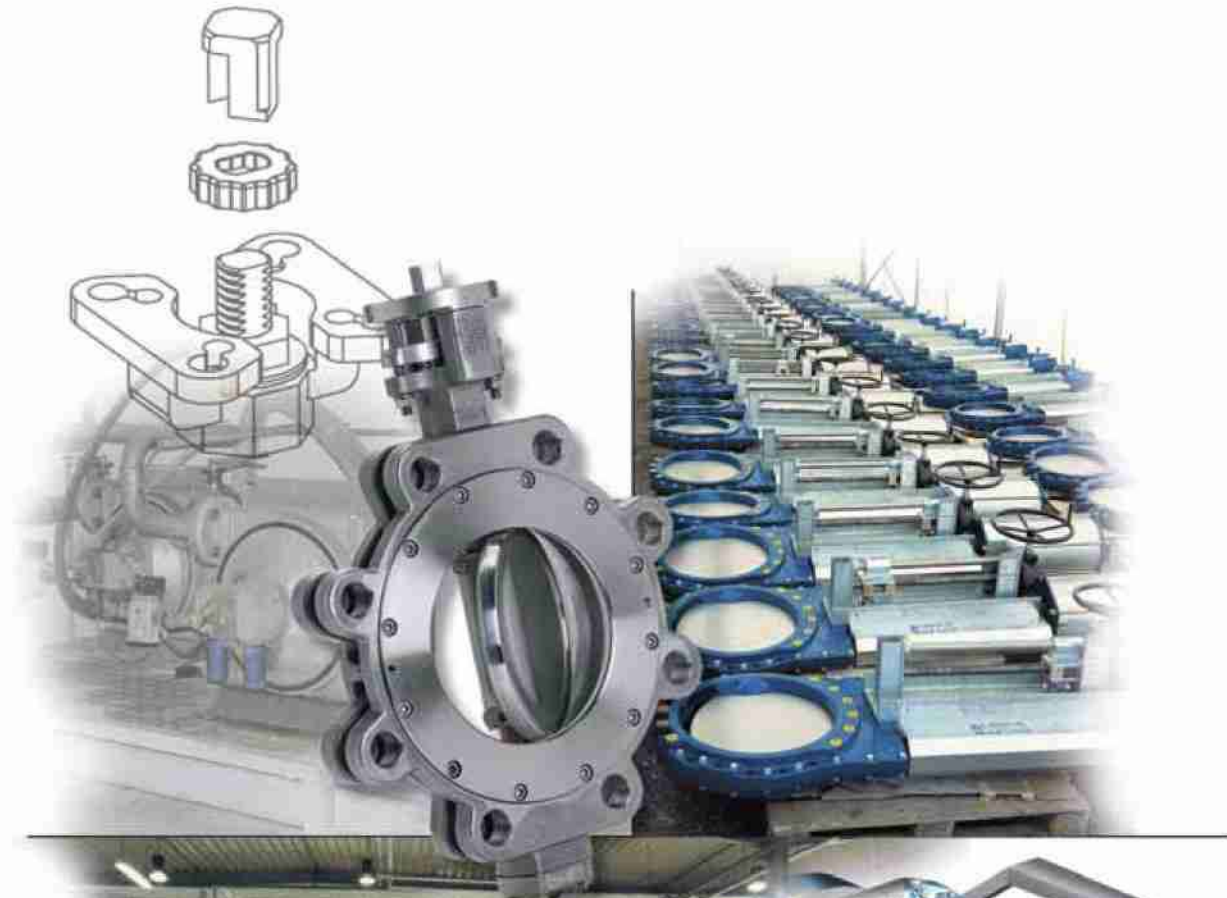
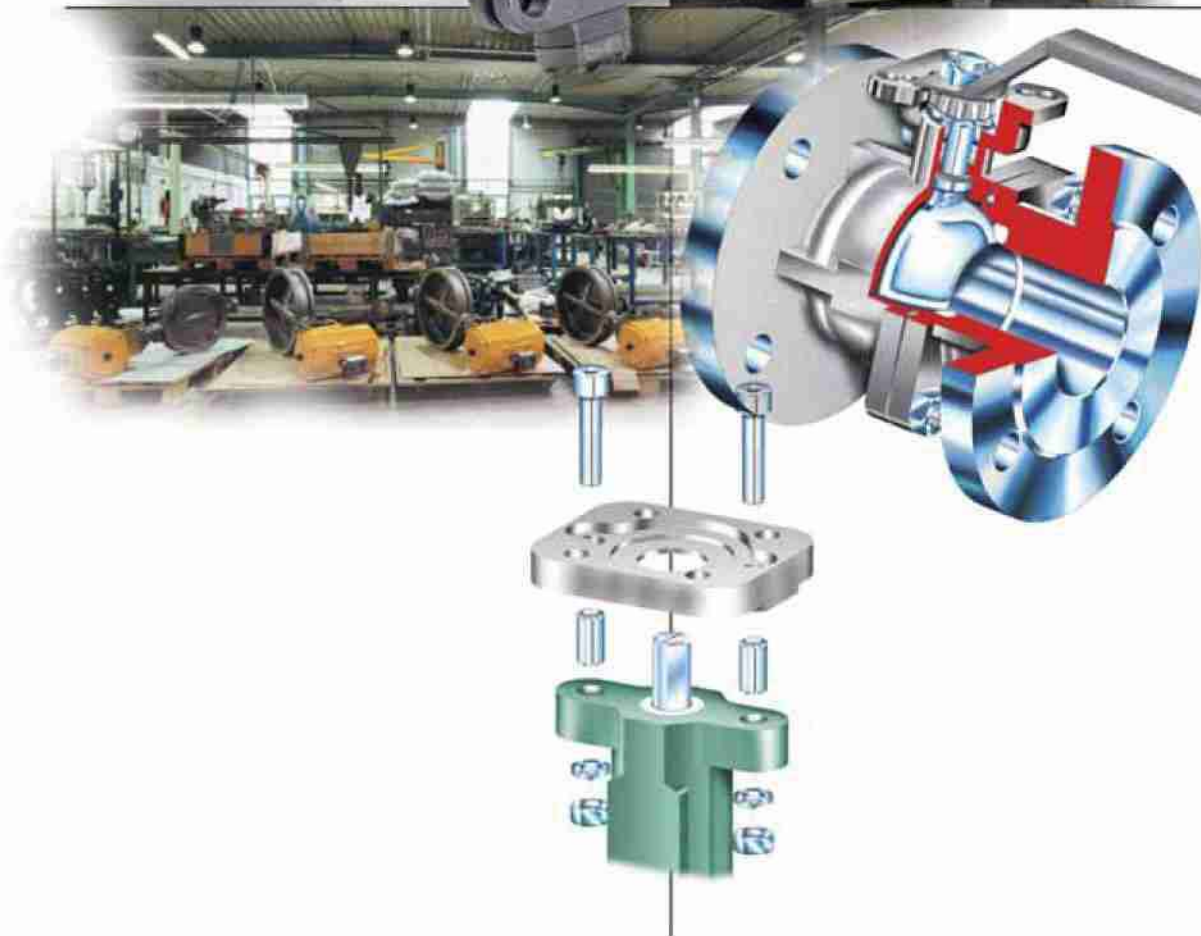




ITESA Chile[®]
INNOVACIÓN & TECNOLOGÍA



Valve Technology Catalogue





ITESA Chile®
INNOVACIÓN & TECNOLOGÍA

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Our product ranges

■ Valves & Controls

- Shut-off and Control valves • Ball valves • Knife Gates valves
- Non Return valves • Actuators • Speciality valves

■ Measurement and Control Technology

- Flow rate measurements • Signal processing modules
- Custom control cabinets and panels
- Pressure transmitters • Temperature measurements



Soft-seated Butterfly valve Series K



Advantages



- Centrally mounted
Solid one-piece valve disc and stem.
- Extremely easy to service:
Quick seat ring changeout possible with two-piece body
- Body completely elastomer-lined with seat ring as multifunctional sealing element
- Operational for almost all media from acid application to sensitive food or pharmaceuticals
- Control and regulation of process sequences without hysteresis



6

Process valve Series K KG 9 • KG 7 • KG 19 • K 17 • K 08 • K 07 • K 11

The Types



Type KG 9 [DN 50 - DN 300]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150,

Two-piece body, self-centring, One-piece valve disc & stem, leakproof to 16 bar, vacuum tight.

Face to face dimensions:

DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: DIN 3337 - ISO 5211

Test: EN 12266-1, P10/P11/P12A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Type KG 7 [DN 50 - DN 300]

Technical Data:

Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150. **Two-piece body with threaded cam** for a fixed flange connection from both sides.

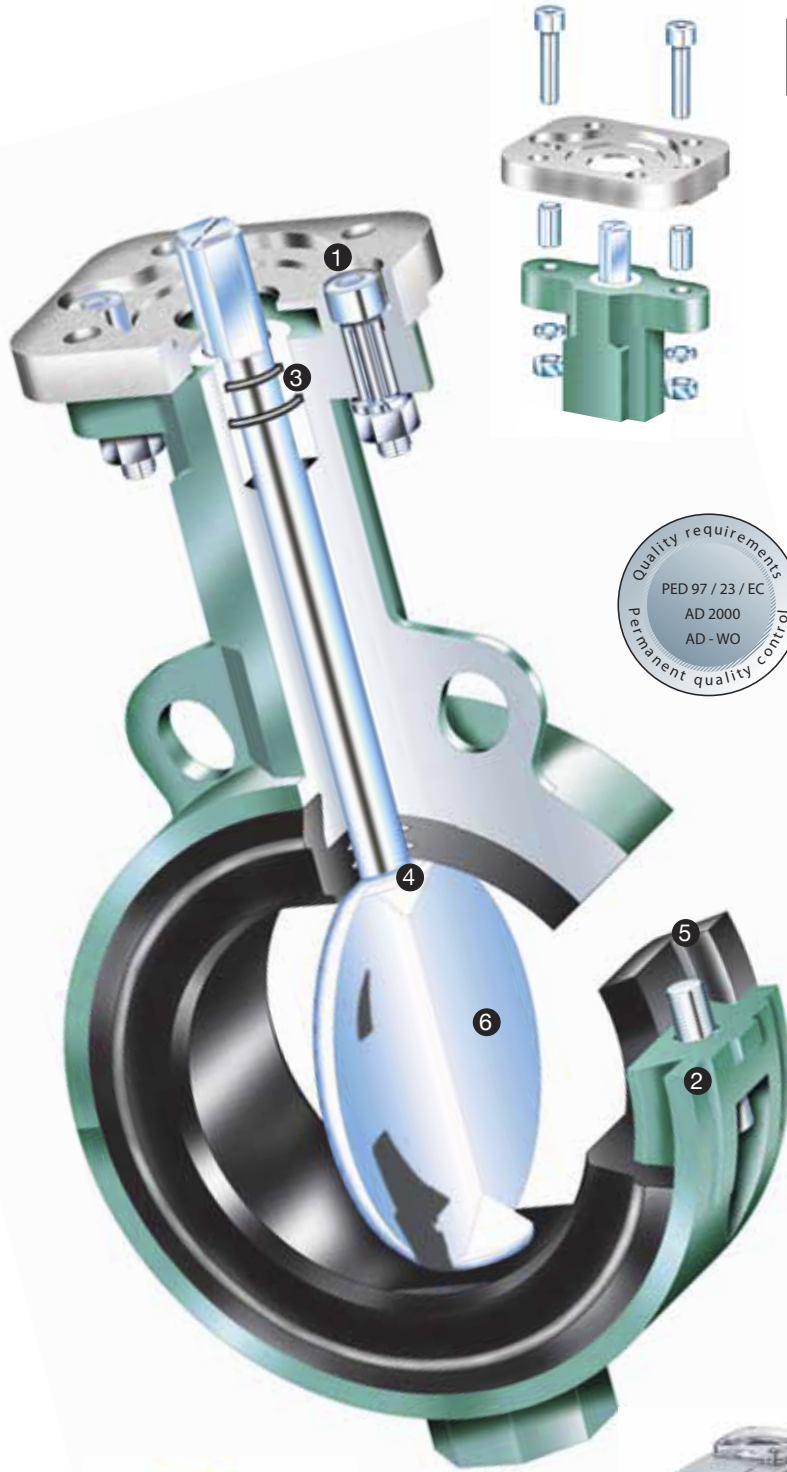
Special features: The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against pressures of up to 10 bar depending on the temperature.

Safe and secure automation with the interchangeable top flange

MULTITOP



Technical specifications



- 1 **Automation**
 - Standard mounting flange conforming to DIN 3337
 - Direct-mount actuation **without interruption to the valve stem**
 - Variable and exchangeable for different actuator sizes
 - Actuator protected against leakage
- 2 **Two-piece body**

Standard construction length; easy to service, simple replacement of the internal parts to the two-piece body construction
- 3 **Bearing bushing with O-ring seal**
- 4 **Primary seal**

Integrated in the seat ring, causes space-free and pressure-stable sealing to the outside, additional labyrinth design
- 5 **Seat ring**

Multifunctional sealing element, single-piece replacement, maintenance-free, long life-span, reliable seal in seat, to the flanges and at the shaft gland; secure latching in the dove tail, Embedded in the housing with no edges to the flange surface
- 6 **Valve disc and stem**

Single-piece construction, absolutely no play, large free cross-section, pressure loss



Subject to technical changes without notice

7

Soft-seated Butterfly valve Series K



Type K 19 [DN 350 - DN 500]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150, **Two-piece body**, self-centring, One-piece valve disc and stem, leak-proof to 16 bar, vacuum-tight.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: ISO 5211

Test: : EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Type K 08 [DN 600 - DN 1200]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 6/10/16, ANSI 150. Single-piece body. One-piece stem, connected with the valve disc inside with a set pin. The connection is shielded from the medium. Replaceable seat ring with additional steel thrust ring as solid rubber-metal connection, retaining a large elastomer-thickness of approximately 15-17 mm.

Top flange: ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Type K 11 [DN 25 – DN 150]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece stainless steel body with centering lugs.

Maintaining all advantages of the basic series K 19, this completely stainless steel version is offered for all sectors also requiring the corrosion resistant properties of external components. A requirement in the food/drink industry and in the pharmaceuticals sector as well as for use with chemicals or when handling sea water.

The body is weight-optimised and produced in precision casting.

Option: Surfaces electropolished.

