



VALVES

Detailed Overview

Overview of our product portfolio with product details

For any further questions, please feel free to contact our competent sales team.
Our inside and outside sales team are always at your service!

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About Us



Flowtec - About Us

We are general agent and partner of leading international manufacturers and specialists in the fields of industrial valves, and systems and components for the pulp and paper industry.

We have already been offering our international customers an extensive product range for many years. Our expertise is based on many years of experience, in-depth know-how and the possibility to offer solution-oriented concepts at a good price-service ratio.



Flowtec - Industrial Valves

Our wide product range covers industrial valves manufactured by internationally leading companies for almost all applications and requests. We will be pleased to advise you and act as your competent partner from the planning phase through product selection to the initial operation. Our employees have more than 30 years of experience within the pulp and paper industry, as well as the general industry.

With Flowtec you have an experienced partner by your side. We are specialized on handling projects of any size professionally and reliably for our customers.



Flowtec - Systems and Components

Our product range covers investment, replacement and wear and tear components for the pulp and paper production.

We work together with renowned and leading manufacturers within the pulp and paper industry.

Next to our wide product range, we will be pleased to support you further by conducting on-site audits of your systems and subsequently presenting you improvement possibilities and methods to increase your efficiency.

Let us be the strong and reliable partner on your side.



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Overview of our Services

Flowtec operates mainly in Europe. The sales regions include Austria, with Flowtec's head office, and the Eastern European region.

Apart from Slovakia and the Czech Republic, Flowtec serves customers in Poland, Hungary, Romania, Slovenia, Croatia, Bosnia Herzegovina, Serbia, Bulgaria, etc. You can always count on our competent sales team in the respective country.

We would be glad to assist you! Please contact us.



Consulting and Training

- Advice and assistance from the planning phase through product selection to start-up
- Individual trainings at your site or at one of our offices in Graz or Vienna



Planning and Projects

- Professional partner for small and large sized projects
- Ensuring a smooth progress from the project start to the finalization of the project



Warehouse and Assembly

- Modernly equipped workshop allows customized assembly and testing of the valves according to applicable standards and guidelines
- Extensive warehouse in Graz
- Delivery of standard valves within one working day in Austria



Service and Maintenance

- Professional repair and maintenance work on time




Wafer / Lug Butterfly Valves (TTV Valves)



DN (mm):	32 - 600 (up to 1400 on request)	<ul style="list-style-type: none"> ▪ Replaceable seat ▪ Coating Rilsan 250-300 µm (C5M on request) ▪ Extended body neck ▪ Full crossing stem
PN (bar) / ANSI:	10 - 16 / CL 150	
Body materials:	GGG-50, G-SC 25, 1.4301 (AISI 304), 1.4408 (AISI 316), bronze C352, aluminium bronze C415, 1.4462	
Seat materials:	EPDM, NBR, Viton®, silicone (food, steam), EPDM-HT, EPDM white, NBR gas, NR (natural rubber), Hypalon	
Disc:	GGG-50, 1.4301 (AISI 304), 1.4408 (AISI 316), bronze C352, aluminium bronze C415, 1.4462, 1.4408 + Halar®, Hastelloy® C, Uranus® B6	
Connections:	Lug type, wafer	
Face-to-face:	EN 558-R20, API 609 Table 1	
Options:	Vulcanized, vacuum, special coatings, stainless steel lever, IP68 gearbox, polished disc, gear with locking device	
Applications:	Water, seawater, waste water with low concentration of chemicals, process water with low fiber consistency, air, gas, oil, bulk material, vacuum	
Approvals:	ATEX, WRAS (on request), ACS (on request), CERTI GAS (on request), FDA (on request), SIL, AD2000 W0/A4	




Flanged / Double Flanged Centric Butterfly Valves (TTV Valves)

DN (mm):	50 - 3000	<ul style="list-style-type: none"> Flanged design: Replaceable seat Double flanged design: Vulcanized seat Coating Rilsan 250-300 µm (C5M on request) One-piece body with flanges Full crossing stem
PN (bar) / ANSI:	10 - 16 / CL 150	
Body materials:	GGG-50, GS-C 25, 1.4301 (AISI 304), 1.4408 (AISI 316), bronze C352, aluminium bronze C415, 1.4462	
Seat materials:	EPDM, NBR, Viton®, silicone (food, steam), EPDM-HT, EPDM white, NBR gas, NR (natural rubber), Hypalon	
Disc:	GGG-50, 1.4301 (AISI 304), 1.4408 (AISI 316), bronze C352, aluminium bronze C415, 1.4462, 1.4408 + Halar®, Hastelloy® C, Uranus® B6	
Connections:	Flanged, double flanged	
Face-to-face:	Flanged: EN 558-R20, API 609 Table 1 Double flanged: EN 558-R13, API 609 Table 2C	
Options:	Vulcanized (flanged design), vacuum, special coatings, stainless steel lever, IP68 gearbox, polished disc, gear with locking device	
Applications:	Water, seawater, waste water with low concentration of chemicals, process water with low fiber consistency, air, gas, oil, bulk material, vacuum	
Approvals:	ATEX, WRAS (on request), ACS (on request), CERTI GAS (on request), FDA (on request), SIL, AD2000 W0/A4	

Double Eccentric Double Flanged Butterfly Valves (TTV Valves)

DN (mm):	50 - 2000	<ul style="list-style-type: none"> Two-pieces shaft Double eccentric disc in maintenance-free bushings Wetted screws made of stainless steel A4 Gear standard IP67 (40-60µ epoxy coating / color black)
PN (bar) / ANSI:	10/16/25 / CL 150	
Body materials:	GGG50, 1.0619, 1.4408	
Seat materials:	EPDM, NBR	
Disc:	GGG50, 1.4408, aluminium bronze, duplex	
Stem:	made of stainless steel, material 1.4021	
Corrosion protection body:	Epoxy coating inside and outside 250-300µ / RAL5012	
Corrosion protection disc:	Epoxy coating 250-300µ / RAL5012	
Connections:	Double flanged	
Face-to-face:	EN 558, series 13 and 14	
Applications:	Water, waste water, cooling water, drinking water, desalination plants, gas	
Approvals:	ATEX, WRAS (on request), CERTI GAS (on request)	

Butterfly Valves, Type CST, PTFE-, TFM-, UHMPE lined (ChemValve-Schmid)

DN (mm):	50 - 1050	<ul style="list-style-type: none"> ▪ To shut off and control corrosive and abrasive liquids or gases ▪ Design of pressure package ensures long-term zero leakage to the atmosphere ▪ Ball-shaped disc and liner lead to longer lifetime and tightest shut-off ▪ Special elastomer backups provide gas tightness
PN (bar):	10 (DN 50 - 600) 6 (DN 650 - 1050)	
Temperature (°C):	-20 up to +200	
Body materials:	GGG40.3 epoxy, carbon steel, stainless steel, thermoset polymer	
Seat materials:	PTFE, TFM, UHMPE, electrically conductive	
Disc:	PFA, PFA cond., 1.4404, 1.4408, 1.4409, 1.4581, polished stainless steel, titanium, Hastelloy®	
Connections:	Lug type, wafer	
Options:	Flexible shaft connection (2-flat parallel, square diagonal or parallel)	
Applications:	Corrosive and aggressive liquids and gases, food	
Approvals:	ATEX, FDA, SIL, TA Luft	

 **ChemValve-Schmid**
Valve Technology



Double Offset High Performance Butterfly Valves, Type Colossus (TTV Valves)

DN (mm):	50 - 600	<ul style="list-style-type: none"> ▪ Replaceable / exchangeable seat design ▪ R-PTFE: Class VI tightness, 0% leakage, PN 10/16/25, ▪ Metal: Class V tightness, PN 10/16/25 ▪ Bidirectional
PN (bar) / ANSI:	10/16/25, CL 150	
Body materials:	1.0619 (A216WCB), 1.4408 (CF8M)	
Seat materials:	R-PTFE (-50°C up to +220°C), F316L (-100°C up to +350°C)	
Disc:	R-PTFE seat: CF8M (polishing), Metal seat: CF8M + hard chrome (polished)	
Connections:	Wafer, lug type, flanged	
Options:	Seat materials R-PTFE fire-safe, PTFE	
Applications:	Steam, air, oil, gas, bitumen, chemicals	
Approvals:	ATEX, fire-safe (on request), FDA (on request), SIL (on request), AD2000 W0/A4	

 **TTV**



Hydromat® (Tröger + Entenmann)

DN (mm):	50 - 1200 (higher on request)	<ul style="list-style-type: none"> ▪ Frictionlocked sealing principle ▪ No mechanical stop of the disc in the valve body ▪ Massive vulcanized sealing ▪ Up to ≤ DN600: Enamel ▪ Up to ≤ DN1200: Inside enamelled ▪ Manufactured entirely in Germany ▪ Promptly available from the stock in Germany
PN (bar):	10 - 16 (PN25 on request)	
Body materials:	GGG50 (ab DN1400: S235JRG2)	
Sealing materials:	EPDM	
Disc:	GGG50	
Stem:	1.4021	
Connections:	Flanged	
Face-to-face:	DIN EN 558-1, GR14 or DIN EN 558-1, GR15	
Options:	Electric or pneumatic actuation	
Applications:	Water, waste water, cooling water, drinking water	
Approvals:	DVGW	



Triple Eccentric High Performance Butterfly Valves, Type MTV (Somas)

DN (mm):	80 - 500	<ul style="list-style-type: none"> ▪ Solid stainless steel seat due to special geometry ▪ Suitable for high flow rates and media containing solids ▪ Ideal shut-off and control valve ▪ Bi-directional tightness ▪ Friction and torque minimized design
PN (bar) / ANSI:	10 - 25 / CL 150	
Temperature (°C):	up to +500	
Body materials:	1.4408, special materials	
Seat materials:	Solid stainless steel, R-PTFE reinforced	
Connections:	Wafer, double flanged, lug type	
Options:	Oil and gas applications	
Applications:	Hot water and pulp stock up to min. 1%, pulp liquor applications, solids, steam, oil, gas	
Approvals:	ATEX, TA Luft (on request), Fire-safe (on request), FDA (on request), SIL	



Triple Eccentric High Performance Butterfly Valves, Type VSS (Somas)

DN (mm):	80 - 1600	<ul style="list-style-type: none"> ▪ Solid stainless steel seat due to special geometry ▪ Suitable for high flow rates and media containing solids ▪ Ideal shut-off and control valve ▪ Bi-directional tightness ▪ Friction and torque minimized design
PN (bar) / ANSI:	10 - 100 / CL 150 - 600	
Temperature (°C):	-196 up to +600	
Body materials:	1.4408, special materials	
Seat materials:	Solid stainless steel, R-PTFE reinforced	
Connections:	Wafer, lug type	
Options:	Low-noise design, oil and gas applications, high temperature design, cryogenic design, combustion gas applications	
Applications:	Hot water and pulp stock up to min. 1%, pulp liquor applications, steam turbine applications, solids, steam, oil, gas	
Approvals:	ATEX, TA Luft (on request), Fire-safe (on request), FDA (on request), SIL	



Four Offset High Performance Butterfly Valves (Quadax®)

DN (mm):	50 - 1800	<ul style="list-style-type: none"> Shut-off and control butterfly valve for highest requirements in four offset design Absolute tightness even at extreme temperatures and pressures
PN (bar) / ANSI:	10 - 160 / CL 150 - 900	
Temperature (°C):	-270 up to +800	
Body materials:	Carbon steel, stainless steel, special materials	
Valve seat materials:	Inconel®, Stellite, other materials on request	
Seal ring materials:	Graphite/stainless steel lamella, all metal lamella, Inconel® O-ring, other materials on request	
Connections:	Lug type, wafer, double flanged, butt weld ends, top entry	
Options:	High temperature and cryogenic design, special materials, safety shut-off function, special face-to-face dimensions	
Applications:	Technical gases, power generation, thermosolar, oxygen, LNG/LPG, cryogenic, heating district, pulp and paper, refineries/petrochemicals, tank storage, steel plants	
Approvals:	PED 2014/68EU, ASME 16.34, ATEX, TA Luft, ISO 15848, NACE, SIL3, Fire-safe, AD2000 A4, BAM	



Four Offset High Performance Butterfly Valves, Gate Valve Replacement (Quadax®)

