225	160	H50098

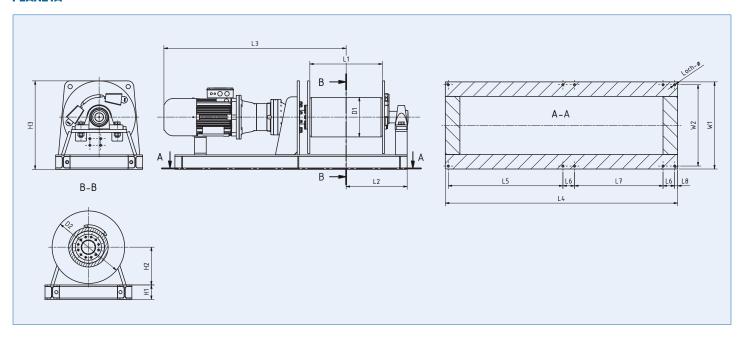
#### **Options**

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

 $<sup>^{\</sup>star}$  Acc. ISO 12944 C4 (high) - System C5-M-Marine (very high), quoted price x 2 according to your directions!



## **Electric rope winch PHW**



TYPE	Capacity	Weight	Rope dia- meter		Dimensions (mm)															
••••	kg	kg	mm	D1	D2	L1	L2	L3*	L4	L5	L6	L7	L8	H1	H2	НЗ	W1	W2	HEB	Loch-ø
PHW-E 300	1,250	200	9	152	300	500	410	1,040	1,450	660	80	590	20	100	215	520	500	460	100	14
PHW-E 301	2,000	230	11	191	375	500	405	1,030	1,450	680	80	570	20	100	215	520	500	460	100	14
PHW-E 304	3,000	360	14	241	430	500	421	1,240	1,600	790	80	610	20	100	260	610	600	560	100	14
PHW-E 305	4,000	425	16	273	500	500	421	1,255	1,600	790	80	610	20	100	260	610	600	560	100	14
PHW-E 306	5,500	460	20	324	580	500	460	1,325	1,800	910	80	690	20	100	300	690	700	660	100	18
PHW-E 307	7,000	720	22	394	680	500	487	1,510	1,950	1,020	100	680	25	120	360	830	800	<i>7</i> 50	120	20
PHW-E 309	9,000	960	24	419	730	500	502	1,580	2,100	1,035	110	785	30	140	380	890	900	840	140	22
PHW-E 310	12,000	1,520	28	495	860	500	530	1,675	2,200	1,045	120	835	40	160	460	1,070	1,100	1,040	160	26
PHW-E 311	15,000	1,760	32	546	980	500	528	1,875	2,400	1,222	120	858	40	160	510	1,180	1,150	1,090	160	30
PHW-E 313	18,000	2,100	34	572	1,020	500	539	1,970	2,400	1,165	120	915	40	180	585	1,340	1,350	1,290	180	30
PHW-E 314	23,000	2,950	38	660	1,160	500	628	2,190	2,600	1,215	120	1,065	40	200	585	1,360	1,450	1,390	200	32
PHW-E 315	30,000	3,050	44	<i>7</i> 11	1,350	500	628	2,235	2,600	1,203	140	1,037	40	200	685	1,560	1,550	1,470	200	36
PHW-E 316	37,000	3,500	48	<i>7</i> 11	1,400	500	634	2,245	2,650	1,402	140	888	40	200	<i>7</i> 10	1,610	1,600	1,520	200	36

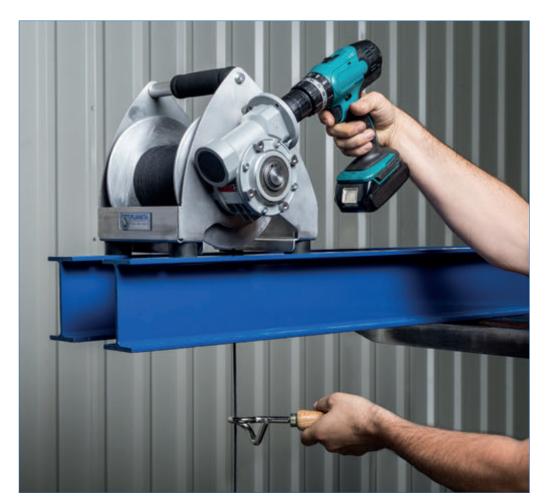
 $<sup>\</sup>ensuremath{^{\star}}$  may vary depending on the version of the motor!





### PLANETA-PRAKTi battery-operated rope winch











#### 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



### **PLANETA** control engineering











#### **PLANETA-Control engineering**

BASIS-control for hoist, traversing and pulling winches up to 4 kW.
Only for PFW-E and PKW-E winches.

