



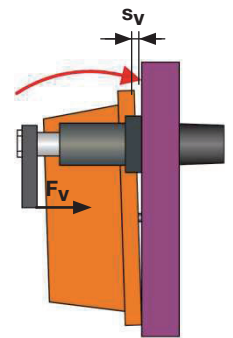


Is the workpiece to be positioned or to be pulled against the support?

yes  no

Displacement force  $F_V =$  \_\_\_\_\_ [N]

Displacement stroke  $s_V =$  \_\_\_\_\_ [mm]



**Condition:**

The subsequent clamping force is to be adjusted at least to 4.5 kN.

The usable displacement force  $F_V$  is depending on the clamping arm length between 0.7 and 1.1 kN.

**Note:**

Evaluate the maximum displacement force as per diagram on data sheet B 1.8310.

Positioning up to 2 mm displacement stroke possible.

Is there the risk of side load introduction during clamping / unclamping?

yes  no

Description of the side load:

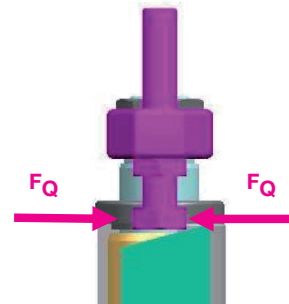
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note:**

Additionally introduced side loads ( $F_Q$ ), apart from the side loads introduced by the admissible clamping arms, are generally to be avoided during clamping / unclamping.

**Examples of side load introduction:**

During the clamping process, rotatory loads must not be introduced into the piston, since this could lead to wear of the guide elements or to damage of the components. This type of load can e.g. be generated by clamping on an inclined surface. Due to the slipping of the clamping screw on the inclined surface, a side load to the clamping arm will be caused and transferred to the internal mechanics of the electric swing clamp.



Environmental conditions  dry

minimum quantity lubrication

dust

wet

Type: \_\_\_\_\_  
(e. g. coolant lubricants, wet cleaning, etc.)

**Note:**

If there is any danger that fluids penetrate into the electric swing clamp, the screw plug at the venting port G 1/8 has to be removed and a vent hose has to be connected.

The other end of the hose has to be placed to an absolutely dry area where no liquids, liquid mist or similar can be sucked in. It is recommended to connect a dry positive air pressure protection with 0.2 bar.

Ambient temperature [C°] \_\_\_\_\_  
Admissible: -10 ... +40 °C

Must vibrations/oscillations be expected?

yes  no

**Note:** Vibrations/oscillations can lead to the loss of self-locking when disconnecting the power supply.

Is a metallic wiper required?

yes  no

What type of swarf/contamination is to be expected? \_\_\_\_\_

What is the number of load changes?

Load changes/day \_\_\_\_\_

Load changes/week \_\_\_\_\_

Load changes/month \_\_\_\_\_

**Note:** It is recommended to send the electric swing clamp after 500,000 clamping cycles to ROEMHELD for overhaul. On this occasion, the spring elements are replaced, and the spindle is cleaned and greased.

What control is provided for the electric swing clamps?

How are they controlled?

PLC  conventional push-button contacts  IO link

**Note:**

- Provide error display/error evaluation
- Provide error reset possibility
- Provide error handling routine, if necessary
- Observe power supply unit dimensioning per clamp: at least 15 A
- Couplings for standard plugs available as accessories

Is the electric swing clamp automatically coupled electrically?

yes  no

**Note:**

- Coupling and uncoupling must only be effected in de-energised state

Cable length/cable cross section

< 7 m = 1 mm<sup>2</sup>

< 12 m = 1.5 mm<sup>2</sup>

< 20 m = 2.5 mm<sup>2</sup>

< 30 m = 4 mm<sup>2</sup>

**Important note:** The connecting cables must be shielded. The shielding must be grounded on the control side. The connecting cables should be laid and fixed so that damages are excluded. Cable lengths longer than 30 m are not allowed. For further information on control, see operating manual B18310.

Fixed or variable clamping force?

fixed  variable

**Note:**

- Analogue input must be connected and the trimmer F on the board must be set to "0".

Other comments

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