

Fully Lined Products

XOMOX

Process Valves & Actuators



Fully Lined Valves

Due to the multi-purpose application XOMOX lined valves and valve accessories are used by various industries handling highly corrosive media in their plants. XOMOX lined products incorporate the highest levels of performance, reliability and safety requirements. XOMOX offers one of the most comprehensive fully lined valve program including:

- Lined plug valves (two-way, multiport- and jacketed valves)
- Lined ball valves with full bore design
- Lined butterfly valves in WAFER- and LUG-design
- Other lined valves e.g. sight flow indicators, check valves, sampling valves, filters, strainers and others
- Lined valves accessories e.g. PTFE-encapsulated dip pipes and asbestos free gaskets for severe customers' requirements.



Economical and Design Advantages

- Efficient and economical in corrosive application
- Minimization of the investment costs versus high alloy valves
- Minimum maintenance costs
- Long life cycle / low maintenance
- Economical valve actuation due to low torque requirements
- No contamination of the flow media
- Maximal internal (lining) and external (Acryle-Polyuretane) corrosion resistance of all valves.
- All XOMOX plug, ball and butterfly valves are designed **in conformity with the „TA-Luft“** (German Federal Air Immision Regulations) recommendations.

High Quality Lining Materials

The virgin fluorocarbon resins used by XOMOX stand out for excellent corrosion resistant performance. These resins are sufficient to satisfy all customers' valving needs. The valve lining process is the result of an intense cooperation with our customers resulting in compact valve designs, which reflect the customers' valve requirements.

Long term cooperation with our customers in the terms of corrosion applications enables XOMOX to offer the most efficient and economical solutions.

In the manufacture of plastic lined valves and valve accessories, the choice and the quality of the lining materials and the method of lining are critical considerations, since metallic valve parts should never get in contact with corrosive media. Therefore, only following virgin fluor plastic resins are selected by XOMOX:

- | | | |
|----------------------------|------|--------------------------------------|
| ● Perfluoroalkoxy: | PFA | - maximal temperature rating* 200 °C |
| ● Polyvinylidene fluoride: | PVDF | - maximal temperature rating* 130 °C |
| ● Polytetrafluoroethylene: | PTFE | - maximal temperature rating* 200 °C |
- *the temperature rating depends on the pressure rating



The plastic resins PFA and PVDF are fully thermoplastics with a homogeneous structure, whereas PTFE is a sintered material. Due to the optical transparence of PFA, an excellent optical quality control is possible contributing to the top quality of all lined products.

As standard, the XOMOX quality control includes electric spark testing of all lined valves. On special request a dye penetration test can be performed as well. Further on, all XOMOX lined valves are fully vacuum resistant.

The lining material thickness of all valves is min. 3 mm for max. protection of permeation and corrosion.



Fully Lined Plug Valve

- Based on proven TUFLIN® plug valve design
- Multi-purpose application for various industries
- Safe and reliable design for on-off and throttling application
- Excellent chemical resistance due to virgin fluorocarbon resins
- Prevents product contamination - No retention of process media
- Multiport configurations suitable for complex piping systems
- Maintenance and service-friendly design
- Long life-time, reduced cost of valve ownership
- Various configurations (2-way up to 5-way versions)

◆ Design Features & Benefits

- DIN/ISO 5211 actuator mounting flange
- High quality lining locked-in valve body
- Virgin PFA-lining materials as standard
- Perfect vacuum resistance
- Two independent sealing systems for maximum safety requirements
- Cavity-free design
- Adjustable sealing system

◆ Technical Data

Size Range:	2-way valves	DN 15 - 300 NPS 1/2 - 12
	Multiport configurations	DN 15 - 150 NPS 1/2 - 6
Pressure Range:	PN 10/16	
	ANSI Class 150	
	JIS 10K and other standards on request	
Temperature Range:	PFA: max. 200°C	
	PFA Antistatic on request	
	PVDF on request	

◆ Materials

EN-JS1049 (0.7043, GGG 40.3)
A352-LCB

◆ Options

- 3-way, 4-way and 5-way styles
- PFA antistatic lining
- 2-way design with heat jackets
- Many special versions available on request