#### Standard:

- Plastic box IP 55
- Control voltage 24 VDC
- Mains monitoring
- Control switch on 3 m control cable
- Mains plug on 3 m supply cable
- Compatible with TN networks (3Ph)

#### **Options:**

- Mounted and wired to winch
- Overload protection
- Motor temperature monitoring
- Radio control

Motor power kW	Overload protection	Motor temperature monitoring	Mounted and wired to winch	Order No.					
	1 Ph. / 230 V / 50 Hz								
1,5				H69910-C					
1,5	x			H69911-C					
1,5		х		H69912-C					
1,5	х	х		H69913-C					
1,5			х	H69915-C					
1,5	х		х	H69916-C					
1,5		х	x	H69917-C					
1,5	х	х	х	H69918-C					
		3 Ph. / 400 V / 50 Hz	2						
1,5				Н69920-С					
1,5	х			H69921-C					
4,0		х		H69922-C					
4,0	х	х		Н69923-С					
1,5			x	H69925-C					
1,5	х		х	H69926-C					
4,0		х	х	Н69927-С					
4,0	х	х	х	H69928-C					









### **PLANETA** control engineering



# PRO-single speed control for hoist, traversing and pulling winches up to 45 kW

#### Standard:

- Steel cabinet IP 65
- Control voltage 24 VDC
- Mains monitoring
- Motor temperature monitoring PTC
- Electric overload protection
- Mains isolator
- Control switch on 3 m control cable
- Mains plug on 3 m supply cable
- Compatible with TN networks

#### **Options:**

- Mounted and wired to winch
- Other operating voltages
- Stainless steel cabinets
- Radio control

# PRO-variable speed control for hoist and traversing winches up to 45 kW

#### Standard:

- Steel cabinet IP 65
- Control voltage 24 VDC
- Frequency converter
- Braking resistor or regenerative unit
- Motor temperature monitoring PTC
- Electric overload protection
- Mains isolator
- Two-stage control switch on 3 m control cable
- Mains plug on 3 m supply cable
- Compatible with TN networks

#### **Options:**

- Mounted and wired to winch
- Other operating voltages
- Stainless steel cabinets
- Radio control

PRO-variable speed	control for	pulling	winches
up to 45 kW			

#### Standard:

- Steel cabinet IP 65
- Control voltage 24 VDC
- Frequency converter
- Motor temperature monitoring PTC
- Electric overload protection
- Mains isolator
- Two-stage control switch on 3 m control cable
- Mains plug on 3 m supply cable
- Compatible with TN networks

#### Options:

- Mounted and wired to winch
- Other operating voltages
- Radio control
- Stainless steel cabinets

Motor power 400 V kW	Order No.
5,5	H69933
7,5	H69934
11,0	H69935
15,0	H69936
22,0	H69937
30,0	H69938
45,0	Н69939

Motor power 400 V kW	Order No.
	1140050
0,55	H69950 H69952
1,5	H69954
2,2	H69956
3,0	H69958
4,0	H69960
5,5	H69962
7,5	H69964
11,0	H69966
15,0	H69968
18,5	H69970
22	H69972
30,0	H69974
45,0	H69976

Motor power 400 V kW	Order No.
0,55	H69951
1,1	H69953
1,5	H69955
2,2	H69957
3,0	H69959
4,0	H69961
5,5	H69963
7,5	H69965
11,0	H69967
15,0	H69969
18,5	H69971
22	H69973
30,0	H69975
45,0	H69977



#### Wire ropes and limit stop equipment

We mostly use steel wire ropes according DIN EN 12385-4 for PLANETA-winches. 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-winches basically without ropes because there are so many rope types possible.

Our winches PFW, PCW and PHW 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.

We give below a choice of recommended wire ropes to be used for fre-

#### SIKA swivel load hook, grade 8



		•	
TYPE	Capacity kg	Weight kg	Order No.
WHS-1.25	1,250	0.4	D00150
WHS-1.6	2,000	0.9	D00151
WHS-3.2	3,200	1.6	D00152
WHS-5.4	5,400	3.5	D00153
WHS-8.8	8,000	6.5	D00154
WHS-11.5	11,500	8.5	D00155

#### SIKA hook with eye, grade 8



TYPE	Capacity kg	Weight kg	Order No.
OHS-06	1,120	0.6	D00160
OHS-08	2,000	1.0	D00161
OHS-10	3,150	1.5	D00162
OHS-13	5,300	3.5	D00163
OHS-16	8,000	5.5	D00164
OHS-20	12,500	7.6	D00165

