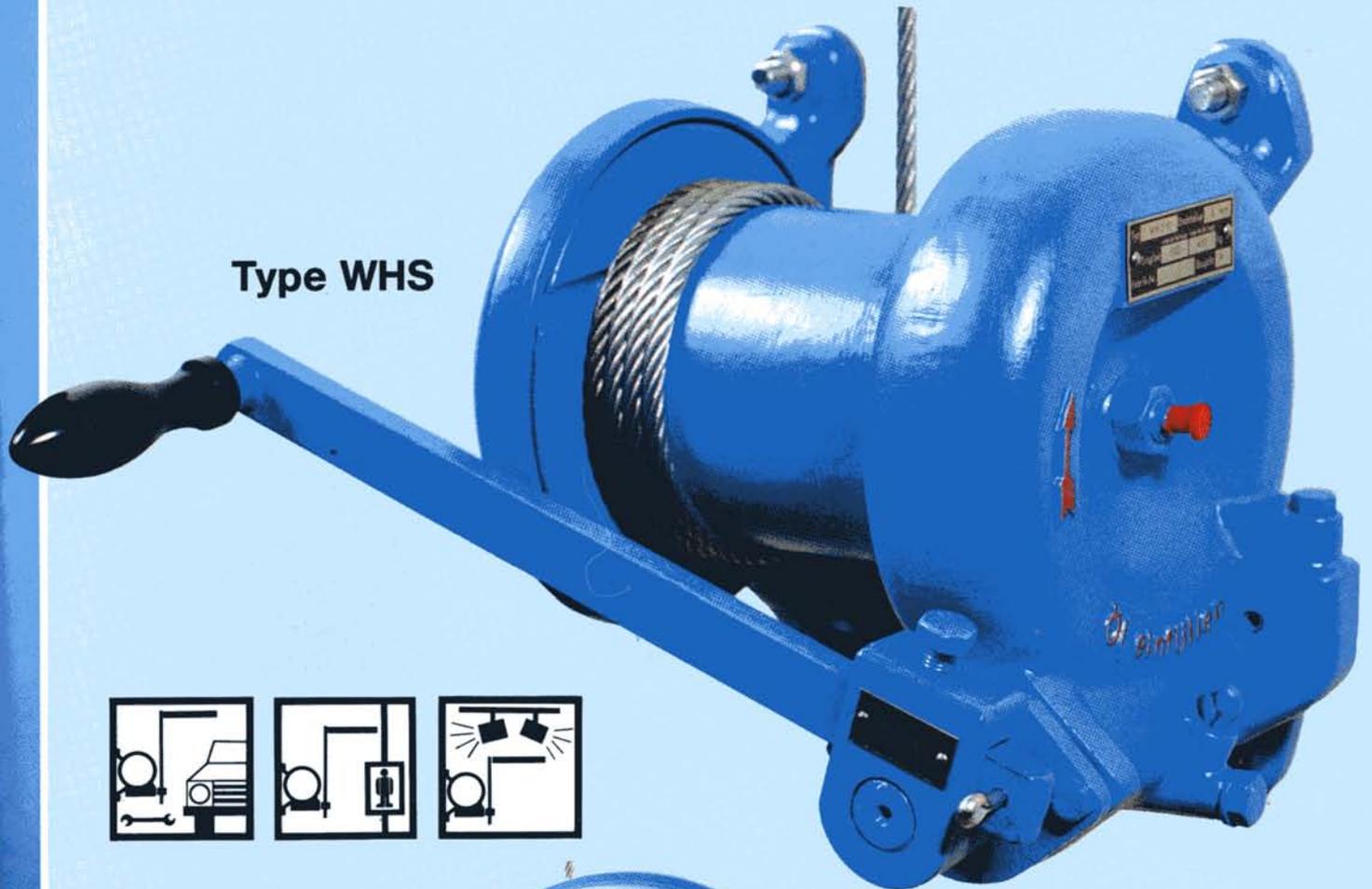


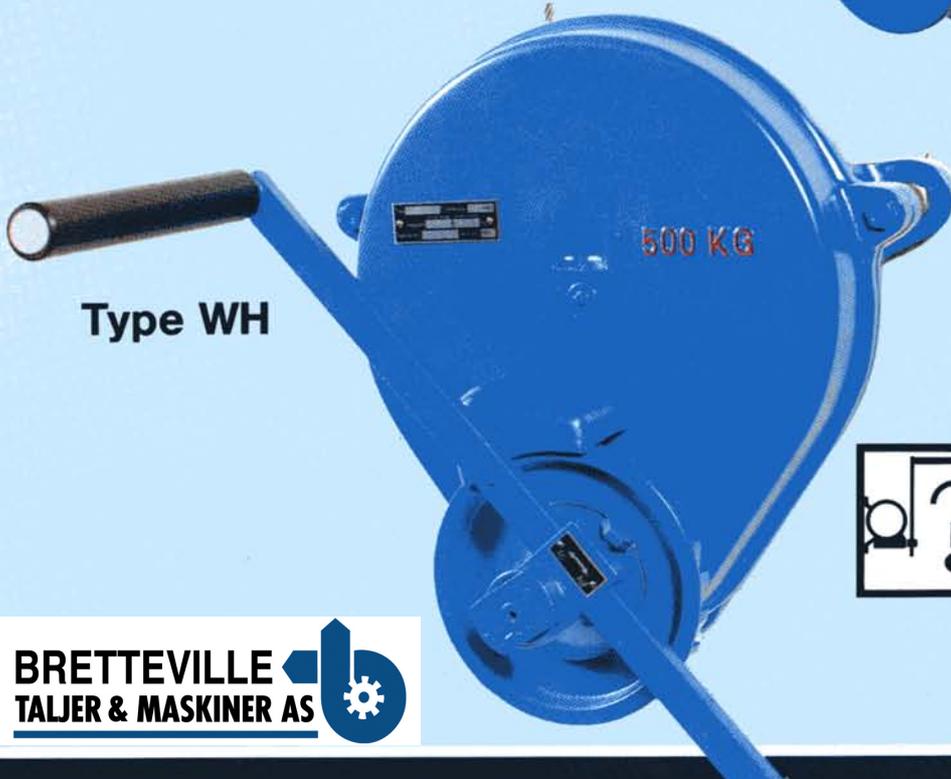
ADLER

MANUAL WALL-WINCHES

Type WHS



Type WH



Technical data

Type	Load capacity 1st rope layer, kg	Rope dia mm	Usable wire rope take-up for single rope operation and ungrooved drum								For double-rope operation and grooved drum per rope					
			1st rope layer m	2 rope layers m	3 rope layers m	4 rope layers m	5 rope layers m	6 rope layers m	7 rope layers m	8 rope layers m	Rope dia mm	1st rope layer m Figs. 10 and 11 resp. 14	Total in 2 rope layers Figs. 12 and 13	Drum dia mm	Drum	
 1 WH 050	63	3	2,4	6,1	10,0	14,3	18,8	23,5	28,6					62	50	
 2 WH 1	125	4	2,3	5,7	9,4	13,4	17,7	22,3	27,3					63	58	
 3	WH 3 L	300	5	4,8	11,4	18,4	25,9	33,9	42,2		4	1,8	4,8	120	79	
	WH 3 L gr	300	5	5,9	14,0	22,6			67,4		4	2,2	6,0	150	79	
	WH 5 L *	500	6	5,2	12,6	20,6	29,0	37,9	47,3	57,1	67,4	5	1,7	5,5	150	86
	WH 5 L gr	500	6	6,2	15,0	24,2	33,9	44,0	54,7		5	2,0	6,5	178	86	
 4	WH 10 L	1000	9	6,1	15,3						6	3,0	5,4	200	117	
	WH 15 L *	1500	11	5,4	13,8						8	2,2	7,0	205	125	
 5	WH 3	300	5	4,8	11,4	18,4	25,9	33,9	42,2		4	1,8	4,8	120	79	
	WH 3 gr	300	5	5,9	14,0	22,6					4	2,2	6,0	150	79	
