

VALVES AND SOLUTIONS FOR SANITARY PROCESSES • ESSENTIALS





Milk • Food • Drink



Cosmetics • Pharmaceuticals



Laundry products



Pet Food

A specialist for over 55 years in the transfer of liquids and semi-liquids, DEFINOX designs and manufactures process valves and customised equipment in stainless steel. Our solutions comply with current regulations applicable to hygienic processes and the most stringent constraints in terms of cleanability.

Present in more than 70 countries, we offer comprehensive support to our industrial customers, integrators, and distributors to ensure sustainable performance.

DEFINOX, FLEXIBILITY AND PERFORMANCE

The solid machining, turning, and welding (TIG) techniques used by DEFINOX to produce its solutions ensure that the strategic components in contact with the fluid have a high level of robustness, finish, and quality in line with process requirements.



GLOBAL SUPPORT

Drawing on its expertise, Definox offers a complete package and supports you throughout your experience with our services and products, to your complete satisfaction.

For even greater performance and durability, we offer several service packages: **Retrofit and Repair, Maintenance, Training, Advice, and Spare Parts.**

● Retrofit and repair: products built to last

As opposed to programmed obsolescence, Definox products are designed for greater durability. The reparability of our products, in all its forms, contributes to the environmental transition between suppliers and customers. As opposed to programmed obsolescence, Definox products and processes are optimised for durability.

● Maintenance: 4 levels of maintenance to cover all needs - Predictive, Preventive, Curative, and Remote

Anticipated maintenance programmes limit downtime and give greater control over the availability of production lines.

● Training: making maintenance safe through training

Training is one way of responding to the concerns of manufacturers to keep operators' knowledge up to date and guarantee their safety when they carry out valve maintenance.

● Spare parts: the guarantee of original parts, available anywhere in the world

Designed and selected specifically for Definox valves, components and wear parts are available for current and older generations of valves.



DIGITAL TOOLS

An array of digital tools to simplify use

📱 **Augmented reality** is provided systematically and free of charge for all valves, including specific products.

📄 **Library of documents available online: definox.com**
You'll find maintenance and installation instructions and detailed catalogues.

🛒 **The Definox eshop service:** order your valves, components and wear parts online at eshop.definox.com

📺 **Maintenance videos and 3D animations**
available on our YouTube channel.

📦 **The Cadenas portal:** download 2D and 3D valve symbols for your drawings.

SUMMARY

Customisable and available in a wide range of variants and options, our valves and solutions are fully maintainable and easily adaptable to line geometry and process configuration. The wide range of materials on offer means they can be used on fluids of all kinds.

P 5

Isolation valves

The principle of isolation consists of isolating an entire line or part of a process from the flow of fluid, by completely obstructing the passage of the liquid.

P 11

Divert valves

A directional valve is used to direct the flow in a specific direction. It is used to stop the flow on the lower or upper channel of the valve or to allow the flow to flow freely in the 2 channels of the valve.

P 15

Mixproof valves

The mixproof valves allow the lines to be operated with an optimum level of sanitary protection. The mixproof valve incorporates a leakage chamber to detect the failure of a sealing point, while preventing the risk of mixing between channels. Double seat valves allow two fluids of different types to cross.

P 23

Aseptic valves

The health and safety requirements of certain processes or manufactured products necessitate the use of aseptic valves. Definox aseptic valves have either a physical barrier between the inside of the valve and the outside, or an integrated device for sterilising valve components in contact with the outside environment.

P 27

Sampling valves

Sampling consists of taking a quantity of liquid to check its appearance, composition, or quality. Before sampling, the sampling device needs to be sterilised (flame sterilisation, sterilant circulation, or steam injection).

P 29

Tank bottom valves

Valves adapted for use on tanks enable transfer, cleaning, or sampling operations to be carried out. Some equipment guarantees protection against vacuum or overpressure.

P 32

Cleaning valves

The design of Definox cleaning valves ensures effective, targeted cleaning of the inside of tanks and tank equipment. They combine the functionality of cleaning valves with the benefits of sanitary valves.

P 34

Protection devices

These protection devices allow pressure to be relieved or vacuum to be properly compensated, while protecting peripheral equipment.

P 39

Regulating Valves

Regulating valves are used to precisely regulate a flow. They can be used to control a filling level, dose additives, or regulate the temperature of a mixture.

P 41

Control and signalling

Definox control tops provide remote monitoring and control of valves. They alert you in real time to any anomalies so that you can take immediate action. Definox valves can also be fitted with other simple signalling devices.

P 43

Pigging systems

At the end of a transfer cycle, production lines can store a large quantity of residual product. After being pigged, the product is recovered towards the end of the line and can be recycled.

P 45

Custom solutions

Manifolds, or automated valve assemblies, are essential for managing flows and providing links between processing machines, storage or processing sites, and cleaning plants. Our industrial flexibility also enables us to design specific injection systems and valves adapted to production and cleaning constraints.

The technical specifications and operating conditions given in this documentation are for guidance only and are subject to change because of technical developments. Combinations of extreme service conditions are sometimes inappropriate. It is therefore strongly advisable to seek advice from our services. The photographs, visuals, and diagrams included in this documentation are not contractual and remain the exclusive property of Definox. All reproductions, copies, or modifications are prohibited. DEFINOX is a registered trademark.

ISOLATION VALVES

- **BUTTERFLY VALVES**

DPX / DPAX

6

- **SHUT-OFF SINGLE SEAL VALVES**

DCX3

7

- **FRACTIONAL SHUT-OFF SINGLE SEAL VALVES**

DCX3 FRACT

8

- **SHUT-OFF VALVES**

DCX3 REVERSE

9

- **BALL VALVES**

DBX / DBAX

10

DPX / DPAX

Used in a wide range of process and auxiliary fluid applications, DPX and DPAX butterfly valves benefit from a high-performance hygienic design, thanks to the geometry of the components with no retention zones, combined with new-generation seals.

