



## XM4 penstock

made of stainless steel

WITH RECTANGULAR OPENING, 4-SIDED SEALING

### Opening dimensions and pressure stage

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

### Frame and panel

- Supplied as pre-assembled fitting 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 slide panel 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 fitting 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 (507) / 1.4462 (318LN) / 1.4539 (904L)

### Spindle

- Spindle protection made of polyethylen pipe
- Spindle with rolled trapezoidal thread made of stainless steel for opening dimensions 200-1700 mm
- Spindle with whirled trapezoidal thread made of stainless steel from opening dimensions 1800-4000 mm
- Single spindle design or twin spindle design
- Spindle nut made of seawater- and wastewater-resistant bronze

### Seal

- Assembled on the sliding plate, twin-lipped seal with welded BÜSCH UNO jointed connections made from wastewater- and UV-resistant EPDM or oil-resistant NBR
- Base seal is located on the slider 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 according to DIN EN 19569, Part 4, Table 1:  
Pressure on front side:  $0.02$  to  $0.051 \cdot s^{-1} \cdot m^{-1}$  (leak tightness class 4)  
Pressure on rear side:  $0.05$  to  $0.11 \cdot s^{-1} \cdot m^{-1}$  (leak tightness class 3)
- XM4 penstock leak rate:  
Pressure on front side: max. 1 % von  $0.02 \cdot s^{-1} \cdot m^{-1}$  (leak tightness class 5)  
Pressure on rear side: max. 5 % von:  $0.02$  to  $0.05 \cdot s^{-1} \cdot m^{-1}$  (leak tightness class 4)

\*(multiple frame as of 1300 mm)



XM4 penstock 600 x 600 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

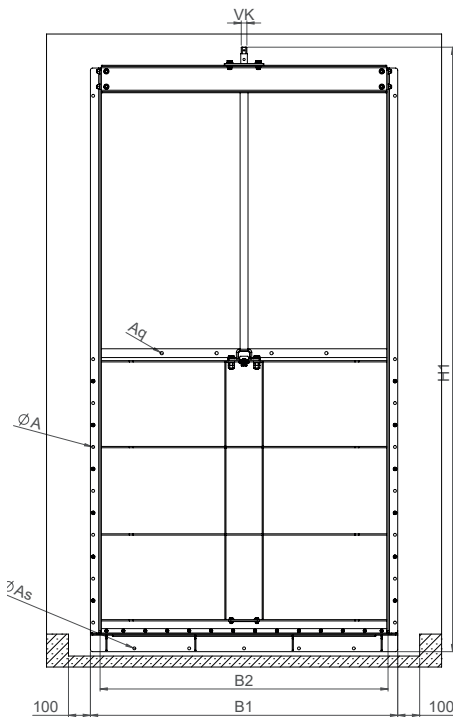
## Mounting

- Lateral fixing  
Concreted into recess  
Dowelling to the wall in front of the opening
- Fastening in the base  
Concreted into recess  
Dowelling to the wall in front of the opening  
Dowelling onto the base

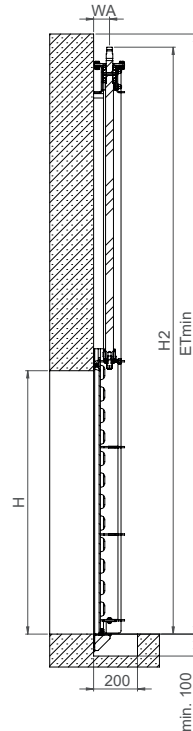
## Actuation of the penstock by

- Stainless steel handwheel on transverse yoke
- Lateral actuation with gearbox with BÜSCH stainless steel gearbox with stainless steel handwheel or stainless steel crank handle
- BÜSCH All-in-one control key via square cap
- BÜSCH MOBITORQ mobile electric actuator via square cap
- BEA®servo electric actuator assembled on transverse yoke
- Optional: BÜSCH weather protection roof
- Pneumatic drive unit assembled on transverse yoke
- Hydraulic drive unit assembled on transverse yoke
- E-actuator

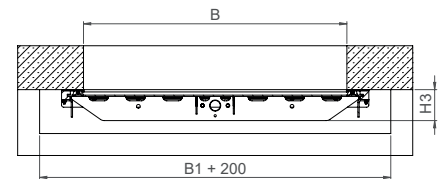
## Dimensional drawing



XM4 1200 x 1200 front view



XM4 1200 x 1200 side view



XM4 1200 x 1200 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>	312	412	512	612	712	812	912	1012	1112	1312
<b>H1</b>	730	930	1130	1330	1530	1754	1954	2154	2354	2754
<b>H2</b>	650	850	1050	1250	1450	1674	1874	2074	2274	2674
<b>H3</b>	125	125	125	141	141	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	4x Ø13 M10x190	6x Ø13 M10x190	6x Ø13 M10x190	10x Ø13 M10x190	12x Ø13 M10x190	14x Ø13 M10x190	16x Ø13 M10x190		
<b>Aq</b>			2x Ø15 M8x90					4x Ø15 M8x90		

Dimensions for other nominal sizes on request.