



Valves

sealex[®]

**KLAUS
UNION**

Quality and Know How, A Valve's Most Efficient Combination

Klaus Union is one of the leading manufacturers of valves and pumps specially designed for the chemical industrial market. The professional production capability acquired over more than 40 years, a sophisticated and state-of-the-art fabrication process provide an excellent basis for finding optimum solutions to any special problems versatile response to any specific requirement imposed by the user. Valve and pump units supplied by Klaus Union are of superior quality and come up to the highest standard. They contribute to appreciably enhance both performance and safety of your installation and, besides they cut pollution to the benefit of environment and mankind. Klaus Union: We set the standard for valves.



Quality Assurance

It is the policy of Klaus Union to achieve adequate quality assurance for the manufacture of all products to ensure they comply with contractual requirements. All sub-suppliers are totally committed to assure and achieve the contractual requirements through vigorous implementation of the quality assurance program. All purchased material is repeatedly inspected for conformity on receipt and after assembly.

The quality assurance system established according to latest state-of-the-art principles fully complies with the requirements specified in international codes and regulations.

A quality assurance system that has been verified and certified warrants that the requirements imposed by you are fully complied with.



sealex - The Safety System - Perfectly Seals Aggressive, Explosive and Toxic Fluids

High safety demands are put on valves conveying highly dangerous fluids. In addition to their normal application, the valves must prove their safe and reliable operation even under adverse and extreme conditions, all by maintaining the perfectly sealed condition for a very long period of time.

Is this a stringent requirement? Valves and pumps manufactured and supplied by Klaus Union under the tradename *sealex*

incorporate this safety. During all stages of manufacture they are all subjected to regular quality control tests and have to pass stringent examinations by our own quality assurance department. Valves that have passed all of these tests and examinations are of superior quality and provide an exceptionally safe operation and reliability. This safety is not only in compliance with German and international codes and standards, but has also been attested in test certificates issued by TÜV (HPO, WVO).

In addition to all types of steel and stainless steel used for the fabrication of first class quality Klaus Union valves there is a wide choice of materials including but not limited to: nickel, monel, hastelloy, and titanium. Highly advanced production machines and procedures are available allowing economic fabrication of our products in series or custom designed. Hence, Klaus Union can supply and deliver any valve system in strict compliance with any specific requirement.



**Valves – Engineered by
Klaus Union
Advanced Concept
Operating Successfully
in Installations –
World-wide.**

Research and development work continually made by Klaus Union focussing at an advanced technology of environmental compatibility has resulted in a product range that warrants safe and reliable operation in compliance with virtually all and any requirements.

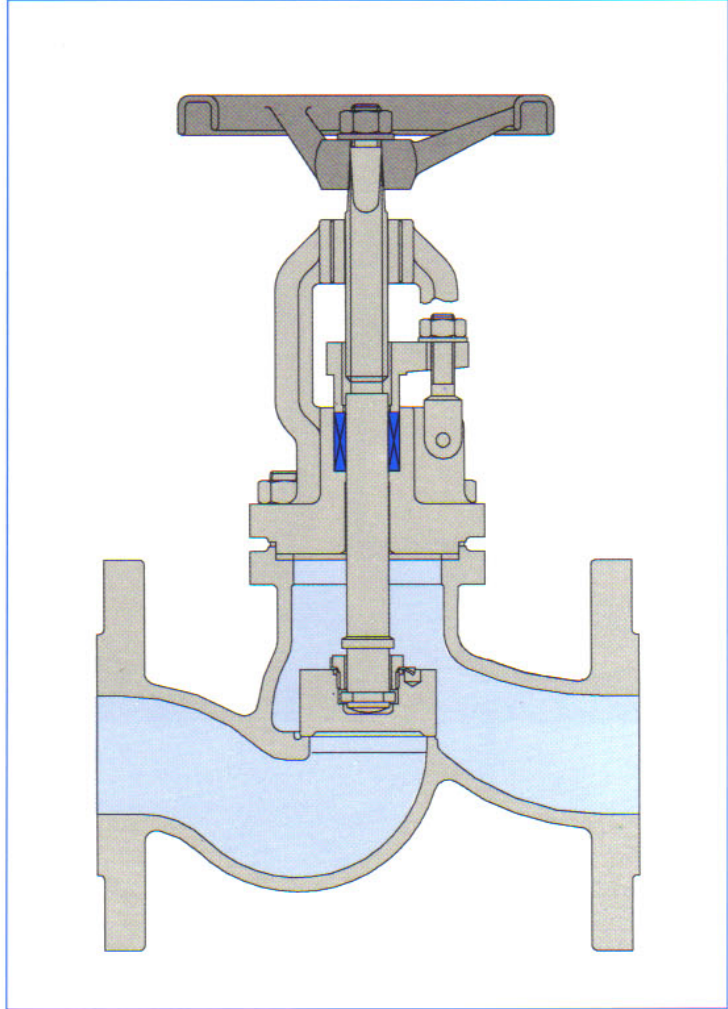
In addition to the products listed in this leaflet, Klaus Union can assist you in resolving any of your special problems. Contact us for any further particulars you may require.

