



ATOMAC - Lined Valves
DURCO - Plug Valves
DURCO - Butterfly Valves

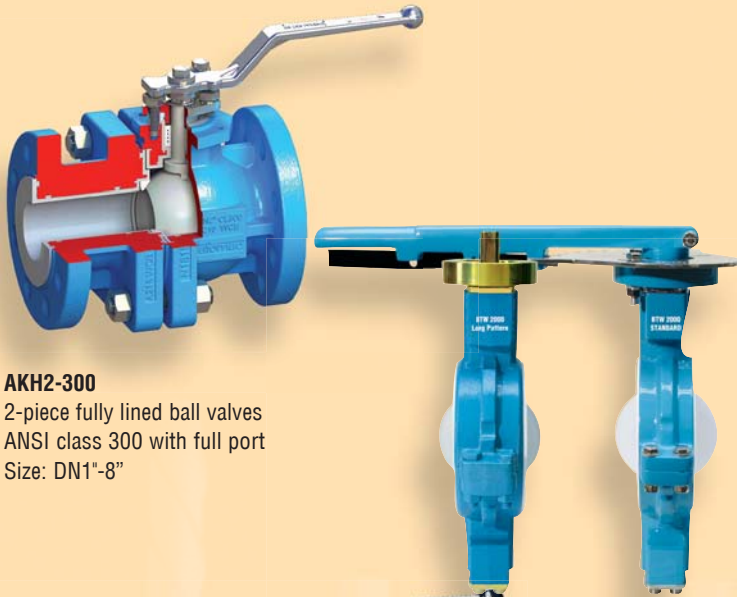
FCD Quarter-turn Valves and Automation Systems

Reliable Solutions for the Chemical Process Industries

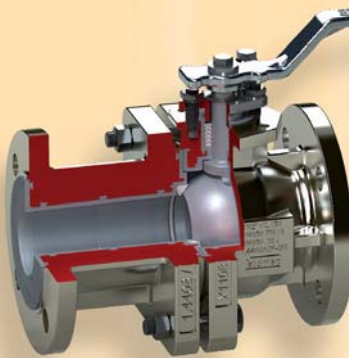


Experience In Motion

Atomac Valves for Top Performance, Reliability and Safety



AKH2-300
2-piece fully lined ball valves
ANSI class 300 with full port
Size: DN1"-8"



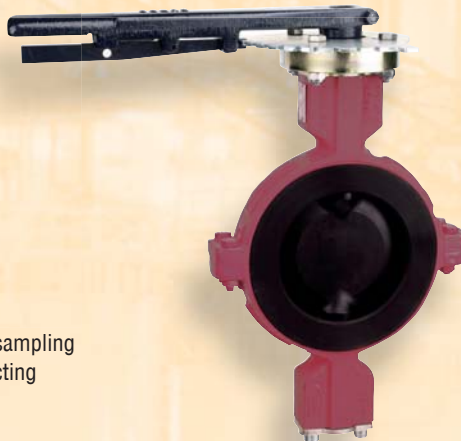
BTV 2000 & BTV 2000 LP
BTV 2000 butterfly valves available with PTFE, UHMWPE liners
Size: DN50-600, DN2"-24
BTV 2000 LP butterfly valves
Extended face to face eliminates the potential for the disc to interfere with heavy duty lined piping systems
Size: DN50-600, DN2"-24"

AtoStar, 2-piece fully lined ball valves with full port and stainless steel body. Available in ANSI 150lbs, JIS 10K and DIN PN16
Size: DN½"-6", DN15-150
Option: *Integral heating jacket*



ARK2 lined swing check valve are ideal for use in highly corrosive applications
Size: DN50-400, DN 2"-16"

AtoPro
Stainless steel and lined ball sampling systems, available with protecting casing and actuator
Size: DN25-80, DN1"-3"

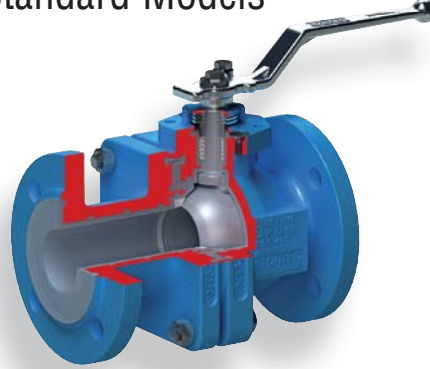


BTV 2000 PFA-L butterfly valves available with conductive liners
Size: DN50-600, DN2"-24"

Atomac fluoropolymer lined ball valves provide:

- Superior corrosion resistance
- Bubble-tight shutoff
- Reliable seals to atmosphere
- Blowout-proof stem assembly
- Full port flow
- Characterised trims for control duties
- Reduced maintenance

Standard Models



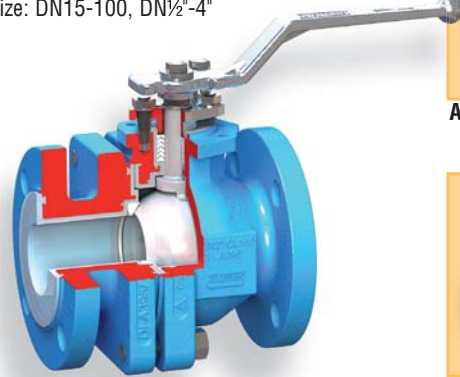
AKH2.2, 2-piece fully lined ball valves with full port, maintenance-free
Size: DN15-100, DN½"-4"



AKH2.2 with PFA conductive liner



AKH2



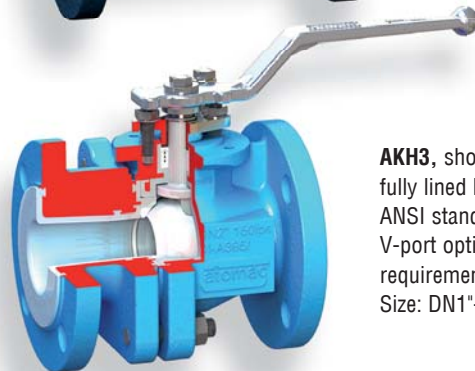
AKH2A short pattern, 2-piece fully lined ball valves with ANSI full port
Size: DN1"-6"



AKH2.2 optional ceramic ball in all ball valves models



ARL, atomac 45° check valve for horizontal applications
Size: DN25-80, DN1"-3"



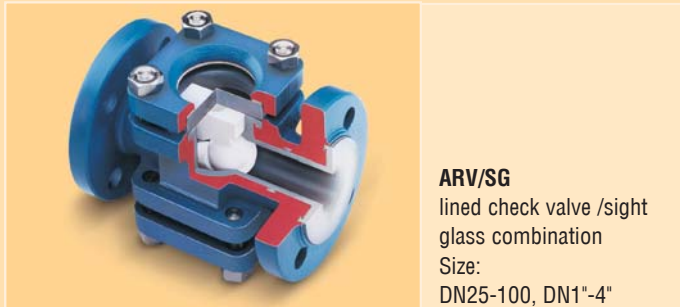
AKH3, short pattern, 2-piece fully lined ball valves with ANSI standard port. V-port option for control requirements
Size: DN1"-14"

All ball valves also available with V-ball for control purposes or C-ball for among other the elimination of medium deposits in low cavity.

Lined Accessories



ASF
Y-Type strainer
Size:
DN25-200, DN1"-8"



ARV/SG
lined check valve /sight
glass combination
Size:
DN25-100, DN1"-4"

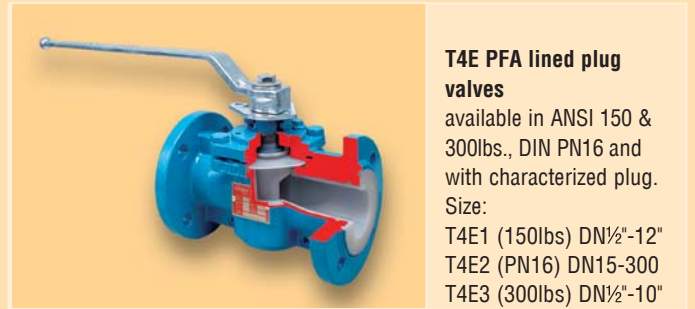


ASG
2-way, 3-way or 4-way
lined sight glass offers
clear visual inspection
from either side
Size:
DN25-250, DN1"-10"

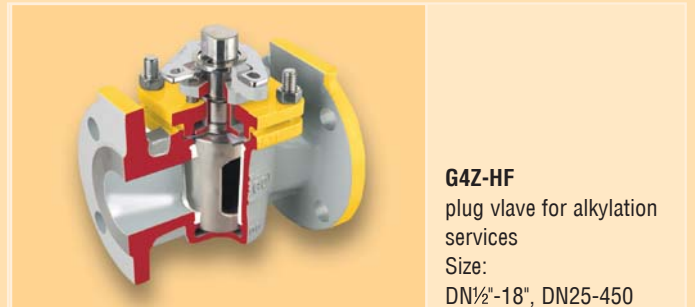


ARV2
lined check valve
Size:
DN15-200, DN½"-8"

