





Spring pressure disc brake



Brake motor

Electric winch model RPE

Capacity 250 - 1000 kg

Winches series RPE and RPA are designed explicitly for performance, efficiency and safety and offer many advantages and options. RPE's and RPA's extremely compact, practical cube design and universal rope lead-offs allow individual applications in almost any position and make them powerful aids for lifting and pulling loads.

The winches are designed to DIN 15020, classification 1 Bm/M3, safety regulation BGV D8 (winch, lift and pull equipment) and, of course, 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.
- Voltage 400 V/230 V, 3-phase, 50 Hz, protected to IP 54, insulation class F.
- Adjustable slip clutch to protect the winch from overloading standard for model RPE 10-6.
- 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.
- Direct control or 42 V low voltage control (incl. pushbutton with emergency-stop and 2 m control cable).

When selecting the length of the rope please bear in mind that a minimum of 2.5 windings have to remain on the drum (approx. 1 m rope).



Options

- Different drum designs, e.g. extended to accommodate longer rope, machined grooves for exact reeling, with separation web and 2nd rope outlet for working with two ropes.
- Geared limit switches to limit rope motion in both directions (in combination with 42 V low voltage control).
- Single-phase A.C. motor 230 V, 50 Hz, 42 V low voltage control.
- Slack rope switch to automatically stop the winch when rope tension eases e.g. when the load touches down (only in combination with low voltage control).
- Frequency converter for stepless speed control.
- Adjustable slip clutch to protect the winch from overloading for models RPE 2-13, RPE 5-6 and RPE 5-12.
- Special design according to BGV C1 for theater stage applications available.
- · Radio remote control
- · Other operating voltages
- · Stainless brake



Special design for wind energy as well as customised constructions on request.

Also available as zinc-plated version on request.



Single-phase A.C. motor



Geared limit switches



Gearbox with slip clutch



Different drum designs

Hoisting Equipment Electric & Pneumatic winches

Technical data model RPE

| Model | EAN-No. 4025092* | Capacity kg | Lifting speed 1 st layer m/min | Lifting speed top layer m/min | Rope diameter mm | Motor kW | ED % | Useable rope length 1 st layer m | Useable rope length top layer m | Weight without rope kg |
|-----------|---------------------|----------------|--|--|------------------------|-------------|---------|--|--|---------------------------------|
| RPE 2-13 | *071796 | 250 | 10.2 | 13.2 | 4 | 0.55 | 40 | 11.2 | 54.5 | 31.8 |
| RPE 5-6 | *071857 | 500 | 4.6 | 6.6 | 6 | 0.55 | 40 | 7.0 | 38.8 | 32.8 |
| RPE 5-12 | *071918 | 500 | 8.7 | 12.6 | 6 | 1.1 | 40 | 11.0 | 55.4 | 41.0 |
| RPE 9-6 | *071956 | 990 | 5.1 | 6.5 | 8 | 1.1 | 40 | 10.2 | 37.4 | 76.0 |
| RPE 10-6* | *072014 | 1000 | 5.1 | 6.5 | 8 | 1.1 | 40 | 10.2 | 37.4 | 76.9 |

^{*}With slip clutch

Plain drum (longer useable rope length)

| Model | Capacity top layer kg | Drum size | Useable rope length max. m |
|-----------------|-----------------------------|-----------|-------------------------------------|
| RPE 2-13 L | 250 | 2 | 80 |
| RPE 5-6 L | 500 | 2 | 58 |
| RPE 9-6/10-6 L | 990/1000 | 2 | 56 |
| RPE 2-13 XL | 250 | 3 | 200 |
| RPE 5-6 XL | 500 | 3 | 140 |
| RPE 5-12 XL | 500 | 3 | 140 |
| RPE 9-6/10-6 XL | 990/1000 | 3 | 100 |

Grooved drum (recommended for single layer operation)

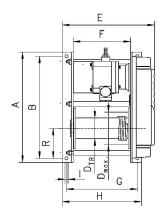
| Model | Capacity top layer kg | Drum size | Useable rope length 1 st layer m | Useable rope length max. m |
|------------------|-----------------------------|-----------|--|-------------------------------------|
| RPE 2-13 R | 250 | 1 | 8.8 | 43 |
| RPE 5-6 R | 500 | 1 | 6.2 | 33 |
| RPE 9-6/10-6 R | 990/1000 | 1 | 8.2 | 30 |
| 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 9-6/10-6 LR | 990/1000 | 2 | 12.9 | 47 |
| 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 9-6/10-6 XLR | 990/1000 | 3 | 25.2 | 89 |

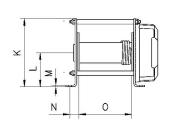


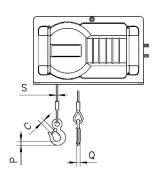
Dimensions model RPE (400 V direct control, standard drum)

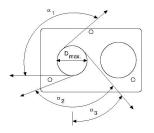
| Model | RPE 2-13 | RPE 5-6 | RPE 5-12 | RPE 9-6 | RPE 10-6 |
|-----------|----------|---------|----------|---------|----------|
| A, mm | 405 | 405 | 405 | 525 | 525 |
| B, mm | 375 | 375 | 375 | 485 | 485 |
| C, mm | 18 | 18 | 18 | 25 | 25 |
| DTR, mm | 76 | 76 | 76 | 108 | 108 |
| D max, mm | 104 | 118 | 118 | 148 | 148 |
| DA, mm | 150 | 150 | 150 | 180 | 180 |
| E, mm | 338 | 338 | 428 | 450 | 450 |
| F, mm | 210 | 210 | 300 | 270 | 270 |
| G, mm | 260 | 260 | 350 | 345 | 345 |
| H, mm | 290 | 290 | 380 | 380 | 380 |
| l, mm | 11 | 11 | 11 | 13 | 13 |
| K, mm | 250 | 250 | 250 | 340 | 340 |
| L, mm | 125 | 125 | 125 | 170 | 170 |
| M, mm | 6 | 6 | 6 | 10 | 10 |
| N, mm | 33 | 33 | 33 | 47.5 | 47.5 |
| O, mm | 194 | 194 | 284 | 250 | 250 |
| P, mm | 19 | 19 | 19 | 24 | 24 |
| Q, mm | 13 | 13 | 13 | 19 | 19 |
| R, mm | 125 | 125 | 125 | 170 | 170 |
| S, mm | 4 | 6 | 6 | 8 | 8 |
| α1,° | 130 | 130 | 130 | 145 | 145 |
| α 2, ° | 110 | 110 | 110 | 125 | 125 |
| α3,° | 40 | 40 | 40 | 50 | 50 |
| β 1, ° | 150 | 150 | 150 | 155 | 155 |
| β2,° | 90 | 90 | 90 | 100 | 100 |
| β 3, ° | 80 | 80 | 80 | 83 | 83 |

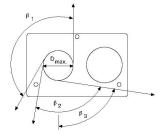
^{*}Dimensions for s with optional features are available on request!











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

Rope lead-offs for electric winch RPE

Hoisting Equipment Electric & Pneumatic winches



Pneumatic winch model RPA

Capacity 250 - 500 daN

The conception is in accordance with the design of the model RPE.

With 100% duty rating and an unlimited number of starts the model RPA is suitable for heavy duty applications. It is insusceptible to contamination, humidity and aggressive mediums from the outside.

Features

- Robust rotating piston motor with high starting torque, designed for operating pressures 4 to 6 bar.
- Spring pressure disc brake incorporated in the motor holds the load secure even in the event of an air failure.
- Sensitive control by means of direct acting valves in the control switch.

Options

- Different drum designs, e.g. extended to accommodate longer rope, machined grooves for exact reeling, with separation web and 2nd rope outlet for working with two ropes.
- Control including 2.5 m hose and air coupler.
- Maintenance unit for main air supply pipe (pressure regulator, manometer, lubricator and support).

To ensure faultless operation the compressed air supply must be filtered and oiled.



Rope attachment



Different drum designs

Available in corrosion proof version on request!



Technical data model RPA

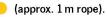
| Model | EAN-No. 4025092* | Capacity | Lifting speed with rated load* | Lifting speed without load* | Lowering speed with rated load* | Rope diameter | Motor | Useable rope length top layer | Weight without rope |
|----------|---------------------|----------|---|--------------------------------------|--|------------------|-------|-------------------------------------|---------------------------|
| | | kg | m/min | m/min | m/min | mm | kW | m | kg |
| RPA 2-13 | *072397 | 250 | 12.5 | 20 | 22 | 4 | 0.55 | 54.5 | 36.7 |
| RPA 5-6 | *072458 | 500 | 6.2 | 10 | 11 | 6 | 0.55 | 38.8 | 36.7 |

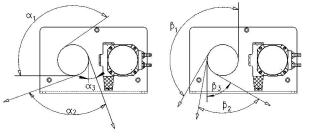
^{*}Values in the top layer for 6 bar, air consumption 0.75 m³/min

Dimensions model RPA

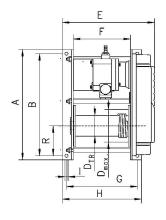
| Model | RPA 2-13 | RPA 5-6 |
|-----------|----------|---------|
| A, mm | 405 | 405 |
| B, mm | 375 | 375 |
| C, mm | 18 | 18 |
| DTR, mm | 76 | 76 |
| D max, mm | 104 | 118 |
| DA, mm | 150 | 150 |
| E, mm | 336 | 336 |
| F, mm | 210 | 210 |
| G, mm | 260 | 260 |
| H, mm | 290 | 290 |
| l, mm | 11 | 11 |
| K, mm | 250 | 250 |
| L, mm | 125 | 125 |
| M, mm | 6 | 6 |
| N, mm | 33 | 33 |
| O, mm | 194 | 194 |
| P, mm | 19 | 19 |
| Q, mm | 13 | 13 |
| R, mm | 125 | 125 |
| S, mm | 4 | 6 |
| α1,° | 130 | 130 |
| α2,° | 90 | 90 |
| α3,° | 20 | 20 |
| β 1, ° | 150 | 150 |
| β2,° | 70 | 70 |
| β 3, ° | 60 | 60 |

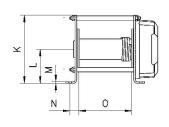
When selecting the length of the rope please bear in mind that a minimum of 2.5 windings have to remain on the drum

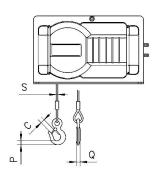




Rope lead-offs for pneumatic rope winch RPA







Hoisting Equipment Electric & Pneumatic winches



For determining the required rope length, please take into account that at least 2 to 3 windings must remain on the drum!

Electric winch model BETA SILVERLINE

Capacity 125 - 3200 kg

Electric winches of the BETA SILVERLINE range are used for lifting, towing and positioning of loads.

The proven technology and specified equipment features make the winch the ideal product for standard applications.

Features

- The electrically released spring pressure disc brake safely holds the load also in the event of a power failure
- Powerful three-phase AC drives for multi-range voltage 380 - 420V, 50 Hz or 440 - 460V, 60 Hz.
 Motor type of enclosure IP 55, duty factor 40% ED.
- Electronic overload protection from 1000 kg lifting load as standard.
- The maintenance-free, oil lubricated gearbox has quiet running characteristics due to milled and ground gears with helical teeth.
- All parts with high-quality two component paint (RAL 5015, coat thickness approx. 120 µm), rope drum zinc-plated in addition.
- Standard rope drum of grooved design, with large rope capacity.
- Variable rope lead-in due to two rope attachment points (left and right).
- · Contactor control (incl. gear limit switch).
- Complies with accident prevention regulations BGV D 8.

BETA SILVERLINE winches are only available with the specifications shown in this catalogue.

Additional options and an adaptation for special applications are offered exclusively for model BETA PROLINE (see page 106).

 As PROLINE winches are always customized solutions they are only available on request.



