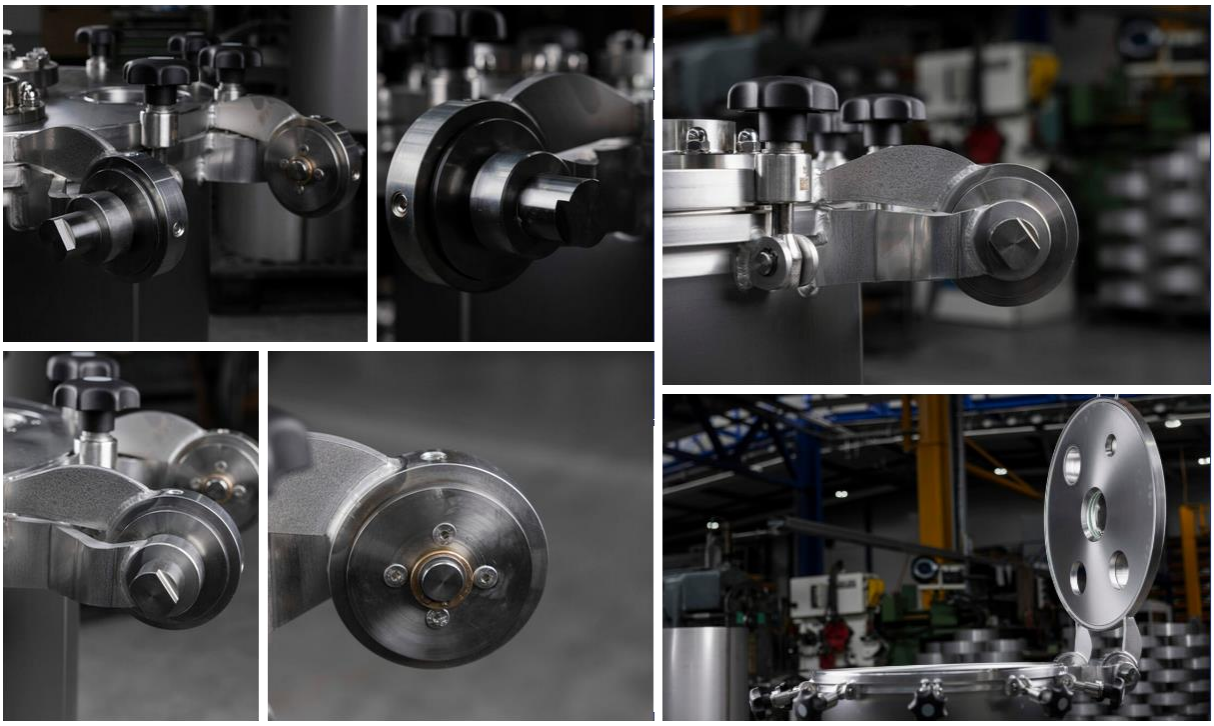
Adjustable hinge for side installation



Applications

Clean room, medical, biotechnology, pharmaceutical industry, food industry, chemical industry