◆ Approvals/Certificates

CE-marking
FDA approval
TA-Luft approval
Type-test approval



Fully Lined Ball Valves

- Complete product line with various product options
- Excellent performance in many industries
- Excellent diffusion and corrosion resistance
- No media contamination, no retention of process media
- Only virgin fluorocarbon resins are used
- Interchangeable sealing systems
- Maintenance and service-friendly design
- Long life-time, reduced cost of valve ownership

◆ Design Features & Benefits

- Standardized actuator flange connection acc. to DIN/ISO 5211
- Full bore design
- Corrosion resistant lining
- Locked-in linings
- Floating ball design
- Anti-blow out stem
- Perfect vacuum resistance
- Modular concept of body and shaft sealing
- Cavity-free design

◆ Technical Data

Size Range: DN 15 - 300 / NPS 1/2 - 12
Pressure Range: PN 19,5 (PN 10 für DN 200-300) / ANSI Class 150
 JIS 10K and other standards on request
Temperature Range:
 PFA Antistatic & PVDF on request

◆ Materials

EN-JS1049 (0.7043, GGG 40.3)
 Stainless steel version on request

◆ Options

- Ball valves with different packing options
- Maintenance-free, live loaded packing
- Double packing for exceptional safety requirements
- Metal-to-metal design • Ball valves with ceramic ball
- Bottom discharge designs • Ball valves with heating jacket
- Ball valves with grounding straps • Compact ball valves
- Control ball valves • Safety Coupling Systems
- Glass lined ball valves

More options and customer tailor-made solutions on request

◆ Approvals/Certificates

CE-marking
 FDA approval
 TA-Luft approval
 Type-test approval





Fully Lined Butterfly Valves

- Cost-efficient alternative vs. expensive high alloy valves
- Multi-purpose applications in various industrial applications (e.g. chemical, petrochemical & pharmaceutical)
- Minimum maintenance and life-time costs
- Superior sealing principle
- Suitable for tight shut-off or throttling service
- Excellent corrosion and diffusion resistant lining materials
- Low torque requirements
- Excellent references in chemical, seawater and offshore applications

◆ Design Features & Benefits

- Different body designs (Wafer, Lug, Lug PN 20)
- Compact, two-piece valve design
- Standardized face-to-face dimensions (API 609, DIN EN 558)
- Space savings in piping systems
- Standardized actuator assembly flange acc. to DIN ISO 5211
- Blow-out proofed one-piece disc-stem design
- Maximum internal and external corrosion resistance for highest safety aspects
- Thick corrosion resistant lining
- Independent primary and secondary sealing systems
- Seamless one piece molded liner
- Body liner extension
- Fully enclosed bottom shaft

◆ Technical Data

Size Range: DN 80 - 600
NPS 3 - 24

Pressure Range: PN 10 / ANSI Class 150 derated
PN 20 / ANSI Class 150 full rated
JIS 10K and other standards on request

Temperature Range:
PFA: max. 200°C
PFA Antistatic on request

◆ Materials

EN-JS1049 (0.7043, GGG 40.3)
Other materials on request

◆ Options

- Disc and shaft in stainless steel
- High-tensile and pressure resistant bearing and disc materials
- Customer tailor-made solutions on request

◆ Approvals/Certificates

CE-marking
FDA-approval
TA-Luft approval
Type test approval
Approved to NORSOK standard



Fully Lined Sight Flow Indicators

- Multi-purpose applications
- Provides reliable and safe visual indication and control of corrosive fluid flow
- Required for determination of flow quantity and stringent pureness requirements
- Only high-quality fluorocarbon resins are used
- Corresponds to DIN Standard 3237-2

◆ Design Features & Benefits

- Rugged design
- Face-to-face dimension DIN EN 558
- Designed to DIN standard 3237-2
- No product retention when installed vertically
- Stress-free mounted and thermal resistant MAXOS safety glasses acc. to DIN 7080-16
- Full bore design for maximum flow
- Excellent, external corrosion protection (Acryle-polyurethane coating)