THE + PRODUCTS



Constant torque, with no drop in performance over time



Excellent resistance to deformation



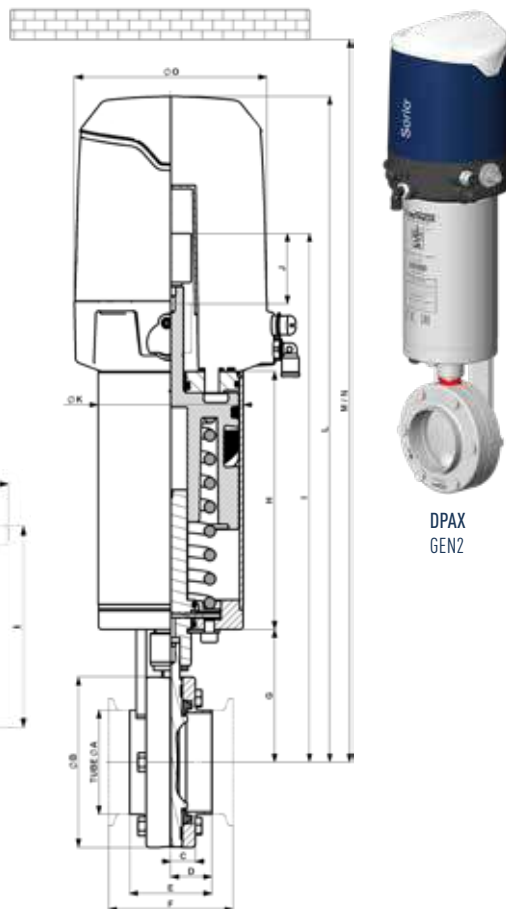
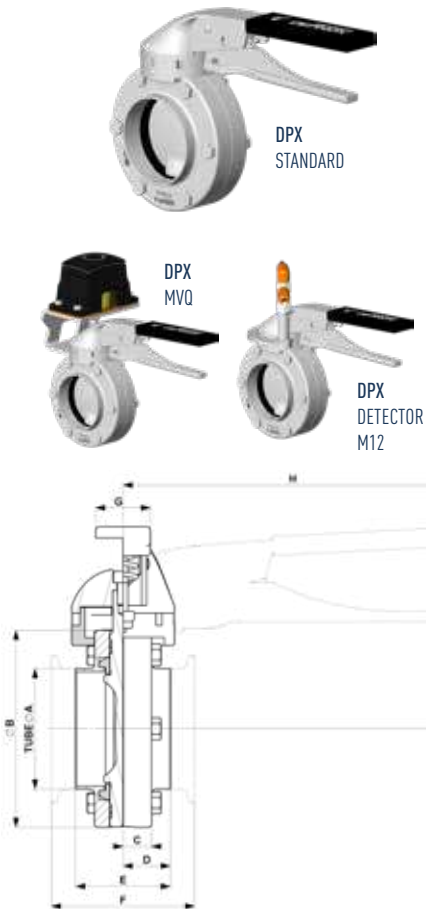
Highly adaptable thanks to its operating devices



Quick assembly and disassembly

DPX MANUAL BUTTERFLY VALVES

DPAX GEN2 AUTOMATIC BUTTERFLY VALVES



SPECIAL FEATURES

- Reliable and economical technology
- Modular handle for all uses (micrometric, lockable, with detection)
- Low pressure loss
- Transfer in line without retention

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 3/4" to DN 150

MATERIAL

- Half-body: AISI 316L / 1.4404
- Disc: AISI 316L / 1.4404
- Plug seal: EPDM, FKM, or HNBR
- Operating devices: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
To be welded
Between flanges
Clamp
Threaded
Smooth, Nut
- Standards:
SMS, DIN, US standard
SMS, DIN, US standard
US standard
SMS, DIN
SMS, DIN

SIGNALLING EQUIPMENT

- Handle-mounted sensor
- MVQ IO-Link sensor can be easily fitted on the handle
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : +120°C / 248°F
- Minimum temperature : 0°C / 32°F
- Maximum operating pressure : 8 to 14 bar (800 to 1400 kPa)
116 to 203 psi, depending on diameter
- Actuator supply pressure: 5.5 bar (550 kPa) minimum / 80 psi
8 bar (800 kPa) maximum / 116 psi
- Resistance to vacuum: 0.4 cm³/s



