

## WALL PENSTOCK WITH TWO GATES TYPE MV-ZN2P

- wall penstocks are used for shutting off or adjusting the flow in channels with drinking water, waste water, cooling water, river water etc.,
- possibility of mounting at rounded bottom channel outlets providing four-sided leaktightness in both flow directions,
- FEM-aided individual structural calculations performed for specific operational parameters and places of installation,
- all stainless steel elements undergo etching and passivation by dipping or spraying,
- actuator is mounted directly on a frame, central or shifted support,
- penstocks are pressure tested in the factory.

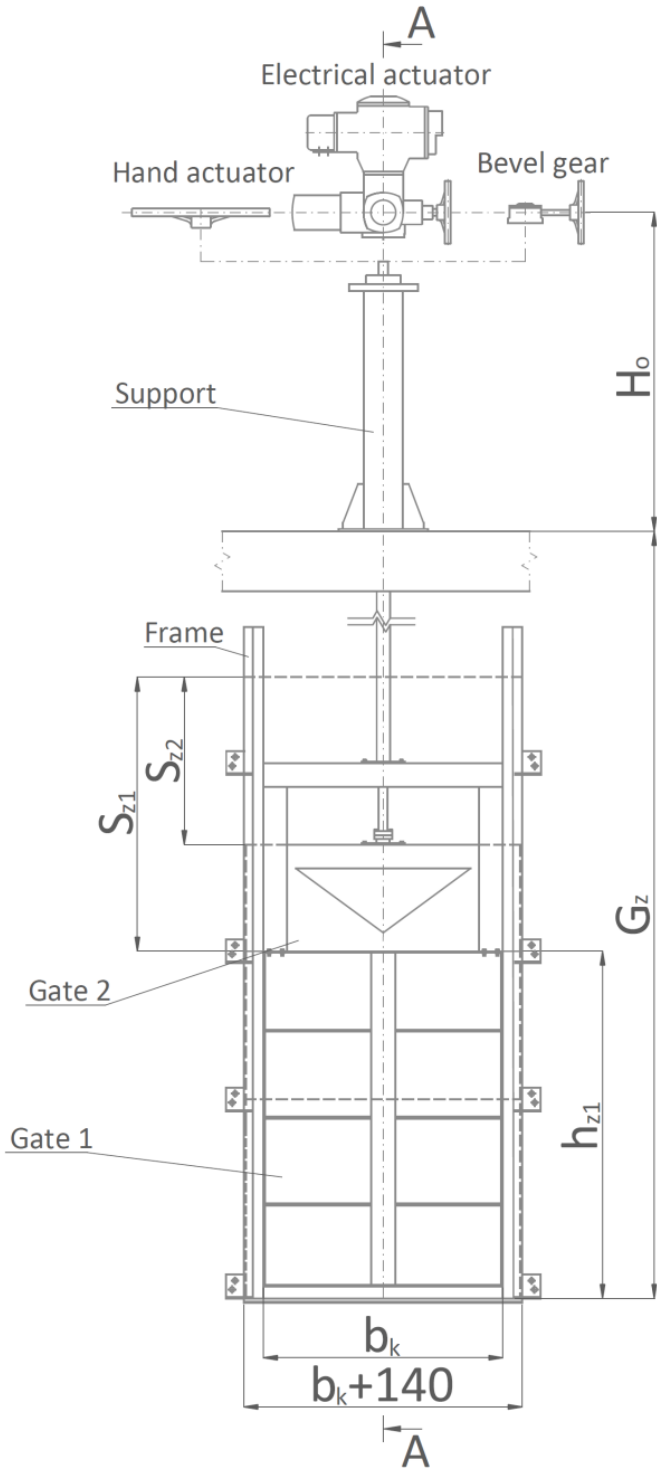
## TECHNICAL DATA

<b>Work pressure:</b>	up to 6mH <sub>2</sub> O (tightness based on PN-EN 12266-2 table A.5 tightness class: C, tightness based on DIN 19569-4 tightness class: 3), available up to 10mH <sub>2</sub> O on special orders
<b>Penstock width: [mm]</b>	150 to 4000, penstocks of widths exceeding 4000 are made to special orders
<b>Gate height: [mm]</b>	150 to 4000, penstocks of gate heights exceeding 4000 are made to special orders
<b>Material:</b>	1.4301, 1.4541, 1.4571, Duplex, etc.
<b>Actuator:</b>	electric, pneumatic, hand actuator, bevel gear
<b>Seal:</b>	EPDM, NBR, Viton or others