DN (mm):	50 - 1800	<ul style="list-style-type: none"> Shut-off and control butterfly valve for highest requirements in four offset design Slide replacement without modification of the pipeline
PN (bar) / ANSI:	10 - 160 / CL 150 - 900	
Temperature (°C):	-270 up to +800	
Body materials:	Carbon steel, stainless steel, special materials	
Valve seat materials:	Inconel®, Stellite, other materials on request	
Seal ring materials:	Graphite/stainless steel lamella, all metal lamella, Inconel® O-ring, other materials on request	
Connections:	Flanged/gate valve replacement	
Options:	High temperature and cryogenic design, special materials, safety shut-off function, special face-to-face dimensions	
Applications:	Technical gases, power generation, thermosolar, oxygen, LNG/LPG, cryogenic, heating district, pulp and paper, refineries/petrochemicals, tank storage, steel plants	
Approvals:	PED 2014/68EU, ASME 16.34, ATEX, TA Luft, ISO 15848, NACE, SIL3, Fire-safe, AD2000 A4, BAM	



On/off and Control Butterfly Valves, Type HRD/HRA / RD/RA (Herberholz)

DN (mm):	32 - 1200	<ul style="list-style-type: none"> ▪ Particularly suitable for high temperatures ▪ With manual, pneumatic or electric actuator ▪ For on/off and control applications
PN (bar) / ANSI:	6 - 16 / CL 150	
Temperature (°C):	up to +900	
Body materials:	Cast iron, ductile iron, aluminium cast, stainless steel, special materials	
Seat materials:	Graphite, PTFE, elastomers	
Connections:	Wafer	
Applications:	Industrial furnace, shipbuilding, motor test bench, gas exhaust system, steel plant, chemical industry	



Safety Shut-off Valves, Type AK/DVGW, AK/SSK, Series 049/054 (Herberholz)

DN (mm):	50 - 1200	<ul style="list-style-type: none"> ▪ Safety shut-off valve acc. to DIN EN 161, class A ▪ Safety shut-off valve for pipes to burner or multiple burners ▪ Max. working pressure: 2 bar ▪ Suitable for use in safety related systems as a single safety related subsystem according to DIN EN IEC 61508 and DIN EN IEC 61511 for up to and including SIL3
PN (bar):	6 - 10	
Body materials:	Ductile iron GGG40.3, steel 1.0570	
Seat materials:	NBR-DVGW, NBR, EPDM, FPM (vulcanized), FMQ, CSM, IIR	
Closing times:	up to DN 500: < 1 sec., DN 600 - 1200: < 2 sec.	
Connections:	Wafer	
Applications:	For gas trains, biogas plants, wastewater treatment plants, as double shut-off valve in furnace systems	
Approvals:	EN 161, DVGW (Gas), SIL, ATEX	



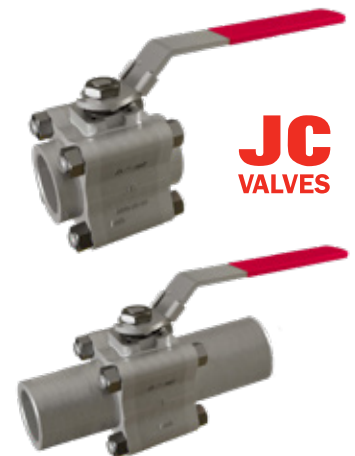
3-Piece Ball Valves (ICP Valves)

DN (mm):	8 - 100 / 1/4" - 4"	<ul style="list-style-type: none">▪ 3-piece design▪ Full bore▪ Locking device as standard
PN (bar):	63 (to DN50) / 25 (DN65-100)	
Body materials:	1.4408	
Seat materials:	PTFE	
Connections:	BSP threads, NPT threads, socket weld ends, butt weld ends, long butt weld ends	
Designs:	BSP: Fig. 140/140 ISO, NPT: Fig. 141/141 ISO, SW: Fig. 142/142 ISO, BW: Fig. 143/143 ISO, acc. ASME B16.25 & DIN3239 part 1, Long BW: Fig. 143L-ISO, acc. ASME B16.25 & DIN3239 part 1	
Applications:	Water, oil, gas, chemicals	
Approvals:	ATEX	



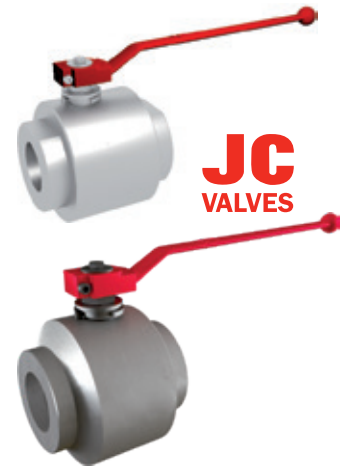
3-Piece Ball Valves, Series 800 (JC Valves)

DN (mm):	10 - 50 / 3/8" - 2"	<ul style="list-style-type: none">▪ 3-piece body▪ Cavity balancing hole▪ Blow out proof stem▪ Full bore▪ Floating ball
PN (bar) / ANSI:	PN63 DIN EN butt weld ends long (short on request) / CL800/CL1500 for BSP, NPT and socket weld ends	
Body materials:	A105N / F316L / LF2 and Duplex on request	
Seat materials:	RPTFE, STANSIT (PTFE-SS), A479 Tp. 316 + TCC	
Connections:	Type 800 BSP - CL800 Type 801 NPT - CL800 Type 802 socket weld ends - CL 800 Type 803 DIN EN butt weld ends - PN63 (on request) Type 803L DIN EN butt weld ends long - PN63 Type 807 ASME B16.34 Nipples - CL800	
Applications:	Water, oil, gas, chemicals, seawater, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4	



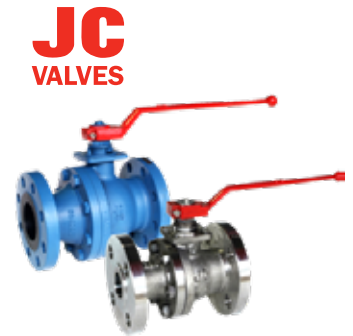
Forged Monobloc Ball Valves, Series 400/41500 (JC Valves)

DN (inch):	3/8" - 2"	<ul style="list-style-type: none">▪ Monobloc design▪ Reduced bore▪ Floating ball▪ Cavity balancing hole
ANSI:	CL 800 (series 400) / CL 1500 (series 41500)	
Body materials:	A105N, A479 Type A316L, other materials on request	
Seat materials:	RPTFE, STANSIT (PTFE-SS)	
Connections:	BSP, NPT, SW, BW	
Applications:	Oil, gas, chemicals, steam, mining	
Approvals:	ATEX, Fire-safe, AD2000 W0/A4, NACE, TA Luft	



DIN Flanged Ball Valves, Floating, Short Pattern Series 516/540, Long Pattern Series 316/340 (JC Valves)

DN (mm):	15 - 200	<ul style="list-style-type: none">▪ 2-piece design▪ Full bore▪ Floating ball▪ Face to face dimensions: EN 558 Series 1 / Series 27▪ Cavity balancing hole
PN (bar):	16 (to DN200) / 40 (to DN150)	
Body materials:	1.0619, 1.4408, other materials on request	
Seat materials:	PTFE, R-PTFE, PTFE glass, DEVLON, STANSIT (PTFE-SS), PEEK, nylon	
Connections:	Flanged	
Options:	V-port regulation ball, cryogenic construction to -196°C, oil- and grease-free, cavity fillers, cavity relief seats, double packing, oval handwheel (up to 2"), vacuum design up to 10 ⁻⁴ bar, PN63/PN100	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, FDA (on request)	



DIN Flanged Ball Valves, Semi Trunnion, Short Pattern Series 1516/1540, Long Pattern Series 1316/1340 (JC Valves)

DN (mm):	200 - 300	<ul style="list-style-type: none">▪ 2-piece design▪ Full bore▪ Semi trunnion ball▪ Face to face dimensions: EN 558 Series 27 / Series 1▪ Cavity balancing hole
PN (bar):	16 (DN250-300) / 40 (DN200-300)	
Body materials:	1.0619, 1.4408, other materials on request	
Seat materials:	PTFE, R-PTFE, PTFE glass, DEVLON, STANSIT (PTFE-SS), PEEK, nylon	
Connections:	Flanged	
Options:	Oil- and grease-free, double packing, vacuum design up to 10 ⁻⁴ bar	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4	



DIN Metal Seated Flanged Ball Valves, Floating, Short Pattern Series 3516/3540 / Long Pattern Series 3316/3340 (JC Valves)

DN (mm):	15 - 150	<ul style="list-style-type: none"> 2-piece design Full bore Floating ball Face to face dimensions: EN 558 Series 1 / EN 558 Series 27 Cavity balancing hole
PN (bar):	16 (up to DN150) / 40 (up to DN100)	
Body materials:	1.0619, 1.4408, LCC and other materials on request	
Ball materials:	316 + TCC coating, other treatments on request	
Seat materials:	316 + TCC coating, other treatments on request	
O-rings:	FKM, Aflas (up to 250°C), FFKM-Kalrez (up to 327°C), Graphite above 327°C	
Temperature (°C):	up to +500 (depending on material and treatment!)	
Connections:	Flanged	
Leakage rate:	Class A with Aflas, FKM, FFKM; Class D (B on request) with Graphite	
Options:	Special seats, double packing, oval handwheel (up to 2")	
Applications:	Oil, gas, chemicals, steam, mining	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4	

JC
VALVES



DIN Flanged Ball Valves, PN63-100, Long Pattern/Floating, Series 563 (PN63) / Series 599 (PN100) (JC Valves)

DN (mm):	15 - 100	<ul style="list-style-type: none">▪ 2-piece design▪ Full bore▪ Floating ball▪ Face to face dimensions: EN 558 Series 1▪ Cavity balancing hole
PN (bar):	63/100	
Body materials:	A105, F316, LF2, other materials on request	
Seat materials:	R-PTFE, PTFE glass, DEVLON, STANSIT (PTFE-SS), PEEK, nylon	
Connections:	Flanged	
Options:	Oil- and grease-free, cavity relief seats, double packing, vacuum design up to 10 ⁻⁴ bar	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4	

JC
VALVES



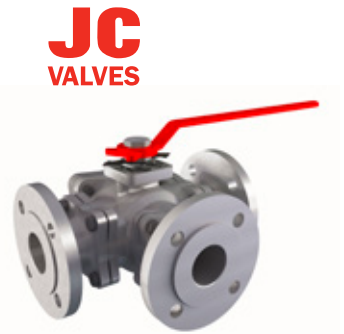
DIN Metal Seated Flanged Ball Valves, PN63-100, Long Pattern/Floating, Series 3563 (PN63) / Series 3599 (PN100) (JC Valves)

DN (mm):	15, 20, 25, 40, 50	<ul style="list-style-type: none"> 2-piece design Full bore Floating ball Face to face dimensions: EN 558 Series 1 Cavity balancing hole
PN (bar):	63/100	
Body materials:	A105, F316, LF2, weitere Materialien auf Anfrage	
Seat materials:	316 + TCC Beschichtung, weitere Beschichtungen auf Anfrage	
O-rings:	FKM, Aflas (bis 250°C), FFKM-Kalrez (bis 327°C), Graphit über 327°C	
Temperature (°C):	bis +500 (abhängig von Material und Behandlung!)	
Connections:	Flansch	
Leakage rate:	Class A with Aflas, FKM, FFKM; Class D (B on request) with Graphite	
Options:	Special seats, double packing, oval handwheel (up to 2")	
Applications:	Oil, gas, chemicals, steam, mining	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4	



DIN Flanged 3-Way Ball Valves, Floating, Series 916N (JC Valves)

DN (mm):	25 - 200	<ul style="list-style-type: none">▪ 5-piece design (body + 3 connectors + cover)▪ Full bore▪ Floating ball▪ Face to face dimensions: Manufacturer standard▪ Cavity balancing hole
PN (bar):	16	
Body materials:	1.0619, 1.4408, other materials on request	
Seat materials:	PTFE, R-PTFE, PTFE glass, STANSIT (PTFE-SS)	
Port combinations:	L-port, T-port, inverted port	
Connections:	Flanged	
Options:	Oil- and grease-free	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, AD2000 W0/A4	



DIN Flanged Ball Valves with Heating Jacket, Long Pattern/Floating, Series 553 (JC Valves)

DN (mm):	15 - 100	<ul style="list-style-type: none">▪ PN10 steam jacketed▪ 2-piece design▪ Full bore▪ Floating ball▪ Face to face dimensions: EN 558 Series 1▪ Cavity balancing hole
PN (bar):	16/40	
Body materials:	1.4408 (other materials on request)	
Seat materials:	STANSIT (PTFE-SS)	
Connections:	Flanged	
Options:	Cavity fillers, cavity relief seats, double packing	
Applications:	Chemicals, bitumen	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4	



ANSI Flanged Ball Valves, Floating, Series 515(B)/530(B) (JC Valves)

