NEEDLE VALVES TYPE REGFLUX
FOR DAMS, RESERVOIRS & HYDROPOWER

MAIN FEATURES

- Product range from DN 80 to DN 2000
- Pressure classes PN 10-16-25-40-64-100
- Design & Manufacturing according to EN 1074-1 / EN 1074-5 / EN 1349
- Face-to-face according to EN 558 S15 (F5)
- Flanges according to EN 1092-1/2 or ANSI B16.5 CL 150/300/600
- Easy installation
- Corrosion protection by FBE coating 300 microns, color RAL 5005. Potable water approved DM174 / WRAS / ACS / DVGW
- Class A tightness According to EN 12266
- Control valve in straight way type
- Reduced pressure loss
- Standardized face-to-face for the whole range

ADVANTAGES

- State of the art design.
- Innovative design for flow optimization with a reduced pressure loss in open valve position. Reduced torque for low acting moments aimed to facilitate the operations of all actuators.
- Long life of all sealing systems. All the gaskets are located safely in the no-flow zone.
- Long-Life of the valve in all conditions with all internal and moving parts in stainless steel. The body is completely protected by Heavy Duty Corrosion Protection FBE coating.
- Accurate construction completely made in Italy with the use of cutting edge technologies for all components.
- Linear flow control up to 96% of the total stroke of the valve.
- Cavitation prevention using sophisticate solutions in any condition.
- Advanced solutions for each application.
- Compact, lightweight and economic efficiency design.
- Wide and unique range of production.

APPLICATION FIELDS

DRINKING WATER  WATER TREATMENT

- Flow control
- Pressure control

SNOWMAKING

- Pressure control
- Flow control

INDUSTRY

- Flow control
- Pressure control

HYDROPOWER

- By-pass valve
- Turbine control
- Turbine by-pass
- Safety overflow valve
- Pipe burst protection

IRRIGATION

- Flow control
- Pressure control
- District Metering Area (DMA)
- Level control

PRESSURE MANAGEMENT

- Dynamic pressure control
- District Metering Area (DMA)
- District Metering Zone (DMZ)
NEEDLE VALVES TYPE REGFLUX
FOR DAMS, RESERVOIRS & HYDROPOWER

DESIGN

State of the art design to guarantee a product at the top of the range. Use of the most sophisticated CAD-CAE programs available on the market (SolidWorks, Pro/E).

KNOW-HOW

Thanks to a new design based on the calculation software COMSOL (FEM + FLUID DYNAMICS), AC.MO S.p.A. has done a big leap from theoretical fluid dynamics design to a simulate fluid dynamic design.

MANUFACTURING

HIGH QUALITY MATERIALS
- Casting
- Machining
- Painting
- Assembly
MADE IN ITALY

QUALITY CONTROL

The quality control is carried out using the most modern equipment, static and dynamic test benches. The quality parameters are carefully checked by highly qualified staff.

TRAINING AND TECHNICAL SUPPORT

A highly skilled team of engineers is available for:
- training courses
- pre-post sale support
- technical assistance "on-site"
THE MOST RELIABLE SOLUTION FOR CONTROL

Body in ductile cast iron GJS-500-7
(Stainless steel 1.4408 - 1.4308 on request)

Main seal in Technopolymer (TPU)

Stainless steel fork (seamless construction)

Shaft, piston and seat in stainless steel
(DUPLEX or SUPERDUPLEX on request)

Replaceable bronze guides (AISI 316 on request)

Self-locking worm gear unit

Bidirectional tightness (with ACMO design gasket)

A special and innovative internal gasket for a perfect and bidirectional seat.

Compact piston with 4/6 bronze guide strips (replaceable).

Heavy duty corrosion protection by FBE epoxy coating 300 microns (500 microns on request).

State of the art solutions for a high performance long lasting product.

High performance seal, located in no-flow zone, easy replaceable without disassembling the valve from the pipeline.

One-piece body (L=DN+200 mm) EN 558 S15 (F5).

State of the art solutions for a high performance long lasting product.

