

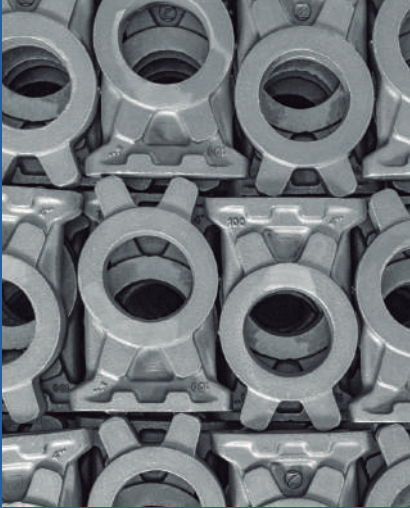
# MENTO

Your link to improved performance

## Knife Gate Valves



## STANDARDIZED ZUBI VALVES



Valve bodies and valve parts are ready just one step before the final assembly of the valve. Just ready to fit our customers' requirements on an extensive range of diaphragm valves, knife gate valves, check valves and penstock valves.

### FEATURES & BENEFITS

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Next day assembly & delivery requirements.

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Optimal cost - delivery time ratio.

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Over 7.000 standardized developments available.

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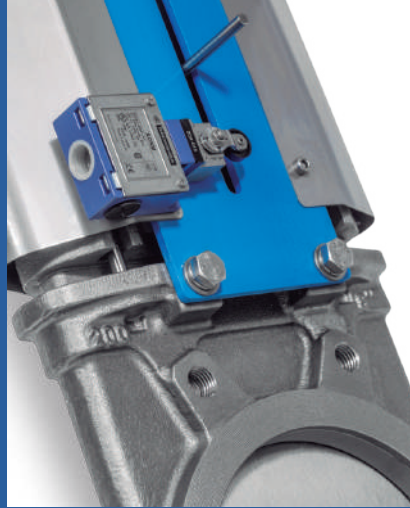
Knife gate, diaphragms and check valves.

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Valve drives and accessories available.

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## CUSTOM MADE ZUBI VALVES



Valve bodies and valve parts are completely customizable previous to the final assembly of the valve. Special parts or finishes available on an extensive range of preexisting diaphragm, knife gate, check and penstock type valve developments.

### FEATURES & BENEFITS

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Made-to-order customization requirements.

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Optimal adaptability - delivery time ratio.

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Over 8.500 developments available.

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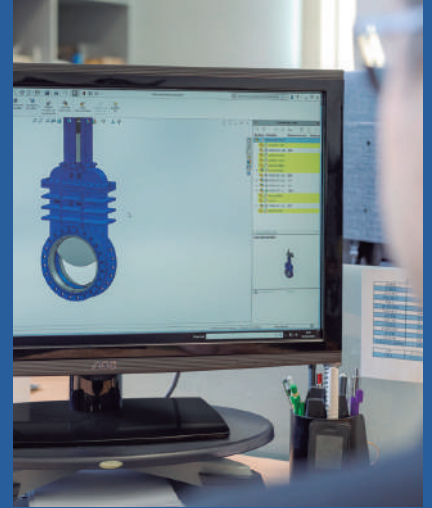
Knife gate, diaphragm, check and penstock type valves.

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Valve drives and accessories available.

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## SPECIAL ZUBI VALVES



Special valves and niche products on diaphragm, knife gate, check and penstock type valve developments. Turnkey solutions from the initial enquiry and engineering through to production and delivery.

### FEATURES & BENEFITS

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Engineering expertise at the forefront.

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High pressure duties.

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Specific design based on customer criteria.

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Special developments of components.

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Construction materials on demand.

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Customized coatings & finishes.

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## CODE COMPLIANCE

Our knife gate, diaphragm, check and penstock type valves are fully compliant with all relevant standards. Manufacturing processes are verified and recorded as well as the traceability of products through specific manufacturing orders and casting numbers. Calibrated equipment to measure coatings allows us to verify thickness is adequate in each case.

We even test 100% of our valves on a test bench using hydrostatic tests. We perform seal and body tightness tests. We also check the correct operation of all actuators / operators in every case.

# KNIFE GATE VALVES

## Reliable isolation solutions



Zubi's knife gate valves manufacturing started 1994 in Irun. Throughout the years the company has developed new product lines for the most challenging process conditions, adapting our capabilities and installing the latest generation of milling and CNC machinery.