◆ Technical Data

Size Range: DIN-Version: DN 15 - 150
ANSI / JIS-Version: NPS 1/2 - 10

Pressure Range: ANSI Class 150
JIS 10K and other standards on request

Temperature Range: PFA: max. 200°C
PFA Antistatic on request

◆ Materials

DIN: EN-JS1049 (0.7043, GGG 40.3)
ANSI / JIS: EN-JS1049 oder A352-LCB

◆ Options

- Double-glass version for heavy duty applications
- Sight flow indicators with integrated ball check valves
- Sight flow indicators with integrated flow indicator
- Sight flow indicators with integrated on-off or control ball valve
- Sight flow indicators for horizontal installation (cavity-free)
- Further options on request

◆ Approvals/Certificates

CE-marking
FDA approval



Fully Lined Check Valves

- Large variety of different design (ball and piston check valves, 45°-version, wafer check valves)
- Multi-purpose and efficient safety and protection devices
- Effectively prevent any backflash of media within the piping system
- Required to protect pumps e.g. in chemical, petrochemical or pharmaceutical plants

◆ Design Features & Benefits

Ball check valves

- Solid or hollow PTFE ball
- Resistant against solid dirt particles
- Self-cleaning effect due to permanent ball rotation

Piston check valves

- PTFE encapsulated spring
- Preferably used at plants with low blow-down pressures
- Spring support closing direction
- Easily adaptable to specific operation requirements

Wafer check valves

- Fully lined disc
- Cost-efficient solutions for larger sizes

◆ Technical Data

Size Range:

Ball & piston check valves
DN 15 - 150 / NPS 1/2 - 6

Wafer check valves:
DN 80 - 300 / NPS 3 - 12

Pressure Range:

PN 10/16 / ANSI Class 150
JIS 10K and other standards on request

Temperature Range:

PFA: max. 200°C
PFA Antistatic & PVDF on request

◆ Materials

DIN: EN-JS1049 (0.7043, GGG 40.3)
ANSI: Steel 1.0254 / 0.7043

◆ Options

- One-piece ball check valves
- Piston check valves with special springs
- Customer tailor-made solutions

◆ Approvals/Certificates

CE-marking
FDA approval



Fully Lined Sampling Valves

- Proven and safe design
- Controlled sampling process for quality purposes
- Exact determination of media quality and quantity during production process
- Prevents any interruption of production process
- Fulfills stringent safety and environmental requirements and laws
- No leakage of media to the atmosphere
- Easy and safe operation

◆ Design Features & Benefits

Ball valve design

- Rugged design
- Based on proven ball valve design
- Enables the precise determination of the sampling quantity
- Various ball volumes for different volume of sampling process

Needle valves

- Short face-to-face dimension
- Simple and proven design
- Spindle with shut-off cone

◆ Technical Data

Size Range:	Ball valve design: DN 25 - 150 / NPS 1 - 6 Needle valves: DN 25 - 100 / NPS 1 - 4
Pressure Range:	PN 10/16 ANSI Class 150 JIS 10K and other standards on request
Temperature Range:	PFA: max. 200°C PFA Antistatic on request PVDF on request

◆ Materials

EN-JS1049 (0.7043, GGG 40.3)
Other materials on request

◆ Options

- Different sampling end pieces
- Various sampling glasses
- Different levers

◆ Approvals/Certificates

CE-marking
FDA approval





Fully Lined Strainers and Filters

- Multi-purpose devices for cleaning and filtering purposes
- High filtering result at minimal pressure drop
- Maintenance and service-friendly design
- Safety device for other valves, pumps and measuring instruments

◆ Design Features & Benefits

- Excellent corrosion and diffusion resistance
- High-quality lining materials
- Corrosions-resistant lining materials
- Easy and separate cleaning of PTFE insert
- The drain plug allows an easy emptying of the liquid, without removing the insert

◆ Technical Data

Size Range: DN 15 - 100
NPS 1/2 - 4

Pressure Range: PN 10/16
ANSI Class 150
JIS 10K and other standards on request

Temperature Range:
PFA: max. 200°C
PVDF on request
PFA Antistatic on request

◆ Materials

EN-JS1049 (0.7043, GGG 40.3)
Other materials on request

◆ Options

- Various filter inserts allow the adjustment to different media with dirt level
- Different drain plugs
- PFA antistatic on request