High performance seal, located in no-flow zone, easy replaceable without disassembling the valve from the pipeline.
NEEDLE VALVES  
TYPE REGFLUX  
FOR DAMS, RESERVOIRS & HYDROPOWER

CERTIFICATIONS AND CONSTRUCTION STANDARD

The high quality standards and strict controls during the manufacturing have led to obtain major awards with internationally recognized certification bodies.

EN 1074-1  
EN 1074-5  
EN 1349  
DM 174

CONFIGURATIONS

- Worm gear box and handwheel  
- Electric actuator  
- Hydraulic brake and lift unit  
- Double acting hydraulic piston  
- Simple acting hydraulic piston  
- Double and single acting pneumatic actuator

A DEDICATED SOFTWARE AND ACCESSORIES FOR SIZING AND PREVENTION OF CAVITATION

- **INTRUSIVE**  
  Dissipating cylinder  
- **NON INTRUSIVE**  
  Dissipating plate  
  Venting device  
  Venting device
### MAIN FEATURES

- The Double Eccentric Butterfly valves type “Dopex” are normally used due to their strength and resistance even at high pressure. They are simple and lightweight and entirely made in high quality ductile cast iron with stainless steel shafts and a welded-on seat ring. The valve is operated by gear box and handweel or electric, pneumatic, hydraulic actuators.
- Product range from DN 100 to DN 3000
- Design & Manufacturing according to EN 593 / EN 1074-1 / EN 1074-2 AWWA C504
- Face-to-face according to EN 558-S14 (F4) EN 558 S13 (BS 5155 SHORT)

### ADVANTAGES

- A state of the art design guarantees a high operational safety and low maintenance.
- The double o-ring and closed disc eyes allow the shaft to be completely dry.
- Replaceable sealing ring without disassembling the valve from the pipeline.
- Long-Life valve with all internal parts in stainless steel and high quality coating in fusion bonded epoxy.
- Flanges according to EN 1092-1/2 or ANSI B16.5 CL150-CL300
- Class A tightness according to EN 12266
- Pressure classes PN10-16-25-40
- Corrosion protection by FBE coating 300 microns, color RAL 5005. Potable water approved DM174 / WRAS / ACS / DVGW
- Double offset disc.
- Automatic sealing system with rubberized profile seal ring.
- Self-locking worm gearbox with mechanical position indicator.
- Seat tightness in both flow directions.
- Automatic sealing system that reduces the actuating moments and increase the life of the seal.
- Gearbox guaranteeing the opening /closing with the maximum ΔP up to PN 40.
- Corrosion and wear-resistant overlay welded seat made of stainless steel.

### APPLICATION FIELDS

- **DRINKING WATER**
- **WATER TREATMENT**
- **IRRIGATION**
- **INDUSTRY**
- **HYDROPOWER**
- **FIRE PROTECTION**
- **WASTEWATER**
BUTTERFLY VALVES TYPE DOPEX
FOR DAMS, RESERVOIRS & HYDROPOWER

DESIGN
State of the art design to guarantee a product at the top of the range. Use of the most sophisticated CAD-CAE programs available on the market (SolidWorks, Pro/E).

KNOW-HOW
Thanks to a new design based on the calculation software COMSOL (FEM + FLUID DYNAMICS), AC.MO S.p.A. has done a big leap from theoretical fluid dynamics design to a simulate fluid dynamic design.

MANUFACTURING
HIGH QUALITY MATERIALS
- Casting
- Machining
- Painting
- Assembly
MADE IN ITALY

QUALITY CONTROL
The quality control is carried out using the most modern equipment, static and dynamic test benches. The quality parameters are carefully checked by highly qualified staff.

TRACEABILITY
Total product traceability. By QR code any technical documentation is available online.

TRAINING AND TECHNICAL SUPPORT
A highly skilled team of engineers is available for:
- training courses
- pre-post sale support
- technical assistance “on-site”
BUTTERFLY VALVES  TYPE DOPEX
FOR DAMS, RESERVOIRS & HYDROPOWER

State of the art solutions for a high performance product with extended life.