Zubi are capable of producing more than 15 different type of knife gate valves, round and square type with different shape, flange connections and pressures.

The highest quality EU origin components GG/GGG, CF8M, Duplex 2205, Super Duplex 2507, SMO, 904L/UBS are used for the most demanding applications. Our valves can handle a variety of differential pressure scenarios, abrasive and corrosive materials, not to mention extreme temperature.

100% valves water tested as per EN 12261-1.

Our high quality products and team of experts make Zubi Valves a reference in manufacturing of industrial knife gate valves. Worldwide customers trust on Zubi Valves, for it's design, quality and service... making our brand unique in the market.

Zubi complies with the highest demanding standards:

DIR 2006/42/CE (machinery)

DIR 2014/68/EU (PED) Fluid Group 1(b), 2 (Cat. I. mod. A)

DIR 2014/34/EU (ATEX) Area 2&22

Manufactured as per Management System of ISO 9001:2015



Waste water



Food industry



Fish farming

# MENTO



## T200 - T200BI

The model 200 is a monoblock body design full bore unidirectional or bidirectional shut off valve, made with internal guides to support the knife, offering a zero leakage shut off (Class A) and used in general industry applications & water with maximum solid concentration of 5%. Available in wafer and lug versions.

Short FTF dimensions as per manufacturer standard. Other standards such as DIN3202 K1 and MSS SP-81 under demand.

### Design features:

- Seating wedges help the knife to close against the body and seat.
- Directional arrow in the body showing the correct mounting position.
- High flow rates with low pressure drop.
- Internal design avoids any build up of solids that would prevent valve from closing.
- Polished gate with rounded edges prolongs the working life of the rings and packing.

### Applications:

Pulp & Paper industry, Power plants, Wastewater treatment plants, Bulk handling, Mining, Chemical industry, Food & Beverage industry.

### Sizes:

DN50-DN1600 (Larger sizes on request)

### Pressures:

DN50 (2") – DN250 (10") 10bar  
 DN300 (12") – DN450 (18") 6bar  
 DN500 (20") – DN600 (24") 4bar  
 DN700 (28") – DN1600 (64") 2bar  
 (Higher design pressures on request)



## T200-TAPPI (MSS SP-81)

The model 200 TAPPI is a monoblock body design full bore "lugged" valve. Face to face dimensions and pressure rates according to MSS SP-81 and TAPPI Tis 405-8. Available in unidirectional and bidirectional versions.

### Design features:

- Seating wedges help the knife to close against the body and seat.
- Directional arrow in the body showing the correct mounting position.
- High flow rates with low pressure drop.
- Internal design avoids any build up of solids that would prevent valve from closing.
- Polished gate with rounded edges prolongs the working life of the rings and packing.

### Applications:

Pulp & Paper industry, Power plants, Wastewater treatment plants, Bulk handling, Mining, Chemical industry, Food & Beverage industry.

### Sizes:

DN50-DN600 (Larger sizes on request)

### Pressures:

DN50 (2") – DN600 (24") 10bar



## T700 - BIDIRECTIONAL

The model 700 knife gate valve is a monoblock body design full bore bidirectional shut off valve, offering a zero leakage shut off up to 10 bar to size DN250. DN300 available in two piece body version up to 6 bar. Available in wafer and lug versions. Body quality available in (GG/GGG).

Short FTF dimensions as per manufacturer standard. Other standards such as DIN3202 K1 and MSS-SP-81 on demand. 100% full bore valve, water tight in both directions.

### Design features:

- Special seal housing and design avoiding any build-up.
- Stainless steel both sides polished gate to avoid seat damage and lengthening packing durability.
- U-profile perimeter resilient seat with internal reinforced steel core to increase durability.
- Internal gate guides provide support through the entire range of travel eliminating both lateral movement and deflection. Additionally, they scrape & clean the knife so no fluid can reach the surrounding environment.

### Applications:

Wastewater treatment plants, Power plants, Food & Beverage industry, Pulp & Paper industry, Mining, Chemical industry, Bulk handling.

