

## 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 wagon 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 PORTY and MC cable winches with emergency crank handles. Therefore, if there is a loss of electrical power, you can raise or lower the load by hand.

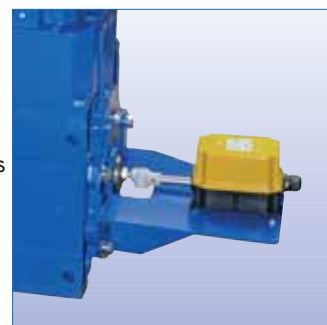
## Manual brake venting

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

## Spindle limit switch

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

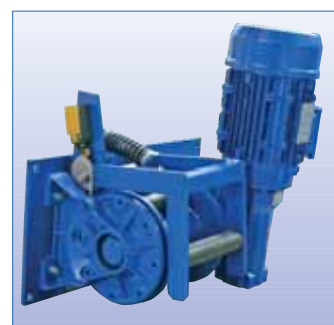
We can equip the switch with up to five contacts on request. Therefore, you can switch something at interim positions (e.g. the alarm horn) or switch to a lower speed with cable winches that have two speeds.



## Slack wire switch

A slack wire switch determines whether the cable is laden or unladen. The cable winch is switched off automatically once the load is set down.

This is advantageous for example in filling stations.



## Disengaging clutch

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

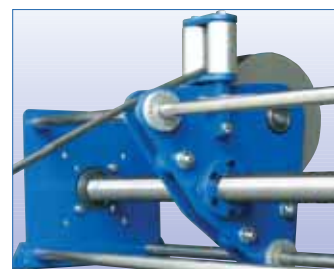
The cable can then be easily wound by hand and does not have to be unwound at cable speed using a motor. Freewheeling couplings are only permissible for traction winches. The scored drum and cable contact roller options are recommended in order to ensure that the unladen cable is wound in an orderly manner.



## Spooling device

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

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





Manual control button for direct controller



Contactor controller



Radio control



Pushbuttons in the switch cabinet door



Manual control button for contactor controller



Selector switch



Mains isolator



Wall-mounted switch



Mains connection cable



Device attachment plug

## Control

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

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

A contactor controller must be used for this because the control circuit is low voltage (42 V). This is also part of the optional manual control button and therefore also increases your safety.

You can use a frequency converter controller to move at two adjustable speeds as standard. Braking and start-up ramps are freely programmable.

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

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

## Operation

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

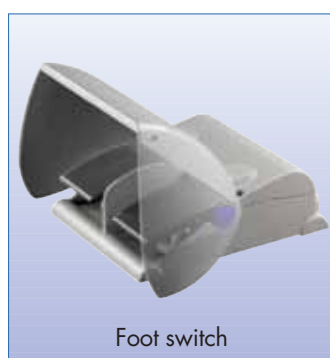
The prerequisite for this is that you use a contactor controller or a frequency converter controller. Each of the operations contains the "UP" and "DOWN" pushbuttons and an "EMERGENCY STOP" palm switch. If you require additional operating points, you can select the desired operating point on a selector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

## Control options

The power cord or the device attachment plug provide the winch with an electrical connection to the mains and consist of the desired length of connection cable and one of the plugs that correspond to the cable winch's operating voltage and power.

A mains isolator can be used to power off the cable winch (e.g. for servicing purposes) in the same way as a mains connection plug also can.

