

# Wire Rope Winches & Hoists

## LB Console-Mounted Wire Rope Winches



150-350 kg

Galvanized design

### SW K-LB Wire Rope Winch galvanized design

We have designed manual lifting to be not only safe but also ergonomic: The friction disk brake equipped with a shuttle valve on our wire rope winch prevents from unintentional lowering of the load in every position. The galvanized wire rope winches with tension loads of 150 kg up to 1350 kg have been galvanized in order to improve corrosion protection.



Stainless steel design  
650 kg



250 kg

Stainless steel design

### SW K-LB-VA Wire Rope Winch stainless steel design

The robust high-quality wire rope winch LB made of stainless steel V2A. Suitable for outside use.

It does not matter whether used as winch for lifting, the opening of sliders and gates or for the lifting or lowering of wet-pit pumps – our console-mounted hand wire rope effortlessly succeeds.

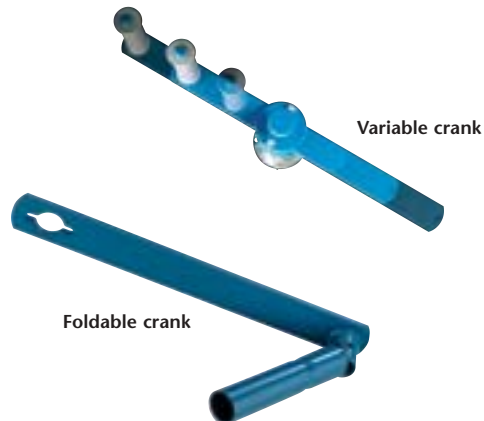
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Galvanized design  
650-900 kg



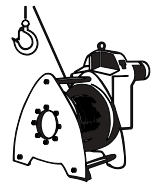
Stainless steel design  
1000 kg



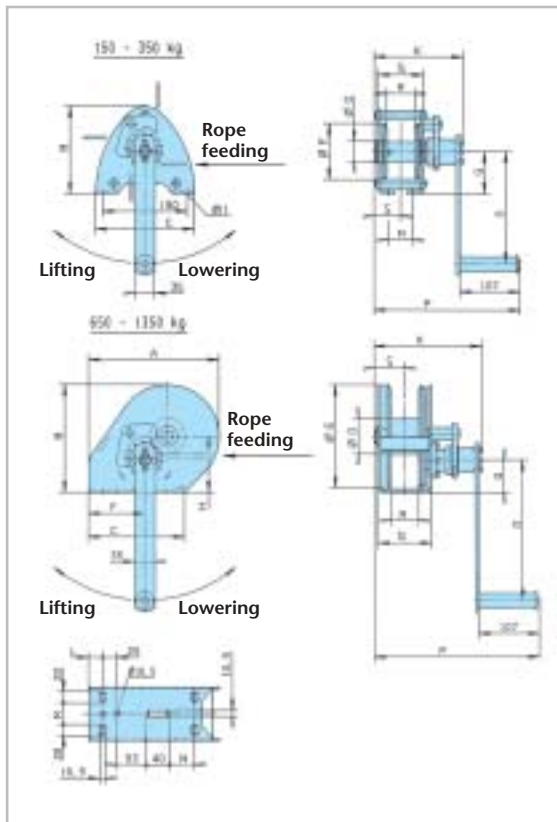
Variable crank

Foldable crank

# Wire Rope Winches & Hoists



## LB Console-Mounted Wire Rope Winches



LB 1350 kg  
with automatic uncoil  
(for manual pulling-off the  
unloaded wire rope)

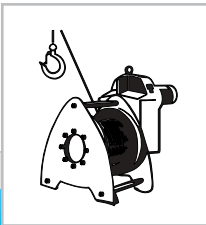
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Art. No.		030239016	030239015	030239004	030239006	030239008	-	-	-
Galvanized design							-	-	-
Automatic uncoil		-	-	-	030239007	030239009	-	-	-
Stainless steel design		-	-	-	-	-	030239017	030239012	030239013
Lifting capacity - 1 <sup>st</sup> rope layer	kg	150	350	650	900	1350	250	650	1000
Lifting capacity - upper rope layer	kg	75	170	290	400	480	125	290	360
Drive group DIN 15020		1 Em	1 Em	1 Em	1 Em	1 Em	1 Em	1 Em	1 Em
Wire rope Ø	mm	4*	4*	6*	7*	7**	4*	6*	7*
Wire rope capacity - 1 <sup>st</sup> layer	m	0,8	1,8	1	0,8	1	1,8	1	1
Wire rope capacity - total	m	11	20	20	14	26	19,5	20	26
Lift per crank rotation	mm	125	125	55	58	45	125	55	45
Required crank pressure	daN	17	25	22	24	24	20	22	24
Weight	kg	4,2	4,8	7,3	10	12,1	4,8	7,6	12,1
A	mm	-	-	232	232	273	-	232	273
B	mm	155	155	192	192	266	155	192	266
C	mm	175	175	170	170	240	175	170	240
Ø D	mm	36	36	63,5	63,5	63,5	36	63,5	63,5
Ø E	mm	100	100	183	183	255	100	183	255
F	mm	-	-	100	100	78	-	100	78
G	mm	75	75	58	58	75	75	58	75
H	mm	-	-	100	100	138	-	100	138
K	mm	159	189	192	192/226***	192/226***	191,5	190	190
L	mm	-	-	25	25	35	-	25	35
M	mm	45	75	38	38	30	75	38	30
N	mm	-	-	-	-	53	-	-	53
O	mm	200	320	250	320	320	320	250	250
P	mm	260	290	293	293/303***	293/303***	292,5	291	291
R	mm	50	80	50	50	50	80	50	50
Q	mm	81	111	95	95	95	111	95	95
S	mm	48	63	55	55	55	65,5	55	55

\*recommended wire rope: DIN 3060 FE-znk 1770 sZ-spa

\*\*recommended wire rope: DIN 3060 SE-znk 2160 sZ-spa

\*\*\*automatic uncoil

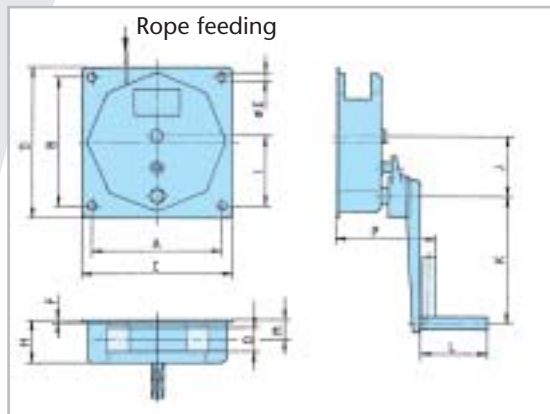


# Wire Rope Winches & Hoists

## SW-W Wall-Mounted Wire Rope Winch



SW-W Wall-Mounted Wire Rope Winch



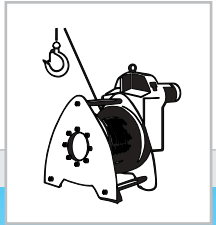
Good ideas make life easier: Our wall-mounted wire rope winches 80 and 125 kg are supplied with removable crank, inside braked spring retention and aluminum housing. Industrial and plant construction, agriculture as well as wholesale will find the SW winch perfect equipment for most requirements, as they are robust and superbly engineered. For a tensile load of 300 kg or more, Pfaff-silberblau offers you winches with spur-gear units, an externally mounted safety spring-loaded crank and steel panel housing. We can also supply you with a safety lock-off with removable hand crank.

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Art. No.		040271017	040271008	030271001	030271136	030271019	
Lifting capacity	1 <sup>st</sup> layer	kg	80	125	300	500	750
	Upper layer	kg	45	65	220	350	550
Drive Group	DIN 15020		1Em	1Em	1Em	1Em	1Em
Drum Ø	N	mm	51	40	108	108	108
Drum length		mm	60	60	50	50	50
Wire rope Ø		mm	3*	4*	5**	6**	7**
Wire rope capacity	1 <sup>st</sup> layer	m	2,4	2	2,1	2,4	2
	Upper layer	m	30	12	15	15	10
Lift per crank rotation		mm	170	138	68	35	35
Required crank pressure		daN	12	13	15	13	20
Weight		kg	3	3	10	11	11
A		mm	110	110	250	250	250
B		mm	110	110	250	250	250
C		mm	130	130	290	290	290
D		mm	130	130	290	290	290
Ø E		mm	9	9	14,5	14,5	14,5
F		mm	15	15	2	2	2
H		mm	121	121	85	85	85
I		mm	55	55	138	138	138
J		mm	-	-	117	117	117
K		mm	250	250	250	250	250
L		mm	130	130	130	130	130
M		mm	68	68	39	39	39
O		mm	60	60	50	50	50
P		mm	275	275	192	192	192

\*recommended wire rope: DIN 3055 FE-znK 1770 sZ-spa  
 \*\*recommended wire rope: DIN 3060 FE-znK 1770 sZ-spa

