ROEMHELD
HILMA ▪ STARK

Request Checklist for
Electric swing clamps as per data sheet B 1.8310

CUSTOMER DATA

Company / Customer	Town	Customer no.
Contact person	Department	
Email	Phone	

from

Request recorded by (name / company)	Date

Project **Designation** _____

End customer _____ **Site** _____

Task _____

For what type of application the electric swing clamp shall be used?

Installation conditions and installation space
(send also sketch or drawing)

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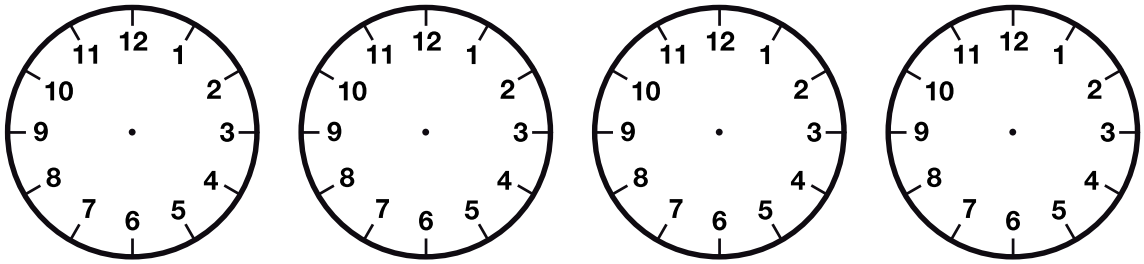
Installation situation

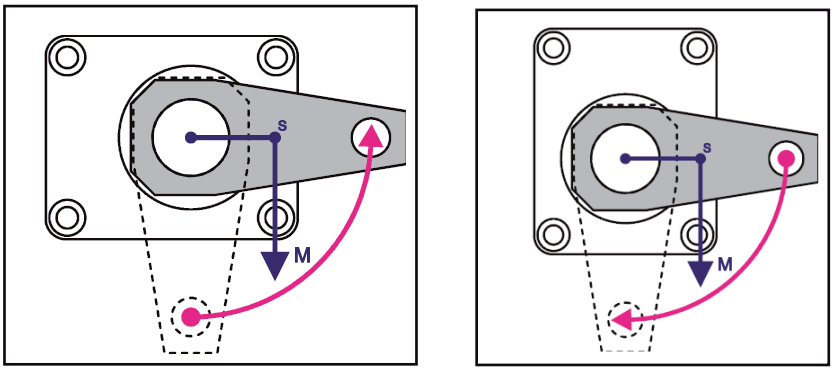
Swing angle ☐ 0° ☐ 90° ☐ 180° ☐ other _____ (min. 45°)

Direction of rotation ☐ without ☐ clockwise rotation ☐ counterclockwise rotation

Mounting position ☐ vertical ☐ hanging ☐ upright ☐ horizontal

Position of the clamping arm in unclamped mode and horizontal mounting position
Please mark in the sketch 1 to 12 o'clock position





Clamping arm

☐ Accessory as per data sheet **B 1.8310** Part no.: _____

Special clamping arm

☐ Special clamping arm ☐ 3D model available (please send step file) ☐ Material _____

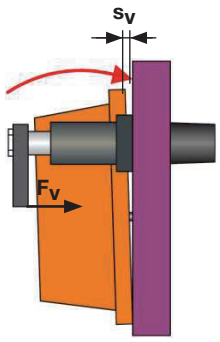
Note:

- **Clamping arm length: max. 150 mm**
- **Radial torque: max. 0.4 Nm**
- **Moment of inertia: max. 0.008 kgm²**

Is the evaluation of the clamping arm by ROEMHELD desired? ☐ yes ☐ no
(clamping arm length, radial torque, moment of inertia)

Shall we prepare an offer for the evaluation? ☐ yes ☐ no
If a 3D model is not available, ROEMHELD prepares a 3D model for evaluation based on a manufacturing drawing as well as the material used for the clamping arm.

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

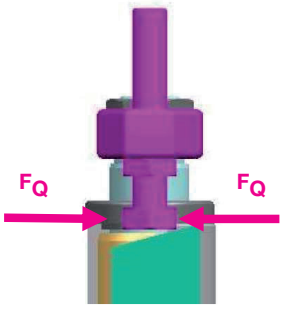
Description of the side load:

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^2

< 12 m = 1.5 mm^2

< 20 m = 2.5 mm^2

< 30 m = 4 mm^2

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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