### Sizes:

DN50-DN300 (Larger sizes on request)

### Pressures:

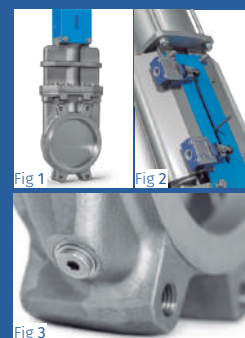
DN50 (2") – DN250 (10") 10bar  
 DN300 (12") 6bar

Drillings: DIN PN6 / PN10 / PN16 / PN25 / PN40 · ANSI 125/150 · BST "E" / BST "D" · JIS 5K / 10K · AS-2129-D / E

## ACCESSORIES & OPTIONS

*(Accessories are valid for all the models)*

- Special alloy of construction materials available: 254SMO, 654SMO, Duplex, Superduplex, Carbon steel, Ductile iron.
- Powder coating RAL 5015 120µ as standard. Different RALs and coating processes available under requirements.
- Bonneted versions chance (Fig 1). Knife gates fully enclosure, lower packing maintenance and total tightness to the environment.
- Valves are suitable for mechanical limit switches (Fig 2), inductive switches and positioners.
- Cleaning flushing ports in the body and bonnet to prevent obstructions and the build up of solids in the body cavities. (Fig 3)
- Special gate finishes available as mirror polished, hard chromed or stellite for a better job in each application.





## T300 - THROUGH CONDUIT

The model 300 is a bidirectional wafer type self cleaning knife gate valve with a central round shaped through going "o" ported knife. This design secures a really safe and total shut-off against static and highly concentrated pulps.

Designed for fluids with suspended solids, with a maximum concentration of 20%.

### Design features:

- Wafer style cast two part bolted body internally machined (Stainless Steel version includes internal polyethylene sliders as standard).
- Full port design, with great flow capacity and minimal pressure drop.
- Polished stainless steel gate in both sides and with rounded edges to ensure life of seat/packing elements.
- Ideal for high concentrated pulp stock, slurry, liquor and granulates.

### Applications:

Wastewater treatment plants, Power plants, Bulk handling, Pulp & Paper, Mining, Chemical industry, Food & Beverage.

### Sizes:

DN50-DN600 (Larger sizes on request)

### Pressures:

DN50 (2") - DN250 (10") 10bar  
 DN300 (12") - DN450 (18") 6bar  
 DN500 (20") - DN600 (24") 4bar



## T300SHORT - SLURRY

The model 300 short is a bidirectional slurry knife gate valve equipped with two abrasion resistant rubber sleeves protecting the body. Additionally the design allows internal cleaning/maintenance through flushing ports located in the bottom cover.

### Design features:

- Wafer style cast two part bolted body internally machined.
- Design allows draining through the bottom part, where a cover or splash guard is available.
- Seat is made of two high abrasion resistant rubber sleeves (NBR, EPDM, Natural Rubber & Viton) with internal metal core to improve durability.
- Polished stainless steel gate in both sides and with rounded edges to ensure life of seat/packing elements.
- Ideal for high concentrated pulp stock, slurry, liquor and granulates.

### Applications:

Mining, Bulk handling, Power plants.

### Sizes:

DN50-DN600 (Larger sizes on request)

### Pressures:

DN50 (2") - DN250 (10") 10bar  
 DN300 (12") - DN450 (18") 6bar  
 DN500 (20") - DN600 (24") 4bar



## T400 - SILO TYPE

The model 400 knife gate valve is a unidirectional wafer monoblock valve designed for industrial general service. Mainly used in bulk handling applications, discharge of powders and solids.

### Design features:

- The special design of the body allows for easy passage of the fluid and makes it ideal for use as a silo outlet valve.
- The valve is normally installed in the reverse position (seat upstream) in order to avoid problems like build-up in valve body, seat wear, difficult closing...
- Flushing holes (x4) integrated on the body as standard. These purge ports allow internal cleaning of the valve and avoid solids trapping.
- Directional arrow in the body showing correct mounting position.

### Applications:

Wastewater treatment plants, Power plants, Food & Beverage, Pulp & Paper industry, Mining, Chemical industry, Bulk handling.

