



XL3 penstock weir type (Seal in frame)

made of stainless steel or steel

WITH RECTANGULAR OPENING, 3-SIDED SEALING

Opening dimensions und pressure level

Opening size 150 × 150 mm bis 4000 × 2500 mm

Pressure stage corresponds to the plate height

Frame and plate

- Supplied as pre-assembled penstock which does not require assembly, setting and adjusting works up to 1200 mm
- Design as self-supporting frame construction made of stainless steel with integrated spindle bearing
- Welded frame and penstock plate made of stainless steel, optimised for maximum safety and durability by means of FEM certification
- Bridge screwed on, thereby all wear parts (spindle, spindle nut, spindle bearing and seal) can be exchanged in the installed condition without dismantling the penstock from the structure
- Penstock for embedding in concrete: Equipped with setting sleeve for aligning the penstock in the channel recess
- No offset in rear to front invert level on the embedded penstock
- Welding certificate in accordance with DIN EN 1090-2 EXC2

Material

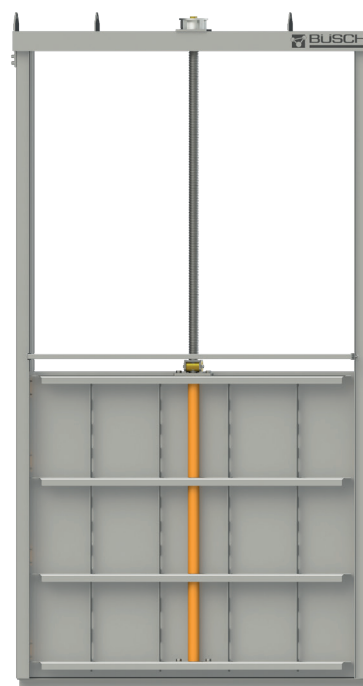
- Stainless steel 1.4301 (304) / 1.4404 (316L) / 1.4410 (A182 F53) / 1.4462 (A182 F51) / steel 1.0038 (S235JR) hot-dip galvanised or epoxy-coated

Spindle

- Spindle protection made of polyethylene or stainless steel
- Spindle with rolled trapezoidal thread made of stainless steel from opening dimensions 150-1700 mm
- Spindle with whirled trapezoidal thread made of stainless steel, opening dimensions 1800-2500 mm
- Single spindle design or twin spindle design
- Spindle nut made of seawater- and wastewater-resistant bronze
- Optional: Spindle outside the medium rising or non-rising (easier to lubricate)

Seal

- Double-lip profile seal mounted in the frame with hot vulcanised (minimum temperature: 180°C) UNO angle joints made of wastewater and UV-resistant EPDM or oil-resistant NBR
- Easy replacement of the seal, as the penstock plate can be pulled upwards
- Factory pre-assembled seal against the wall made of solid, wastewater-resistant cellular rubber on the penstock frame with maximum pressure stage 6 mwc on both sides
- Seal line 50 mm larger than the masonry opening to prevent leaks on masonry spalling



XL3 penstock weir type 2000 x 1850 mm

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YOUR ADVANTAGES

- **READY FOR IMMEDIATE USE**
The penstock is delivered ready for assembly*
- **FOREVER DURABLE SEAL**
Through vulcanised UNO angle joints
- **SEAL IN THE FRAME**
Good control properties, tight in intermediate position
- **PERFECT CORROSION PROTECTION**
All welded stainless steel parts from our own pickling plant
- **OPTIONAL EX-PROTECTION**
On request, the penstock can be proven to comply with the ATEX Directive 2014/34/EU

*(multiple frame as of 1300 mm)

Slide sealing system

Opening dimension 150 x 150 mm to 4000 x 2500 mm

- Integrated sliding guides on the penstock plate made of polyethylene (PE-UHMW)

Leak tightness class

- Leak rate better than DIN EN 19569, Part 4, Table 1:
 - Pressure on front side max: 1 % from 0.05 to 0.1 l·s⁻¹·m⁻¹ (tightness class 3)
 - Pressure on back side max: 5 % from 0.05 to 0.1 l·s⁻¹·m⁻¹ (tightness class 3)

