Cable winches

S-line geared cable winches

The forest farmer, just like the semi-professional business, has the requirement to use a professional geared cable winch. The S-line model enables this at the price level of a chain cable winch.

► Page 12

70 - 110 m

5 - 7.2 t

Profi geared cable winches

Heavy timber recovery in flat terrain or thinning in mountainous areas - the requirements for a professional geared cable winch differ according to its area of application. Pfanzelt Profi geared cable winches are assembled on the basis of a variable modular system and can thus be optimally adapted to the operating conditions.

► Page 22

100 - 175 m

6 - 10 t

Three-point geared cable winches were Pfanzelt's first product when the company was founded 33 years ago. Even today, the geared cable winches are still being constantly developed and adapted to new requirements.

The Pfanzelt product range includes a very wide selection of cable winches. The scope of products ranges from standard cable winches to customer-specific system solutions.

Pluggable and fixed winches

Pfanzelt's pluggable and fixed rope winches are suitable tools for commercial use. One reason for this is the installation of the winch and the mountain support on a console, which means that the tractor remains largely free of loads when roping.

► Page 36

Aggregates and vehicle winches

Pfanzelt's modular series for vehicle winch systems offer cable winches with lifting and pulling forces from 30 to 160 kN. Different winch drives are available for different applications.

► Page 42

S-line geared cable winches

Until a few years ago, geared cable winches were only affordable for professional users due to their low production volume and heavy construction. This has changed since the introduction of Pfanzelt's S-line cable winch. Today, Pfanzelt offers geared winches with an attractive price-performance ratio especially for semi-professional operations and forest farmers. The technology is the same as for the larger models; however, only the dimensions are adapted to the size of the tractors which are mostly smaller.

Types

Geared cable winch S150

An inexpensive start into the geared cable winch technology is the model S150 with its 5.0 t tractive force. With a rear blade width of 1,500 mm and a lower overall height, this three-point cable winch is adapted to smaller tractors.

Geared cable winch S160

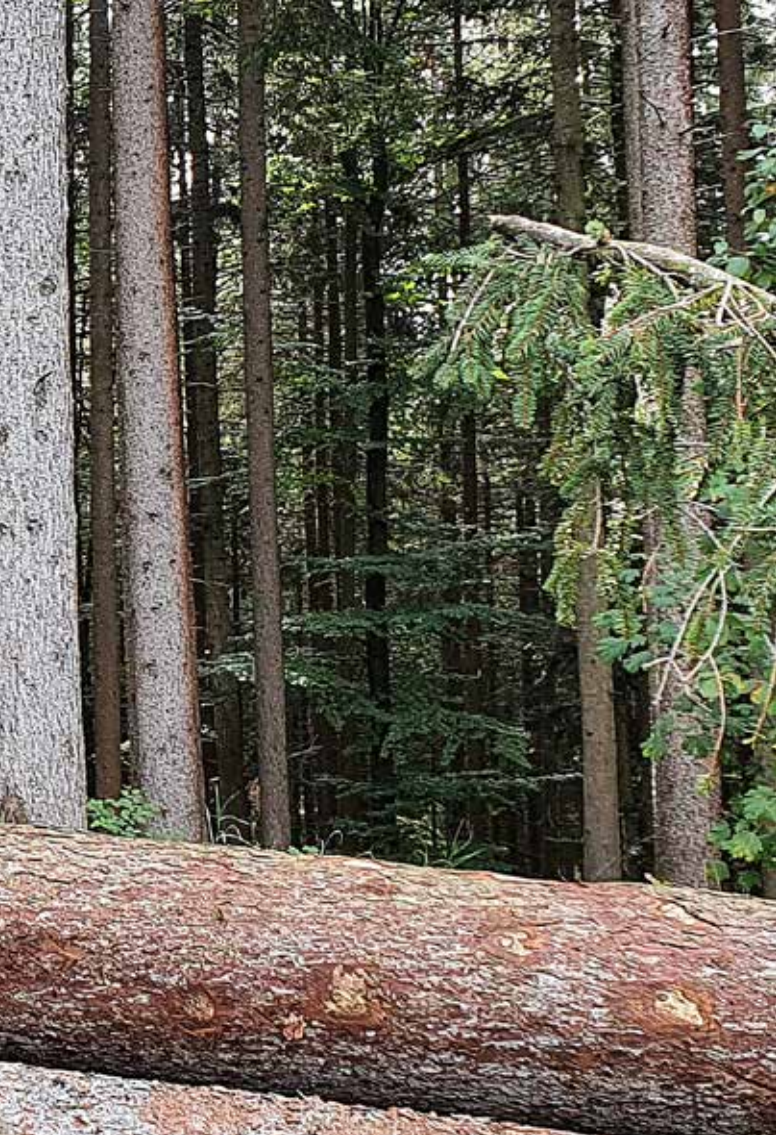
The S160 model is suitable for larger tractors and the user who needs more pulling force. The powerful middle class of the S-line winch range.

Geared cable winch S172

The S172 gear cable winch is the optimal tool for big tasks in the farmer's forest. In this series, the cable winch already has a blade width of 1,800 mm.

Technical specs ▶ Page 20

Made in Germany



Convincing technical details:

- Extremely light cable payout of only 30 N when the cable is pulled out due to the arrangement of the rope drum in the direction of travel
- Lowest tractive force drop of only 21 % (with standard equipment)
- Exact control of braking and clutch operations through multi-disc plate packs
- Pfanzelt precision control PPS for adjusting the cable winch to the forwarding situation in three steps
- Standard radio control with motor speed adjustment function
- Tailor-made accessories: Cable distribution with cable infeed brake, hydromechanical cable payout, PTB automated trailing drum brake, various shield widths, and much more.

Independently tested.

The forestry training centre Ort/ Gmunden has tested the S-line S160 cable winch in practice.

"Until now, geared cable winches have been heavy and expensive. But the German forestry machine manufacturer Pfanzelt is convinced of this technology and exclusively produces cable winches with gears. The goal of the Allgäu-located company is to develop a lighter geared cable winch affordable for forest farmers."

Evaluation of the LANDWIRT magazine (excerpt)

+ low tractive effort loss
+ winding device
+ hydromechanical rope ejection
+ hitch geometry
+ rear shield
+ PPS controller...

The complete test report and a video of the test application can be found on the Internet at www.pfanzelt.com.

S-line cable winches live in action.
youtube.com/pfanzeltTV

S-line geared cable winches
Technical details at a glance

1 The adjustable and sturdy safety grille provides safety for the operator and protects the tractor from damage.

2 All Pfanzelt cable winches are equipped as standard with a **Forest radio system**.

3 Two **holders for fuel canister and chainsaw** are useful and keep order on the tractor.

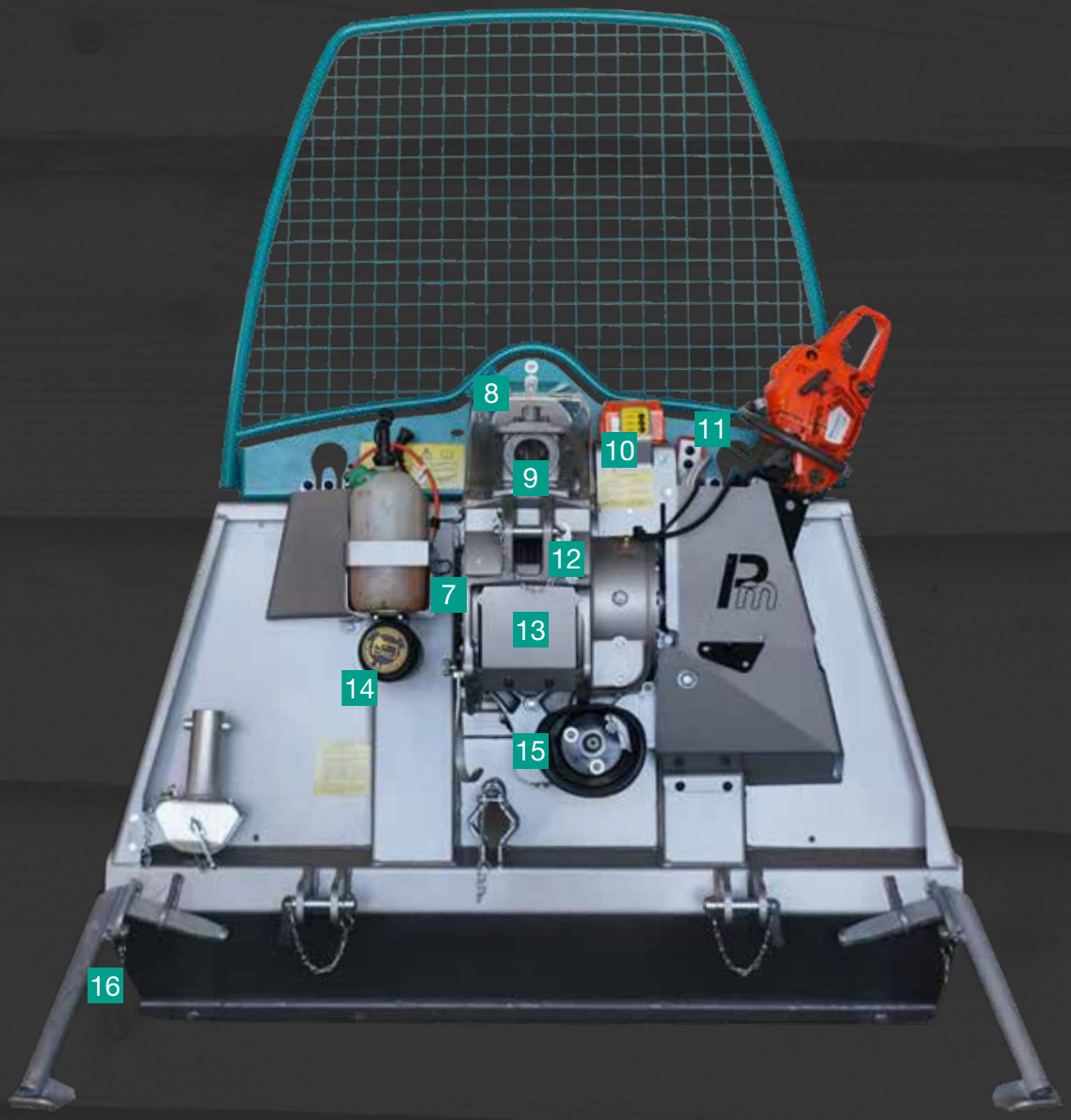
4 Two **storage compartments** mounted on the side of the winch plate ensure order and are easy to reach.