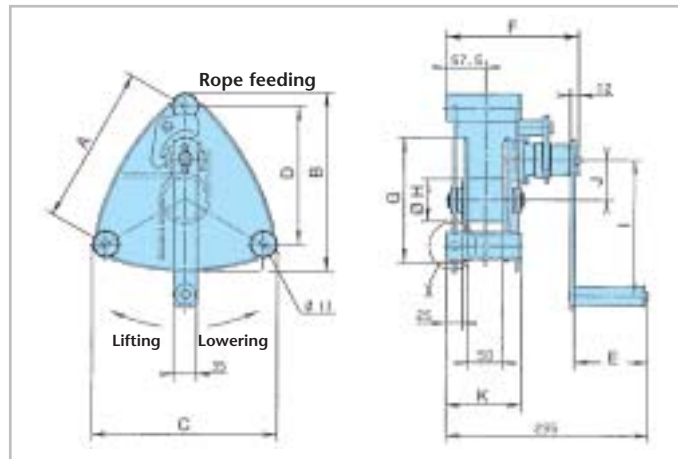
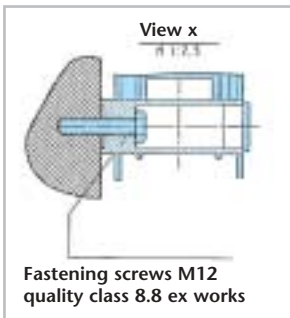
# Wire Rope Winches & Hoists



## SW-W ALPHA Wall-Mounted Wire Rope Winches

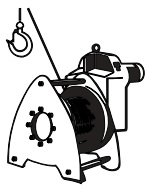
### ALPHA Wall-Mounted Wire Rope Winch

Here is the solution for lifting and lowering of loads: the wall-mounted wire rope winch ALPHA is so versatile, smooth running and safe in handling that nearly no one in wholesale, mechanical engineering or agriculture is willing to dispense with it. Equipped with a toothed spur wheel back gear, low net weight and compact design makes this winch meet every requirement. Easily mounts onto the wall with rope output possible in every direction. Our hand wire rope winch can be delivered in galvanized design.



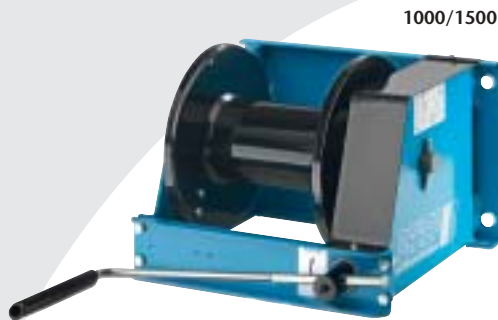
Art. No.		030272006	030272005	030272002	030272001	
Lifting capacity	1 <sup>st</sup> layer	kg	300	500	750	1000
	upper layer	kg	130	230	270	360
Drive group	DIN 15020	1Em	1Em	1Em	1Em	
Drum Ø	mm	63	63	63	63	
Drum width	mm	50	50	50	50	
Wire rope Ø*	mm	5	6	7	7	
Wire rope capacity	1 <sup>st</sup> layer	m	1,3	1	1	1
	upper layer	m	28	20	26	26
Lift per crank rotation	mm	57	55	45	45	
Required crank pressure	daN	13	17	17	18	
Weight	kg	10	10	16	16	
A	mm	234	234	306	306	
B	mm	262	262	337	337	
C	mm	274	274	357	357	
D	mm	203	203	265	265	
E	mm	107	107	107	107	
F	mm	194	194	194	194	
G	mm	183	183	255	255	
H Ø	mm	63	63	63,5	63,5	
I	mm	200	250	250	320	
J	mm	58,6	58,6	92,5	92,5	
K	mm	109,5	109,5	107	107	

\*recommended wire rope: DIN 3060 FE-znK 1770 sZ-spa



# Wire Rope Winches & Hoists

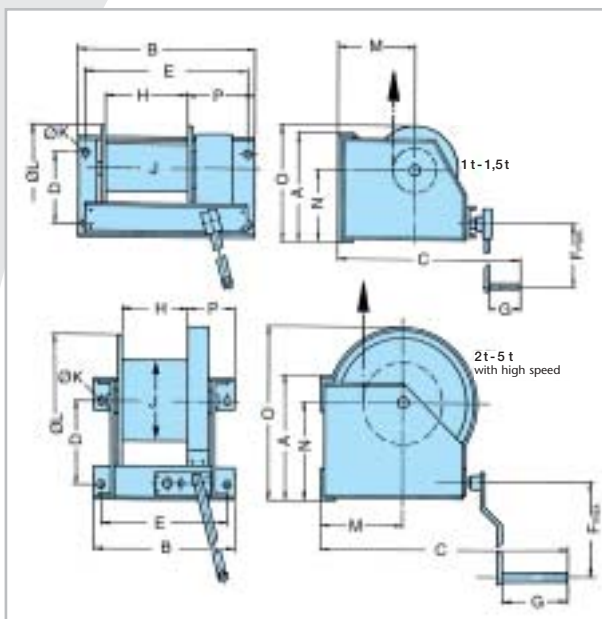
## Wall-Mounted Wire Rope Winches With Worm Gear



1000/1500 kg



2000-5000 kg



### SW W-SGO Wall-mounted Wire Rope Winch with worm gear

Strength is easy to prove: For the lifting and lowering of loads our hand manual wire rope winch with worm gear and additional friction disk brake is mounted onto the wall and takes up to 5 tons tension loads. Winch housing and rope drum is made of robust steel plate. Sizes from 2 tons upwards are equipped with an additional speed increasing ratio used for overdrive.

#### Options:

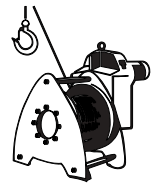
- Multi-compartment
- Zinc plated
- Grooved drum

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Art. No.		030253006	030253000	030254002	030255009	030256013	
Lifting capacity	1 <sup>st</sup> layer	kg	1000	1500	2000	3000	5000
	upper layer	kg	500	850	1100	2000	3300
Wire rope capacity	1 <sup>st</sup> layer	m	4,5	4,5	4	5	4,5
	upper layer	m	46	38	37	34,5	33,8
Wire rope Ø*		mm	9	10	13	16	20
Lift per crank rotation		mm	21	18	8/16**	7/14**	8/16**
Required crank pressure		daN	10,6	16	9/18**	12/24**	25,2/50,4**
Weight		kg	26	28	60	78	105
A		mm	201	238	295	356	421
B		mm	348	378	410	436	436
C		mm	490	490	740	825	865
D		mm	141	178	196	251	316
E		mm	316	346	360	386	386
F		mm	350	350	380	380	380
G		mm	140	140	250	250	250
H		mm	160	185	180	205	200
J Ø		mm	101,6	101,6	133	165,1	219,1
K Ø		mm	17	17	25	25	25
L Ø		mm	240	240	312	376	437
M		mm	164	164	208	260	298
N		mm	140	142	249	308	335
O		mm	260	263	419	550	613
P		mm	127	127	137	137	138

\*recommended wire rope DIN 3060 FE-znK-1770 sZ spa

\*\*load / high speed



## Console-Mounted Aluminium Wire Rope Winches

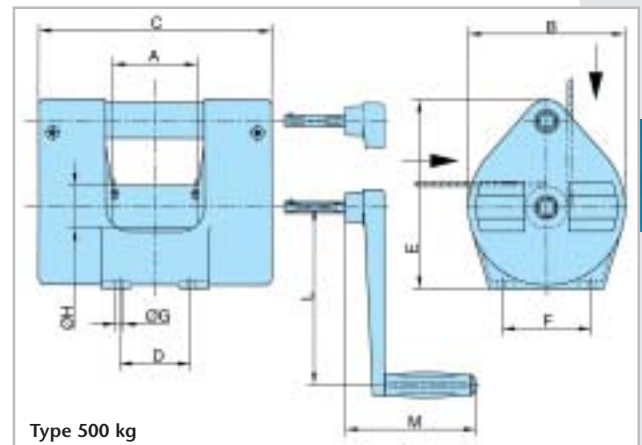
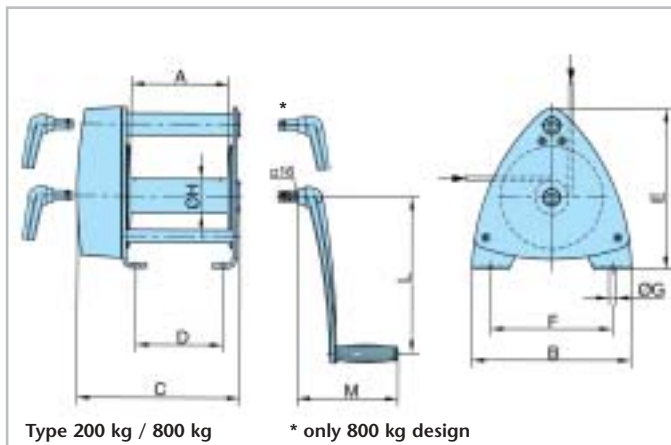
### SW K GAMMA Console-Mounted Aluminum Wire Rope Winch

The wire rope winch GAMMA is a drum winch equipped with closed sprocket wheel drive and made of aluminum. Therefore it is especially suitable for outdoor application.