TUBE Ø A	Ø B	C	D	E	F	G	G	H	H	I	I	J	Ø K	L	Clearance		Ø O	Weight (kg)
						DPX	DPAX	DPX	DPAX	DPX	DPAX	Stroke			M with top	N without top		DPAX without top
SMS 22.6/25	79	15	25	50	75	29	67	179	157	94	308.5	43	89	392	850	500	117	4.1
SMS 30/32	79	15	25	50	75	29	67	179	157	94	308.5	43	89	392	850	500	117	4
SMS 35.6/38	79	15	25	50	75	29	67	179	157	94	308.5	43	89	392	850	500	117	4
SMS 48.5/51	89	15	25	50	75	29	73	179	157	99	314.5	43	89	398	850	500	117	4.3
SMS 60.3/63.5	104	15	25	50	75	29	82	179	157	106.5	323.5	43	89	407	860	510	117	4.4
SMS 72.9/76.1	119	15	25	50	75	29	91	179	157	114	332.5	43	89	416	870	520	117	4.7
SMS 100/104*	149	19	29	58	108	-	101	-	157	-	342.5	43	89	426	880	530	117	9.4
DIN 26/29	79	15	25	50	80	29	67	179	157	94	308.5	43	89	392	850	500	117	4.1
DIN 32/35	79	15	25	50	80	29	67	179	157	94	308.5	43	89	392	850	500	117	4
DIN 38/41	79	15	25	50	80	29	67	179	157	94	308.5	43	89	392	850	500	117	4
DIN 50/53	89	15	25	50	80	29	73	179	157	99	314.5	43	89	398	850	500	117	4.3
DIN 66/70	119	15	25	50	90	29	91	179	157	114	332.8	43	89	416	870	520	117	4.8
DIN 81/85	119	15	25	50	90	29	90	179	157	114	331.5	43	89	415	870	520	117	5.1
DIN 100/104*	149	19	29	58	108	-	101	-	157	-	342.5	43	89	426	880	530	117	9.4
DIN 125/129*	179	19	29	58	114	-	116	-	174	-	327	47.5	115	458	910	560	117	9.7
DIN 150/154*	204	19	29	58	114	-	129	-	174	-	340	47.5	115	471	930	580	117	11.5
US 1" (22.1/25.4)	79	15	25	50	75	29	67	179	157	94	308.5	43	89	392	850	500	117	4.1
US 1 1/2" (34.8/38.1)	79	15	25	50	75	29	67	179	157	94	308.5	43	89	392	850	500	117	4
US 2" (47.5/50.8)	89	15	25	50	75	29	73	179	157	99	314.5	43	89	398	850	500	117	4.3
US 2 1/2" (60.2/63.5)	104	15	25	50	75	29	82	179	157	106.5	323.5	43	89	407	860	510	117	4.4
US 3" (72.9/76.1)	119	15	25	50	75	29	91	179	157	114	332.5	43	89	416	870	520	117	4.7
US 4" (97.4/101.6)*	149	19	29	58	89	-	101	-	157	-	342.5	43	89	426	880	530	117	9.4
US 6" (146.9/152.4*)	204	19	29	58	95	-	129	-	174	-	340	47.5	115	471	930	580	117	11.5

*DN 100 - 125 and 150 fitted with DPAX actuator (previous generation of actuator)

Weight with Sorio® top:

+ 0.77 kg

DCX3

The DCX3 shut-off valve, fitted as standard with a floating seal, has been designed to respond effectively to market requirements in terms of both cleanability and operation.

THE + PRODUCTS



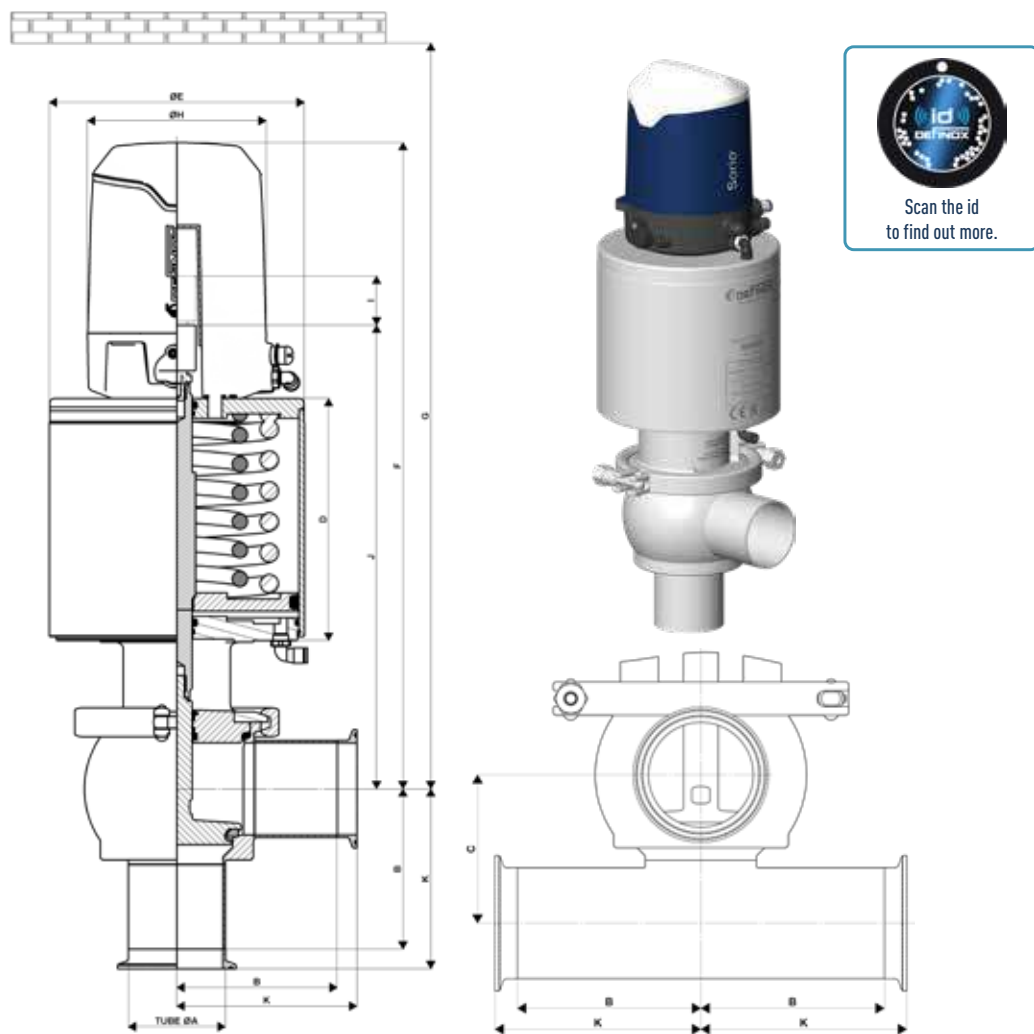
Optimum cleanability thanks to the floating seal



