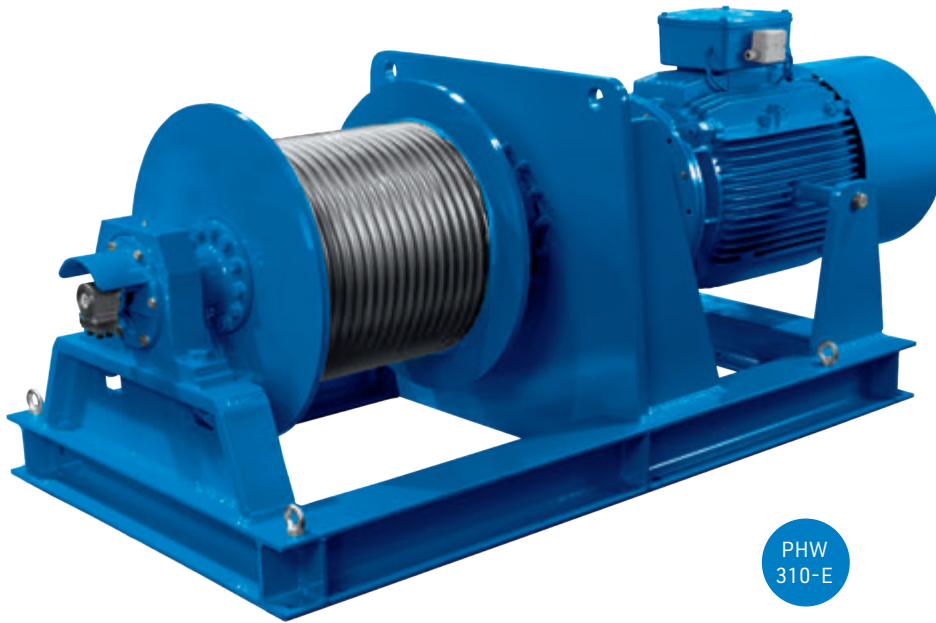




PHW
310-E

ROPE WINCH | PHW

The standard build PHW type winch provides the basis of the solution to many pulling and lifting winch applications. The winch is constructed in the conventional manner with motor, gearbox and drum in line. When it comes to the need of a shorter design the PHW winch is available with a angular gearbox.

The choice of the rope complies with the pulling force in the 5th rope layer. The drum is build according classification 1Am. The drum diameter is at least 16-times bigger than the diameter of the indicated rope diameter. Although the name of this winch indicates different, these winches are very suitable to fit to your specific winch application and can be equipped with different drums, other gearboxes or motors. Many options can be offered on these highly versatile winches. The standard version comes without a rope and control.

Standard winch features:

- Heavy duty planetary gearbox
- PHW-E; IP 54 aluminium braked motor 400 VAC/3 phase/50 Hz
- PHW-H; orbit or radial piston type hydraulic motor complete with brake valve
- PHW-LPR; radial piston type air motor complete with hand control valve and mufflers
- PHW-LG; gear type air motor complete with hand or remote control valve and mufflers
- Steel drum with cable fixing point at flange
- Two drum supports
- Double layer 2 component conversation, colour RAL 5010

Available winch options:

- IP 56 TENV cast iron motor for marine applications
- Alternative drum dimensions / split drums /additional rope anchors /etc.
- Explosion proof motors
- Protective steel motor cover
- Drum pressure roller, spooling gears, grooved drums

- Band brakes (manual or failsafe automatic)
- Manual disengaging clutch
- Alternative speeds
- Alternative supply voltages
- Drum guards
- Manual emergency crank
- Slip ring mounting
- Warping head
- Angular gear

Available control options:

- Control box IP 55 with pushbuttons and emergency stop
- Control box IP 55 with low voltage IP 65 remote control
- Load limiter (required by CE for applications exceeding 1,000 kg W.L.L.)
- Frequency inverter for variable speed control
- Wireless radio remote control systems
- Limit switches (electric, pneumatic)
- Slack wire switches (electric, pneumatic)
- Proportional local or remote control valve (pneumatic or hydraulic)
- Motor overheating protection