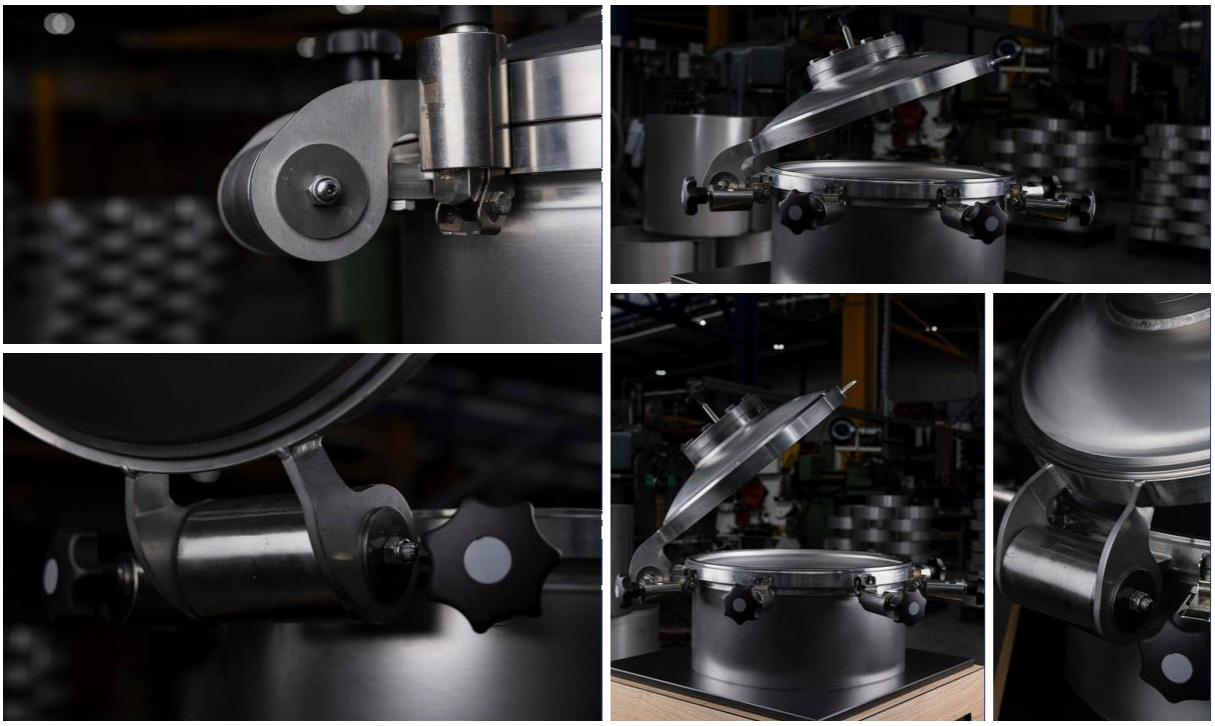
Advantages

- Lid position can be adjusted and fixed in all three axes via the hinge
- Sealed housing
- Rotary shaft mounted on igus® plain bearings
- Easy adjustment, with only a few tools
- Also suitable for large and heavy lids
- Easy to clean

Problem cases of the conventional hinges with lateral installation

- Lid “falls down” when using the “normal” hinge
- Additional installation of a support wedge necessary
- Lid must be centered manually when closing
- High friction on brass bushings or brass washers
- Abrasion of metal particles due to friction on brass bushings

Encapsulated opening aid



Applications

Clean room, hazardous environment, biotechnology, pharmaceutical industry, food industry

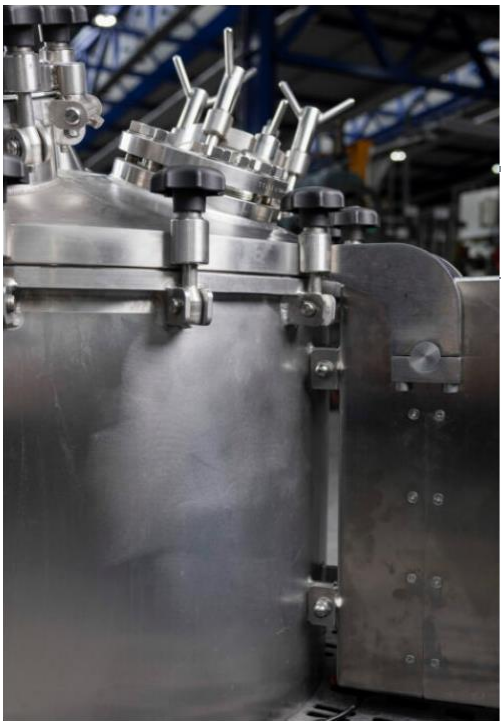
Advantages

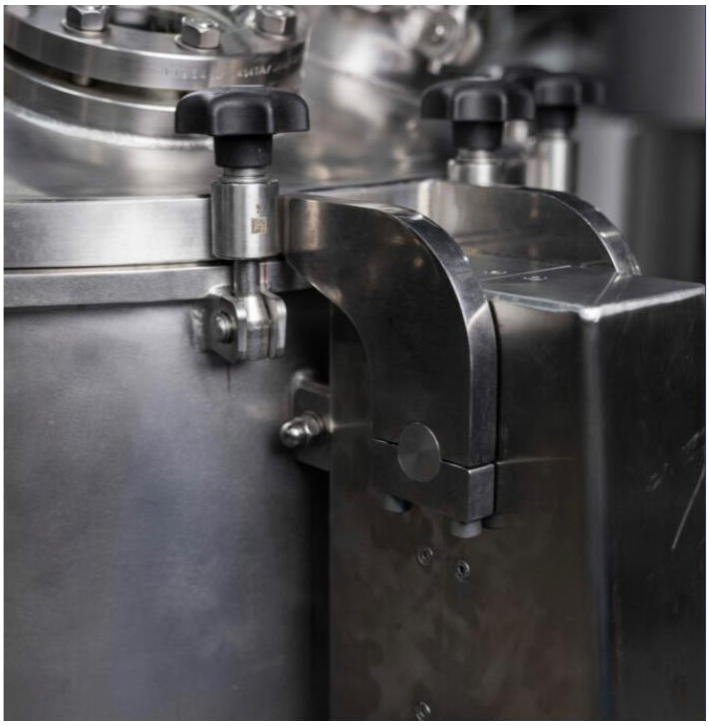
- Internal spring (sealed)
- Spring available in different sizes, therefore adaptable to different torques
- Compact design
- Almost frictionless rotation
- Spring assembly easy to disassemble
- Replaceable without welding
- Hygienic design
- Approved for ATEX Zone 1
- Maximum torque: 190Nm
- Spring is designed for lifetime
- Spring force is only effective up to a cover opening angle of approx. 90°
- Stop for opening angle exchangeable (also for other opening angles)
- Locking bolt can be retrofitted in end position (screwed)