Winches with tension load of 500 kg and more are equipped with an additional speed increasing ratio for winding and unwinding the unloaded rope. The winch allows mounting in every position, can comfortably be operated from either end of the winch and is equipped with a removable crank. The spring retention is located inside and therefore maintenance free. As an option for 800 kg winches, a drum separation plate for double rope operation can be delivered.



800 kg



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Art. No.		040270004	040270001	040270006
Lifting capacity 1 <sup>st</sup> layer	kg	200	500	800
upper layer	kg	110	200	350
Wire rope capacity 1 <sup>st</sup> layer	m	3,6	4,2	5,3
upper layer	m	40	50	78
Drive group DIN 15020/1		1 Em	1 Em	1 Em
Wire rope Ø*	mm	4	6	7
Lift per crank rotation	mm	195	60/400**	36/280**
Required crank pressure	daN	19	12	18
Ratio of transmission		–	6,57:1	7,57:1
Weight	kg	6	14	16
A	mm	120	120	200
B	mm	160	220	326
C	mm	192	330	336
D	mm	152	100	180
E	mm	165	267	327
F	mm	135	125	250
G Ø	mm	9,5	11	14
H Ø	mm	50	60	70
L	mm	320	250	320
M	mm	207	165	207

\*recommended wire rope DIN 3060 FE-znK-1770 sZ spa  
\*\*load /high-speed



200 kg



500 kg



# Wire Rope Winches & Hoists

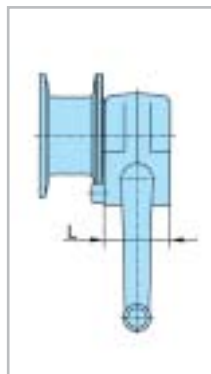
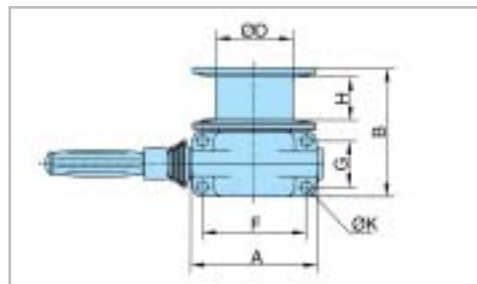
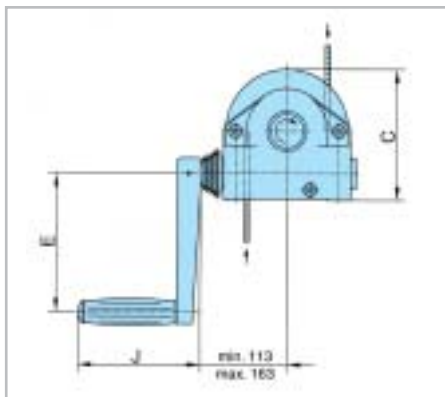
## Console-Mounted Aluminium Wire Rope Winches



### SW KAL Console-Mounted Aluminium Wire Rope Winch (Compact wire rope winch)

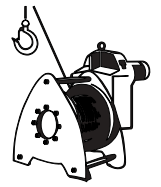
The smaller it is – the more important it can be: Our compact wire rope winch made of aluminium is of a closed construction and therefore maintenance-free. For tension loads from 750 kg up to 1120 kg it is your perfect partner for superstructures on vehicles and trailers (with freewheeling device) as well as for lifting and lowering of wet-pit pumps in sewage works. Many of those comfortable features – like absolutely smooth running and a self-locking worm gear or low-friction shaft gearing provide the comfortable operation, longlife and safety you have come to expect from Pfaff-silberblau.

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Art. No.			030207004	030208000
Lifting capacity	1 <sup>st</sup> layer	kg	750	1120
	upper layer	kg	600	600
Wire rope capacity - total		m	10	10
Wire rope Ø*		mm	6	7
Drum-Ø		mm	100	63
Lift per crank rotation		mm	15	11
Required crank pressure		daN	20	22
Weight		kg	7	7
A		mm	165	165
B		mm	168	168
C		mm	170	170
Ø D		mm	100	63
E		mm	180	180
F		mm	135	135
G		mm	60	60
H		mm	56	50
Ø K		mm	13	13
J		mm	160	160
L		mm	85	85

\*recommended wire rope DIN 3060 SE-znK-1770 sZ spa



## LAMBDA Console-Mounted Wire Rope Winches

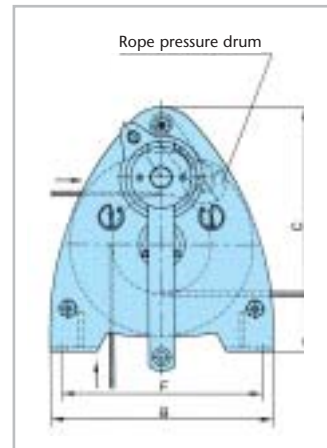
### SW K LAMBDA Console-Mounted Wire Rope Winch BGV C1 (VBG 70)

Spotlight on: the console-mounted wire rope winch LAMBDA has a grand entrance when used as drum winch in studios and theatres, fashion and warehouses – ideal for use wherever heavy objects weighing up to 300 kg have to be safely moved above peoples' heads. A double-acting safety retaining spring reliably holds the load in every position. It is driven by a single-stage, spur toothed pair of internal geared wheels. This corresponds to the newest rules for prevention of accidents BGV C1 (DIN 56925) as well as the prototype- and safety-test (GS-test – tested safety) of the committee for lifting equipment.

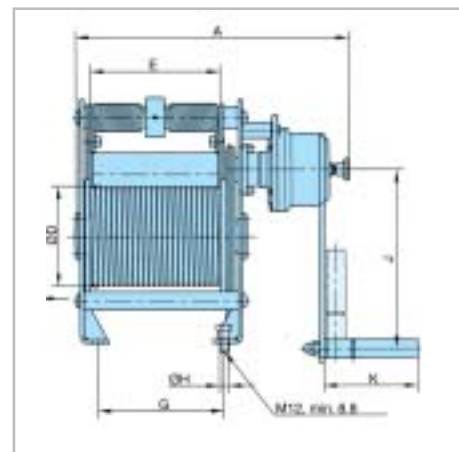


#### Options:

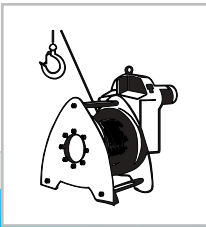
- Wall bracket
- Drum with multiple cables grooves



Art. No.		030272015	030272017
Lifting capacity	kg	300	300
Drive group DIN 15020/1		2m	2m
Max. wire rope capacity in 1 lay.	m	10	15
Wire rope Ø*	mm	6	6
Req. crank press. at max. load	daN	18	18
Transmission ratio		8,83:1	8,83:1
Lift per crank rotation	mm	50	50
Weight	kg	30	36
Lift	m	10	15
A	mm	379	469
B	mm	310	310
C	mm	340	340
Ø D	mm	133,4	133,4
E	mm	180	270
F	mm	280	280
G	mm	175	265
Ø H	mm	13	13
J	mm	250	250
K	mm	130	130

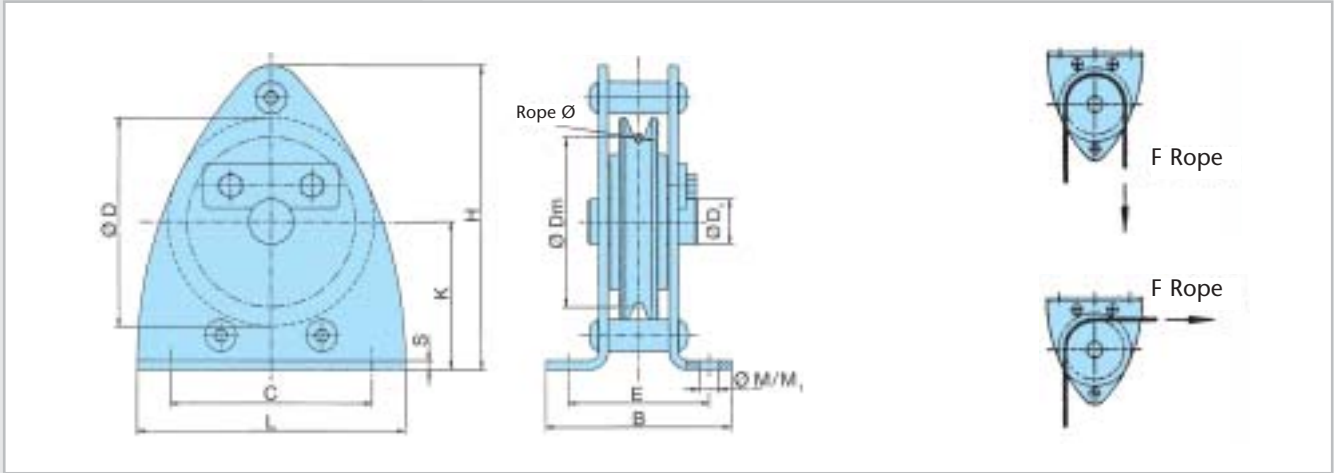


\* recommended steel rope 6 DIN 3069 SE-znk-1960-sZ-spa, (calc. breaking stress min. 30,4 kN)



