RKSlimlift / EM
Two-stage lifting column
Two-stage lifting column - **RKSlimlift / EM**

Rod-shaped design and extremely quiet operation

**RKSlimlift**

- **Features:**
  - General
    - Excellent installation height/stroke length ratio
    - Self-locking, even at max. load
    - Fixing slots in external profile

- **Options:**
  - Version with manual drive via crank handle
  - Further stroke lengths available on request
  - Quadro control enables control of up to 32 columns synchron

**RKSlimlift EM**

- **Features:**
  - 4 fixing threads
    - Simple connection
  - Drive above the internal profile
    - Large assembly surface
    - Supports variable stroke lengths (optional)

- **Options:**
  - Attractive design
    - Slim design
    - Slender rod shape in the design versions Eclipse and Basic

Integrated drive

- **General**
  - Simple connection

Eclipse

Basic

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46 Lifting columns
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- Foot.............................................. Page 52
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## Position determination

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- RK Slimlift
- Properties/Technical data
- Versions
- Accessories
- Fixing
- Position determination

### Versions:
- Mono 1 or 2 Synchro
- Mono 1 or 2

### Accessories:
- Foot
- Square nut
- Profile adaptor

### Fixing:
- Controls
- PLC/PC data interface
- Hand switches
## General information / operating conditions

<table>
<thead>
<tr>
<th>Design</th>
<th>Rod-shaped lifting column, optionally available with external drive motor <em>(RK Slimlift EM)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Guide</td>
<td>Preset sliding elements made of plastic</td>
</tr>
<tr>
<td>Installation position</td>
<td>Any position/suspended with drop protection provided by the customer</td>
</tr>
<tr>
<td>Push force</td>
<td>Choice of 1,000 N/4,000 N</td>
</tr>
<tr>
<td>Pull force</td>
<td>Choice of 500 N/1,000 N/2,000 N</td>
</tr>
<tr>
<td>Voltage</td>
<td>36 V DC</td>
</tr>
<tr>
<td>Power input</td>
<td>144 W = Slimlift/108 W = Slimlift EM</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 30</td>
</tr>
<tr>
<td>Self-locking</td>
<td>Yes</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>+5°C to +40°C</td>
</tr>
<tr>
<td>Max. displacement with synchronous operation</td>
<td>0-3 mm/0-1.5 mm</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>At nominal load, 15% (max. 1.5 mins operating time, 8.5 mins rest time)</td>
</tr>
</tbody>
</table>

**Note:**
All information refers to the standard sizes. All data of push/pull forces are referring to the individual lifting column, for combined applications a safety factor of up to 0.6 has to be considered.

## Load data

**RK Slimlift**
- \( M = 100 \text{ Nm} \) (dynamic)
- \( F_{\text{push}} = 1,000/4,000 \text{ N} \)
- \( F_{\text{pull}} = 500/2,000 \text{ N} \)
- Support torque: 200 Nm (static)

**RK Slimlift EM**
- \( M = 75 \text{ Nm} \) (dynamic)
- \( F = 1,000 \text{ N} \)
- Support torque: 150 Nm (static)
Parallel operation

The standard version also supports parallel operation of two Slimlifts (no synchronisation). This may produce different lifting positions during operation, which can be levelled out by moving to the end positions.

Synchronous operation

Synchronous operation of two or more columns. In conjunction with the integrated sensors, the control (see page 146) ensures synchronisation, and thus constant alignment of all the columns in both directions of travel, even if subject to different loads. The synchronous operation tolerance depends on the lifting speed and is max. 1.5 mm for the 8 mm/s version and max. 3 mm for the 25/32 mm version. A memory function is also available.
**RKSlimlift – Versions**

### Mono and synchro

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QSL32BA130460</td>
<td>RKSlimlift Eclipse</td>
<td>1,000</td>
<td>500</td>
<td>32</td>
<td>460</td>
<td>610</td>
<td>6.0</td>
</tr>
<tr>
<td>QSL32BA330460</td>
<td>RKSlimlift Basic</td>
<td>1,000</td>
<td>500</td>
<td>32</td>
<td>460</td>
<td>610</td>
<td>6.0</td>
</tr>
<tr>
<td>QSL10BD200285</td>
<td>RKSlimlift Basic</td>
<td>4,000</td>
<td>2,000</td>
<td>8</td>
<td>285</td>
<td>610</td>
<td>7.0</td>
</tr>
</tbody>
</table>

4 fixing slots (sealed with cover profile) to accommodate square nuts.
**Lifting columns**

**Introduction**

**Lifting columns**

**Electric cylinder**

**Controls & Accessories**

**Appendix**

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**Areas of application**

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**RKSlimlift EM - Versions**