Excellent resistance to chemicals and high temperatures



Modular valve thanks to interchangeable components



SPECIAL FEATURES

- Pneumatic actuator that can be dismantled and easily converted to NO (Normally Open) - NC (Normally Closed) or DA (Double Acting).
- Connection of actuators and disconnections by clamps facilitating maintenance and allowing numerous adaptations
- Spherical body machined from a single piece of material with a thick wall, guaranteeing excellent resistance to expansion stresses and allowing different configurations: + - T - L
- One-piece plug machined from a single piece of material, eliminating the risk of breakage and unscrewing

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: stainless steel AISI 316 L / 1.4404
- Shut-off unit: stainless steel AISI 316 L / 1.4404
- Plug seal: floating PFA - EPDM, fluorinated elastomer FKM or HNBR
- Other seals: EPDM - fluoroelastomer (FKM) or silicone
- Operating devices: AIS 304 / 1.4301 stainless steel

CONNECTIONS

- Connector type:
 - To be welded
 - Threaded
 - Smooth - Nut
 - Clamp
- Standards:
 - SMS - DIN - US standard
 - SMS - DIN
 - SMS - DIN
 - US standard

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

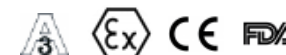
- Maximum temperature : + 140°C/+ 284°F (temperature depending on the type of seal)
- Minimum temperature : - 5°C/+ 23°F
- Maximum operating pressure : 8 bar (800 kPa)/116 psi
- Actuator supply pressure: minimum 5.5 bar (550 kPa)/80 psi maximum 8 bar (800 kPa)/116 psi
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

- All-elastomer seal for abrasive fluids or with particles
- Long stroke for maximum valve clearance

VARIANTS

Manual Version



TUBE Ø A	B	C	D	Ø E	F	G	Ø H	Stroke I	J	K	Weight (kg) without top
SMS 22.6/25	55	45	110	89	339	480	117	18	223	70	3.90
SMS 35.6/38	70	55	110	89	346	485	117	21	225	85	4.10
SMS 48.5/51	82	70	123	114	375	505	117	29	245	97	7
SMS 60.3/63.5	105	85	159	167	424	565	117	36	304	125	16.40
SMS 72.9/76.1	110	95	159	167	431	570	117	36	310	130	16.50
SMS 100/104	130	125	181	217	481	630	117	41	365	155	34.10
DIN 26/29	55	47	110	89	339	480	117	18	223	-	3.90
DIN 32/35	55	51	110	89	344	485	117	18	227	-	4
DIN 38/41	70	55	110	89	346	485	117	21	225	-	4.10
DIN 50/53	80	71	123	114	375	505	117	29	245	-	7
DIN 66/70	108	93	159	167	427	565	117	36	307	-	16.50
DIN 81/85	115	105	159	167	436	575	117	36	316	-	17
DIN 100/104	130	125	181	217	481	630	117	41	365	-	34.10
DIN 125/129	160	155	285	270	651	845	117	73	517	-	70.1
DIN 150/154	180	180	285	270	664	885	117	73	529	-	72
US 1" (22.1/25.4)	51	45	110	89	339	480	117	18	222	64	4
US 1 1/2" (34.8/38.1)	57	55	110	89	346	485	117	21	225	70	4.10
US 2" (47.5/50.8)	76	70	123	114	375	505	117	29	255	89	7.10
US 2 1/2" (60.2/63.5)	76	85	159	167	424	565	117	36	305	89	16.40
US 3" (72.9/76.1)	82	95	159	167	431	570	117	36	310	95	16.70
US 4" (97.4/101.6)	130	125	181	217	481	630	117	41	365	146	34.60

Weight with Sorio® top:		+ 0.77 kg
For DN:	125 DIN	+ 1.29 kg
	150 DIN	

DCX3 FRACT

These small, single-seated shut-off valves are characterised by high sealing pressures. They are used in the Starmotion® pigging stations and Starwheel® injection systems.

THE + PRODUCTS



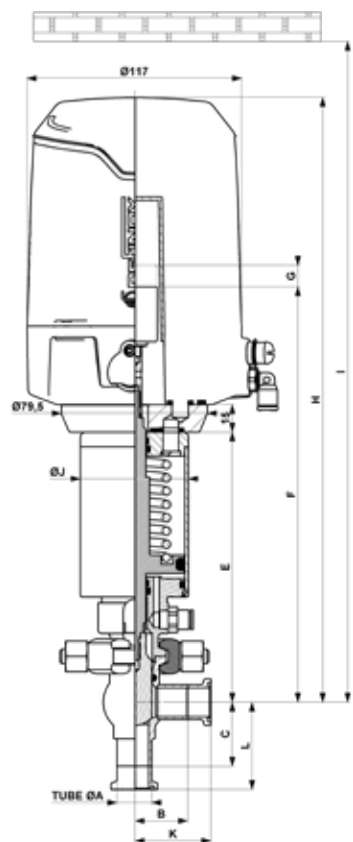
High sealing pressure



Adjustable actuator for pressure adjustment in valve assembly



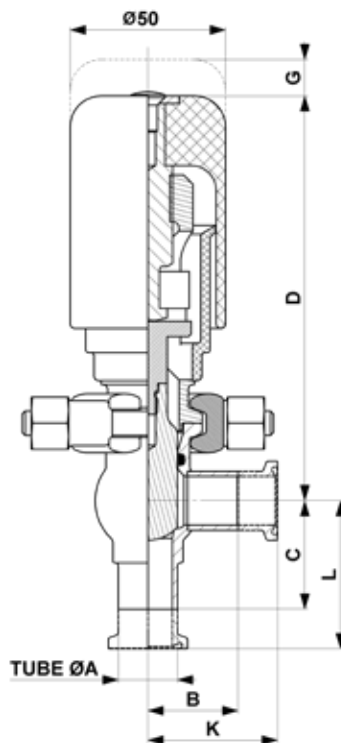
Easy maintenance through clamped assembly of sub-assemblies



