



CP4 penstock

made of stainless steel

PENSTOCK WITH RECTANGULAR OPENING, 4-SIDED SEALING

Opening dimensions and pressure stage

Opening dimensions 150 x 150 mm to 1200 x 1200 mm

Pressure stage on the front side: 6 mWC

Pressure stage on the rear side: 4 mWC; from 900 x 900 mm: 3 mWC

Frame and panel

- Supplied as pre-assembled fitting which does not require assembly, setting and adjusting works
- Design as self-supporting frame construction made of stainless steel with integrated spindle bearing
- Slim construction design (width = masonry opening + 165 mm)
- Welded frame and slide panel made of stainless steel, optimised for maximum safety and durability by means of FEM certification
- No crack in the base of the embedded penstock
- Penstock for embedding in concrete: Equipped with setting sleeve for aligning the fitting in the channel recess
- Seal and wear parts (spindle, spindle nut, spindle bearing, seal) replaceable
- Welding certificate in accordance with DIN EN 1090-2 EXC2

Material

- 1.4301 (304) / 1.4571 (316Ti)

Spindle

- Spindle with rolled trapezoidal thread made of stainless steel
- Spindle non-rising
- Self-cleaning spindle nut made of sea and wastewater resistant bronze with cleaning recess
- Optional: Spindle outside the medium rising or non-rising (easier to lubricate)

Seal

- Movable, positioned seal support, seal clipped with stainless steel and pre-tensioned for two-sided pressure absorption
- Profile seal with UNO corner connections made from wastewater and UV resistant EPDM or oil-resistant NBR
- Factory pre-assembled seal against the wall made of solid, wastewater resistant cellular rubber on the seal support in the design for dowel fixing
- Seal line 44 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 $0.05 \text{ l} \cdot \text{s}^{-1} \cdot \text{m}^{-1}$ leak tightness class 4)
Pressure on rear side: 0.05 to $0.11 \text{ l} \cdot \text{s}^{-1} \cdot \text{m}^{-1}$ leak tightness class 3)
- CP4 penstock leak rate:
Pressure on front side: maximum 1 % from 0.02 to $0.05 \text{ l} \cdot \text{s}^{-1} \cdot \text{m}^{-1}$ (leak tightness class 4)
Pressure on rear side: maximum 5 % from 0.02 to $0.05 \text{ l} \cdot \text{s}^{-1} \cdot \text{m}^{-1}$ (leak tightness class 4)



CP4 penstock 500 x 500 mm

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YOUR ADVANTAGES

- **IMMEDIATELY TIGHT**
Full sealing performance independent of water level due to pre-tensioned seal
- **NARROW CONSTRUCTION**
Usable in narrow shafts
- **NO SPRAY EFFECT**
Clear control behavior
- **LARGER SEALING LINE**
Ideal for rough construction openings
- **PERFECT CORROSION PROTECTION**
All welded stainless steel parts from our own pickling plant
- **EX-PROTECTION**
Proven to comply with ATEX directive 2014/35/EU

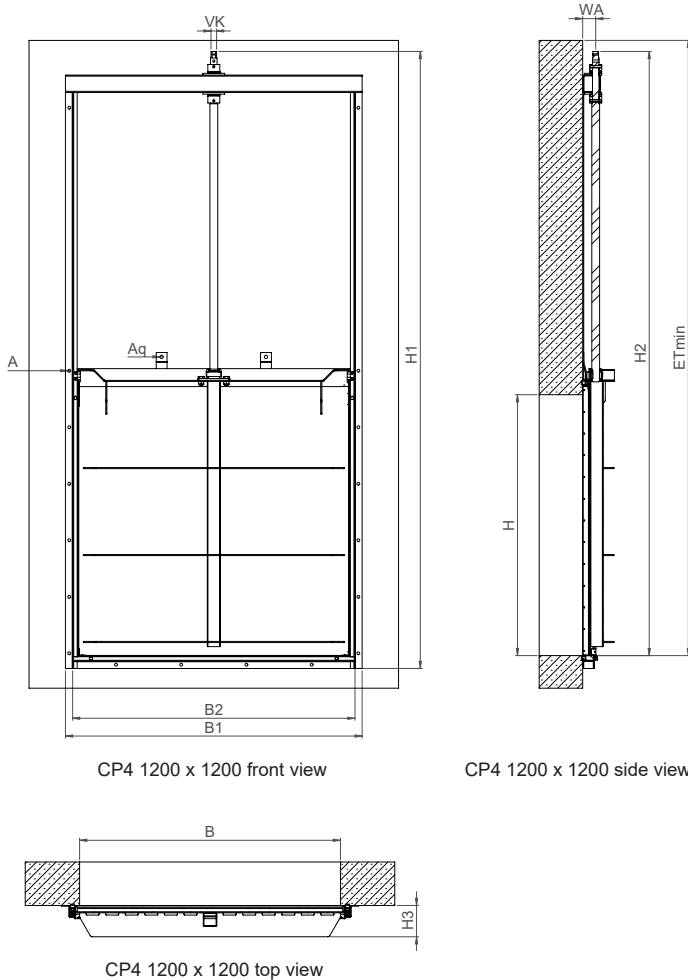
Actuation of the penstock by

- 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 electric or accu - mobile actuators via square stem cap
- BEAservo stainless steel electric actuator assembled on transverse yoke, optional with BÜSCH weather protection roof
- Pneumatic actuator assembled on transverse yoke
- Hydraulic actuator assembled on transverse yoke

Mounting

- Concreted into recess
- Dowelling to the wall in front of the opening

Dimensional drawing



CP4 1200 x 1200 front view

CP4 1200 x 1200 side view

CP4 1200 x 1200 top view

Dimensions in mm

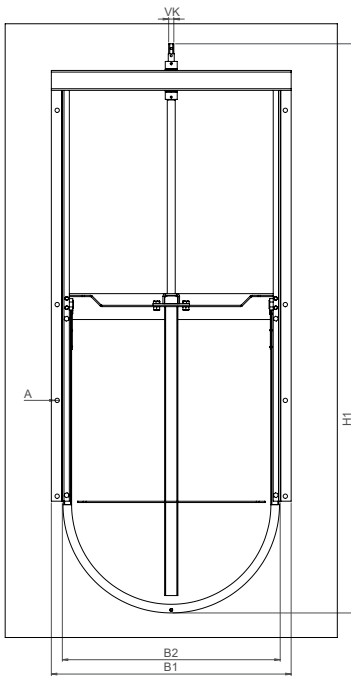
B x H	150x150	200x200	250x250	300x300	400x400	500x500	600x600	700x700	800x800	900x900	1000x1000	1200x1200
B1	315	365	415	465	565	665	765	865	965	1065	1165	1365
B2	250	300	350	400	500	600	700	800	900	1000	1200	1300
H1	670	770	870	970	1170	1370	1590	1790	1990	2239	2439	2839
H2	610	710	810	910	1110	1310	1530	1730	1930	2179	2379	2779
H3	80	80	80	80	90	90	95	100	105	121	134	144
Etmin	670	770	870	970	1170	1370	1590	1790	1990	2239	2439	2839
WA	54	54	54	54	54	54	54	54	54	60	60	60
Rev./stroke (ca.)	38	48	58	68	88	108	128	148	168	188	208	248
VK	□16	□16	□16	□16	□16	□16	□16	□16	□26	□26	□26	□26
A	"2x Ø13 M10x130"		"3x Ø13 M10x130"	"5x Ø13 M10x130"		"8x Ø13 M10x130"	"10x Ø13 M10x130"	"12x Ø13 M10x130"	"13x Ø13 M10x130"	"16x Ø13 M10x130"		"18x Ø13 M10x130"
Aq	-	-	-	-	-	-	-	"1x Ø15 M12x160"		"2x Ø15 M12x160"		

Dimensions for other nominal sizes on request.

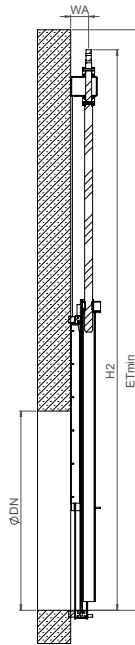
CP4 semicircular VARIANT* FROM CP4

PENSTOCK WITH SEMICIRCULAR OPENING, 4-SIDED SEAL

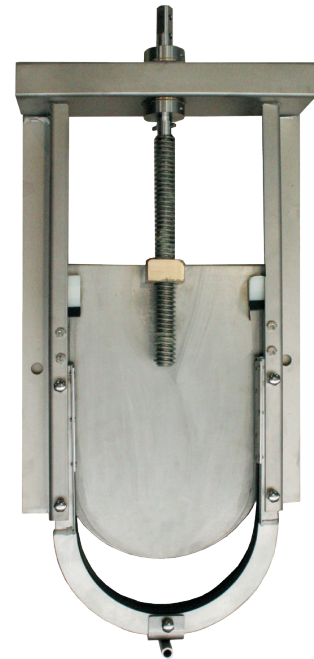
Dimensional drawing



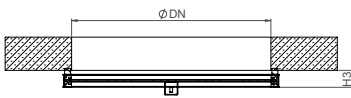
CP4 semicircular DN 600 front view



CP4 semicircular DN 600 side view



CP4 semicircular DN 200



CP4 semicircular DN 600 top view

SPECIAL FEATURES

- **SEMICIRCULAR BOTTOM**
Ideal penstock for DIN channels
- **VARIABLE INSTALLATION OPTIONS**
Subsequent installation in shafts, in an existing channel, or for a new sewer construction

*STANDARD DATA: please refer CP4 penstock

Dimensions in mm

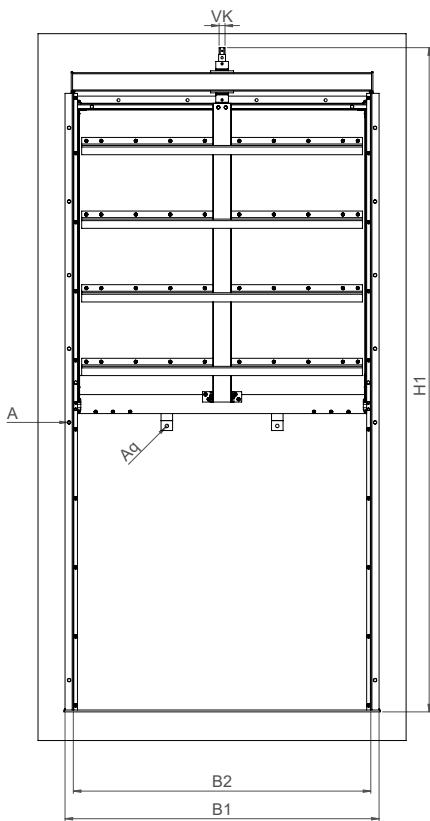
DN	150	200	250	300	400	500	600
B1	272	322	372	422	522	622	722
B2	206	256	306	356	456	556	656
H1	625	720	820	972	1222	1470	1720
H2	562	660	760	937	1187	1437	1680
H3	80	80	80	80	80	80	80
Etmin	622	720	820	997	1247	1497	1740
WA	54	54	54	54	54	54	54
Rev./stroke	32	42	52	62	82	102	122
VK	□16	□16	□16	□16	□16	□16	□16
A	"2x Ø13 M10x130"	"5x Ø13 M10x130"				"7x Ø13 M10x130"	"9x Ø13 M10x130"

Dimensions for other nominal sizes on request.

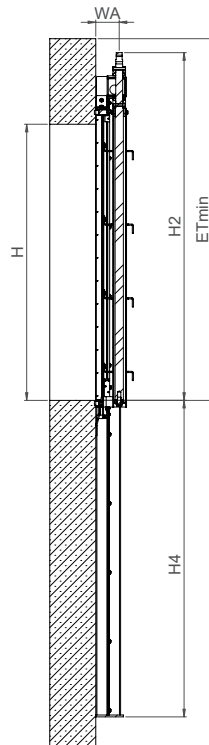
CP4 lowering type penstock VARIANT* FROM CP4

WITH RECTANGULAR OPENING, 4-SIDED SEALING

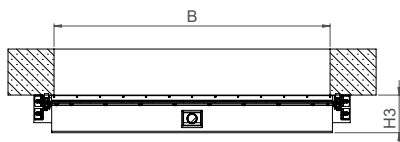
Dimensional drawing



CP4 lowering type penstock
1500 x 1500 front view



CP4 lowering type penstock
1500 x 1500 side view



CP4 lowering type penstock
1500 x 1500 top view



CP4 lowering type penstock 700 x 700 mm

SPECIAL FEATURES

- **LOWERING TYPE PENSTOCK**
Sliding plate can be lowered for optimum water level regulation

*STANDARD DATA: please refer CP4 penstock

Dimensions in mm

B 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	