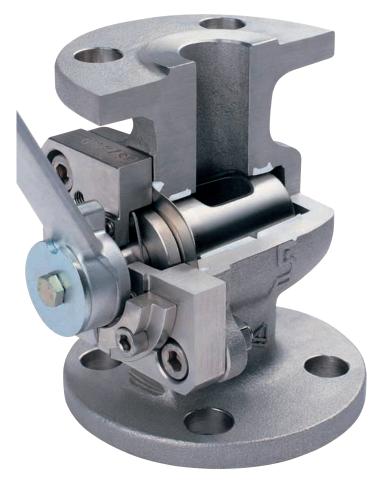


# XOMOX



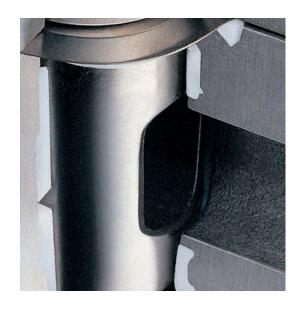


# TUFLIN® PLUG VALVE

- No Lubrication, no maintenance cost
- Excellent shut-off and control properties
- No cavities also at media containing solid particles and crystallizing fluids
- No residuals, no contamination of the process media
- Tight shut-off of liquids and gases (Leakrate < 10<sup>-6</sup> mbar l/sec)
- Long service-life at highest reliability
- Economical life-cycle-cost at different applications
- For more than 40 years TUFLIN® sleeved plug have proven to be reliable shutoff and throttling service devices. They are used in a wide range of severe and highly demanding services ideal for corrosive, scaling, adhering, inflammable, or erosive flow media. These valves show excellent performance in traditional ball and gate valve applications, and they offer a cost-efficient solution for tight shutoff and throttling of gases, vapors, slurries, etc.

# **TECHNICAL FEATURES**

- PTFE-sleeve entirely retained by 360° lips around the ports.
- PTFE-sleeve acts as primary seal in the waterway and to atmosphere.
- Due to the PTFE-sleeve no lubrication necessary.
   Therefore, no contamination of the process fluid by lubricants.
- Secondary seal at the cover also in FIRESAFEdesign available (optional).
- Conical plug shape grants low operation torques and vertical adjustment possibility.
- Compact and robust body design (one-piece cast body).
- Low weight
- Easy operation 0° 90°





#### **Technical Data**

**Size Range:** DN 15 – DN 400 / NPS 1/2 - 16"

**Pressure Range:** PN 10 – PN 100 / ANSI Class 150 – 600

(also according to JIS and BS)

Vacuum

(Vacuum range: up to 1.33 x 10<sup>-2</sup> mbar)

**Temperature Range:** 173 K up to 553 K (-100°C up to +280°C)

# Materials

**Body and Plug** 

**Ductile Iron** EN-JS1049 as per EN 1563, 0.7659

(Ni Resist) as per DIN 1694

**Carbon Steel** e. g. EN10213-2 (1.0619), A216-WCB, A352-LCB

**Stainless Steel** e.g. 1.4408, 1.4309 as per EN 10213-4,

CF8M, CF8C, CF8, CF3M, CF3,

special Alloys: 1.4539, CN7M, A494-M-35-1 (Monel), A494-CZ100 (Nickel), A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titan), A494-CY-40 (Alloy 600) Other material acc. to DIN/EN and ASTM on

request.

**Sleeves** PTFE, glasfibre-reinforced PTFE, PE, PTFE-

X and PTFE-XC for special applications

(virgin plastic material)

# **Options**

- FIRESAFE
- Oil- and Grease-free, i.e. for oxygen
- Relief hole or slot for polymerizing media and chlorine
- Fullbore
- Control plug valve
- Special design for HF-service
- Nucelar designs
- Special designs for specific applications

# **Approvals/Certificates**

CE-Marking
EU Type Test Approval
FIRESAFE certificate according to API607 4th ed.
Several approvals from clients
GOST R