AUTOMATIC
FRACTIONAL
DCX3 SHUT-OFF
VALVE



MANUAL
FRACTIONAL
SHUT-OFF VALVE
DCX3 Fract



SPECIAL FEATURES

- Compact, one-piece body: T, L or cross body configurations available.
- PEEK plug, as standard Material inert to chemicals
- Compact, removable actuator, easy to convert from NO (Normally Open), NC (Normally Closed) or DA (Double Acting)

TECHNICAL CHARACTERISTICS

DIMENSIONS

From DN 1/2" US to DN 1" US

MATERIAL

- Body: stainless steel AISI 316L / 1.4404
- Shut-off unit: PEEK or steel stainless steel AISI 316L / 1.4404
- Plug seal: EPDM, FKM, or FFKM
- Handle: plastic material
- Actuator: AISI 304 / 1.4301 stainless steel

CONNECTIONS

- Connector type:
To be welded
Clamp

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : +140°C / 248°F
- Minimum temperature : -5°C / 23°F
- Maximum operating pressure. : 16 bar (1600 kPa) / 232 psi
- Actuator supply pressure: 5.5 bar (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

Adjustable actuator for setting the pressure in the valve assembly

VARIANTS

- Stainless-steel plug, elastomer seal
- Ergonomic handle with visual opening indicator.



TUBE Ø A	B	C	D	Ø E	F	Stroke G	Ø H	I	Ø J	K	L	Weight (kg) DCX3P	
												Manual	Automatic
US 1/2" (12.7 x 1.65)	27.5	30	128	145	225	12	328	470	59	40	42.5	0.8	1.6
US 3/4" (19.05 x 1.65)	29	35	131	148	227	12	331	470	59	41.5	47.5	0.9	1.7
US 1" (25.4/1.65)	33.5	40	131	163	243	15	346	485	71	46	52.5	1.2	2.5
Weight with Sorio® top:												+ 1.3 kg	

Weight with Sorio® top: + 1.3 kg

DCX3 REVERSE

This valve manages any direction of flow, ensuring optimal sealing performance. It integrates easily into existing lines and facilitates installation on parallel pipelines. It is optimised for pressures coming from below the plug.

THE + PRODUCTS



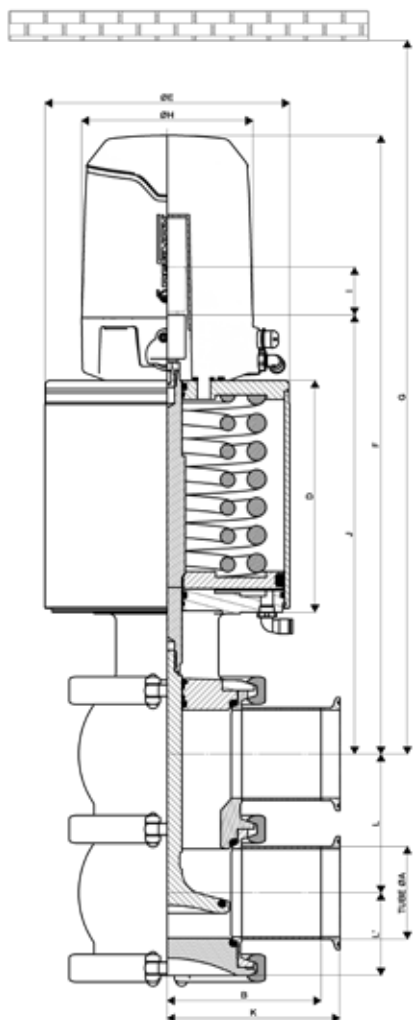
Optimum cleanability thanks to the floating PFA seal



Modular valve thanks to interchangeable components



Easy maintenance through clamped assembly of sub-assemblies



Scan the id
to find out more.

SPECIAL FEATURES

- Spherical body with thick walls for excellent resistance to expansion stress.
- The solid bodies are assembled by Tri-clamp to meet all orientation constraints.
- Actuator can be dismantled and easily converted to NO (Normally Open), NC (Normally Closed) or DA (Double Acting).
- One-piece plug machined from a single piece of material, eliminating the risk of breakage and unscrewing

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: stainless steel AISI 316L / 1.4404
- Shut-off unit: stainless steel AISI 316L / 1.4404
- Plug seal: PFA, EPDM, FKM or HNBR floating seal
- Actuator: stainless steel AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth - Nut
- Standards:
 - SMS - DIN - US standard
 - US standard
 - SMS - DIN
 - SMS - DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : 140°C / 284°F
- Minimum temperature : -5°C / 23°F
- Maximum operating pressure. : 8 bar (800 kPa)/116 psi
- Actuator supply pressure: 5.5 (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