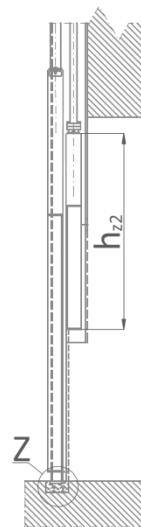
# Penstock type MV-ZN2P

## Penstock with two gates with a central support



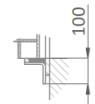
- Channel width b<sub>k</sub> = .....
- Gate 1 height h<sub>z1</sub> = .....
- Gate 2 height h<sub>z2</sub> = .....
- Depth G<sub>z</sub> = .....
- Scope 1 S<sub>z1</sub> = .....
- Scope 2 S<sub>z2</sub> = .....
- Height from operating level H<sub>0</sub> = .....
- Actuator 1 .....
- Actuator 2 .....
- Pressure [mH<sub>2</sub>O] .....
- Bottom type\*:
- Standard/for cementing
- Seal\*:
- EPDM/NBR/Viton
- \* delete as appropriate

### A-A

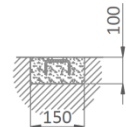


### Z

standard

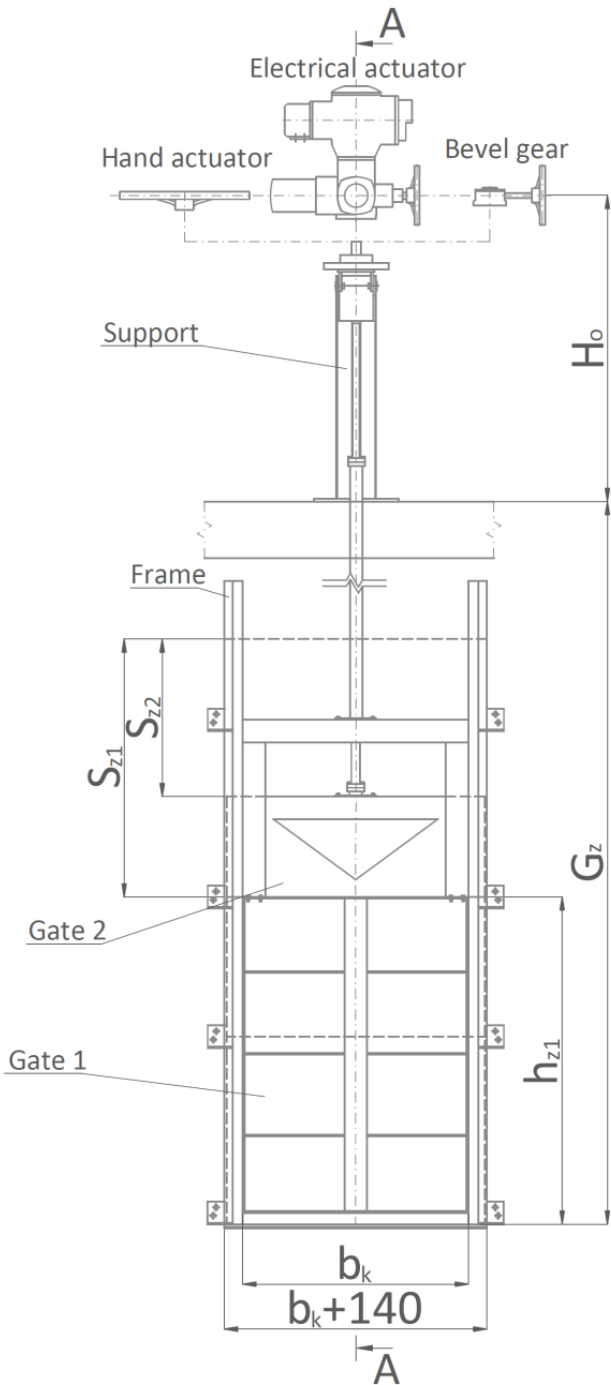


for cementing

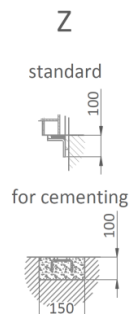
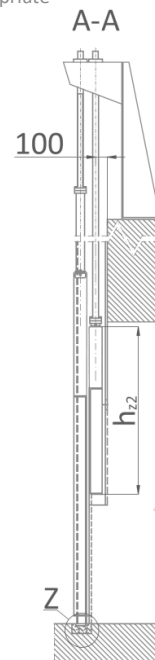