# Other



# TUFLIN®-TWO-WAY PLUG VALVES

- Two-way design (straight water way)
- Flange-, Weld (SW/BW)- resp. Threaded Ends
- ISO-Cover for standardised actuator mounting acc. to DIN/ISO 5211

# **Technical Data**

**Size Range:** DN 15 – 400 / NPS 1/2 - 16 **Pressure Range:** PN 10-100 (EN 1092-1)

ANSI Class 150-600 (also according to JIS & BS)

Vacuum

(Vacuum range: up to 1.33 x 10<sup>-2</sup> mbar) **Temperature Range:** 173 K up to 553 K (-100° C up to +280° C)

# **Materials**

**Ductile Iron** EN-JS1049 as per EN 1563, **Carbon Steel** e.g. EN10213-2 (1.0619), A216-WCB, A352-LCB **Stainless Steel** e.g. 1.4408, 1.4539, 1.4309, CF8M, CF8, CF3M, CN7M, A494-M-35-1 (Monel), A494-CZ100, A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titanium) Other materials on request.

Sleeves and sealings made from virgin PTFE. Further materials for sleeves available depending on pressure and temperature.

# **Options**

- FIRESAFE
- Oil- and Grease-free, i.e. for oxygen
- Relief hole or slot for polymerizing media and chlorine
- Nucelar designs
- Special designs for specific applications

CE-Marking; EU Type Test Approval; FIRESAFE certificate according to API607 4th ed.; Several approvals from clients; GOST R

Corrosive flow media; Inflammable media; Adhering flow media Erosive flow media: Toxic flow media

# Approvals/Certificates

**Applications** 

Other

Standard lever – material: Aluminum Steel lever T-lever – material: Steel



## **Technical Data**

# **Materials**

## **Options**

# Approvals/Certificates

# **Applications**

#### Other

# TUFLIN®-JACKETED PLUG VALVES

- Plug Valve with Jacket
- Jackets from flange to flange (PJ) resp. Full-Jacketed (FJ) with Oversize-flanges
- Large jacket volume
- Jackets in materials Carbon Steel and Stainless Steel (1.4301)
- Several Jacket connection designs and Jacket connections (sockets with weld and threaded ends, flanges acc. to DIN and ANSI)
- For Two-way- and Mulitport valve types available
- ISO-Cover

**Size Range:** DN 15 – 350 / NPS 1/2 - 14 **Pressure Range:** PN 10-100 (EN 1092-1)

ANSI Class 150-600 (also according to JIS & BS)

Vacuum

(Vacuum range: up to 1.33 x 10<sup>-2</sup> mbar) **Temperature Range**: 173 K up to 553 K (-100° C up to +280° C)

**Carbon Steel** e.g. EN10213-2 (1.0619), A216-WCB **Stainless Steel** e.g. 1.4408, 1.4539, 1.4309, CF8M, CF8, CF3M, CN7M, A494-M-35-1 (Monel), A494-CZ100, A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titanium)

Other materials on request.

Sleeves and sealings made from virgin PTFE. Further materials for sleeves available depending on pressure and temperature.

- FIRESAFE
- Oil- and Grease-free, i.e. for oxygen,
- Relief hole or slot for polymerizing media and chlorine
- Special designs for specific applications

CE-Marking; EU Type Test Approval; FIRESAFE certificate according to API607 4th ed.; Several approvals from clients; GOST R

Liquid Sulphur; Bitumen; Tar; Resins; other corrosive, polymerisating, etc. media, which must be maintained on their process temperature.

Standard lever – material: Aluminum

Steel lever

T-lever – material: Steel



# TUFLIN®-MULTIPORT PLUG VALVES

- Identical technical features like the two-way-valve
- Mulitport-design for a variety of applications
- 3-way- up to 5-way-valves
- Different Plug designs
- 3-way valves also with Jackets
- Valves acc. to DIN and ANSI
- Valves with Flanged-, Weld (SW/BW)- resp.
   Threaded Ends
- DIN/ISO 5211-Cover available

**Technical Data** 

**Size Range:** DN 15 – 300 / NPS 1/2 - 12 **Pressure Range:** PN 10-40 (EN 1092-1)

ANSI Class 150 - 300 (also according to JIS & BS)