#### Stainless steel swivel load hook



	_		
TYPE	Capacity kg	Weight kg	Order No.
WHN-05	500	0.3	D02151
WHN-1	1,000	1.0	D02152
WHN-2.4	2,400	1.4	D02153
WHN-3.8	3,850	2.3	D02154
WHN-5	5,000	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

quent 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	6 x 19 - 6 x 36 - (as of 10 mm) galva		17 x 7 · 1960 f galva	PE + IWRC N/mm <sup>2</sup> nised, resistant	Plus tailoring of rope
mm	Min. breaking force kN	Order No.	Min. breaking force kN	Order No.	Order No. One side welded, other side with thimble
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	stainless s	19 N/mm²	18 1570 N stainless s	YPE x 7 N/mm² teel (V4A) resistant	Plus tailoring of rope
mm	Min. breaking force kN	Order No.	Min. breaking force kN	Order No.	Order No. One side welded, other side with thimble
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



#### Wire cable blocks

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

PA/R = 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	Roller outer Ø	Roller basic Ø	Max. wire rope	Housing- width	Base width	Axis length	Installation length at hook	Weight	Order No. PA/R	Order No. ST/R	Order No. ST/B
at hook t	mm	mm	mm	mm	mm	mm	mm	approx. kg			
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	Roller outer Ø	Roller basic Ø	Max. wire rope	Housing- width	Base width	Axis length	Installation length at hook	Weight approx.	Order No. PA/R	Order No. ST/R	Order No. ST/B
t	mm	mm	mm	mm	mm	mm	mm	kg			
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	Roller outer Ø	Roller basic Ø	Max. wire rope	Housing- width	Base width	Axis length	Installation length at hook	Weight	Order No. PA/R	Order No. ST/R	Order No. ST/B
at hook t	mm	mm	mm	mm	mm	mm	mm	approx. kg			
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	11/8	46	31.8	D00288	D00305	D00322	D01200
12	11/4	51.5	35.1	D00289	D00306	D00323	D01201
13.5	13/8	57	38.1	D00290	D00307	D00324	D01202
17	11/2	60.5	41.4	D00291	D00308	D00325	D01203
25	13/4	73	51	D00292	D00309	D00326	D01204
35	2	82.5	57	D00293	D00310	D00327	D01205
55	21/2	105	70	D00294	D00311	D00328	D01206





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)

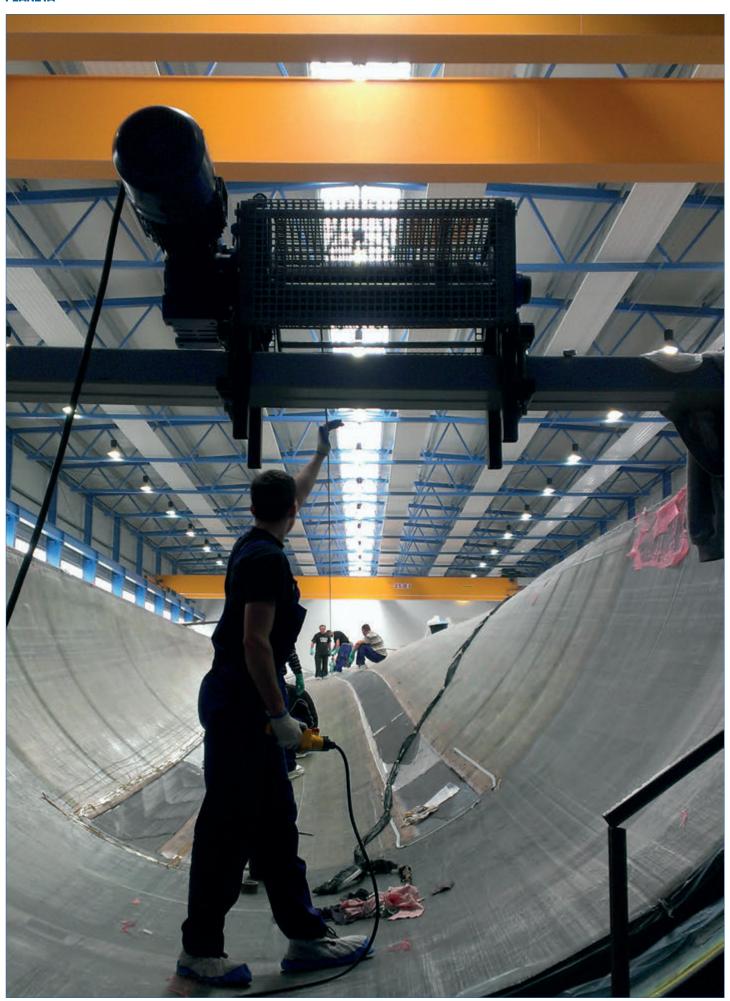




<sup>\*</sup> Only as eye bolt available.