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**RKSlimlift EM**

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**Mono and synchro**

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<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>QSL25BA270300</td>
<td>RKSlimlift EM Basic</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>300</td>
<td>480</td>
<td>~4.5</td>
</tr>
<tr>
<td>QSL25BA170300</td>
<td>RKSlimlift EM Eclipse</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>300</td>
<td>480</td>
<td>~4.5</td>
</tr>
<tr>
<td>QSL25BA270400</td>
<td>RKSlimlift EM Basic</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>400</td>
<td>580</td>
<td>~5.3</td>
</tr>
<tr>
<td>QSL25BA170400</td>
<td>RKSlimlift EM Eclipse</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>400</td>
<td>580</td>
<td>~5.3</td>
</tr>
<tr>
<td>QSL25BA270430</td>
<td>RKSlimlift EM Basic</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>430</td>
<td>610</td>
<td>~5.5</td>
</tr>
<tr>
<td>QSL25BA170430</td>
<td>RKSlimlift EM Eclipse</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>430</td>
<td>610</td>
<td>~5.5</td>
</tr>
<tr>
<td>QSL25BA270500</td>
<td>RKSlimlift EM Basic</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>500</td>
<td>680</td>
<td>~6.0</td>
</tr>
<tr>
<td>QSL25BA170500</td>
<td>RKSlimlift EM Eclipse</td>
<td>1,000</td>
<td>1,000</td>
<td>25</td>
<td>500</td>
<td>680</td>
<td>~6.0</td>
</tr>
</tbody>
</table>
Levelling foot (for Type EM)

- The foot can be bolted centrally into the base plate of the RK Slimlift EM.
- Max. screw-in depth 25 mm

**Material:**
- Steel parts galvanised
- Pivot plate PA, black

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZD120340</td>
<td>Levelling foot</td>
</tr>
</tbody>
</table>

Foot

- Both foot versions can be bolted to the external profile without the need for any further modifications

**Material:**
- GK-AlSi12/3.2583.02, black powder-coating
- Max. load 1,000 N

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZD120341</td>
<td>1</td>
</tr>
<tr>
<td>QZD120342</td>
<td>2</td>
</tr>
</tbody>
</table>
**Square nut**

- For connecting accessories to the external profile

**Material:** galvanised steel

**Profile adaptor**

- The profile adaptor allows several lifting columns to be together to form a stable combination. In this way, and with minimum effort, four columns can be connected to form lifting tables and operated via a synchronous control (MultiControl quadro).
- The aluminium profiles F-60/1, F-60-L, F-G 60, F-2G 60 from the BLOCAN® Profile Assembly System are suitable as struts for this purpose.

**Material:** AlMgSi, clear anodised

**Galvanised fastenings**

**Scope of delivery:** one profile adaptor with fastenings for attachment to one end of the profile

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**Order instruction square nut:**

- Purchase only in lot sizes and a multiple of that, see product table below

---

**Order instruction square nut:**

- Purchase only in lot sizes and a multiple of that, see product table below

**Code No.**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Lot sizes</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>qzd050971</td>
<td>10, 20, 30... pcs</td>
<td>Square nut M6, DIN 562</td>
</tr>
</tbody>
</table>

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**Application example:**

- Connection example

**Connection example**

- Profile adaptor
- BLOCAN® profile
- View “X”

**Connection example**

- Profile adaptor
- BLOCAN® profile
- View “X”

**Connection example**

- Profile adaptor
- BLOCAN® profile
- View “X”

**Code No.**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZD120256</td>
<td>Complete profile adaptor</td>
</tr>
</tbody>
</table>
Fixing plate (not for EM)

This universal plate can be bolted directly into the screw channel of the lifting column using a fixing set. The numerous pre-drilled holes in the metal make it easy to attach table tops, brackets, etc.

Material: steel, black powder-coated (RAL 9005), galvanised fastenings

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZD100313</td>
<td>Fixing plate</td>
</tr>
<tr>
<td>QZD120336</td>
<td>Fixing set, 4x M6 x 14, DIN 7984</td>
</tr>
</tbody>
</table>
**Controls**

- Input voltage 230 V AC
- Output voltage 24/36 V DC
- For battery operated controls

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Transformer control 120 VA

- approx. 24 V DC

MultiControl

- approx. 36 V DC

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For dimensions and other technical data, please refer to the chapter "Motors and controls"

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZA09C13BH031</td>
<td>Transformer control 120 VA connection C</td>
</tr>
<tr>
<td>QSTACCA1AA000</td>
<td>MultiControl mono connection C, up to max. I= 12 A current output, 36 V DC</td>
</tr>
<tr>
<td>QST20C02AA000</td>
<td>MultiControl duo connection C, 12 A current output at 20% duty cycle</td>
</tr>
<tr>
<td>QST21C02AA000</td>
<td>MultiControl duo connection C for RK Slimlift EM, 12 A current output at 20% duty cycle</td>
</tr>
<tr>
<td>QST20C04AA000</td>
<td>MultiControl quadro connection C, 12 A current output at 20% duty cycle</td>
</tr>
<tr>
<td>QST21C04AA000</td>
<td>MultiControl quadro connection C for Slimlift EM, 12 A current output at 20% duty cycle</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZD020083</td>
<td>Fixing plate 120 VA, control is pushed onto the plate</td>
</tr>
<tr>
<td>QZD100093</td>
<td>6 m bus cable for the networking of up to 8 synchronous controls</td>
</tr>
<tr>
<td>QZD0702844000*</td>
<td>Straight connecting cable (4 m) with 5-pin connector and open cable end</td>
</tr>
<tr>
<td>QZD070526</td>
<td>Extension cable 2.5 m drive for connector C/8-pin DIN socket</td>
</tr>
</tbody>
</table>

*for the connection of a parallel hand switch or an external potentiometer (in the case of the MultiControl mono)
PLC/PC data interface

This interface enables actuation of the synchronous control system via different input devices (PLC, PC and hand switch).

You will find further product information on page 182.

Hand switches/accessories

Note:
For further hand switch versions, please refer to the chapter “Controls” on page 146.
We say what we do - and do what we say!
We also say what we can’t do - and don’t do it!