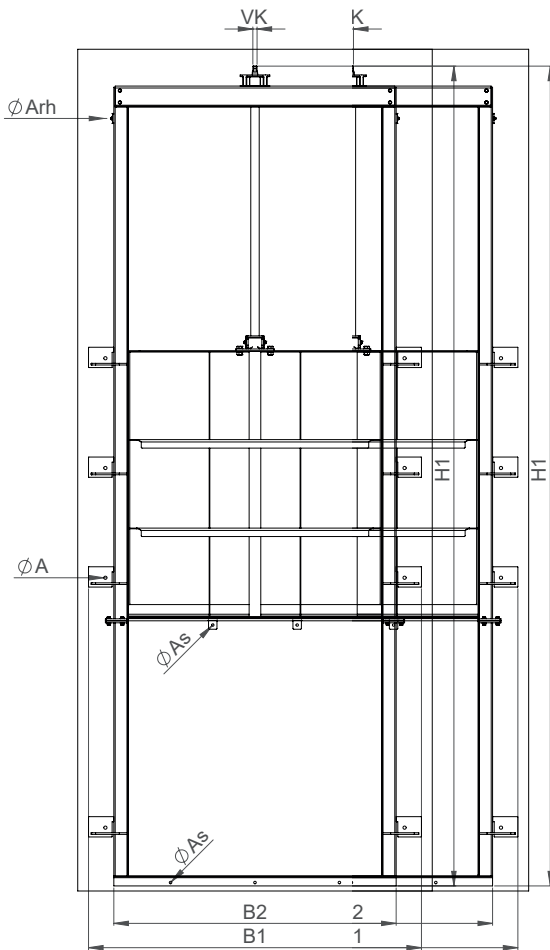
Mounting

- Lateral fixing
 - Grouting into recess
 - Anchoring to the wall in front of the opening
 - Anchoring laterally to the wall
- Fixing onto the base
 - Anchoring to the wall in front of the opening

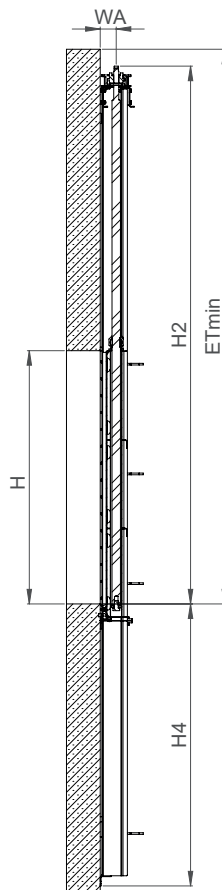
Actuation options

- Stainless steel handwheel with direct mounting or with Modular Actuation System MAS
- Lateral actuation with stainless steel gearbox with stainless steel handwheel or stainless steel crank handle
- Stainless steel operating key All-in-one via square cap
- MOBITORQ mobile actuators (electric or battery-powered) via square cap
- BEAmax stainless steel electric rotary actuator for open-close & modulating duty with direct mounting or with Modular Actuation System MAS, optional with stainless steel weather protection roof
- Electric actuator
- Pneumatic actuator/Hydraulic actuator with direct mounting or with Modular Actuation System MAS

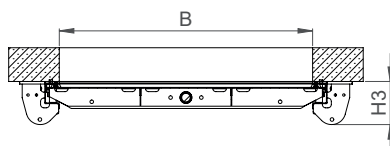
Dimensional drawing



XL3 penstock weir type 1500 x 1500 mm front view



XL3 penstock weir type 1500 x 1500 mm side view



XL3 penstock weir type 1500 x 1500 mm top view

W x H

B1	Please specify when ordering
B2	
H1	Size dependent
H2	
H3	
H4	Please specify when ordering
ET min.	
WA	Size dependent
Rev./Stroke	
VK	
A	
As	
Aq	
Arh	