Electric rope winch PHW-E

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

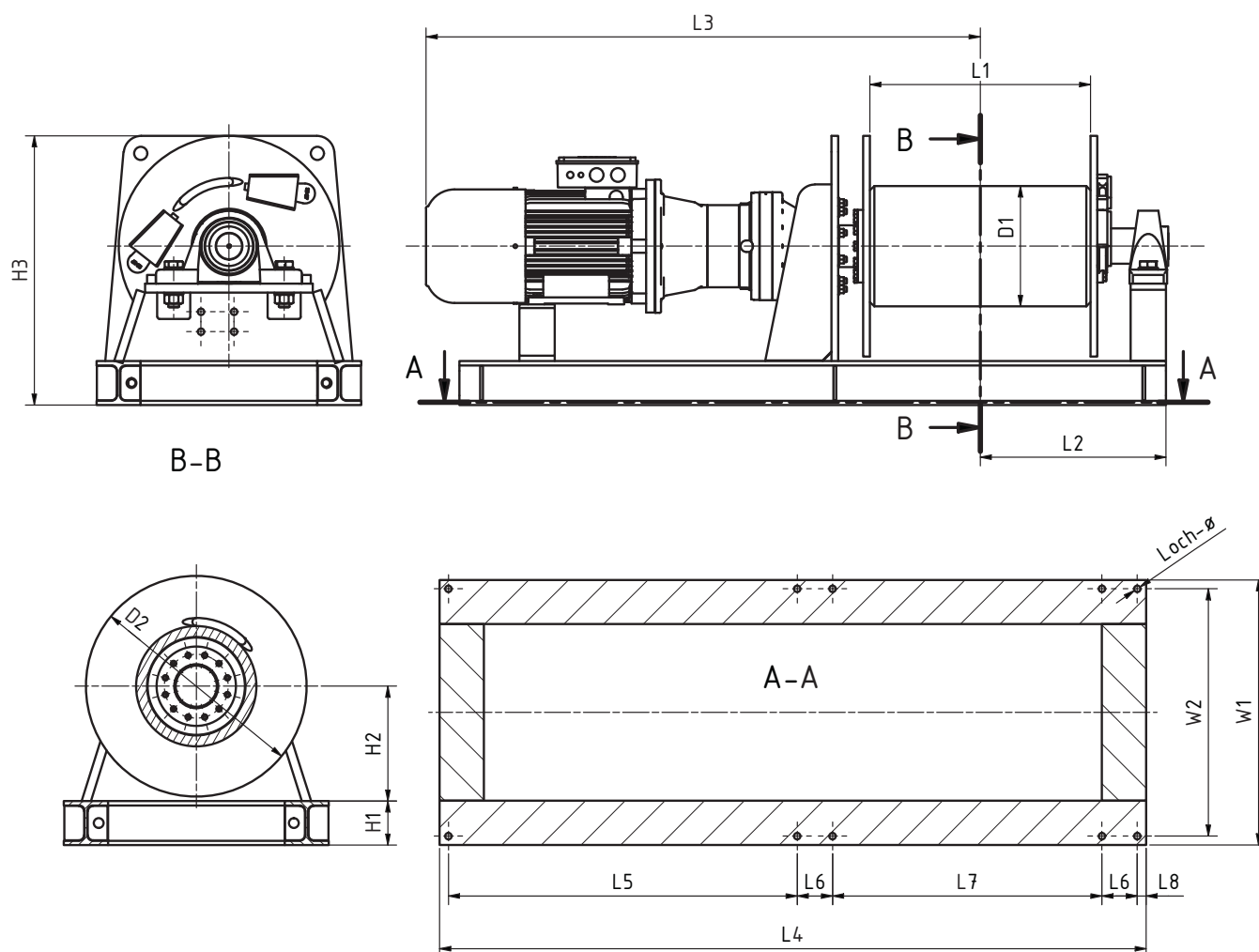
Pneumatic rope winch PHW-L

TYPE	Max. lifting capacity 1st rope layer kg	Max. lifting capacity 5th rope layer kg	Recommended rope diameter mm	Rope speed 1st rope layer m/min	Rope speed 5th rope layer m/min	Rope length in 1st rope layer m	Rope length in 5th rope layer m	Air pressure bar	Air consumption l/sec.	Order No.
PHW 300-LPR2	1,200	845	10	11	16	26	168	7	90	H50119
PHW 301-LPR2	2,100	1,435	12	7	10	24	157	7	90	H50121
PHW 303-LPR2	2,500	1,740	14	6	9	26	165	7	90	H50084
PHW 303-LPR3	2,500	1,740	14	12	17	26	165	7	140	H50122
PHW 305-LPR3	4,000	2,770	16	9	13	25	161	7	150	H50085
PHW 305-LPR4	4,000	2,770	16	15	21	25	161	7	240	H50123
PHW 306-LPR4	5,500	3,970	18	10	14	28	181	7	240	H50086
PHW 307-LPR4	7,000	4,960	22	8	11	26	171	7	240	H50087
PHW 307-LG6	7,000	4,960	22	13	18	26	171	7	350	H50124
PHW 309-LPR4	9,000	6,285	26	6	9	24	163	7	220	H50125
PHW 309-LG6	9,000	6,285	26	10	14	24	163	7	350	H50088
PHW 310-LG6	12,000	8,460	28	7	10	24	168	7	350	H50126
PHW 311-LG6	16,000	10,655	34	5	7.5	19	144	7	350	H50089
PHW 313-LG6	20,000	13,610	38	4	6	19	151	7	350	H50090

Hydraulic rope winch PHW-H

TYPE	Max. lifting capacity 1st rope layer kg	Max. lifting capacity 5th rope layer kg	Recommended rope diameter mm	Rope speed 1st rope layer m/min	Rope speed 5th rope layer m/min	Rope length in 1st rope layer m	Rope length in 5th rope layer m	Oil differential pressure bar	Flow in l/min.	Order No.
PHW 303-H	2,500	1,740	14	18	26	26	165	140	60	H50077
PHW 305-H	4,000	2,770	16	18	26	25	161	160	80	H50078
PHW 306-H	5,500	3,970	18	25	35	28	181	225	95	H50079
PHW 307-H	7,000	4,960	22	20	28	26	171	230	100	H50080
