

**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, FEP and PFA lining.
Multiport valves (3 to 5-way valves).
Jacketed valves.

Fully Lined Ball Valves

DIN and ANSI versions.
PFA- and FEP-lining.

Fully Lined Butterfly Valves

DIN, ANSI and JIS versions.
PFA-, FEP- 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

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**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.**



Fully Lined Products

XOMOX *Process Valves & Actuators*

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 Immission Regulations) recommendations.

High Quality Lining Materials

The high quality 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 high quality fluor plastic resins are selected by XOMOX:

- Fluoroethylenpropylene: FEP - maximal temperature rating* 180 °C
 - 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 FEP, PFA and PVDF are fully thermoplastics with a homogeneous structure, whereas PTFE is a sintered material. Due to the optical transparency of FEP and 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 high quality 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 life-cycle cost
- 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
- High quality FEP- or 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:	FEP: max. 180°C	
	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 high quality fluorocarbon resins are used
- Interchangeable sealing systems
- Maintenance and service-friendly design
- Long Life-Time, reduced life-cycle cost

◆ 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: FEP: max. 180°C / PFA: max. 200°C
 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
- Excellent references in chemical, seawater and offshore applications
- Long Life-Time, reduced life-cycle cost

◆ Design Features & Benefits

- All butterfly valves suitable for ISO PN 20
- A PTFE atmospheric seal protects the top seal against corrosion
- Compact, two-piece valve design
- Standardized face-to-face dimensions (API 609, DIN EN 558)
- Standardized actuator assembly flange acc. to DIN ISO 5211
- Blow-out proofed one-piece disc-stem design
- 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 50 - 600 NPS 2 - 24
Pressure Range:	ISO PN 20 / ANSI Class 150 full rated JIS 10K and other standards on request
Temperature Range:	FEP: max. 180°C 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 purity 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:	FEP: max. 180°C 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

XOMOX

Process Valves & Actuators



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:

FEP: max. 180°C

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:	FEP: max. 180°C 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:	FEP: max. 180°C 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. 260°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

XOMOX - Fully Lined Products

XOMOX *Process Valves & Actuators*



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 - Fully Lined Products