DN (inch):	½" - 8"	<ul style="list-style-type: none">▪ 2-piece design▪ Full bore▪ Floating ball▪ API 6D▪ Cavity balancing hole
ANSI:	CL 150 (up to 8") / CL 300 (up to 6")	
Body materials:	A216WCB, A351 CF8M, 352 LCC, other materials on request	
Seat materials:	PTFE, R-PTFE, PTFE glass, DEVLON, STANSIT (PTFE-SS), PEEK, nylon	
Connections:	Flanged	
Options:	V-port regulation ball, cryogenic construction to -196°C, heating jacket (type 550 / 570), oil- and grease-free, cavity fillers, cavity relief seats, double packing, oval handwheel (up to 2"), vacuum design up to 10 ⁻⁴ bar	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, FDA (on request), NACE, API 6D	



ANSI Flanged Ball Valves, Semi Trunnion, Series 1515/1530 (JC Valves)

DN (inch):	8" - 12"	<ul style="list-style-type: none">▪ 2-piece design▪ Full bore▪ Semi trunnion ball▪ API 6D▪ Cavity balancing hole
ANSI:	CL 150 (10"-12") / CL 300 (8"-12")	
Body materials:	A216WCB, A351 CF8M, 352 LCC, other materials on request	
Seat materials:	PTFE, R-PTFE, PTFE glass, DEVLON, STANSIT (PTFE-SS), PEEK	
Connections:	Flanged	
Options:	1-piece design series 715/730, oil- and grease-free, double packing, vacuum design up to 10 ⁻⁴ bar	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D	

JC
VALVES



ANSI Metal Seated Flanged Ball Valves, Floating, Series 3515/3530 (JC Valves)

DN (inch):	½" - 6"	<ul style="list-style-type: none"> 2-piece design Full bore Floating ball API 6D Cavity balancing hole
ANSI:	CL 150 (to 6") / CL 300 (to 4")	
Body materials:	A216 WCV, A351 CF8M, 352 LCC, other materials on request	
Ball materials:	316 + TCC coating, other treatments on request	
Seat materials:	316 + TCC coating, other treatments on request	
O-rings:	FKM, Aflas (up to 250°C), FFKM-Kalrez (up to 327°C), Graphite above 327°C	<ul style="list-style-type: none"> Leakage rate: Class A with Aflas, FKM, FFKM; Class D (B on request) with Graphite Options: Ball in slurry design, special seats, double packing, oval handwheel (up to 2") Applications: Oil, gas, chemicals, steam, mining Approvals: ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D
Temperature (°C):	up to +500 (depending on material and treatment!)	
Connections:	Flanged	
Leakage rate:	Class A with Aflas, FKM, FFKM; Class D (B on request) with Graphite	
Options:	Ball in slurry design, special seats, double packing, oval handwheel (up to 2")	
Applications:	Oil, gas, chemicals, steam, mining	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D	

JC
VALVES



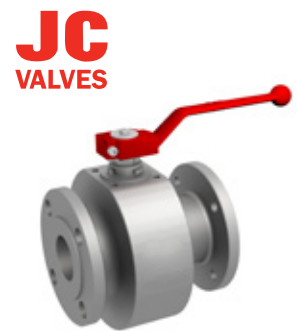
ANSI Flanged Ball Valves, Floating, Full Bore Series 560(B) / Reduced Bore Series 660(B) (JC Valves)

DN (inch):	½" - 4" (½" - 2" Type B = BAR material)	<ul style="list-style-type: none">• 2-piece design• Full bore - Series 560• Reduced bore - Series 660• Floating ball• API 6D• Cavity balancing hole
ANSI:	CL 600	
Body materials:	A216WCB, A351 CF8M, 352 LCC, A105, F316, LF2, other materials on request	
Seat materials:	Nylon, R-PTFE, PTFE glass, DEVLON, STANSIT (PTFE-SS), PEEK	
Connections:	Flanged	
Options:	Oil- and grease-free, cavity relief seats, double packing	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D	



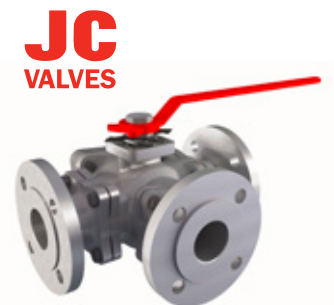
ANSI Flanged Ball Valves, Floating, Full Bore, Series 590B CL900 / 550B CL1500 (JC Valves)

DN (inch):	½" - 2"	<ul style="list-style-type: none">▪ 2-piece design▪ Full bore▪ Floating ball▪ API 6D▪ Cavity balancing hole
ANSI:	CL900 (590B) / CL1500 (550B)	
Body materials:	A105, F316, LF2, other materials on request	
Seat materials:	DEVLON, PEEK	
Connections:	Flanged	
Options:	Oil- and grease-free	
Applications:	Water, seawater, oil, gas, chemicals	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D	



ANSI Flanged 3-Way Ball Valves, Floating, Series 915N (JC Valves)

DN (inch):	1" - 8"	<ul style="list-style-type: none">▪ 5-piece design (body + 3 connectors + cover)▪ Full bore▪ Floating ball▪ Face to face dimensions: Manufacturer standard▪ Cavity balancing hole
ANSI:	CL 150	
Body materials:	A216WCB, A351 CF8M, 352 LCC, other materials on request	
Seat materials:	PTFE, R-PTFE, PTFE glass, STANSIT (PTFE-SS)	
Port combinations:	L-port, T-port, inverted port	
Connections:	Flanged	
Options:	Oil- and grease-free, double packing	
Applications:	Water, seawater, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, AD2000 W0/A4, NACE	



DIN & ANSI Forged Trunnion Design Flanged Ball Valves, Soft / Metal Seated, Series 6000FB / 7000RB (JC Valves)

DN (mm):	40 - 1050 / 1½" - 42"	<ul style="list-style-type: none"> ▪ 3-piece design ▪ Full bore - series 6000FB ▪ Reduced bore - series 7000RB ▪ Trunnion ball ▪ Spring loaded seats ▪ API 6D
PN (bar) / ANSI:	16 - 420 / CL 150 - 2500 (depending on sizes)	
Body materials:	A105, F316, LF2, Duplex and other materials on request	
Soft seat:	PTFE, R-PTFE, PEEK, DEVLON, nylon, other materials on request	
Metal seat:	316 + TCC coating, other treatments on request	
Connections:	Flanged	
Leakage rate:	Class A up to 327° (FFKM-Kalrez O-rings); Class D (B only on request) for temperatures above 327°C	
Options:	Construction to -196°C, heating jacket, oil- and grease-free, cavity fillers, double packing, special face-to-face dimensions, special flanges	
Applications:	Liquors, water, seawater, sour gas, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D	



ANSI Cast Trunnion Design Flanged Ball Valves, Soft / Metal Seated, Series 2515/2530 (JC Valves)

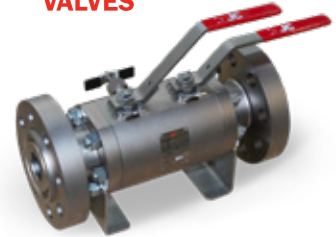
DN (inch):	2" - 16"	<ul style="list-style-type: none"> ▪ 2-piece design ▪ Full bore ▪ Trunnion ball ▪ Spring loaded seats ▪ API 6D
ANSI:	CL 150 - 900	
Body materials:	A216WCB, A351 CF8M, 352 LCC, other materials on request	
Soft seat:	PTFE, R-PTFE, PEEK, DEVLON, nylon, other materials on request	
Metal seat:	316 + TCC coating, other treatments on request	
Connections:	Flanged	
Leakage rate:	Class A up to 327° (FFKM-Kalrez O-rings); Class D (B only on request) for temperatures above 327°C	
Applications:	Water, seawater, sour gas, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX, SIL, TA Luft, Fire-safe, AD2000 W0/A4, NACE, API 6D	



ANSI Double Block and Bleed Ball Valves, Flanged / Threaded, Floating, Series DBB (JC Valves)

DN (inch):	½" - 4"	<ul style="list-style-type: none">▪ 3-piece design▪ Full bore▪ Floating ball▪ API 6D
ANSI:	CL 150 - 2500	
Body materials:	A216WCB, A351 CF8M, 352 LCC, other materials on request	
Seat materials:	R-PTFE, other materials on request	
Connections:	Flanged, threaded	
Applications:	Oil, gas, chemicals	
Approvals:	ATEX, SIL, TA Luft/Fugitive emissions, Fire-safe, AD2000 W0/A4, NACE, API 6D	

JC
VALVES



Double Block and Bleed Valve, Type DBBV (Control Seal)

DN (inch):	2" - 42" (larger on request)	<ul style="list-style-type: none">▪ 100% tight shut-off▪ Friction-free opening and closing▪ Actuation: manual or automatic▪ Fast opening and closing▪ Maintenance friendly (less moving parts, in-line maintenance possible)
ANSI:	CL 150 - 2500	
Temperature (°C):	-196 up to +250	
Body materials:	A216 WCB, CF8M, wide choice of other materials on request, also according to DIN	
Seat materials:	Viton® A, FFKM, PTFE	
Design:	API 6D, ASME B16.34	
Execution:	Reduced or full (piggable) port	
Connections:	Flanged	
Face-to-face dimension:	API 6D, ASME B16.10, B16.47	
Options:	ATEX Cat II 2 G/D, various bleed systems	
Applications:	Oil and fuel	
Approvals:	SIL, TA Luft, Fugitive Emission, SHELL, AD2000 A4, Fire-safe, NACE	

CONTROL
Seal
valve manufacturer



Non Contact Rising Stem Ball Valve, Type RSBV (Control Seal)

DN (inch):	2" - 36"	<ul style="list-style-type: none">▪ 100% tight shut-off▪ Friction-free opening and closing▪ Actuation: manual or automatic▪ Fast opening and closing▪ Maintenance friendly▪ Self-cleaning▪ Frequent switching
ANSI:	CL 150 - 2500	
Temperature (°C):	-196 up to +538	
Body materials:	A216 WCB, CF8M, wide choice of other materials on request, also according to DIN	
Seat materials:	Metal	
Design:	API 6D, ASME B16.34	
Execution:	Reduced or full (piggable) port	
Connections:	Flanged	
Face-to-face dimension:	API 6D, ASME B16.10, B16.47	
Options:	Sand & slurry option up to 50% particles	
Applications:	Oil, gas, steam, hydrogen	
Approvals:	SIL, TA Luft, Fugitive Emission, SHELL, AD2000 A4, Fire-safe, NACE	

CONTROL
Seal
valve manufacturer



Ball Valves, Type SKV (Somas)

DN (mm):	25 - 500	<ul style="list-style-type: none"> Manual, shut-off and control valve Full bore Easy to replace seats without removing the actuator Tightness acc. to ANSI Class V to VI
PN (bar) / ANSI:	25, 50 / CL 150, 300	
Temperature (°C):	-196 up to +550	
Body materials:	1.4408, special materials	
Seat materials:	HiCo or PTFE/stainless steel (PTFE 53)	
Connections:	Flanged	
Applications:	Fibrous stock, pulp and pulp liquor applications	
Approvals:	ATEX (on request), SIL (on request), FDA (on request), TA Luft (on request)	



Compact Ball Valves, Type FA1/FB1/FC1/FA2/FB2/FC2 (Adler)

DN (mm):	10 - 50	<ul style="list-style-type: none"> One- or two-piece body Cast or forged steel Full bore
PN (bar) / ANSI:	10 - 160 / CL 150 - 1500	
Body materials:	Carbon steel, stainless steel, titanium, Hastelloy®, Monel®	
Seat materials:	PTFE, R-PTFE (PTFE glass, PTFE metal mixture), PEEK	
Connections:	Flanged	
Options:	Heating jacket, oil- and grease-free, cryogenic design, pressure equalizing hole, oval hand lever, cavity filling in PTFE / metal	
Applications:	High pressure shower pipes, white water, water, oil, gases, chemicals, low pressure steam	
Approvals:	ATEX, FDA, SIL3, TA Luft, Fire-safe	



3-Way Ball Valves, Type FT4/FZ4 and FT6/FZ6 (Adler)

DN (mm):	15 - 150	<ul style="list-style-type: none"> „L“ or „T“ shaped Type FT6/FZ6 for higher pressures
PN (bar) / ANSI:	10 - 40 / CL 150 - 300 (up to DN 50: PN 63)	
Body materials:	Carbon steel, stainless steel, titanium, Monel®, Hastelloy®	
Seat materials:	PTFE, R-PTFE (PTFE glass, PTFE metal mixture)	
Connections:	Threaded, block flanges	
Options:	Heating jacket, oil- and grease-free, cryogenic design, pressure equalizing hole, oval hand lever, cavity filling in PTFE	
Applications:	Water, oil, gas, chemicals	
Approvals:	ATEX, FDA, SIL3, TA Luft, Fire-safe	