# Accessories for Pfaff-silberblau Hand Winches

## Sheave Block for Wire Rope Guidance



Art. No.	Type	D Ø mm	Rope Ø mm	Dm Ø	Drive group FEM	Max. tensile load kg at deflection		Ball bearing	D <sub>1</sub> Ø mm	L Ø mm	C mm	H mm	B mm	E mm	S mm	K mm	M/M <sub>1</sub> Ø mm
						90°	180°										
033447103	DSRB S 90/4	90	3-4	80	2m	700	500	6004ZZ	20	120	90	134	85	65	4	65	9/9
033447413	DSRB S 90/6	90	5-6	78	1Dm	700	500	6205ZZ	25	120	90	134	85	62	6	65	9/9
033447106	DSRB S 145/7	145	7	126	1Am	1100	800	6306ZZ	25	200	160	224	125	88	6	110	11,5/13
033447107	DSRB S 185/8	185	8	160	2m	2300	1630	6306ZZ	30	245	195	273	138	106	8	135	13,5/15
033447111	DSRB S 270/12	270	9-12	246	2m	2500	1800	6208ZZ	40	360	290	407	191	138	10	202	18/20
033447113	DSRB S 400/16	400	13-16	368	3m	5000	3800	6310ZZ	50	530	430	612	302	212	15	310	26/30
033447115	DSRB S 490/20	490	20	450	3m	8000	6000	6313ZZ	65	650	580	694	313	220	16	340	34/40

All wire cable reels are also available individually on request.

### Standard cables for Pfaff-silberblau hand winches

Galvanized 6 x 19 design in accordance with DIN 3060, with fiber inlay at one end with pressed in thimble and ultra-strong safety hook, and point-cut (blunt) at the other. Please refer to the table below for the order number required, taking account of the cable diameter and length.

Rope Ø	Calculated breaking strength	Rope lengths				Lifting capacity of eye hooks
		5 m	10 m	15 m	20 m	
4 mm - DIN 3060	10,1 kN	033600405	033600410	033600415	033600420	500 kg
5 mm - DIN 3060	15,8 kN	033600505	033600510	033600515	033600520	1000 kg
6 mm - DIN 3060	22,8 kN	033600605	033600610	033600615	033600620	1000 kg
7 mm - DIN 3060	31,0 kN	033600705	033600710	033600715	033600720	1000 kg
7 mm - DIN 3069 *	43,9 kN	-	-	033601715	-	1600 kg

\*Cable with higher breaking strength for wire rope winch LB 1350 kg

### Additional accessories available on request

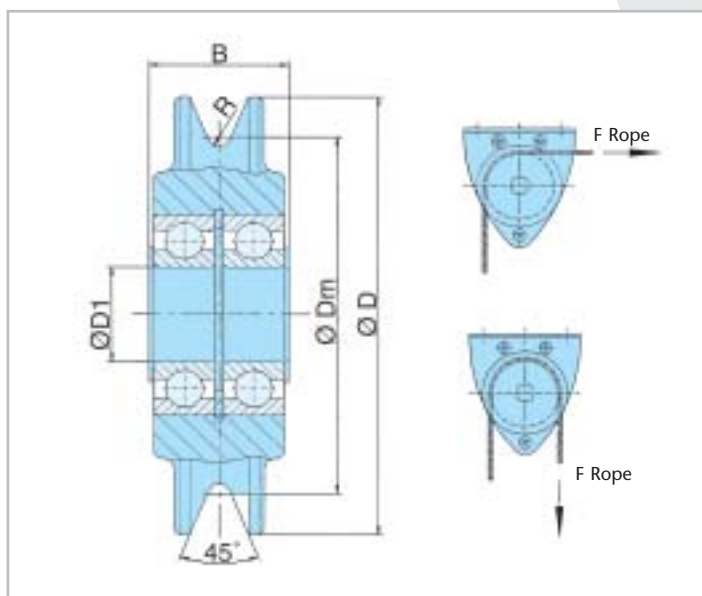
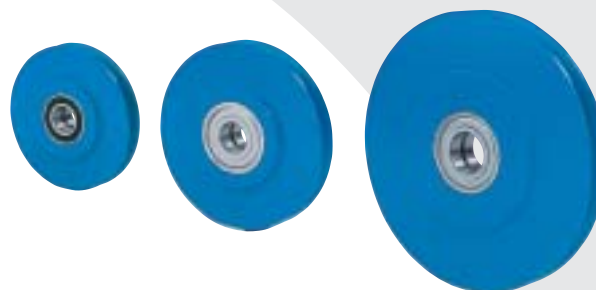
- Cable suspension gear (1 to 4-strand)
- Sling ropes with loops at both ends
- High-strength shackles
- Gibs and cotters, turnbuckles
- Wire cable blocks with hooks and swivel eyes
- Hinged wire cable blocks
- Wire rope sheave block with plastic sheave



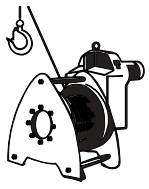
## Sheaves

### DSR Sheaves

The deviation of wire ropes high safety regulations have to be observed. The sheaves DSR made of steel provides a safe concept: due to a wear-resistant rope guide where the machine groove is perfectly adjusted to the wire rope. 15 different types guarantees a made-to-specification solution at loads of up to 8 tons. The sheaves can be varied in wire and sheave diameter (from 80 up to 490 mm) – and as standard all sheaves are equipped with ball bearings. The sheaves are one of the guiding elements within the comprehensive Pfaff-silberblau product range of wire rope winches, wire rope and wire rope pulley blocks.



Art. No.	Type	D mm	Rope Ø mm	Dm mm	Drive group FEM	Tensile load kg at deflection		Ball bearing	D1 Ø mm	R mm	B mm
						90°	180°				
033447202	DSR S 80/4	80	4	66	1Bm	700	500	6004ZZ	20	2,2	28
033447403	DSR S 90/6	90	6	80	1Dm	700	500	6004ZZ	20	3,2	28
033447204	DSR S 145/5	145	5	125	4m	1100	800	6205ZZ	25	2,7	34
033447205	DSR S 145/6	145	6	125	2m	1100	800	6205ZZ	25	3,2	34
033447206	DSR S 145/7	145	7	126	1Am	1100	800	6205ZZ	25	3,7	34
033447207	DSR S 185/8	185	8	160	2m	2300	1630	6306ZZ	30	4,2	42
033447208	DSR S 185/9	185	9	162	1Am	2300	1630	6306ZZ	30	4,8	42
033447209	DSR S 270/10	270	10	245	3m	2500	1800	6208ZZ	40	5,3	41
033447210	DSR S 270/11	270	11	248	3m	2500	1800	6208ZZ	40	6,0	41
033447211	DSR S 270/12	270	12	246	2m	2500	1800	6208ZZ	40	6,5	41
033447212	DSR S 270/13	270	13	244	1Am	2500	1800	6208ZZ	40	7,0	41
033447217	DSR S 325/14	325	14	297	2m	4500	3200	6310ZZ	50	7,5	60
033447213	DSR S 400/16	400	16	368	3m	5000	3800	6310ZZ	50	8,6	61
033447214	DSR S 400/18	400	18	364	2m	5000	3800	6310ZZ	50	9,7	61
033447215	DSR S 490/20	490	20	450	3m	8000	6000	6313ZZ	65	10,8	72



# Wire Rope Winches & Hoists

## BETA PROLINE Electric Wire Rope Winches



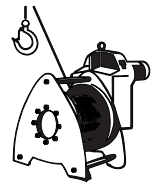
6

Profit from a box of ideas for the lifting, lowering and pulling of loads for your individual application. Pfaff-silberblau electric wire rope winches stand out for their first-class quality combined with reliable and durable drive motors. The gearwheels of the maintenance-free spur gear run in a oil-bath. The spiral gearing of the gear wheel guarantees very smooth running. The strong three-phase motors allows running with flexible supply voltage from 380 up to 420 V/50 Hz. or 440 up to 460 V/60 Hz. - motor protection class IP 54.

Safe winch operation is ensured by a separated contactor control (42 V/50 Hz.) with integrated "Up-Down/Emergency Stop" buttons as well as the master switch. Winches with a lifting capacity of 1000 kg have

electronic overload protection as standard. Pfaff-silberblau electric wire rope winches PROLINE have been developed for high-quality applications within industry, mechanical engineering as well as materials processing and are designed for a theoretic service-life of 400 (1Bm), 800 (1Am) up to 1600 (2m) operating hours when fully loaded. All winches can be operated within temperature ranges of -20°C up to 40°C without special oil filling. Our wire winches are equipped with grooved drums with each one wire fastening at the flanged wheels. If requested we can deliver drums with special grooves and several wires. For special applications you will surely find appropriate accessories for your professional winch!