### Sizes:

DN100-DN600 (Larger sizes on request)

### Pressures:

DN100 (4") - DN250 (10") 3bar  
 DN300 (12") - DN400 (18") 2bar  
 DN500 (20") - DN600 (24") 1,5bar

Drillings: DIN PN6 / PN10 / PN16 / PN25 / PN40 · ANSI 125/150 · BST "E" / BST "D" · JIS 5K / 10K · AS-2129-D / E

## ACCESSORIES & OPTIONS

(Accessories are valid for all the models)



- We offer many types of actuators and drives such as:
  - Manual with handwheel (rising and non rising version)
  - Manual with chainwheel (rising and non rising version) (Fig 6)
  - Manual with gear box (rising and non rising version)
  - Manual with handlever
  - Square end (non rising version)
  - Pneumatic (double acting, single acting spring close / spring open)
  - Electric actuated (rising and non rising version)
  - Hydraulic actuated (Fig 7)

- Interchangeable actuators.
- Emergency handwheel and gearboxes can be installed with pneumatic actuators. (Fig 8)
- Air tank systems available to open or close the valve in case of air supply loss. (Fig 9)
- Stem protection bellow for dusty environments. (Fig 10)
- Custom made adapters and connections for ISO and special actuators availables.



Fig 9



Fig 10



## T500-T500BI - HIGH PRESSURE

Unidirectional and bidirectional flanged type knife gate valve. It is designed for high pressure applications, up to PN25. Thanks to its sturdy design, this valve provides better features as regards watertightness and working pressure.

### Design features:

- Single piece monoblock body with internal wedges and screwed down bonnet to guarantee the tightness.
- Gate with rounded edges to prolong working life of the seat.
- Internal reinforced parts to work under high pressure conditions.
- Minimum packing area, reduced leak risk and maintenance.
- Recommended for installations handling highly corrosive or hazardous fluids, or plants working with high pressures.

### Applications:

Wastewater treatment plants, Power plants, Bulk handling, Pulp & Paper, Mining, Chemical industry, Food & Beverage...

### Sizes:

DN150-DN800

### Pressures:

DN150 (6") – DN800 (32") Up to 25bar

## FABRICATED SINGLE WEDGE

Single wedge is a unidirectional or bidirectional type knife gate valve design. Full flange (welded) sturdy design ideal for high pressure and severe working conditions. Face to face as per manufacturer standard. (Others to be confirmed)

### Design features:

- Single piece welded body and bonnet.
- Provided with top cover (bolted bonnet) to prevent leak to the atmosphere.
- Polished stainless steel gate in both sides and with rounded edges to ensure life of the seat.
- Minimum packing area, reduced leak risk and maintenance.
- High flow rates and minimum pressure drop design.

### Applications:

Wastewater treatment plants, Power plants, Bulk handling, Pulp & Paper, Mining, Chemical industry, Food & Beverage...

### Sizes:

DN900-DN2000 (Larger sizes on request)

### Pressures:

DN900 (36") – DN2000 (80") Up to 10bar

## SQUARE MODEL VALVE

Square/rectangular port fabricated knife gate valve available in unidirectional or bidirectional seat design. Welded body construction design in several materials, steel & stainless steel.

Metal and soft seated design available.

### Design features:

- Single piece welded body.
- Polished stainless steel gate on both sides and with rounded edges to ensure life of the seat and packing elements.
- Flange connection as per Zubi standard or specific on customer demand. The design may be adapted easily to the customer's installation
- Low pressure duty valve, ideal for solid handling, bulks grain and cements.

### Applications:

Wastewater treatment plants, Power plants, Food & Beverage, Pulp & Paper industry, Mining, Chemical industry, Bulk handling.

### Sizes:

150x150 – 1200x1200 (Larger sizes on request)

### Pressures:

150x150 – 1200x1200 1bar

Drillings: DIN PN6 / PN10 / PN16 / PN25 / PN40 · ANSI 125/150 · BST "E" / BST "D" · JIS 5K / 10K · AS-2129-D / E

Drillings: According Zubi standard. / According customers requirements.

## ACCESSORIES & OPTIONS

*(Accessories are valid for all the models)*

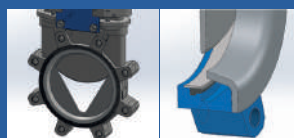


Fig 11

Fig 12

- Several types of diaphragm port models for flow control applications. (Fig 11)
- Deflector cones (Fig 12) are available in different quality materials for directing the fluid to the center, protecting internal components as body, seat, rings.
- Submerged and underground special designs are available. (Fig 13)
- Zubi Valves manufactures many types of stem extension solutions for any type of actuator.