Quality Approvals

- ISO 9001/EN 29001/
BS 5750 Part 1
- To "TRB 801, No. 45, Section 7.5 for valves of class B"
- Instruction "AD-HPO"
- Instruction "AD-WO/- TRD 100/
TRD 201"
- Component examination and test (TUV) for gate valves and globe valves
- Certified to "TA-Luft" for body tightness
- Certified to "TA-Luft" for spring loaded stuffing boxes

Table of contents

| | |
|--|----|
| Globe valves, stuffing box, DIN | 4 |
| Globe valves, bellow sealed, DIN | 4 |
| Globe valves, bellow sealed, ANSI | 5 |
| Globe valves, y-type, bellow sealed, DIN | 5 |
| Relief valves, bellow sealed | 6 |
| Control valves | 6 |
| Gate valves, DIN | 7 |
| Swing check valves, DIN | 8 |
| Strainers | 8 |
| Check valves | 9 |
| Sight glasses | 9 |
| Special constructions | 10 |
| Check-list for valve inquiries | 11 |



**Globe valves
to DIN 3356
stuffing box**

- globe valve, straight seat type
- flanges to DIN 2501
- outside screw and yoke
- rising handwheel
- rising stem
- stuffing box

DN 15 - 300, PN 10 - 40
 DN 15 - 250, PN 63 - 100
 DN 15 - 150, PN 160

Standard materials:

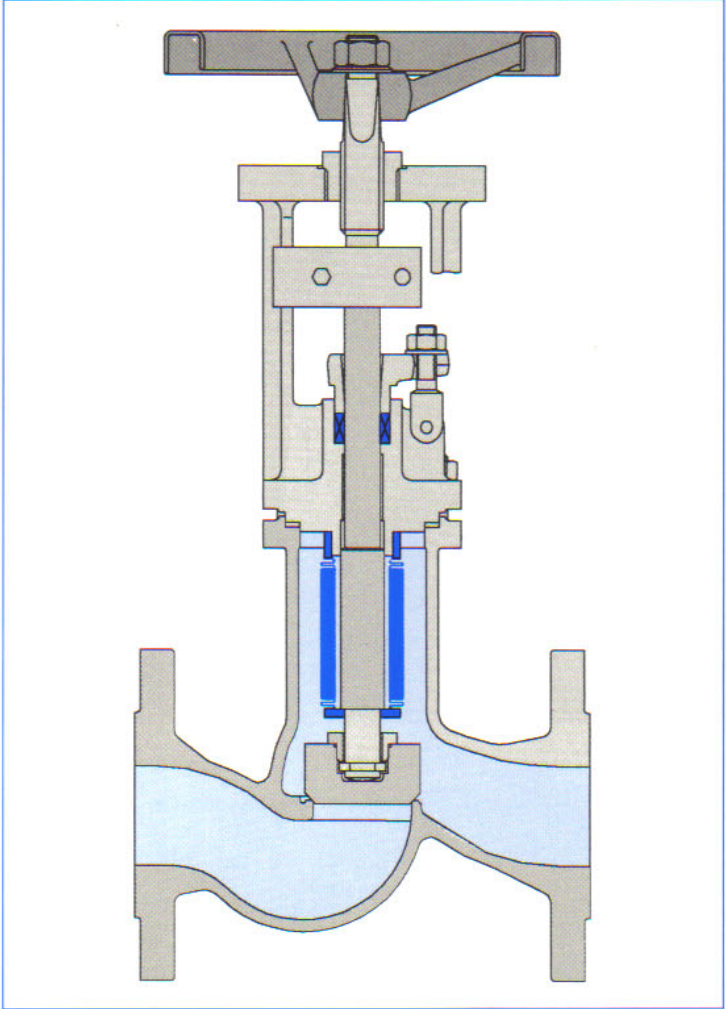
| | |
|----------------|--------|
| GS-C25 | 1.0619 |
| G-X6CrNiMo1810 | 1.4408 |

Optional features:

heating jacket
 extended bonnet
 disc with PTFE seal
 conical plug
 throttle type plug
 indicator
 stellite seat
 buttwelded
 spring loaded stuffing box

Optional materials:

high temperature cast steel
 low temperature cast steel
 special alloys



sealex
**Globe valves, bellow
sealed
to DIN 3356
PN 10 up to PN 160**

- globe valve, straight seat type
- flanges to DIN 2501
- two-piece stem
- rising stem
- rising handwheel
- indicator
- secondary seal
- yoke with flange to DIN/ISO 5210

DN 15 - 300, PN 10 - 40
 DN 15 - 200, PN 63 - 100
 DN 15 - 100, PN 160

Standard materials:

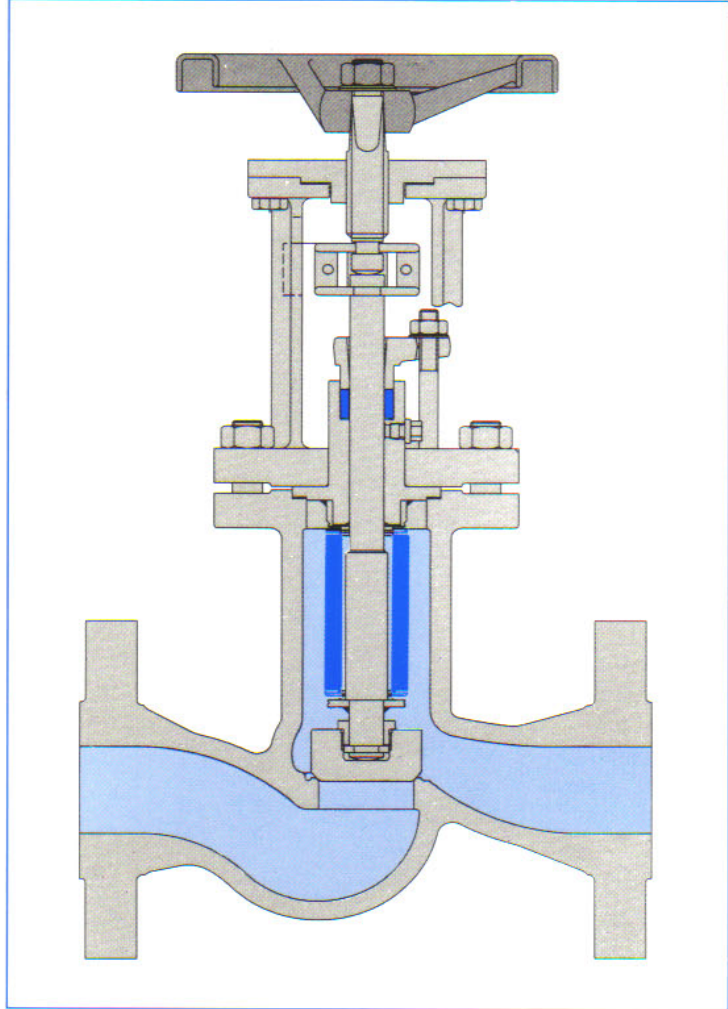
| | |
|----------------|--------|
| GS-C25 | 1.0619 |
| G-X6CrNiMo1810 | 1.4408 |

