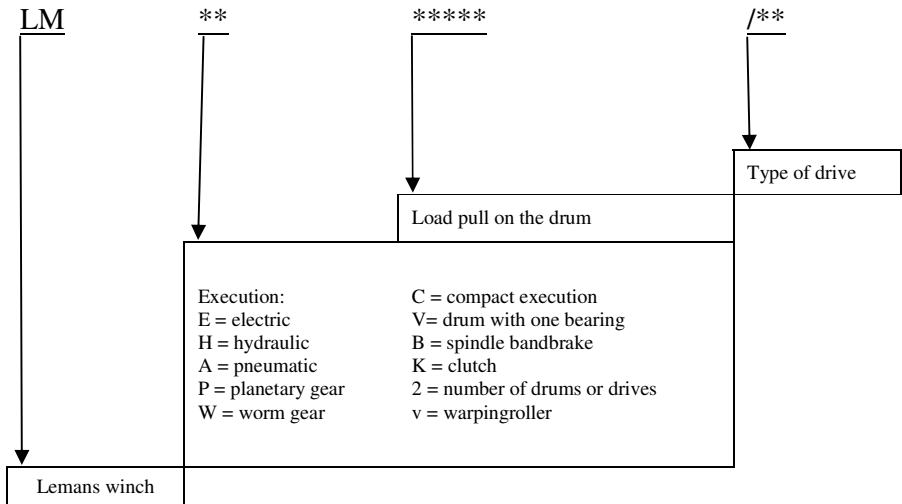


1. WORMWINCHES

TYPE LM-EW

explanation of type:



Technical data for mooring winches:

TYPE LM-EW	TENSILE FORCE 1ST LAYER	TENSILE FORCE 3RD LAYER	HOIST PULL 1ST LAYER	HOIST PULL 3RD LAYER	RECOMMEND ED CABLE DIAMETER	HAULING- SPEED 1ST LAYER)	WIRE STORAGE 5E LAYER	MOTOR OUTPUT	WEIGHT
250	250 kg	200 kg	200 kg	165 kg	ø6 mm	8.2 mtr/min	20 m	0.55 kW	21 kg
500	500 kg	400 kg	400 kg	375 kg	ø6 mm	8.4 mtr/min	20 m	1.1 kW	36 kg
750	750 kg	600 kg	600 kg	495 kg	ø6 mm	5.8 mtr/min	20 m	1.1 kW	36 kg
1.000	1.000 kg	770 kg	580 kg	475 kg	ø8 mm	5.9 mtr/min	40 m	1.5 kW	90 kg
1.250	1.250 kg	960 kg	800 kg	655 kg	ø8 mm	6.0 mtr/min	40 m	2.2 kW	92.5 kg
1.750	1.750 kg	1,340 kg	1,050 kg	855 kg	ø10 mm	5.9 mtr/min	53 m	3 kW	136 kg
2.250	2.250 kg	1,725 kg	1,325 kg	1,090 kg	ø12 mm	7.1 mtr/min	65 m	4 kW	192 kg
2.800	2.800 kg	2,110 kg	1,700 kg	1,390 kg	ø14 mm	7.9 mtr/min	75 m	5.5 kW	302 kg

Different and larger tensile forces at request.

Concerning all electric motors: S2, IP56 protection, isolation class: F and voltage 400Volt - 50Hz

Technical data for hoist winches:

TYPE	HOIST PULL TOP LAYER	NUMBER OF LAYERS	RECOMM ENDED CABLE DIAMET ER	HAULIN G- SPEED 1ST LAYER)	WIRE STORAG E 5E LAYER	MOTOR OUTPUT	WEIGHT
LM-EW 200	200 kg	3	ø5 mm	5.7 mtr/min	12 m	0.37 kW S2	24 kg
LM-EW 450	450 kg	3	ø6 mm	7 mtr/min	12 m	1.1 kW S1	40 kg
LM-EW 580	580 kg	3	ø7 mm	5.7 mtr/min	25 m	1.1 kW S1	95 kg
LM-EW 800	800 kg	3	ø8 mm	6.5 mtr/min	25 m	1.5 kW S1	98 kg
LM-EW 1.050	1,050 kg	3	ø10 mm	7.9 mtr/min	35 m	3 kW S1	150 kg
LM-EW 1.325	1,325 kg	3	ø11 mm	9.3 mtr/min	45 m	4 kW S1	209 kg
LM-EW 1.700	1,700 kg	3	ø12 mm	9.5 mtr/min	55 m	5.5 kW S1	315 kg

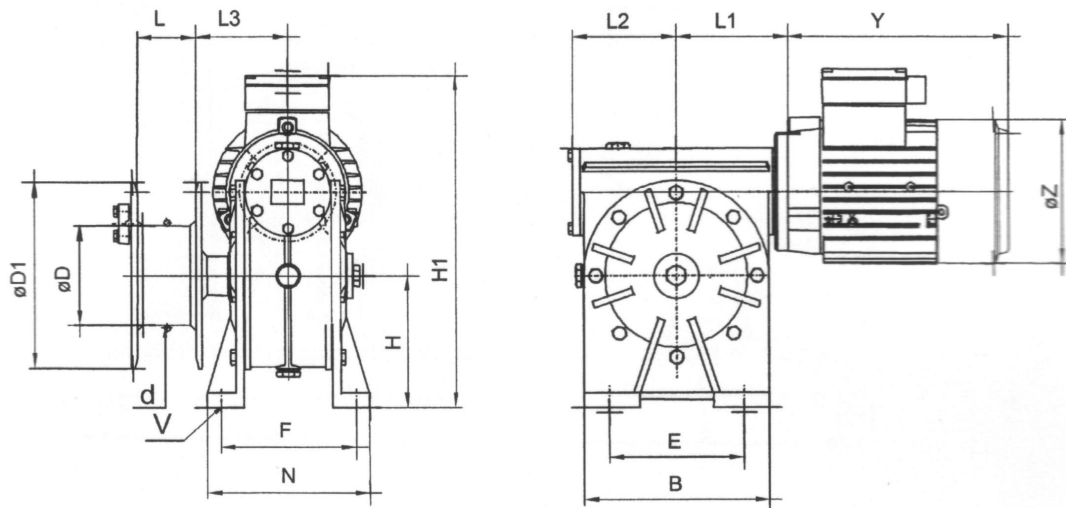
Different and larger tensile forces at request

up to 450 kg without foundation

concerning all electric motors: IP56 protection, isolation class: F and voltage 400Volt - 50Hz, executed with high-torque brake from 580 kg standard executed with grooved drum

drawing with inquiry

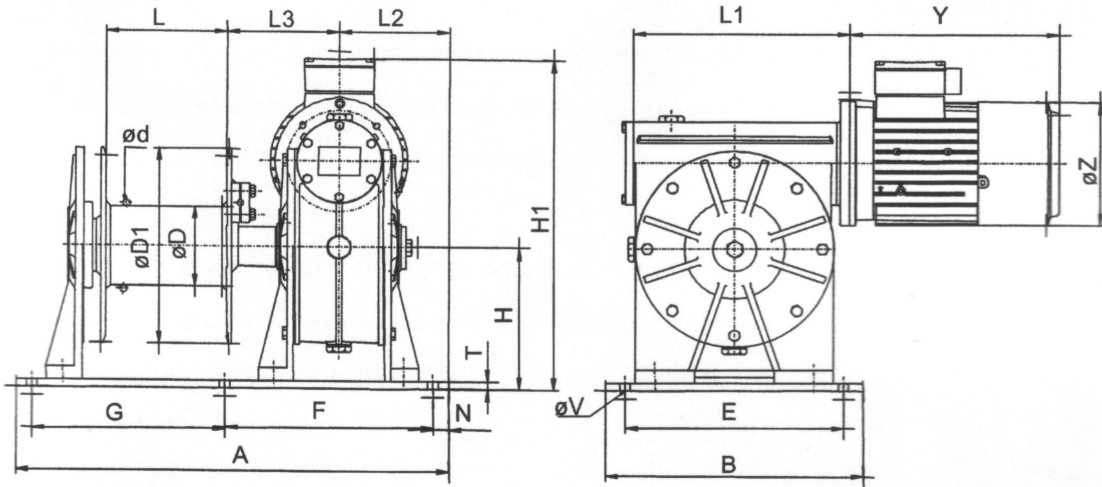
dimensions for mooring winches LM-EW 250 up to LM-EW 750:



Type LM- EW	$\varnothing d$	$\varnothing D$	$\varnothing D1$	B	E	F	H	H1	L	L1	L2	L3	N	$\varnothing v$	Y	$\varnothing Z$
250	6	101.6	190	158	120	116	115	290	60	100	89	87	140	11	206	130
500	6	101.6	190	193	140	140	135	344	60	116	108	168	168	13	228	146
750	6	101.6	190	193	140	140	135	344	60	116	108	168	168	13	228	146

(Alternations may occur, all dimensions in mm.)

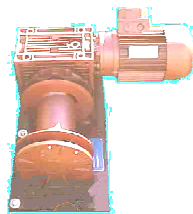
dimensions for mooring winches LM-EW 1.000 up to LM-EW 2.800:



Type LM-EW	Ød	ØD	ØD1	A	B	E	F	G
1.000	8	101.6	200	540	325	275	260	240
1.250	8	101.6	250	540	325	275	260	240
1.750	10	121	280	640	370	320	290	310
2.250	12	146	320	710	410	360	300	370
2.800	14	159	370	850	440	380	370	430

Type LM-EW	H	H1	L	L1	L2	L3	N	T	ØV	Y	ØZ
1.000	182	422	150	283	138	140	20	10	13	262	158
1.250	182	422	150	283	138	140	20	10	13	262	158
1.750	215	491	200	319	156	162	20	15	17	307	190
2.250	245	541	250	374	170	175	20	15	17	307	190
2.800	285	630	300	460	210	183	25	20	20	324	216

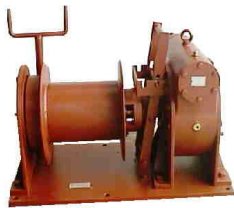
(Alternations may occur, all dimensions in mm.)



ALL TYPES ARE AVAILABLE WITH THE FOLLOWING OPTIONS:

- Bigger drum for more storage
- Build-in coned clutch (to obtain free-running of the drum).
- Brake motor.
- Build-on spindle limit switch.
- Reversing switch mounted on the motor.
- Switch box with thermal protections and remote control with tension safety switch 24 Volts and 5 m. cable.
- Variable speed rates and drum diameters.
- Frequency control, also for hoist winches.
- Grooved or divided/split drum.
- Marine construction.
- Bandbrake on the drum.
- Press-on roller.
- Alternating currenxy motor 1 x 220 Volts (up to LM-EW 750).
- Hydraulic- or air motor driven.
- Special coating or end finish according to RAL.
- Slack wire contact.
- 2nd axis end with hand crank.
- Standstill heating.
- Drum with LEBUS-patent groove.
- Drawing on computer disc.
- EX-electrical motor for hazardous environments like for instance offshore and (petro-) chemical industries
- executed with a gypsy-wheel and warpinghead(s)

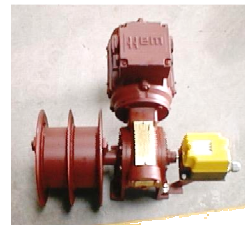
Examples of specials:



anchor winch



mooring winch with automatic
and manual free running



signal winch