# Penstock type MV-ZN2P

## Penstock with two gates with a shifted support

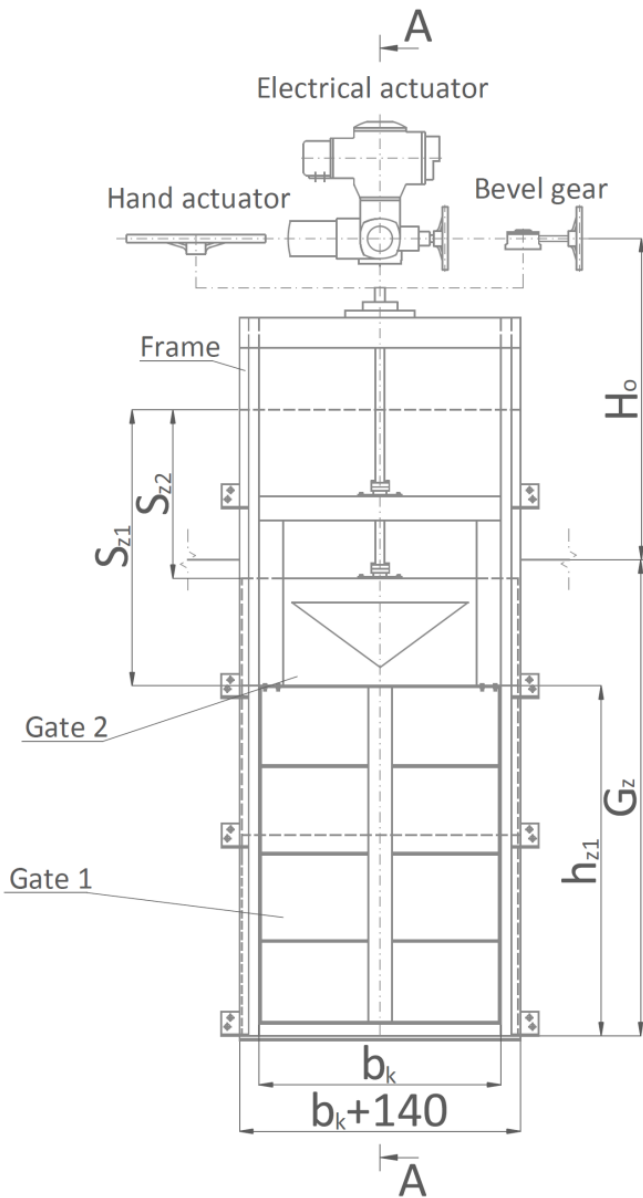


Channel width	$b_k = \dots\dots\dots$
Gate 1 height	$h_{z1} = \dots\dots\dots$
Gate 2 height	$h_{z2} = \dots\dots\dots$
Depth	$G_z = \dots\dots\dots$
Scope 1	$S_{z1} = \dots\dots\dots$
Scope 2	$S_{z2} = \dots\dots\dots$
Height from operating level	$H_0 = \dots\dots\dots$
Actuator 1	$\dots\dots\dots$
Actuator 2	$\dots\dots\dots$
Pressure [mH <sub>2</sub> O]	$\dots\dots\dots$
Bottom type*:	
Standard/for cementing	
Seal*:	
EPDM/NBR/Viton	
* delete as appropriate	