The inner parts that come into contact with the medium can be adapted variably to the medium and implementation conditions and be used from the basic series.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: DIN 3337 - ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1



Type K 17 [DN 350 – DN 500]

Technical Data:

Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10, ANSI 150. **Two-piece body with threaded cam** for a fixed flange connection from both sides. One-piece valve disc and stem, leak-proof to 16 bar and vacuum-tight. The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against pressures of up to 10 bar depending on the temperature.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Type K 07 [DN 600 – DN 1200]

Technical Data:

Double-flange valve for installation between flanges DIN EN 1092-1, PN 6/10/16, ANSI 150. Single-piece body in double-flange version on one side (6 bar). One-piece valve disc and stem, connected with a set pin. The connection is shielded from the medium. Replaceable seat ring with additional steel thrust ring as solid rubber-metal connection, retaining a large elastomer-thickness of approximately 15-17 mm.

Top flange: ISO 5211

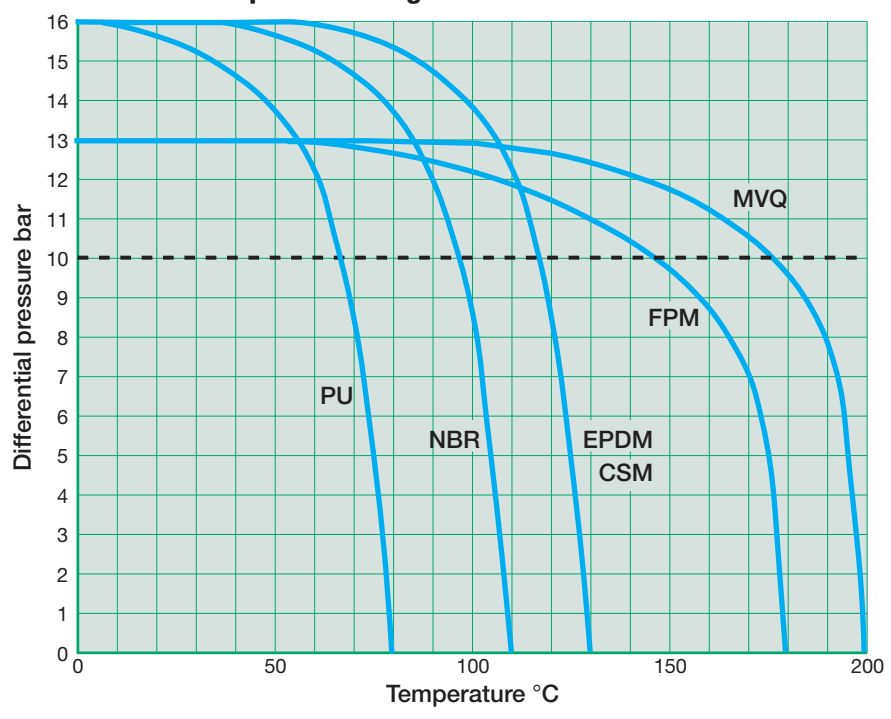
Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Technical Data

Control range:
20° - 60° Opening angle

Pressure/Temperature Diagram



As of DN 200, at a differential pressure above 13 bar, seat rings with an increased shore hardness are required.
 Vacuum tight to 1×10^{-2} mbar
 KG7 / K17 / K14: In single-side flange status max. differential pressure 10 bar
 KG2 / KG4: max. differential pressure 10 bar
 K08 / K07: max. differential pressure 10 bar
 K08 / K07: Seat ring material EPDM and NBR available

Available Material

Code	Cast iron
22	GG25
72	Grey cast iron, plastic-coated
44	Cast steel GS-C25
24	Ductile iron
63	Stainless steel 1.4301/1.4308
66	Stainless steel 1.4571/1.4408

Code	Disk
61	Steel 1.4008
66	Stainless steel (up to DN 150-1.4581) as of DN 200-1.4408
31	Stainless steel, polished
13	Bronze
23	Ductile iron GGG 40
77	PTFE-coated
78	E-CTFE-coated
79	EPDM-rubberised
92	Alloy C 22
93	Alloy C
94	Titanium

Code	Seat ring
E	EPDM
Ew	EPDM white
B	NBR (Nitrile)
H	CSM (Hypalon)
S	MVQ (Silicone)
V	FPM
PU	PU (Urepan)

EPDM
(Ethylene propylene terpolymer)
Application temperature: -30 °C to +140 °C

CSM
(Chlorosulfonated polyethylene)
Application temperature: -20 °C to +140 °C

NBR
(Nitrile-rubber)
Application temperature: -20 °C to +120 °C

MVQ
(Silicone-rubber)
Application temperature: -40 °C to +200 °C

FPM
(Fluorine rubber)
Application temperature: -30 °C to +180 °C

PU
(Urepan)
Application temperature: -30 °C to +80 °C

Seat ring replacement



After loosening the two body bolts, only the lower part of the body is pulled out along with the inner parts. The actuator remains mounted to the top of the body!



Simply pull the seat ring from the disc.

The new seat ring – that is really easy!



Press the lower part of the body back together with the inner parts again and then



tighten both body bolts. Finished!



Subject to technical changes without notice

Soft-seated Butterfly valve Type KG 2 · KG 4

The Types



Type KG 2 [DN 50 – DN 500]

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.



Type KG 4 [DN 50 – DN 500]

Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Technical Data:

Single-piece body, self-centring

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: DIN 3337 - ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1

Control range: 20° - 60° Opening angle

Special features: The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against pressures of up to 10 bar depending on the temperature.

Advantages

- Centre-mounted process valve for safe and secure industrial usage
- Economic initial equipment with single-piece housing construction
- Body complete
Elastomer-lined with seat ring as multifunctional sealing element

Option:
Version DIN - DVGW Gas
DIN - DVGW Wasser
with certification



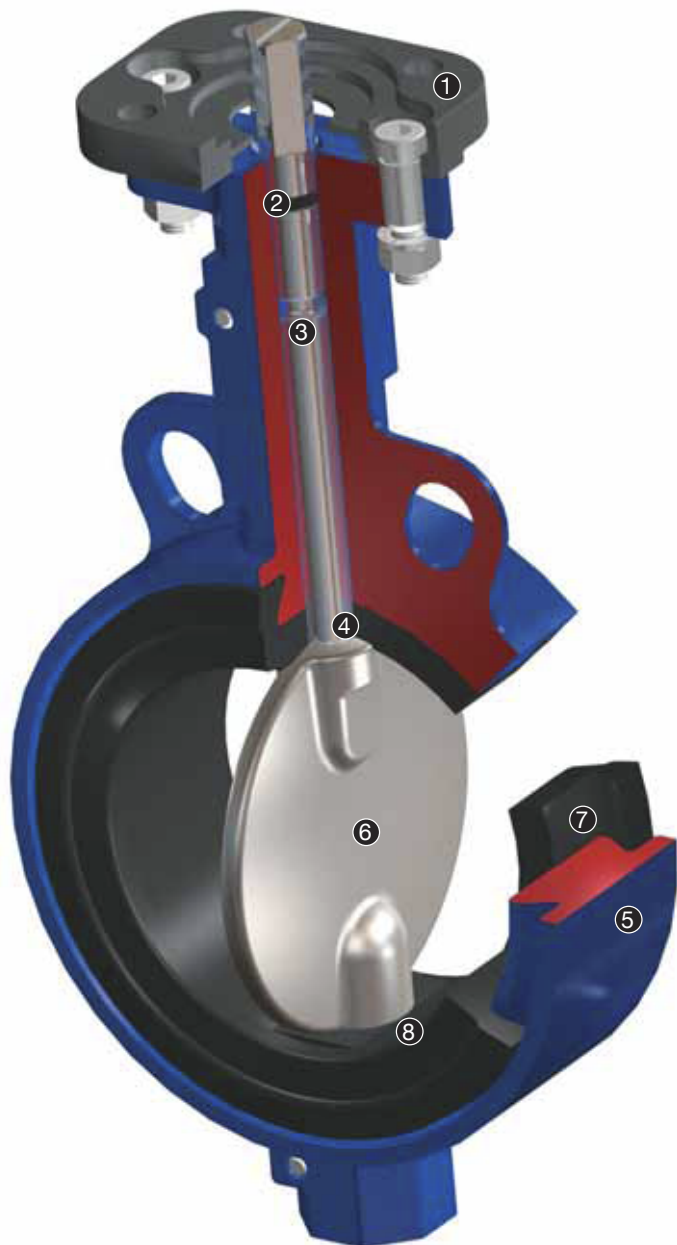
KG 2 · KG 4

Process valve



Safe and secure automation with the interchangeable top flange

MULTITOP



Technical specifications

- 1 **Automation**
 - Standard mounting flange conforming to DIN 3337
 - Direct-mount actuation **without interruption to the valve stem**
 - Variable and exchangeable for any size of actuator
 - Actuator protected against leakage
- 2 **Additional O-ring seal**
Seals the stem coupling from outside
- 3 **Two-piece, blow-out proof stem**
ensures a stable mount for the valve disc
- 4 **Primary seal**
integrated in the seat, ensures a pressure-stable seal to the outside, additional labyrinth design, seals on the stem
- 5 **Body**
single-piece with locating holes or threaded cam as lug type version
- 6 **Valve disc**
with full high finish
- 7 **Seat ring**
exchangeable multifunctional sealing element, maintenance-free, long life-span, reliable seal in seat, to the flanges and on the stem coupling, secure latching in the dove tail, embedded with no protruding edges to flange surfaces in the housing
- 8 **Seat seal**
with the special profile of the valve disc sealing surface, absolute seat seal is achieved to

Available Materials

Code	Body
22	Grey cast iron GG25

Code	Disc
66	Stainless steel 1.4408

Code	Valve stem
	Stainless steel 1.4021

Code	Seat ring
E	EPDM
Ew	EPDM white
B	NBR (Nitrile)
H	CSM
S	MVQ (Silicone)
V	FPM
PU	PU (Urepan)

Subject to technical changes without notice



PTFE-lined Butterfly valve Series K



Advantages

- Centrally mounted valve disc with solid, zero play disc/stem connection
- Body fully PTFE-lined (min. 3 mm)
- Permanent seal with full chemical resistance
- Very aggressive and corrosive media are transferred safely
- Option:** Pharmaceutical version / cavity free with glazed PTFE face towards flange

The Types

Process valve **KG 6** • **KG 8** • **K 16** • **K 18**



Type KG 6 [DN 50 – DN 300]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece body, self-centring, single-piece valve disc and stem, sealed to 10 bar.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: DIN 3337 - ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1, DIN 3230, T5, T6



Type KG 8 [DN 50 – DN 300]

Technical Data:

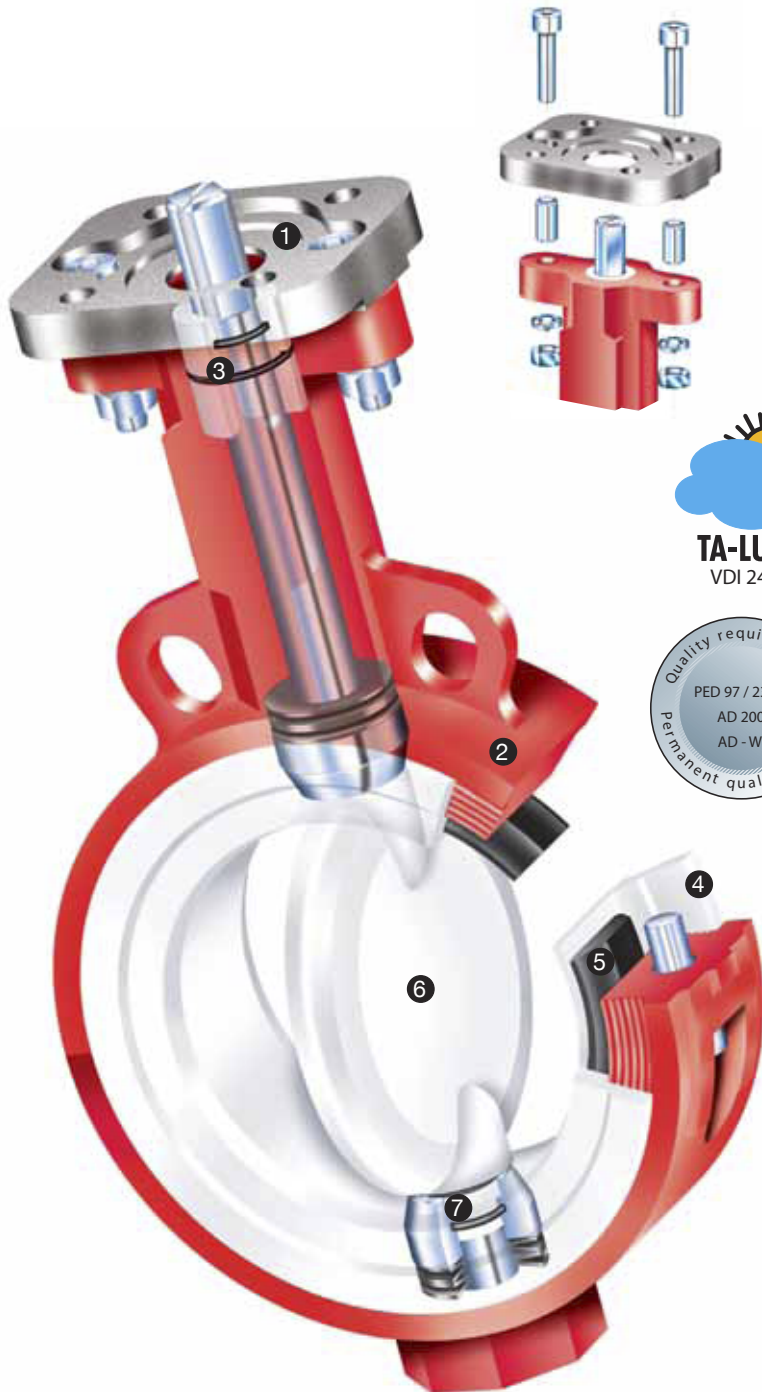
Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece body with threaded cam for solid flange connection from both sides, sealing to 10 bar. **Special features:** The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against a pressure from up to 10 bar depending on the temperature.