Other pressure classes on request

Vacuum

(Vacuum range: up to 1.33 x 10<sup>-2</sup> mbar)

**Temperature Range:** 173 K up to 553 K (-100° C up to +280° C)

**Materials** 

**Ductile Iron** EN-JS1049 as per EN 1563, **Carbon Steel** e.g. EN10213-2 (1.0619), A216-WCB, A352-LCB **Stainless Steel** e.g. 1.4408, 1.4539, 1.4309, CF8M, CF8, CF3M, CN7M, A494-M-35-1 (Monel), A494-CZ100, A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titanium) Other materials on request.

Sleeves and sealings made from virgin PTFE. Further materials for sleeves available depending on pressure and temperature.

**Options** 

• FIRESAFE

- Oil- and Grease-free, i.e. for oxygen
- Special designs for specific applications

CE-Marking; EU Type Test Approval; FIRESAFE certificate according to API607 4th ed.; Several approvals from clients; GOST R

Change-over valves for example for mixing of media, tank filling filter- and drying-units, pump circuits

Applications

**Approvals/Certificates** 

Other

Standard lever – material: Aluminum Steel lever

T-lever – material: Steel



## **Technical Data**

# **Materials**

# **Options**

# **Approvals/Certificates**

# **Applications**

Other

# TUFLIN®-SLEEVED PLUG VALVES WITH TRIPLE SEALING

- Identical technical features like the two-way-valve
- Three independent sealing systems to atmosphere Primary seal = PTFE-sleeve Secondary seal = cover sealing set Tertiary Seal = Safety stuffing box
- Safety stuffing box guarantees emergency sealing, even when the first two sealing systems are damaged
- For Two-way- and Mulitport valve types available (except for lined valves)
- DIN/ISO 5211-connection at the cover

**Size Range:** DN 15 – 400 / NPS 1/2 - 16 **Pressure Range:** PN 10-40 (EN 1092-1)

ANSI Class 150-300 (also according to JIS & BS)

Higher pressure classes on request

Vacuum

(Vacuum range: up to 1.33 x 10<sup>-2</sup> mbar)

**Temperature Range:** 173 K up to 553 K (-100° C up to +280° C)

**Ductile Iron** EN-JS1049 as per EN 1563, **Carbon Steel** e.g. EN10213-2 (1.0619), A216-WCB **Stainless Steel** e.g. 1.4408, 1.4539, 1.4309, CF8M, CF8, CF3M, CN7M, A494-M-35-1 (Monel), A494-CZ100, A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titanium) Other materials on request.

Sleeves and sealings made from virgin PTFE. Further materials for sleeves available depending on pressure and temperature.

- FIRESAFE
- Leakage detection
- Oil- and Grease-free, i.e. for oxygen

CE-Marking; EU Type Test Approval; FIRESAFE certificate according to API607 4th ed.; Several approvals from clients; GOST R

For extreme critical media (for example toxic, lethal) In case of quick working temperature cycling

Standard lever – material: Aluminum Steel lever T-lever – material: Steel Operation with pneumatic (recommended with XOMOX XRPactuators), electrical and hydraulic actuators as per client's requirements.



# TUFLIN®-CONTROL PLUG VALVES

- Identical technical features like the two-way-valve
- Regulation of the process medium by means of Flow Cage and Control Plug
- Variable applications due to different cv-values
- Easy adaption on changed process conditions just by exchange of the Flow Cage (larger or smaller cvvalue)
- Control Valve with thight shut-off
- Also available for Plug Valves with Jackets
- DIN/ISO 5211-Cover

**Technical Data** 

**Size Range:** DN 15 – 300 / NPS 1/2 - 12 **Pressure Range:** PN 10-40 (EN 1092-1)

ANSI Class 150-300 (also according to JIS & BS)

Higher pressure classes on request

Vacuum

(Vacuum range: up to 1.33 x 10<sup>-2</sup> mbar)

**Temperature Range:** 173 K up to 553 K (-100° C up to +280° C)

**Materials** 

**Carbon Steel** EN10213-2 (1.0619), A216-WCB **Stainless Steel** e.g. 1.4408, 1.4539, 1.4309, CF8M, CF8, CF3M, CN7M, A494-M-35-1 (Monel), A494-CZ100, A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titanium) Other materials on request.

