

Severe Service Butterfly Valves

Series 9000

XOMOX *Process Valves & Actuators*

Severe Service Butterfly Valves

Value Statement

For the harsh conditions of critical process applications, steam isolation, high cycle frequency, and temperature extremes, this triple-offset metal-seated valve provides unmatched performance, reliability, and quality.

The superior design of the disc / shaft engagement and the precision machined sealing components combine with innovative design geometry to provide improved cycle life, lower operating torque, and reliable performance in extreme temperatures.

The bi-directional bubble-tight closure, even after extensive cycling, provides sealing integrity formerly associated only with soft-seated valves.

With decades of service this valve earned a reputation for proven performance in critical applications.

Xomox valves are recognized around the world for innovative leadership and customer support.

Applications

These valves are used in a broad spectrum of market sectors, including refining, chemical processing, power generation, marine, pulp and paper, petroleum production, and gas processing.

Applications include process liquids, process gases, flue gas, cryogenics, steam, condensate, petroleum products, thermal fluid, and water.

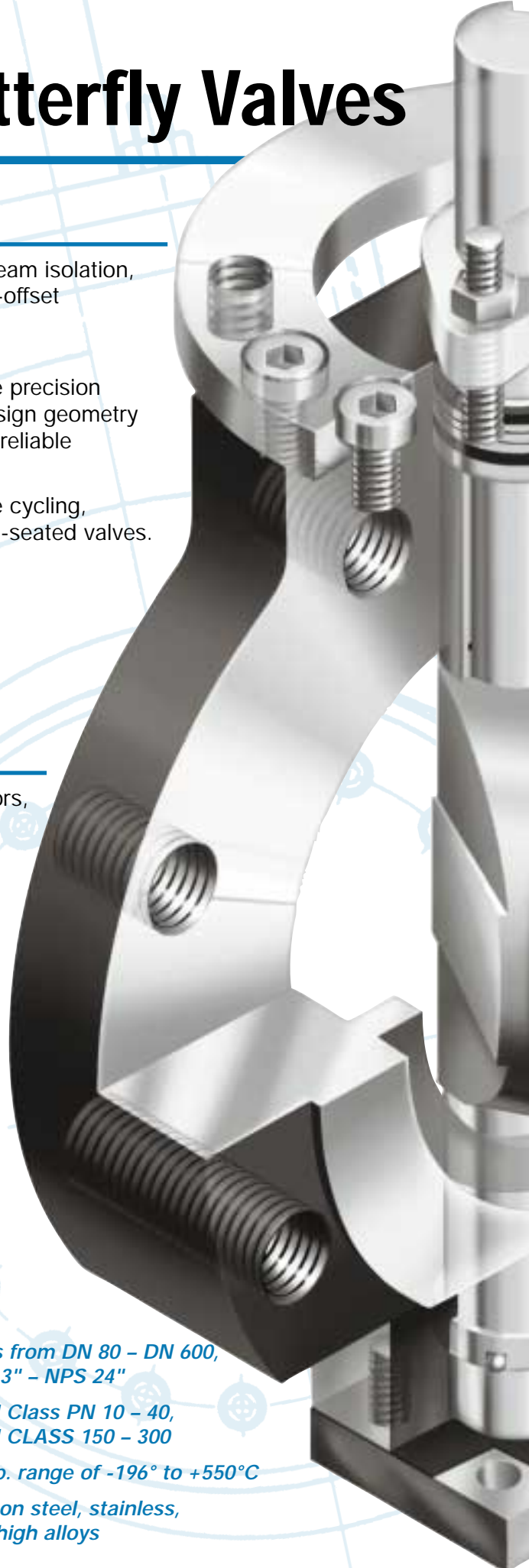


*Sizes from DN 80 - DN 600,
NPS 3" - NPS 24"*

*ANSI Class PN 10 - 40,
ANSI CLASS 150 - 300*

Temp. range of -196° to +550°C

*Carbon steel, stainless,
and high alloys*



Series 9000

Features and Benefits

■ Triple Offset Design

Eliminates wear associated with sealing surface contact and maintains sealing integrity and high cycle life

■ Wide Angle Seat Design

Eliminates wedging and binding of the seat / disc engagement

■ Torque Seated Resilient Metal Seal Ring

Provides reliable zero leakage bi-directional closure from -196°C to +550°C

■ Bubble-Tight Closure

Provides process efficiency with reduced cost of maintenance

■ Self-Centering Disc Design

Accommodates thermal extremes without binding

■ Robust Single-Piece Shaft

Minimizes shaft deflection and permits bi-directional sealing

■ Optional Stellite Seat

Offers optimum resistance to erosion in abrasive and high velocity applications

■ No Plastics or Elastomers

Provides fire-safe system security at extreme temperatures

■ Bearing Protector Rings

Prevent solid particles from coming in contact with bearing surfaces

■ Blowout-Proof Shaft

Complies with API 609 to improve safety for operating personnel

■ API 609 Lug Body Dimensions

Interchangeable with most double-offset high performance valves

■ Optional ASME B16.10 Flanged

Interchangeable with Gate valve and Ball valve lay lengths

■ Quarter Turn Design

Reduces emissions and improves containment integrity

■ 90° Low Torque Actuation

Enables simplified, cost-effective automation

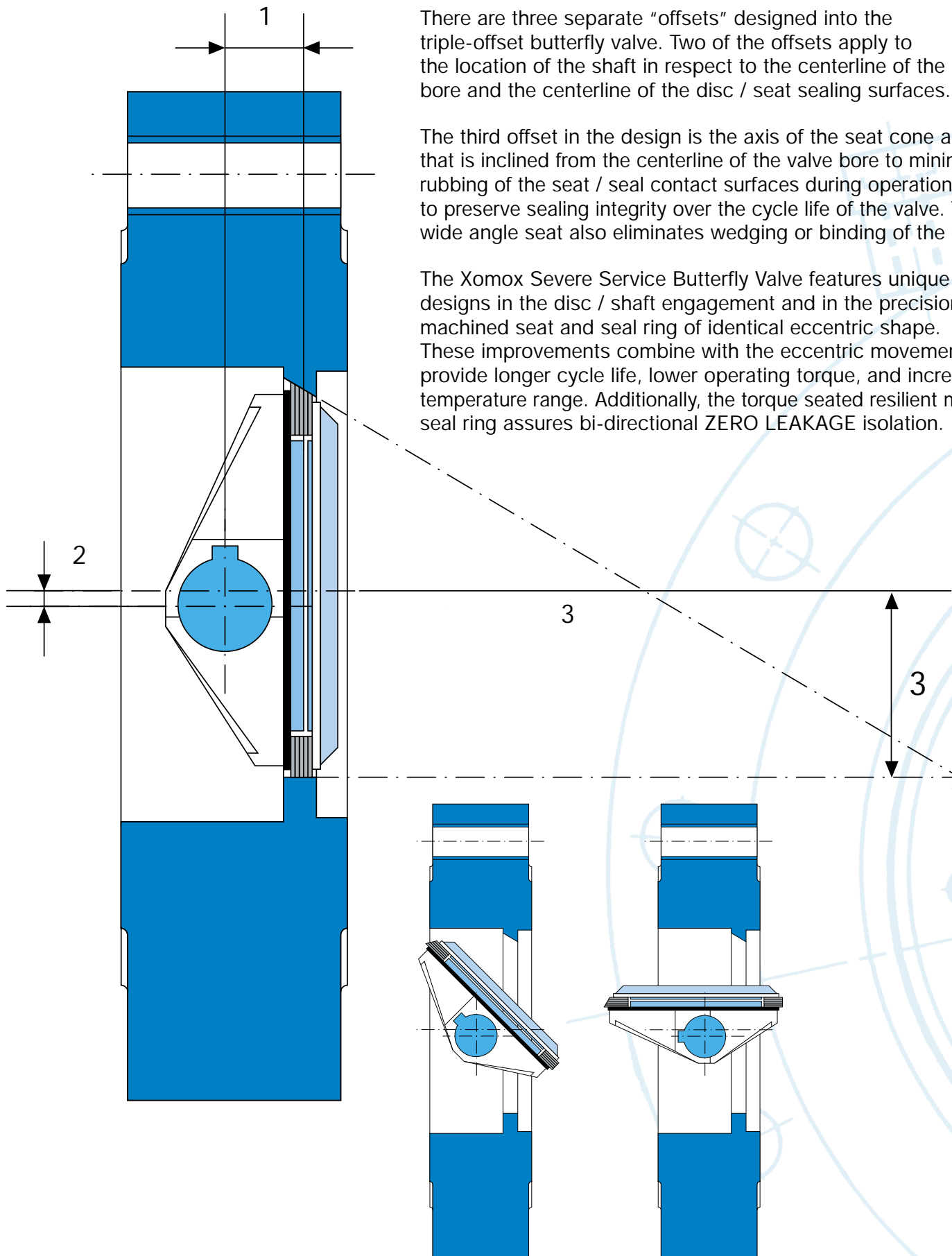
■ Fire Tested

Meets API 607 Ed. 4



API 607

Triple-Offset Design



There are three separate "offsets" designed into the triple-offset butterfly valve. Two of the offsets apply to the location of the shaft in respect to the centerline of the bore and the centerline of the disc / seat sealing surfaces.

