

The image shows the winch RPE
up to 1.0 t

Yale *RPE*

Electric winch

Capacity 250 - 2000 kg

Winches series RPE are designed for performance, efficiency and safety and offer many advantages and options. RPE's compact, practical cube design and universal rope lead-offs allow individual applications in almost any position for lifting and pulling loads.
The winches are designed to DIN 15020, classification 1 Bm/M3 and the EC machinery directives.

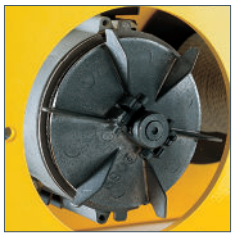
Every winch is factory tested with overload. The units are supplied with a test certificate showing the unit's serial-no. and an operating instructions manual which contains a manufacturer's declaration.

Features

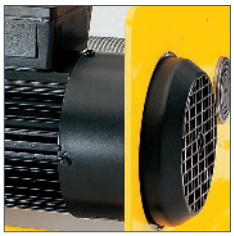
- Compact dimensions due to internal brake motor.
- Standard: 400 V/230 V, 3 Ph, 50 Hz
  or 230 V, 1 Ph, 50 Hz
- Protected to IP 55
- Insulation class F
- Adjustable slip clutch to protect the winch from overloading standard for RPE 10-6 and RPE 20-6.
- Spur gear transmission with helical first gear ensures smooth motion. Lubricated by grease and can, therefore, be used in any position.
- Spring pressure disc brake incorporated in the motor holds the load secure even in the event of a power failure.
- Plain rope drum standard.The rope is secured to the drum in a recess so that the rope can be wound onto the drum in several layers without damage.
- 42 V low voltage control (incl. push-button with emergency-stop and 2 m control cable) or without controls.



Rope attachment



Spring pressure disc brake



Brake motor

INFO

When selecting the length of the rope please bear in mind that a minimum of 2 - 3 windings have to remain on the drum!

The wire rope, if ordered, comes dismounted, and is to be mounted onto the drum by the user.

Please note, the single-phase winches generate a higher noise level than those with three-phase motors!

Optional

- Different drum designs (XL) extended to accommodate longer rope.
- Machined grooved drums for better rope reeling.
- Drums with separation web and extra rope outlets for working with two or more ropes.
- Geared limit switches to limit rope motion in both directions (in combination with 42 V low voltage control).
- Slack rope switch to automatically stop the winch when rope tension eases e.g. when the load touches down (in combination with 42 V low voltage control).
- Frequency converter for stepless speed control.
- Radio remote control (in combination with 42 V low voltage control).
- Other operating voltages on request.
- Motor brakes with manual release.
- Special coatings or zinc plated finish.

The image shows the winch RPE 20-6 with the grooved drum (optional).





Single-phase A.C. motor



Geared limit switches



Gearbox with slip clutch



Different drum designs



INFO

Also available as zinc-plated version on request!

Technical data RPE

Model	Capacity kg	Lifting speed m/min 1st layer	Lifting speed m/min top layer	Rope layers max.	Rope diameter mm	Motor kW	Motor rating ED	Weight without rope kg L	Weight without rope kg XL
RPE 2-13 L	250	10.2	13.2	4	4	0.55	40 %	40	48
RPE 5-6 L	500	4.6	6.6	4	6	0.55	40 %	41	49
RPE 5-12 L	500	8.7	12.6	4	6	1.1	40 %	47	54
RPE 10-6 L[1]	1000	5.1	6.5	3	8	1.1	40 %	89	105
RPE 20-6[1]	2000	5.2	7.6	3	12	2.2	40 %	213	235

[1] Adjustable slip clutch as standard



Plain drum rope capacity

Model	Capacity top layer kg	Drum size	Useable rope length max. m 1st layer	2nd layer	3rd layer	4th layer
RPE 2-13[1]	250	1[1]	11.1	24.5	39	54
RPE 5-6[1]	500	1[1]	7.4	16.9	27	38
RPE 10-6[1]	1000	1[1]	10.1	23.0	37	–
RPE 20-6	2000	1	13.2	30.3	49	–
RPE 2-13 L	250	2	16.8	36.4	57	80
RPE 5-6 L	500	2	11.3	25.2	40	57
RPE 5-12 L	500	2	11.3	25.2	40	57
RPE 10-6 L	1000	2	15.8	35.2	56	–
RPE 20-6 L	2000	2	20.6	46.1	74	–
RPE 2-13 XL	250	3	44.3	94.1	148	200
RPE 5-6 XL	500	3	30.0	65.5	105	149
RPE 5-12 XL	500	3	65.0	65.5	105	149
RPE 10-6 XL	1000	3	30.7	67.0	107	–
RPE 20-6 XL	2000	3	34.1	74.9	120	–

[1] available on request only!

Grooved drum rope capacity (recommended for single layer operation)

Model	Capacity top layer kg	Drum size	Useable rope length m 1st layer	max.
RPE 2-13 R[1]	250	1[1]	8.8	43
RPE 5-6 R[1]	500	1[1]	6.2	33
RPE 10-6 R[1]	1000	1[1]	8.2	30
RPE 20-6 R	2000	1	12.0	44
RPE 2-13 LR	250	2	13.3	64
RPE 5-6 LR	500	2	9.5	49
RPE 5-12 LR	500	2	9.5	49
RPE 10-6 LR	1000	2	12.9	47
RPE 20-6 LR	2000	2	16.8	61
RPE 2-13 XLR	250	3	35.3	165
RPE 5-6 XLR	500	3	25.7	128
RPE 5-12 XLR	500	3	25.7	128
RPE 10-6 XLR	1000	3	25.2	89
RPE 20-6 XLR	2000	3	27.9	99

[1] available on request only!

INFO

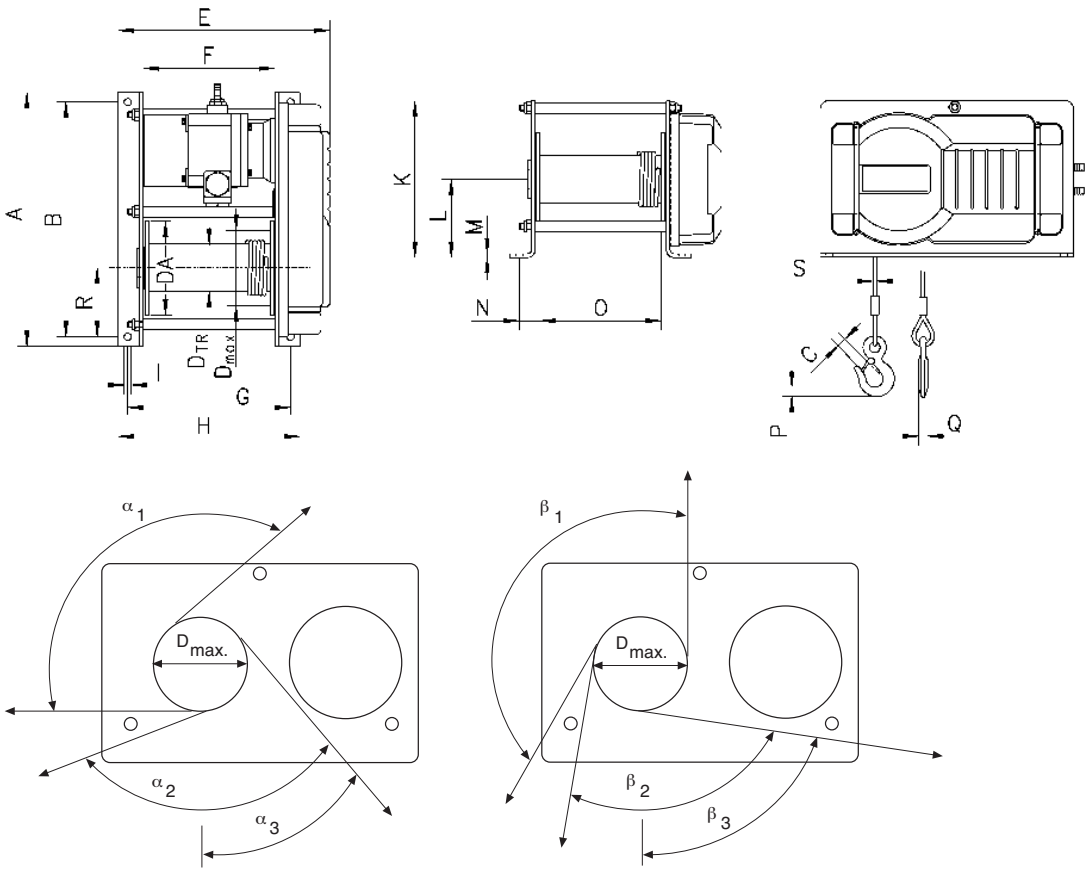
When selecting the length of the rope please bear in mind that a minimum of 2 - 3 windings have to remain on the drum!

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose.

Dimensions RPE

Model	RPE 2-13 [1] RPE 5-6 [1]	RPE 2-13 L RPE 5-6 L RPE 5-12 L	RPE 2-13 XL RPE 5-6 XL RPE 5-12 XL	RPE 10-6 [1]	RPE 10-6 L	RPE 10-6 XL	RPE 20-6	RPE 20-6 L	RPE 20-6 XL
A, mm	405	405	405	525	525	525	670	670	670
B, mm	375	375	375	485	485	485	550	550	550
C, mm	18	18	18	25	25	25	36	36	36
D_{TR}, mm	76	76	76	108	108	108	146	146	146
D max, mm	104	118	118	148	148	148	224.4	224.4	224.4
DA, mm	150	150	150	180	180	180	245	245	245
E, mm	338	428	865	450	575	902	619	784	1.084
F, mm	210	300	737	270	395	722	360	525	825
G, mm	260	350	787	345	470	797	480	645	945
H, mm	290	380	817	380	505	832	540	705	1.005
I, mm	11	11	11	13	13	13	23	23	23
K, mm	250	250	250	340	340	340	401	401	401
L, mm	125	125	125	170	170	170	215	215	215
M, mm	6	6	6	10	10	10	15	15	15
N, mm	33	33	33	47.5	47.5	47.5	72.5	72.5	72.5
O, mm	194	284	721	250	375	702	335	500	800
P, mm	19	19	19	24	24	24	34	34	34
Q, mm	13	13	13	19	19	19	26	26	26
R, mm	125	125	125	170	170	170	135	135	135
S, mm	4	6	6	8	8	8	12	12	12
α 1, °	130	130	130	145	145	145	153	153	153
α 2, °	110	110	110	125	125	125	136	136	136
α 3, °	40	40	40	50	50	50	64	64	64
β 1, °	150	150	150	155	155	155	147	147	147
β 2, °	90	90	90	100	100	100	107	107	107
β 3, °	80	80	80	83	83	83	83	83	83

[1] available on request only! Dimensions for models with optional features are available on request!



Rope lead-offs for electric winch RPE