Safe and secure automation with the interchangeable top flange

MULTITOP



Technical specifications

- 1 Automation**
 - Standard mounting flange conforming to DIN 3337
 - Direct-mount actuation **without interruption to the valve stem**
 - Variable and exchangeable for any size of actuator
 - Actuator protected against leakage
- 2 Two-piece body**

Standard construction length; very easy to service, simple replacement of the internal parts only possible with the two-piece body construction
- 3 Bearing bushing with O-ring seal**
- 4 PTFE seat ring**

in solid construction (3 mm), diffusion-stable, guarantees permanent seal on stem coupling, on closing/sealing and to the flanges
- 5 Elastomer spring element**

precisely fitted elastic ring of silicone or EPDM behind the PTFE seat ring for flexible sealing on closing
- 6 PTFE valve disc**

solid (4 mm) PTFE encapsulated stainless steel disc with protective assembly on the stem in the primary sealing area
- 7 Primary seal**

integrated in the seat ring, ensures a cavity-free pressure-stable seal. The contact pressure is provided by the spring-loaded bearing.



TA-LUFT
VDI 2440



S h u t - o f f - a n d c o n t r o l v a l v e s

PTFE-lined Butterfly valve Series K



Type K 16 [DN 350 – DN 600]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10/16, ANSI 150.

Two-piece body, self-centring, single-piece valve disc and stem, sealed to 10 bar.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1
DIN 3230, T5, T6



Type K 18 [DN 350 – DN 600]

Technical Data:

Lug type butterfly valve for installation between flanges DIN EN 1092-1, PN 10, ANSI 150. **Two-piece body with threaded cam** for a fixed flange connection from both sides. Single-piece valve disc and stem.

Special features: The pipeline is flanged on one end, the closed disc blocks as a dead-end valve against a pressure from up to 10 bar depending on the temperature.

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3202-K1)

Top flange: ISO 5211

Test: EN12266-1, P10/P11/P12-A
DIN 3230, T3 - BA/BO-1
DIN 3230, T5, T6

With the chemical valve – PTFE-lined and centrally mounted – aggressive and corrosive media are securely blocked, controlled and regulated.

The PTFE guarantees almost unlimited application with full chemical resistance. In important areas, the minimum material thickness is even exceeded, guaranteeing high diffusion stability.

Only two components come into contact with the medium: the valve disc and seat ring. Thanks to its absolute cavity-free construction and the physiologically neutral characteristics of the PTFE material that is in contact with the product, its typical application is in food manufacture and pharmaceuticals.

The dual spring principle behind the seat ring guarantees a permanent seal in the opening.

- With the „Spring element“ elastomer insert behind the PTFE lining, the sealing functionality is achieved over the entire circumference of the opening.

- The primary seal of the stem coupling is dampened separately with precisely adjusted spring-collars behind the PTFE.



Primary seal

The primary seal for the stem coupling is engaged via spring-mounted stainless steel pressure bearings.

Between the primary sealing surface of the valve disc and the spring-loaded PTFE lining, the medium is already blocked off securely at this pressing surface (supported by an additional PTFE-elastic seal).

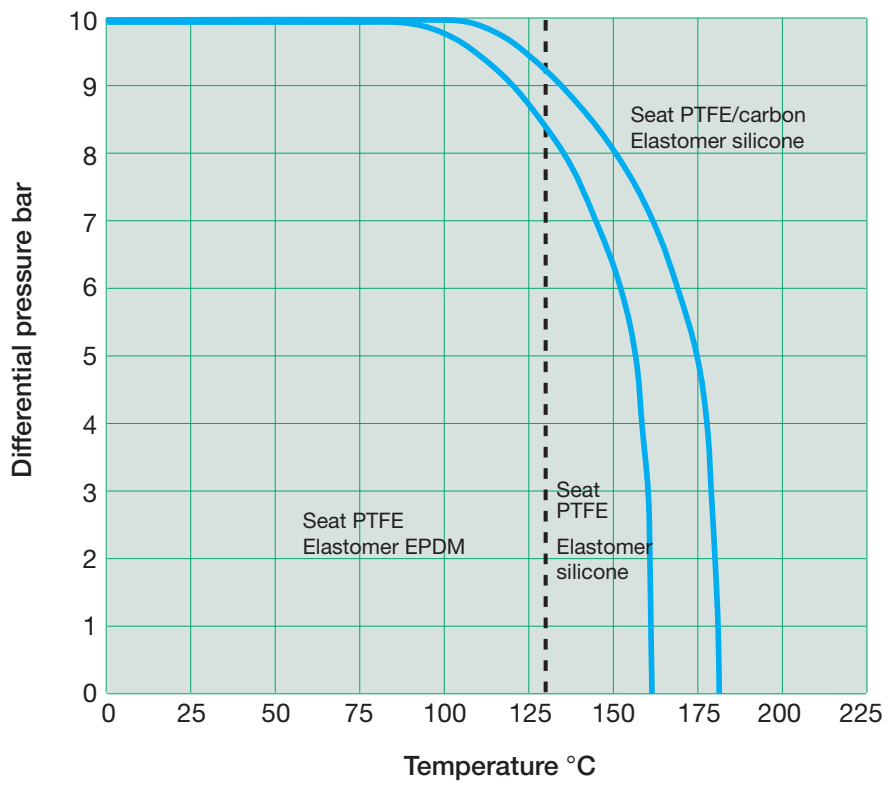
The valve stem does not come into contact with the medium. As an additional - third - barrier, a gas barrier is positioned on the stem outlet directly behind the primary seal. This "three-fold seal" secures the absolutely sealed functionality to the outside and prevents leaks into the space inside the housing behind.

This is the safest and most effective method of counteracting emissions where TA-Luft (German Technical Instructions on Air Quality Control) is concerned.



Technical Data

Pressure/Temperature Diagram



Control range:
20° – 60° Opening angle

PTFE material (Fluorine plastic) provides the user with a material that can rarely be matched with another material in terms of its corrosion and chemical resistance. For lining or coating parts in contact with the medium – as with GEFA-Buttefly Valves KG 6 / KG 8 – this material has become almost indispensable.

PTFE
(polytetrafluorethylene)
with EPDM elastomer
Temperature: -30 °C to +130 °C.
with silicone elastomer
Temperature: to +160 °C.

PTFE / Carbon
(Reinforced polytetrafluorethylene with 25% carbon content as filler material)
with silicone elastomer
Temperature: to +180 °C.

Available Materials

Code	Body
22	Cast iron GG25
72	Cast iron, Plastic coating
44	Cast steel GS-C25
24	Ductile iron
63	Stainless steel 1.4301/1.4308
66	Stainless steel 1.4571/1.4408

Code	Disc
66	Stainless steel (up to DN 150-1.4581) from DN 200-1.4408
31	Stainless steel, polished
77	PTFE-coated
92	Alloy C 22
93	Alloy C
94	Titanium

Code	Seat ring
T	PTFE
TK	PTFE/carbon



TA-Luft / VDI 2440

The PTFE-lined shut-off valves are already tested and certified in the standard version based on the current guidelines of TA-Luft / VDI 2440.

The strict test requirements have been met to the full extent under constant load and continuous operation as well as under temperature and pressure from the valves.

Result: 1×10^{-4} mbar x ltr./(s x m) as specific leakage rates are considerably undercut. The specified requirements in regard to TA-Luft have been demonstrably exceeded by the valves.

User's advantage: A shut-off valve with secure characteristics regarding sealing, functionality and life-span. References confirm the excellent quality of this impressive valve technology.

Shut-off - and control valves

High-performance valve Type HG



High-performance, on-off and control valve Type HG

The range of applications in terms of pressure and temperature has been greatly expanded with the HG double eccentric and is very cost effective in comparison with classic control valves.

Whether designed as on-off- or control functionality: the double eccentric valve now meets important control requirements in process technology.

HG

High-performance valve

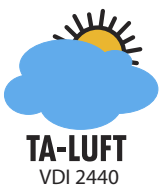
The Types



HG 1 Wafer type Butterfly valve

for installation between flanges
DIN EN 1092-1, ANSI 150-300

Advantages



- Reliable on-off and control valve
- Reliable sealing at high pressures with low torques are the double eccentric principle.
- Low seat-wear characteristics
- Secure stem seal (Option: TA-Luft)
- Variable seat ring materials

MULTITOP

Effective automation with variable interface **without interrupting the valve stem**



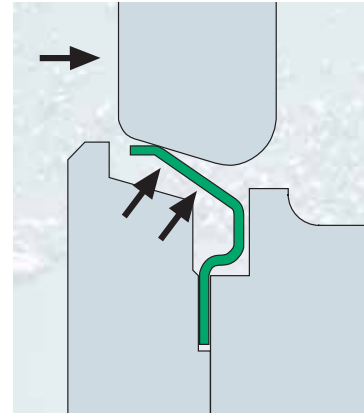
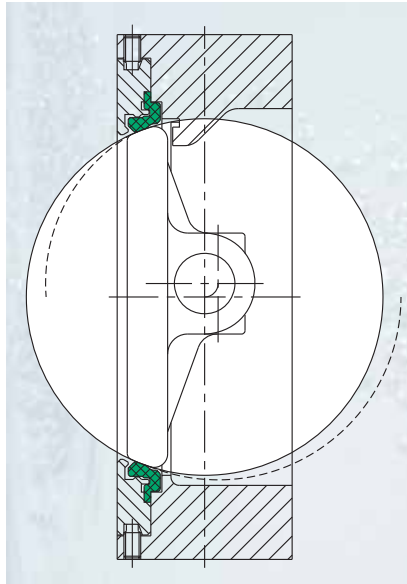


The double eccentric principle



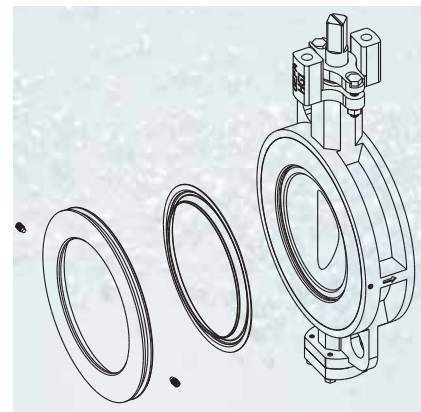
HG 7 Flange valve

The pipe can be flanged on one side in the recommended pressure direction.



The recommended flow direction (arrow on the housing) guarantees a perfect seal. The effective pressure (differential pressure) of the medium also supports the sealing functionality with a pressing effect of the seat ring against the sealing surface of the disc. The insert ring and the housing also protect the flexible seat ring effectively from negative flow influences.

The double eccentric principle enables reliable sealing with almost no wear. The double displacement of the pivot point lifts the valve disc from the seat right at the beginning of the opening movement. The seat ring is relieved at full extent from the sealing pressure. **The 90°-rotation is therefore friction-free with additional decreased torque.** An extremely high functional life-span is the result of these construction features - even at high operating frequencies.



Getting to the seat ring as a functioning part is also straightforward. Changing the seat ring can be done quickly in any location without the requirement for special tools.



HG 7-....BK Flange valve

with pressure-resistant threaded clamp ring, flanged on both sides
Observe maximum operating pressures.

Other construction options

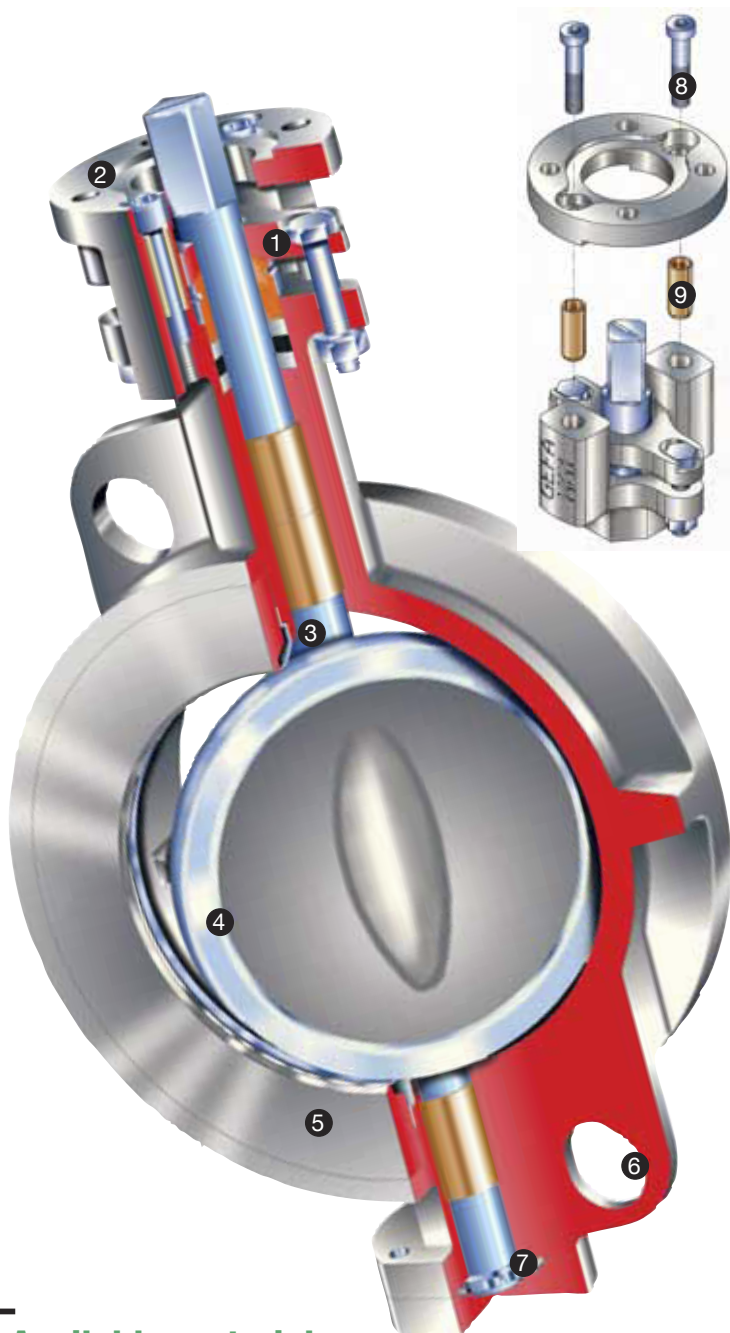
- Pressure range: PN 40/PN 63
- Construction with heating/cooling jacket
- Special materials
- Control valve, Cavity-free
- O-ring seal on bearing bushings and stem couplings
- 3-way switch combination



High-performance valve Type HG

Safe and secure automation with the interchangeable top flange

MULTITOP



Technical specifications

1 Automation

- Standard mounting flange conforming to DIN 3337
- Direct-mount actuation **without interruption to the valve stem**
- Variable and exchangeable for any size of actuator
- Actuator protected against leakage

2 Safety (TA-Luft option)

Stem seal can be retightened below the top flange, allowing adjustment without removal of the actuator

3 Long life-span

The insert ring of the body protects the seat ring efficiently from direct oncoming flow of the medium and prevents wear such as erosion and abrasion

4 Reliability

The double eccentric principle with spherical sealing surface on the disc enables almost wear-free operation with optimal sealing efficiency and low torque

5 Accurate and variable

Face to face dimensions: DIN EN 558-1 series 20/25/16

Option: tongue/groove version DIN 2512

6 Precise installation

Simple installation with locating holes for popular flange standards

7 Easy to service

The axial stem centring is easy to access and prepared for later service.