The third offset in the design is the axis of the seat cone angle that is inclined from the centerline of the valve bore to minimize rubbing of the seat / seal contact surfaces during operation and to preserve sealing integrity over the cycle life of the valve. This wide angle seat also eliminates wedging or binding of the disc.

The Xomox Severe Service Butterfly Valve features unique designs in the disc / shaft engagement and in the precision machined seat and seal ring of identical eccentric shape. These improvements combine with the eccentric movement to provide longer cycle life, lower operating torque, and increased temperature range. Additionally, the torque seated resilient metal seal ring assures bi-directional ZERO LEAKAGE isolation.

Cost of Ownership



- Valve Price
- Freight
- Size/Weight
- Installation



- Torque
- Automation
- Cycle Life
- Maintainability



- Zero Leakage
- Containment
- Firesafe
- Retrofit

Lower operating torque permits the use of smaller gear operators or actuators. Quarter turn actuation is more versatile and more economical and has space saving benefits as well.

Triple-offset valves are known for high cycle life, unmatched by any other metal seated valve design, and for diminished cost of maintenance.

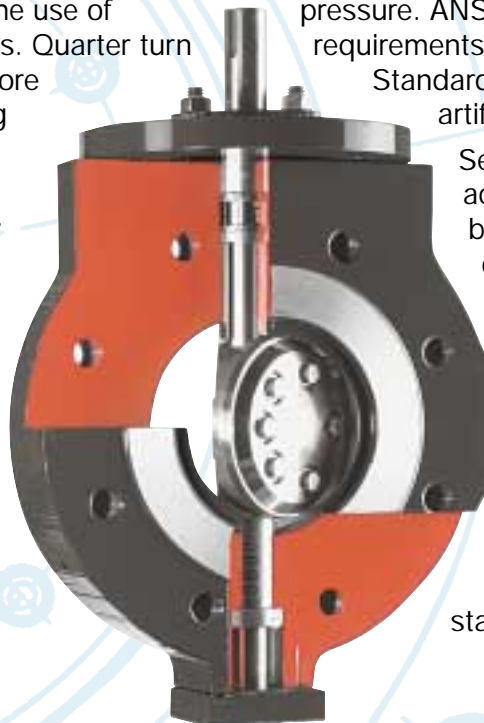
These valves are easy and inexpensive to maintain. The stainless / graphite seal ring can be replaced simply by removing the seal retainer on the disc. Complete disassembly of the valve is not necessary.

Zero leakage, the valves are bidirectional tight up to nominal

pressure. ANSI/FCI70-2 CLASS VI requirements and DIN 323c leakrate 1 Standard are fulfilled. Stempacking is artified acc. to TA-Luft.

Series 9000 valves are safe tested acc. to API 607. The tightness has been proved in bath flow directions.

Retrofitting systems is also simplified with the versatility of these valves. The three lay length options eliminate the cost of piping adjustments when replacing gate, globe or other valves. They are manufactured to API 609, ASME B16.10 and ISO 5752 standards.



Versatility

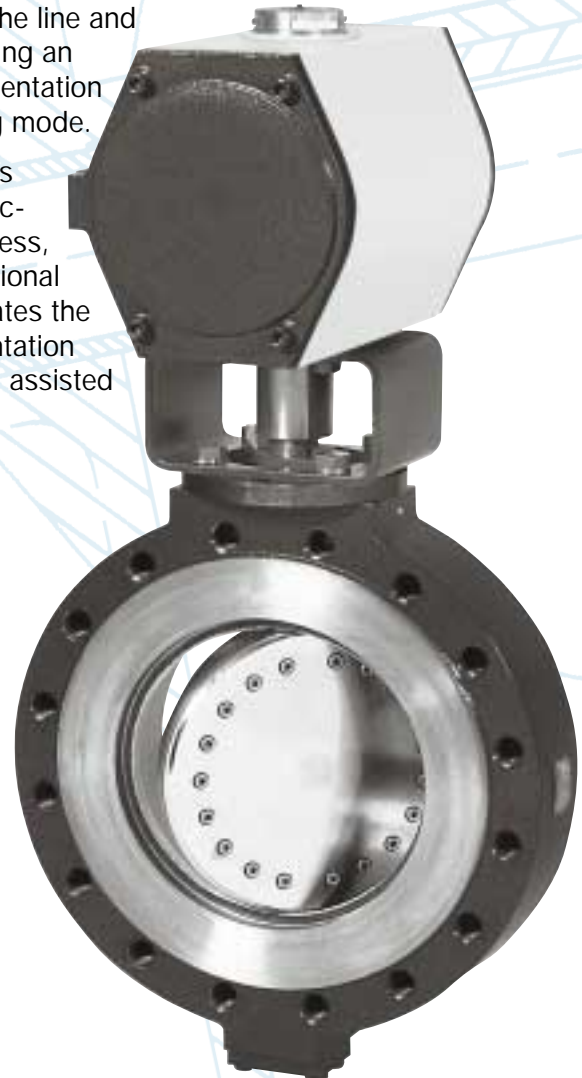
Versatility is a standard feature of these valves. They provide reliable operation in a variety of pressure and temperature requirements and in critical applications like flue gas and cryogenics. The versatility extends to three options for lay length dimensions which gives you both cost savings and greater flexibility in piping design and retrofit.