Durco Plug Valves



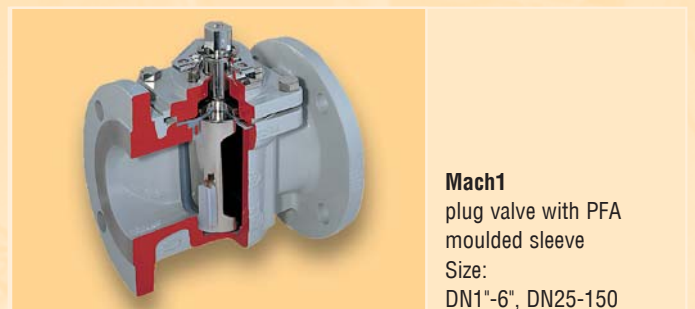
**T4E PFA lined plug
valves**
available in ANSI 150 &
300lbs., DIN PN16 and
with characterized plug.
Size:
T4E1 (150lbs) DN½"-12"
T4E2 (PN16) DN15-300
T4E3 (300lbs) DN½"-10"



G4Z-HF
plug valve for alkylation
services
Size:
DN½"-18", DN25-450

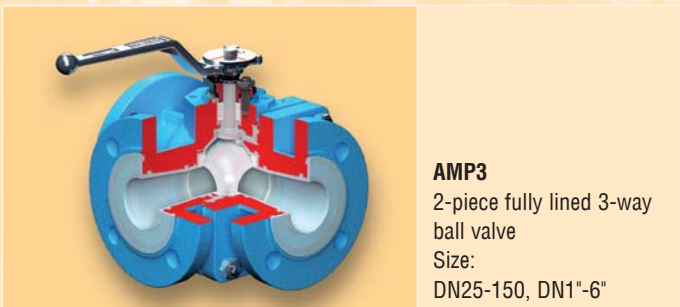


G4E
plug valve provides
bubble tight shutoff and
ISO mounting.
Size:
DN½"-6", DN15-150



Mach1
plug valve with PFA
moulded sleeve
Size:
DN1"-6", DN25-150

Specialty Models



AMP3
2-piece fully lined 3-way
ball valve
Size:
DN25-150, DN1"-6"



AKH5
2-piece fully ceramic
lined ball valves with
full port
Size:
DN25-150, DN1"-6"



AKH6
2-piece tank drain valve
with full port
Size:
DN25/50-150/200,
DN1½"-6¾"

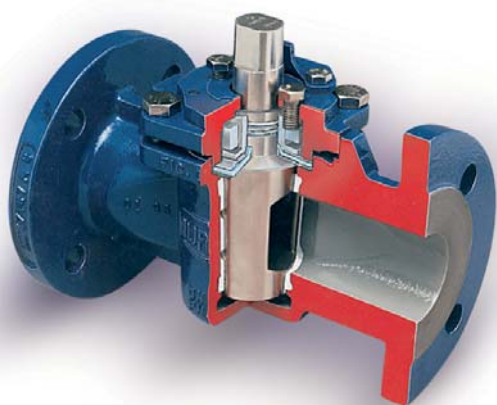


AKH7
2-piece fully lined ball
valves with full port for
glass pipe systems
Size:
DN25-100

Durco Valves are the Benchmark for Quality and Value

Durco plug, ball and butterfly valves are designed for highly corrosive services where bubble-tight shutoff is an absolute requirement.

- Wide variety of metallic and non-metallic materials is available
- Plug valves feature dynamic self adjusting, self-energized reverse lip diaphragm stem seal with in-line/thru-line seal adjustment
- Butterfly valves feature reliable, bubble-tight shutoff with long, continuous, high cycle operation