# Wire Rope Winches & Hoists

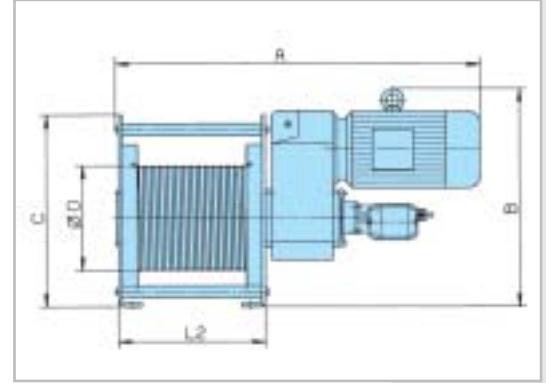


## BETA PROLINE Electric Wire Rope Winches

### SW-E PROLINE Standard Electric Wire Rope Winch

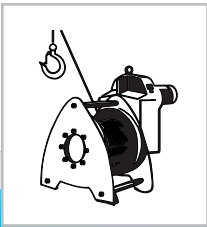
Pfaff-silberblau standard winches are supplied with a wire rope speed and a basic level of equipment which leaves no wishes unfulfilled. The winches are subdivided into 5 sizes (Size 1 - 5). Due to combination of motor capacity and gear transmission, tension loads of 100 up to 7500 kg at rope speeds up to 30 m/min can be supplied from the building block system.

If required our wire rope winches can be delivered with a.c. motors. All winches can be delivered with numerous options (see page 94).



Art. No.	Size	Lifting capacity 1 <sup>st</sup> layer kg	Drive group FEM	Rope speed 1 <sup>st</sup> layer m/min	Motor Power kW	Recomm. Rope Nom. strength N/mm <sup>2</sup>	Rec. Rope Ø* mm	Rope capacity		Weight kg	Dimensions in mm				
								1 <sup>st</sup> layer m	total m		A	B	C	D-Ø	L2
031148012	1	250	2m	9,5	0,42	1770	5	16,2	77,8	61,5	695	333	325	175	264
031148018	1	250	2m	13,8	0,60	1770	5	16,2	77,8	62,9	725	343	325	175	264
031148024	1	250	2m	21,1	0,93	1770	5	16,2	77,8	63,9	725	343	325	175	264
031148007	1	320	2m	5,6	0,32	1960	5	16,2	77,8	62,5	710	333	325	175	264
031148013	1	320	2m	9,6	0,54	1960	5	16,2	77,8	62,9	725	343	325	175	264
031148019	1	320	2m	13,8	0,77	1960	5	16,2	77,8	63,9	725	343	325	175	264
031148025	1	320	2m	21,3	1,19	1960	5	16,2	77,8	67	780	352	325	175	264
031148077	1	500	1 Am	8,5	0,75	1960	6	8,4	58,5	63,9	725	343	325	108	264
031148208	2	500	2m	10,3	0,91	1770	8	17,1	85,5	104	907	490	444	242	338
031148209	2	630	2m	10,3	1,14	1770	8	17,1	85,5	104	907	490	444	242	338
031148219	2	630	2m	20,3	2,25	1770	8	17,1	85,5	110,5	940	490	444	242	338
031148205	2	800	2m	4,8	0,67	1960	8	17,1	85,5	100,9	852	490	444	242	338
031148210	2	800	2m	10,3	1,45	1960	8	17,1	85,5	104	907	490	444	242	338
031148220	2	800	2m	20,5	2,87	1960	8	17,1	85,5	113,5	940	490	444	242	338
031148259	2	980	1 Am	7,5	1,28	1960	9	11	77,4	104	907	490	444	175	338
031148403	3	1250	2m	5,2	1,15	1770	12	16,3	61,3	164,5	1014	614	547	295	406
031148406	3	1250	2m	11,0	2,41	1770	12	16,3	61,3	174	1065	614	547	295	406
031148441	3	1600	1 Am	8,1	2,28	1960	12	12,1	87,7	174	1065	614	547	218	406
031148444	3	1600	1 Am	12,5	3,50	1960	12	12,1	87,7	173	1037	614	547	218	406
031148504	3,5	2000	2m	7,6	2,66	1770	14	13,8	53,9	221	1091	684	547	295	406
031148507	3,5	2000	2m	11,1	3,89	1770	14	13,8	53,9	233,6	1147	684	547	295	406
031148510	3,5	2000	2m	16,3	5,72	1770	14	13,8	53,9	246,4	1258	684	547	295	406
031148505	3,5	2500	2m	7,6	3,35	1770	14	13,8	53,9	224	1091	684	547	295	406
031148502	3,5	2500	2m	5,5	2,40	1770	14	13,8	53,9	221	1091	684	547	295	406
031148511	3,5	2500	2m	16,3	7,15	1770	14	13,8	53,9	246,4	1258	684	547	295	406
031148530	3,5	3200	1 Am	4,5	2,52	2160	14	11,4	64,5	221	1091	684	547	242	406
031148536	3,5	3200	1 Am	9,1	5,10	2160	14	11,4	64,5	233,6	1147	684	547	242	406
031148620	4	3200	2m	21,7	12,19	1770	18	15,6	62	502,6	1408	826	687	364	480
031148644	4	4000	1 Am	6,2	4,38	1960	18	12,7	98,3	434,6	1265	826	687	295	480
031148652	4	4000	1 Am	11,2	7,85	1960	18	12,7	98,3	468,4	1374	826	687	295	480
031148802	5	5000	2m	4,2	3,66	1960	20	20,3	79,2	1047,4	1549	1046	844	451	568
031148804	5	5000	2m	8,6	7,58	1960	20	20,3	79,2	1019,4	1549	1046	844	451	568
031148823	5	6300	1 Am	3,4	3,72	2160	20	16,4	93,4	1047,4	1549	1046	844	364	568
031148825	5	6300	1 Am	7,0	7,71	2160	20	16,4	93,4	1019,4	1549	1046	844	364	568
031148840	5	7500	1 Bm	5,7	7,44	2160	20	13,4	104,8	1019,4	1549	1046	844	295	568
031148842	5	7500	1 Bm	10,2	13,46	2160	20	13,4	104,8	1097,5	1617	1046	844	295	568

\* recommended steel rope DIN 3069 SE-znk-1960, non-rotating



# Wire Rope Winches & Hoists

## Options for BETA PROLINE Electric Wire Rope Winches



Diagram and chart see page 93

# 6

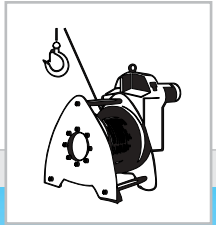
### With infinitely variable rope speeds (on request)

On the BETA electric rope winch from Pfaff-silberblau a converter can be used for infinitely variable speed control purposes. The drive motor is then operated at a frequency between 9 Hz and 87 Hz. The specially designed control system is equipped with a frequency converter, line filter, output throttle and brake resistor (designed for max. 20 % duty cycle during the lowering operation). Jolt-free operation and exact positioning are guaranteed by the integrated control elements.

- Rope pressure drum
- Slack rope switch
- Gear limit switch
- Pendant control box with 3 m control cable
- Electronic overload protection (for winches up to 1000 kg)
- Three-phase current motor with special voltage
- Special kinds of lacquers and preservative
- Freewheeling device (on request)
- Bottom hook block for doubling the hook load
- Mechanical emergency lowering with hand wheel
- Wire rope drum with special grooves (multiple)
- Wire rope drum lengthening for higher wire rope lengthening capacities
- Wire rope pulley blocks and sheaves (see page 91/97)
- Wire ropes (see page 98/99)
- Other motor protection classes
- Shaft and incremental encoders (provided by customer).
- Pole - changing motor for 2 wire rope speeds (on request)

### Standard Equipment

- Infinitely variable speed control via frequency converter
- Integrated gear limit switch (standard)
- Protection class IP 54
- Integrated electronic overload protection (standard)
- EMV-conformity acc. to latest EC-regulations
- Metal control box incl. ventilator
- Motor with integrated PTC resistor (standard)
- Braking resistance IP 20

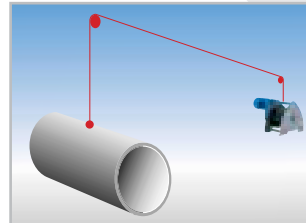


## BETA PROLINE Electric Wire Rope Winches

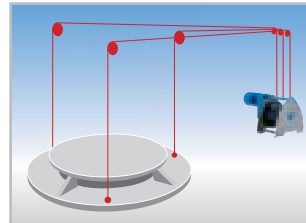
### Application Examples for BETA PROLINE electric wire rope winches

#### Electric wire rope winches - standard design

convincing because of its functional and robust design, along with its effectiveness at the same time. Great capacity range concerning the load, lifting height and its speed. Can be used for goods and building lifts, stacker trucks, slip installations for boats and many other applications. Integrated lift limit stop available upon request.