#### Please photocopy and send a FAX!

Winch Inquiry Checklist	Please see backside of catalogue for FAX-Number!
1. Kind of drive and quantity *	7. Location of control
☐ manually	☐ Direct control on m control cable
☐ electric, Operating voltage Phases / V AC / Hz	☐ Low voltage control box
☐ pneumatic, Flow volume l/sec bar	☐ Panel mounted on winch frame
☐ hydraulic, Flow volume l/min bar	$\Box$ for mounting on walls, with m distance to winch
Quantity: pieces	☐ Frequency inverter
	☐ mounted on winch frame
2. Site of Operation and capacity *	☐ for mounting on walls, with m distance to winch
□ Pulling winch with daN pulling force and m rope length	
☐ Lifting winch with kg lifting capacity and m rope length	8. Operation
☐ Traversing winch with daN pulling force and m rope length	☐ Push buttons in the control panel door
☐ Capstan winch with daN pulling force	☐ Pendant control with m control cable
☐ Traction winch with daN pulling force	☐ Radio Remote control
If the pulling or lifting capacity is not known, please describe your	☐ Wall-mounted push-button
application with the length of the path, weight of load and rolling	☐ Food pedal
conditions for your pulling applications. For lifting applications please	☐ Several with selector switch in the control panel door
also describe the angle or slope of the path.	
	9. Options for control
	☐ Panel mounting appliance inlet
	☐ Power supply cable with m cable
	☐ Power shut-off switch
	☐ Electric overload protection
3. Rope speed	☐ Full motor protection (Temperature monitoring)
□ slow (1-5m/min) □ medium (5-15m/min)	10. Other requirements
☐ 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	11. Please sketch your application here
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	* Please note the required fields!
☐ More rope exits like shown on sketch	Please note our notes and explanations on
☐ Explosion-proof protection class	the following pages.
Company name:	Company stamp:
	F/
Fax:	

















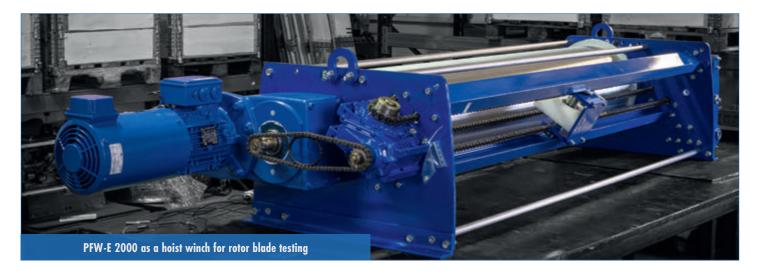












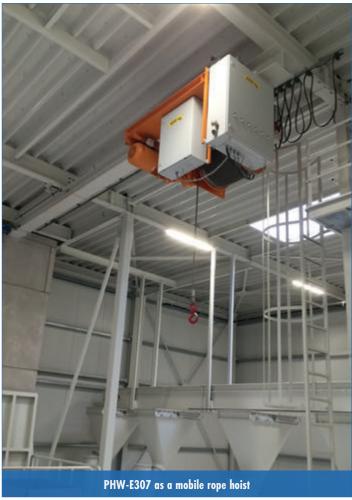




# **PLANETA Rope winches - Solutions (Excerpt)**









### **PLANETA Rope winches - Solution**







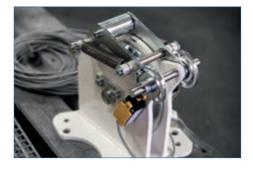
















Complete group drive system in accordance with BGV-C1 including installation and commissioning.

Consisting of five rope winches and spool winders, synchronous control, programmable via touch panel for a shopping centre in Macau

# PLANETA program overview



### Would you like to know more?

We would be glad to talk to you personally.
Company:
Contact person:
Street:
Post code:
Cih
City:
Phone:
Fax:
E-Mail:
Further information on the PLANETA range
Would you like to order one of our printed catalogues?
We have the following specials available for you:
PLANETA Image brochures
☐ Electric Chain Hoist and Crane Rail System
☐ ATEX lifting equipment
Lifting equipment for wind turbines
☐ Brochure "Hebezeuge für die Eventtechnik / Lifting equipment for event technology" (DE/EN)
☐ Brochure "Hebeklemmenprogramm / Plate clamps programm" (DE/EN)
We would be delighted to send you our catalogues by mail.
Address, email and fax number – see back page.
City, date: Signature:













