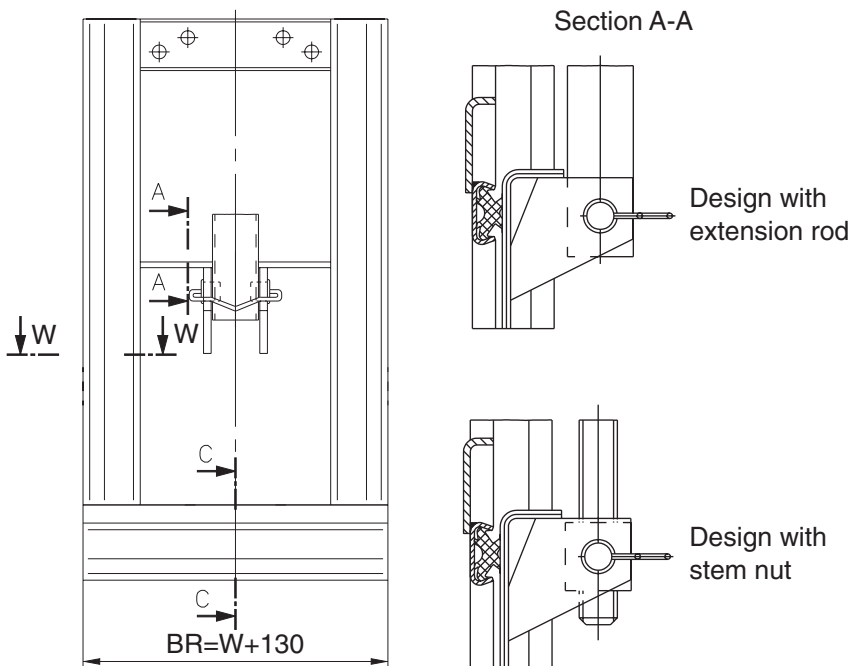


## WAGU PRO Penstock 4480

4 facings, for on-seating or off-seating pressure, suitable as throttle and flow control penstock, for mounting to inlets or outlets of chambers or basins, for grouting into structure recesses or for anchor bolting to smooth concrete walls.



### Designs

- ⇒ Straight sill
- ⇒ Round sill
- ⇒ Sill flush with channel invert
- ⇒ With slide rails
- ⇒ Single-stem type

### Design Features

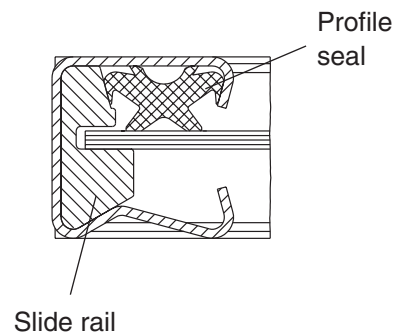
- ⇒ Welded frame of rigid rolled steel profile
- ⇒ Wear-resistant guide positively secured in the frame
- ⇒ Lip profile seal clamped for easy maintenance
- ⇒ Universal retainer for all types of operating gears for stem nut or extension rod (Quick-Fix)
- ⇒ New rib system of the door
- ⇒ Wall sealing by self-adhesive sealing tape (no grouting work necessary)
- ⇒ Anchor bolting by means of variable fastening claws

### Sizes

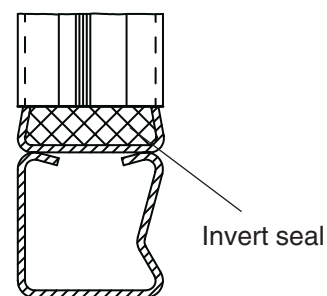
- ⇒ Width W x H up to 1200 x 1200 mm

### Details

Section B-B

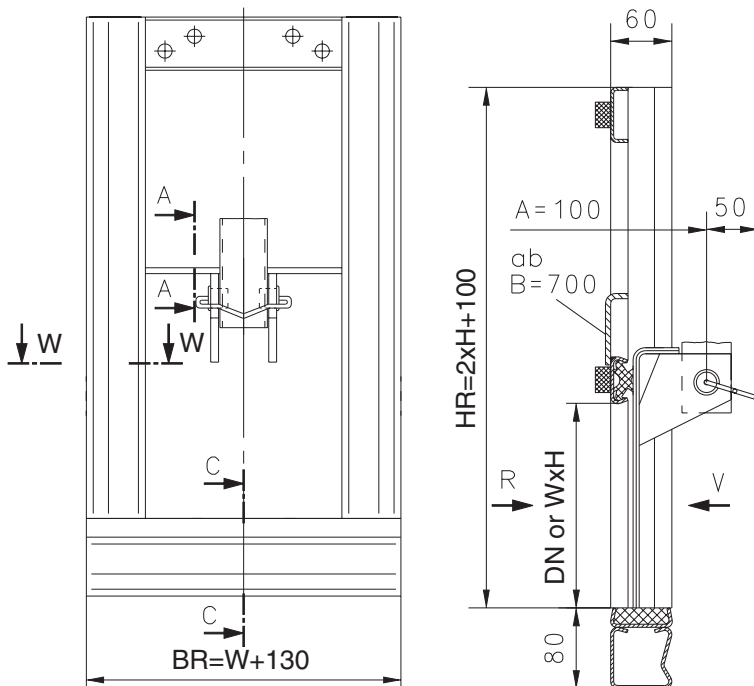


Section C-C



## WAGU PRO Penstock 4480

For grouting, with straight sill for grouting  
DN or W x H 150 x 150 up to 1200 x 1200  
up to 4 m W.C.



### Available Materials

Frame	Door*	Seal	Slide rail	Stem*	Connecting parts
S.S. 1.4571	S.S. 1.4301	chloroprene	PET	S.S. 1.4301	S.S. A4
S.S. 1.4571	S.S. 1.4571	chloroprene	PET	S.S. 1.4301	S.S. A4

\* Other materials or combinations available on request.

### Example for Placing an Order

WAGU PRO Penstock for grouting, with straight sill for grouting,  
catalogue sheet 07.110, operating gear to corresponding catalogue sheet.

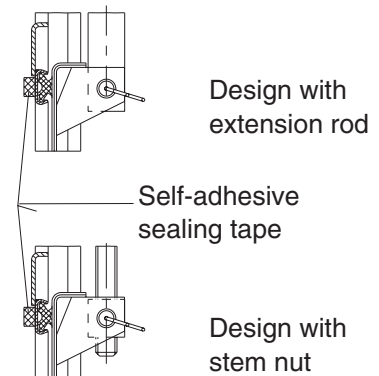
Materials*	Dimensions*
Frame: S.S. 1.4571	DN or width W x H: mm
Door:	Installation depth T <sup>1)</sup> : mm
Seal: chloroprene	Working pressure: m W.C.
Slide rail: PET	Flow direction V/R:
Connecting parts: S.S. A4	

<sup>1)</sup> Dimension from penstock invert to upper edge of the structure.

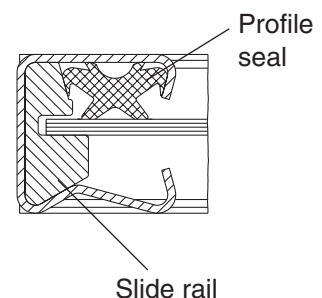
\* Please specify in the enquiry/order.

### Details

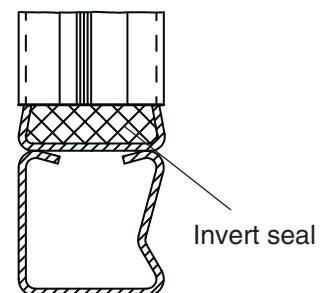
#### Section A-A



#### Section B-B



#### Section C-C



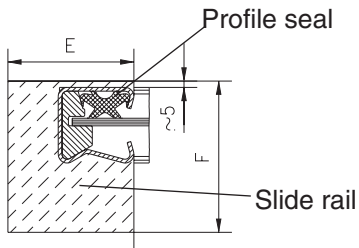
07.110

## Details

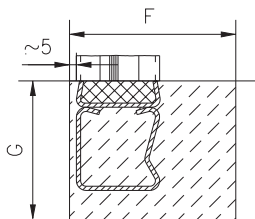
### Recesses

DN / W x H	E	F	G
150 - 1200	100	120	100

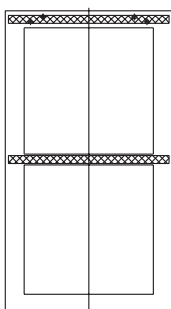
### Section B-B



### Section C-C



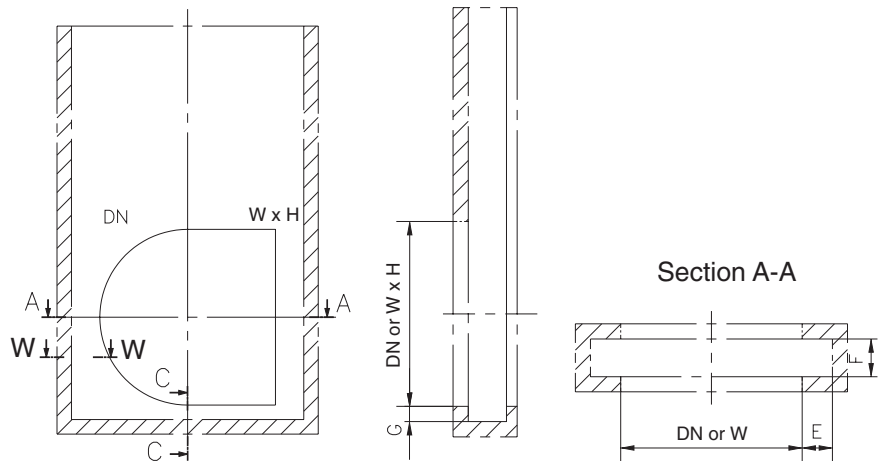
### Configuration of sealing tape



## WAGU PRO Penstock 4480

For grouting, with straight sill for grouting.

## Structure Recesses



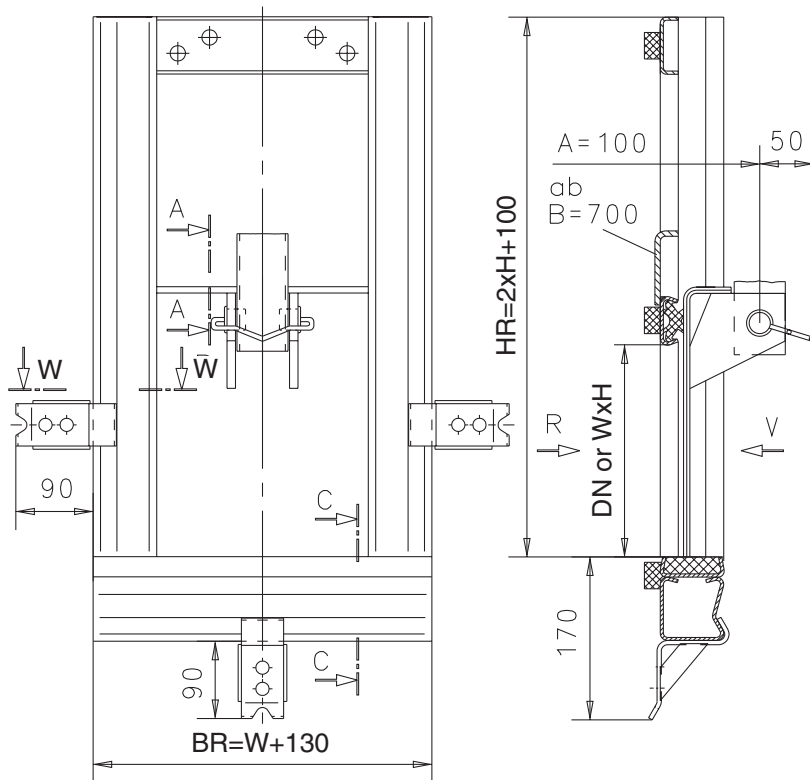
## Mounting Instructions

- ➔ Fix the sealing tape at the middle brace and at the upper cross profile (see detail).
- ➔ Insert the **WAGU PRO** Penstock into the structure recess and align it.
- ➔ Press the frame against the wall without any distortion and see to it that the invert seal is aligned with the channel invert and the sealing tape is compressed to a final height of approx. 5 mm.
- ➔ The drilled holes in the upper cross profile serve for preliminary fastening.
- ➔ Control once more the presetting of the sealing tape at the middle brace and adjust if necessary.
- ➔ For a **WAGU PRO** Penstock of large nominal size and/or high pressure rating, the middle brace has to be provided with an additional fastening angle.
- ➔ Fixing has to be effected by compound anchor bolts.
- ➔ Please take care during alignment that the **WAGU PRO** Penstock sits close without any distortion.
- ➔ The mounting torque has to be applied crosswise by a wrench in order to obtain final fastening force.
- ➔ It is not possible to change the position of the frame after grouting. For that reason, prior to grouting the **WAGU PRO** Penstock has to be checked for perfect performance.
- ➔ Shutter up the recess in a way that no mortar touches the seals or the frame profiles outside the shuttering when grouting<sup>1)</sup>. Possible impurities have to be removed immediately.

<sup>1)</sup> We recommend to use a grouting mortar based on cement, e.g. VGM Superfluid of company TRICOSAL, BETEC Rapid or similar.

## WAGU PRO Penstock 4480

For anchor bolting, with straight sill for anchor bolting  
DN or W x H 150 x 150 up to 1200 x 1200  
up to 4 m W.C.



### Available Materials

Frame	Door*	Seal	Slide rail	Stem*	Connecting parts
S.S. 1.4571	S.S. 1.4301	chloroprene	PET	S.S. 1.4301	S.S. A4
S.S. 1.4571	S.S. 1.4571	chloroprene	PET	S.S. 1.4301	S.S. A4

\* Other materials or combinations available on request.

### Example for Placing an Order

WAGU PRO Penstock for anchor bolting, with straight sill for anchor bolting.  
Catalogue sheet 07.130, operating gear to corresponding catalogue sheet.

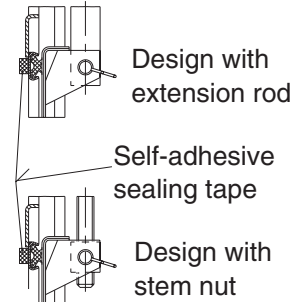
Materials*		Dimensions*	
Frame:	S.S. 1.4571	DN or width W x H:	mm
Door:		Installation depth T <sup>1)</sup> :	mm
Seal:	chloroprene	Working pressure:	m W.C.
Slide rail:	PET	Flow direction V/R:	
Connecting parts:	S.S. A4		

<sup>1)</sup> Dimension from penstock invert to upper edge of the structure.

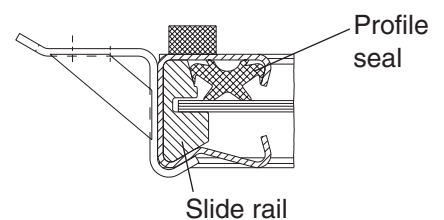
\* Please specify in the enquiry/order.