Fully-Welded Ball Valves (Peter Meyer)

DN (mm):	10 - 150	<ul style="list-style-type: none"> One-piece body design (with screwed insert) Laser welded, without body seal Full bore Chambered seats Integrated cavity pressure relief system Replaceable packing in depressurized, built-in condition Low cavity behind the seats Antistatic device Minimum weight construction
PN (bar) / ANSI:	6 - 40 / CL 150 - 300	
Body materials:	1.4404, 1.4435, Hastelloy®, titanium, tantalum (further materials on request)	
Seat materials:	TFM pure, PTFE pure, PTFE-glass, TFM-glass, BA 130, PEEK mod., TFM 50% VA, metal	
Connections:	All standard connections, other connections on customer request	
Options:	Double gland packing, heating jacket, flushing bore, Ra < 0.8 µm in the through bore, locking device, special face-to-face dimensions	
Applications:	Chemicals, acids, liquors, industrial gases	
Approvals:	ATEX, FDA, SIL, TA Luft, Fire-safe, SVGW	



Two- and Multi-Way Ball Valves for Demanding Applications (Kitz/Perrin)

DN (mm):	15 - 600 / 1/2" - 24"	<ul style="list-style-type: none"> For special applications like abrasion, high temperatures and pressures Various materials and coatings For high switching cycles
PN (bar) / ANSI:	10 - 420 / CL 150 - 2500	
Temperature (°C):	-196 up to +800	
Body materials:	Carbon steel, stainless steel, titanium, Hastelloy®, special materials	
Seat materials:	PTFE, graphite, PEEK, metal	
Connections:	Flanged, threaded, butt weld ends, socket weld ends	
Options:	Heating/cooling jacket, grid and lock units, special coatings	
Applications:	Oil, gas, hydrogen, dosing, power stations, mining, PE-/PP-production	
Approvals:	ATEX, FDA, SIL, TA Luft, Fire-safe, DVGW (Gas)	



Knife Gate Valves, Type EB (Orbinox)

DN (mm):	50 - 1200 (higher on request)	<ul style="list-style-type: none">▪ Bi-directional sealing with exchangeable profile seal▪ Integrated flange seal ring
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	GGG40 (DN 50 - 300), GG25 (DN 350 - 1200), epoxy-coated	
Seat materials:	EPDM, NBR, Viton®	
Connections:	Wafer	
Applications:	Especially suitable for water and waste water applications, sludge, clean pulp stock up to 8% consistency	
Approvals:	ATEX (on request)	



Pulp Knife Gate Valves, Type HK/EX (Orbinox)

DN (mm):	50 - 1200 (higher on request)	<ul style="list-style-type: none">▪ One-piece body▪ Type HK: Seal ring flange-mounted from the outside▪ Type EX: Seal ring integrated into the body▪ Uni-directional sealing
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	GG25, GGG40, 1.4408, special materials	
Seat materials:	PTFE, EPDM, NBR, Viton®, metal	
Connections:	Wafer	
Options:	Bonnet design, V-port for regulation, flush connections, type EX with FDA approval available (on request)	
Applications:	Pulp < 5%, recycled paper pulp, water, waste water, bulk material, sludge	
Approvals:	ATEX (on request)	



Knife Gate Valve as End-Of-Line Valve, Type ET (Orbinox)

DN (mm):	50 - 750 (higher on request)	<ul style="list-style-type: none">▪ Acc. to TAPPI Standard▪ Drillings acc. to DIN available▪ Seal ring integrated into body▪ Uni-directional sealing
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	1.4408, cast iron	
Seat materials:	EPDM, Viton®, NBR, metal, PTFE	
Connections:	Lug type	
Options:	Bonnet design, V-port for regulation, flush connections	
Applications:	Pulp < 5%, liquids containing solids, recycled paper pulp, water, waste water, bulk material, sludge	
Approvals:	ATEX (on request)	



Pulp Knife Gate Valve, Type TK/TH/TL (Orbinox)

DN (mm):	50 - 1600	<ul style="list-style-type: none"> ▪ Through-going valve plate ▪ Bi-directional sealing ▪ TK: Seal ring flange-mounted from the outside ▪ TL: Seal ring integrated into body ▪ TH: reinforced construction up to 25 bar
PN (bar) / ANSI:	up to 25 / CL 300	
Body materials:	GG25, 1.4408, special materials	
Seat materials:	Metal, PTFE, EPDM, NBR, Viton®, special materials	
Connections:	Wafer	
Options:	V-port for regulation, flush connections	
Applications:	Pulp < 18%, liquids containing solids, recycled paper pulp, waste water, bulk material, sludge, rejects, syrup (seed magma)	
Approvals:	ATEX (on request)	



Reject Valve, Type CR (Orbinox)

DN (mm):	100 - 600 (higher on request)	<ul style="list-style-type: none"> ▪ Round inlet and larger rectangular outlet ▪ Hardened gates
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	GG25, 1.4408	
Seat materials:	Polyurethane, metal	
Connections:	Wafer	
Options:	Transition pieces square/round, bonnet design	
Applications:	Especially in recycled paper processing, heavy rejects, glass, clamps, sand, junk traps	
Approvals:	ATEX (on request)	



Reject Valve, Type DT (Orbinox)

DN (mm):	100 - 600 (higher on request)	<ul style="list-style-type: none">▪ Double plate knife gate valve enables short opening and closing times and avoids jamming▪ UHMW polyethylene body liner
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	Steel, stainless steel	
Seat materials:	Metal	
Connections:	Wafer	
Applications:	Heavy rejects, glass, metal parts, junk traps, especially in recycled paper processing and pulper applications	
Approvals:	ATEX (on request)	



Lined Knife Gate Valves, Type VG (Orbinox)

DN (mm):	50 - 900 (higher on request)	<ul style="list-style-type: none">▪ For abrasive media▪ With elastomer sleeves
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	GGG40	
Seat materials:	NR, EPDM, NBR	
Connections:	Wafer	
Options:	Splash-guard	
Applications:	Mining industry, chemical industry, solid-containing and abrasive sludges and slurries	
Approvals:	ATEX (on request)	



Safety Relief Valves, Type 1216 B (TOSACA)

DN (inch):	1/2"x1" - 1"x1"	<ul style="list-style-type: none"> Special materials available on request
PN (bar) / ANSI:	16, 40 / CL 150, 300	
Temperature (°C):	-196 up to +350	
Body materials:	A351 CF3M	
Seat materials:	Viton®/PTFE, AISI 316L	
Spring:	AISI 302, 17-7 PH	
Disc:	AISI 316L	
Connections:	Flanged, treaded, DIN or ANSI	
Design standards:	EN12516-1, EN4126-1/7 DIN 259, ANSI B2.1	
Options:	Lifting device, packed lifting lever, heating jacket, ECTFE coating	
Applications:	Steam, gases, liquids	
Approvals:	CE, ATEX, ISO9001:2008, AD2004 A4 (on request), UV-Stamp (on request)	



Safety Relief Valves, Type 1415 (TOSACA)

DN (inch):	1/2"x1" - 12"x16"	<ul style="list-style-type: none"> Up to ANSI600: 1/2"x1" - 12"x16" ≥ ANSI900: 1 1/2"x2 - 4"x6" Special materials available on request CR - Cryogenic version LP - Low pressure version
ANSI:	CL 150 - 2500	
Temperature (°C):	-196 up to +555	
Body materials:	A216 WCB, A351 CF3M, duplex	
Seat materials:	Viton®, PTFE, AISI 316L	
Spring:	1.8159, AISI 302	
Disc:	AISI 316L	
Connections:	Flanged acc. to ASME/ANSI B16.5	
Design standards:	API STD 526, ASME section VIII	
Options:	Lifting device, packed lifting lever, open bonnet, bellow seal, heating jacket, ECTFE coating	
Applications:	Steam, gases, liquids	
Approvals:	CE, ATEX, ISO9001:2008, AD2004 A4 (on request), UV-Stamp (on request)	



DIN Safety Relief Valves, Type 1400 DIN (TOSACA)

DN (mm):	15x25 - 400x500	<ul style="list-style-type: none">▪ Special materials available on request▪ CR - Cryogenic version▪ LP - Low pressure version
PN (bar):	16 - 100	
Temperature (°C):	-196 up to +455	
Body materials:	Cast iron, carbon steel, stainless steel, duplex	
Seat materials:	PTFE, Viton®, AISI 316L, AISI 316L+Stellite	
Spring:	1.8159, AISI 302	
Disc:	AISI 316L	
Connections:	Flanged (DIN)	
Design standards:	EN12516-1, EN4126-1/7	
Options:	Lifting device, packed lifting lever, open bonnet, bellow seal, heating jacket, ECTFE coating	
Applications:	Steam, gases, liquids	
Approvals:	CE, ATEX, ISO9001:2008, AD2004 A4 (on request), UV-Stamp (on request)	

TOSACA
Safety relief valves



DIN Safety Relief Valves, Threaded, Type 1216 (TOSACA)

DN (Zoll):	1/2"x3/4" - 2"x2"	<ul style="list-style-type: none">▪ Special materials available on request▪ CR - Cryogenic version▪ C - Clamp version
PN (bar):	40	
Temperature (°C):	-196 up to +455	
Body materials:	A351 CF3M	
Seat materials:	PTFE, Viton®, AISI 316L	
Spring:	AISI 302, 17-7 PH	
Disc:	AISI 316L	
Connections:	BSP/NPT threads	
Design standards:	EN12516-1, EN4126-1/7	
Options:	Lifting device, packed lifting lever, heating jacket, ECTFE coating	
Applications:	Steam, gases, liquids	
Approvals:	CE, ATEX, ISO9001:2008, AD2004 A4 (on request), UV-Stamp (on request)	

TOSACA
Safety relief valves



DIN High Pressure Safety Relief Valves, Type 1216 HP (TOSACA)

DN (inch):	1/2"x3/4" - 2"x2"	<ul style="list-style-type: none"> PN100: 1"x2" - 2"x2" PN250 - 400: 1/2"x3/4" - 1"x1" Special materials available on request CR - Cryogenic version
PN (bar):	100, 250, 400	
Temperature (°C):	-196 up to +300	
Body materials:	A351 CF3M	
Seat materials:	AISI 316L	
Spring:	Inconel X750, 17-7 PH	
Disc:	17-4 PH	
Connections:	BSP/NPT threads	
Design standards:	EN12516-1, EN4126-1/7 DIN 259, ANSI B2.1	
Options:	Lifting device, packed lifting lever, heating jacket, ECTFE coating	
Applications:	Steam, gases, liquids	
Approvals:	CE, ATEX, ISO 9001:2008, AD2004 A4 (on request), UV-Stamp (on request)	

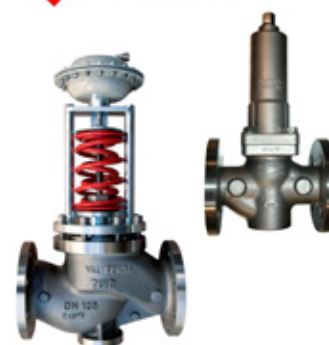
TOSACA
Safety relief valves



Pressure Reducing Valves (VALFONTA)

DN (mm):	8 - 150	<ul style="list-style-type: none"> European manufacturing Short delivery times Special executions according to customer requirements
PN (bar):	16 - 40	
Temperature (°C):	up to +250	
Body materials:	Ductile iron, cast steel, stainless steel, bronze, special materials	
Connections:	Threaded, flanged (DIN, ANSI), welded ends	
Applications:	Steam, water, other liquids, oil, air, other gases	
Approvals:	CE, ATEX, ISO 9001:2015	

 **VALFONTA**
valve design and manufacturing



Excess Pressure Valves (VALFONTA)

DN (mm):	15 - 150	<ul style="list-style-type: none"> European manufacturing Short delivery times Special executions according to customer requirements
PN (bar):	16 - 40	
Temperature (°C):	up to +350	
Body materials:	Ductile iron, cast steel, stainless steel, bronze, special materials	
Connections:	Threaded, flanged (DIN, ANSI), welded ends	
Applications:	Steam, water, other liquids, oil, air, other gases	
Approvals:	CE, ATEX, ISO 9001:2015	

 **VALFONTA**
valve design and manufacturing



Plastic Butterfly Valves, Series EXTREME (CEPEX)

DN (mm):	65 - 300	▪ Design acc. to EN ISO 16136
PN (bar):	6 - 10	
Temperature (°C):	-30 up to +120	
Body materials:	PP-H, GR	
Seat materials:	EPDM, FPM (FKM)	
Disc:	PVC-U, PVC-C, PP-H, PVDF, ABS	
Stem:	1.4542 / 17-4 PH / AISI 630	
Connections:	Wafer, lug type	
Applications:	Shut-off and control of liquids	
Approvals:	CE, ACS, WRAS, ISO 9001, ISO 14001	