◆ Approvals/Certificates

CE-marking
FDA approval



Dip Pipes and Spargers

- Multi-purpose application
- Devices for injection and discharge purpose
- Suitable also for special vessel forms
- Adjustable to individual customer requirements
- Completely PTFE encapsulated
- Straight and curved versions available
- Precise distribution of process media within the vessel

◆ Technical Data

Size Range: DN 15 - 400 / NPS 1/2 - 16
Pressure Range: PN 10
Temperature Range: PTFE: max. 200°C
 PTFE Antistatic lining on request

◆ Materials

Steel / PTFE

◆ Options

- Customer tailor-made solutions
- Antistatic PTFE lining and vacuum-resistant lining
- End pieces with thermo-couplings, pH-measuring heads and other devices
- Dip pipes with dispersion head

◆ Approvals/Certificates

FDA approval

RESISTOFLEX Lined Piping Systems



Pipes, fittings, hoses, elbows, chemical transfer hoses, industrial hoses, bellows & expansion joints, dip pipes & spargers, diaphragms, field tube flaring tools, Conquest piping systems





Gaskets

- Designed for special pipelines, glass pipelines and enamelled vessels
- Excellent adjustment to sealing surface
- Easily adapt themselves to rough sealing surfaces
- Suitable for elevated pressure and temperature conditions

◆ Design Features & Benefits

- Various designs available
Type JE01 / JE06: Gaskets with PTFE envelope
Type JM: PTFE fully encapsulated stainless steel insert
- Asbestos-free design
- Excellent sealing efficiency • Long service life

◆ Technical Data

Size Range:	Type JE01 und JE06	DN 15 - 1000
	Type JM	DN 15 - 150
Pressure Range:	-1 up to + 40 bar ANSI Class 150	
Temperature Range:	Type JE01 und JE06	-60°C up to +200°C
	Type JM	-190°C up to +250°C

◆ Materials

Type JE01 / JE06:	Gaskets with PTFE envelope
Type JM:	Gaskets with PTFE fully encapsulated stainless steel insert

◆ Approvals/Certificates

FDA approval

XOMOX Actuated Valve Packages



XOMOX Products Profile

Sleeved Plug Valves

DIN and ANSI versions.
On-Off-valves, Multiport valves (3 to 5-way valves).
Jacketed valves.

Metallic Ball Valves

DIN and ANSI versions.
On-Off-valves, multiport valves (3 to 5-way valves).
Special valves.

High Performance Butterfly Valves

DIN and ANSI versions.
PTFE, FIRESAFE and metal seat DN 50 to DN 2550,
NPS 2 to 102, WAFER- and LUG-design.

Fully Lined Plug Valves

DIN and ANSI versions.
On-Off-valves, PFA lining.
Multiport valves (3 to 5-way valves).
Jacketed valves.

Fully Lined Ball Valves

DIN and ANSI versions.
PFA- lining.

Fully Lined Butterfly Valves

DIN and ANSI versions.
WAFER- and LUG design, PFA- and PTFE-lining.

Other Fully Lined Valves

Check valves, sight glasses, filters and strainers,
dip pipes and PTFE gaskets.

Control Valves

Control valves for precise throttling service.

Actuators and Accessory

XOMOX XRP-actuators for plug-, ball- and butterfly valves.
Complete actuation accessory packages.

Detailed technical information providing comprehensive data is available on request.

XOMOX - Your Partner in Valves

Continuous improvement is the foundation of our EN ISO 9001 certified Quality Process. We believe that continuous improvement is necessary at all levels and in all functions across the organization.

Our Quality Process relies on effective teamwork between our customers, employees, suppliers, representatives and communities.

www.xomox.de

XOMOX Process Valves & Actuators

XOMOX International GmbH & Co.

Von-Behring-Straße 15
D-88131 Lindau/Bodensee
Telefon: (49) 8382-702-0
Fax: (49) 8382-702-144
info@xomox.de

Subject to technical modifications.