### Details

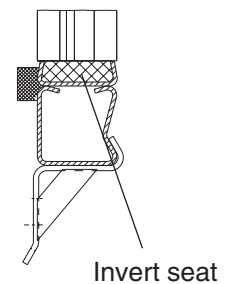
#### Section A-A



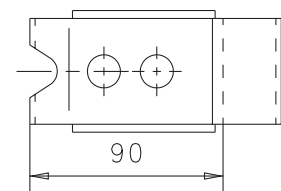
#### Section B-B



#### Section C-C

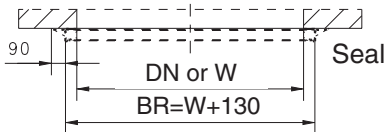


#### Fastening claw

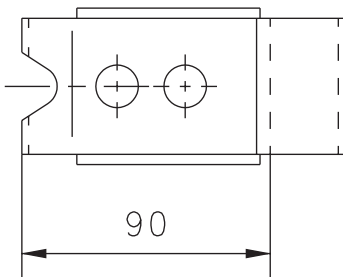


## Details

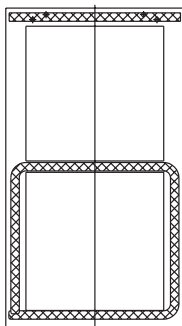
Section A-A



Fastening claw



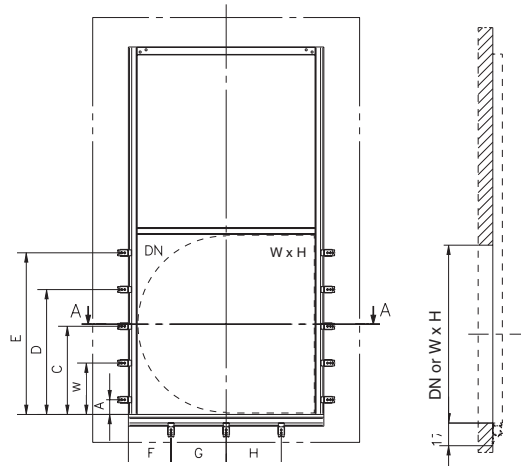
Configuration of sealing tape



## WAGU PRO Penstock 4480

For anchor bolting, with straight sill for anchor bolting.

### Structure Recesses



### Mounting Instructions

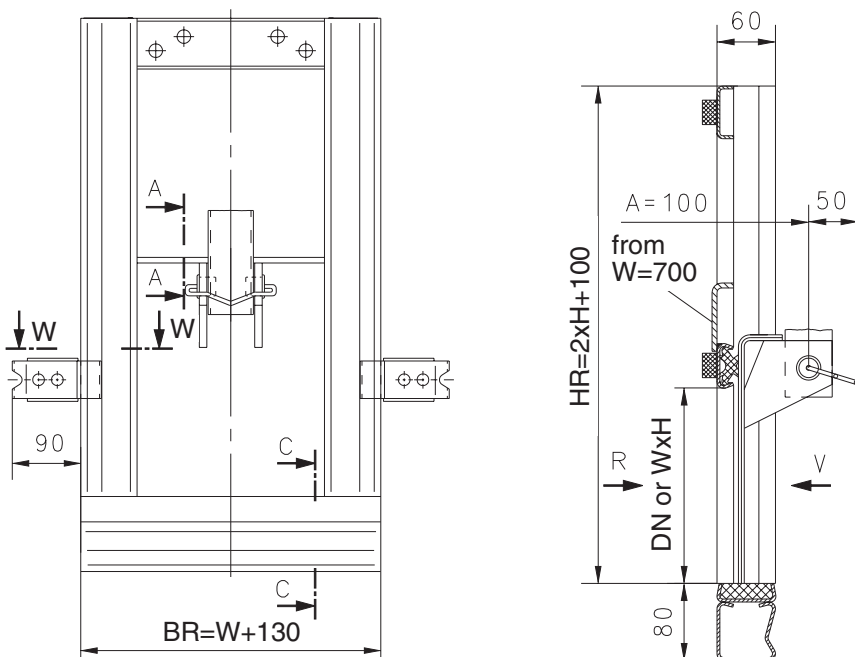
- ➔ Fix the sealing tape in an overlapping way to the back of the frame (see detail).
- ➔ Place the **WAGU PRO** Penstock at the determined position and align it.
- ➔ The drilled holes in the upper cross profile and invert profile serve for preliminary fastening.
- ➔ Attach the fastening claws at the determined positions (see detail and table).
- ➔ For a **WAGU PRO** Penstock of large nominal size and/or high pressure rating, the middle brace has to be provided with an additional fastening angle.
- ➔ Fixing has to be effected by compound anchor bolts.
- ➔ When pretightening the fixing nuts take care that the **WAGU PRO** Penstock sits close without any distortion.
- ➔ Possible structural tolerances to DIN 18202 will be compensated by the wall sealing.
- ➔ The mounting torque has to be applied crosswise by a wrench in order to obtain final fastening force.