	WH 5 *	500	6	5,2	12,6	20,6	29,0	37,9	47,3	57,1	67,4	5	1,7	5,5	150	86
	WH 5 gr	500	6	6,2	15,0	24,2	33,9	44,0	54,7		5	2,0	6,5	178	86	
 6	WH 10	1000	9	6,1	15,3						6	3,0	5,4	200	117	
	WH 15	1500	11	5,4	13,8						8	2,2	7,0	205	125	
 7	WH 2 S	250	5	4,8	11,3						4	2,6		96	94	
	WH 5 S	500	6	7,9	18,1	29,1					5	4,1		125	138	
	WH 7 S	750	8	9,2	21,5	34,7	49,0				6	5,1		150	182	
 8 WH 16 S	1600	10	6,6	16,4	27,1	38,6					8	3,0		175	155	

1) The two initial (reserve) loops have already been deducted for the rope lengths stated. The lengths given are based on 1.5 x rope diameter as drum flange excess length.

2) Double-rope operation with ungrooved drum is possible, in this case the usable rope length is increased by 15 or 20%, but it is better to prefer a grooved drum. If winding up in two rope layers is required, drum grooving as Figs. 12 and 13 should be selected.

3) The winches Type WH 20 S - WH 50 S are equipped with a rapid motion which makes possible a hoisting height per crank revolution which is four times greater than normal, up to a maximum of 1/4 load capacity. To use the rapid motion, the hand crank must be put on the other driving pin.