Optional features:

heating jacket
 extended bonnet
 conical plug
 throttle type plug
 stellite seat
 buttwelded
 welded body and bonnet

Optional materials:

high temperature cast steel
 low temperature cast steel
 special alloys



**Globe valves, bellow
sealed
to ANSI B 16.5
and B 16.10
150 and 300lb**

- globe valve, straight seat type
- flanges to ANSI B 16.5
- two-piece stem
- rising stem
- rising handwheel
- indicator
- secondary seal

DN 1/2" - 12", 150 lb
DN 1/2" - 12", 300 lb

Standard materials:

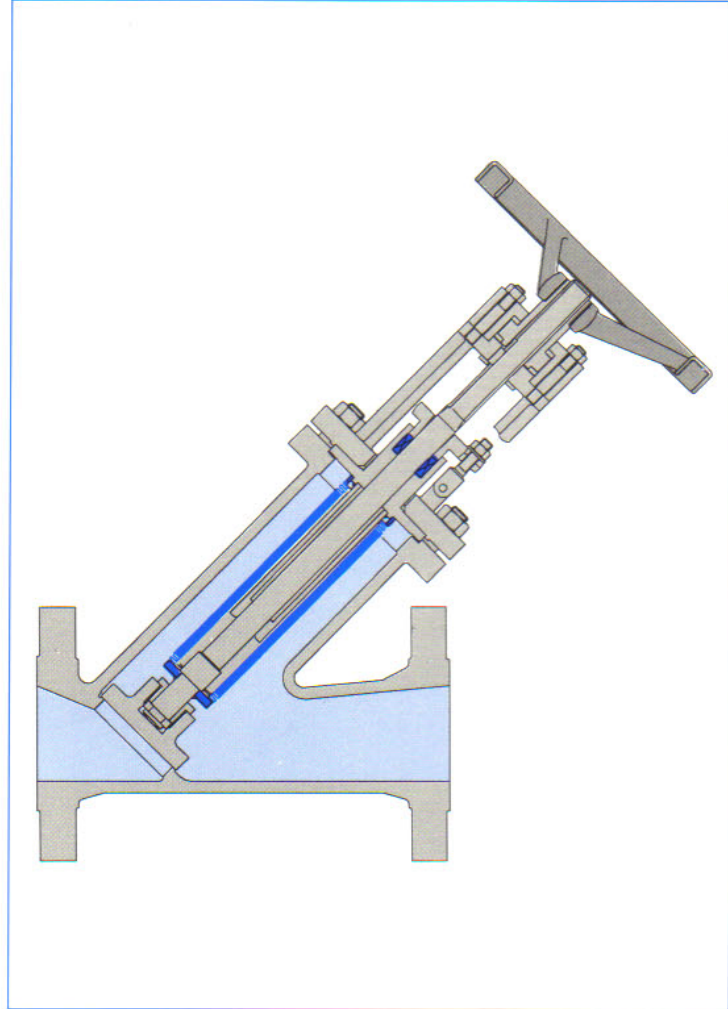
A216 WCB
A352 LCB

Optional features:

heating jacket
disc with PTFE seal
conical plug
stellite seat
buttwelded

Optional materials:

CrNi cast steel
special alloys



**sealex
Globe valves, bellow
sealed
to DIN 3356
PN 10 up to PN 160**

- globe valve, y-type
- flanges to DIN 2501
- rising stem
- non-rising handwheel
- secondary seal

DN 15 - 300, PN 10 - 40
DN 15 - 200, PN 63 - 100
DN 15 - 100, PN 160

Standard materials:

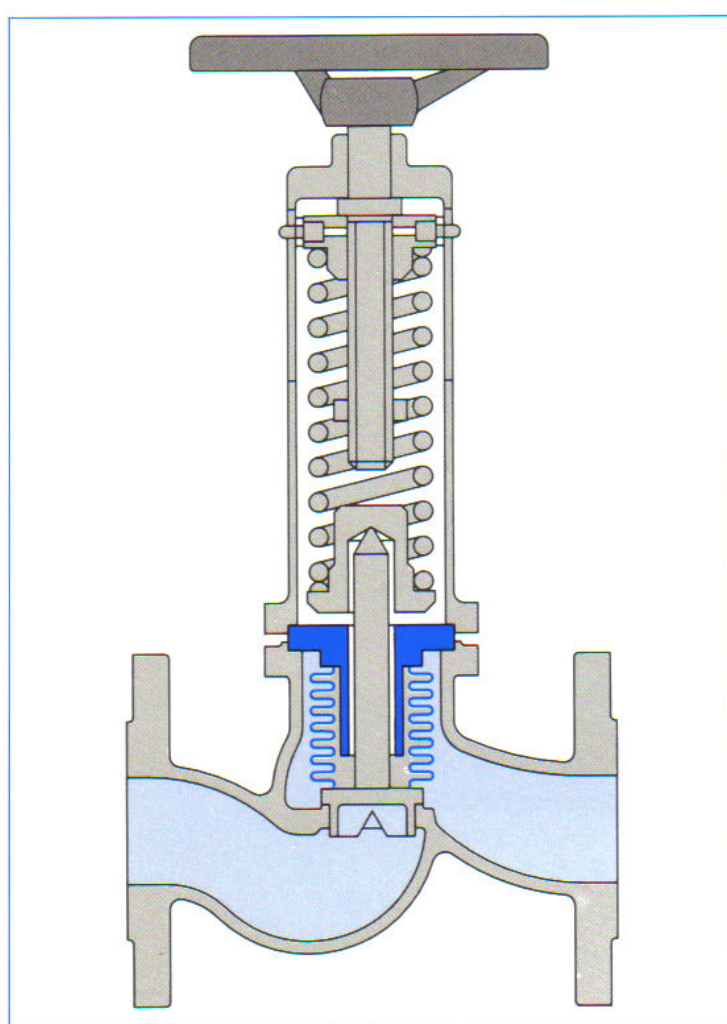
GS-C25 1.0619
G-X6CrNiMo1810 1.4408

Optional features:

heating jacket
conical plug
stellite seat
buttwelded
welded body and bonnet

Optional materials:

high temperature cast steel
low temperature cast steel
special alloys



**Relief valves,
bellows sealed**

- independent from counter-pressure
- straight seat type
- flanges to DIN 2501
- bellows sealed
- spring loaded
- adjustable by handwheel
- non-rising stem
- top-guided V-port

DN 15 - 150, PN 40

Range of selection (bar):

1,0 ... 2,5
2,5 ... 6,0
6,0 ... 10,0
10,0 ... 16,0
16,0 ... 22,0
22,0 ... 30,0
30,0 ... 40,0

Standard materials:

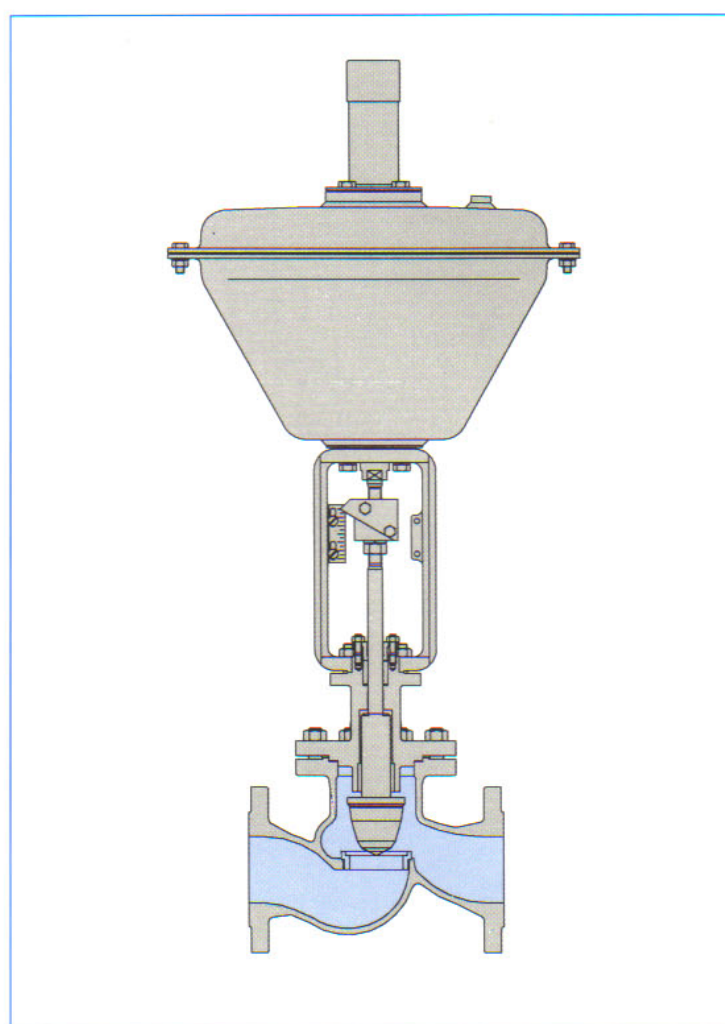
GS-C25 1.0619
G-X6CrNiMo1810 1.4408

Optional features:

heating jacket
buttwelded
stellite seat
spring pipe

Optional materials:

special alloys



**Control valves
stuffing box**

- **Single seat type:**
DN 15 - 200, PN 10 - 40
DN 15 - 100, PN 63 - 160

- **Double seat type:**
DN 50 - 300, PN 10 - 40
DN 50 - 200, PN 63 - 160

- flanges to DIN 2501
- pneumatic diaphragm actuator
- operating action reversible
- mechanic travel indicator
- stuffing box
- test curve linear or equal percentage type

Standard materials:

G-X6CrNi18 9 1.4308
G-X6CrNiMo1810 1.4408

Optional features:

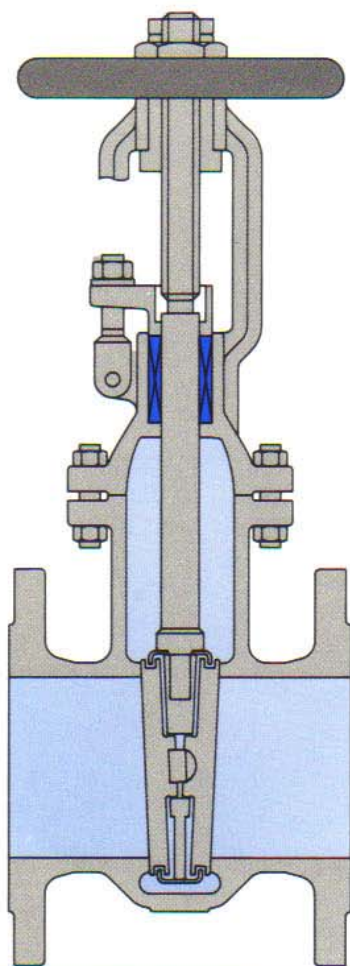
stellite seat
heating jacket
extended bonnet
bellows sealed

Optional equipment:

pneumatic or electro-pneumatic
positioner
handwheel

Optional materials:

high temperature cast steel
low temperature cast steel
special alloys



**Gate valves
to DIN 3352
stuffing box**

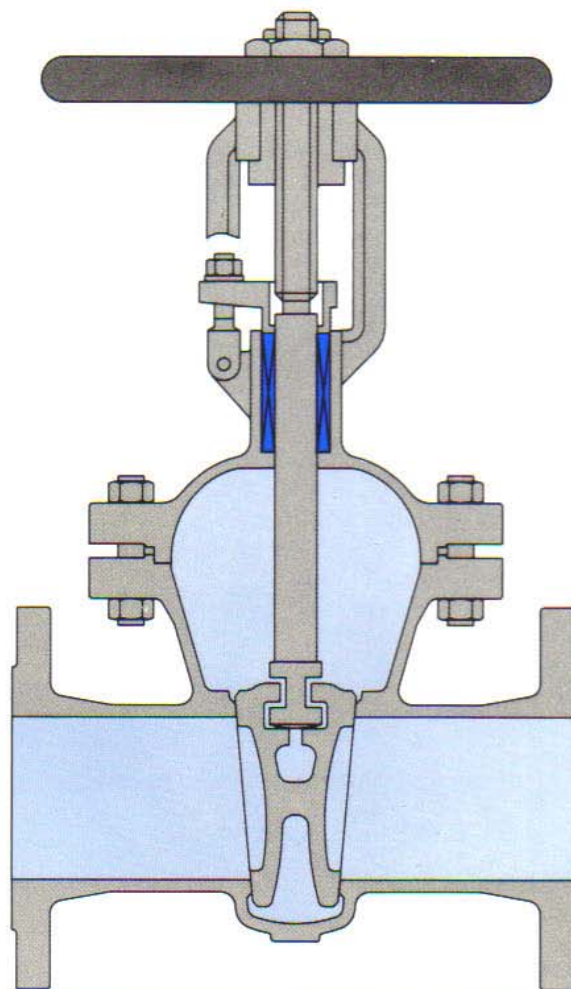
- flat shaped body (isomorphous series)
- double disc
- flanges to DIN 2501
- outside screw and yoke
- non-rising handwheel
- rising stem

DN 50 - 150, PN 10
DN 200 - 300, PN 6
DN 350 - 500, PN 4
DN 600, PN 2.5

Standard materials:
G-X6CrNiMo1810 1.4408

Optional features:
stellite seat

Optional materials:
special alloys



**Gate valves
to DIN 3352
stuffing box**

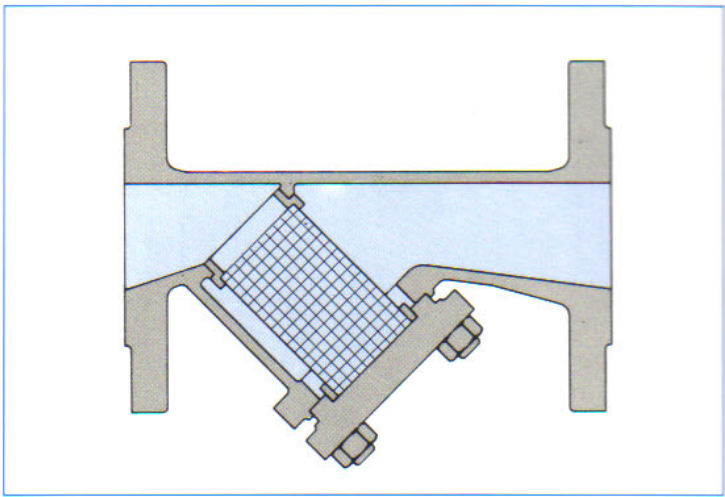
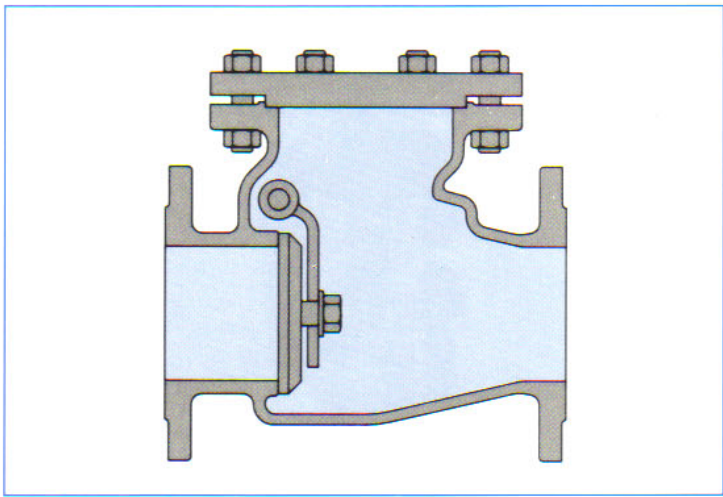
- gate valve with flexible wedge or double disc
- flanges to DIN 2501
- outside screw and yoke
- non-rising handwheel
- rising stem