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



Foot switch

## Wire ropes

Rope diameter mm	TYPE 6 x 19 + IWRC 6 x 36 + IWRC (as of 10 mm) 1960 N/mm <sup>2</sup> galvanised, non-rotation resistant		TYPE 17 x 7 + IWRC 1960 N/mm <sup>2</sup> galvanised, rotation resistant		Plus tailoring of rope  Order No. One side welded, other side with thimble
	Min. breaking force kN	Order No. per meter	Min. breaking force kN	Order No. per meter	
4	10.4	<b>C04619</b>	10.3	<b>C04177</b>	<b>C04001</b>
5	16.2	<b>C05619</b>	16.1	<b>C05177</b>	<b>C05001</b>
6	23.4	<b>C06619</b>	23.1	<b>C06177</b>	<b>C06001</b>
7	31.8	<b>C07619</b>	31.5	<b>C07177</b>	<b>C07001</b>
8	41.6	<b>C08619</b>	41.1	<b>C08177</b>	<b>C08001</b>
9	52.7	<b>C09619</b>	52.1	<b>C09177</b>	<b>C09001</b>
10	69.8	<b>C10636</b>	64.3	<b>C10177</b>	<b>C10001</b>
11	84.4	<b>C11636</b>	77.8	<b>C11177</b>	<b>C11001</b>
12	100.5	<b>C12636</b>	92.6	<b>C12177</b>	<b>C12001</b>
13	118	<b>C13636</b>	109	<b>C13177</b>	<b>C13001</b>
14	136.8	<b>C14636</b>	126	<b>C14177</b>	<b>C14001</b>
16	178.7	<b>C16636</b>	165	<b>C16177</b>	<b>C16001</b>
18	226.2	<b>C18636</b>	208	<b>C18177</b>	<b>C18001</b>
20	279.3	<b>C20636</b>	257	<b>C20177</b>	<b>C20001</b>
22	337.9	<b>C22636</b>	-	-	<b>C22001</b>
24	402.2	<b>C24636</b>	-	-	<b>C24001</b>
26	472	<b>C26636</b>	-	-	<b>C26001</b>
28	547.4	<b>C28636</b>	-	-	<b>C28001</b>

## Stainless steel wire ropes

Rope diameter mm	TYPE 7 x 19 1570 N/mm <sup>2</sup> stainless steel (V4A) non-rotation resistant		TYPE 18 x 7 1570 N/mm <sup>2</sup> stainless steel (V4A) rotation resistant		Plus tailoring of rope  Order No. One side welded, other side with thimble
	Min. breaking force kN	Order No. per meter	Min. breaking force kN	Order No. per meter	
4	8.34	<b>C04719</b>	9	<b>C04187</b>	<b>C04002</b>
5	13	<b>C05719</b>	13	<b>C05187</b>	<b>C05002</b>
6	18.7	<b>C06719</b>	19	<b>C06187</b>	<b>C06002</b>
7	25.5	<b>C07719</b>	27	<b>C07187</b>	<b>C07002</b>
8	33.3	<b>C08719</b>	34	<b>C08187</b>	<b>C08002</b>
9	-	-	-	-	-
10	52.1	<b>C10719</b>	53	<b>C10187</b>	<b>C10002</b>
11	-	-	-	-	-
12	75	<b>C12719</b>	77	<b>C12187</b>	<b>C12002</b>
13	-	-	-	-	-
14	102	<b>C14719</b>	107	<b>C14187</b>	<b>C14002</b>
16	133	<b>C16719</b>	135	<b>C16187</b>	<b>C16002</b>
18	-	-	-	-	-
20	-	-	-	-	-
22	-	-	-	-	-
24	-	-	-	-	-
26	-	-	-	-	-
28	-	-	-	-	-

### 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 ropes and limit stop equipment

We mostly use steel wire ropes according DIN EN 12385-4 for PLANETA-winch. But some applications require higher tensile strengths or a durable corrosion protection. Then steel with 1960 N/mm<sup>2</sup> or higher, stainless steel wires and nylon ropes have to be used. They differ much in way of twisting, flexibility, duration, breaking strength or twist-free characteristic.

Winches with one rope only that lifts unguided loads have to use a wire rope which does not twist open under tension. Those ropes belong to the group of twist-poor ropes. Ropes are selected according their future use. It is most helpful to know in advance as many parameters as possible to make the correct decision.

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

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

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

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

### SIKA swivel load hook, grade 8

TYPE	Capacity kg	Weight kg	Order No.
<b>WHS-1,12</b>	1120	0.65	<b>D00150</b>
<b>WHS-2,00</b>	2000	0.95	<b>D00151</b>
<b>WHS-3,15</b>	3150	1.71	<b>D00152</b>
<b>WHS-5,30</b>	5300	2.97	<b>D00153</b>
<b>WHS-8,00</b>	8000	5.60	<b>D00154</b>
<b>WHS-12,5</b>	12500	9.50	<b>D00155</b>



### SIKA hook with eye, grade 8

TYPE	Capacity kg	Weight kg	Order No.
<b>OHS-06</b>	1120	0.6	<b>D00160</b>
<b>OHS-08</b>	2000	1.0	<b>D00161</b>
<b>OHS-10</b>	3150	1.5	<b>D00162</b>
<b>OHS-13</b>	5300	3.5	<b>D00163</b>
<b>OHS-16</b>	8000	5.5	<b>D00164</b>
<b>OHS-20</b>	12500	7.6	<b>D00165</b>