PHW 309-H	9,000	6,285	26	13	18	24	163	190	100	H50081
PHW 310-H	12,000	8,460	28	11	16	24	168	230	95	H50096
PHW 311-H	16,000	10,655	34	10	15	19	144	230	110	H50082
PHW 313-H	20,000	13,610	38	8	12	19	151	210	120	H50083
PHW 315-H	30,500	20,800	44	8	12	19	151	235	165	H50097
PHW 316-H	37,000	24,570	48	6	9	17	141	225	160	H50098

Rope winch



TYPE	Capacity	Weight	Rope diameter mm	Dimensions (mm)																Hole $\varnothing$
	kg	kg		D1	D2	L1	L2	L3*	L4	L5	L6	L7	L8	H1	H2	H3	W1	W2	HEB	
PHW-E 300	1,250	200	9	152	300	500	410	1,040	1,450	660	80	590	20	100	215	520	500	460	100	14
PHW-E 301	2,000	230	11	191	375	500	405	1,030	1,450	680	80	570	20	100	215	520	500	460	100	14
PHW-E 304	3,000	360	14	241	430	500	421	1,240	1,600	790	80	610	20	100	260	610	600	560	100	14
PHW-E 305	4,000	425	16	273	500	500	421	1,255	1,600	790	80	610	20	100	260	610	600	560	100	14
PHW-E 306	5,500	460	20	324	580	500	460	1,325	1,800	910	80	690	20	100	300	690	700	660	100	18
PHW-E 307	7,000	720	22	394	680	500	487	1,510	1,950	1,020	100	680	25	120	360	830	800	750	120	20
PHW-E 309	9,000	960	24	419	730	500	502	1,580	2,100	1,035	110	785	30	140	380	890	900	840	140	22
PHW-E 310	12,000	1,520	28	495	860	500	530	1,675	2,200	1,045	120	835	40	160	460	1,070	1,100	1,040	160	26
PHW-E 311	15,000	1,760	32	546	980	500	528	1,875	2,400	1,222	120	858	40	160	510	1,180	1,150	1,090	160	30
PHW-E 313	18,000	2,100	34	572	1,020	500	539	1,970	2,400	1,165	120	915	40	180	585	1,340	1,350	1,290	180	30
PHW-E 314	23,000	2,950	38	660	1,160	500	628	2,190	2,600	1,215	120	1,065	40	200	585	1,360	1,450	1,390	200	32
PHW-E 315	30,000	3,050	44	711	1,350	500	628	2,235	2,600	1,203	140	1,037	40	200	685	1,560	1,550	1,470	200	36
PHW-E 316	37,000	3,500	48	711	1,400	500	634	2,245	2,650	1,402	140	888	40	200	710	1,610	1,600	1,520	200	36