Plastic Ball Valves, Series EXTREME (CEPEX)

DN (mm):	10 - 100	▪ Design acc. to EN ISO 16135:2007
PN (bar):	10 - 16	
Temperature (°C):	-30 up to +120	
Body materials:	PVC-U, PVC-C, PP-H, PVDF, ABS	
Body O-ring:	EPDM, FPM (FKM)	
Seat materials:	PTFE	
Ball materials:	PVC-U, PVC-C, PP-H, PVDF, ABS	
Stem:	PVC-U, PVC-C, PP-H, PVDF, ABS	
Connections:	Female / male solvent socket, female / male threaded, flanged, PE 100, socket weld ends, butt weld ends	
Options:	Lever with throttle plate, pneumatic and electric actuator	
Applications:	Shut-off and control of liquids	
Approvals:	CE, ACS, WRAS, ISO 9001, ISO 14001	



Plastic Diaphragm Valves, Series EXTREME (CEPEX)

DN (mm):	15 - 50	▪ Design acc. to EN ISO 16138:2007
PN (bar):	6 - 10	
Temperature (°C):	+5 up to +80	
Body materials:	PVC-U, PVC-C, PP-H, PVDF	
Diaphragm/O-Rings:	EPDM, FPM	
Stem:	PPO + GF	
Connections:	Female / male solvent socket, female / male threaded, flanged, PE 100, socket weld ends, butt weld ends	
Applications:	Shut-off and precise control of liquids	
Approvals:	CE, ACS, WRAS, ISO 9001, ISO 14001	



DIN Small Shut-off Gate Valves, Forged Design (BFE)

DN (mm):	15 - 50	<ul style="list-style-type: none">▪ Integral flanged ends▪ Solid wedge design DN15-40▪ Flexible wedge design DN50▪ Full bore▪ Bolted bonnet▪ Face-to-face length DN15-32 acc. to EN558-1, basic line 1▪ Face-to-face length DN40-50 acc. to EN558-1, basic line 26
PN (bar):	25/40	
Body materials:	1.0460, 1.4571, LF2	
Seat/wedge:	Metal seat (depending on body material)	
Connections:	Flanged	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft, NACE, AD2000 W0/A4	



ANSI Small Shut-off Gate Valves, Forged Design (JC Valves)

DN (inch):	1/2" - 2"	<ul style="list-style-type: none">▪ Full bore▪ Solid wedge design DN15-40▪ Flexible wedge design DN50▪ Bolted bonnet up to CL 1500▪ Welded bonnet up to CL 4500▪ Testing acc. API 598
ANSI:	CL 150 - 4500	
Body materials:	A105, F316, LF2, other materials on request	
Connections:	Flanged, socket weld ends, butt weld ends, threaded	
Design standards:	ASME B16.34 / API 602	
Options:	Bellows seal, oil- and grease-free, cryogenic	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft, NACE, AD2000 W0/A4	



DIN Metal Seated Flat Gate Valves PN 10/16 and Oval Gate Valves PN 25 (Bombas Borja)

DN (mm):	40 - 800	<ul style="list-style-type: none">▪ With inside steam Fig. 31 = PN10 Fig. 31N = PN16 Fig. 33 = PN25▪ With outside steam Fig. 34 = PN10 Fig. 34N = PN16 Fig. 36 = PN25▪ Standard packing up to 120°C, for higher working temperatures packing will be changed
PN (bar):	10/16/25	
Body materials:	GGG50 (GG25 for PN10 types up to DN300) Epoxy coating RAL5017	
Wedge materials:	GGG50 (GG25 for PN10 types up to DN300) Epoxy coating RAL5017	
Body and wedge seat rings:	Brass EN-12164 (AISI304; for DN350-800 bronze on request)	
Connections:	Flanged	
Face-to-face:	PN10/16: EN 558, GR14 PN25: EN 558, GR15	
Options:	Stem extensions, square caps, position indicator, limit switches	
Applications:	Water, waste water	



DIN Metal Seated Flat Gate Valve Type with Bolted Cover, Fig. 38 ECO (Bombas Borja)

DN (mm):	50 - 300	<ul style="list-style-type: none"> Standard packing up to 80°C, for higher working temperatures packing will be changed
PN (bar):	10	
Body materials:	GG25 Epoxy coating RAL5017	
Wedge materials:	GG25 Epoxy coating RAL5017	
Body and wedge seat rings:	Brass EN-12164	
Connections:	Flanged	
Face-to-face:	EN 558, GR14	
Options:	Stem extensions, square caps, position indicator, limit switches	
Applications:	Water, waste water	



Rubber Lined Wedge Gate Valves, Fig. 50N (Bombas Borja)

DN (mm):	40 - 800	<ul style="list-style-type: none">▪ Continuous internal and external coating of the body for improved corrosion protection▪ Working conditions EPDM: -1 to +16 bar, -10 to +100°C▪ Working conditions NBR: -1 to +16 bar, -10 to +80°C
PN (bar):	10 - 16 (PN 25 Fig. 52)	
Body materials:	GGG50 Epoxy coating RAL5017 min. 250 µm	
Wedge rubber coating, sealings:	EPDM, NBR	
Connections:	Flanged, socket connection DN20-50 (Fig. 53)	
Face-to-face:	EN 558, GR14 or GR15 (Fig. 52)	
Options:	Stem extensions, square caps, position indicator, limit switches	
Applications:	Water, waste water	
Approvals:	WRAS	



DIN Gate Valves, Cast Design (RT Valves)

DN (mm):	50 - 1000	<ul style="list-style-type: none">▪ Different face-to-face acc. DIN EN▪ Bolted bonnet or pressure sealed▪ Double plate, flexible or solid wedge
PN (bar):	6 - 320	
Body materials:	1.0619, 1.4408, LCC, other materials on request	
Temperature (°C):	-196 up to +650	
Connections:	Flanged, welded ends	
Design standards:	EN12516	
Options:	Bellows seal, ISO top flange (convertible), live loaded packing, packing extraction system, stem and/or cryogenic extensions, position indicator, position indicator with limit switches, locking device, drain plug, bypass, pressure relief valve	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft (on request), AD2000 W0/A4 (on request)	



DIN High Pressure Double Plate Wedge Gate Valves (Wakmet)

DN (mm):	50 - 600	<ul style="list-style-type: none">▪ 2-plate design▪ With cover flange: up to PN100▪ With self pressure cover lock: PN160 and higher▪ Forged body and bonnet▪ Sealing faces up to PN100 made of Cr-Ni-steel or Stellite; PN160 and higher: Stellite
PN (bar):	40 - 630	
Body materials:	Forged steel	
Connections:	Flanged, welded ends	
Design standards:	EN12516	
Options:	Live loaded packing, position indicator, position indicator with limit switches, locking device, drain plug, bypass, pressure relief valve	
Applications:	Steam, water, gas, oil, condensate	
Approvals:	ATEX, TA Luft (on request), AD2000 A4/HPO (on request)	



DIN Forged Steel Shut-off and Control Globe Valves with Gland Seal or Bellows Seal (Wakmet)

DN (mm):	15 - 300	<ul style="list-style-type: none">▪ Graphite packing or bellows seal▪ Straight pattern or Y-type▪ Shut-off or throttling plug▪ With cover flange: up to PN160▪ As bayonet lock without cover: PN250 (DN15-50) and higher▪ With self pressure cover lock: PN250 (DN65) and higher▪ Sealing faces up to PN160: Cr-Ni-steel or Stellite; PN250 and higher: Stellite
PN (bar):	40 - 630 (bellows seal up to PN160)	
Body materials:	Forged steel	
Connections:	Flanged, socket weld ends, butt weld ends, threaded	
Design standards:	DIN	
Applications:	Steam, water, gas, oil, condensate	
Approvals:	ATEX, TA Luft on request, AD2000 A4/HPO on request	



DIN Forged Piston Check and Piston Closing Check Valves (Wakmet)

DN (mm):	15 - 300	<ul style="list-style-type: none">▪ With cover flange: up to PN160▪ With screwed cover: PN250 (DN15-25) and higher▪ Self pressure cover lock: PN250 (DN32) and higher▪ Check disc with closing spring▪ Sealing faces up to PN160 made of Cr-Ni-steel or Stellite; PN250 and higher: Stellite
PN (bar):	40 - 630	
Body materials:	Forged steel	
Connections:	Flanged, socket weld ends, butt weld ends, threaded	
Design standards:	DIN	
Applications:	Steam, water, gas, oil, condensate	
Approvals:	ATEX, TA Luft on request, AD2000 A4/HPO on request	



DIN Swing Check Valves in Forged Design (Wakmet)

DN (mm):	50 - 600	<ul style="list-style-type: none">▪ With cover flange: up to PN100▪ With self pressure cover lock: PN160 and higher▪ Sealing faces up to PN100 made of Cr-Ni-steel or Stellite; PN160 and higher: Stellite
PN (bar):	40 - 630	
Body materials:	Various forged materials	
Connections:	Flanged, socket weld ends, butt weld ends	
Design standards:	DIN	
Applications:	Water, steam, gas, oil, condensate	
Approvals:	ATEX, TA Luft on request, AD2000 A4/HPO on request	



DIN Shut-off and Control Globe Valves with Gland Seal or Bellows Seal (LDM Valves)

DN (mm):	15 - 400	<ul style="list-style-type: none">▪ Gland seal: Series UV226-S & UV236-S▪ Bellows seal: Series UV226-R & UV236-R▪ Straight through▪ Pressure balanced plug from DN200▪ Flow characteristic: on/off, linear▪ Position indicator
PN (bar):	16 - 40	
Temperature (°C):	-60 up to +400	
Body materials:	1.0619 (Type UV226) / 1.4581 (Type UV236), LCB, other materials on request	
Gland seal:	Graphite packing equipped with backseat - Type S	
Bellows seal:	Stainless steel bellows with safety graphite packing - Type R	
Trim material:	Stainless steel	
Connections:	Flanged	
Design standards:	DIN	
Options:	Control plug, oil- and grease-free, ASTM body/bonnet material, non explosive execution	
Applications:	Water, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX on request, TA Luft on request, AD2000 A4/W5 on request	



DIN Shut-off and Control Globe Valves „Stellite Version“ with Gland Seal or Bellows Seal (LDM Valves)

DN (mm):	15 - 400	<ul style="list-style-type: none">▪ Gland seal: Series UV227-S & UV237-S▪ Bellows seal: Series UV227-R & UV237-R▪ Straight through, with hard metal overlay seat and spiral-wound cover gasket▪ Pressure balanced plug from DN200▪ Flow characteristic: on/off, linear▪ Position indicator
PN (bar):	16 - 40	
Temperature (°C):	-60 up to +550	
Body materials:	1.0619 (Type UV227) / 1.4581 (Type UV237), LCB, other materials on request	
Gland seal:	Graphite packing equipped with backseat	
Bellows seal:	Stainless steel bellows with safety graphite packing	
Plug/seat hard overlay executions:	CrNiMoTi/CrNiMn, CrNiMoTi/Stellite 6, Stellite 6/Stellite 6, 13Cr/Stellite 6	
Connections:	Flanged	
Design standards:	DIN	
Applications:	Steam, water, gas, oil, condensate	
Approvals:	ATEX on request, TA Luft on request, AD2000 A4/W5 on request	



ANSI Forged Shut-off and Control Globe Valves (JC Valves)

DN (inch):	1/2" - 2"	<ul style="list-style-type: none">▪ Straight through▪ Reduced bore▪ Design standard: ASME B16.34 / API 602▪ Testing acc. API 598
ANSI:	CL 150 - 4500	
Body materials:	A105, F316, LF2, other materials on request	
Connections:	Flanged, socket weld ends, butt weld ends, threaded	
Options:	Y-type, bellows seal, oil- and grease-free, cryogenic	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft, NACE, AD2000 W0/A4	



ANSI Shut-off and Control Globe Valves with Gland Seal or Bellows Seal (JC Valves)

DN (inch):	1/2" - 20"	<ul style="list-style-type: none">▪ Design standard: ASME B16.34▪ Straight through▪ With hard metal overlay▪ Flow characteristic: on/off, linear
ANSI:	CL 150 - 2500 (bellows seal up to CL 900)	
Body materials:	A216 WCB, A352 LCB, A351 CF8M, other materials on request	
Connections:	Flanged, butt weld ends	
Applications:	Steam, water, gas, oil, condensate	
Approvals:	ATEX, TA Luft, NACE, AD2000 W0/A4	