Problem cases of the conventional torsion spring opening aid

- Abrasion of metal particles due to friction between torsion spring and bearing or between the individual coils
- Difficult to clean
- Unhygienic design
- Only approved for ATEX Zone 2
- Lid could fall shut in case of spring breakage
- Maximum torque: approx. 100Nm

Electromechanical hinge





Applications

Clean room, biotechnology, pharmaceutical industry, food industry, chemical industry

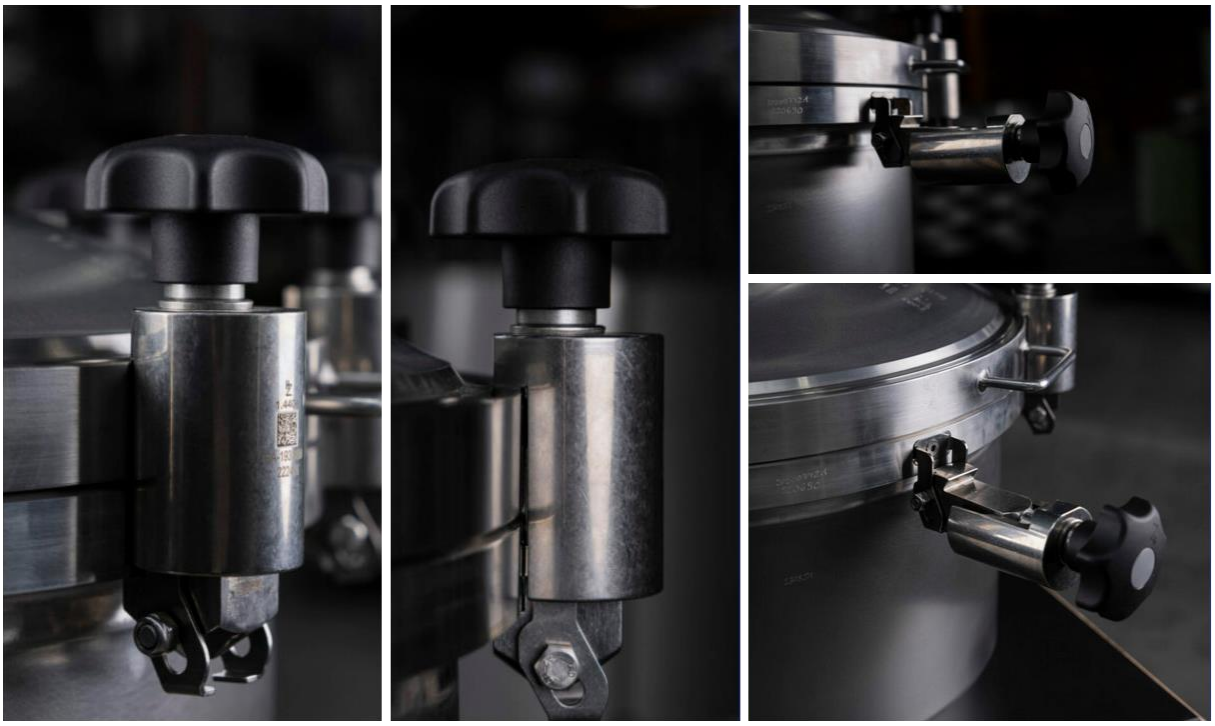
Advantages

- Internal, electric linear drive
- The electric drive is supported by an additional compression spring
- Sealed housing
- Connection via Harting ® plug
- Angle and speed of rotation (open/closed) individually programmable
- Complete actuator will be exchanged in case of defect (replacement actuator available within one week)
- Clamped hinge lugs and screwed housing allow quick and easy installation
- Only power connection necessary
- Opening time adjustable (min. approx. 10 sec. to 95°)
- Maintenance free design
- Protection class IP66, cleanable with high pressure cleaner (protection class IP69k)
- Approved for ATEX zone 21
- Applicable from -25 to +65°C
- Self-locking design, lid cannot close in case of power failure