### Stainless steel swivel load hook, grade 8

TYPE	Capacity kg	Weight kg	Order No.
<b>WHN-025</b>	250	0.2	<b>D02150</b>
<b>WHN-05</b>	500	0.3	<b>D02151</b>
<b>WHN-1</b>	1000	1.0	<b>D02152</b>
<b>WHN-2,4</b>	2400	1.4	<b>D02153</b>
<b>WHN-3,8</b>	3850	2.3	<b>D02154</b>
<b>WHN-5</b>	5000	3.8	<b>D02155</b>



### Stainless steel hook with eye, grade 8

TYPE	Capacity kg	Weight kg	Order No.
<b>OHN-025</b>	250	0.1	<b>D02160</b>
<b>OHN-045</b>	450	0.2	<b>D02161</b>
<b>OHN-1,5</b>	1500	0.8	<b>D02162</b>
<b>OHN-2,4</b>	2400	1.4	<b>D02163</b>
<b>OHN-3,8</b>	3850	3.0	<b>D02164</b>
<b>OHN-5</b>	5000	4.8	<b>D02165</b>





## Wire cable blocks

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

**CI/R = with cast iron roller(s) with plain bearing**

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

**ST/B = with steel roller(s) with ball bearing**

### Wire cable block, single-roll



Load bearing capacity at hook t	Roller outer Ø mm	Roller basic Ø mm	Max. wire rope Ø mm	Housing width mm	Base width mm	Axis length mm	Installation length at hook mm	Weight approx. kg	Order No. CI/R	Order No. ST/R	Order No. ST/B
0.5	100	80	7	130	25	55	385	3.5	D01500	D01508	D01516
1	125	105	9	150	30	55	430	4.5	D01501	D01509	D01517
2	150	125	11	165	33	65	500	7.5	D01502	D01510	D01518
3	175	145	12	210	41	82	640	15	D01503	D01511	D01519
3	200	170	15	210	41	82	640	15.5	D01504	D01512	D01520
5	225	185	16	265	45	85	740	24	D01505	D01513	D01521
5	250	210	18	265	45	85	740	25	D01506	D01514	D01522
8	310	260	23	325	52	110	890	45	-	D01515	D01523

### Wire cable block, double-roll



Load bearing capacity at hook t	Roller outer Ø mm	Roller basic Ø mm	Max. wire rope Ø mm	Housing width mm	Base width mm	Axis length mm	Installation length at hook mm	Weight approx. kg	Order No. CI/R	Order No. ST/R	Order No. ST/B
1	100	80	7	130	30	81	410	5	D01530	D01537	D01544
1.6	125	105	9	150	33	86	440	7	D01531	D01538	D01545
3	150	125	11	165	41	113	525	12	D01532	D01539	D01546
5	175	145	12	210	45	130	680	23	D01533	D01540	D01547
5	200	170	15	210	45	130	680	24	D01534	D01541	D01548
8	225	185	16	265	52	150	785	38.5	D01535	D01542	D01549
8	250	210	18	265	52	150	785	40.5	D01536	D01543	D01550

### Wire cable block, single-roll, hinged

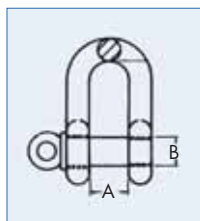


Load bearing capacity at hook t	Roller outer Ø mm	Roller basic Ø mm	Max. wire rope Ø mm	Housing width mm	Base width mm	Axis length mm	Installation length at hook mm	Weight approx. kg	Order No. CI/R	Order No. ST/R	Order No. ST/B
0.5	100	80	7	130	25	55	350	3.5	D01560	-	D01576
1	125	105	9	150	30	61	390	4.5	D01561	-	D01577
2	150	125	11	165	33	73	435	7.5	D01562	-	D01578
3	175	145	12	210	41	90	580	15	D01563	D01571	D01579
3	200	170	15	210	41	90	580	15.5	D01564	D01572	D01580
5	225	185	16	265	45	105	700	24	D01565	D01573	D01581
5	250	210	18	265	45	105	700	25	D01566	D01574	D01582
8	310	260	23	325	52	120	810	41	D01567	D01575	D01583

Other sizes on request.

## High-strength galvanised shackle

Design A  
**G 209**  
(curved)  
with eye bolt



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



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



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



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

\* Only as eye bolt available.