Technical data model BETA SILVERLINE

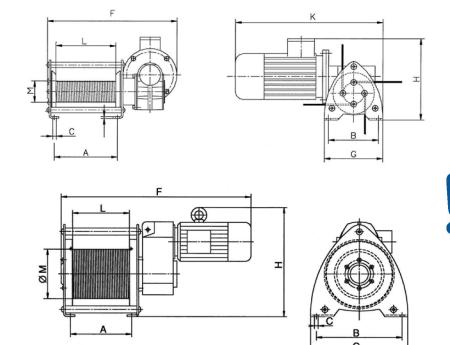
| ArtNo. Contactor control | Size | Capacity 1 st layer kg | Capacity top layer kg | Lifting speed 1 st layer m/min | Lifting speed top layer m/min | Rope diameter* mm | Motor kW | Classification FEM/ISO | Useable rope length 1 st layer m | Useable rope length top layer m | Weight without rope kg |
|--------------------------------|--------|---|-----------------------------|--|--|-------------------------|-------------|---------------------------|--|--|---------------------------------|
| 031140006 | Mini | 250 | 170 | 4.7 | 7.3 | 4 | 0.37 | 1Bm/M3 | 7 | 46.7 | 25 |
| 031140015** | Mini | 250 | 170 | 3.7 | 5.7 | 4 | 0.55 | 1Bm/M3 | 7 | 46.7 | 25 |
| 031149065 | BG 1 | 500 | 348 | 3.5 | 5.5 | 6 | 0.37 | 1Am/M4 | 8.4 | 58.5 | 65 |
| 031149077 | BG 1 | 500 | 348 | 8.5 | 12.6 | 6 | 0.75 | 1Am/M4 | 8.4 | 58.5 | 65 |
| 031149254 | BG 2 | 980 | 697 | 3.4 | 4.9 | 9 | 0.75 | 1Am/M4 | 11 | 77.5 | 114 |
| 031149259 | BG 2 | 980 | 697 | 7.5 | 10.8 | 9 | 1.1 | 1Am/M4 | 11 | 77.5 | 120 |
| 031149302 | BG 2 | 1250 | 814 | 5.9 | 9.2 | 9 | 1.1 | 1Bm/M3 | 8.7 | 64.1 | 125 |
| 031149438 | BG 3 | 1600 | 1115 | 3.9 | 5.7 | 12 | 1.1 | 1Am/M4 | 12.1 | 87.8 | 204 |
| 031149441 | BG 3 | 1600 | 1115 | 8.5 | 12.5 | 12 | 2.2 | 1Am/M4 | 12.1 | 87.8 | 210 |
| 031149533 | BG 3.5 | 3200 | 2354 | 6.0 | 8.3 | 14 | 3 | 1Am/M4 | 11.4 | 64.5 | 224 |

^{*}recommended rope: DIN 3069 FE-znk 1960 sZ-spa

Dimensions model BETA SILVERLINE

| ArtNo. Contactor | 031140006 | 031140015* | 031149065 | 031149077 | 031149254 | 031149259 | 031149302 | 031149438 | 031149441 | 031149533 |
|------------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| A, mm | 185 | 185 | 215 | 215 | 270 | 270 | 270 | 320 | 320 | 320 |
| B, mm | 170 | 170 | 300 | 300 | 400 | 400 | 400 | 510 | 510 | 510 |
| Ø C, mm | 12 | 12 | 13.5 | 13.5 | 18 | 18 | 18 | 22 | 22 | 22 |
| F, mm | 389 | 389 | 710 | 746 | 852 | 912 | 907 | 1014 | 1073 | 1101 |
| G, mm | 200 | 200 | 340 | 340 | 465 | 465 | 465 | 570 | 570 | 570 |
| H, mm | 241 | 241 | 333 | 319 | 490 | 487 | 490 | 614 | 599 | 684 |
| K, mm | 432 | - | - | - | - | - | - | - | - | - |
| L, mm | 180 | 180 | 200 | 200 | 250 | 250 | 250 | 300 | 300 | 300 |
| Ø M, mm | 64 | 64 | 108 | 108 | 175 | 175 | 138 | 218 | 218 | 242 |

^{*}A.C. motor drive 230 V



Pfaff winches are not designed for passenger elevation applications and must not be used for this purpose.

^{**}A.C. motor drive 230 V



Available in explosion proof version.



Application oriented winch solutions



In compliance with accident prevention regulations BGV C1, also available for application on stages and in studios.

Options

- Various drum designs e.g. extended for a larger rope capacity, special rope drums for operation with several ropes
- Rope pressure rollers to prevent the unloaded rope from jumping off the drum.
- Adjustable gear limit switch for limiting the rope path in both directions.
- Slack rope switch for automatically stopping the winch when the rope tension eases or when the load is set down.
- Frequency inverter for infinitely variable speed control.
- External operation via cable/radio
- · Other operating voltages
- Other motor protection
- · Absolute or incremental encoder
- Pole-changing motors
- · Special preservation

Electric winch model SW-E BETA PROLINE

Capacity 250 - 7500 kg

When it comes to individual solutions or highly specialized applications we recommend our winch model BETA PROLINE. Major fields of application are entertainment, explosion protected environments and everywhere where our standard winch models RPE and BETA SILVERLINE do not meet the demanding requirements.

Electric winches of the BETA PROLINE range are used for lifting, towing and positioning of loads under demanding conditions. All models are based on a modular system; a high degree of flexibility ensures tailor-made solutions owing to a large number of options.