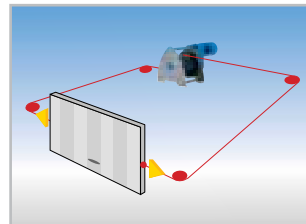


**Electric wire rope winches for operating with several ropes** to elevate expansion bellows, covers and other bulky pieces. The drum is grooved for one rope or for two ropes with additional wire rope fastening attachments. The most modern fabrication allows its use without any compromise. Ideal for theatre applications.



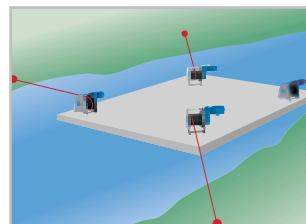
#### Electric wire rope winches for positioning

such as gates, trolleys, etc. The drum is grooved for one rope, but is supplied with a second rope fastening attachment placed face to face with the flanged wheel. The winch is robust, functional and needs little maintenance.



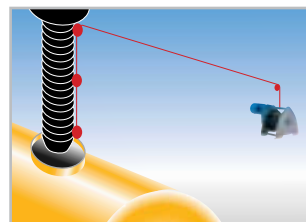
#### Electric wire rope winches with lengthened drum

for a higher rope capacity. A design particularly for moving hydraulic dredgers, ferries and ships.



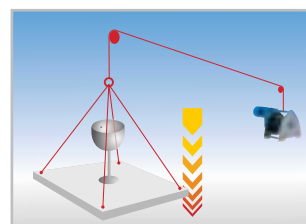
#### Electric wire rope winches with slack rope switch

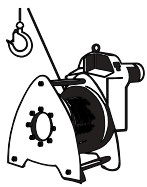
which turns off the winch automatically after the load is set. This type of winch was particularly designed for the environmentally compatible loading of bulk materials in connection with a loading facility and the lowering of the loading blow-pipe. The winch is also usable in many other areas as well.



#### Electric wire rope winches with 2 speeds

through pole-changing driving motor. This robust winch BETA guarantees an exact and precise set up of loads which are particularly sensitive. An unexpected start is avoided by this construction. Know-how through our technical experience.





# Wire Rope Winches & Hoists

## BETA SILVERLINE Electric Wire Rope Winches



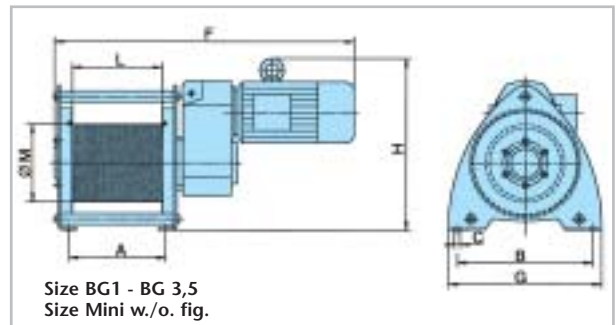
### Electric Wire Rope Winch SW-E BETA SILVERLINE

Why be complicated if Pfaff-silberblau know-how supplies easy and economic solutions:

The sturdy electric rope winch BETA SILVERLINE takes over the effortless lifting, lowering and pulling of all types of loads weighing from 125 up to 3200 kg.

A modern design in combination with practice-proven engineering and high standard of quality gives good service wherever trouble-free, long-lasting operation has to be guaranteed. The maintenance-free fully enclosed spur gear which is running in an oil-bath enables a long service life. Electronic overload protection from 1000 kg is standard for BETA SILVERLINE. The cost-efficient and powerful electric wire rope winch SW-E BETA SILVERLINE can especially be recommended for easy lifting of loads.

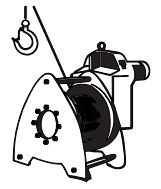
Pfaff-silberblau electric wire rope winches BETA SILVERLINE are only available in already described execution. Further options and special designs will be quoted exclusive for the BETA PROLINE range (Page 93).



Art. No.		Size	Lifting capacity	Rope speed	Drive group FEM	Motor Power	Rope Ø*	Rope capacity		A Ø	B Ø	C	F	G	H	L	M
Directly control	Contactor control with limit switch							1st layer	total								
			kg	m/min		kW	mm	m	m	mm	mm	mm	mm	mm	mm	mm	mm
031140004	-	Mini	125	5,1	1 Bm	0,25	4	7	46,7	185	170	12	379	422	222	180	64
031140000	-	Mini	250	2,5	1 Bm	0,25	4	7	46,7	185	170	12	389	432	241	180	64
031140001	031140006	Mini	250	5,1	1 Bm	0,37	4	7	46,7	185	170	12	389	432	241	180	64
031140005 **	031140015**	Mini	250	3,7	1 Bm	0,55	4	7	46,7	185	170	12	389	432	241	180	64
031148065	031149065	BG 1	500	3,5	1 Am	0,37	6	8,4	58,5	215	300	13,5	710	340	333	200	108
031148129	-	BG 1	630	6,8	1 Bm	0,75	6	6,7	48,9	215	300	13,5	731	340	343	200	86
031148254	031149254	BG 2	980	3,4	1 Am	0,75	9	11	77,5	270	400	18	852	465	490	250	175
-	031149302	BG 2	1250	5,9	1 Bm	1,1	9	8,7	64,1	270	400	18	907	465	490	250	138
-	031149438	BG 3	1600	3,9	1 Am	1,1	12	12,1	87,8	320	510	22	1014	570	614	300	218
-	031149533	BG 3,5	3200	6,3	1 Am	3	14	11,4	64,5	320	510	22	1101	570	684	300	242

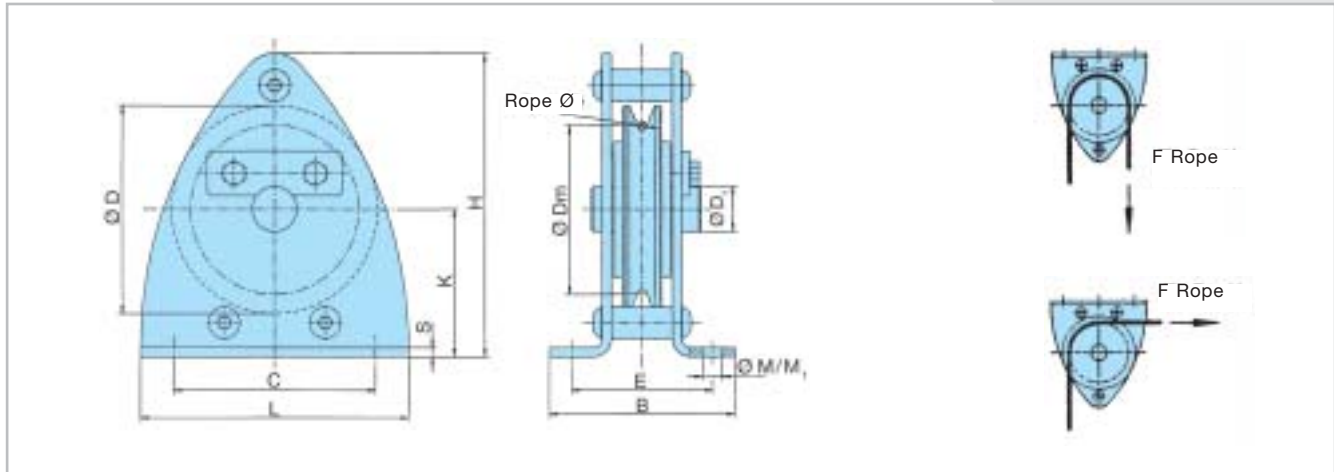
\*recommend steel rope Din 3069 FE-znk-1960 sZ-spa  
\*\*A.C.motor drive 230 V

# Wire Rope Winches & Hoists



## BETA PROLINE and SILVERLINE Electric Wire Rope Winches

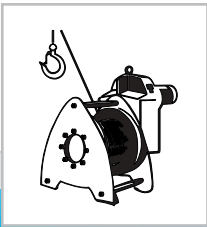
### Wire Rope Sheave Block for BETA PROLINE and SILVERLINE



Guiding with DSRB S wire rope sheave blocks for BETA PROLINE and SILVERLINE electric rope winches. The dynamic all-rounder with variable rope and sheave diameters and cable deflections of up to 180° can move loads of up to 8 t with ease and absolute reliability. Typical for Pfaff-silberblau is the high standard of quality: With a sheave block for manual and powered operation, equipped with grease-filled, sealed ball-bearings as standard. A carefully coordinated system of application-specific cable diameters and matching turned precision cable groove ensures that the unit is also wear-free.