DIN and ANSI Strainers in Cast or Forged Design

DN (mm):	15 - 400 / 1/2" - 36"	<ul style="list-style-type: none"> ▪ Y-type ▪ Different mesh sizes available ▪ Face-to-face length acc. to EN 558-1 Series 1 or ASME B16.34 ▪ Pressure seal design CL 900 - 2500
PN (bar):	16 - 40 / CL 150 - 2500	
Body materials:	GG25, GGG40, 1.0619 (A216 WCB), A352 LCB, 1.4408 (A351 CF8M), 1.4581, other materials on request; forged body executions on request	
Mesh screen material:	Stainless steel	
Connections:	Flanged, female thread, socket weld ends, butt weld ends	
Design standards:	DIN / ASME B16.34	
Options:	Oil- and grease-free, drain plug	
Applications:	Water, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX on request, TA Luft on request, AD2000 A4/W5 on request, NACE on request	



Ball Segment Valves, Wafer Design, Centric / Eccentric, Type KVTW-A (Somas)

DN (mm):	25/2 - 250	<ul style="list-style-type: none"> ▪ Somas standard face-to-face dimensions ▪ Centric (type KVTW) or eccentric (type K VXW) design ▪ Low-Noise: noise reduction for high differential pressures ▪ V-groove (type KVMW) for high consistency pulp ▪ Particularly high Kv-values
PN (bar) / ANSI:	10 - 100 / CL 150 - 300	
Temperature (°C):	-196 up to +550	
Body materials:	1.4408, Hastelloy® C, titanium, special materials	
Seat materials:	PTFE (10% carbon), PTFE 53 (50% 1.4435), HiCo, PEEK (high temperature resistant plastic), without seat (hard chromed cover plate)	
Connections:	Wafer	
Options:	Manual override, safety interlock at the actuator	
Applications:	Pulp stock up to 10%, steam, water, solid-containing gases, rejects	
Approvals:	ATEX, FDA (on request), SIL, TA Luft (on request)	



Ball Segment Valves, Wafer Design, Short Face-to-Face Dimension, Centric / Eccentric, Type KVTW-D (Somas)

DN (mm):	25/2 - 250	<ul style="list-style-type: none"> ▪ Short face-to-face dimension ▪ Centric (Type KVTW) or eccentric (Type K VXW) design ▪ Low-Noise: noise reduction for high differential pressures ▪ V-groove (type KVMW) for high consistency pulp ▪ Particularly high Kv-values
PN (bar) / ANSI:	up to 25 / CL 150	
Temperature (°C):	-196 up to +550	
Body materials:	1.4408, Hastelloy® C, titanium, special materials	
Seat materials:	PTFE (10% carbon), PTFE 53 (50% 1.4435), HiCo, PEEK (high temperature resistant plastic), without seat (hard chromed cover plate)	
Connections:	Wafer	
Options:	Manual override, safety interlock at the actuator	
Applications:	Pulp stock up to 10%, steam, water, solid-containing gases, rejects	
Approvals:	ATEX, FDA (on request), SIL, TA Luft (on request)	



Ball Segment Valves, Flanged Design, Centric / Eccentric, Type KVTF-L / KVTF-B (Somas)

DN (mm):	25/2 - 65 (KVTF-L), 80-700 (KVTF-B)	<ul style="list-style-type: none"> Face-to-face dimension acc. to EN 558, series 15 Full bore Centric (Type KVTW) or eccentric (Type KVXW) design Low-Noise: noise reduction for high differential pressures V-groove (type KVMW) for high consistency pulp Particularly high Kv-values
PN (bar) / ANSI:	up to 50 / CL 150 - 300	
Temperature (°C):	-196 up to +550	
Body materials:	1.4408, Hastelloy® C, titanium, special materials	
Seat materials:	PTFE (10% carbon), PTFE 53 (50% 1.4435), HiCo, PEEK (high temperature resistant plastic), without seat (hard chromed cover plate)	
Connections:	Flanged	
Options:	Manual override, safety interlock at the actuator	
Applications:	Pulp stock up to 10%, steam, water, solid-containing gases, rejects	
Approvals:	ATEX, FDA (on request), SIL, TA Luft (on request)	



Ball Segment Valves, Flanged Design, Short Face-to-Face Dimension, Centric / Eccentric, Type KVTF-C (Somas)

DN (mm):	80 - 400	<ul style="list-style-type: none"> Short face-to-face dimension acc. to EN 558:2008 series 36 Reduced bore Centric (Type KVTW) or eccentric (Type KVXW) design Low-Noise: noise reduction for high differential pressures V-groove (type KVMW) for high consistency pulp
PN (bar) / ANSI:	up to 25 / CL 150	
Temperature (°C):	-196 up to +550	
Body materials:	1.4408, Hastelloy® C, titanium, special materials	
Seat materials:	PTFE (10% carbon), PTFE 53 (50% 1.4435), HiCo, PEEK (high temperature resistant plastic), without seat (hard chromed cover plate)	
Connections:	Flanged	
Options:	Manual override, safety interlock at the actuator	
Applications:	Pulp stock up to 10%, steam, water, solid-containing gases, rejects	
Approvals:	ATEX, FDA (on request), SIL, TA Luft (on request)	



Ball Segment Valves, Medium and High Consistency Valves (Somas)

DN (mm):	100/150 - 350/400	<ul style="list-style-type: none">▪ Smaller nominal inlet to outlet size▪ V-groove
PN (bar) / ANSI:	25 / CL 150	
Body materials:	1.4408, CF8M	
Seat materials:	PTFE 53 (50% 1.4435), HiCo	
Connections:	Flanged	
Applications:	Specially designed for high stock consistencies > 10%	
Approvals:	ATEX (on request), SIL (on request), FDA (on request), TA Luft (on request)	



Ball Segment Valves, Basis Weight Valve (Somas)

DN (mm):	50 - 350	<ul style="list-style-type: none">▪ Based on the Somas ball segment valve▪ Complete unit - with special electric actuators
PN (bar):	10 - 25	
Temperature (°C):	-196 up to +550	
Body materials:	1.4408, Hastelloy® C, titanium, special materials	
Seat materials:	PTFE (10% carbon), PTFE 53 (50% 1.4435), HiCo	
Connections:	Wafer, flanged	
Applications:	Basis weight regulation, especially constructed to meet the requirements of the paper industry	
Approvals:	ATEX (on request), SIL (on request), FDA (on request), TA Luft (on request)	



2- and 3-Way Control Valves

DN (mm):	15 - 300	<ul style="list-style-type: none">▪ Mixing or diverting function▪ Rangeability 50:1▪ Leakage rate Class III/IV acc. to EN 1349▪ Face to face-dimensions acc. to EN 558-1, series 1
PN (bar):	16 - 40	
Temperature (°C):	-20 up to +500	
Body materials:	Ductile iron, cast steel, stainless steel	
Seat materials:	1.4028/1.4027, 1.4571/1.4581	
Plug materials:	1.4021/1.4027, 1.4571/1.4581	
Kvs values:	1,6 - 1000 m³/h	
Connections:	Flanges acc. to EN 1092	
Options:	Bellow seal, perforated plug, oxygen and food execution	
Applications:	Hot water, steam, power generation, chemical industry, heating and ventilation	
Approvals:	CE, ATEX, ISO 9001:2015, TRD 100/110/201, TRB 801, ISO 14001:2015, OHSAS	



Globe Valves in 2- and 3-Way Design (Flowtec)

DN (mm):	4 - 200 / 1/4" - 8"	<ul style="list-style-type: none"> Optimally adapted design depending on the individual application Adaptable Kv-values and characteristics Mixing or diverting function
PN (bar) / ANSI:	10 - 63 / CL 150, 300	
Temperature (°C):	-196 up to +350	
Body materials:	GGG40, 1.0619, 1.4408	
Seat materials:	Stainless steel, stellited, plastic layer	
Connections:	Flanged, threaded and welded ends	
Options:	Bellow seal, extended stem, cryogenic design	
Applications:	Water, steam, oil, heat exchanger, gases	
Approvals:	ATEX	



Micro Flow Valves (Badger Meter)

DN (mm):	15 - 50 / 1/4" - 2"	<ul style="list-style-type: none"> Variety of combinations of materials, innervolve and other components Globe or angle design
PN (bar):	up to 340	
Temperature (°C):	-70 up to +530	
Body materials:	Stainless steel	
Seat materials:	Stainless steel, stellited, Hastelloy®, tantalum	
Kvs range:	0.0000015 - 5.1	
Connections:	Flanged, threaded and special connections	
Options:	Bellow seal, cooling fins, extended stem, special packings	
Applications:	General industry, research, development, pilot plants, liquids, gases, steam	
Approvals:	ATEX, SIL, TA Luft, FDA	



Tilting Disc Check Valves, Type RM (Orbinox)

DN (mm):	40 - 900	<ul style="list-style-type: none">▪ Robust design▪ Metal sealing▪ Eccentric design▪ Quick closing reaction due to oblique sealing▪ Short face-to-face dimension▪ Also suitable for low differential pressures
PN (bar):	10 - 40	
Temperature (°C):	up to +400	
Body materials:	1.4408, special materials	
Seat materials:	Metal	
Connections:	Wafer	
Options:	Auxiliary spring, counterweight, hydraulic damping device	
Applications:	White water, pulp < 5%, sludge, wastewater treatment plants, food and beverage, water, steam, gas, air	
Approvals:	ATEX (on request)	



Wafer Swing Check Valves, Type CSC / CSCF (ChemValve-Schmid)

DN (mm):	50 - 1000	<ul style="list-style-type: none">▪ Cast disc with opening limit▪ Tight-closing already in case of low pressure difference by additional spring (DN50-200)▪ Ring screw for mounting (standard)▪ Centering by outer diameter of body▪ Short weight-saving overall length
PN (bar) / ANSI:	10 - 16 / CL 150	
Body materials:	1.0619, 1.4408, 1.4404, bronze, duplex, super duplex, PP, PTFE + 25% glass	
Seat materials:	Metal, NBR, EPDM, Viton®, PTFE	
Applications:	Liquids, gases, steams	
Approvals:	AD2000 W0, FDA (on request), ATEX	



Dual Plate Check Valves, Type DDC (ChemValve-Schmid)

DN (mm):	50 - 1000	<ul style="list-style-type: none">▪ Eccentric disc for low zeta values and a minimum of pressure drop▪ Equipped with special springs for minimal opening pressures and short closing times▪ Favorable for hydraulic installations▪ Available in API overall lengths and according to ASTM materials
PN (bar) / ANSI:	10 - 100 / CL 150 - 600	
Body materials:	1.4301, 1.0038, 2.1090, 1.4404	
Seat materials:	Metal, NBR, EPDM, Viton®, PTFE	
Applications:	Liquids, gases, steams	
Approvals:	AD2000 W0, FDA (on request), ATEX	



Check Valves, Type CSD / CVD (ChemValve-Schmid)

DN (mm):	15 - 350	<ul style="list-style-type: none">▪ Up to DN100: Cast-on centering collar with wide flange connection faces▪ DN125-350: Centering through body (external diameter) or optionally with centering ring▪ Guiding of valve plate by body ribs▪ Protected spring bearing quality▪ Body made of investment casting▪ Broad connection faces secure optimal holding of the flange sealings
PN (bar) / ANSI:	6 - 40 / CL 150 - 300	
Body materials:	1.0619, 1.4408, 1.4404, bronze, duplex, super duplex, Hastelloy®, titanium, Uranus®, etc.	
Seat materials:	Metal, NBR, EPDM, Viton®, PTFE	
Options:	Special springs for variable opening pressures	
Applications:	Liquids, gases, steams	
Approvals:	AD2000 W0, FDA (on request), ATEX	

 **ChemValve-Schmid**
Valve Technology



Check Valves, Forged Design, Type DSF (ChemValve-Schmid)

DN (mm):	15 - 100	<ul style="list-style-type: none">▪ From bar material▪ Broad flange connection on both sides▪ Guiding of valve plate by body ribs▪ Centering through body (external diameter)
PN (bar) / ANSI:	10 - 250 / CL 150 - 2500	
Body materials:	1.0619, 1.4408	
Seat materials:	Metal, NBR, EPDM, Viton®, PTFE	
Applications:	Liquids, gases, steams	
Approvals:	AD2000 W0, FDA (on request), ATEX	

 **ChemValve-Schmid**
Valve Technology



Non Return Nozzle Check Valves, Type CSL streamLiner (ChemValve-Schmid)