Long stroke for maximum plug clearance



TUBE Ø A	B	D	Ø E	F	G	Ø H	Stroke I	J	K	L	L'	Weight (kg) without top
SMS 22.6/25	55	110	89	339	535	117	15	216	70	55	36.5	5.9
SMS 35.6/38	70	110	89	346	555	117	22	222	85	70	45.15	6.3
SMS 48.5/51	82	123	114	375	600	117	28	252	97	80	47.65	9.8
SMS 60.3/63.5	105	159	167	424	685	117	32	301	125	95	56.5	21.2
SMS 72.9/76.1	110	159	167	431	715	117	36	307	130	105	60.15	21.5
SMS 100/104	130	181	217	481	870	117	42	359	155	150	91.15	52.4
DIN 26/29	55	110	89	339	535	117	11	220	-	55	36.5	5.9
DIN 32/35	55	110	89	344	550	117	22	221	-	65	41.95	6.2
DIN 38/41	70	110	89	346	555	117	22	222	-	70	45.15	6.3
DIN 50/53	80	123	114	375	600	117	28	252	-	80	47.65	9.9
DIN 66/70	108	159	167	427	700	117	32	304	-	100	58.5	21.6
DIN 81/85	115	159	167	436	790	117	36	313	-	130	79.65	23.4
DIN 100/104	130	181	217	481	870	117	42	359	-	150	91.15	52.4
DIN 125/129	160	285	270	651	1100	117	77	508	-	165	92.65	93.3
DIN 150/154	180	285	270	664	1175	117	77	520	-	195	110.15	97.6
US 1" (22.1/25.4)	51	110	89	339	560	117	15	216	64	82.5	36.5	6.2
US 1 1/2" (34.8/38.1)	57	110	89	346	570	117	22	222	70	82.5	45.15	6.4
US 2" (47.5/50.8)	76	123	114	375	635	117	29	252	89	95	47.65	10.1
US 2 1/2" (60.2/63.5)	76	159	167	424	715	117	36	301	89	108	56.5	21.5
US 3" (72.9/76.1)	82	159	167	431	745	117	36	307	95	120	60.15	21.9
US 4" (97.4/101.6)	130	181	217	481	900	117	42	359	146	165	91.15	53.4

Weight with Sorio® top:		+ 0.9 kg
For DN:	125 DIN	+ 1.4 kg
	125 DIN	

DBX / DBAX

DBX DBAX ball valves complete the Definox range of sanitary process valves. These valves are for use in auxiliary circuits.

THE + PRODUCTS



Good pressure resistance



Resistance to aggressive chemicals



Easy circulation of powders

SPECIAL FEATURES

- Available in full- or reduced-flow versions
- Left or right-hand opening handle for manual versions
- Automatic version fitted with DPAX butterfly valve actuator

TECHNICAL CHARACTERISTICS

DIMENSIONS

- Full flow from DN 8 to DN 50
- Reduced flow from DN 15 to DN 65

MATERIAL

AISI 316L / 1.4404 and PTFE

CONNECTIONS

- Connector type:
To be welded
- Standards:
ISO – SMS – DIN

SIGNALLING EQUIPMENT

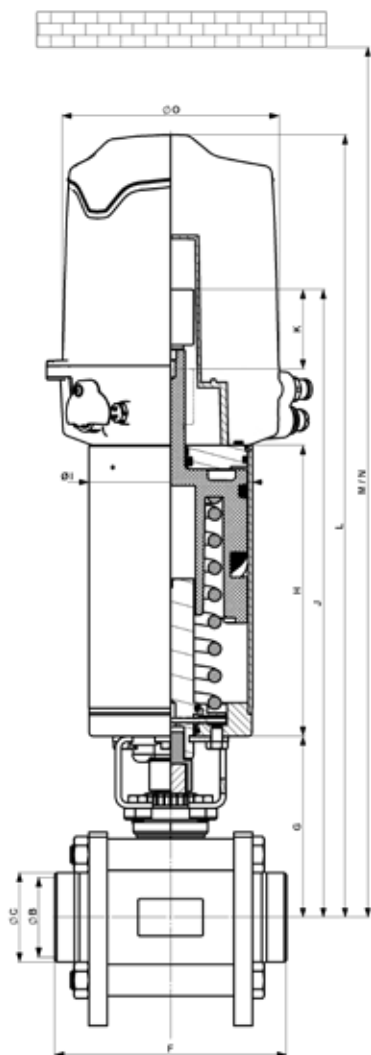
Sorio® control top, digital version, AS-i or IO-Link

CONDITIONS FOR OPERATION

- Maximum temperature: +160°C / 320°F
- Minimum temperature: -30°C / -22°F
- Maximum operating pressure: 20 bar (2000 kPa)/290 psi
- Actuator supply pressure: 5.5 bar (550 kPa) minimum / 80 psi
8 bar (800 kPa) / 116 psi

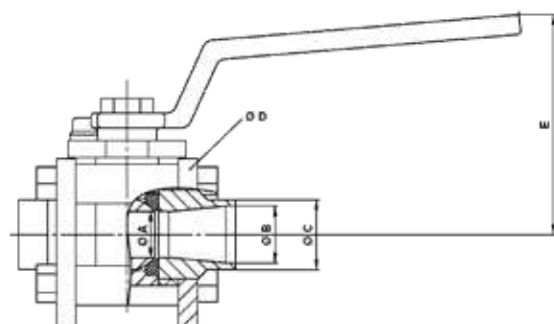
OPTIONS

Can be used in control version



Scan the id
to find out more.

AUTOMATIC BALL
VALVE
DBAX



MANUAL BALL VALVE
DBAX

DN												K		M		N		Weight (kg)	
Integral	Conventional	Ø A	Ø B	Ø C	Ø D	E	F	G	H	Ø I	J	Stroke	L	Without top	With top	Ø O	DBX	DBAX without top	
8	-	11.1	9.5	13.5	56	70	65	58	157	89	312	43	401	550	580	117	0.7	4.1	
12	-	11.1	13.2	17.2	56	70	65	58	157	89	312	43	401	550	580	117	0.7	4.1	
15	-	14	17.3	21.3	63	73	70	61	157	89	315	43	404	555	585	117	0.8	4.2	
-	15	11.1	17.3	21.3	56	70	65	58	157	89	312	43	401	550	580	117	0.7	4.1	
-	20	14	22.9	26.9	63	73	70	61	157	89	315	43	404	555	585	117	0.8	4.2	
20	-	19	22.9	26.9	80	91	85	71	157	89	325	43	414	565	595	117	1.6	5	
25	-	25	29.7	33.7	88	95	100	75	157	89	329	43	419	570	600	117	2.1	5.5	
-	25	19	29.7	33.7	80	91	85	71	157	89	325	43	414	565	595	117	1.6	5	
-	32	25	37.2	42.4	88	95	100	75	157	89	329	43	419	570	600	117	2.1	5.5	
32	-	32	37.2	42.4	104	111	110	93	157	89	337	43	437	585	620	117	3.3	6.7	
40	-	38	43.1	48.3	117	116	125	98	157	89	342	43	442	590	625	117	4.3	7.7	
-	40	32	43.1	48.3	104	111	110	93	157	89	337	43	437	585	620	117	3.1	6.5	
-	50	38	54.5	60.3	117	116	125	98	157	89	342	43	442	590	625	117	4.3	7.7	
50	-	50	54.5	60.3	148	137	150	119	174	115	340.5	50.5	479	400	650	117	8.7	12.1	
-	65	50	70.3	76.1	148	137	150	119	174	115	340.5	50.5	479	400	650	117	8.6	12	

