



## XM4 penstock

made of stainless steel or steel

WITH RECTANGULAR OPENING, 4-SIDED SEALING

### Opening dimensions and pressure stage

- Opening dimensions 200 x 200 mm to 1000 x 1000 mm;  
Pressure level both sides: 10 mwc
- Opening dimensions 1100 x 1100 mm to 1200 x 1200 mm;  
Pressure level both sides: 6 mwc

### 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
- No offset in rear to front invert level on the embedded penstock

### Material

- Stainless steel 1.4301 (304) / 1.4404 (316L) / 1.4410 (A182 F53) / 1.4462 (A182 F51) / Steel 1.0038 (S235JR/A36) hot-dip galvanised or epoxy-coated

### Spindle

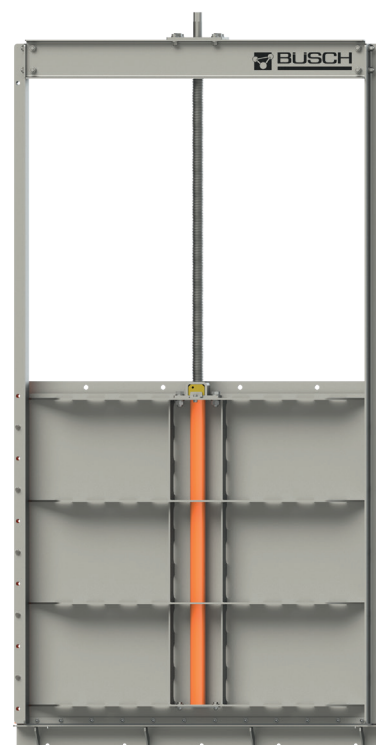
- Spindle protection made of polyethylene
- Spindle with rolled trapezoidal thread made of stainless steel for opening dimensions 200-1200 mm
- Single spindle design or twin spindle design
- Spindle nut made of seawater- and wastewater-resistant bronze

### Seal

- Double-lip seal mounted on the penstock frame with a hot-vulcanised (minimum temperature: 180°C) UNO angle joint made of wastewater- and UV-resistant EPDM or oil-resistant NBR
- Base seal is located on the penstock plate
- Waterproofing to wall as optional, to be ordered, sealing compound (SIKAFLEX®)
- Seal line 50 mm larger than the masonry opening to prevent leaks on masonry spalling

### Leak tightness class

- Leak rate better than to DIN EN 19569, Part 4, Table 1:  
Pressure on front side max: 1% of 0.02 l·s<sup>-1</sup>·m<sup>-1</sup>  
(leak tightness class 5)  
Pressure on rear side max: 5% of 0.02 to 0.05 l·s<sup>-1</sup>·m<sup>-1</sup>  
(leak tightness class 4)



XM4 penstock 1000 x 1000 mm

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## YOUR ADVANTAGES

- **READY FOR IMMEDIATE USE**  
Penstock is delivered ready for assembly\*
- **CLEAR CONTROL OPTIONS**  
Seal is completely in place even in the intermediate position
- **LARGER SEALING LINE**  
Ideal for unclean building openings
- **WEAR-FREE BOTTOM LINE**  
Bottom seal mounted on the slide panel
- **PERFECT CORROSION PROTECTION**  
All welded stainless steel parts from our own pickling plant
- **EX-PROTECTION OPTIONAL**  
On request, proven to comply with ATEX directive 2014/35/EU

\*(multiple frame as of 1300 mm)

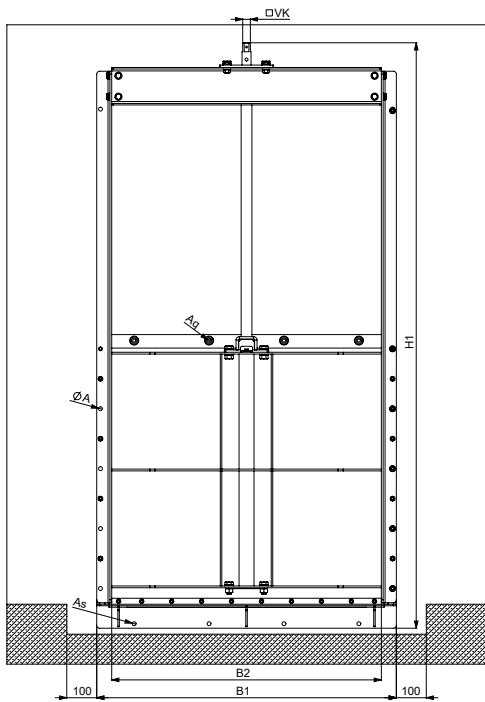
## Mounting

- Lateral fixing
  - Grounding into recess
  - Anchoring to the wall in front of the opening
- Fastening in the base
  - Grounding into recess
  - Anchoring to the wall in front of the opening
  - Anchoring onto the base

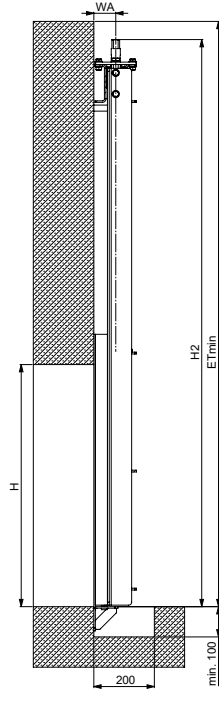
## Actuation of the penstock by

- 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

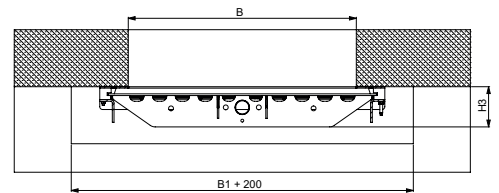
## Dimensional drawing



XM4 penstock 800 x 800 mm front view



XM4 penstock 800 x 800 mm side view



XM4 penstock 800 x 800 mm top view

## Dimensions in mm

B x H	200 x 200	300 x 300	400 x 400	500 x 500	600 x 600	700 x 700	800 x 800	900 x 900	1000 x 1000	1200 x 1200
<b>B1</b>	400	500	600	700	800	900	1000	1100	1200	1400
<b>B2</b>	308	408	508	608	708	812	912	1012	1112	1312
<b>H1</b>	658	858	1058	1258	1458	1754	1954	2154	2354	2754
<b>H2</b>	598	798	998	1198	1398	1674	1874	2074	2274	2674
<b>H3</b>	111	121	121	132	132	141	141	141	161	161
<b>ET min.</b>	710	910	1110	1310	1510	1734	1934	2134	2334	2734
<b>WA</b>	73	73	73	73	73	73	73	73	73	73
<b>Rev./Stroke</b>	41	61	81	101	121	141	161	181	201	241
<b>VK</b>	□16	□16	□16	□16	□16	□26	□26	□26	□26	□26
<b>A</b>	4x Ø13 M10x190		6x Ø13 M10x190		10x Ø13 M10x190		12x Ø13 M10x190		14x Ø13 M10x190	16x Ø13 M10x190
<b>As</b>	1x Ø13 M10x190	2x Ø13 M10x190		3x Ø13 M10x190			4x Ø13 M10x190		5x Ø13 M10x190	
<b>Aq</b>	2x Ø14,5 M8x90					4x Ø14,5 M8x90				

Dimensions for other nominal sizes on request.