MANUAL WALL-WINCHES

Drum dimensions		Data for manual operation				Data for Gearings and Brakes							
flange dia mm	Load hoisting per crank revolut. 1st rope layer mm	Crank pressure at max. load in the 1st rope layer kg	Lowering speed m/min	Required lowering weight kg ⁽¹⁾	Drive group according to DIN 15020	Brake type	Lowering of loads by	Gearing type	Transmission ratio i	Net weight approx. kg without rope	A	B	C
204	10,0			1 B _m		Load reaction brake	turning back the crank	direct	1	6,5	100	142	11
210	14,9			1 B _m		Load reaction brake	turning back the crank	direct	1	9	178	154	14
76	10,3			1 B _m		Load reaction brake	turning back the crank	Gear transmission	5,15	27	265	222	15
95	12,8			1 B _m		Load reaction brake	turning back the crank	Gear transmission	5,15	32	265	222	15
69	15,4			1 B _m		Load reaction brake	turning back the crank	Gear transmission	7,15	42	335	270	19
81	18,1			1 B _m		Load reaction brake	turning back the crank	Gear transmission	7,15	44	335	270	19
36	16,4			1 B _m		Load reaction brake	turning back the crank	Gear transmission	18	80	345	477	20
30	20,3			1 B _m		Load reaction brake	turning back the crank	Gear transmission	22,5	100	375	533	20
76	10,3	36	9,0	1 B _m		Brake regulator	pressing back the crank	Gear transmission	5,15	34	265	222	15
95	12,8	36	9,0	1 B _m		Brake regulator	pressing back the crank	Gear transmission	5,15	39	265	222	15
69	15,4	36	14,5	1 B _m		Brake regulator	pressing back the crank	Gear transmission	7,15	50	335	270	19
81	18,1	36	14,5	1 B _m		Brake regulator	pressing back the crank	Gear transmission	7,15	52	335	270	19
36	16,4	18	24,5	1 B _m		Brake regulator	pressing back the crank	Gear transmission	18	87	345	477	20
30	20,3	18	41,5	1 B _m		Brake regulator	pressing back the crank	Gear transmission	22,5	110	375	533	20
20	9,2			1 B _m		Load reaction brake	turning back the crank	Worm gearing	16	12,5	137	205	12
26	14,5			1 B _m		Load reaction brake	turning back the crank	Worm gearing	16	21	190	250	14
20	16,0			1 B _m		Load reaction brake	turning back the crank	Worm gearing	25	42	243	330	20
14,5	28,0			1 C _m		Self-locking	turning back the crank	Worm gearing		72	350	230	17

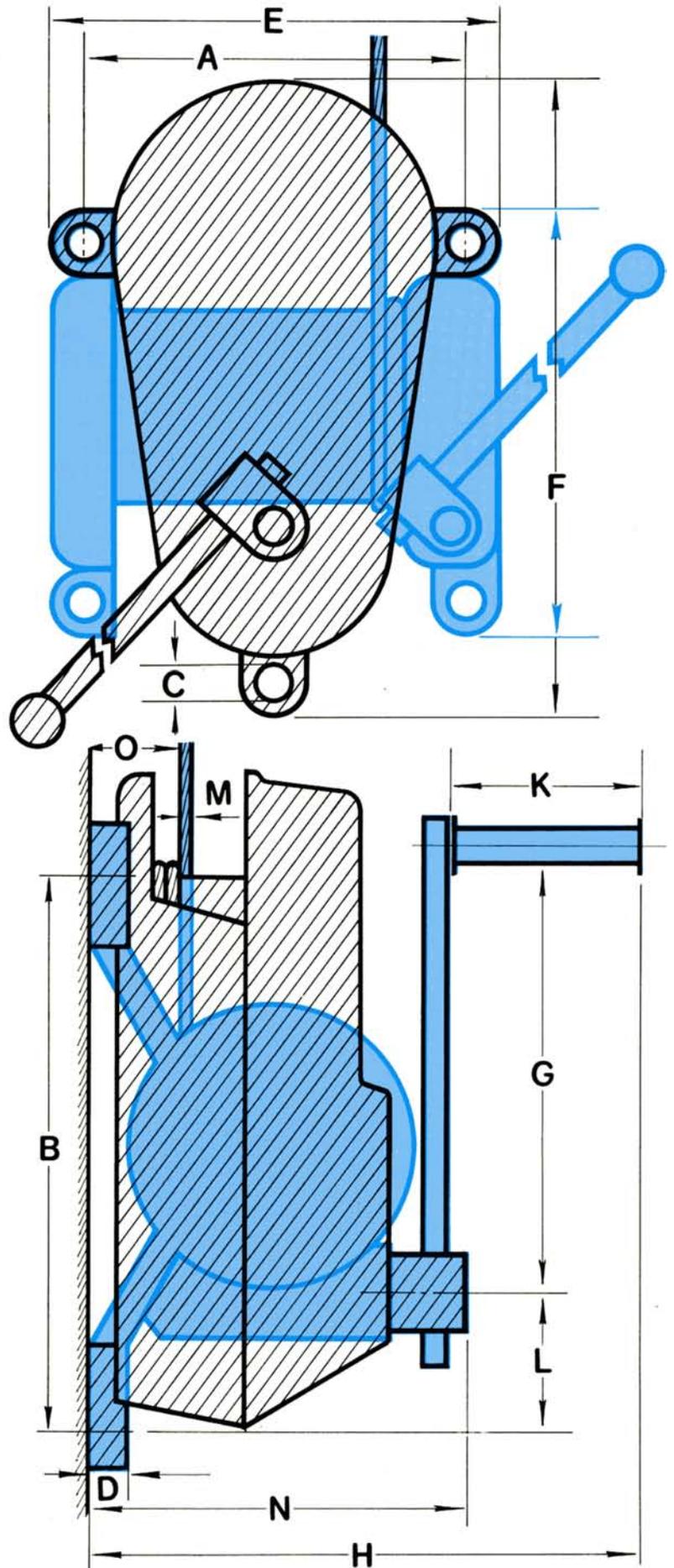
Required lowering weight as stated applies only at temperature $\geq 15^{\circ}\text{C}$. At lower temperatures resp. with more than one pulley (pulley dia min. 16 x rope dia) a higher lowering weight is required.