8 Safe and secure

- The cap-head screws fasten the mounting flange without transferring any torque (actuator torque) at the same time
- The clamping sleeves guarantee connection of the mounting flange to the housing with no play and transfer the actuator torque

Available materials

Position	Designation	M a t e r i a l						
		≤ DN 300	HG...4466 TG	HG...6666 TG	HG...4466 M	HG...6666 M	HG...4466 HM	HG...6666 HM
		≥ DN 350	HG...4444 TG		HG...4444 M		HG...4444 HM	
	Max. operating temperature	+220 °C	+220 °C	+220 °C	+220 °C	+450 °C	+450 °C	
1	Body	GS-C25	1.4408	GS-C25	1.4408	GS-C25	1.4408	
2	Valve disc	≤ DN 300	1.4408	1.4408	1.4408/nitrified	1.4408/nitrified	1.4408/nitrified	1.4408/nitrified
		≥ DN 350	GS-C25/nickel-plated	1.4408	GS-C25/nickel-plated	1.4408/nitrified	GS-C25/nickel-plated	1.4408/nitrified
3	Stem	1.4571	1.4571	1.4571	1.4571	1.4571	1.4571	
4*	Seat ring	PTFE/glass	PTFE/glass	1.4571/nitrified	1.4571/nitrified	1.4571/nitrified	1.4571/nitrified	
5	Bearing bushing	1.4401/PTFE	1.4401/PTFE	1.4401/PTFE	1.4401/PTFE	1.4571/nitrified	1.4571/nitrified	
6*	Packing	PTFE	PTFE	PTFE	PTFE	Graphite	Graphite	
7	Clamp ring	C-Steel	1.4571	C-Steel	1.4571	C-Steel	1.4571	

* Replacement part / wear part



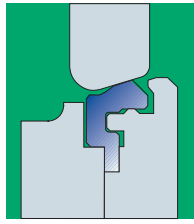
The seat ring system

Highly flexible with optimised reset force

When installed in the recommended flow direction, the differential pressure supports the sealing closure effectively.

Options

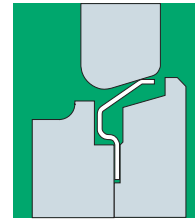
- Fire safe seat ring
- Low temperature seat ring
- Seat ring of high-performance plastic for extreme applications



R-PTFE-seat ring

Highly flexible construction - almost unlimited chemical-resistance. Pressure-stable with fibreglass reinforcement, even at high temperatures.

Leak tightness acc. EN 12266-1, P12A
DIN 3230, Part 3/BO-1



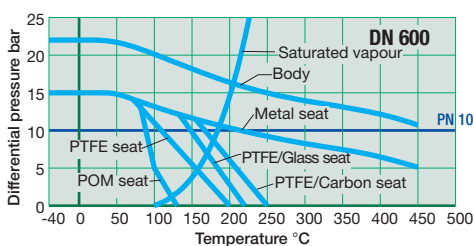
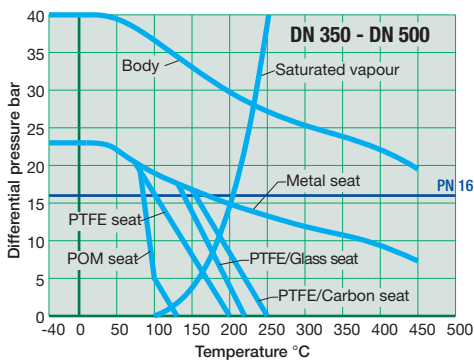
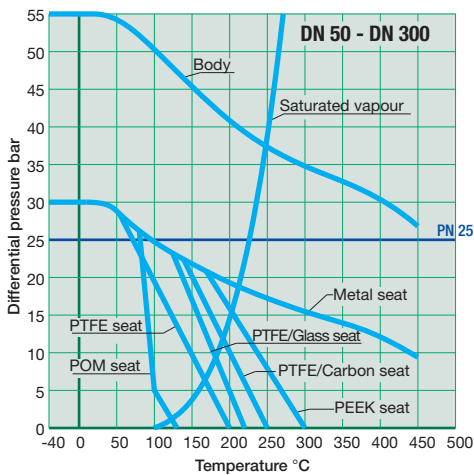
Metal seat ring

Excellent spring characteristics through engineered shape. High-temperature-resistance with seat ring construction of: 1.4571 nitrified

Leak tightness acc. EN 12266-1, P12-B
DIN 3230, Part 3/BO-2

Technical Data

Pressure-Temperature Diagram



Torques

DN	NPS	Kvs	PTFE seat Δp 10 bar (Nm)	PTFE seat Δp 16 bar (Nm)	PTFE seat Δp 25 bar (Nm)	Metal seat Δp 10 bar (Nm)	Metal seat Δp 16 bar (Nm)	Metal seat Δp 25 bar (Nm)
50	2"	79	53	55	59	70	72	73
65	2 1/2"	130	53	55	59	70	72	73
80	3"	225	55	60	66	78	80	86
100	4"	395	70	77	88	92	97	106
125	5"	655	93	104	130	131	143	156
150	6"	990	131	144	181	179	196	214
200	8"	1810	204	224	280	256	281	318
250	10"	2760	290	319	398	340	378	433
300	12"	4050	418	535	685	536	681	854
350	14"	5000	627	819	-	873	1219	-
400	16"	6900	943	1252	-	1316	1851	-
500	20"	12000	1461	1986	-	2044	2818	-
600	24"	18000	2282	-	-	3219	-	-

Pressure

Nominal diam.	Nominal pressure	max. operating pressure
DN 50 bis DN 300	PN 10/16/25/40 ANSI 150/300	25 bar
DN 350 bis DN 500	PN 10/16/25 ANSI 150	16 bar
DN 600 bis DN 1000	PN 10/16 ANSI 150	10 bar

The maximum operating pressure depends on the operating pressure.

Control range:

20° - 60° Opening angle

Flange sealing surfaces

Ra 3.2

Triple offset high-performance valve Type HGT



The Types

HGT Triple offset high-performance valve



HGT 1.. Wafer type valve

for installation between flanges
DIN EN 1092-1 PN 10 - PN 40,
ANSI Class 150/300



HGT 7.. Lug type valve

can be flanged on both sides
DIN EN 1092-1 PN 10 - PN 40,
ANSI Class 150/300

Advantages



TA-LUFT
VDI 2440



- Tight closing in both pressure directions
- Temperatures up to +45°C
- Frictionless non-interference disc operation into the lamella seat
- Laminated seat integrated into valve body
- Secured stem sealing (Option: TA-Luft)

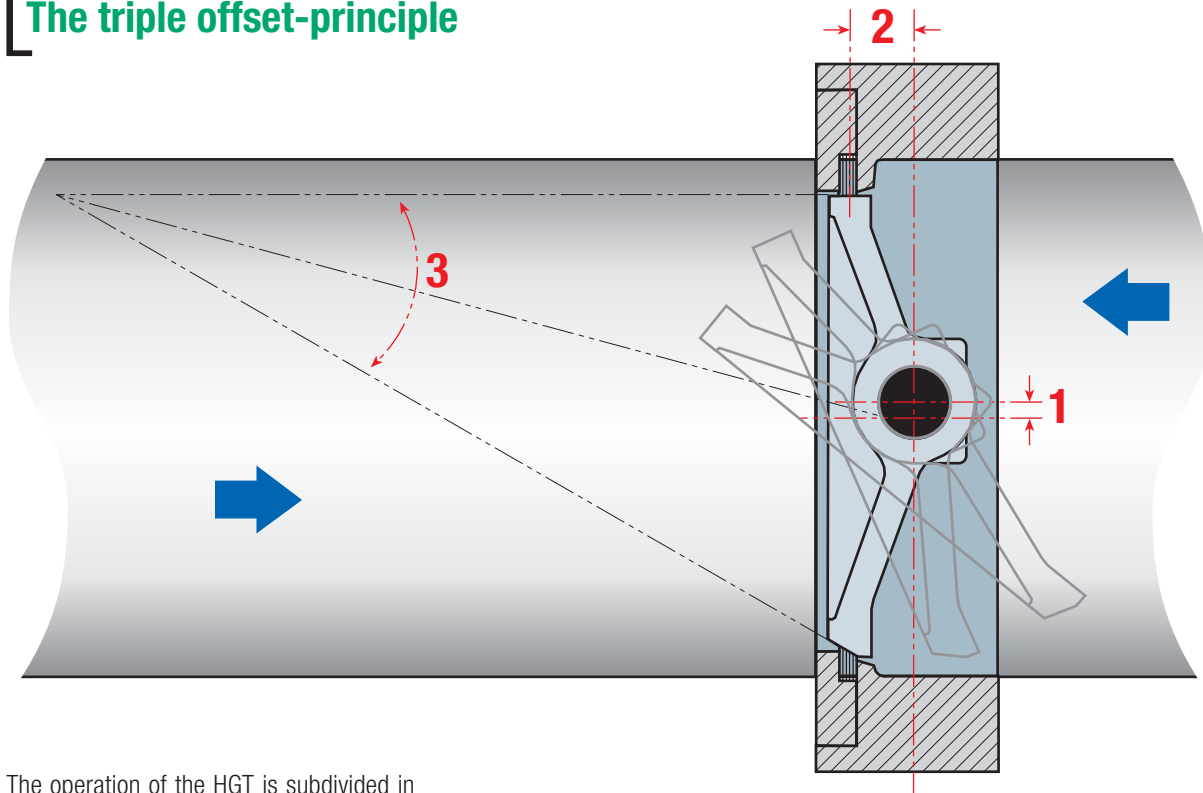
MULTITOP

Effective automation with variable interface **without interrupting the valve stem**





The triple offset-principle

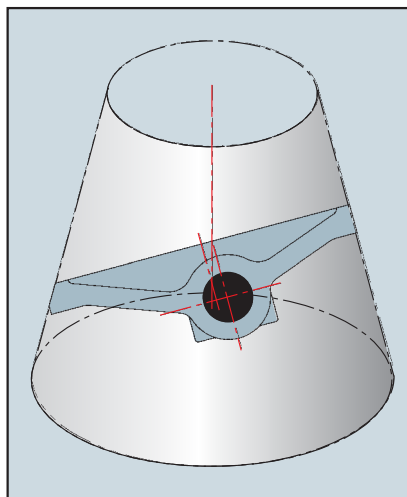


The operation of the HGT is subdivided in three offsets. It starts with the centerline offset of the stem. This stem centreline offset is aligned to one side of the valve centreline.

The result is a rotary motion of the stem that moves the disc angle from the seat upon opening. If the disc arrives in the position "closed" the offset transforms the rotary motion into a linear motion with the result that the disc is pushed into the seat. During this movement the disc is never in contact with the seat.

Followed by the stem set away from the disc angle. The result is a continuous sealing surface without any interruption caused by the stem.

Finally the third offset combines the two cones of the conical seal and the seat angle. This combination removes the disc angle from the seat without interferences and allows a contact between the disc and seal only at closing.



Option



Triple offset high-performance valve Type HGT

Safe and secure automation with the interchangeable top flange

MULTITOP



Technical specifications

1 Automation

- Standard mounting flange conforming to DIN 3337
- Direct-mount actuation **without interruption to the valve stem**
- Variable and exchangeable for any size of actuator
- Actuator protected against leakage

2 TA-Luft certified safety

Adjustable stem sealing, located below the top flange, allowing adjustment without removal of the actuator.

3 Long service life

The insert ring, mounted with its orientation against the direction of flow, actively protects the integrated laminated seat/seal from premature erosion and wear, providing longer service life and reduced costs and downtime.

4 Insert Ring

Pressure-sealed bolted design – located outside of the flange sealing surface according to TA-Luft.

5 Reliability

The triple-offset-principle in combination with the lamella seat enable a nearly nonwearing function with low torques and best possible tightness.

6 Multiple mounting standards

face-to-face dimension acc. to EN 558 T1, line 20 (25/16) DIN 3230 / K1 (K2/K3)

7 Bearing

- Stem bearings absorb adverse loads and securely support the stem
- Continuous secured stem guidance provides maximum support for the single-piece stem constructed of high-tensile materials

8 Precise mounting

Simple and precise mounting using wafer body location holes for all face to face dimensions.

9 Axial securing device

Axial securing device and hardened axial securing ring ensure perfect stem and disc alignment, positioned away from the medium and built into the bottom flange

Due to the design of the seat, triple offset valves are torque-seated. Therefore the actuator torque is constantly used to ensure contact pressure between the seating surfaces. This is necessary to provide zero leakage performance.



Laminated seat

The laminated stainless steel/graphite seat ensures bi-directional, zero leakage shut-off throughout the full temperature range of -50 °C to +450 °C.

- Bi-directional zero-leakage shut-off
- Metal-Metal, frictionless non-interference disc operation
- Continuous smooth jam-free operation due to the offset angle of the sealing surface
- Laminated seat/seal system, made of stainless steel/graphite
- Seat/seal system integral to valve body - not on the disc
- The insert ring, mounted against the direction of flow, actively protects the laminated seat/seal system against wear.
- Additionally the laminated seat will not wear prematurely as it is common with laminated disc seal systems.
- The flexible metal laminated seat/seal system is securely fastened by the insert ring positioned in front. The floating, self-centered design of the laminated seat/seal system ensures accurate mounting in the valve body.
- When re-seating the disc, the laminated seat/seal system self-centres to the disc.
- The elasticity of the laminated seat/seal system ensures uniform peripheral sealing with the disc.
- Zero leakage acc. to DIN EN 12266-part 1, leakage rate A as well as low torques and continuous smooth operation.