XOMOX Worldwide Manufacturing, Sales and Service

Europe / Middle East / Africa / America

BUNDESREPUBLIK DEUTSCHLAND

XOMOX International GmbH & Co
Tel.: (49) 8382-702-0
Fax: (49) 8382-702-144
info@xomox.de

XOMOX Burgkirchen
Tel.: (49) 8679-6092/93
Fax: (49) 8679-4944
burgkirchen@xomox.de

XOMOX Göhren
Tel.: (49) 34638-6080
Fax: (49) 34638-60899
goehren@xomox.de

XOMOX Grevenbroich
Tel.: (49) 02181-4944-0
Fax: (49) 02181-4944-44
grevenbroich@xomox.de

XOMOX Norderstedt
TEL.: (49) 40-526860-0
FAX: (49) 40 526860-33
norderstedt@xomox.de

XOMOX Wachenheim
Tel.: (49) 06322-9465-0
Fax: (49) 06322-9465-20
wachenheim@xomox.de

BELGIE/BELGIQUE

XOMOX Belgium
Tel.: (32) 3-6468675/
3-6451796
Fax: (32) 3-6441975
belgie@xomox.de

PROMETAL N.V.
Tel.: (32) 3-2051320
Fax: (32) 3-2328434

CESKA REPUBLIKA

XOMOX
Tel.: (420) 558 877 146
Fax: (420) 558 877 146

ESPAÑA

XOMOX International GmbH & Co. OHG
Sucursal en España
Tel.: (34) 93 786 92 50
Fax: (34) 93 785 98 51
espana@xomox.de

FRANCE

XOMOX France S.A.
Tel.: (33) 389-611361
Fax: (33) 389-064011
france@xomox.de

XOMOX Agence Paris
Tel.: (33) 164920113
Fax: (33) 169920118
france@xomox.de

HUNGARIA

XOMOX
MAGYARORSZAG KFT
Ceh u. 1.
8000 Székesverhérvár
Tel.: (36) 06-22-513-100
Fax: (36) 06-22-513-131
magyarorszag@xomox.de

ITALIA

CRANE PROCESS FLOW TECHNOLOGIES S.r.l.
Division XOMOX Italia
Tel.: (39) 039 2704373
Fax: (39) 039 2704450
lorenzo_bisogno_xomox@cranefflow.com

MIDDLE EAST

XOMOX Germany
Tel.: (49) 8382-702-0
Fax: (49) 8382-702-216
info@xomox.de

NEDERLAND

XOMOX Nederland
Tel.: (31) 181-618100
Fax: (31) 181-614100
nederland@xomox.de

NORGE

XOMOX Norge
Tel.: (47)231-73500
Fax: (47)231-73501
norge@xomox.de

Further manufacturing, sales and service in:
USA, Brasil, Canada, China, India, Japan, Korea, Mexico and Singapore

ÖSTERREICH

XOMOX International Ges.mbh
Tel.: (43) 732-652400/
732-661086
Fax: (43) 732-665541
austria@xomox.de

POLSKA

XOMOX
Tel.: (48) 32-2873428
Fax: (48) 32-2873428

RUSSIA

XOMOX
Tel.: (7) 095-9265406
(7) 095-202 6919
Fax: (7) 095-202 6919
andrey-xomox@mtu-net.ru

SCHWEIZ

XOMOX AG
Tel.: (41) 61-4859550
Fax: (41) 61-4859555
schweiz@xomox.de

SUOMI/FINLAND

XOMOX Finland GmbH & Co
Sivuliike Suomessa
Tel.: (358)14-3385000
Fax: (358)14-3385050
suomi@xomox.de

SVERIGE

XOMOX Sverige
Tel.: (46) 303-88980
Fax: (46) 303-88982
sverige@xomox.de

UNITED KINGDOM

XOMOX Ltd.
Tel.: (44) 1271-311111
Fax: (44) 1271-322022
uk@xomox.de

USA

XOMOX Cincinnati
Tel.: (1) 513 745-6000
Fax: (1) 513-745-6972
www.xomox.com

XOMOX Service and Automation Center

Our EN ISO 9001 certified Service and Automation Centers offer comprehensive service, including valve automation, repair, modification, accessory packaging and other services. We also have standard valves, spare and accessory parts in stock.

Our Service and Automation Centers offer our customers complete service and quick turnaround for the most urgent requirements.