Problem cases of conventional pneumatic or hydraulic actuators

- “Jerking” of pneumatic drives
- Hydraulic oil and no power unit required
- Cover can close in case of pressure drop in the lines

HZ-clamp screw



Applications

Clean room, hazardous environment, biotechnology, pharmaceutical industry, food industry

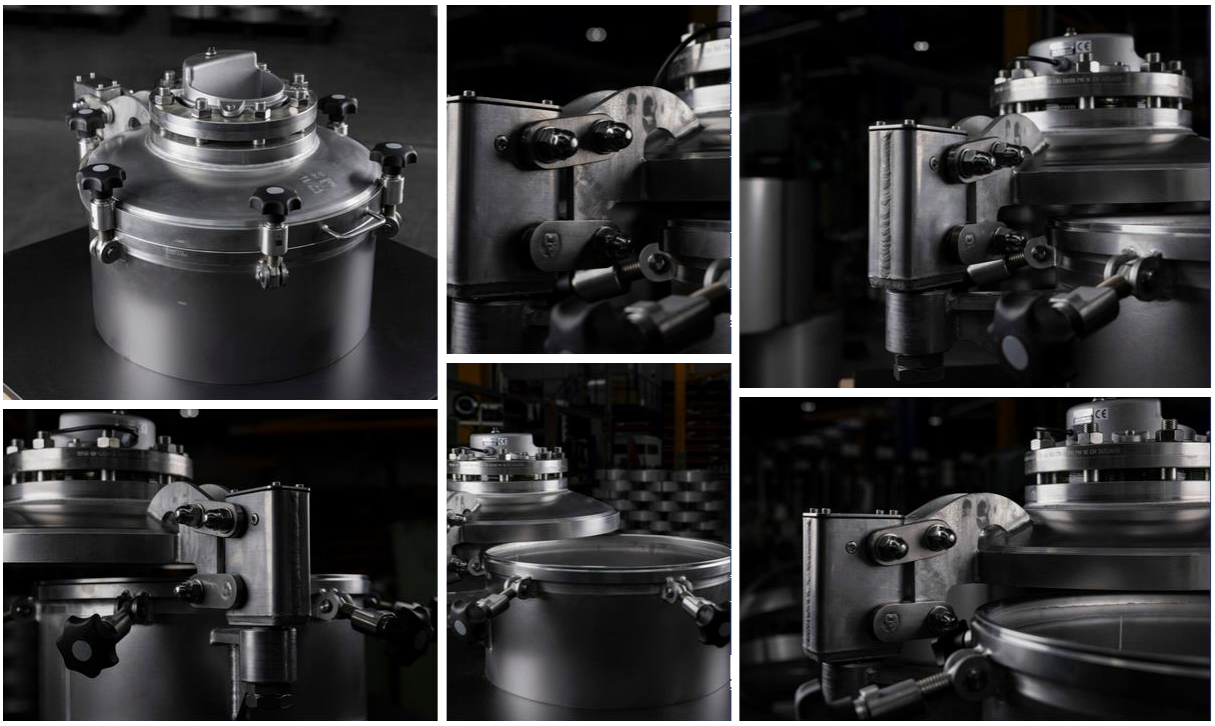
Advantages

- No welds
- Screwed design, screws can be easily replaced
- Position of screws fixed by retaining plate
- Screws cannot “fall off” or be removed without tools
- Type examination approved design by notified body
- Surface easy to clean
- Bolt can be easily, manually closed and tightened. Lower clamping bracket guide creates secure engagement once screw is tightened
- No twisting of the clamping bushing during closing
- Replaceable without welding
- Easy to clean, easy to dismantle

Comparison to hinged screw

- Lugs aren’t welded on
- Upper clamping bushing can’t twist during closing

Mechanical lifting / pivoting hinge



Applications

Limited installation space, clean room, explosive environment, biotechnology, pharmaceutical industry, food industry, chemical industry

Advantages

- Screws can be tightened in any sequence (but crosswise)
- Internal pressure spring (adaptable to the respective lid weight)
- Fine adjustment of the lifting mechanism by pre-loading the internal compression spring
- Internal mechanism accessible from above (after unscrewing the cover plate)
- Rotation via bearing mounted shaft (ease of movement adjustable via “brake”)
- Rotating mechanism and lifting mechanism work independently of each other
- Almost frictionless rotary movement
- Exchangeable without welding
- Easy to clean
- Approved for ATEX zone 2
- Maximum cover weight approx. 100kg
- Spring designed for lifetime
- Latch position can be retrofitted or can be specified induvidually, standard torsion angle

Problem cases of the conventional swing hinge

- No “canting” of the lid when opening / closing
- Strict procedure to be ensured when closing the lid / eye bolts