DN (mm):	15 - 100 (DN125-350 made of solid material)	<ul style="list-style-type: none">▪ Low pressure loss▪ Non-slam closure
PN (bar) / ANSI:	10 - 250 / CL 150 - 2500	
Body materials:	Stainless steel casting as well as special materials in solid material	
Seat materials:	Metal, NBR, EPDM, Viton®, PTFE	
Applications:	Liquids, gases, steams	
Approvals:	AD2000 W0, FDA (on request), ATEX	

 **ChemValve-Schmid**
Valve Technology



PTFE Lined Check Valves, Type DTEF (ChemValve-Schmid)

DN (mm):	15 - 150	<ul style="list-style-type: none"> Hastelloy® spring coated with PTFE/PFA tube and welded on the ends
PN (bar) / ANSI:	10 / CL 150	
Body materials:	PTFE + 25% glass, TFM/PTFE cond. FDA	
Valve plate:	PTFE + 25% glass, TFM/PTFE cond. FDA	
Seat materials:	Without sealing, Viton®, EPDM, NBR	
Connections:	Mounting between flanges acc. to DIN EN 1092-1	
Applications:	Corrosive and aggressive liquids and gases, food	
Approvals:	ATEX, FDA, SIL	

 **ChemValve-Schmid**
Valve Technology



DIN Piston Check and Piston Closing Check Valves

DN (mm):	15 - 200	<ul style="list-style-type: none"> Different design options available (with spring, without spring, check closing, check closing without spring)
PN (bar):	16 - 40	
Temperature (°C):	-10 up to +400	
Body materials:	1.0619 (Type ZV226/ZV227) / 1.4581 (Type ZV236/ZV237), LCB, other materials on request	
Plug/seat		
Type ZV226/236:	In stainless steel	
Plug/seat	In hard overlay execution	
Type ZV227/237:	(CrNiMoTi / CrNiMn, CrNiMoTi / Stellite 6, Stellite 6 / Stellite 6, 13Cr / Stellite 6)	
Connections:	Flanged	
Design standards:	DIN	
Options:	Oil- and grease-free, ASTM body/bonnet material	
Applications:	Water, oil, gas, chemicals, low pressure steam	
Approvals:	ATEX on request, TA Luft on request, AD2000 A4/W5 on request	



ANSI Forged Piston Check Valves (JC Valves)

DN (inch):	1/2" - 2"	<ul style="list-style-type: none">▪ Bolted bonnet▪ Straight pattern▪ Testing acc. API 598
ANSI:	CL 150 - 2500	
Body materials:	A105, F316, LF2, other materials on request	
Connections:	Flanged, socket weld ends, butt weld ends, threaded	
Design standards:	ASME B16.34 / API602	
Options:	Y-type, oil- and grease-free, welded bonnet	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft, NACE, AD2000 W0/A4	

JC
VALVES



ANSI Swing Check Valves (JC Valves)

DN (inch):	2" - 40"	<ul style="list-style-type: none">▪ Straight through▪ Bolted bonnet design CL 150 - 2500▪ Pressure seal design CL 900 - 2500
ANSI:	CL 150 - 4500	
Body materials:	Cast body materials A216 WCB, A352 LCB, A351 CF8M, other materials on request Forged body executions on request	
Connections:	Flanged, socket weld ends, butt weld ends	
Design standards:	ASME B16.34	
Options:	Lever and weight	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft, NACE, AD2000 W0/A4	

JC
VALVES



Ball Check Valves, Fig. 40 (Bombas Borja)

DN (mm):	40 - 600	<ul style="list-style-type: none"> Continuous internal and external coating of the body for improved corrosion protection Working conditions NBR: -1 to +16 bar, -10 to +80°C
PN (bar):	10	
Body materials DN40-300:	GG25, epoxy coating RAL5017, min. 250 µm	
Body materials DN350-600:	GGG50, epoxy coating RAL5017, min. 250 µm	
Ball materials:	NBR rubberized	
Connections:	Flanged, socket connection DN25-80 (Fig. 44)	
Face-to-face:	EN 558-1 Series F48	
Applications:	Water, waste water	



DIN Swing Check Valves, Fig. 13 / 13N / 13N-F48 (Bombas Borja)

DN (mm):	40 - 700	<ul style="list-style-type: none"> Epoxy coating for improved corrosion protection
PN (bar):	10/16/25	
Body materials:	GG25, epoxy coating RAL5017 (Type 13), GGG40, epoxy coating RAL5017 (Type 13N)	
Connections:	Flanged	
Face-to-face:	13+13N acc. manufacturer standard 13N-F48: EN558-1 Series F48	
Options:	Hydraulic damper, counterweight, by-pass pipe	
Applications:	Water, waste water	



DIN Swing Check Valves in Cast Design (RT Valves)

DN (mm):	50 - 1000	<ul style="list-style-type: none"> Different face to face acc. DIN EN Bolted bonnet or pressure sealed
PN (bar):	6 - 320	
Body materials:	1.0619, 1.4408, LCC, other materials on request	
Temperature (°C):	-196 up to +650	
Connections:	Flanged, welded ends	
Design standards:	DIN EN12516	
Options:	Position indicator, position indicator with limit switches, hydraulic brake, bypass, pressure relief valve, stop device with handwheel	
Applications:	Water, oil, gas, chemicals, steam	
Approvals:	ATEX, TA Luft (on request), SIL, AD2000 W0/A4	



All-Ceramic and Partially Ceramic Modular Ball Valves (Cera System)

Ball valves and sliding disc valves are getting highly wear-resistant due to the strategic use of ceramic components. These valves are mainly used for control and on/off applications for abrasive, corrosive, and solid-containing media like fly ash, lime milk, lime mud, kaolin, titanium dioxide, acids, alkaline solutions, pigments, etc. Due to its modular design, „Cera Valve“ provides numerous different designs for many different application possibilities.

DN (mm): 15 - 300
PN (bar): up to 40 (higher pressures possible)
Temperature (°C): -30 up to +950
Compact or flanged design
Control and on/off valve
Flow rates from 1m³/h up to 2,800m³/h
Spring-loaded sealing system with trunnion mounted and floating ball, also hardened metal or tungsten carbide ball available
Used ceramics: Aluminium oxide, zirconium oxide, silicon carbide, silicon nitride
Approvals: TA Luft, SIL, ATEX
Applications: where corrosion, temperature and abrasion meet; chemical industry, pulp and paper industry, steel mills, power plants, waste incineration plants, pneumatic conveyor systems, liquors, MgO, fillers, rejects, sand, TiO ₂ , corrosive vapours.



Sliding Disc Valves (Cera System)

The sliding disc valve is dead space-free and gas tight and is particularly suitable for regulation of low volumes as well as dosing tasks. In the case of type SSC, the medium flows solely through ceramic (no metallic contact). Suitable for control and on/off applications.

Key data:

DN (mm): 1 - 200
PN (bar): up to 40
Temperature (°C): up to +450 (higher on request)

Designs:

Design for chemical industry (type SSC)
Light-weight design (type SDL)
4-plate design (type SVC)

Applications:

Where corrosion, temperature and abrasion meet; highly corrosive media, pharmaceutical products, products for microelectronics (pure silicon), liquors, MgO, fillers, TiO ₂ , corrosive vapours.



Wear Protection of Pipes, Pipe Elbows, T/Y-Pieces, Orifice Plates, Reducers (Cera System)

The pipe elbows made of one-piece cast ceramic are nominal size conform. These pipe elbows are characterized by the use of premium ceramics, low weight, and step-free transition. The components can also be adapted to existing systems, without changing the pipelines.



Pinch Valves RF VALVE, Type BE / BO (RF Valves)

DN (mm):	25 - 1500	<ul style="list-style-type: none"> Control and on/off applications Patented non-stretch tube design with expansion arches Wide range of elastomer qualities In-line quick tube change Face-to-face dimensions according to DIN/EN, ISO, ASME Full bore Self-cleaning
PN (bar):	up to 20	
Temperature (°C):	-50 up to +150	
Body materials:	Cast iron, ductile iron, cast steel, stainless steel, aluminium	
Sleeve materials:	NR, SBR, EPDM, IIR, NBR, CR, FPM, CSM	
Actuation:	Manual, pneumatic, electric, hydraulic	
Connections:	Flanged	
Options:	SMART Valve wear monitoring sensor, opening tags, conical tubes, fail close systems	
Applications:	Abrasive, corrosive, scaling or coating slurries, liquids and powders, liquors in pulp production	
Approvals:	ATEX, PED, ISO 9001, FDA	



Pinch Valves, Type aiRFlex® (RF Valves)

DN (mm):	25 - 1500	<ul style="list-style-type: none"> Control and on/off applications Patented non-stretch tube design with expansion arches Wide range of elastomer qualities Simple and cost-effective solution for low pressures In-line quick tube change Face-to-face dimension according to ASME B16.1 Full bore Self-cleaning
PN (bar):	up to 4	
Temperature (°C):	-50 up to +150	
Body materials:	Cast iron, aluminium, stainless steel on request	
Sleeve materials:	NR, SBR, EPDM, IIR, NBR, CR, FPM, CSM	
Actuation:	Compressed air/liquids	
Connections:	Flanged	
Options:	SMART Valve wear monitoring sensor, fail close and quick opening systems	
Applications:	Abrasive, corrosive, scaling or coating slurries, liquids and powders	
Approvals:	ATEX, PED, ISO 9001, FDA	



Silo Outlet Valves, Type XC (Orbinox)

DN (mm):	50 - 600	<ul style="list-style-type: none"> ▪ Special design of the body ▪ Ideal for use as silo outlet valve ▪ Uni-directional sealing
PN (bar) / ANSI:	up to 10 / CL 150	
Body materials:	GG25, 1.4408	
Seat materials:	EPDM, PTFE, Viton®, silicone, metal	
Connections:	Wafer	
Options:	Bonnet design	
Applications:	As silo outlet valve, bulk material applications, bentonite, starch, powder	
Approvals:	ATEX (on request), FDA (on request)	



Swing Disc Valves, Type SD (Orbinox)

DN (mm):	80 - 300 / 3" - 12"	<ul style="list-style-type: none"> ▪ For particularly high switching cycles ▪ For pneumatic conveyor systems ▪ Dirt traps
PN (bar):	up to 3	
Body materials:	Cast iron, stainless steel	
Seat materials:	Soft seat, metal seat	
Connections:	Wafer	
Applications:	Highly abrasive media (e.g. bottom ashes), cleaner rejects	
Approvals:	ATEX (on request)	



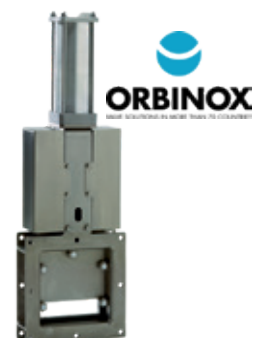
Swing Knife Gate Valves, Type SG (Orbinox)

DN (mm):	80 - 400 / 3" - 16"	<ul style="list-style-type: none"> ▪ Rotary shaft feedthrough
PN (bar):	up to 3	
Body materials:	Stainless steel, steel	
Seat materials:	Metal seat, soft seat	
Connections:	Flanged	
Applications:	Bulk material applications, bottom ashes, granulates, starches, dusts	
Approvals:	ATEX (on request)	



Square Port Knife Gate Valves, Type BC (Orbinox)

DN (mm):	150x150 - 600x600 (higher on request)	<ul style="list-style-type: none"> ▪ Rectangular / square port low-pressure knife gate valve in welded construction
PN (bar):	1 (higher on request)	
Body materials:	Carbon steel, stainless steel	
Seat materials:	EPDM, Viton®, silicone, metal	
Connections:	Flanged	
Applications:	Powdery media	
Approvals:	ATEX (on request)	



Bottom Outlet Valves (Guichon)

DN (mm):	20 - 400	<ul style="list-style-type: none"> Very flexible in design, adaptable to customer requirements
PN (bar) / ANSI:	10 - 150 / CL 150 - 900	
Body materials:	Steel, stainless steel, titanium, zirconium, Uranus® B6, Hastelloy®, Monel®, (super)duplex, carbon steel, Incoloy® (Reg.), Inconel® (Reg.)	
Actuation:	Manual, pneumatic, electric, hydraulic	
Options:	Crust-breaking function, bellow sealed stem, flush connections, surface polished inside and/or outside (CIP/ SIP), heating jacket, injection control, dead space free	
Applications:	Liquids with/without solids, gases, powders, powdery media, viscous and highly viscous media, liquors in pulp production	
Approvals:	ATEX, FDA, SIL, TA Luft, Fire-safe	



Bottom Outlet Valves, Type KVBW / KVBF (Somas)