The manual winches according to Figs. 7 - 9 can also be used as traversing winch for the shifting of loads. In the case of winches according to Fig. 3 - 8 brakes become effective in one direction only. Winches with foldable hand-crank may be supplied where space is restricted, see Fig. 1 - 9. The handcranks of the winches Fig. 1 and 2 are fixed with square pins and are removable. As extra protection, winches according to Figs. 3 - 6 on top can be provided with a cover hood. The winches may also be used for passenger transport as well as for stages and studios according to special regulations. All of the winches have been furnished with test certificates by the employers' liability insurance company.

Dimensions

D	E	F	G	H	K	L	M	N	O
16	142	170	260	228	108	62	3	107	19 ÷ 66
20	218	220	350	260	108	51	4	139	29 ÷ 83
24	309	348	440	483	238	58	5	281	63
24	309	348	440	483	238	58	5	281	63
25	397	435	440	508	238	50	6	305	75
25	397	435	440	508	238	50	6	305	75
30	400	630	440	603	238	138	9	379	95
30	446	695	440	628	238	138	11	402	105
24	309	348	440	558	238	58	5	356	63
24	309	348	440	558	238	58	5	356	63
25	397	435	440	583	238	50	6	381	75
25	397	435	440	583	238	50	6	381	75
30	400	630	440	603	238	138	9	379	95
30	446	695	440	628	238	138	11	402	105
18	219	237	295	313	108	41	5	215	45
22	282	290	440	479	238	49	6	250	46
25	350	390	440	573	238	59	8	349	81
6	390	364	440	604	238	40	10	379	58

● The schematic diagrams do not show special Manual wall-winch types, but serve as generalized drawings exclusive for marking the letters, which are used in the dimension sketch.
 Black drawing: Drum vertical to wall
 Blue drawing: Drum parallel to wall



Drum grooving resp. rope winding up for double-rope operation for the Types WH 3, WH 5, WH 3 L, WH 5 L, WH 10, WH 15, WH 10 L, WH 15 L, WH 10 S – WH 50 S



Fig. 10

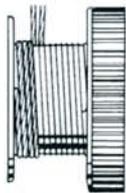


Fig. 11



Fig. 12

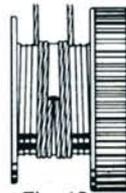


Fig. 13



Fig. 14



Fig. 15

Fig. 10 and 11: The two ropes are fastened to the same drum flange and are from there wound up parallelly in direction to the other drum flange. With this grooving, rope winding up is possible only in one rope layer. Should two layers be specified, resource shall be taken to the rope grooving as shown in Fig. 12 resp. Fig. 13.

Fig. 12 and 13: The wire rope is fastened in the centre of the drum. From here the two rope strands are wound up in direction of the two drum flanges. For the second rope layer the two rope strands are wound from the drum flanges again towards the drum centre.

Fig. 14: Rope winding up possible only from the drum flange towards the centre.

Fig. 15: A partition web may be fixed at the drum centre for increased rope take-up for double-rope operation.

Electrical Winch with Emergency Manual Drive



Type WE 10

Type WE 5

Winch Accessories



ADLER Wall-mounted Electrical Winch

SHW 10

... the compact
waterproof winch
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