- Lug pattern bodies designed to API 609 are economical and are interchangeable with most high performance double-offset and triple-offset rotary valves.
- Flanged short pattern bodies designed to ISO 5752 offer the most common lay length for triple-offset rotary valves.

- Flanged long pattern bodies designed to ASME B16.10 simplify replacement of gate valves and ball valves with interchangeable dimensions.

Disc position is indicated by an integral marking of the shaft in alignment with a permanent reference mark on the valve body. This enables quick and easy retrofitting of actuators without removing the valve from the line and without risking an incorrect orientation or operating mode.

These valves have bi-directional tightness, and a directional arrow indicates the proper orientation for pressure assisted closure.



Double Flange Long Pattern

ASME B16.10
Tables 1 & 2 (Gate)
NPS 3" to 24" (DN 80 – 600)
ANSI Class 150 / 300
PN 10, 16, 25, 40

Other sizes, classes on request.

Lug Pattern

EN 558-1, Reihe 16 (DIN 3202-K3)
API 609-Tab2
NPS 3" to 24" (DN 80 – DN 600)
ANSI CLASS 150/300
PN 10, 16, 25, 40

Other sizes, classes on request.

Standards

These valves are designed and manufactured in compliance with ASME, API and ISO Standards under Quality Assurance provisions of ISO 9001 and in compliance with PED requirements.



Design: ASME B16.34
ASME Sec III and SEC VIII
ASME B31.1 and B31.3
API 609

Face to Face Dimensions: EN 558-1 (DIN 3202)
ASME B16.10
ISO 5752
API 609
MSS-SP-68

Flange Dimensions: ASME B16.5
ASME B16.47
DIN 2501, ISO 7005

Testing: API 598 (Soft Seat)
API 6D (Soft Seat)
FCI 70-2 Class VI
DIN 3230, BS 6755

Fire Testing: API 607 Ed 4
TA-LUFT

Marking: MSS SP-25, EN 19

Quality Assurance: ISO 9001
PED

Double Flange Short Pattern

EN 588-1, Reihe 13 (DIN 3202-F16)
ISA 5752, Table 4 short
NPS 3" – 24", DN 80 – DN 600
ANSI CLASS 150/300
PN 10, 16, 25, 40

Other sizes, classes on request.



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 (e.g. ball valve couplings).

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.

Plastic Lined Plug Valves

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

Plastic Lined Ball Valves

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

Plastic Lined Butterfly Valves

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

Other Plastic 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 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
Phone: (49) 8382-702-0
Fax: (49) 8382-702-144

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) 2181-4944-0
Fax: (49) 2181-4944-44
grevenbroich@xomox.de

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

XOMOX Wachenheim
Tel.: (49) 6322-9465-0
Fax: (49) 6322-9465-20
wachenheim@xomox.de

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

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

Česká Republika
XOMOX
Tel.: (420) 558-877 146
Fax: (420) 558-877 146

España

XOMOX International
GmbH & Co. OHG
Sucursal en España
Tel.: (34) 937869250
Fax: (34) 937859851
espana@xomox.de

France

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

Hungaria

XOMOX
Magyarorszag KFT
Tel.: (36) 1-401-0121
Fax: (36) 1-401-0130
magyarorszag@xomox.de

Italia

Crane Process Flow
Technologies S.r.l.
Division XOMOX Italia
Tel.: (39) 039-2704373
Fax: (39) 039-2704431
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

Österreich

XOMOX International
Ges.mbH
Tel.: (43) 732-652400
und 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

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

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.