5 The **cable infeed reel with ball bearings** guarantees cross pulls up to 90°. The low position saves a deflection roller.

6 Made of fine grain steels, the **sturdy shield** is torsionally stiff and provides support when pulling sideways.

7 The optionally available **load lowering valve** allows the brake to be released in a controlled manner.

8 An optionally available **cable payout** facilitates the cable pullout and reduces cable wear.



9 The optional **cable distribution with cable inlet brake** ensures an optimised distribution of the cable and low wear.

10 The standard **PPS controller** allows easy adjustment of the overlap.

11 A standard **manual control** can be used in the event of problems with the **radio control**.

12 The automated **trailing drum brake PTB** automatically brakes the cable when the drum is opened.

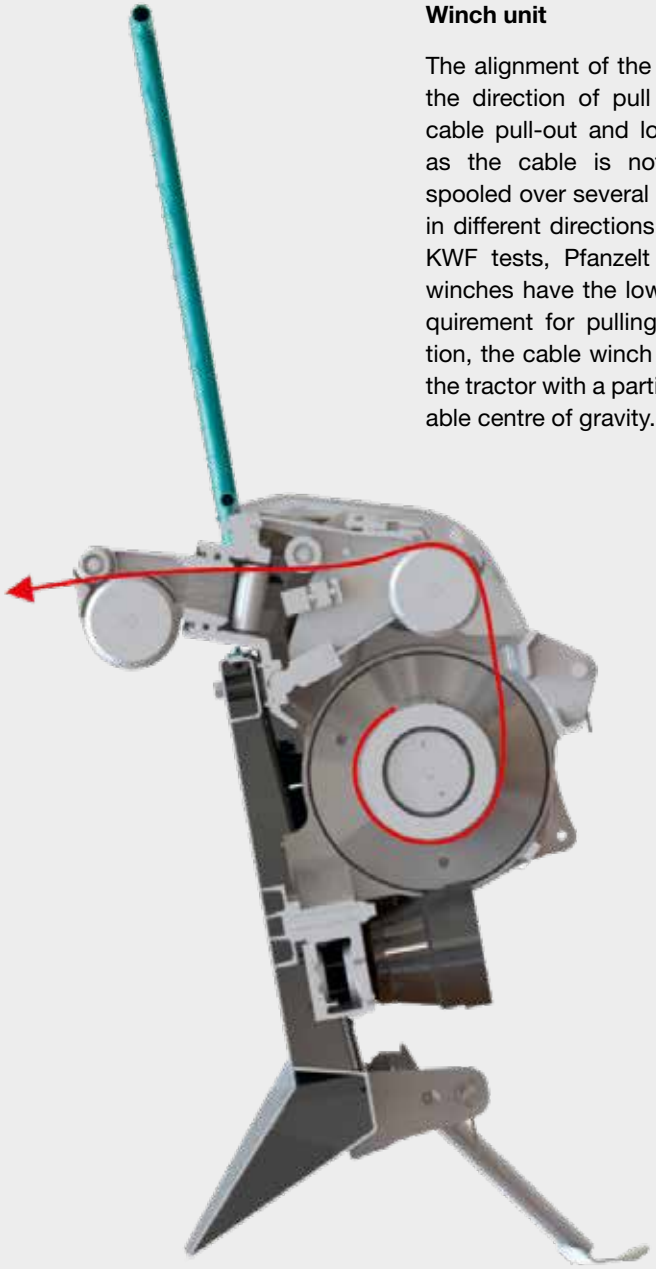
13 The wide rope drum **minimises the loss of traction to a maximum of 21%**.

14 The hydraulic pressure can be checked quickly and easily on the standard pressure gauge.

15 A reversing gear is optionally available for use at the front and rear of the tractor.

16 Lateral **stand legs** facilitate mounting and dismounting of the winch and secure the operator.

S-line geared cable winches
Technical details that will convince you



Winch unit

The alignment of the cable drum in the direction of pull enables easy cable pull-out and low cable wear as the cable is not wound and spooled over several cable sheaves in different directions. According to KWF tests, Pfanzelt geared cable winches have the lowest power requirement for pulling out. In addition, the cable winch is attached to the tractor with a particularly favourable centre of gravity.

Shield

Pfanzelt S-line geared cable winches have a particularly stable shield made of high-strength fine-grained steel, which is manufactured as a torsion box with high rigidity. Due to the wedge shape, lateral tensile forces can also be absorbed safely, stably, and durably. Side-operated parking supports ensure convenient attachment and detachment of the winch to the tractor and prevent accidents.

Transmission

The cable winch is driven via the tractor's power take-off shaft at a speed of 540, 750, or 1.000 rpm. From the cardan shaft, the driving force is transmitted via a spur gear to the precision worm gear in an oil bath. This ensures a very smooth operation and ensures long-term operational reliability.

Multi-disc sinter plate packs are used for the exact control of the braking and coupling process and for safe overlapping. The complete system is protected on the inside.

Lowest loss of tractive force

The use of a cable drum with a large drum core diameter guarantees a very low loss of tensile force from the lower to the upper cable layer. According to independent testing by KWF, the S-line cable winch has a maximum tractive force drop of 21% with a standard cable length. The low cable entry height allows easy and comfortable working without a deflection pulley.

Technology explained in detail.
www.pfanzelt.com

PPS controller

With the Pfanzelt precision control PPS which is unique on the market, the winch can be adapted to the respective forwarding situation. By preselection, the operator can quickly and easily adjust the overlap of clutch and brake. This offers maximum ease of use and maximum safety at work. The stage is preselected via the radio control.

Standard radio control

The S-line cable winches are equipped with a radio control system for safe, comfortable, and gentle working. The operator is thus not in the danger zone and can detect obstacles.

The safety update

The radio control decouples Pull and Release. The command Pull is now activated by a pushbutton.

In addition to the remote control, a cable controlled system with 5 m cable is included in the scope of delivery of the cable winch.

All functions at a glance

- Pull (via pushbutton)
- Release, short release (via rocker arm)
- stepless motor speed adjustment
- Motor start / stop
- Emergency OFF
- PPS - Changeover via radio

PTB - Automatic drum overrun brake (option)

When a tensioned cable is released, disorder on the drum is often the consequence. In such cases, the new automated trailing drum brake automatically brakes the drum and ensures proper cable winding. This guarantees easy, unproblematic pull-out of the cable.

Technology explained in detail.
www.pfanzelt.com

Cable infeed brake (option)

Always a tight rope when pulling in, even if the log starts to slip or the rope is pulled up loosely - this is possible with the Pfanzelt cable infeed brake. A cylinder presses the cable onto the brake block with a brake roller when it is pulled in. The cylinder force is dimensioned in such a way that the cable is only pressed onto the block when it is not subject to load. The brake opens completely when you pull it out.

Rope payout (option)

The Pfanzelt rope payout was developed to facilitate use. The decoiling device installed in the swivel arm of the cable distribution is mechanically driven and hydraulically switched. The cable is firmly pressed against the cable pulley over a large radius by several flexibly suspended pressure rollers. Due to the large contact surface, functionality is ensured despite contamination or cable damage.

Technology explained in detail.
www.pfanzelt.com

Stowage space

Specially adapted holders for chainsaw and fuel canister and two additional storage compartments, depending on the model, provide sufficient storage space for forestry work.

Active operator protection

The TUTUM anti-crushing device prevents hand crushing and injuries caused by cable damage. This protective mechanism is standard only with Pfanzelt products.