The application of high-quality components and gear motors ensure safety and a long service life.

Features

- The electrically released spring pressure disc brake safely holds the load also in the event of a power failure.
- Powerful three-phase AC drives for multi-range voltage 380 - 420V, 50 Hz or 440 - 460V, 60 Hz.
 Motor type of enclosure IP 55, duty factor 40% ED.
- Electronic overload protection from 1000 kg lifting load as standard.
- The maintenance-free, oil lubricated gearbox has quiet running characteristics due to milled and ground gears with helical teeth.
- All parts with high-quality two component paint (RAL 5015, coat thickness approx. 120 µm), rope drum zinc-plated in addition.
- Standard rope drum of grooved design, with large rope canacity
- Variable rope lead-in due to two rope attachment points (left and right).
- Increased operating safety due to 42 V contactor control.
- Complies with accident prevention regulations BGV D 8.



BETA PROLINE winches are customized and made to order products that are only available on request.



For determining the required rope length, please take into account that at least 2 to 3 windings must remain on the drum!



Sheave block for rope guidance, equipped with ball bearings model DSRB S

Technical data model DSRB S

| Model | ArtNo. | Classification FEM/ISO | Pulling force in kg at deflection 90° | Pulling force in kg at deflection 180° | Rope diameter mm |
|---------------|-----------|---------------------------|--|---|------------------------|
| DSRB S 90/4 | 033447103 | 2m/M5 | 700 | 500 | 4 |
| DSRB S 145/5 | 033447104 | 4m/M6 | 1100 | 800 | 5 |
| DSRB S 145/6 | 033447105 | 2m/M5 | 1100 | 800 | 6 |
| DSRB S 185/8 | 033447107 | 2m/M5 | 2300 | 1630 | 8 |
| DSRB S 185/9 | 033447108 | 1 Am/M4 | 2300 | 1630 | 9 |
| DSRB S 270/12 | 033447111 | 2m/M5 | 2500 | 1800 | 12 |
| DSRB S 325/14 | 033447117 | 2m/M5 | 4500 | 3200 | 14 |
| DSRB S 400/16 | 033447113 | 3m/M6 | 5000 | 3800 | 16 |
| DSRB S 400/18 | 033447114 | 2m/M5 | 5000 | 3800 | 18 |
| DSRB S 490/20 | 033447115 | 3m/M6 | 8000 | 6000 | 20 |



Dimensions model DSRB S

| Model | DSRB S 90/4 | DSRB S 145/5 | DSRB S 145/6 | DSRB S 185/8 | DSRB S 185/9 | DSRB S 270/12 | DSRB S 325/14 | DSRB S 400/16 | DSRB S 400/18 | DSRB S 490/20 |
|------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| ArtNo. | 033447103 | 033447104 | 033447105 | 033447107 | 033447108 | 033447111 | 033447117 | 033447113 | 033447114 | 033447115 |
| B, mm | 85 | 125 | 125 | 138 | 138 | 191 | 260 | 302 | 302 | 313 |
| C, mm | 90 | 160 | 160 | 195 | 195 | 290 | 350 | 430 | 430 | 580 |
| Ø D, mm | 90 | 145 | 145 | 185 | 185 | 270 | 325 | 400 | 400 | 490 |
| Ø D1, mm | 20 | 25 | 25 | 30 | 30 | 40 | 50 | 50 | 50 | 65 |
| Ø Dm, mm | 80 | 125 | 125 | 160 | 162 | 246 | 297 | 368 | 364 | 450 |
| E, mm | 62 | 88 | 88 | 106 | 106 | 138 | 180 | 212 | 212 | 220 |
| H, mm | 134 | 224 | 224 | 273 | 273 | 407 | 490 | 612 | 612 | 694 |
| K, mm | 65 | 110 | 110 | 135 | 135 | 202 | 242 | 310 | 310 | 340 |
| L, mm | 120 | 200 | 200 | 245 | 245 | 360 | 440 | 530 | 530 | 650 |
| Ø M/M1, mm | 9/9 | 11.5/13 | 11.5/13 | 13.5/15 | 13.5/15 | 18/20 | 22/25 | 26/30 | 26/30 | 34/40 |
| S, mm | 4 | 6 | 6 | 8 | 8 | 10 | 12 | 15 | 15 | 16 |