DN 50 - 600, PN 10 - 25
DN 50 - 500, PN 40 - 63
DN 50 - 200, PN 100 - 160

Standard materials:
GS-C25 1.0619
G-X6CrNiMo1810 1.4408

Optional features:
extended bonnet
heating jacket
buttwelded
spring loaded stuffing box
stellite seat
electric actuator
piston actuator

Optional materials:
high temperature cast steel
low temperature cast steel
special alloys



Swing check valves to DIN

- inside hinge or
- with lever and weight
- flanges to DIN 2501
- damping device (special design)

DN 40 - 600, PN 10 - 40
DN 40 - 400, PN 63 - 100
DN 40 - 300, PN 160 - 320

Standard materials:
GS-C25 1.0619
G-X6CrNiMo1810 1.4408

Optional features:
heating jacket
disc with PTFE seal
stellite seat
buttwelded

Optional materials:
high temperature cast steel
low temperature cast steel
special alloys

Strainers

- y-type
- flanges to DIN 2501
- removable basket

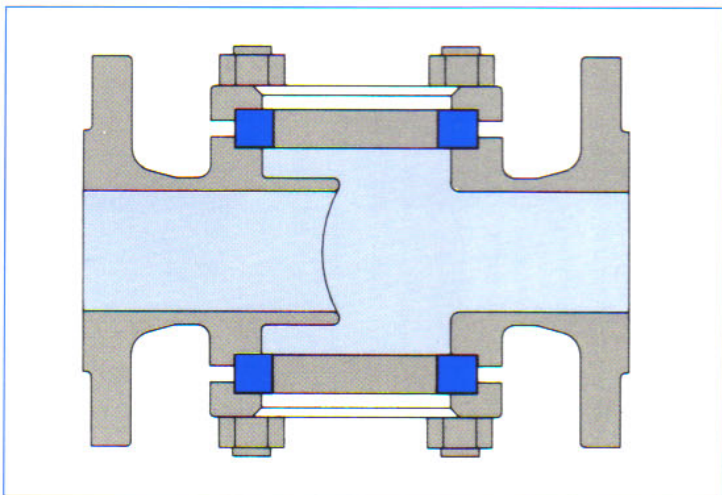
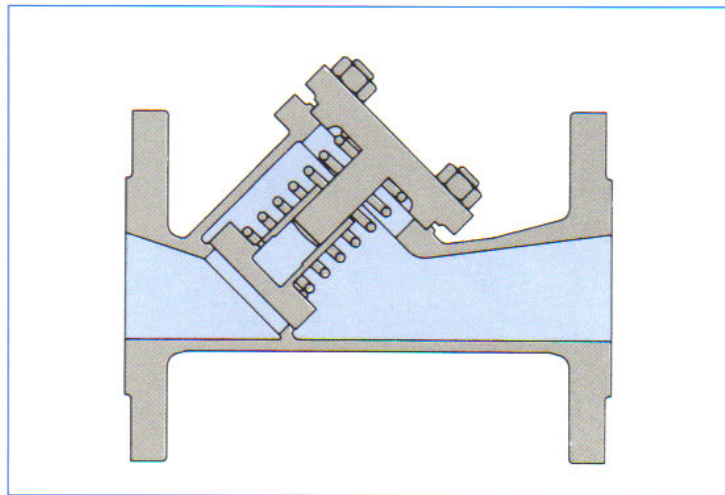
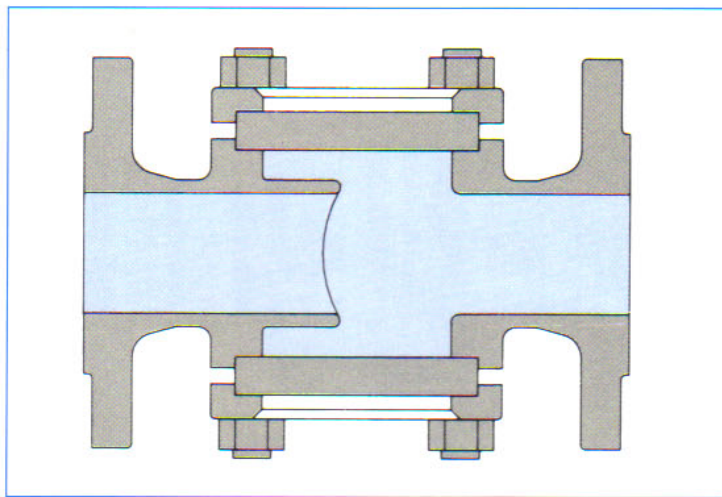
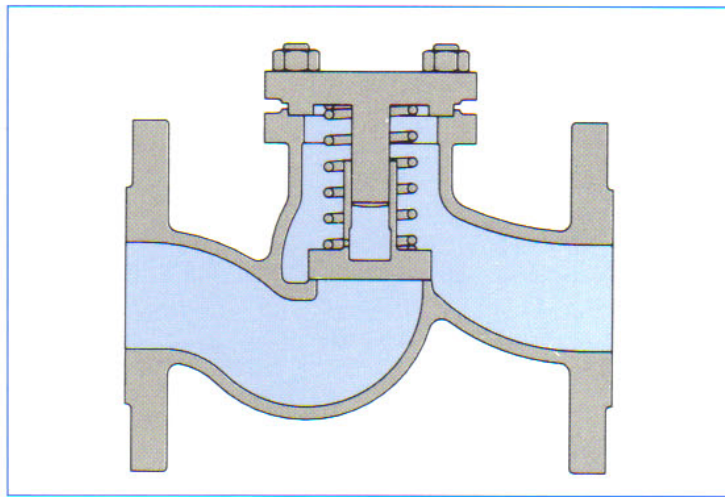
DN 15 - 300, PN 10 - 40
DN 15 - 250, PN 63 - 100
DN 15 - 150, PN 160