Compact body. Face to Face according to EN558-S14 (F4).

High stability disc and low pressure loss design.

A welded-on seat ring in stainless steel for lasting safety.

Body in ductile cast iron GJS-500-7.

Disc in ductile cast iron GJS-500-7 (stainless steel 1.4301 - 1.4401 on request).

 Shaft in stainless steel (DUPLEX on request).

Bearing in bronze.

Automatic seal (EPDM - NBR).

Perfect tightness in both flow directions.

Dry shafts.

Heavy duty corrosion protection by FBE epoxy coating 300 microns (500 microns on request).

“A modern, reliable and durable product”.

Body in ductile cast iron GJS-500-7.

Disc in ductile cast iron GJS-500-7 (stainless steel 1.4301 - 1.4401 on request).

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BUTTERFLY VALVES TYPE DOPEX
FOR DAMS, RESERVOIRS & HYDROPOWER

CERTIFICATIONS AND CONSTRUCTION STANDARD

The high quality standards and strict controls during the manufacturing have led to obtain major awards with internationally recognized certification bodies.

EN 593
EN 1074-1
EN 1074-2
AWWA C504

CONFIGURATIONS

Worm gear box and handwheel

Electric actuator

Electric actuator

Worm gear box and extension spindle

Hydraulic brake and lift unit

Double acting hydraulic piston

Simple acting hydraulic piston

Double and simple acting pneumatic actuator

Speed detector
BUTTERFLY VALVES TYPE TRIPLEX
FOR DAMS, RESERVOIRS & HYDROPOWER

STANDARDS

Manufacturing
• EN 593 METALLIC BUTTERFLY VALVES
• EN 1074-1 VALVES FOR WATER SUPPLY
• EN 1074-2 ISOLATING VALVES
• EN 558-1 S13 FACE TO FACE
  (ISO 5752)
• EN 1092-1 DRILLING FLANGES
  (ISO 7005-2)

Materials
• ASTM A216 BODY A216 WCB CARBON STEEL
• ASTM A216 DISC A216 WCB CARBON STEEL
• EN 10088-3 SEAL RING AISI304+GRAFITE GRAPHITE
• EN 10088-3 BODY SEALING AISI304+STELLITE
• EN 10088-3 STEM STAINLESS STEEL
• EN 10088-3 BUSHING NITRIDING

Corrosion Protection
COATED INSIDE-OUTSIDE

Certificates
HEALTH DEPARTMENT

Applications
WATER

Testing
• EN 12266-1 (ISO 5208)
  PRESSURE TESTS Grade “A”

Accessories
• ELECTRIC ACTUATOR
• OIL-DYNAMIC ACTUATOR
• PNEUMATIC ACTUATOR
• WITH OVERSPEED SYSTEM

PN 10-16-25-40-64
DN 50 -3000

APPLICATION FIELDS

DRINKING WATER
WATER TREATMENT

HYDROPOWER
**Free Discharge Valve**
Castbody or carbon steel/stainless steel fabricated body, elastomer seat and hydraulic or electric actuator.

**Specifics:**
- Size: Up to DN3000
- Pressure: Up to 20 bar

**Submerged Discharge Valve**
Terminal discharge valve providing submerged energy dissipation and flow control. Type - End of line single flanged.

**Specifics:**
- Size: DN200 - 1800
- Pressure: 10 + 16 bar

**Fabricated Butterfly Valve**
Carbon or stainless steel fabricated body and disc, elastomer seal and hydraulic or electric actuator.

**Specifics:**
- Size: Up to DN3500
- Pressure: 10 up to 25 bar (DN1000) Up to 16 bar (DN2000)

**High Performance Butterfly Valve**
Boving type double eccentric resilient seal on disc and stainless steel body seat. Drop tight shut-off in preferred direction and double flanged connection.

**Specifics:**
- Size: DN100 - 3000
- Pressure: PN10, 16, 25, 40 bar