Penstock size	Frame	Distance for fastening claws					Sill for anchor bolting			Anchor
Width W x H		A	B	C	D	E	F	G	H	Thread
150	2	100	-	-	-	-	-	-	-	M12
200	2	100	-	-	-	-	-	-	-	M12
250	2	120	-	-	-	-	-	-	-	M12
300	2	50	300	-	-	-	-	-	-	M12
350	2	100	350	-	-	-	-	-	-	M12
400	2	100	400	-	-	-	265	-	-	M12
450	2	100	450	-	-	-	290	-	-	M12
500	2	120	500	-	-	-	315	-	-	M12
600	2	100	350	600	-	-	240	250	-	M12
700	4	100	350	700	-	-	265	300	-	M12
800	4	100	400	800	-	-	290	350	-	M12
900	4	150	450	900	-	-	215	300	300	M12
1000	4	100	350	650	1000	-	240	325	325	M12
1100	4	100	350	600	850	1100	265	350	350	M12
1200	4	100	350	600	900	1200	290	375	375	M12

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## WAGU PRO Penstock 4480

For anchor bolting, with straight sill for grouting  
DN or W x H 150 x 150 up to 1200 x 1200  
up to 4 m W.C.



### Available Materials

Frame	Door*	Seal	Slide rail	Stem*	Connecting parts
S.S. 1.4571	S.S. 1.4301	chloroprene	PET	S.S. 1.4301	S.S. A4
S.S. 1.4571	S.S. 1.4571	chloroprene	PET	S.S. 1.4301	S.S. A4

\* Other materials or combinations available on request.

### Example for Placing an Order

WAGU PRO Penstock for anchor bolting, with straight sill for grouting,  
catalogue sheet 07.140, operating gear to corresponding catalogue sheet.

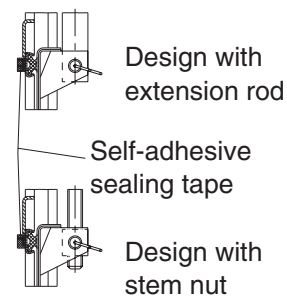
Materials*	Dimensions*
Frame: S.S. 1.4571	DN or width W x H: mm
Door:	Installation depth T <sup>1)</sup> : mm
Seal: chloroprene	Working pressure: m W.C.
Slide rail: PET	Flow direction V/R:
Connecting parts: S.S. A4	

<sup>1)</sup> Dimension from penstock invert to upper edge of the structure.

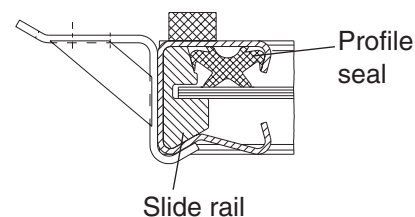
\* Please specify in the enquiry/order.