DBAX weights (8/40 integral and 15/50 conventional) with Sorio® top: + 1.4 kg

DBAX weights (50 integral and 65 conventional) with Sorio® top: + 2.07 kg



DIVERT VALVES

- **DIVERT SINGLE SEAL VALVES**

DCX4 12

- **FRACTIONAL DIVERT VALVES**

DCX4 FRACT 13

- **DIVERT VALVES**

DCX4 REVERSE 14

DCX4

The DCX4 single-seated divert valve is fitted with a floating seal. Its hygienic design enables it to meet the requirements of food processes. Its various configurations include sectioning, bypass, and divert functions.

THE + PRODUCTS



Optimum cleanability thanks to the floating PFA seal



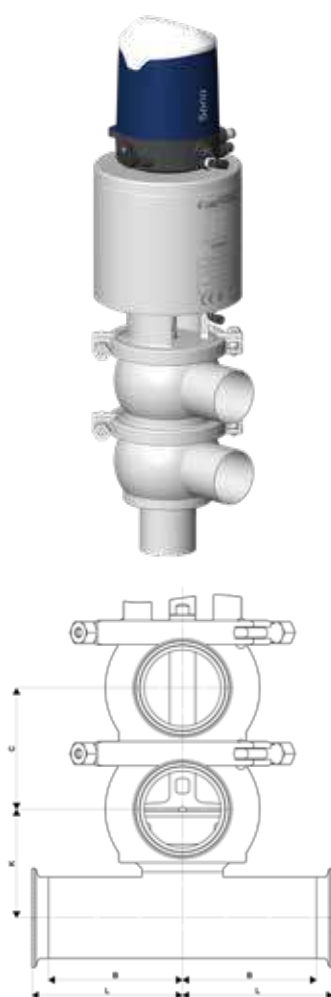
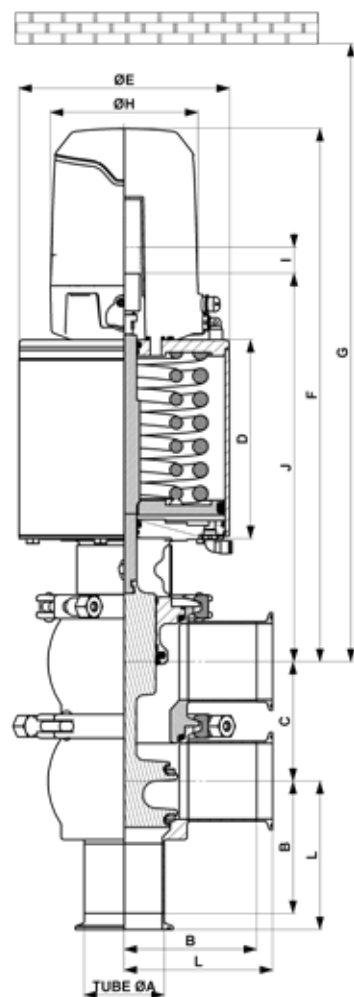
Excellent resistance to chemicals and high temperatures



Modular valve thanks to interchangeable components



Resistance to expansion stress



SPECIAL FEATURES

- Pneumatic actuator that can be dismantled and easily converted to NO (Normally Open) - NC (Normally Closed) or DA (Double Acting).
- Connection of actuators and disconnections by clamps facilitating maintenance and allowing numerous adaptations
- Spherical body with thick walls to provide excellent resistance to expansion stresses and allow different configurations L/L, T/L, L/T, T/T, L/X
- One-piece plug machined from a single piece of material, eliminating the risk of breakage and unscrewing

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards, from DN 25 to DN 104 for the manual version
- From DN 25 to DN 150 for the automatic version

MATERIAL

- Body: stainless steel AISI 316L / 1.4404
- Shut-off unit: stainless steel AISI 316L / 1.4404
- Plug seal: floating PFA - EPDM, FKM or HNBR
- Other seals: EPDM - fluoroelastomer (FKM) or HNBR
- Operating devices: AISI 304 / 1.4301 stainless steel

CONNECTIONS

- Connector type:
 - To be welded
 - Threaded
 - Smooth - Nut
 - Clamp
- Standards:
 - SMS - DIN - US standard
 - SMS - DIN
 - SMS - DIN
 - US standard

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : 140°C/+ 284°F (temperature depending on the type of seal)
- Minimum temperature : - 5°C/+ 23°F
- Maximum operating pressure : 8 bar (800 kPa) / 116 psi
- Actuator supply pressure: 5.5 bar (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi
- Resistance to vacuum: 0.4 cm²/s

OPTIONS

- All-elastomer seal for abrasive fluid or with particles
- Long stroke for maximum plug clearance

VARIANTS

- Balanced version with locking system to prevent the clamp from loosening and limit water hammer.
- Manual Version