- Different accessories can be supplied: (Fig 14,15)
- Columns
- Stem wall supports
- Customized supports for actuators
- Position indicators
- Removable T-keys
- Extended support plates
- Cardan solutions for inclined extensions

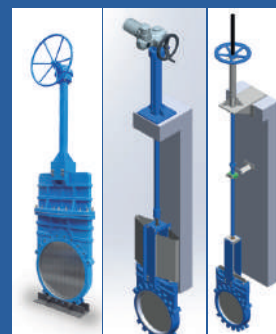


Fig 13

Fig 14

Fig 15

# MENTO

# DIAPHRAGM VALVES

## Manufactured since 1979



Zubi's diaphragm valve success story began in 1979 in a small garage in Irún. With more and more customers demanding high quality diaphragm valves the family increased in type and sizes during the time. To date Zubi Valves produces flanged type weir Model 100 and full bore Model 85 up to size DN350 as well as threaded and socket welded versions.

Many different type of body qualities and linings are available in our production portfolio.

Zubi diaphragm valves are the perfect solution for corrosive and abrasive media. Our different high quality rubber linings (HRL, SRL, Butyl, Hypalon, Neoprene, NBR, ETFE, ECTFE) and Diaphragms (NR, EPDM, NBR, Viton, Hypalon, Butyl, Neoprene, PTFE) provide security, long life cycle and savings in costs.

Our diaphragm valves can be provided with multiple flange options, actuators, accesories and coating systems (C4, C5, Rilsan).

Available face to face in EN558 Series 1 (DIN3022 F1) and EN558 Series 7 (BS5156).

Zubi complies with the highest demanding standards:

DIR 2006/42/CE (machinery)

DIR 2014/68/EU (PED) Fluid Group 1(b), 2 (Cat. I. mod. A)

DIR 2014/34/EU (ATEX) Area 2&22

Manufactured as per Management System of ISO 9001:2015.



Petrochemical plant



Drinking water



Sewage waste water



## T85 - STRAIGHT THROUGH

Straight through type model 85 is a bidirectional monoblock cast body bolted bonneted diaphragm valve. Lined and unlined options available. Ideal to handle high abrasive fluids. Full bore with high capacity flow. Easy maintenance: Three part design (Body, diaphragm and actuator) allows maintenance and actuator retrofitting without removing the valve body from the pipeline.

### Design features:

- Monoblock body, one piece cast.
- Bolted bonnet design.
- Internal rubber lined and unlined options.
- High strength woven reinforced diaphragms.
- Bidirectional shut off design.

### Applications:

Pulp & Paper industry, Power plants, Wastewater treatment plants, Bulk handling, Mining, Chemical industry, Food & Beverage industry.

### Sizes:

DN15-DN300

### Pressures: (manual valves)

DN15 (1/2") – DN50 (2") 10bar  
 DN65 (2 1/2") – DN125 (5") 6bar  
 DN150 (6") – DN300 (10") 4bar

For actuated valves, please refer to the appropriate datasheets.

Face to face as per EN558 serie 1 DIN-3202 and EN558 serie 7 BS-5156.

## T100 - WEIR

Weir type model 100 is a bidirectional monoblock casted body bolted bonneted diaphragm valve. Lined and unlined options available. Ideal for general industrial corrosive and abrasive applications up to 15% solid services. Perfect valve for on/off control.

Easy maintenance: Three part design (Body, diaphragm and actuator) allows maintenance and actuator retrofitting without removing the valve body from the pipeline.

### Design features:

- Monoblock body, one piece cast.
- Bolted bonnet design.
- Internal rubber and PTFE based lined and unlined options.
- High strength woven reinforced diaphragms.
- Bidirectional shut off design.

### Applications:

Pulp & Paper industry, Power plants, Wastewater treatment plants, Bulk handling, Mining, Chemical industry, Food & Beverage industry.

### Sizes:

DN15-DN350

### Pressures: (manual valves)

DN15 (1/2") – DN150 (6") 10bar  
 DN200 (8") – DN300 (12") 6bar  
 DN350 (14") 4bar

For actuated valves, please refer to the appropriate datasheets.

Face to face as per EN558 serie 1 DIN-3202 and EN558 serie 7 BS-5156.