6

Art. No.	Type	D Ø	Rope Ø	Dm Ø	Drive group FEM	Max. tensile load kg at deflection		Ball bearing	D <sub>1</sub> Ø	L	C	H	B	E	S	K	M/M <sub>1</sub> Ø
						90°	180°										
033447103	DSRB S 90/4	90	4	80	2m	700	500	6004ZZ	20	120	90	134	85	62	4	65	9/9
033447104	DSRB S 145/5	145	5	125	4m	1100	800	6205ZZ	25	200	160	224	125	88	6	110	11,5/13
033447105	DSRB S 145/6	145	6	125	2m	1100	800	6205ZZ	25	200	160	224	125	88	6	110	11,5/13
033447107	DSRB S 185/8	185	8	160	2m	2300	1630	6306ZZ	30	245	195	273	138	106	8	135	13,5/15
033447108	DSRB S 185/9	185	9	162	1Am	2300	1630	6306ZZ	30	245	195	273	138	106	8	135	13,5/15
033447111	DSRB S 270/12	270	12	246	2m	2500	1800	6208ZZ	40	360	290	407	191	138	10	202	18/20
033447117	DSRB S 325/14	325	14	297	2m	4500	3200	6310ZZ	50	440	350	490	260	180	12	242	22/25
033447113	DSRB S 400/16	400	16	368	3m	5000	3800	6310ZZ	50	530	430	612	302	212	15	310	26/30
033447114	DSRB S 400/18	400	18	364	2m	5000	3800	6310ZZ	50	530	430	612	302	212	15	310	26/30
033447115	DSRB S 490/20	490	20	450	3m	8000	6000	6313ZZ	65	650	580	694	313	220	16	340	34/40









## Steel Wire Rope

All Pfaff-silberblau electrical rope winches are supplied without load bearing mechanisms as standard. By selecting the optimum rope design and length and associated fastening elements (hooks, shackles) you can be sure that your rope winch will give you reliable service.

It is sensible to select the wire ropes on the basis of design, type of construction and strength to suit the intended use and frequency of use. The properties of the different types of rope design are as follows:

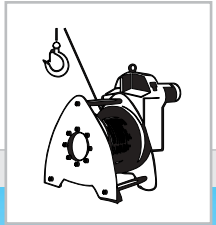
Breaking strength	→	Load bearing capacity, strength of the rope
Bending fatigue + flexibility	→	Service life
External wear	→	Stability of the outer strands
Torsion characteristics	→	Lifting of guided or unguided loads
Handling		

Our range of products includes rope winches for lifting, pulling and moving loads. For use with our winches we recommend the following types of rope:

 	<p><b>Standard design</b> DIN 3060 - 6 x 19 + FE 1770 N/mm<sup>2</sup></p> <p><b>Hand-operated winch rope with fiber inlay</b> 3- 12 mm Ø</p> <ul style="list-style-type: none"> <li>Galvanized</li> <li>Stainless steel in mat. 1.4401 Nominal strength 1570 N/mm<sup>2</sup> (low breaking strength)</li> </ul>	<ul style="list-style-type: none"> <li>Not non-twisting</li> <li>Crosslay type of construction</li> <li>Galvanized or stainless steel</li> <li>Low-tension</li> <li>Lifting rope for infrequent actuation</li> <li>Rugged and widely resistant</li> </ul>
 	<p><b>Warrington-Seale</b> - 6 x 36 WS+SES (FE) 1770 N/mm<sup>2</sup></p> <p>Hand-operated and electric winches in parallel type of construction, 10 - 28 mm Ø</p> <ul style="list-style-type: none"> <li>Galvanized</li> <li>With fiber or steel inlays as options</li> </ul>	<ul style="list-style-type: none"> <li>Highly flexible</li> <li>High breaking strength</li> <li>Average number of reversed bending stresses</li> </ul>
	<p><b>Non-rotating special wire rope SE-znk</b> - 1960 N/mm<sup>2</sup></p> <p>Non-rotating spiral strand rope, 3 - 13 mm Ø</p> <ul style="list-style-type: none"> <li>Standard rope for electric rope winches</li> <li>Galvanized</li> </ul>	<ul style="list-style-type: none"> <li>Balanced characteristics</li> <li>Lifting rope for unguided single rope suspension elements</li> <li>Lifting rope for large lifting heights with multiple rope suspension elements</li> <li><b>Not</b> to be used with a swivel</li> <li>High strength</li> <li>High bending fatigue characteristics</li> </ul>
	<p><b>Heavy duty winch rope</b></p> <p>Electric winch rope with plastic-coated steel core in double-parallel type of construction, 6 - 30 mm Ø</p> <ul style="list-style-type: none"> <li>Bright and greased</li> <li>Not non-twisting</li> </ul>	<ul style="list-style-type: none"> <li>Special rope for frequent bending stress reversals and long use</li> <li>To be used only with matching rope sheaves and drums</li> <li>Optimized break loads thanks to higher fill factor</li> </ul>

**The use of plastic-coated steel wire ropes with lifting equipment is not permitted.**

We shall be pleased to advise you on the length, diameter and type of rope and on suitable fastening equipment (thimbles, hooks, rope clips, etc.) for your particular requirements. Please also ask us to provide you with an offer.



## Rope fasteners / Rope connections

The safe functioning of the rope drive depends to a large extent on the rope fastenings on the winch and on the load. The rope connections and the ropes themselves have to be checked at regular intervals by a suitably qualified expert. The following rope connections are permissible for use with lifting equipment:

### Non-releasable rope connections:

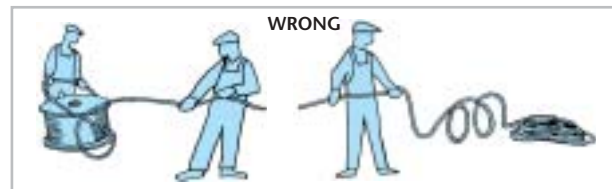
	<p><b>Aluminium press-on connection with thimbles</b> in combination with safety eye hooks or screw shackles provide a simple and safe means of suspending loads.</p>
	<p><b>Splice connections DIN 3089 (uncoated)</b> in combination with thimbles, hooks, etc. In the most unfavourable situation, splice connections can lead to a reduction in the breaking load of the rope line of up to 40%.</p>

Pressed and splice connections may only be produced by specialist firms or rope manufacturers.

### Releasable rope connections:

	<p><b>Rope clips</b></p> <ul style="list-style-type: none"> <li>• The end which is not under load must never be fastened to the load-bearing line.</li> <li>• The length of the rope end which is not under load should be at least 20 times the diameter of the rope and not less than 150 mm.</li> <li>• Clips may no longer be used once the rope has worn by more than 10%.</li> </ul>
	<p>• <b>Wire rope clamps in accordance with DIN 1142 may not be used for rope connections for lifting equipment</b>, with the exception of fastening equipment which is manufactured for one-off special purposes!</p>

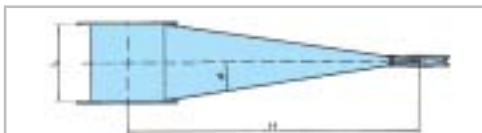
### Handling of ropes – Unwinding



### Care of ropes

"Running ropes" in particular will only offer optimum service lives if they are well lubricated. The use of steel ropes without grease will cause them to wear quickly and the load bearing mechanism will then have to be replaced early.

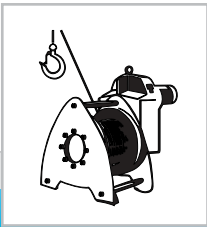
### Notes on the installation of rope winches:



The distance between the rope drum and the return sheave must be such that the maximum deviation angle for the type of rope used is not exceeded:

- Standard rope – Deviation angle < 3° (Minimum distance = Drum width x 10 )
- Special rope – Deviation angle < 1,5° (Minimum distance = Drum width x 20)

- To prevent the wire rope from becoming slack when not under load it should always have an additional rope weight when used with lifting equipment.
- Guided loads must be monitored with a slack rope cut-out.
- To prevent the rope from becoming damaged, steel wire ropes must **never be guided**:
  - over edges,
  - over deflection radii which are too small or
  - over rope sheaves with grooves which are too small.
- High dynamic forces can cause ropes to suddenly break and the load to crash. It is therefore imperative that loads are never brought to a dead stop ("on block") and that loads are never allowed to drop into the rope.



# Wire Rope Winches & Hoists

## BETA Electric Wire Rope Winches acc. to BGV C1

### BETA Electric Wire Rope Winch acc. to BGV C1 for stages and studios

Who is in the limelight has to rely on highest safety! Being good is not good enough for Pfaff-silberblau. Therefore we have developed our electro wire rope winch corresponding to BGV C1 (VBG 70) which is specially designed for fixed installations on stages and studios but can also be used in warehouses and large furniture stores.

Equipped with two independent working disk brakes and safety factor of 10:1 plus dynamic efforts (forces) of the applicable steel rope – related to the arithmetical breaking strength. Electronic overload protection, gear definition for doubled nominal load, a grooved drum (for single-layer winding) and a special gear limit switch with limitation switch as well as an emergency limit switch are delivered as standard.

The special designed electronic control are delivered with integrated control elements (up/down/Emergency Stop/Reset) and a master switch. For the necessary yearly UVV-test, additional tracers within the control box in order to simplify single tests of the brakes as well as the final end position are installed. Highest level of safety for moving heavy loads over the heads of an audience without any compromises designed for rewarding applause at stages all over the world.