Mesh size:
up to DN 500.5 mm
DN 65 - DN 150 ..1.0 mm
from DN 2001.5 mm

Standard materials:
GS-C25 1.0619
G-X6CrNiMo1810 1.4408

Optional features:
heating jacket
buttwelded

Optional materials:
high temperature cast steel
low temperature cast steel
special alloys



Check valves

- straight seat type or y-type
- flanges to DIN 2501
- spring loaded

DN 15 - 300, PN 10 - 40
DN 15 - 250, PN 63 - 100
DN 15 - 100, PN 160

Standard materials:

| | |
|----------------|--------|
| GS-C25 | 1.0619 |
| G-X6CrNi 189 | 1.4308 |
| G-X6CrNiMo1810 | 1.4408 |

Optional features:

heating jacket
closing by hand possible
stellite seat

Sight glasses to DIN 3237, part 1

- straight passage with borosilicate glasses to DIN 7080
- flanges to DIN 2501

DN 15 - 200, PN 10 - 40

Standard materials:

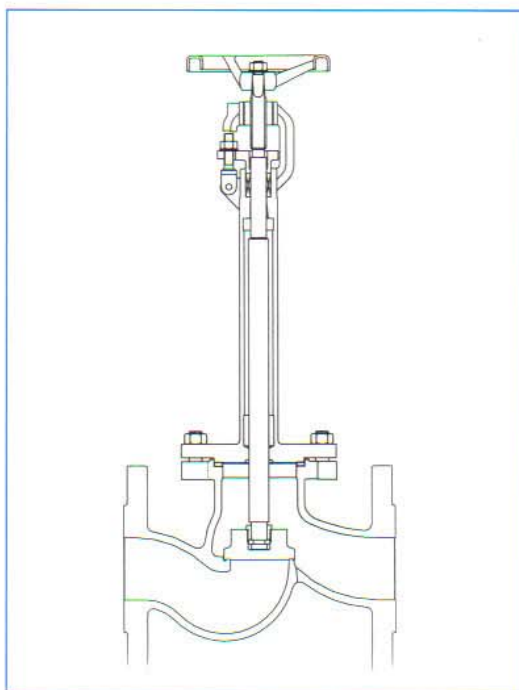
| | |
|----------------|--------|
| GS-C25 | 1.0619 |
| G-X6CrNiMo1810 | 1.4408 |

Optional features:

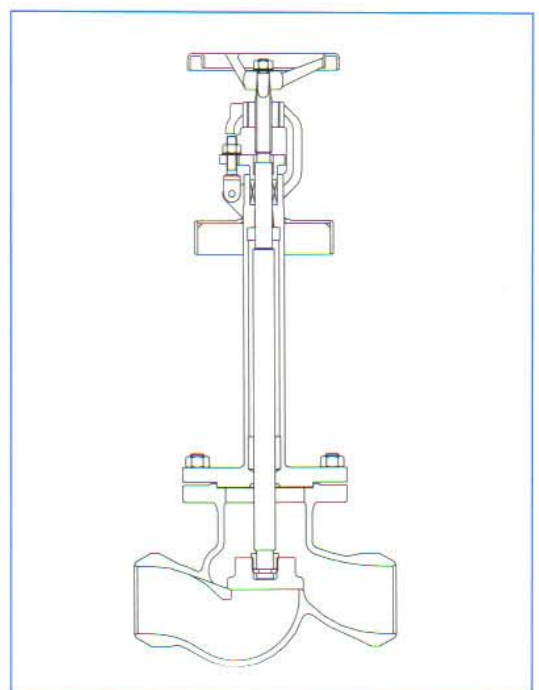
heating jacket
double glasses
glasses melted in a metal ring

Optional materials:

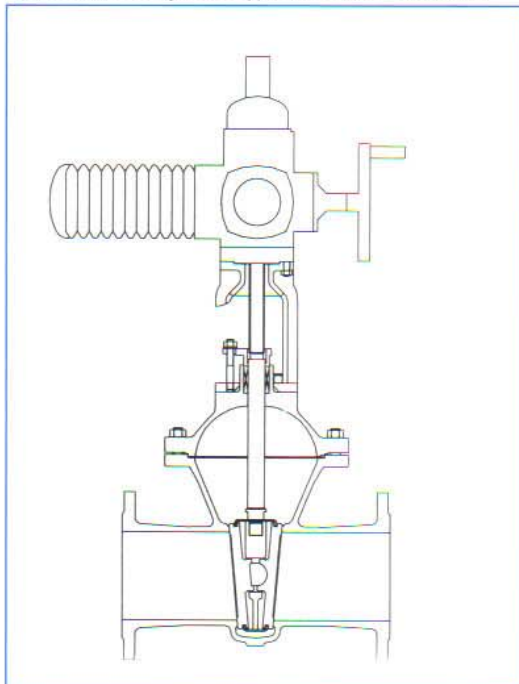
special alloys



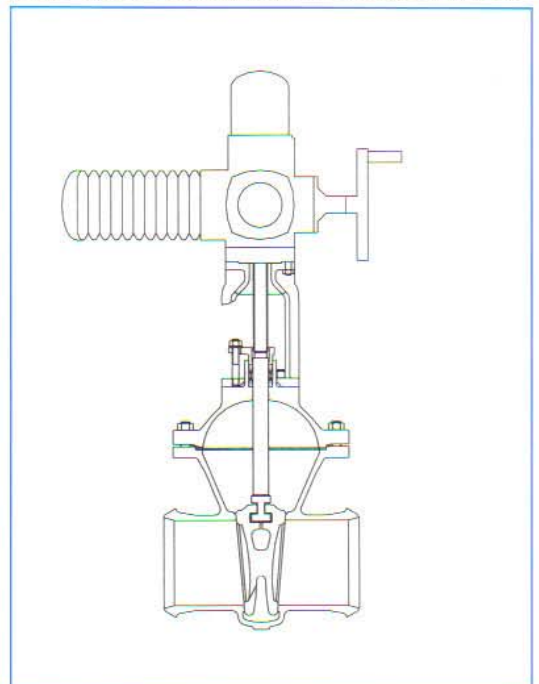
Globe valve, straight seat type, with extended bonnet



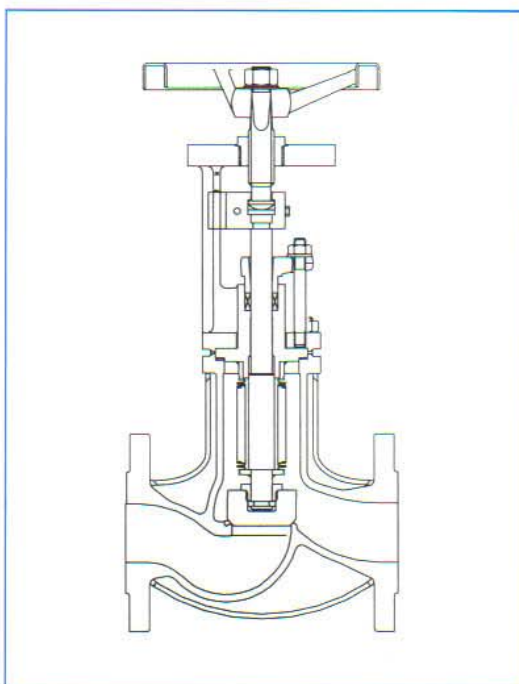
Globe valve with extended bonnet, collar and butt-welded



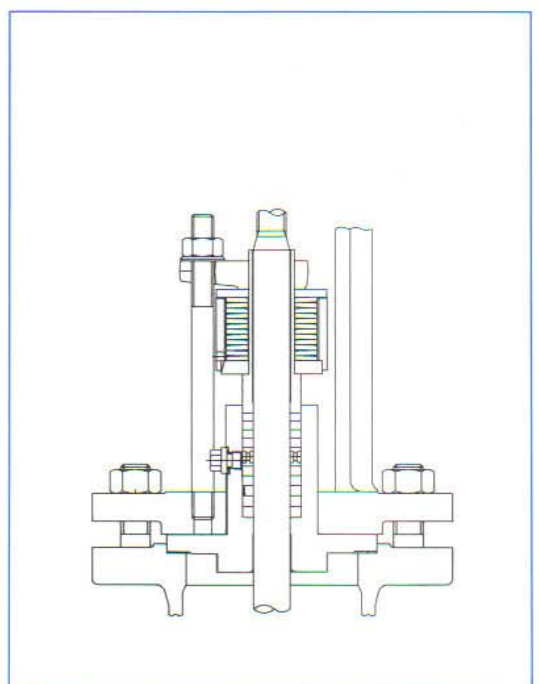
Gate valve with electric actuator



Gate valve with electric actuator and butt-welded



Globe valve, bellows sealed, with heating jacket



Spring loaded stuffing box to "TA-Luft"

Check-list for valve inquiries

| | | |
|---|---------|--|
| Technical Data: | | |
| Service temperature | | |
| Operating pressure | bar/psi | |
| Liquid / Density | | |
| Nominal diameter | DN/in. | |
| Nominal pressure | PN/lbs | |
| Drive hand / pneumatic / electric | | |
| Explosion protection class | | |
| | | |
| * Input pressure | bar/psi | |
| * Output pressure | bar/psi | |
| * Difference pressure | bar/psi | |
| * Max. / min. flow rate (Nm ³ /h) or | gpm | |
| * Open / close rating | | |
| | | |
| DIN / ANSI | | |
| Body material | | |
| Flanged / buttwelded | | |
| | | |
| Valve type: | | |
| Valve / stuffing box / bellows sealed | | |
| Gate valve / stuffing box | | |
| Check valve / swing or lift type | | |
| Control valve / double or single seat | | |
| | | |
| | | |
| | | |
| | | |
| * applicable with control valves only | | |

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