Drillings: DIN PN6 / PN10 / PN16 / PN25 / PN40 · ANSI 125/150 · BST "E" / BST "D" · JIS 5K / 10K · AS-2129-D / E

## ACCESSORIES & OPTIONS



- Different actuator options available: manual with handwheel, chain-wheel or gear box; pneumatic air to open, air to close or double acting. Pneumatic versions are supplied with emergency handwheel. Electric actuated versions available.
- In addition to flanged version, other options are available: threaded connection (BSP or NPT), socket and butt welded (Fig 1) versions. In model T100 angled shape (Fig 2) version is available.
- Many options of high quality body linings available: HRL/ebonite, soft rubber, butyl, hypalon, neoprene, NBR, ETFE, ECTFE.
- Stem extension designs according customer needs on manual valves are possible.
- Visual position indicator can be installed showing the position on the valve all the time.
- Valves are suitable for mechanical (Fig 3) and inductive switches.
- Flow control 4/20mA positioners available.
- Padlocking system option available to prevent valve manipulation. (Fig 4)
- Wide range of casting materials as GG25, GGG40/50, A216 WCB, CF8M, CN7M, Duplex, Superduplex, Bronze RG7 (Fig 5).





# CHECK VALVES

Whatever is difficult or aggressive, you will find Zubi check valves doing the job around the world. If quality and performance is the issue, Zubi check valve family is your choice.

Check valves, leak free and tight sealing, gives protection against reverse flow. Broad range of different configurations and materials available. Industrial sites around the world trust on the Zubi check valve family.



## T113AR TILTING DISK CHECK VALVE

Zubi 113AR model is a Metal to Metal seated check valve with oblique angled seat giving a short closing travel and time. Due to light disc design the optional auxiliary spring improves the closing time and reduces water hammer.

Available sizes DN40 up to DN700, up to PN40 pressure range. Stock in CF8M and DUPLEX 2205, special alloys under demand.

Accessories such counterweights, switches, locking devices available.

Installation between flanges PN6/PN64 and ANSI150/300.



## T114AR FULL BORE CHECK VALVE

Zubi 114AR model is a flanged check valve, made in two parts and with central rubber coated disc, capable of handling corrosive media and slurries.

High quality different internal rubber lining options makes the Zubi 114AR check unique in the market.

Wide range of body and disc linings available in HRL, SRL, Butyl, Hypalon, Neoprene, Halar/ECTFE.

Available in sizes DN15 up to DN400 and multiple flanges PN10/PN16, ANSI150.



## T115AR BALL CHECK VALVE

Zubi 115AR check valve is self cleaning as the ball rotates during operation which eliminates the risk of impurities getting stuck on the ball. Standard ball in NBR.

Available sizes DN25 up to DN250 in GG25 body with poliester coating. Flanged and BSP/NPT threaded connections.

For the most corrosive application Zubi can offer high quality alloys in CF8M, DUPLEX, 254SMO, 904L.



## INDUSTRIES & APPLICATIONS

113AR: Water, seawater, fluids without solid loads, steam.

114AR: Petrochemistry, mining, acids, chemistry.

115AR: Water and waste water industry, food industry.

# PENSTOCK

## VALVES

Zubi penstock valves are for control and isolation of water, made in high quality components, 40 years of manufacturing and design experience endorse the quality and performance of our penstocks.



### WALL (VMCL) PENSTOCK VALVE

Unidirectional or bidirectional valves whose dimensions and design depend on the customer's specific needs (square or rectangular section). These valves ensure watertightness on all four sides, made even more effective by a wedged system which exerts pressure on the closing joint when the penstock is located in its closed position wall mounted.

Available in a wide range of materials as AISI304L, AISI316L, DUPLEX, 904L and seats EPDM, NBR, VITON.

Different interchangeable drives: handwheel, electric actuator, gear box, pneumatic, hydraulic, square end...

Leakage rate as per DIN19569-4 class 5 and AWWA C561.



### CHANNEL (VCTL) PENSTOCK VALVE

Unidirectional or bidirectional valves whose dimensions and design depend on the customer's specific needs. These penstocks ensure watertightness on all three sides (at the bottom and the two sides), thanks to the closing seal located on the penstock seat. Square or rectangular sliding channel gate.

Size 150x150 to 2500x2500.

Accessories available: extension and column extensions, limit switches, proximity and magnetic sensors, solenoid valves, locking devices,...

Level control design available in both versions, unidirectional closing system designed for downward opening applications

where a more accurate flow control is required. The water flows over the top of the slide permitting a constant upstream water elevation. It is manufactured according to customers' specifications in a square or rectangular shape. It consists of a frame and a sliding gate.



### INDUSTRIES & APPLICATIONS

Widely used in water services, agriculture, food and hydraulic installations among general industry.

Contact Mento for more information

# MENTO

Your link to improved performance

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