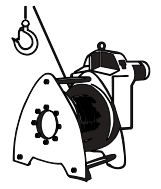
### Example of application: large furniture store

Precise moving of decorating elements: Lighting decorating elements are safely moved according to individual needs by means of the BETA electric wire rope winch.

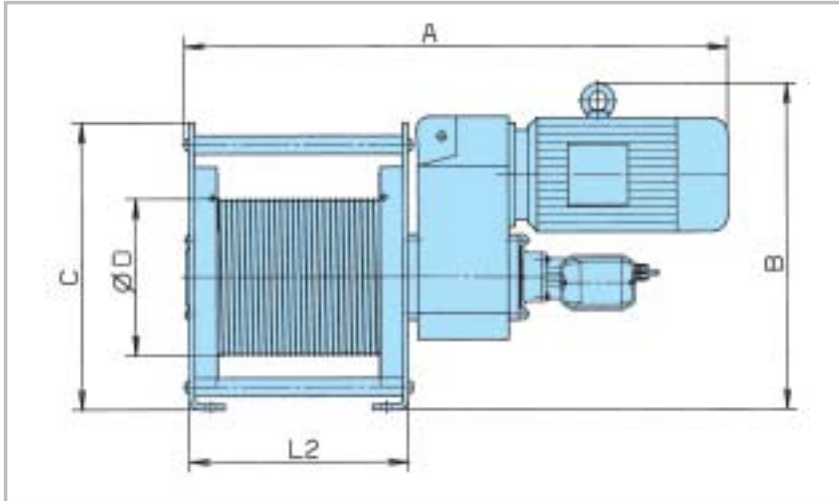
### The following options can be delivered on request:

- Special drums (lengthened, multi-rope applications)
- Rope pressure drum
- Slack rope switch
- Redundant design (with compound transmission)
- Wire rope weights
- Pendant control with plug-in connection
- SPS-control (on request)
- Wire rope pulley blocks and sheaves (see page 97)
- Wire ropes (see page 98/99)
- Shaft and incremental encoders (on request).

# Wire Rope Winches & Hoists



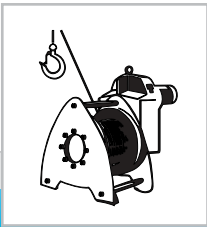
## BETA Electric Wire Rope Winches acc. to BGV C1



BETA Electric Wire Rope Winch acc. to BGV C1

Art. No.	Size	Lifting capacity kg	Rope speed m/min	Drive group DIN 15020	Motor power at 50 Hz kW	Rope Ø* mm	Rope capacity in one layer m	Weight kg	Dimensions in mm				
									A	B	C	D-Ø	L2
031148041	P 1	160	5	2m	0,18	5	16,2	62	768	333	325	175	264
031148042	P 1	160	9,5	2m	0,37	5	16,2	62	768	333	325	175	264
031148043	P 1	160	13,6	2m	0,55	5	16,2	64	798	333	325	175	264
031148044	P 1	160	20,9	2m	0,55	5	16,2	64	798	333	325	175	264
031148234	P 2	400	4,7	2m	0,37	8	17,1	99	895	490	444	242	338
031148235	P 2	400	9,4	2m	0,75	8	17,1	102	950	490	444	242	338
031148236	P 2	400	13,5	2m	1,1	8	17,1	106	965	490	444	242	338
031148237	P 2	400	18,1	2m	1,1	8	17,1	106	965	490	444	242	338
031148421	P 3	630	4,5	2m	0,55	12	16,3	161	1032	614	547	295	406
031148422	P 3	630	8,6	2m	0,75	12	16,3	162	1056	614	547	295	406
031148423	P 3	630	14,9	2m	1,5	12	16,3	169	1127	614	547	295	406
031148519	P 3.5	1200	6,5	2m	1,1	14	13,8	214	1128	684	547	295	406
031148520	P 3.5	1200	10,7	2m	2,2	14	13,8	221	1209	684	547	295	406
031148629	P 4	1600	3,7	2m	1,1	18	15,6	428	1328	826	687	364	480
031148630	P 4	1600	8,1	2m	2,2	18	15,6	428	1328	826	687	364	480
031148811	P 5	2000	4,1	2m	1,5	20	20,3	1002	1533	1046	844	451	568
031148813	P 5	2000	17,7	2m	5,5	20	20,3	1037	1614	1046	844	451	568
031148814	P 5	2500	4,1	2m	1,5	20	20,3	1002	1533	1046	844	451	568

\* recommended steel rope DIN 3069 SE-znk-1960, non-rotating



# Wire Rope Winches & Hoists

## PROLINE G Universal Wire Rope Hoists



G 03

### SZ-U PROLINE G Universal Wire Rope Hoist

Whenever continuous lifting capacity and time tested technique are requested, the universal wire rope hoist PROLINE G will take over the lifting and pulling of. This robust hoist of Pfaff-silberblau is equipped with clamping jaws for holding the load safely. Due to its high technical performance this hoist is very suitable in forestry and agricultural industry, installation firms as well as in the car industry. This multi-purpose tool is made for continuous use with high loads, is solidly worked and is equipped with a corrosion-protected, rugged steel housing.

Art. No.		*030600008	030601004	030602000	030603007	030603163
Type		G03	G08	G16	G32	G32
Lifting capacity	kg	300	800	1600	3200	3200
Wire rope length	m	10	20	20	10	20
Wire rope Ø	mm	4,7	8,4	11,5	16	16
Length	mm	320	500	620	720	720
Height	mm	230	230	300	320	320
Width	mm	40	100	150	140	140
Necessary force at full load	daN	11	33	42	45	45
Rope path per double lift	mm	22	60	68	26	26
Operating speed approx.	m/min	0,7	2-3	2-3	1-2	1-2
Reducing ratio		50:1	30:1	40:1	80:1	80:1
Weight with wire rope, hook and reeler	kg	3,6	14	33	45	54

\* Basic equipment with 10 m wire rope and sling



G 08

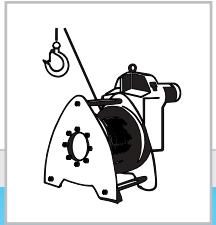


G 16



G 32

6



## SILVERLINE S Universal Wire Rope Hoists

### SZ-U SILVERLINE Universal Wire Rope Hoist

The universal wire rope hoist with robust aluminium housing and strong load bolt keeps all promises made from its proven technique: a special traction rope is alternately held by the two clamping jaws, overload protection prevents the unit from possible damage. Different lifting capacities as well as various equipment are within our standard product range. Special rope lengths, wire rope slings, wire rope snatch block for doubling the load as well as a tool box are all available upon request.



S 08

Art. No.		030601016	030602512	030603533
Type		S 08	S 16	S 32
Lifting capacity	kg	800	1600	3200
Wire rope length	m	20	20	20
Wire rope Ø	mm	8,4	11	16
Min. breaking force/rope	kN	44	85	174
Necessary force at full load	daN	33	42	45
Rope path per double lift	mm	52	55	28
Weight without rope	kg	14	26	49
Suitable for ambient temperature of		-20°C - +40°C		

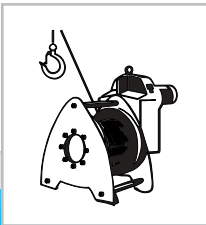


S 16

6



S 32



# Wire Rope Winches & Hoists

## Accessories for Universal Wire Rope Hoists



Wire rope with hand reeler



Steel storage box

### Standard Equipment and Accessories for Universal Wire Rope Hoists

Pfaff-silberblau will perfectly prepare your universal wire rope hoist in an ideal way for your individual on-site needs. Each application is as unique as each customer's needs: Making your decision for the small or large basic equipment you will optimize your purchase. So you will not pay for features you do not really need. Choosing only a few useful accessories like rope reels, wire rope snatch blocks as well as wire rope slings will change the standard wire rope hoist to a product really made to your specifications in order to meet your individual requirements.

6



Sling

#### Standard equipment accessories for universal wire rope hoists

##### Wire rope reelers

Art. No.		030601098	030601101
Size		1	2
Max. Rope capacity at 8,4 mm rope Ø	m	60	150
at 11,5 mm rope Ø	m	50	80
at 16 mm rope Ø	m	25	40
Weight	kg	0,5	2,5

##### Wire rope snatch block, single sheave

Art. No.		033425098	033425120	033425126
Max. load capacity with hook	kg	1600	3200	6400
Sheave Ø	mm	110	145	250
for wire rope hoist	kg	800	1600	3200
Weight	kg	9	14	25

##### Wire rope sling

Art. No.	Suitable for hoist type	Rope Ø mm	Total length m	Weight approx. kg
033624005	G08	10	1	0,5
033624013	G08	10	2	0,85
033624056	S16/G16	14	1,5	1,5
033624064	S16/G16	14	2,5	2,2
033624099	S32/G32	18	2	2,75
033624102	S32/G32	18	3	3,75