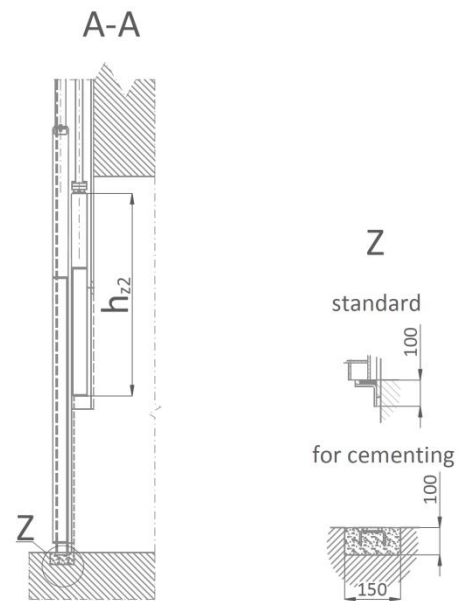


# Penstock type MV-ZN2P

## Penstock with two gates with a frame extended to the operating level

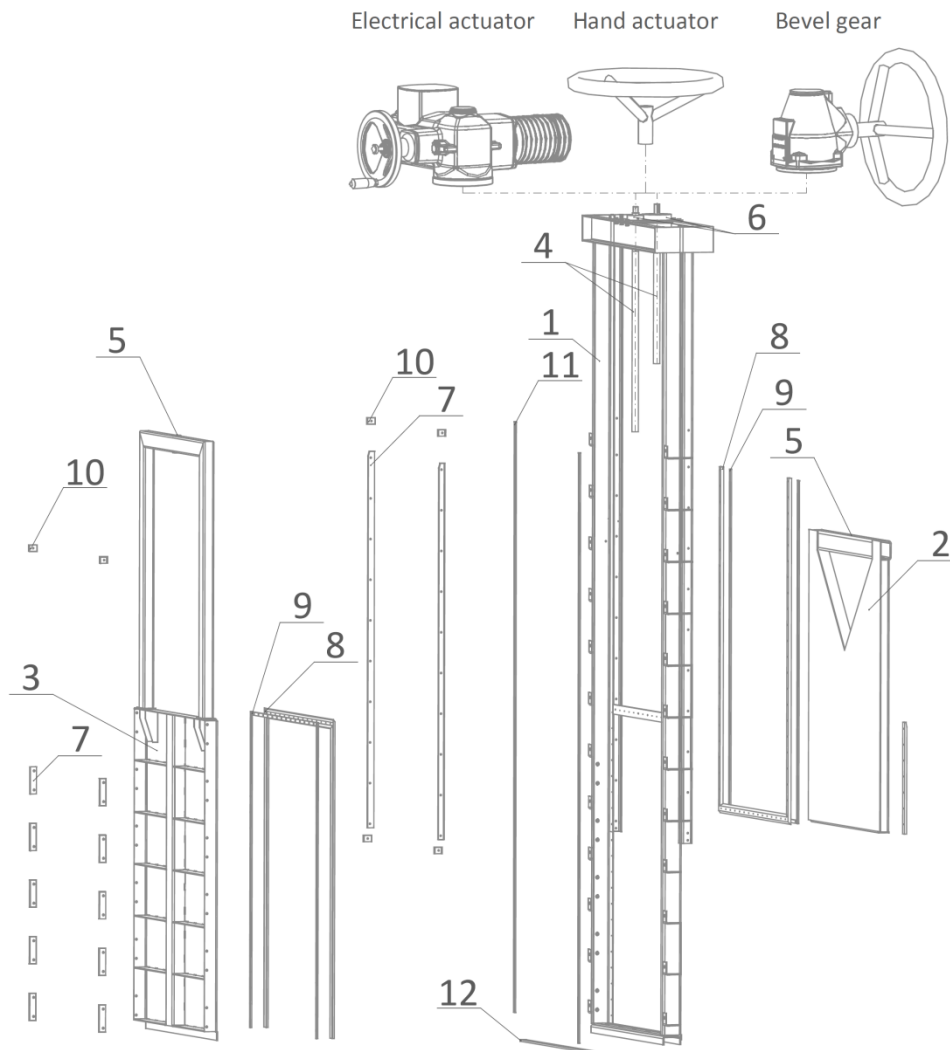


Channel width	$b_k = \dots\dots\dots$
Gate 1 height	$h_{z1} = \dots\dots\dots$
Gate 2 height	$h_{z2} = \dots\dots\dots$
Depth	$G_z = \dots\dots\dots$
Scope 1	$S_{z1} = \dots\dots\dots$
Scope 2	$S_{z2} = \dots\dots\dots$
Height from operating level	$H_o = \dots\dots\dots$
Actuator 1	$\dots\dots\dots$
Actuator 2	$\dots\dots\dots$
Pressure [mH <sub>2</sub> O]	$\dots\dots\dots$
Bottom type*:	$\dots\dots\dots$
Standard/for cementing	$\dots\dots\dots$
Seal*:	$\dots\dots\dots$
EPDM/NBR/Viton	$\dots\dots\dots$
* delete as appropriate	





## Penstock type MV-ZN2P



No.	Element	Material*
1	Welded frame	1.4301, 1.4541, 1.4571, Duplex, etc.
2	Top gate	1.4301, 1.4541, 1.4571, Duplex, etc.
3	Bottom gate	1.4301, 1.4541, 1.4571, Duplex, etc.
4	Stem	1.4301, 1.4541, 1.4571, etc.
5	Stem nut	Self-lubricating brass Rg7
6	Ball bearings	Stainless steel
7	Sliders	POM-C or PTFE
8	Seal	EPDM, NBR, Viton
9	Seal holdfast	1.4301, 1.4541, 1.4571, Duplex, etc.
10	Bumper	POM-C or PTFE
11	Wall seal	Foam
12	Lower seal	EPDM, NBR, Viton

\* Delete as appropriate. Other versions available on special order



**multivalve**

Multivalve Sp. z o.o.  
44-109 Gliwice, ul. Eiffel'a 6  
tel. + 48 32 661 00 00  
fax: + 48 32 661 00 01  
multivalve@multivalve.pl  
www.multivalve.pl

TÜV Rheinland certified  
**ISO 9001 - 2008**