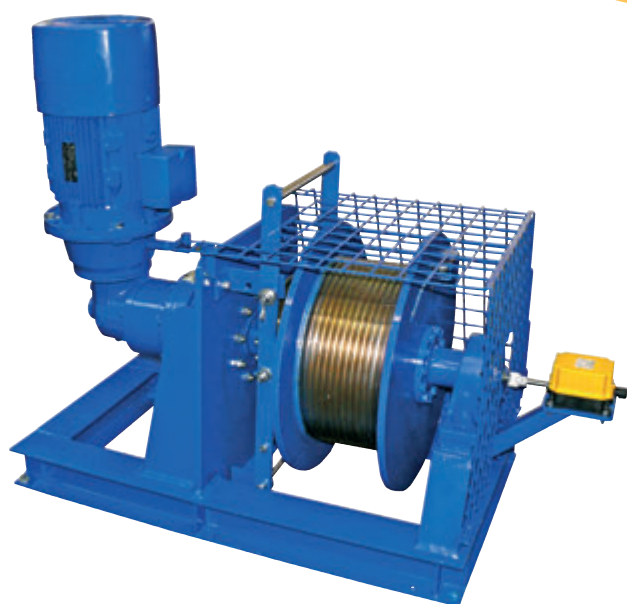
* May vary depending on the motor version!

Accessories for PHW series

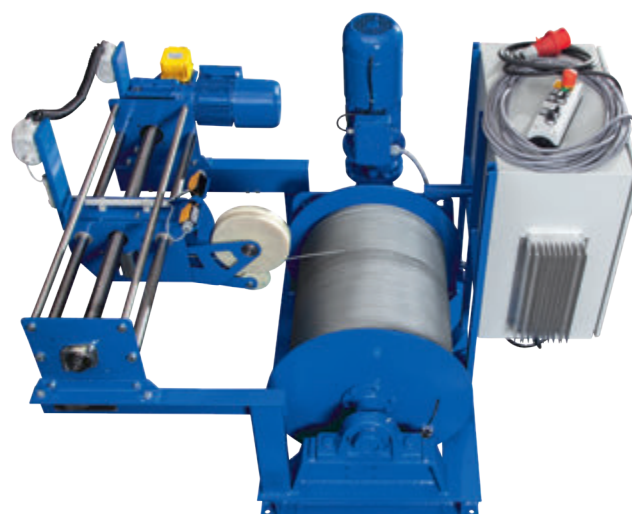
TYPE		Grooved drum	Cable tensioning device with scored cable drum	Longer cable drum, up to 500 mm	Electric rope winch PHW-E		
					3-layer paint coating*	Drum cover	Spindle limit switch (as an operating limit switch)
PHW 300	Order No.	H50206	H50208	H50231	H50450	H50454	H50210
PHW 301	Order No.	H50207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

* Acc. ISO 12944 C4 (high) – System C5-M-Marine (very high)

We can offer an adapted control for the PHW winches according to your directions!



PHW 304-E with angled gear and manual freewheel clutch



PHW 301-E with AISV

PHW rope winch - customer solution



PHW-E 315 electric wire rope winch equipped for use in potentially explosive atmospheres, with a lifting force of 25 tonnes and a lifting distance

of 550 metres. In addition, two PHW-M 306 with a holding force of 4 tonnes and rope lengths of 100 m, as manually operated winches for guiding the load.

They can follow the fixed point on the load because they are rotatably mounted in the base frame.