Available materials

Description	Materials		Options laminated seat/seal system	
	HGT... 4466-MG	HGT... 6666-MG		
Body	GS-C 25	1.4408	..-MM	1.4571/1.4571
Disc	1.4408 hardened	1.4408 hardened	..-MF	1.4571/fibres
Stem	1.4462	1.4462	..-CG	steel/graphite
Seat*	laminated 1.4571/graphite	laminated 1.4571/graphite	..-CC	steel/steel
Bearing	1.4571 nitrated	1.4571 nitrated	..-CF	steel/fibres
Packing ¹⁾	graphite	graphite		

* Spare part/wearing part

¹⁾ alternative: PTFE / Lattyflon (TA-Luft) / graphite TA-Luft approved

Pressure class / max. working pressure		
Size	Nominal pressure	Max. working pressure
DN 80 - DN 300	PN 10 / 16 / 25 / 40 ANSI 150 / 300	25 bar

Max. working pressure is dependant on working temperature.

Control range: 20 - 60° opening angle
Flange surface: Ra 3,2

Throttle valve Type KGT



The Types

Throttle valve KGT



Advantages

- Good control functionality
- Throttle valve in full stainless steel 1.4408
- Smooth surface with cast technology
- Inner contour also operated mechanically clean
- Direct mounting for all actuators – safe and secure

Type KGT [DN 80 – DN 250]

Technical Data:

Wafer type butterfly valve for installation between flanges DIN EN 1092-1, PN 10
Single-piece body with centering lugs, continuous valve stem, dynamic flow surface on disc contour

Face to face dimensions: DIN EN 558-1 series 20 (DIN 3230-K1)

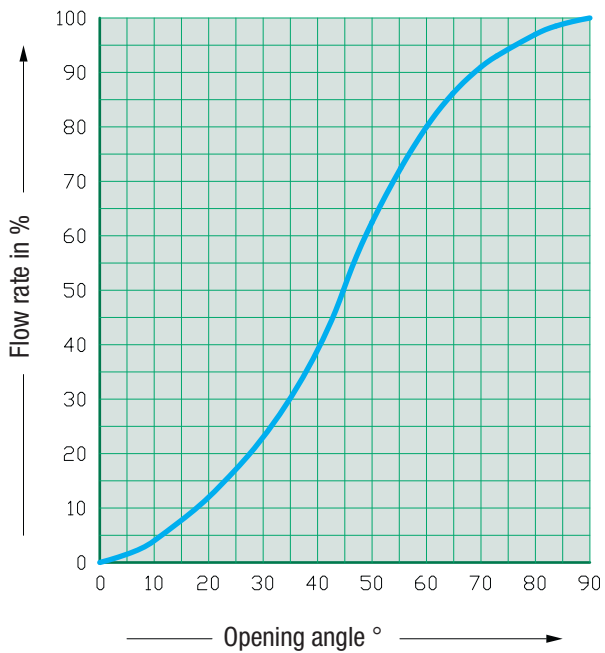
Top flange: DIN 3337 - ISO 5211



Technical Data

Technical features	
Available sizes	DN 80 – DN 250
Install between flange	DIN EN 1092-1, PN 10
Max. Differential pressure Δp	8 bar
Leakage rate Pos. closed	1 – 2 %
Max. Temperature	180 °C

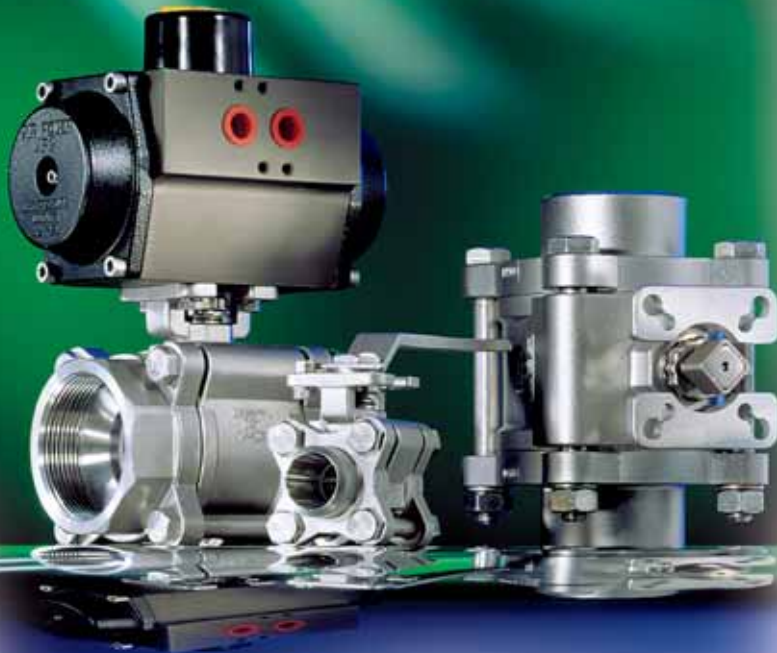
DN	kvs 90°
80	520
100	850
150	1.900
200	3.200
250	5.500



A nominal range of 0° -70° is used for regulating operation. In the range 20° - 60°, the valve has an almost linear flow curve.



3-piece Ball valve Type DG 1



The Type



Advantages

- Secure connection of all actuators
- Reliable valve stem seal
- High operating frequency blow-out-proof
- Valve stem
- Secure seal to the outside
- Excellent seal in passageway
- Variable connections (Flange ends)
- Precise installation

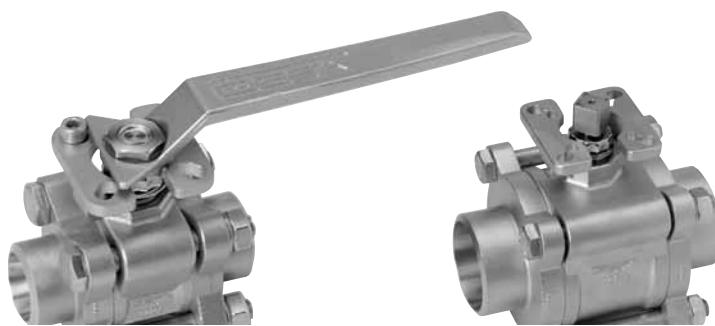
DG 1 3-piece Ball valves

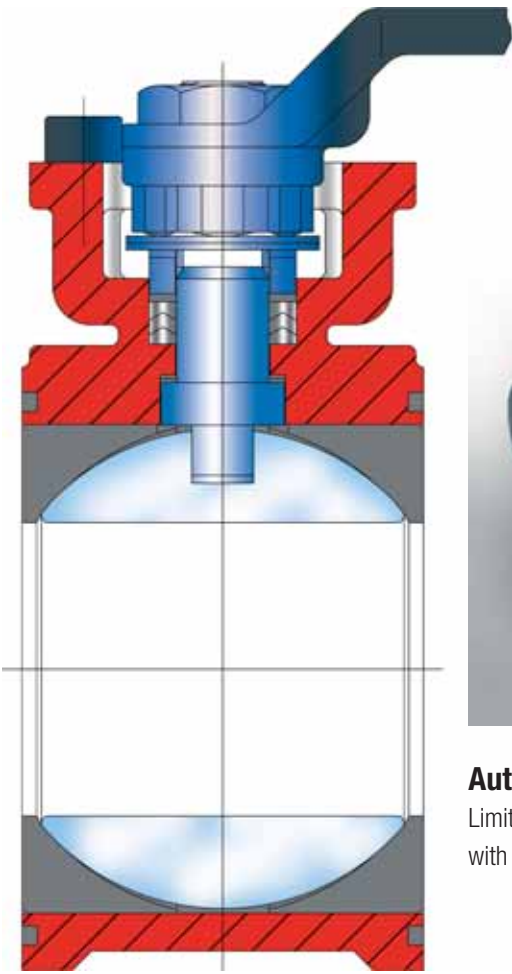
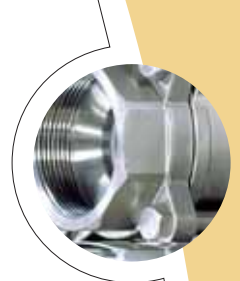
3-piece Ball valve Type DG 1

The DG 1 ball valve provides the user with a modern and reliable fitting that enables a wide range of industrial applications in versatile and different application conditions. The ball valve is successfully utilised in the chemical, petrochemical industry, process technology systems and in the food and beverage industry. Here, **temperatures from -50°C to +250°C** and operating pressures of up to 125 bar are handled securely but the maximum application limits must be matched with the coating operational parameters. A higher flow range is achieved with the free ball passageway. Since there is no barrier piece in the flow of medium when opened, the ball valve remains free of additional deposits and material accumulation.

The ball valve is especially useful for automation:

The actuator interface conforms to DIN 3337 and enables the direct mounting of the actuators- without any further adaptation.





Automation systems
Limit switch box J 10 B
with pneumatic actuator AP



Limit switch box T 10
with pneumatic actuator AP
and solenoid valve.

**Option
Cavity-free passage**

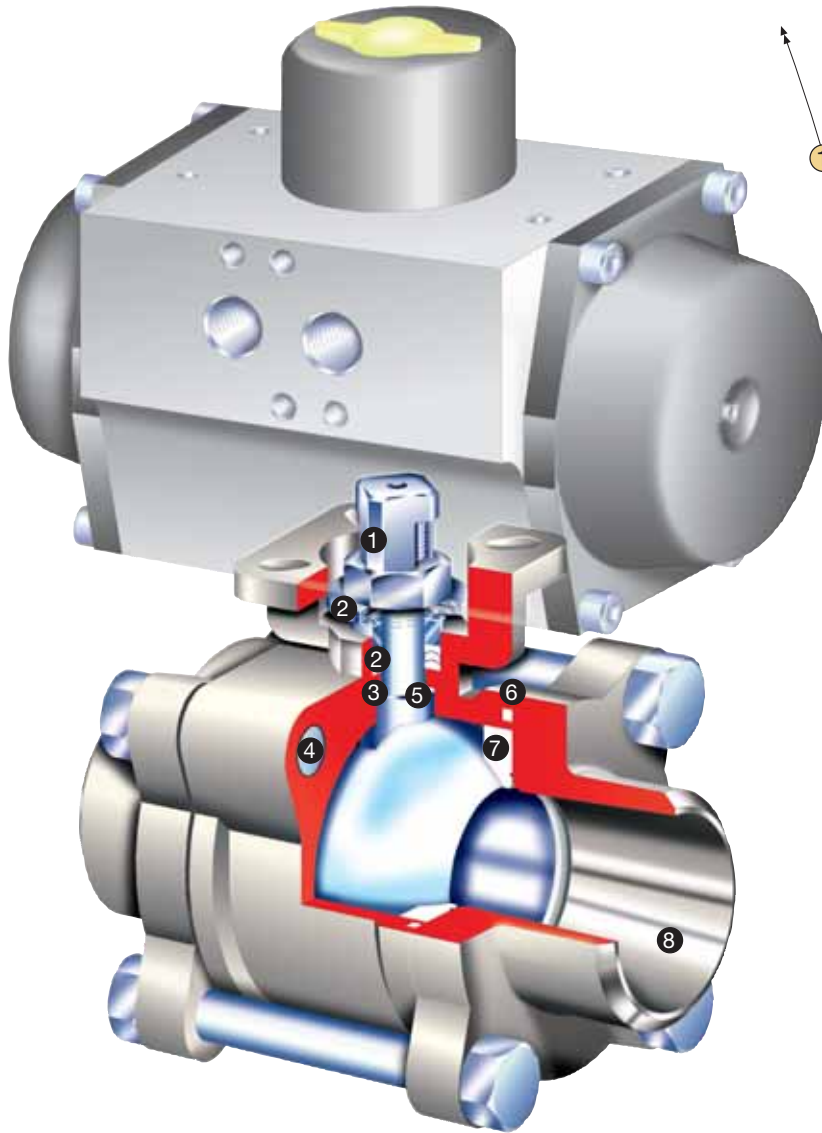
In order to prevent residual product and the inner space to become completely empty, the cavity-filling seat rings surround the ball and fill the existing dead-space. All standard compounds are available as seat ring materials.