DN (mm):	80 - 400	<ul style="list-style-type: none"> Specially adapted inlet flange Shaft is manufactured in one piece to guarantee a backlash-free transfer of the turning movement
PN (bar):	6	
Temperature (°C):	up to +200	
Body materials:	1.4408	
Seat materials:	PTFE 53, Hostaflone® (FDA)	
Connections:	Flanged, wafer	
Options:	Flush connections, surface roughness Ra < 0.8 µm	
Applications:	Liquids with/without solids, gases, powdery and viscous media	
Approvals:	ATEX (on request), FDA (on request), SIL (on request), TA Luft (on request)	



Bottom Outlet Valves (Peter Meyer)

DN (mm):	40 - 150	<ul style="list-style-type: none"> Low cavity behind the seats Antistatic device Full bore One-piece, laser welded body design Without body seal
PN (bar) / ANSI:	6 - 40 / CL 150 - 300	
Temperature (°C):	-60 up to +400	
Body materials:	1.4404, Hastelloy®	
Seat materials:	PTFE, TFM glass, metal	
Connections:	Flanged, welded ends, threaded	
Options:	Double gland packing, heating jacket, flushing bore, integrated cavity pressure relief system, pressure equalizing hole	
Applications:	Liquids with/without solids, gases, powdery and viscous media	
Approvals:	ATEX, FDA, SIL, TA Luft, SVGW, Fire-safe	



Sampling Valves (Guichon)

DN (mm):	10 - 200	<ul style="list-style-type: none">▪ Very flexible in design, adaptable to customer requirements
PN (bar):	10 - 100	
Body materials:	Steel, stainless steel, titanium, zirconium, Uranus® B6, Hastelloy®, Monel®, (super)duplex, carbon steel, Incoloy® (Reg.), Inconel® (Reg.)	
Actuation:	Manual, pneumatic, electric, hydraulic	
Options:	Crust-breaking function, bellow sealed stem, flush connections, surface polished inside and/or outside (CIP/SIP), fire-safe design, heating jacket, injection control, dead space-free	
Applications:	Liquids, solid-containing liquids, gases, powders, powdery media, viscous and highly viscous media	
Approvals:	ATEX, FDA, SIL, TA Luft, Fire-safe	



Sampling Valves, Type TP (Orbinox)

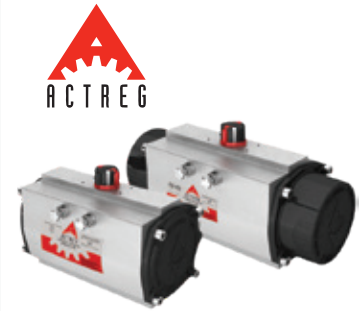
DN (mm):	25/40	<ul style="list-style-type: none">▪ DN 25 for consistency of 0-5%▪ DN 40 for consistency of > 3-5% in case of high reject content or long fiber pulp (without flush connection)▪ DN 40 for consistency of > 5-8% (with flush connection)
PN (bar):	10	
Temperature (°C):	up to +120	
Body materials:	1.4408	
Seat materials:	Soft seat (O-ring NBR), others on request	
Connections:	Welding connection, screw connection	
Options:	Pneumatic actuator, flush connections	
Applications:	Sampling for pulp stock	
Approvals:	ATEX (on request)	



Pneumatic Actuators „Rack-and-pinion“ (Actreg)

Body materials: Aluminium
Torques: up to 6,500 Nm
Temperature range: -30°C up to +100°C
Low temperature version: -40°C up to +80°C
Extremely low temperature version: -60°C up to +80°C
High temperature version: -15°C up to +150°C

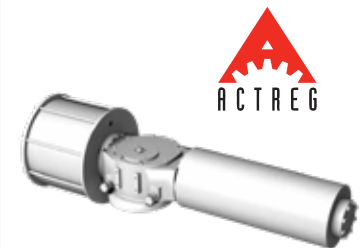
- Aluminium body is hard anodized (outside and inside)
- Standard mounted travel stops for valve position adjustment in open and close position (+/- 5° at each end)
- Multi-function position indicator



Pneumatic and Hydraulic Actuators „Scotch-yoke“ (Actreg)

Body materials: Aluminium
Torques: up to 250,000 Nm
Temperature range: -20°C up to +80°C
Low temperature version: -40°C up to +80°C
Extremely low temperature version: -60°C up to +80°C
High temperature version: -20°C up to +120°C

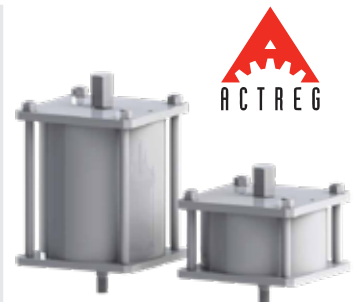
- Due to a modular design, the actuator modules can be combined for different variations



Pneumatic and Hydraulic Linear Actuators (Actreg)

Body materials: Cast steel
Hydraulic pressure: up to 140 bar
Pneumatic pressure: up to 8 bar
Thrust: up to 400,000 N
Standard temperature range: -20°C up to +80°C
Low temperature: -45°C up to +80°C
High temperature: -20°C up to +120°C

- Double or spring return action
- Weatherproof carbon steel housing
- PTFE coated pneumatic cylinder



Pneumatic Actuators „Scotch-yoke“ (Somas)

Body materials: Aluminium
Torques: up to 19.925 Nm
Temperature range: -40°C up to +90°C
High temperature version: +120°C

- Standard mounted travel stops for valve position adjustment in open and close position (+/- 5° at each end)
- Patented backlash-free torque transmission
- Low friction seals
- Optimized torque curve
- Mounting block for all accessories acc. to VDI/VDE 3845

Options: Hand operated, locking device, larger air connections
Approvals: ATEX



Electric Actuators, Fail Safe, Type FS-FSQT (Schiebel)

Voltage:	24 V - 400 V AC/DC	<ul style="list-style-type: none">▪ For on/off and control functions▪ Easy to change positioning time▪ Modulating operation possible due to decoupled fail-safe unit
Positioning time		
Fail Safe:	1 - 10 sec.	
90° turn actuator FSQT (Fail safe quarter turn):	up to max. 32,000 Nm	
Linear actuator FS:	up to max. 190 kN	
Options:	ATEX version, analog position feedback signal 4-20 mA, bus connection, handwheel	



Electric Actuators, Type CM (Schiebel)

Voltage:	24 V - 400 V AC/DC (special voltages on request)	<ul style="list-style-type: none">▪ For on/off and control functions▪ Adjustable speed and positioning time▪ Compact, space-saving construction
90° turn actuator FSQT (Fail safe quarter turn):	up to max. 15,000 Nm (higher for AB series)	
Rotary actuator:	up to max. 500 Nm (higher for AB series)	
Linear actuator:	up to max. 35 kN (higher for AB series)	
Options:	Fail-safe, ATEX version, analog position feedback signal 4-20 mA, bus connection	



Electric Actuators (AUMA)

Voltage:	24 V - 690 V AC/DC	<ul style="list-style-type: none">▪ For on/off and control functions▪ Standardized control technology for DCS
90° turn actuator:	up to max. 675,000 Nm	
Rotary actuator:	up to max. 32,000 Nm	
Linear actuator:	up to max. 270 kN	
Options:	ATEX version, analog position feedback signal 4-20 mA, bus connection	



Electric Part-Turn Actuators (J+J)

Torque:	10 - 300 Nm	<ul style="list-style-type: none">▪ Construction acc. to ISO 5211 / DIN 3337▪ Design: heating resistor, limit switches, manual override
Voltage:	12 V - 230 V AC/DC	
Ambient temperature (°C):	-20 up to +70	
Body materials:	Polyamide (PA6), polypropylene (PP)	
Degree of protection:	IP65, IP67	
Options:	Fail-safe with battery, positioning system for control applications	



Digital Positioners

Design:	Digital	<ul style="list-style-type: none">▪ Auto-calibration (digital)▪ Modular construction▪ Compact, well-proven, and flexible design▪ Exhaust opening with thread connection
Supply air pressure:	up to 10 bar High air capacity at minimum air consumption	
Software:	Diagnosis solutions for maintenance, integration into existing diagnostic systems via DTM device	
Options:	HART, profibus, foundation field bus, partial stroke, contactless sensor	
Approvals:	ATEX, SIL2	



Analog Positioners, Type V200 (VAC)

Design:	Analog	<ul style="list-style-type: none">▪ Optimized pilot valves for reduced air consumption and better air capacity▪ Feedback units or option modules can be installed easily, even later, in the standard housing▪ Simple calibration, external zero and span adjustment▪ High gain pilot valve and super high gain pilot valve▪ Built in gauge ports▪ Bright visible indicator, flat or Dome style▪ Stainless steel cam
Supply air pressure:	up to 8 bar	
Options:	Feedback 4-20 mA, mechanical and inductive limit switches, intrinsically safe, potentiometer, nickel coated, TUFRAM® coated	
Approvals:	Nema 4X	



Limit Switches, Limit Switch Boxes

Portfolio:	Available from all well-known manufacturers
Design:	Mechanical, inductive, etc.
Mounting:	Directly at the actuator/valve or via limit switch box at the actuator



Solenoid Valves

Portfolio:	Available from all well-known manufacturers
Design:	NAMUR or Inline
Function:	3/2-, 5/2- or 5/3-way
Voltage range:	up to 230 V AC/DC
Options:	ATEX, cryogenic design



Pneumatic Accessories

Filter regulators
Throttle plates and silencers
Quick exhaust and booster valves
Valve islands



Mounting Accessories

Mounting kits for automation
Mounting kits for manual valves
Reducing sleeves and adapters
Stem extensions



KTF Filter Systems (Kapotek)

KTF filter systems are fully automated mechanical self-cleaning filter systems that are equipped with slotted, sintered mesh or perforated elements.

Type	Capacity*	Separation size	Connections	Max. Pressure	Dimensions
	[m³/h]	[µm]	[mm]	[bar]	[cm]
KTF04-SP	30	25 - 1500	50	40	51 x 53 x 100
KTF09-TP	90	25 - 1500	50, 80	10	49 x 56 x 154
KTF16-TP	125	25 - 1500	80, 100	10	49 x 56 x 221
KTF32-TP	260	25 - 1500	150	10	49 x 56 x 339

*depending on medium / viscosity

KTF filters are designed for the filtration of a wide variety of different media, including high- and low-viscosity liquids, as well as abrasive or sticky media (e.g. coating colors, size, starch, paints, inks, adhesives, pigments and water).

KTF filter systems are successful in the market for years. They are suitable for new installations as well as for the conversion of existing filters.

Dango & Dienenthal Filter Systems

The Dango & Dienenthal filter range includes fully automatic, self-cleaning backwash filter systems as well as separation systems for liquid filtration. The systems that are built in Germany are based on a carefully developed design.

Type	Capacity	Separation size	Connections	Max. Pressure
	[m³/h]	[µm]	[mm]	[bar]
DDF	5 - 10,500	≥ 5	50 - 1,000	63
RTF	80 - 4,000	≥ 5	100 - 1,000	63
RTF-S	3 - 100	≥ 5	40 - 100	63
JET-S	1 - 25	≥ 50	R 2"	10
JET	1 - 25,000	≥ 50	50 - 3,000	63
SPR	2 - 250	≥ 5	50 - 200	63
EF	5 - 10,000	≥ 10	15 - 1,000	63
DF	5 - 10,000	≥ 10	15 - 500	63

The main applications include power plants, building installations, the steel industry, paper industry, chemical industry, foodstuff industry, sewage plants and snow-making systems.

Dango & Dienenthal filter systems convince through a reliable filtration of solids, trouble-free operation and minimal cost of operation and maintenance.



DANGO & DIENENTHAL
Filtertechnik GmbH



BSW Filter Systems (SPA Filtertechnik)

The BSW gravity strainer is a self-cleaning system, which works under atmospheric conditions for water flows up to 12,000 l/min. Typical applications are the mill's spray water supply, purification of sealing water from vacuum pumps, polishing of water from flocculation plants and cooling towers. The filter is also used for purification of intake water from lakes and rivers.

Type	Capacity	Separation size	Dimensions
	[m³/h]	[µm]	[cm]
BSW10	36 - 96	63	64 x 108 x 120
BSW14	48 - 132	80	89 x 142 x 154
BSW17	90 - 210	100	110 x 172 x 184
BSW22	120 - 360	140	135 x 221 x 232
BSW25	180 - 450	180	145 x 252 x 265
BSW30	240 - 700	250	175 x 298 x 311

Due to the bottom-up cleaning technique, the BSW gravity strainer achieves an exceptionally high operational reliability and is more effective and efficient in retaining solids and fibres, which results in an improved final filtrate. Large differences in contamination as well as fibrous contaminants are easily handled by the BSW gravity strainer.

BSW filter solutions are available in a variety of sizes and a wide range of media options.