Load lowering valve

Pfanzelt S-line geared cable winches can be equipped with a load lowering valve. This enables a cable under tension to be released and lowered in a controlled manner. This is indispensable with felling for safety reasons. To avoid malfunctions, the winch operates with a separate oil circuit with filter unit, which is fed by a piston pump and controls all hydraulic functions.

Front attachment

Instead of the standard spur gear, this option is available as a spur gear with a second PTO stub for reversing the direction of rotation so that the winch can be attached at the front.

Pressure roller (option)

The spring-loaded pressure roller is recommended for long cable lengths. It helps to distribute the cable optimally across the entire cable drum width. If you choose the option cable distribution incl. infeed brake, it is supplied as standard equipment.

S-line geared cable winches
Technical specification

Model	S150	S160	S172
Pulling force of lower cable layer	50 kN	60 kN	72 kN
Pulling force of upper cable layer	40 kN	47 kN	56 kN
Standard cable length (highly compacted forestry cable with sliding hook)	10 mm dia. x 70 m	11 mm dia. x 70 m	12 mm dia. x 60 m
Profi forestry radio system	Radio system with toggle switch, pushbutton, and emergency stop button		
Pfanzelt precision control PPS	●	●	●
Shield width (Standard)	1,500 mm	1,500 mm	1,800 mm
Weight (without cable)	approx. 470 kg	approx. 490 kg	approx. 580 kg
Recommended tractor power	max. 40 kW	approx. 30 - 60 kW	approx. 40 - 90 kW

Range of accessories	S150	S160	S172
Cable distribution with cable infeed brake (incl. pressure roller)	○	○	○
Long cable package (incl. cable distribution with cable infeed brake)	○ 10 mm dia. x 110 m	○ 11 mm dia. x 100 m	○ 12 mm dia. x 90 m
Cable payout	○	○	○
PTB Automatic trailing drum brake	○	○	○
Load lowering valve	○	○	○
Spur gear for front attachment	○	○	○
Shield width 1,800 mm	–	○	●
Shield width 2,000 mm	–	○	○
Shield width 2,200 mm	–	○	○
Cable retrieval winch	○	○	○
Anti-tilt system	○	○	○

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.

● Standard ○ Option – Not available

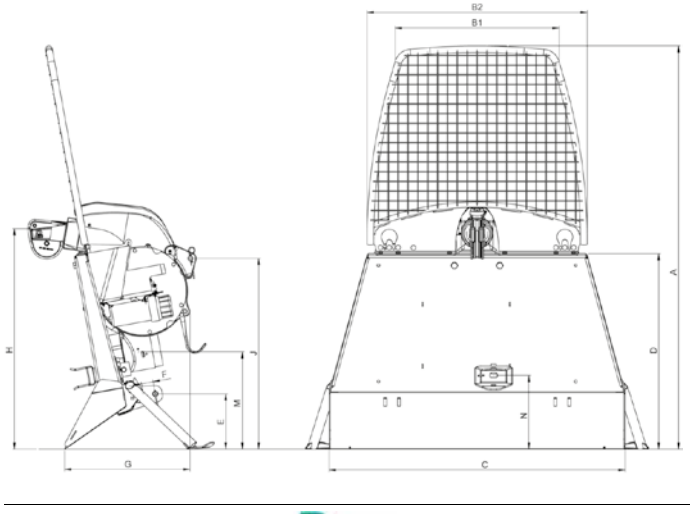
Start your configuration now.
configurator.pfanzelt.com

Dimensions (mm)	S150 [2]	S160 (Shield 1,500 mm)	S160 (Shield from 1,800 mm)	S172
A	2,050 [2]	2,050 [2]	2,350	2,350
B1	830	830	950	950
B2	1,110	1,110	1,370	1,370
C	1,500 [2]	1,500 [2]	1,800 [1]	1,800 [1]
D	990	990	1,210	1,210
E	280	280	355	355
F	60	60	60	60
G	640	640	775	775
H	1,120	1,120	1,330	1,330
J	970	970	1,105	1,105
M	490	490	670	670
N	380	380	540	540

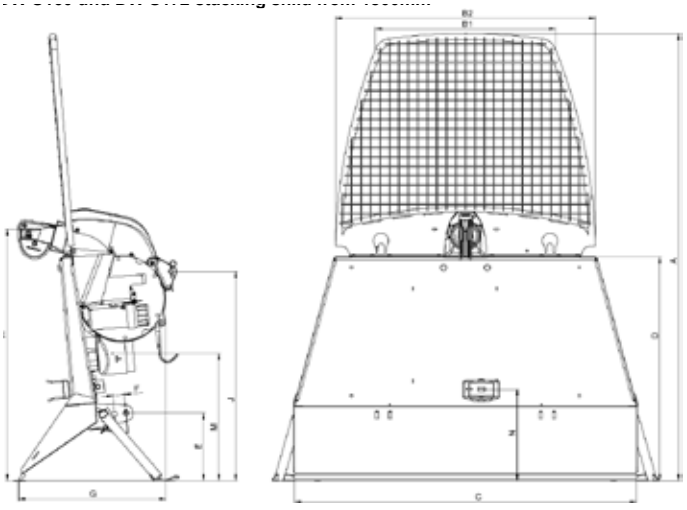
[1] Upon request: 2.000 mm, 2,200 mm, 2,400 mm

[2] The cable winches with a shield width of 1,500 mm are delivered with a protective grating of 2,050 mm height. Due to legal requirements, these winches are only permitted for tractors with a drive power of up to 40 kW.

S150 and S160 - Shield width 1,500 mm



S160 and S172 - Shield width from 1,800 mm



Profi geared cable winches

After more than 25 years on the market, the Pfanzelt Profi winch series has received a new design and new technology.

Ease of operation, ergonomics, and safety for user and vehicle were decisive factors in the further development of the successful series.

During the revision, great importance was attached to adopting features that have proven their worth over decades. Further developments were made, for example, in the optimisation of the hydraulic circuit for even more precise reaction times and more technical possibilities.

The external shape offers more protection for the tractor and greater working comfort. In addition to ergonomically arranged storage compartments, access for maintenance work has also been improved.

Heavy timber recovery in flat terrain or thinning in steep mountainous areas - the requirements for a professional geared cable winch differ depending on the area of application and the available technology.

Made in Germany

Pfanzelt Profi geared cable winches consist of a variable modular system and can thus be optimally adapted to various operating conditions. The technology is the same for all Pfanzelt cable winches. The precision worm gear used in the winch unit and the multi-disc sinter plate packs guarantee maximum reliability and durability of the winch.

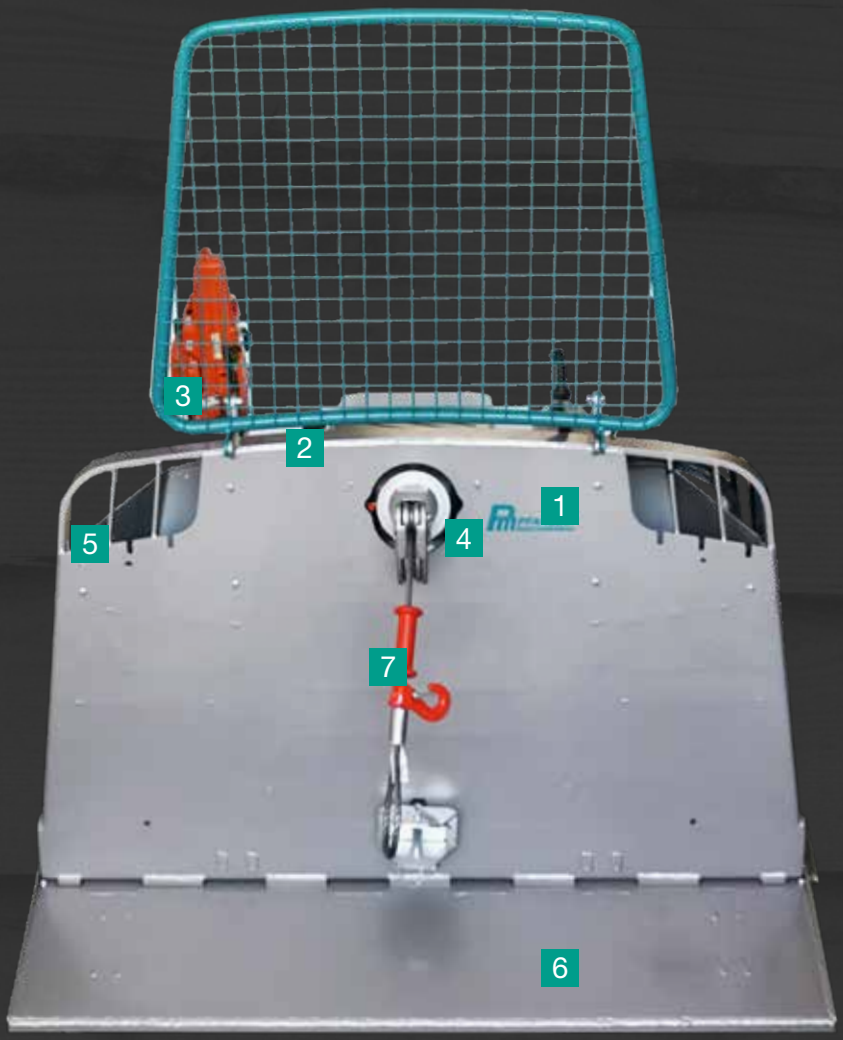
Technical specs ▶ Page 32

Convincing technical details:

- Best tensile force ratios from the lower to the upper rope layer
- Constant pull winch models P163K, P173K, and 273K without loss of traction
- Wide rope drum for large rope capacity and low loss of traction
- Reliable power transmission via spur and worm gears running in an oil bath
- Exact control by a multiple disc brake, clutch, and PHS controller
- Hydraulic self-supply
- Standard equipment with cable distribution and cable in-feed brake
- Pfanzelt precision control PPS for adjusting the cable winch to the forwarding situation in three steps
- Large range of accessories: Rope distribution systems, folding shield

Profi cable winches live in action.
youtube.com/pfanzeltTV

Profi geared cable winches
Technical details at a glance:



1 The PHS system enables short reaction times and fast working due to a permanent hydraulic pressure.

2 All Pfanzelt cable winches are equipped as standard with a **Forestry radio system**.

3 Two **holders for fuel canister and chainsaw** are useful and keep order on the tractor.

4 The cable infeed reel with ball bearings guarantees cross pulls up to 90°. The low position saves a deflection roller.

5 Two **storage compartments** mounted on the side of the winch plate ensure order and are easy to reach.

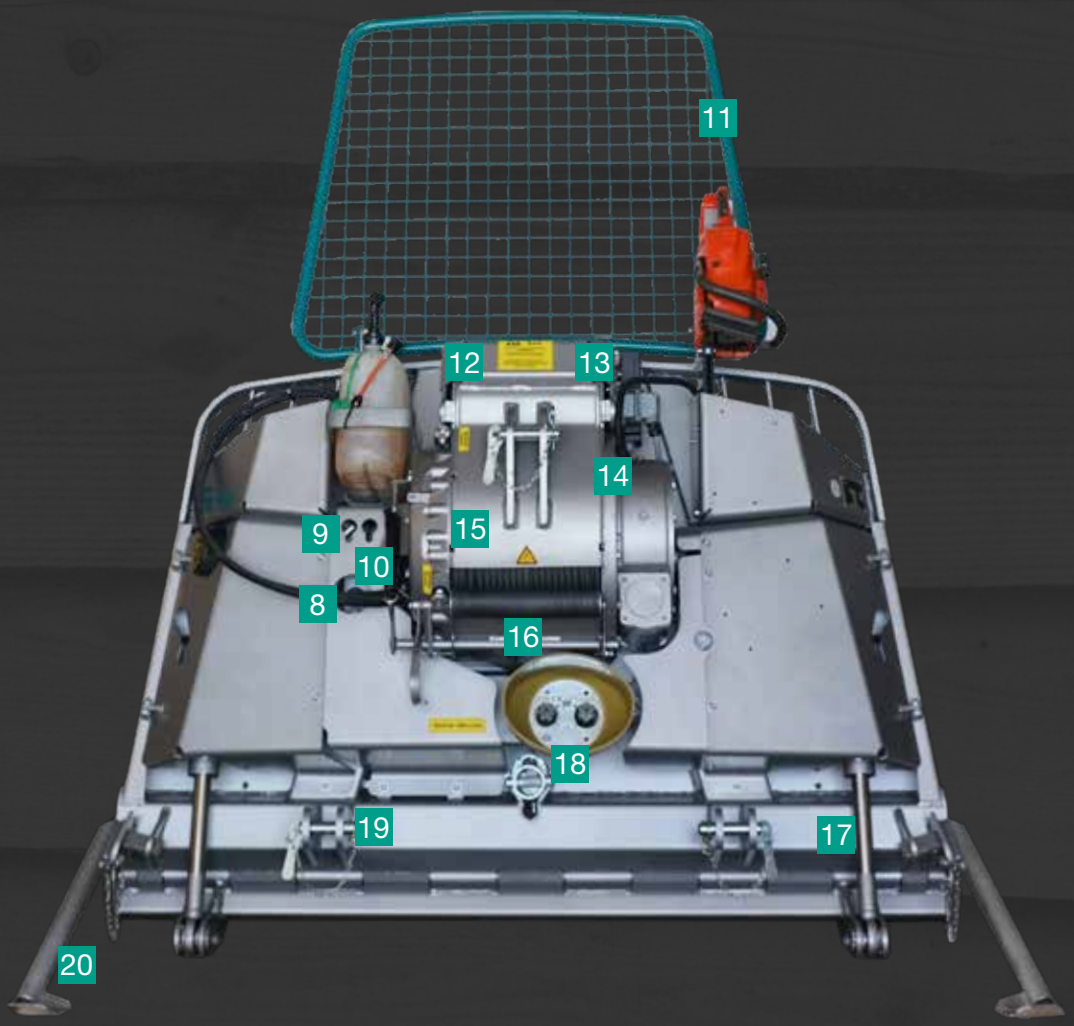
6 Constructed of fine-grained steels, the **sturdy shield** is torsionally stiff and provides support if there is lateral pull.

7 Optimum protection against hand crushing in the event of operating errors is provided by the TUTUM crush protection pro.

8 The hydraulic pressure can be checked quickly and easily on the standard pressure gauge.

9 The optionally available **Load lowering valve** allows the brake to be released in a controlled manner (optionally also by radio).

10 With the **Vario-Zug** option, the maximum pulling force can be adjusted to the given operating conditions.



11 The large and sturdy safety grille provides safety for the operator and protects the tractor from damage.

12 An optionally available cable payout facilitates the cable pullout and reduces cable wear.

13 Various cable distribution systems guarantee perfect cable distribution and low wear.

14 The standard PPS controller allows easy adjustment of the overlap of clutch and brake.

15 The wide cable drum creates space for long cable lengths and minimises the loss of traction to a maximum of 28 per cent.

16 The optionally available pressure roller improves cable distribution across the drum width on wide drums.

17 As an option, the forwarding shield can be supplied hydraulically foldable, which increases ground clearance.

18 A reversing gear is available as an option. With this the winch can also be mounted at the front.

19 **Different mounting options** for different categories of lower links allow an uncomplicated attachment.

20 Lateral **stand legs** facilitate mounting and dismounting of the winch and secure the operator.

Profi geared cable winches
Technical details that will convince you

Winch unit

When the cable drum is aligned in the direction of pull, the cable can be pulled out very easily with low cable wear as it is not spooled and wound over several rope sheaves to different directions. According to KWF tests, Pfanzelt geared cable winches have the lowest power requirement for pulling out. In addition, the cable winch is mounted on the tractor with a particularly favourable centre of gravity The use of a cable drum with a large drum core diameter guarantees a very low loss of tensile force from the lower to the upper cable layer. According to independent testing by the KWF, the Pfanzelt cable winch has a maximum drop in tractive force of only 28 percent with standard cable length.

The low cable infeed height allows easy and comfortable working without a deflection pulley.

Drive

The cable winch is driven via the tractor's power take-off shaft at a speed of 540, 750, or 1.000 rpm. From the cardan shaft, the driving force is transmitted by a spur gear to the precision worm gear in an oil bath. This ensures very smooth operation and long-term operational reliability.

For precise control of the braking and clutching process and safe overlap, disc packs with organic pads are used. The complete system is protected on the inside.

The PHS system of Pfanzelt Profi geared winches enables permanent hydraulic pressure in the system and thus short reaction times even after several switching operations.

Shield

Pfanzelt gear cable winches have a particularly stable shield made of high-strength fine-grained steel, which is manufactured as a torsion box with high torsional rigidity. Due to the wedge shape, lateral tensile forces can also be absorbed safely, stably, and permanently. Stand legs which can extended towards the sides ensure easy mounting and dismounting and prevent accidents.

The shield can also be designed as a **hydraulically folding shield**. This provides greater ground clearance and space for carrying logs.