Subject to technical changes
without notice

3-piece Ball valve Type DG 1

Technical specifications



- 1 **Secure connection**
All actuators can be mounted directly
DIN 3337
No interruption from the valve stem to the actuator
- 2 **Reliable stem seal**
with spring-mounted PTFE V-rings
- 3 **High operating frequency**
with engineered primary seal construction
- 4 **Precise installation**
with complete centred threaded guide
The middle part is guided to the flanges
in the correct position
- 5 **Stem in anti blow-out design**
installed from the inside, high-polished ball
surface and precision contoured
(concentricity)
- 6 **Secure seal**
to the outside with separate, fully clamped
housing seal
- 7 **Excellent seal**
due to the engineered shape of the seat rings.
The pre-tension of the seat rings is created
by the spring-effect creating a reliable seal
with available materials for all pressure
ranges: PTFE/glass, PTFE/carbon, PEEK,
UHMWPE, POM
- 8 **Variable connections**
 - Butt-weld end, short
 - Butt-weld end, long
 - Orbital weld ends
 - Screwed end / inside thread / NPT
 - Full Bore / Reduced Bore

Available materials

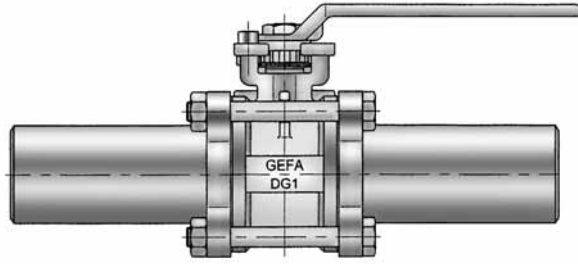
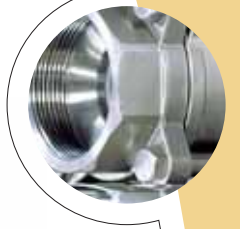
Designation	Material
Body	1.4408 / 1.4529
Ball	1.4408 / 1.4529
Stem	1.4542 / 1.4529
Ends	Stainless steel 1.4408/1.4409
	1.4529 / Steel GS - C 25
Seat rings and housing rings	PTFE/Glass
	PTFE/Carbon
	PEEK
	UHMWPE
	POM

Orbital weld ends

Designation	Material
Body	1.4408
Ball	1.4408
Stem	1.4401
Ends	1.4409
Seat rings and housing rings	R-PTFE
	PTFE/Glass
	PTFE/Carbon
	UHMWPE
	PEEK
	POM

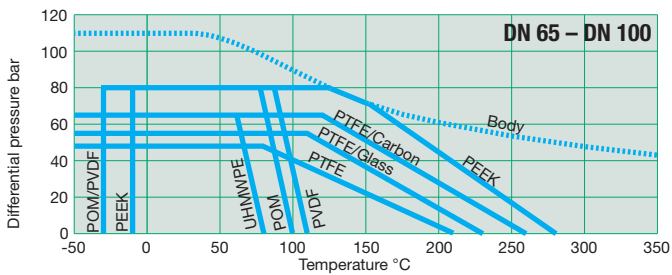
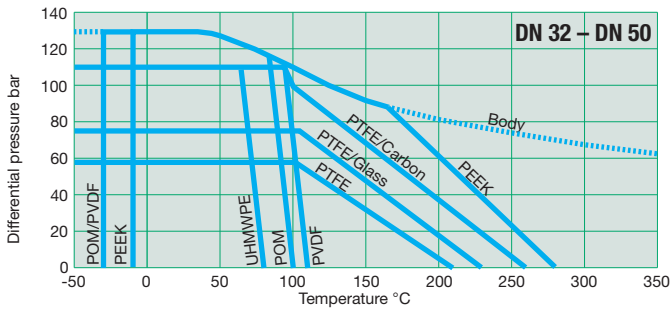
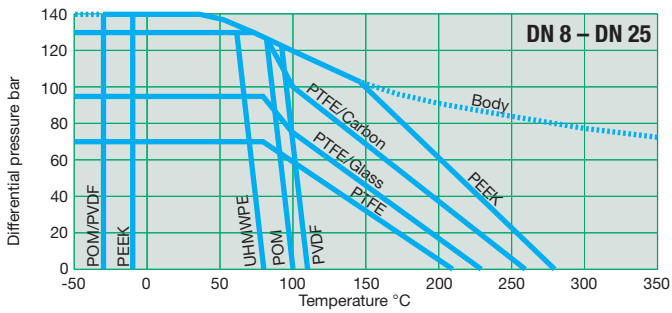
Options:

1.4529, 1.4539, 1.4462, Alloy-C22



Technical Data

Pressure/Temperature Diagram



Option

Version with long thread ends making it possible to weld in the ball valve **without** removing the middle piece.

Advantage: Extensive cost-saving and safety during assembly.



Version with orbital-weld-ends

- for installation in supply- and process-systems with ultra-pure media

Options

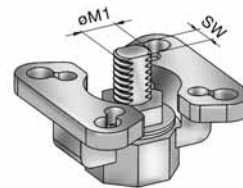
- passageway Ra 1,0
- electro polished
- flushing connection
- free from oil and grease



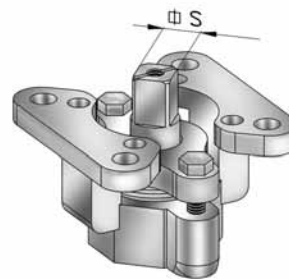
Square-Adaptor



Security cap



DN 8 - DN 50



DN 65 - DN 150

DN	NPS	Kvs		Breakaway torque Nm**		DIN 3337		Parallel flats dimensions	
		red. Passage way	full Passage way	red. Passage way	full Passage way	Flange	Stem □ S	ø Stem M1	SW
8	1/4"	-	5	-	5,5	F 03/04	9/11	8	5,5
10	3/8"	-	9	-	5,5	F 03/04	9/11	8	5,5
15	1/2"	9	16	5,5	9	F 04/05	11/14	9	7
20	3/4"	16	27	9	12	F 04/05	11/14	9	7
25	1"	27	45	12	14	F 04/05	11/14	9	7
32	1 1/4"	45	76	14	18	F 04/05	11/14	11	8
40	1 1/2"	76	110	18	20	F 04/05	11/14	11	8
50	2"	110	208	20	35	F 05/07	14/17	14	10
65	2 1/2"	208	360	35	75	F 07/10	17/22		
80	3"	360	550	75	90	F 07/10	17/22		
100	4"	550	900	90	135	F 07/10	17/22		
150*	6"	900	-	135	-	F 07/10	17/22		

* red. passageway

** based on medium water at room Temperature with PTFE/glass seat rings in depressurised state

Subject to technical changes without notice

Flanged Ball valve Type FG



The Type



FG Flanged Ball valve

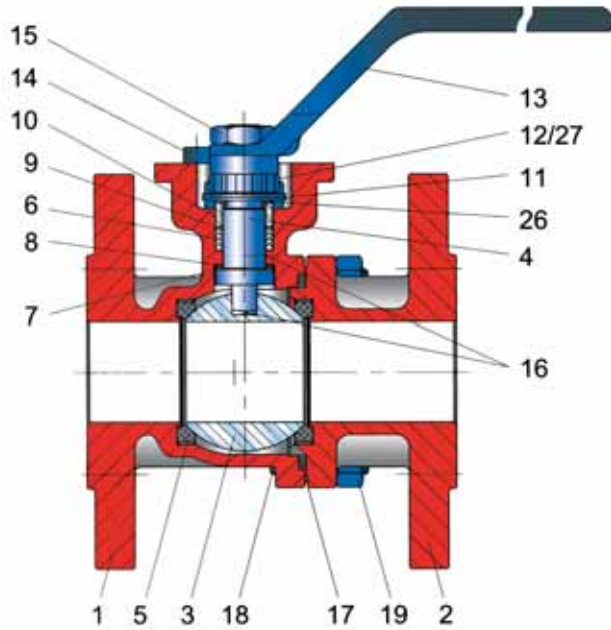
Flanged Ball valve PN 10/40 Type FG

Two-piece stainless steel ball valve optimised for inexpensive automation – direct mounting of actuation elements and actuators conforming to DIN3337. Ball valves meet industrial safety standards with a high degree of quality.

Advantages

- Low cost automation
- Secure connection
- Low pressure loss
- Face to face dimensions
DIN EN 558-1 series 27 (DIN 3202-F4)
DIN EN 558-1 series 28 (DIN 3202-F1)
- High quality assures optimum safety
- Tests and certification confirm the high quality of the product





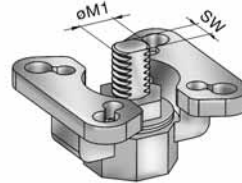
DN 15 – DN 50



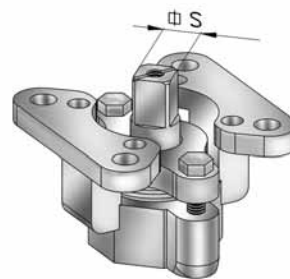
Square-Adapter



Security cap



DN 65 – DN 100



Available materials

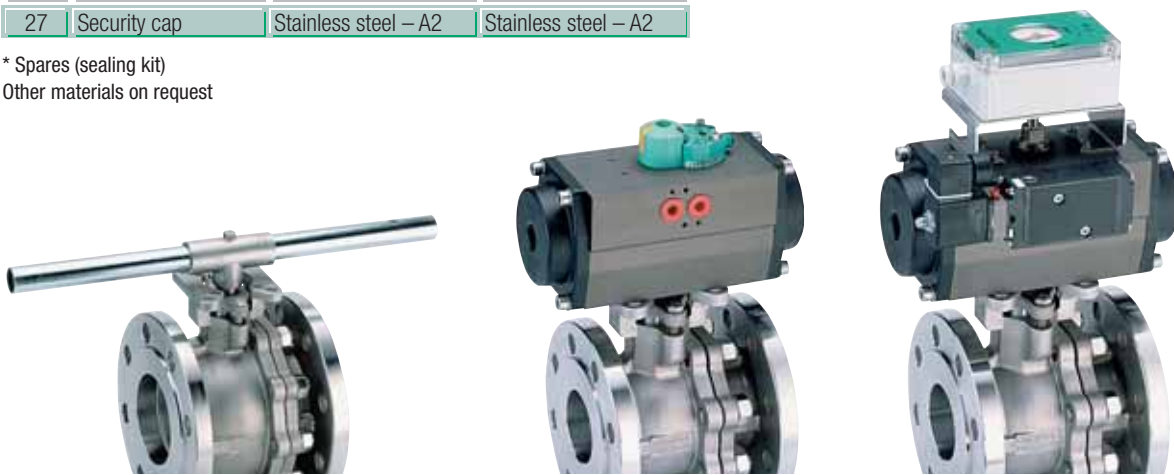
Pos.	Designation	Material	
		FG1-6666 TG	FGF-6666 T
1	Body	1.4408	1.4408
2	Body connector	1.4408	1.4408
3	Ball	1.4408	1.4408
4	Stem	1.4401	1.4401
5*	Seat	PTFE/Glass	PTFE
6*	Stem packing	PTFE/Glass	Graphite
7*	Thrust washer	PTFE/Carbon	PTFE/Carbon
8*	Primary sealing	PTFE/Glass	PTFE/Glass
9*	Thrust washer	PTFE/Carbon	PTFE/Carbon
10	Gland	1.4301	1.4301
11	Disc spring washer	1.4310	1.4310
12	Hexagon nut	DIN 439 – A2	DIN 439 – A2
13	Hand lever	1.4308	1.4308
14	Cylinder screw/nut	DIN 912/DIN 934 – A2	DIN 912/DIN 934 – A2
15	Hexagon nut	DIN 439 – A2	DIN 439 – A2
16	Antistatic device	1.4301	1.4301
17*	Body seal	PTFE/Glass	1.4401/Graphite
18	Stud bolt	Stainless steel – A2	Stainless steel – A2
19	Hexagon nut	DIN 934 – A2	DIN 934 – A2
26	Washer	1.4301	1.4301
27	Security cap	Stainless steel – A2	Stainless steel – A2

* Spares (sealing kit)
Other materials on request

DN	NPS	kvs	Breakaway torque Nm**	DIN 3337		Parallel flats dimensions	
				Flange	Stem S	ø Stem M1	sw
15	1/2"	20	10	F 03/04	9/11	9	7
20	3/4"	40	10	F 04/05	11/14	9	7
25	1"	75	15	F 04/05	11/14	11	8
32	1 1/4"	130	25	F 04/05	11/14	11	8
40	1 1/2"	170	35	F 05/07	14/17	14	10
50	2"	270	50	F 05/07	14/17	14	10
65	2 1/2"	550	70	F 07/10	17/22		
80	3"	1000	100	F 07/10	17/22		
100	4"	1650	125	F 07/10	17/22		

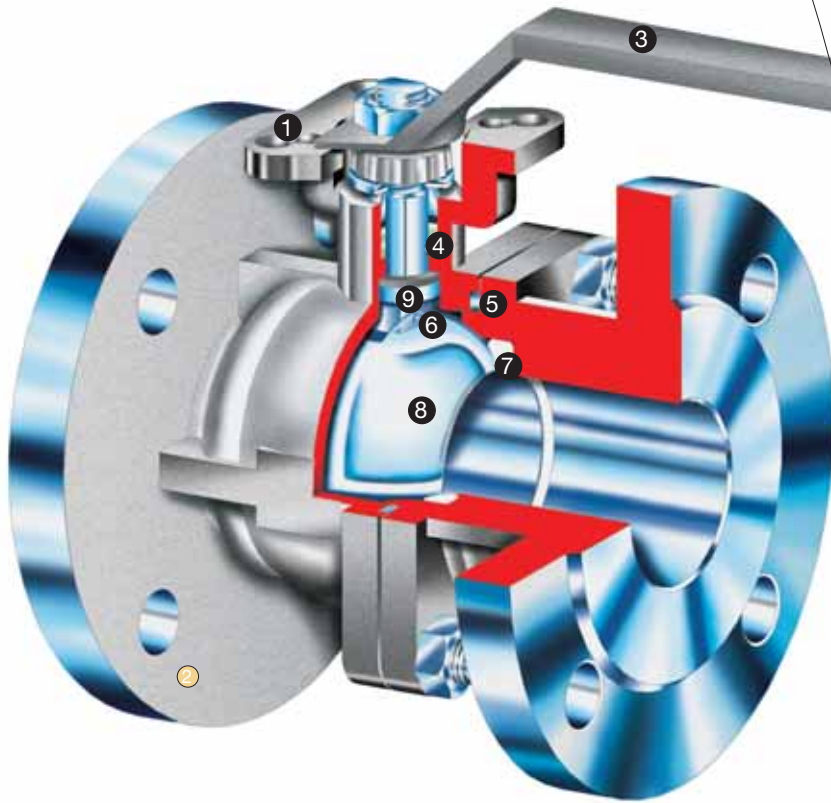
The breakaway torque refers to the depressurised status. It can vary based on medium, temperature, pressure and switching frequency.
** based on medium water at room temperature with PTFE/glass seat rings

Subject to technical changes without notice



Flanged Ball valve Type FG

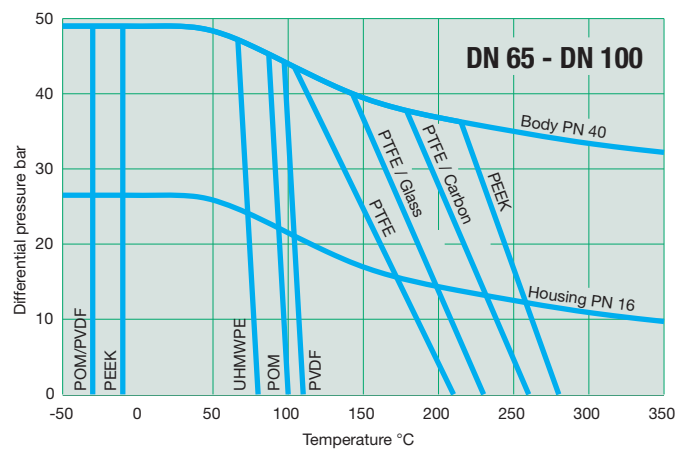
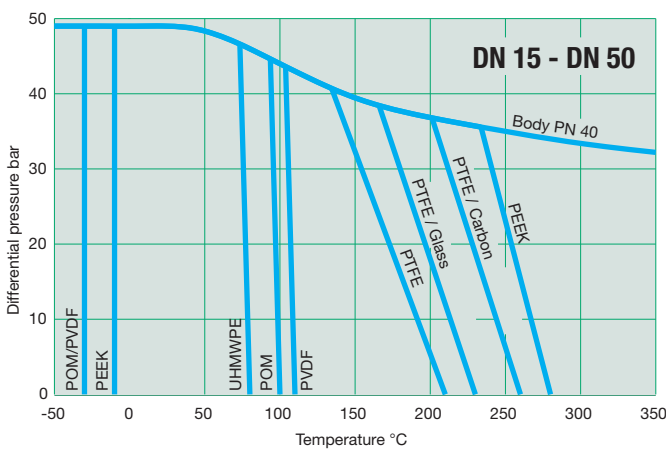
Technical specifications