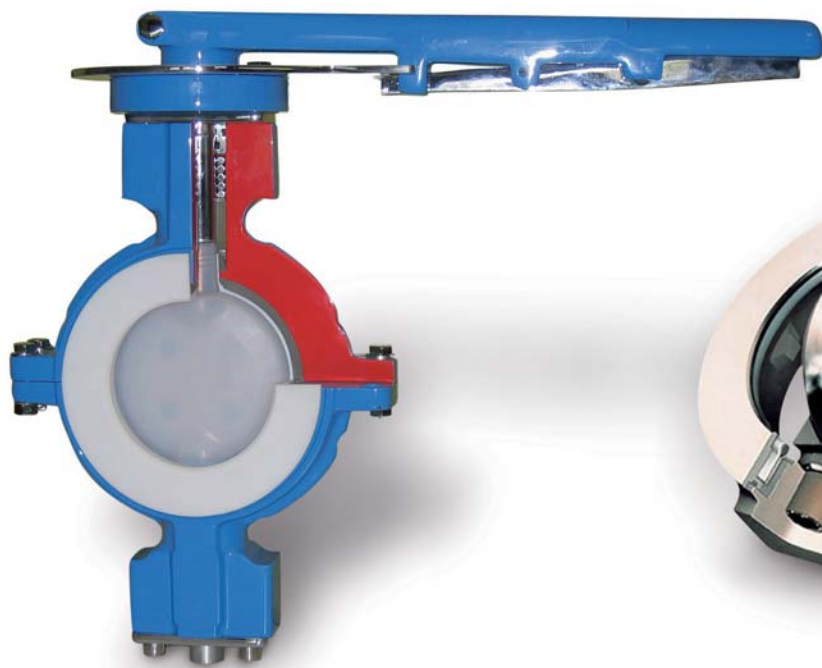
Sleeveline plug valves

Standard Models

- G4E Europe for isolation services
- G4Z fire sealed

Specialty Models

- G4EB Marathon low emission/high cycle
- TSG4 severe service
- MG4 3-way plug valves
- EG4 V-port control
- FJG4 fully jacketed plug valves



Big Max High Performance Butterfly Valves

double eccentric
BX2 ANSI Class 150 & 300

BTV-2000 Butterfly Valves

- PTFE or UHMWPE lined
- Disc in DCI/PFA or metallic material

Seat options

- Soft seated - 204°C (400°F)
- Fire seated - 200°C (392°F)
- Apex™ metal seated - 315°C (600°F)
- TriFlex™ metal seated - 538°C (1000°F)

NEW Plug Valve Product

Durco PlugSeal™ Valve ASME Class 600 Plug Valves Serving the Worldwide Desalination Industry

For 70 years, Flowserve Durco has been a leader in developing and producing non-lubricated plug valves for a wide range of industrial applications. We are proud to introduce the PlugSeal™ plug valves which leverage our expertise in plug valves and adapt them for usage in the expanding seawater reverse osmosis desalination industry.

Design Parameters

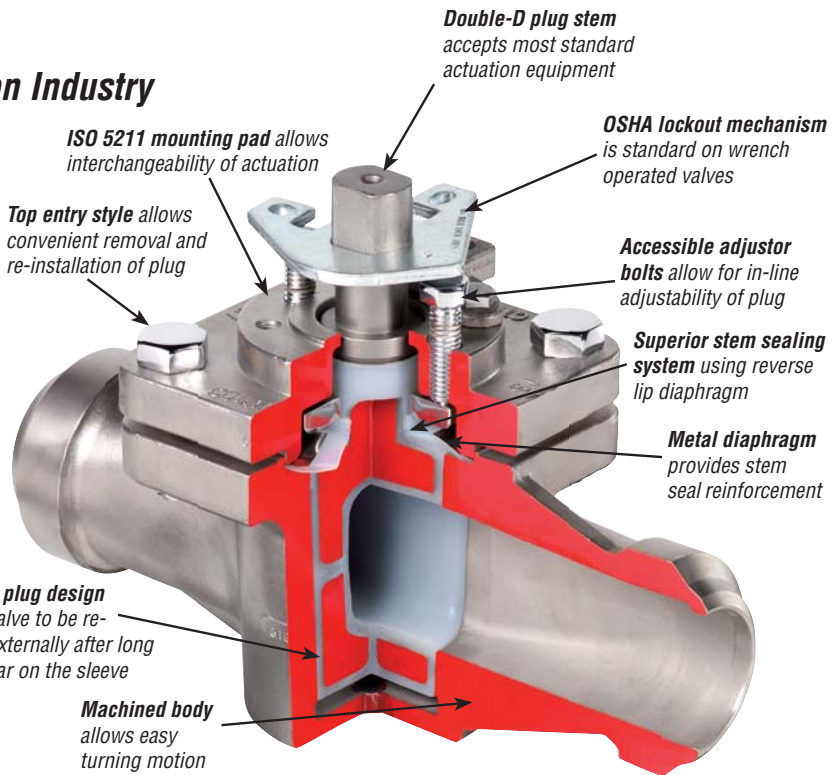
PlugSeal™ valves have been designed with following parameters to suit the SWRO desalination industry:

- Positive Shutoff
- Full Rated ASME Cl. 600
- Butt Weld or flanged
- 904L SS or Super Duplex SS (other materials available)
- Size capability to 16"
- In-line reparability

Materials

Standard materials include the following:

- Super Duplex Stainless Steel ASTM A995 Gr. 5A
- 904L stainless steel UNS N08904
- 254SMO ASTM A351/A744 Gr. CK3MCuN
- CD4MCuN ASTM A995 Gr 1B



Durco Mach 1 Forged Plug Valve Removable Cartridge Design

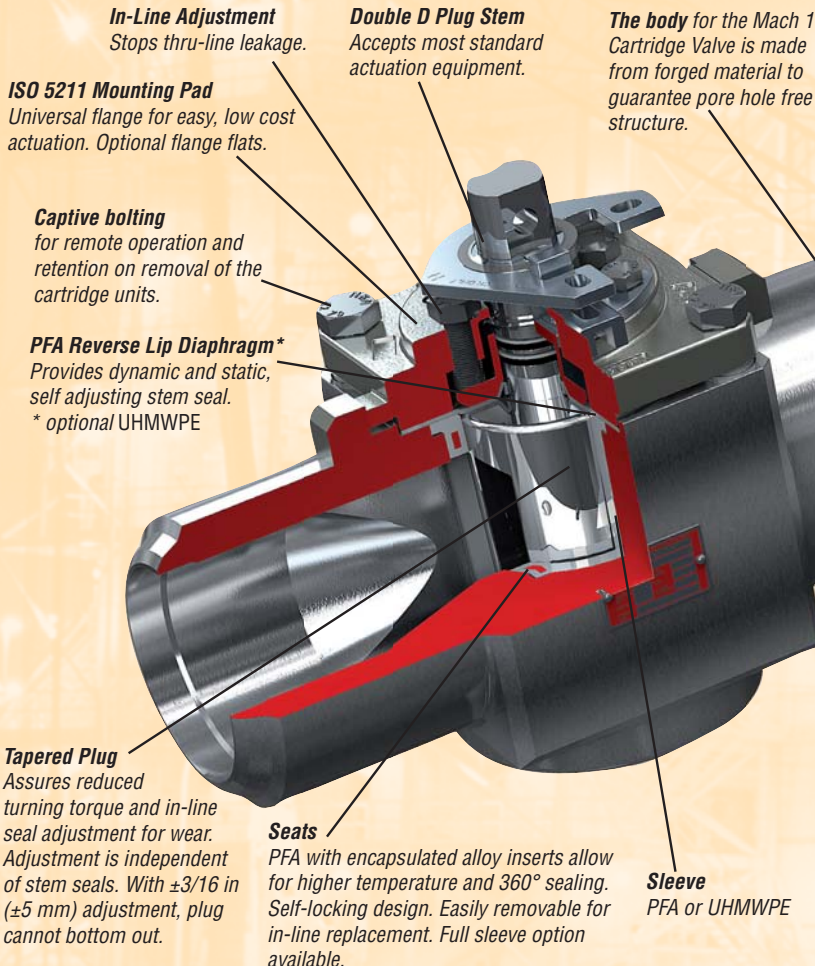
Flowserve has reinvented the non-lubricated plug valve to provide these new performance enhancing features:

- Lower, constant turning torques comparable to ball valves and significantly lower than other plug valves
- Higher temperature capability more comparable to gate and triple-offset butterfly valves (274°C / 525°F)*

- Easy seat replacement with valve in-line; no special tooling required
- ISO mounting pad
- ASME Class 150, 300 and 600 (derated) flanged butt weld, screwed end, socket weld, DIN 25-150 PN10-16, 25-40,100
- The cartridge design of the Mach 1 plug valve range

allows for remote disassembly of the valve trim. Loosening the captive top cap bolts allows for the trim assembly, including the sleeve, to be disassembled in one operation. In the same manner the repaired valve or replacement can be re-assembled without the need for the valve body to be taken out of the pipework.

*Excursions to 288°C (550°F) contact factory.





Flowserve Valve Automation Equipment for precise Modulating and On-Off Control of Rotary Valves

From actuators to positioners, switches to solenoids, Flowserve provides all your automation equipment needs. Flowserve innovated the industry with the first digital intelligent Control systems in 1990, and continues to lead the industry in automation products. The automation-systems can be found in every industry and process application.

Flowserve offers:

- Pneumatic, electric and hydraulic actuators
- Digital, pneumatic and electro-pneumatic positioners
- Robust switches in various executions
- Fail safe systems
- Indicators and other accessories
- Automation services and repair

Super Nova S050-S300 Rack & Pinion Actuators



Atomac lined Ball Valve with Norbro Actuator and Top-mounted Switchbox



RG Heavy Duty Actuators



Actuator Sizing

To assist in selection of automation please contact Flowserve Ahaus GmbH or your nearest Flowserve sales office.

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To find your local Flowserve representative:

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