Technology explained in detail.
www.pfanzelt.com

PPS controller

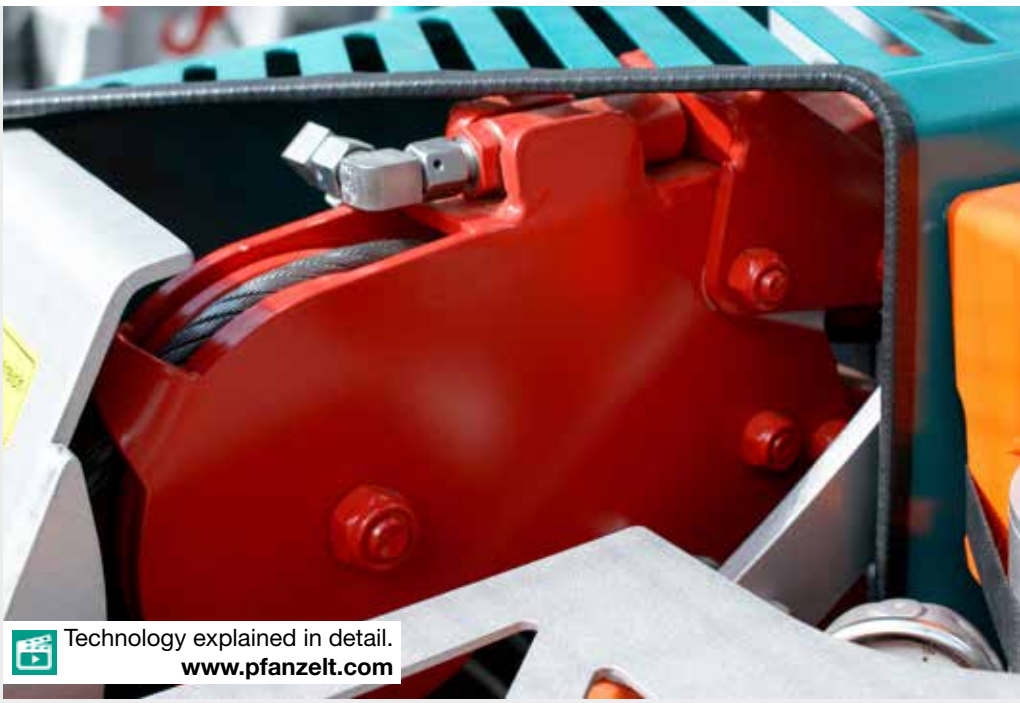
With the Pfanzelt precision control PPS which is unique on the market, the winch can be adapted to the respective forwarding situation. By preselection, the operator can quickly and easily adjust the overlap of clutch and brake. This offers maximum ease of use and maximum safety at work.

Stowage space

Specially adapted holders for the chainsaw and fuel canister and two additional, large storage compartments provide sufficient storage space for forestry work.

Cable distribution with infeed brake

Always a tight rope when pulling in, even if the log starts to slip or the rope is pulled up loosely - this is made possible by the Pfanzelt rope pull-in brake. A cylinder presses the cable onto the brake block with a brake roller when it is pulled in. The force of the cylinder is dimensioned in such a way that the cable is only pressed onto the block when unloaded. The brake opens completely when you pull it out.



Technology explained in detail.
www.pfanzelt.com

Position 1

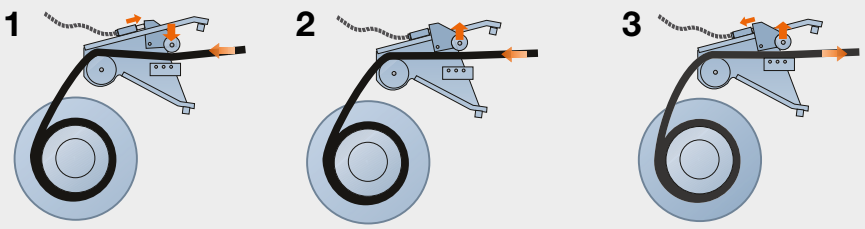
By activating the function *Pulling*, the rope infeed brake is also activated.

Position 2

As soon as the rope is fed in under load, the cable infeed brake opens.

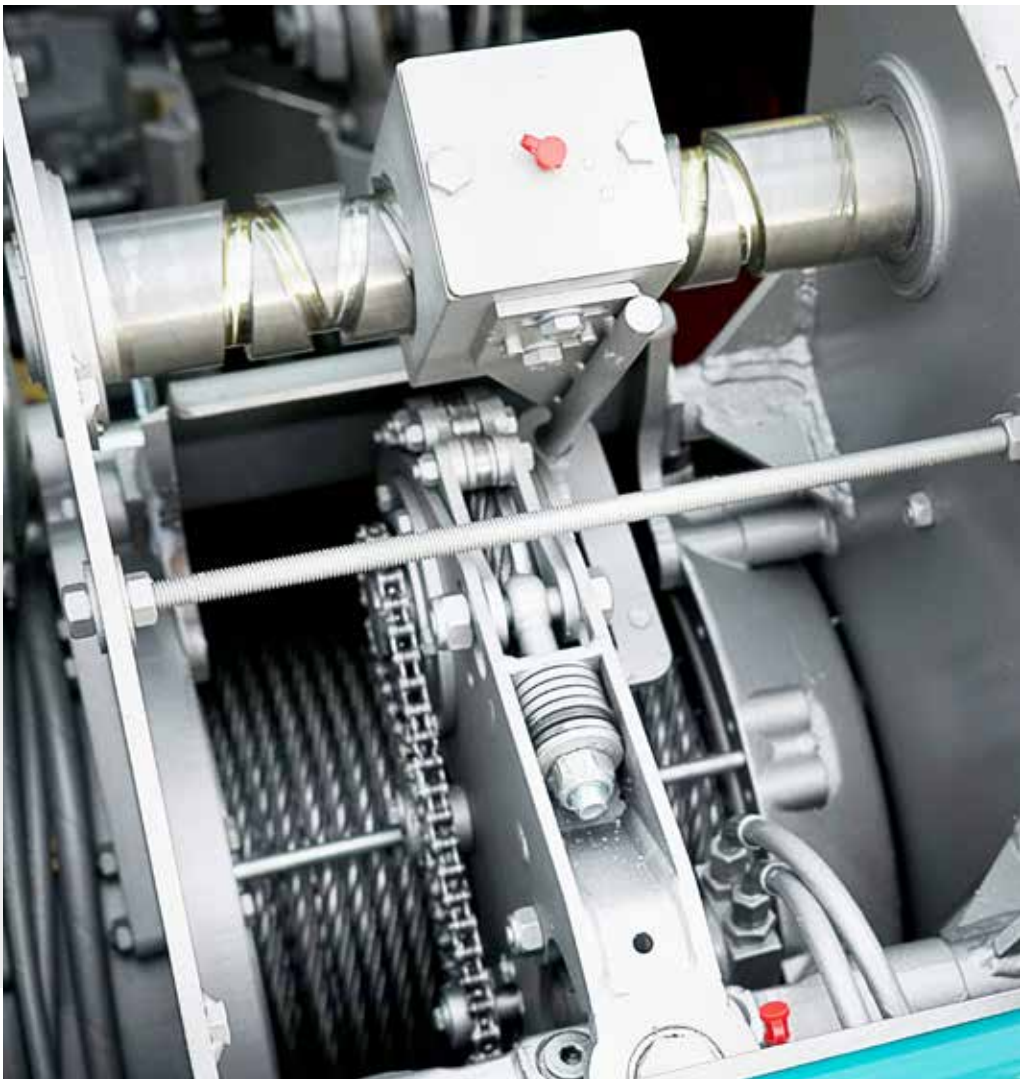
Position 3

When the cable is pulled out, the cable infeed brake opens completely and thus does not obstruct the cable pull-out.



Cable distribution via cross spindle

The positively guided cable distribution via a cross spindle offers an optimum winding result even with wide drums and long cable lengths. The positive guide enables trouble-free cable winding even on slopes.



Cable payout

The Pfanzelt cable payout was developed to increase the ease of use and improve the cable wrapping quality. The unwinding device built into the swivel arm of the cable distribution is hydraulically driven and electrically switched. As soon as rope ejection is activated, the rope is pressed firmly against the rope pulley over a large radius by several flexibly suspended pressure rollers. Due to the special design with a large contact surface of the pressure rollers on the cable, the functionality is ensured despite impurities or cable damage.

Offset gear

Pfanzelt cable winches with a wide cable drum can be equipped with an offset gear for a central drive (standard equipment on some models). This is also recommended for tractors with off-centre PTO shaft union. An offset gearbox with reversal of the direction of rotation for front and rear mounting is also possible.

Constant tractive force
(P163K, P173K, and P273K)

The Pfanzelt winch models P163K, P173K and P273K have a constant pulling force. This means that the winch always operates with the same force when pulling in. The usual loss of tractive force is excluded.

This offers a higher safety level and greater ease of use, as thinner forest cables can be used, for example. The operator can thus always work with the maximum pulling force.

Radio control

In addition to the usual functions (pull, short release, release, continuous release, stepless engine throttle adjustment), the standard modern radio system also supports engine start/stop and an emergency call system on request.

The cable winch is equipped with HBC radio control as standard.

Active operator protection

The TUTUM anti-crushing device prevents hand crushing and injuries caused by cable damage. This protective mechanism is standard only with Pfanzelt products.

Technology explained in detail.
www.pfanzelt.com

Retrieval winch for use on steep slopes

The auxiliary winch for Pfanzelt forestry winches facilitates roping in challenging terrain. The procedure is simple and effective. It is controlled via the winch radio or a stand-alone radio system.