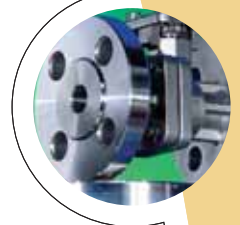
- ① **Direct mounting**
Actuator connection DIN 3337 / ISO 5211
- ② **Flange connection**
DIN PN 10 / PN 40
- ③ **Stainless steel hand lever**
- ④ **Reliable valve stem seal**
with spring-mounted PTFE V-rings
- ⑤ **Secure seal**
fully sealed using a separate body/housing gasket
- ⑥ **Anti-static**
standard
- ⑦ **Seat rings**
Materials: PTFE/Glass, PTFE/Carbon, PEEK, UHMWPE, POM
- ⑧ **High-gloss polished ball surface**
Extremely precision-contoured (concentricity)
- ⑨ **Stem in anti blow-out design**
installed from inside

Factory testing:
DIN 3230, T 3,
BA, BO 1

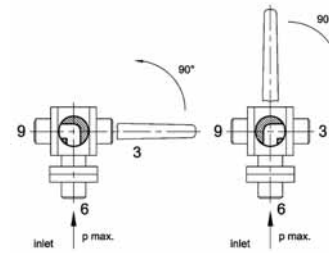
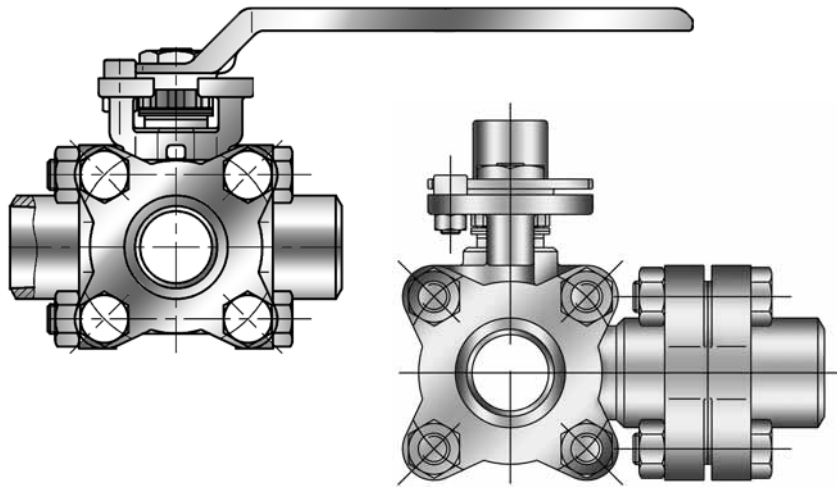
Pressure/Temperature Diagram



Three-/four-way Ball valve Type DG3 · DG4 · JF3



Type DG3 • DN 8 - DN 50 • Full passageway



Switch functions: L-bore

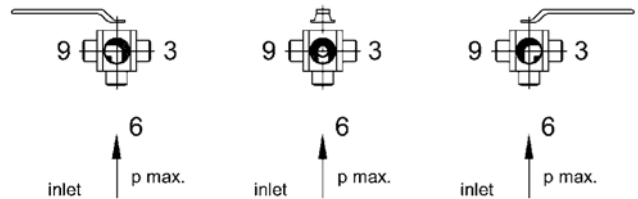
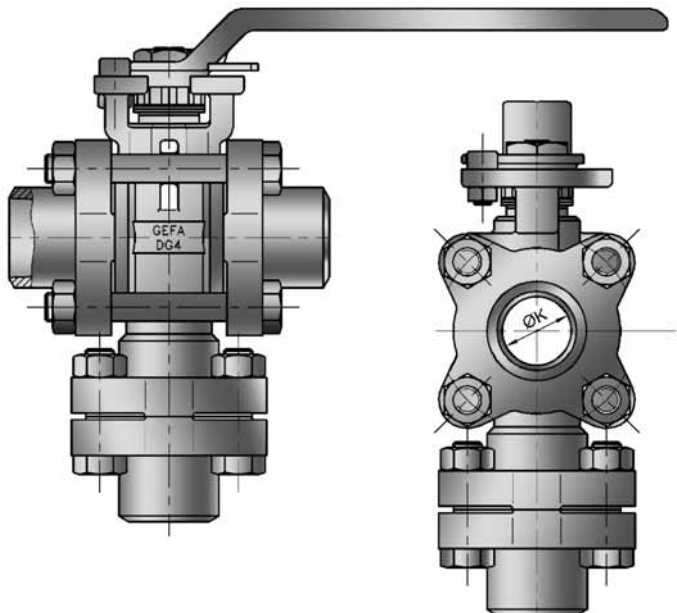
Materials and basic construction

Corresponding with ball valve type DG1

Connections:

Welded, threaded ends

Type DG4 • DN 8 - DN 50 • Full passageway



Switch functions: L-bore

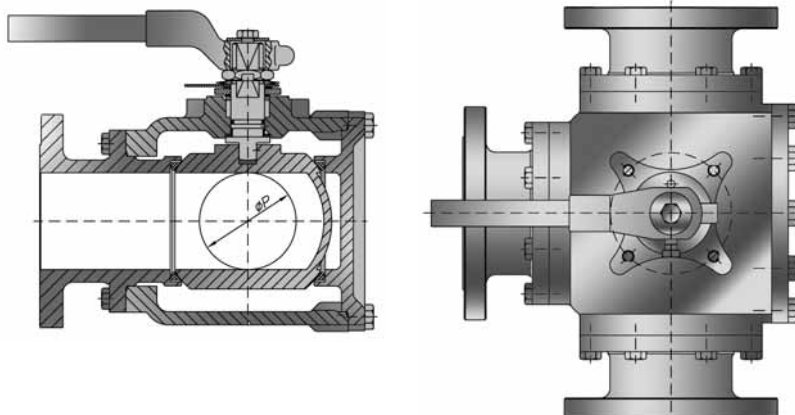
Materials and basic construction

Corresponding with ball valve type DG1

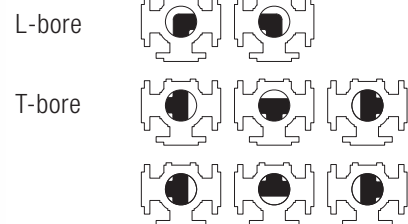
Connections:

Welded, threaded ends

Type JF3 • Three-way bead-cock flange • DN 25 - DN 150 / PN 16 • Full passageway



Switch functions:



Materials

Body:

Cast steel GS-C 25/Stainless steel 1.4408

Ball: Stainless steel 1.4408

Selector stem: Stainless steel 1.4401

Seat rings: PTFE

Flanged Ball valve, PFA-lined Type FGT



The Type



FGT Flanged Ball valve

Flanged full-bore Ball valve PFA-lined PN 10 - PN 40 / Class 150

The material combination of stainless steel** and PFA fluoropolymer for the lining in contact with the medium ensures an excellent all-round chemical-resistance while protecting against external corrosion.

The interface in accordance with DIN 3337 enables inexpensive automation and direct mounting of actuating elements and actuators.

Technical Data:

Lining body, ball and stem: PFA
Actuator connection: DIN 3337 - ISO 5211
Face to face dimensions:
DIN EN 558-1 series 28 (DIN3202-F1)
Flange connection:
DIN EN 1092-1, PN 10 - PN 40
ASME B 16.5 - Class 150

** DN 65 > body steel epoxy coated.
Stainless steel on request

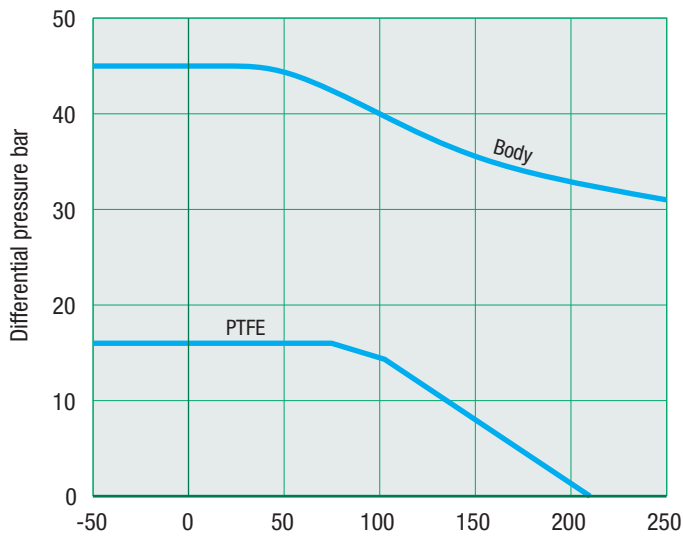
Advantages



- Secure chemical-resistance with PFA-lining inside – Stainless steel body
- High diffusion-resistance with thick-walled lining
- Full-bore
- Minimised contamination with optimised/reduced cavity construction
- Direct mounting of actuators – safe and secure – with interface conforming to DIN 3337



Pressure and Temperature Diagram



Technical Data

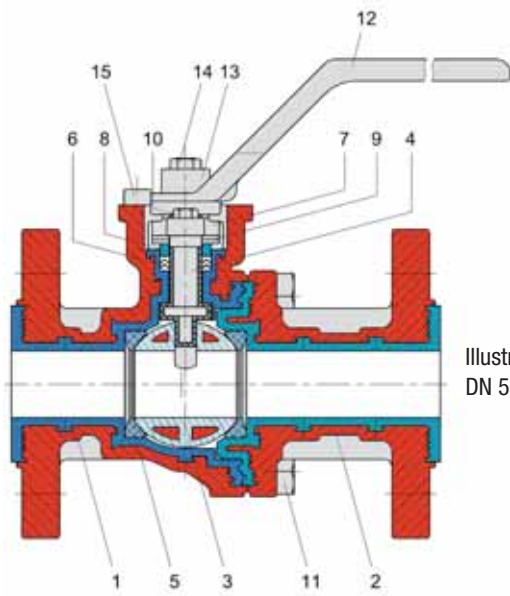


Illustration DN 50

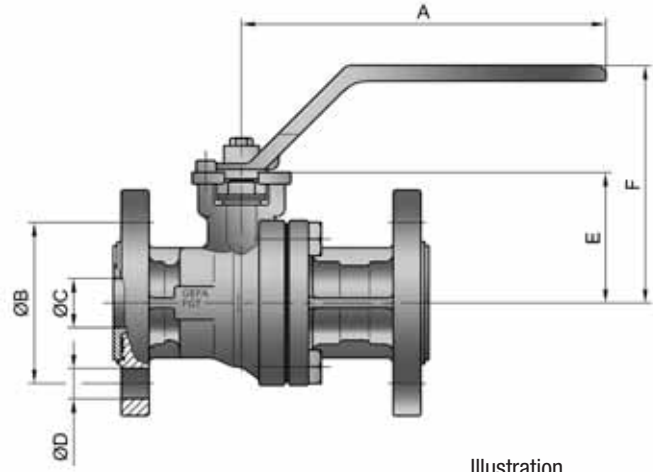
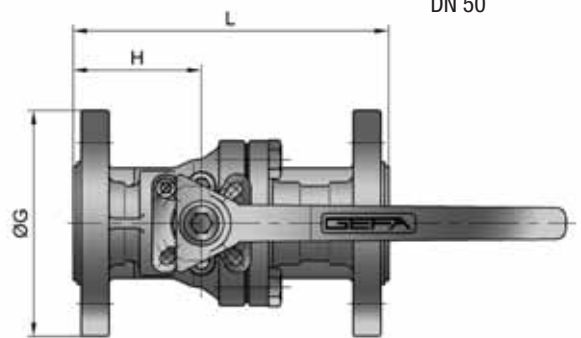


Illustration DN 50



Parts list

Pos.	Designation	Materials
1	Body**	1.4408 / PFA
2	Body connector	1.4408 / PFA
3	Ball	1.4408 / PFA
4	Stem	1.4313 / PFA
5*	Seat	PTFE
6*	Packing	PTFE
7	Gland flange	1.4308
8	Gland	1.4301
9	Disc spring washer	1.4310
10	Hexagon screw	Stainless steel A2
11	Hexagon screw	Stainless steel A2
12	Hand lever	1.4308
13	Case	1.4305
14	Hexagon screw	Stainless steel A2
15	Hexagon screw	Stainless steel A2

* Wear part (seal set)
 ** DN 65 > body steel epoxy coated.
 Stainless steel on request
 Other materials available as option

DN	NPS	kvs	A	ø B		ø C	ø D		E	F	ø G	H	L	Kg
				PN10-40	Class150		PN10-40	Class150						
15	1/2"	20	170	65	60,5	17	4 x 14	4 x 15,7	53	103	95	58	130	2,5
20	3/4"	40	170	75	69,9	20	4 x 14	4 x 15,7	56	105	105	65	150	3,3
25	1"	75	185	85	79,2	25	4 x 14	4 x 15,7	67	121	115	65	160	4,2
32	1 1/4"	130	185	100	88,9	32	4 x 18	4 x 15,7	72	126	140	75	180	5,7
40	1 1/2"	170	230	110	98,6	40	4 x 18	4 x 15,7	83	141	150	85	200	7,3
50	2"	270	230	125	120,7	50	4 x 18	4 x 19,1	91	148	165	100	230	10,0
65	2 1/2"	526	215	145	145	65	4 x 18	4 x 19,1	106	158	185	130	290	17,6
80	3	789	251	160	152,4	80	8 x 18	4 x 19,1	113	167	200	140	310	21,0
100	4	1211	315	180	190,5	100	8 x 18	8 x 19,1	130	182	220	130	350	32,9

Weight including hand lever

Subject to technical changes without notice

DOMINO Knife Gate valve Without compression gland



Advantages

- Maintenance-free COMPACT-cross-seal – Double lip profile
- Self-cleaning effect is obtained through the flash-out-corners of the body
- The cutting edge of the slide-plate separates materials and fibres
- Sealing in both flow directions
- Vibration-free guide for Knife gate
- Custom versions available
- Various actuator selection

The Types

DOMINO Knife Gate valve without compression gland

The knife gate “DOMINO system” is a market leading product in the water treatment and processing technology industries. Sludge, slurry and fibrous media are handled securely.