Sleeves and sealings made from virgin PTFE. Further materials for sleeves available depending on pressure and temperature.

**Options** 

FIRESAFE

- Oil- and Grease-free, i.e. for oxygen
- Special designs for specific applications

CE-Marking; EU Type Test Approval; FIRESAFE certificate according to API607 4th ed.; Several approvals from clients; GOST R

Regulation of process media

**Applications** 

Other

Approvals/Certificates

Standard lever – material: Aluminum Steel lever

T-lever – material: Steel



# TUFLIN®-High Pressure Plug Valves (PN 100 / ANSI Class 600)

- Identical technical features like the two-way-valve
- High Pressure Design for PN 100 resp. ANSI Class 600
- 2-way-valves
- Also with Jackets
- Valves acc. to DIN and ANSI
- Valves withFlanged-, resp. Weld (SW/BW)-Ends
- DIN/ISO 5211-Cover available

**Technical Data** 

Materials

**Options** 

**Approvals/Certificates** 

**Applications** 

Other

**Size Range:** DN 25 – 350 / NPS 1 - 14

**Pressure Range:** PN 100(EN 1092-1); ANSI Class 600 **Temperature Range:** 173 K up to 553 K (-100° C up to +280° C)

**Carbon Steel** EN10213-2 (1.0619), A216-WCB **Stainless Steel** e.g. 1.4408, 1.4539, 1.4309, CF8M, CF8, CF3M, CN7M, A494-M-35-1 (Monel), A494-CZ100, A494-N7M (Alloy B2), A494-CW2M (Alloy C4), B367-C2 (Titanium) Other materials on request.

FIRESAFE
Oil- and Grease-free, i.e. for oxygen

CE-Marking GOST R

High Pressure applications for example in Reverse Osmosis Desalination Plants

Operation with Lever or Gear Operation with pneumatic (recommended with XOMOX XRPactuators), electrical and hydraulic actuators as per client's requirements.



# TUFLIN®-HF-Plug Valves

- Identical technical features like at the two-wayvalve
- TUFLIN®-Plug Valve licensed by PHILLIPS Petroleum Co. and UOP for their HF-Alkylation-Processes
- Body and plug in ASTM A-494-1994 Grade M-35-1 resp. M-30-C
- TUFLIN® HF-SPV have proven themselves with years of service in thousand of hydrofluoric acid applications

**Technical Data** 

Materials

**Options** 

**Approvals/Certificates** 

**Applications** 

Other

Size Range: NPS  $\frac{1}{2}$  - 20

**Pressure Range:** ANSI Class 300 und 600 (de-rated) **Temperature Range:** As per Licensor's specification

ASTM A494-1994 M-35-1 resp. M-30-C

Fullbore-design

PHILLIPS UOP GOST R

HF-Alkylation

- Operation with Lever or Gear
- Operation with pneumatic (recommendet with XOMOX XRP-actuators), electrical and hydraulic actuators as per client's requirements.
- For HF-Alkylation-Process also licensed: CRANE-PACIFIC Gate Globe and Check Valves.
- Centralized HF CRANE Service Center for XOMOX & Pacific HF valves (Stock of valves and spares, support, repair and maintenance).
- Single source for a complete HF-valve package.



# FURTHER TUFLIN® PLUG VALVE DESIGNS

# **Options**

- Fullbore Valves
- Sampling valves
- Interconnected Valve CombinationsPump change-over Valves
- Firebrigade Valves
- Double-Block and Bleed Valves
- Nuclear Valves
- Tank Car and Container Valves (compact plug valves)All valves can be automated with XOMOX XRP-actuators.

Subject to technical revisions.

# XOMOX-XRP AUTOMATED PLUG VALVES







# Fant du ikke det du så etter?

Besøk vår hjemmeside eller kontakt en ekspert

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