That is convincing:

- Pulling force: 400 kg
- Cable length: 240 m, plastic rope
- Freewheel for fast rope outout during the arrangement
- Automatic unwinding when retracting the forwarding cable
- Rope infeed brake
- Removable rope drum for easy removal of the material in between
- Incl. deflection pulley, tree strap

Quickly assembled and ready for use

1. Connect the end of the very light auxiliary rope to the pull rope.
2. Activate the freewheel for easy pull-out of the auxiliary rope.
3. Attach the deflection pulley at the end of the ropeway to a tree.
4. Hook the auxiliary rope and allow the pull cable to extend.

Retrofitting is possible.

Profi geared cable winches
Technical specification

Single drum cable winches	P163K	P172 SPECIAL OFFER	P173K	P186 SPECIAL OFFER	P1102
Pulling force of lower cable layer	61 kN	72 kN	72 kN	86 kN	102 kN
Pulling force of upper cable layer	61 kN	56 kN	72 kN	62 kN	78 kN
Constant tension	●	–	●	–	–
Medium cable speed at 540 rpm	0.43 m/s	0.57 m/s	0.43 m/s	0.43 m/s	0.43 m/s
at 750 rpm	0.60 m/s	0.80 m/s	0.60 m/s	0.60 m/s	0.60 m/s
at 1,000 rpm	0.80 m/s	1.05 m/s	0.80 m/s	0.80 m/s	0.80 m/s
Maximum cable capacity	11 mm dia. / 174 m	12 mm dia. / 138 m	12 mm dia. / 138 m	13 mm dia. / 158 m	14 mm dia. / 121 m
Shield width (Standard)	1,800 mm	1,800 mm	2,000 mm	1,800 mm	1,800 mm
Three-point category	1 and 2	1 and 2	2 and 3	2 and 3	2 and 3
Control	Electrical pushbutton control with wet armature solenoid valve				
Drive	Mechanically via spur gear in oil bath				
Clutch	Multi-disc sinter plate clutch, self-adjusting				
Brake	Multi-disc lamella coverings				
Radio system	HBC Patrol T	HBC Patrol T	HBC Patrol T	HBC Patrol T	HBC Patrol T
mech. cable distribution	●	●	●	●	●
Rope infeed brake	●	●	●	●	●
PHS control	●	●	●	●	●
Pfanzelt precision control PPS	●	●	●	●	●
Cable payout	○	●	○	●	○
Safety guard (per German UVV.)	●	●	●	●	●
Cardan shaft	●	●	●	●	●
Drive centered	●	●	●	●	●
Weight (approx., without cable)	616 kg	625 kg	650 kg	645 kg	650 kg
Recommended tractor power	approx. 40 - 90 kW	approx. 40 - 90 kW	approx. 70 - 120 kW	approx. 55 - 100 kW	approx. 70 - 120 kW

Range of accessories	P163K	P172 SPECIAL OFFER	P173K	P186 SPECIAL OFFER	P1102
Shield widths	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm
Hydraulic folding shield	○	○	○	○	○
Proportional brake control	○	○	○	○	○
Vario-Zug: Adjustable pulling force	–	○	–	○	○
Force-guided rope winding via cross spindle	–	–	–	○	○
Cable payout	○	●	○	●	○
Reversing gear for front mounting	○	○	○	○	○
Cable retrieval winch	○	○	○	○	○
Anti-tilt system	○	○	○	○	○

● Standard ○ Option – Not available

Start your configuration now.
configurator.pfanzelt.com

Double drum winches	P260 SPECIAL OFFER	P272 Special offer	P273K	P285	P2102
Pulling force of lower cable layer	2 x 60 kN	2 x 72 kN	2 x 72 kN	2 x 85 kN	2 x 102 kN
Pulling force of upper cable layer	2 x 42 kN	2 x 58 kN	2 x 72 kN	2 x 61 kN	2 x 78 kN
Constant tension	–	–	●	–	–
Medium cable speed at 540 rpm	0.43 $^{m}/_{s}$	0.43 $^{m}/_{s}$	0.43 $^{m}/_{s}$	0.43 $^{m}/_{s}$	0.43 $^{m}/_{s}$
at 750 rpm	0.60 $^{m}/_{s}$	0.60 $^{m}/_{s}$	0.60 $^{m}/_{s}$	0.60 $^{m}/_{s}$	0.60 $^{m}/_{s}$
at 1,000 rpm	0.80 $^{m}/_{s}$	0.80 $^{m}/_{s}$	0.80 $^{m}/_{s}$	0.80 $^{m}/_{s}$	0.80 $^{m}/_{s}$
Maximum cable capacity	2 x Ø 11 mm/ 88 m	2 x Ø 12 mm/ 102 m	2 x Ø 12 mm/ 138 m	2 x Ø 13 mm/ 129 m	2 x Ø 14 mm/ 100 m
Shield width (Standard)	1,800 mm	2,000 mm	2,000 mm	2,000 mm	2,000 mm
Three-point category	1 and 2	2 and 3	2 and 3	2 and 3	2 and 3
Control	Electrical pushbutton control with wet armature solenoid valve				
Drive	Mechanically via spur gear in oil bath				
Clutch	Multi-disc sinter plate clutch, self-adjusting				
Brake	Multi-disc lamella coverings				
Radio equipment	HBC Patrol D	HBC Patrol D	HBC Patrol D	HBC Patrol D	HBC Patrol D
Mech. cable distribution	○	●	●	●	●
Rope infeed brake	○	●	●	●	●
PHS control	–	●	●	●	●
Pfanzelt precision control PPS	–	●	●	●	●
Safety guard (per German UVV.)	●	●	●	●	●
Cardan shaft	●	●	●	●	●
Drive centered	●	●	●	●	●
Weight (approx., without cable)	590 kg	795 kg	850 kg	850 kg	850 kg
Recommended tractor power	approx. 55 - 100 kW	approx. 70 - 120 kW	approx. 100 - 150 kW	approx. 100 - 150 kW	approx. 100 - 150 kW

Range of accessories	P260 SPECIAL OFFER	P272 SPECIAL OFFER	P273K	P285	P2102
Shield widths	up to 2,200 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm
Hydraulic folding shield	○	○	○	○	○
Proportional brake control	–	○	○	○	○
Vario-Zug: Adjustable pulling force	–	○	–	○	○
Cable payout	–	○	○	○	○
Reversing gear for front mounting	○	○	○	○	○
Cable retrieval winch	○	○	○	○	○
Anti-tilt system	○	○	○	○	○

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

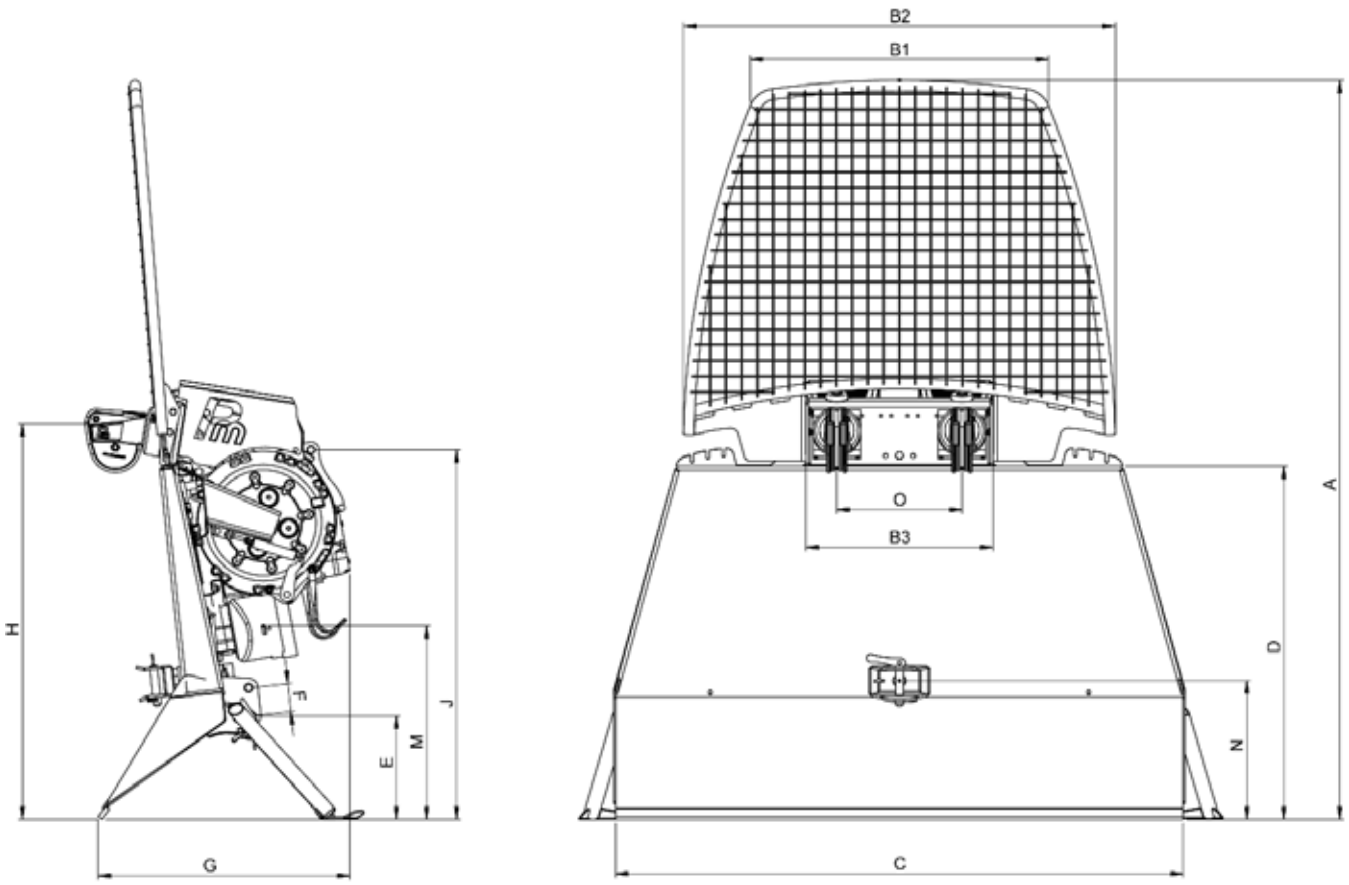
Observe the legally prescribed breaking load for the cable equipment of the winch.