The gate provides sealing in both flow directions!

The versatile designs and actuator variations provide the user with an optimal investment basis.

DOMINO Knife Gate valves



DOMINO AT 100

Wafer type knife gate for installation between flanges conforming to DIN EN 1092-1

Face to face dimensions:

EN 558-1, series 20 (DIN 3202-K1)

DN 80 - DN 150: PN 10/16

DN 200: PN 10



DOMINO AT 150

Flanged knife gate, stainless steel design, for installation between flanges conforming to DIN EN 1092-1,

Face to face dimensions:

EN 558-1, series 20 (DIN 3202-K1)
 DN 50 - DN 150: PN 10/16
 DN 200 - DN 300: PN 10



DOMINO AT 200

Lug type knife gate with middle flange housing for installation between flanges conforming to DIN EN 1092-1

Face to face dimensions:

EN 558-1, series 20 (DIN 3202-K1)
 DN 50 - DN 150: PN 10/16
 DN 200 - DN 1200: PN 10
 Can be used as end fitting.



DOMINO AT 200 R

Control gate with optimised control plate for achieving a linear control function

Face to face dimensions:

EN 558-1, Series 20 (DIN 3202-K1)
 DN 50 - DN 600



DOMINO AT 200F

Lug type design knife gate – **Solid material design** – for installation between flanges DIN EN 1092-1 with inlet cone for product routing, multiple interrupted gate guide and scraper blades on the slide plate. Compact cross-seal with upstream stripping system for sealing to the outside.

 **ATEX certification for organic dusts (coal dust)**

Face to face dimensions:

EN 558-1, series 20 (DIN 3202-K1)
 DN 200 - DN 1000; PN 10



DOMINO AT 400

Lug type design knife gate with completely free through-bore -

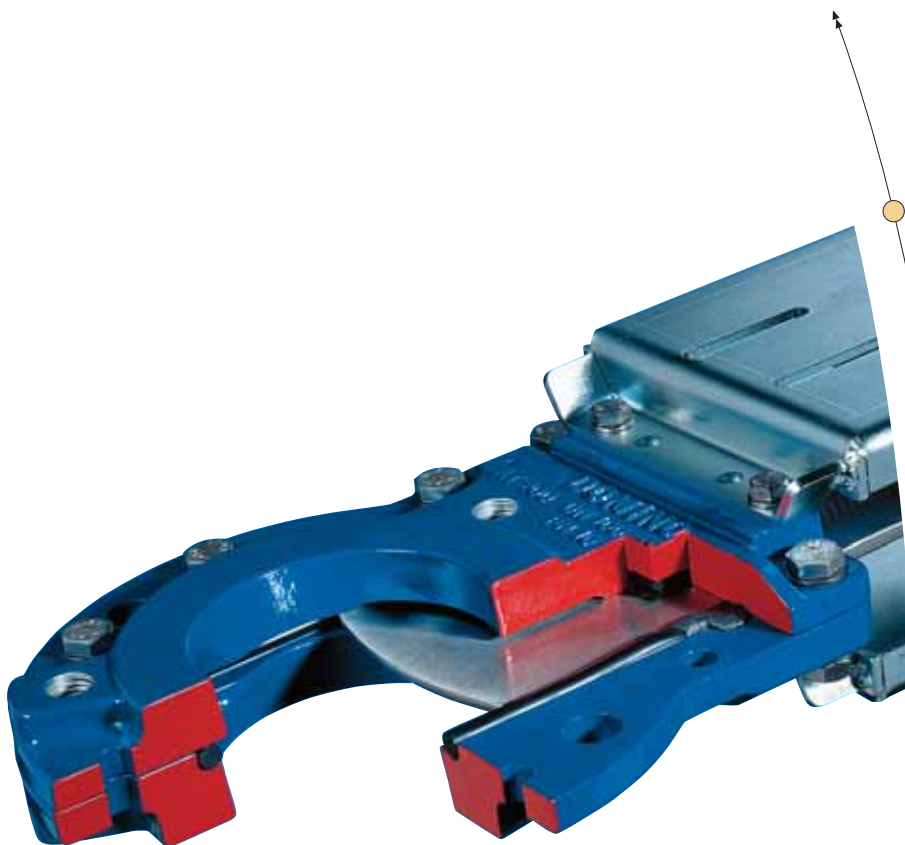
Piggable with calibre pig - for installing between flanges DIN EN 1092-1

Face to face dimensions: EN 558-1, series 20 (DIN 3202-K1) DN 50 - DN 1000



DOMINO Knife Gate valve Without compression gland

Technical specifications



Operation

- Handwheel
- Hand lever
- Square Shaft
- Reduction gearing
- Pneumatic cylinder
- Hydraulic cylinder
- Electro-actuator

Special designs

- Gate with control plate
- Full passageway
(e.g. for tunnel advance)
- Square gate
- Solid material gate

Accessories

- Limit switch, mechanical
- Limit switch, inductive
- Solenoid valve
- Position regulator
- Spindle extensions
- Pedestal stand

Available materials

Designation	Material
Body	GG-25, EKB-coated (Option: GGG-40), 1.4408
Gate	1.4301, 1.4571
Seals	NBR, EPDM, FPM, MVQ, PTFE, ceramic fibre
Attachment parts	Steel, EKB-coated or zinc -coated
Spindle/piston rod	1.4021 (Option: 1.4571) ascending or non-ascending

Your advantages

The construction features of the “DOMINO system”
Guarantee the highest possible user returns:



The **maintenance-free COMPACT-cross-seal as double seal lip profile** ensures the seal of the knife gate to the outside and can be resealed without interrupting operation.



The **self-cleaning effect** is achieved with the **Flush-out corners** and the cut-edges of the knife gate. Solid medium materials and fibres are separated on the **cutting-edge**, before the seal is made against the flexible seat seal. The gate guide is interrupted on the length of the stroke and provides free rinsing of the sealing areas before the valve closes.



A tight seal is made with the side-surfaces of the gate and the surrounding flexible seat seal in the housing to seal the passageway **in both flow directions**. The seat seal is installed chambered and pre-tensioned. **The high finish on the side sliding and sealing surfaces guarantees a long life-span with complete sealing functionality.**

The lateral gate guidance provides **vibration-free movement** of the gate in both flow directions and throttle settings.

Non Return valve Series RF



Advantages

- Sandwich design
- Low weight
- Short face to face dimensions
- Low-noise
- Low pressure loss
- Optional installation location
- High reliability
- Long life-span

The Types



Non Return valve Series RF

The series RF check valves are used as wafer-style valves in all areas of process technology in the short face to face dimensions DIN EN 558. The return is stopped by the spring-loaded valve plate before the return flow has begun.

The valves provide an almost complete opening cross-section and are distinguished by low pressure loss.

In this design, reliable return-prevention is achieved with extensive reductions in weight and face to face dimensions compared with conventional wafer-type check valves.

DN 15 – DN 150 PN 10 – PN 40

Technical Data

Nominal width: DN 15 to DN 150

Application temperature: -30 °C to +180 °C

Application pressure: PN 10

Face to face dimensions: DIN EN 558-1 series 49 (DIN 3202 / K4)

Leakage rate: 2 (test conforming to DIN 3230 BN / BO-1 (Optional with soft seal – Test conforming to DIN 3230 BN / BO)



Series RF 6666 M
PN 6-40 DN 15 - DN 100

DN	ØA	ØC	D	ØE
15	53	29	16	15
20	63	36	19	20
25	73	44	22	25
32	84	54	28	32
40	94	65,5	31,5	39
50	109	78	40	48
65	129	99	46	62
80	144	117	50	75
100	170	138	60	90

PN 16 DN 125 - DN 150

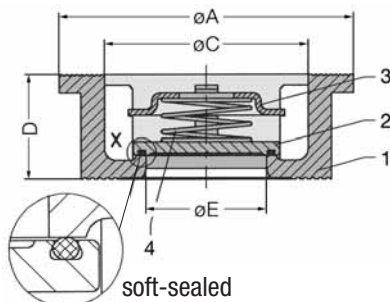
DN	ØA	ØB	ØC	D
125	194	112	166	90
150	220	132	195	106

Pos.	Designation	Materials
1	Body	1.4581/1.4408*
2	Valve plate	1.4571/1.4408*
3	Spring holder	1.4571/1.4408*
4	Spring	1.4571

* DN 125 – DN 150

Special editions in titanium, Alloy, Teflon, etc. upon request

The valves can be provided with soft seals in the valve plate, e.g.: EPDM, NBR, FPM, PTFE



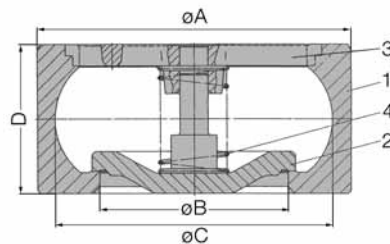
Serie RF 6666 M
PN 16 DN 125 - DN 150

DN	ØA	ØB	ØC	D
125	194	112	166	90
150	220	132	195	106

Pos.	Designation	Materials
1	Body	1.4408
2	Valve plate	1.4408
3	Support	1.4408
4	Spring	1.4571

Special editions in titanium, Alloy, Teflon, etc. upon request

The valves can be provided with soft seals in the valve plate, e.g.: EPDM, NBR, FPM, PTFE



Series RF 8686 T – PTFE carbon
PN 10/16 DN 15 - DN 100

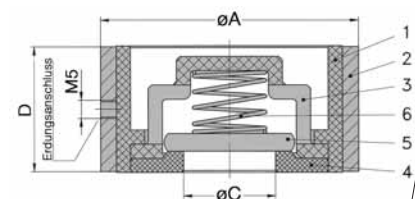
Installation: between flanges
DIN EN 1092-1, PN 10/16

Resistance: Besides fluorine compounds and liquid alkaline metals (sodium, potassium, lithium, caesium and rubidium) at higher temperatures.

The valve surface is strongly anti-adhesive, so that no residue can stick.

DN	ØA	D	ØC
15	53	25	15
20	63	31,5	20
25	73	35,5	26
32	84	40	32
40	94	45	40
50	109	56	48
65	129	63	62
80	144	71	74
100	164	80	90

Pos.	Designation	Materials
1	Body	PTFE carbon
2	Back-up ring	1.4301
3	Spring holder	PTFE carbon
4	Valve seat	PTFE carbon
5	Valve plate	PTFE carbon
6	Spring	1.4571 FEP coated



Swing Check valve Series C



Advantages

- Sandwich design
- Low weight
- Short face to face dimensions
- Low pressure loss
- Installation position horizontal and vertical with flow direction from below to above
- High reliability
- Long life-span

The Types



Swing Check valve Series C

Swing Check valves Series C

The series C swing-check valves are clamped in between flange PN 10/16 at short face to face dimensions.

The free opening cross-section is reduced in this construction. The opening angle is limited by the pipe wall to approximately 70°. Utilising these valves is suitable with continuous flow without impacts or pulsation. In vertical pipelines, the flow direction must rise from below so that the disc closes again automatically.



Swing Check valves Series C

DN	B mm	ø A mm	ø D	
			PN 10	PN 16
40	16	22	95	95
50	14	32	109	109
65	14	40	129	129
80	14	54	144	144
100	18	70	164	164
125	18	92	195	195
150	20	112	220	220
200	22	154	275	275
250	26	200	330	331
300	32	240	380	386
350	38	270	440	446
400	44	310	491	499
500	58	405	596	621

Swing Check valves Series C Type C 8888

DN	B mm	ø A mm	ø D PN 10
50	18	32	109
65	20	40	129
80	20	54	144
100	23	70	164
125	23	92	195
150	26	105	220
200	35	154	275
250	40	192	330
300	45	227	380
350	49	266	440
400	65	310	491
500	78	400	596

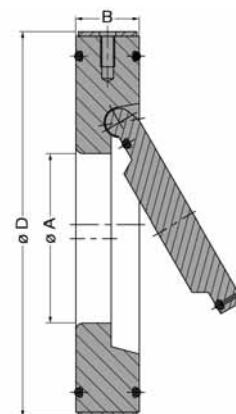
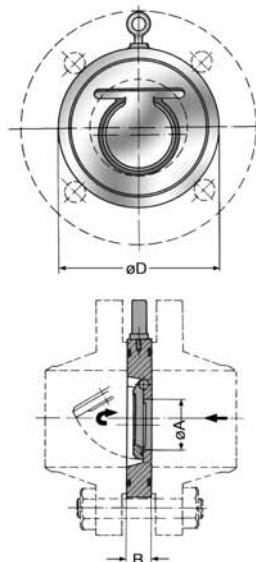
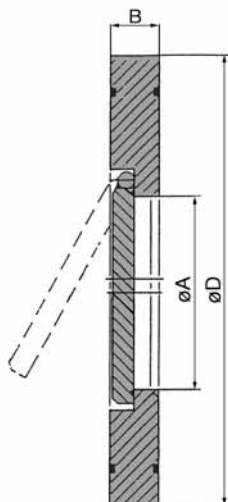
Swing Check valves Series C Type C 8686

DN mm	B mm	ø A mm	ø D PN 10
50	25	32	109
65	25	40	129
80	25	54	144
100	27	70	164
125	30	92	195
150	38	112	220
200	42	154	275
250	45	200	330
300	55	240	380

Designation	Materials	
Body and Disc	Steel	C 4444
	rust- and acid-resistant	
	Stainless steel	C 6666
Sealings	EPDM	C . . . E
	Buna N	C . . . B
	Viton	C . . . V
	PTFE	C . . . T

Designation	Materials	
Body and Disc	Polypropylene	
Sealings	EPDM	
	Buna N	
	FPM	
	PTFE	

Designation	Materials	
Body and Disc	PTFE/carbon	
Sealings (optional)	FEP-coated O-ring	



Subject to technical changes without notice