### Details

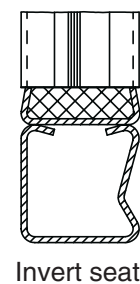
#### Section A-A



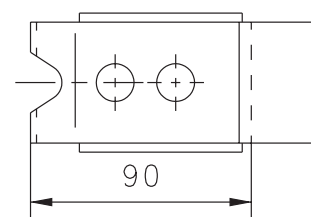
#### Section B-B



#### Section C-C



#### Fastening claw

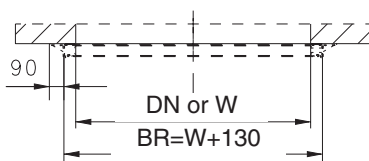


## Details

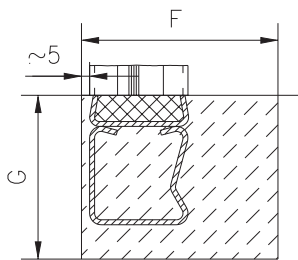
### Recesses

DN / W x H	F	G
150 - 1200	120	100

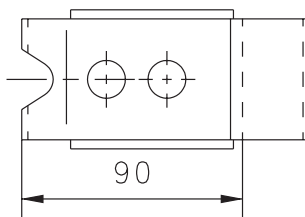
### Section A-A



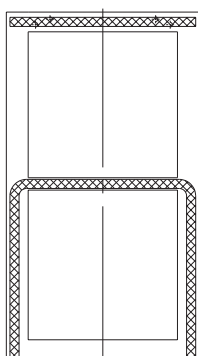
### Section B-B



### Fastening claw



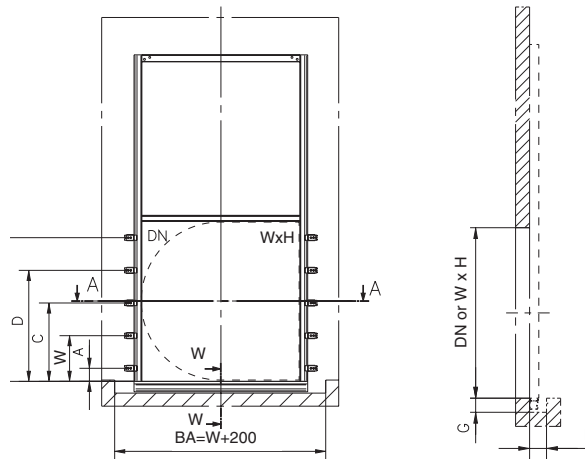
### Configuration of sealing tape



## WAGU PRO Penstock 4480

For anchor bolting, with straight sill for grouting

## Structure Recesses



## Mounting Instructions

- ➔ Fix the sealing tape to the back of the frame (see detail).
- ➔ Place the **WAGU PRO** Penstock at the determined position and see to it that the invert seal is aligned with the channel invert.
- ➔ The drilled holes in the upper cross profile serve for preliminary fastening.
- ➔ Attach the fastening claws at the determined positions (see detail and table).
- ➔ For a **WAGU PRO** Penstock of large nominal size and/or high pressure rating, the middle brace has to be provided with an additional fastening angle.
- ➔ Fixing has to be effected by compound anchor bolts.
- ➔ When pretightening the fixing nuts take care that the **WAGU PRO** Penstock sits close without any distortion.
- ➔ Possible structural tolerances to DIN 18202 will be compensated by the wall sealing.
- ➔ The mounting torque has to be applied crosswise by a wrench in order to obtain final fastening force.
- ➔ It is not possible to change the position of the frame after grouting. For that reason, prior to grouting the **WAGU PRO** Penstock has to be checked for perfect performance.
- ➔ When grouting the sill with expanding grouting mortar<sup>1)</sup>, no mortal must touch the seals or the frame profiles. Possible impurities have to be removed immediately.

<sup>1)</sup> We recommend to use a grouting mortar based on cement, e.g. VGM Superfluid of company TRICOSAL, BETEC Rapid or similar.

Penstock size Width W x H	Frame	Distance for fastening claws					Anchor Thread
		A	B	C	D	E	
150	2	100	-	-	-	-	M12
200	2	100	-	-	-	-	M12
250	2	120	-	-	-	-	M12
300	2	50	300	-	-	-	M12
350	2	100	350	-	-	-	M12
400	2	100	400	-	-	-	M12
450	2	100	450	-	-	-	M12
500	2	120	500	-	-	-	M12
600	2	100	350	600	-	-	M12
700	4	100	350	700	-	-	M12
800	4	100	400	800	-	-	M12
900	4	150	450	900	-	-	M12
1000	4	100	350	650	1000	-	M12
1100	4	100	350	600	850	1100	M12
1200	4	100	350	600	900	1200	M12

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