Profi geared cable winches
Dimensions

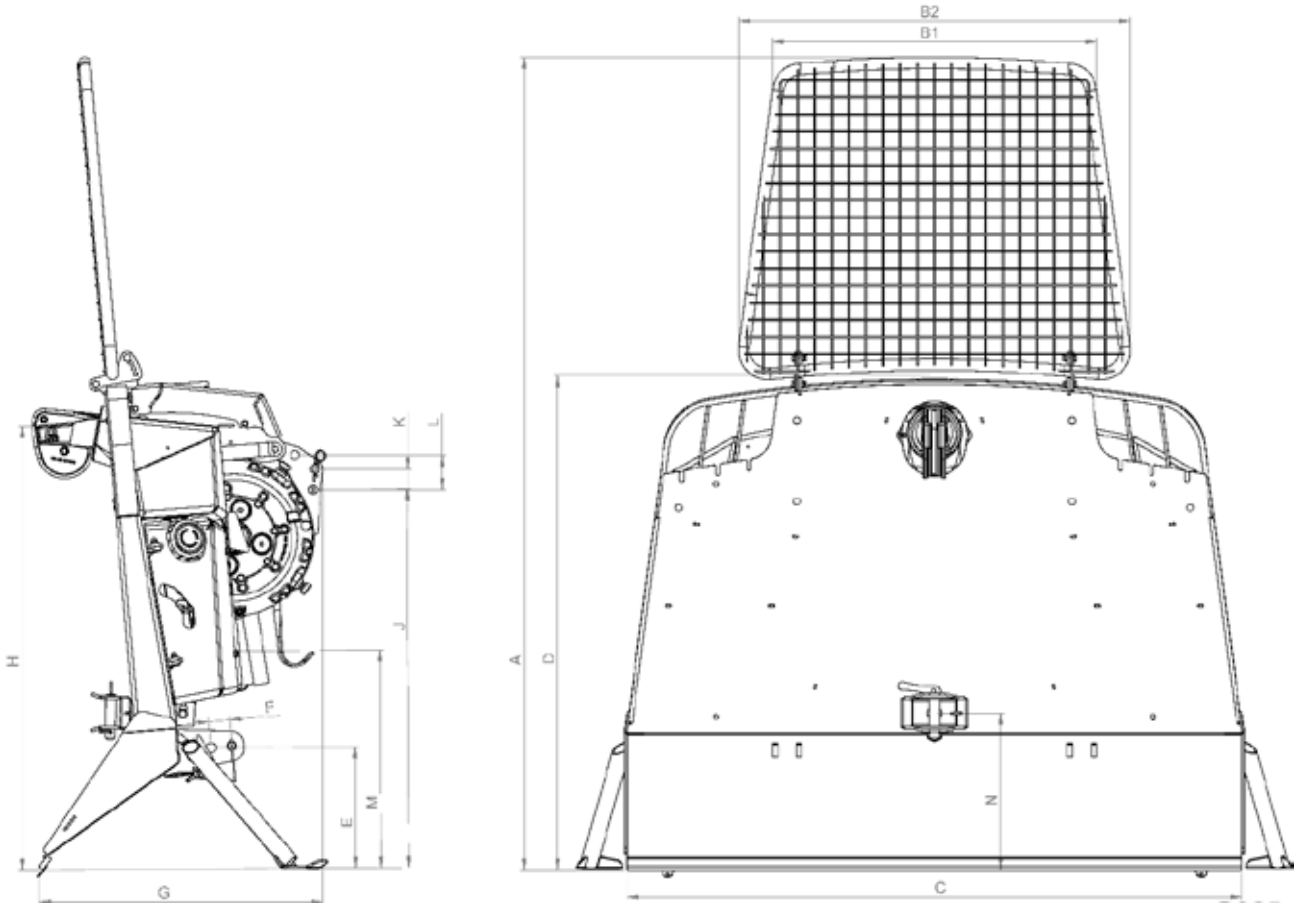
Model	P163K	P172	P173K	P186	P1102	P260	P272	P273K	P285	P2102
A (mm)	2,360	2,360	2,360	2,360	2,360	2,340	2,360	2,360	2,360	2,360
B1 (mm)	950	950	950	950	950	950	950	950	950	950
B2 (mm)	1,150	1,150	1,150	1,150	1,150	1,370	1,150	1,150	1,150	1,150
B3 (mm)	---	---	---	---	---	505	---	---	---	---
C[1] (mm)	1,800	2,000	2,000	1,800	1,800	1,800	2,000	2,000	2,000	2,000
D (mm)	1,440	1,440	1,440	1,440	1,440	1,120	1,430	1,430	1,430	1,430
E (mm)	350	350	350	350	350	330	350	350	350	350
F (mm)	60	60	60	60	60	90	60	60	60	60
G (mm)	830	830	830	830	830	800	840	865	840	865
H (mm)	1,290	1,290	1,290	1,290	1,290	1,250	1,285	1,285	1,285	1,285
J (mm)	1,100	1,100	1,100	1,100	1,100	1,170	1,180	1,180	1,180	1,180
K (mm)	60	60	60	60	60	---	---	---	---	---
L (mm)	100	100	100	100	100	---	---	---	---	---
M (mm)	600[2]	600[2]	600[2]	600[2]	600[2]	610	600	600	600	600
N (mm)	455	455	455	455	455	440	450	450	450	450
O (mm)	---	---	---	---	---	310	370	435	435	435

[1] for standard shield width
[2] with optionally available angled worm gear unit deviating dimensions

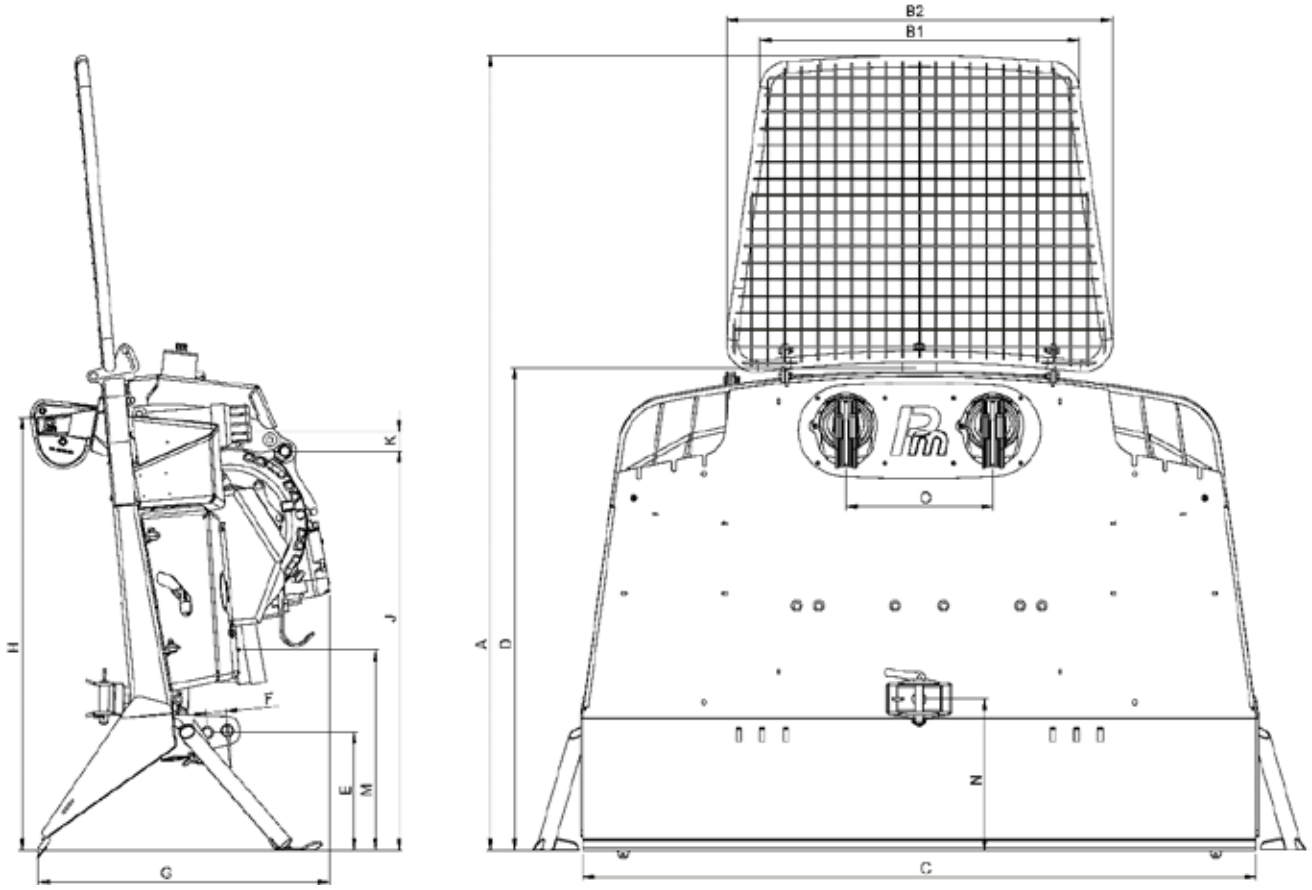
P260



P163K, P172, P173K, P186, P1102



P272, P273K, P285, P2102



Pluggable and fixed winches

Pfanzelt's pluggable and fixed rope winches are the proper tools for commercial forwarding companies. One reason for this is the installation of the winch and the mountain support on a console, which means that the tractor remains largely free of loads when roping.

Pfanzelt's pluggable cable winches consist of a variable modular system and can thus be optimally adapted to various common tractors. The technology is the same. Guarantees for maximum reliability and long service life of the winch are both the precision worm gear used in the winch unit and the multi-disc sinter plate packs.

Depending on the requirements of the operator, pluggable and fixed-mounted cable winches are available with different pulling forces, shield widths, and cable capacities.

Technical specs ► Page 38

Convincing technical details:

- Best tensile force ratios from the lower to the upper rope layer
- Best installation position despite mounted power lift
- Large lifting height of the support post (optionally with automatic trailer coupling)
- Safe power transmission via spur and worm gear units running in an oil bath
- Adjustable rope inlet (mechanical or hydraulic)

Made in Germany


URSUS

Pluggable and fixed winches Technical specification

Pluggable attachment	SW0258	SW0306	SW0308
Pulling force of lower cable layer	80 kN	2x 60 kN	2x 80 kN
Pulling force of upper cable layer	56 kN	2x 42 kN	2x 56 kN
Cable capacity	13 mm dia. x 80 m	2 x 11 mm dia. x 100 m	2 x 13 mm dia. x 80 m
Shield width	1,800 mm	2,000 mm	2,100 mm
Own oil supply via radial piston pump with suction filter	•	•	•
Multi-disc lamella coupling Sintered metal, self-adjusting	•	•	•
Multi-disc lamella brake	•	•	•
Forestry radio system (HBC patrol)	•	•	•
Lift-out height	approx. 850 mm	approx. 850 mm	approx. 850 mm
Underreach	approx. 200 mm	approx. 200 mm	approx. 200 mm
Lifting capacity	approx. 3.5 t	approx. 3.5 t	approx. 3.5 t

• Standard ○ Option – Not available

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.

Assembly and disassembly

Thanks to well thought-out technology, it only takes a few minutes to attach or remove the pluggable cable winch, or the combination of cable winch and loading crane. The tractor is therefore also available for other applications at short notice.

Start your configuration now.
configurator.pfanzelt.com

Large variety of types and wide range of accessories

Pfanzelt's product range offers different solutions for every application and all common tractor types. In addition to the listed plug-in and fixed-mounted cable winches, other single and double-drum cable winches are available with various cable capacities and pulling forces.

Please contact our factory representatives for information on the types and the range of accessories.

Solution concepts for different applications


50

Aggregates and vehicle winches

Pfanzelt's modular series for vehicle winch systems offer cable winches with lifting and pulling forces between 30 and 160 kN. Different winch drives are available for different applications, all of which are largely maintenance and wear-free.

Both adaptable control and safety systems as well as different rope spooling systems can be combined for changing requirements in terms of operating comfort, safety in use, and the different carrier vehicles.

In addition, the cable winch can be equipped with useful accessories such as cable payout systems, electronic pulling force monitoring, or radio control systems.

The versatility of the product range extends from standard winches such as recovery cable winches for fire brigades and techical relief organisations, to customer-specific system solutions.

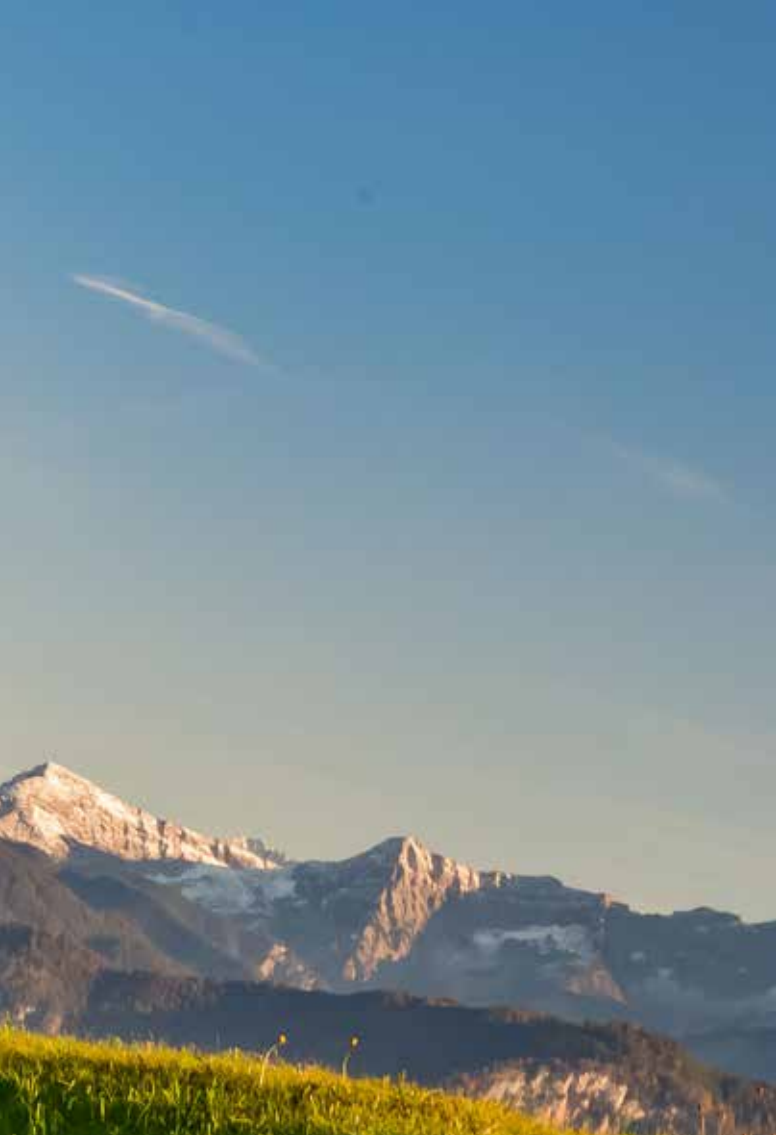
Modular system

Pfanzelt's cable winch units can be individually assembled using a modular system.

The high flexibility applies both to the unit itself and the design of the individual components - for example, the drive can be provided by a hydraulic motor or a mechanical connection.

In addition, various drum widths, adapted to the required rope length, are available. These can also be combined.

Made in Germany



Typical areas of application:

- Rescue vehicles
- Fire-fighting, set-up, and equipment trolleys
- Military vehicles
- Trucks for construction, landscape and water management
- Oil field vehicles

Recovery winch MySelf

Both in agriculture and forestry, as well as in environmental care, a winch is often needed to recover vehicles or equipment. The front recovery winch MySelf was designed exactly for this purpose. A hydraulically controlled cable winch of a simple construction for the quick coupling triangle. This means that, in the event of a rescue operation, it is installed and removed in no time at all.

Made in Germany

Front winch MySelf	BW 0105	BW 0105 for front panel shield
Pulling force of lower cable layer	50 kN	50 kN
Pulling force of upper cable layer	35 kN	35 kN
Worm gear unit in oil bath	●	●
Special forestry cable, highly compacted	12 mm dia. x 50 m	12 mm dia. x 50 m
Coupling for quick cable pull-out	Jaw clutch	Jaw clutch
Average rope speed at 80 l/min	10.1 m/ min	10.1 m/ min
Shield width	1,010 mm	1,600 mm
Weight (incl. rope)	approx. 200 kg	approx. 1.000 kg

● Standard ○ Option – Not available

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.