TUBE Ø A	B	C	D	Ø E	F	G with top	Ø H	Stroke I	J	K	L	Weight (kg)	
												Without top	With top
SMS 22.6/25	55	55	110	89	339	525	117	15	223	45	68	5.3	5.3
SMS 35.6/38	70	70	110	89	346	555	117	20	225	55	83	5.8	5.8
SMS 48.5/51	82	80	123	114	375	595	117	27	245	70	95	9.4	9.4
SMS 60.3/63.5	105	95	159	167	424	660	117	32	304	85	118	20.6	20.6
SMS 72.9/76.1	110	105	159	167	430	675	117	32	310	95	123	20.8	20.8
SMS 100/104	130	150	181	217	481	780	117	36	365	125	155	48.4	48.4
DIN 26/29	55	55	110	89	339	525	117	15	223	47	-	5.3	5.3
DIN 32/35	55	65	110	89	344	550	117	17	227	51	-	5.7	5.7
DIN 38/41	70	70	110	89	346	555	117	20	225	55	-	5.8	5.8
DIN 50/53	80	80	123	114	375	595	117	27	245	71	-	9.4	9.4
DIN 66/70	108	100	159	167	427	670	117	31	307	93	-	20.8	20.8
DIN 81/85	115	130	159	167	436	705	117	32	316	105	-	22.1	22.1
DIN 100/104	130	150	181	217	481	780	117	36	365	125	-	48.4	48.4
DIN 125/129	160	165	285	270	651	1015	117	55	517	155	-	88.6	88.6
DIN 150/154	180	195	285	270	663	1080	117	61	529	180	-	92.6	92.6
US 1" [22.1/25.4]	51	82.5	110	89	339	560	117	15	222	45	64	5.7	5.7
US 1 1/2" [34.8/38.1]	57	82.5	110	89	346	570	117	20	225	55	70	6	6
US 2" [47.5/50.8]	76	95	123	114	375	610	117	27	255	70	89	9.8	9.8
US 2 1/2" [60.2/63.5]	76	108	159	167	424	670	117	32	305	85	89	20.9	20.9
US 3" [72.9/76.1]	82	120	159	167	430	690	117	32	310	95	95	21.5	21.5
US 4" [97.4/101.6]	130	165	181	217	481	795	117	36	365	125	146	49.9	49.9

Weight with Sorio® top:

+ 0.9 kg

DCX4 FRACT

These small, single-seated divert valves are characterised by high sealing pressures. They are used in the Starmotion® pigging stations and Starwheel® injection systems. Its various configurations include sectioning, bypass, and divert functions.

THE + PRODUCTS



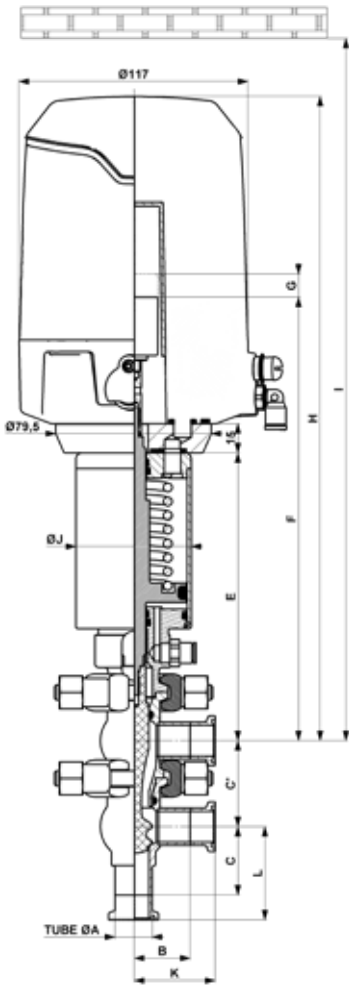
High sealing pressure



Adjustable actuator for pressure adjustment in valve assembly



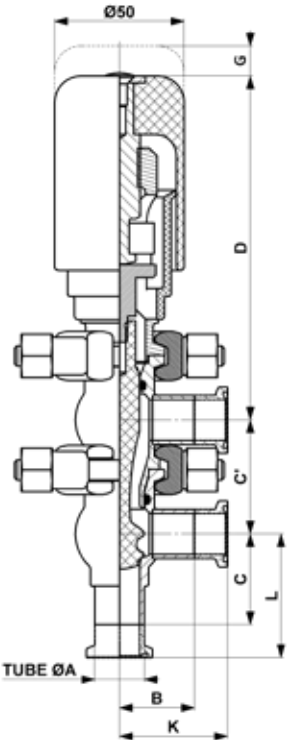
Easy maintenance through clamped assembly of sub-assemblies



AUTOMATIC
FRACTIONAL
DIVERT VALVE
FRACT DCX4



MANUAL
FRACTIONAL
DIVERT VALVE
DCX4 FRACT



SPECIAL FEATURES

- Compact, one-piece body: body configurations available in L/L, T/L or L/T.
- PEEK plug, as standard Material inert to chemicals
- Compact, removable actuator, easy to convert from NO (Normally Open), NC (Normally Closed) or DA (Double Acting)

TECHNICAL CHARACTERISTICS

DIMENSIONS

From DN ½" US to DN 1" US

MATERIAL

- Body: stainless steel AISI 316L / 1.4404
- Shut-off unit: Stainless-steel 1.4404 / AISI 316L
- Plug seal: EPDM, FKM, or FFKM
- Handle: plastic material
- Actuator: AISI 304 / 1.4301 stainless steel

CONNECTIONS

- Connector type:
To be welded
Clamp

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : +140°C / 248°F
- Minimum temperature : -5°C / 23°F
- Maximum operating pressure. : 16 bar (1600 kPa) / 232 psi
- Actuator supply pressure: 5.5 bar (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

- Adjustable actuator for setting the pressure in the valve assembly

VARIANTS

- Stainless-steel plug, elastomer seal
- Ergonomic handle with visual opening indicator.



TUBE Ø A	B	C	C'	D	Ø E	F	Stroke G	H	I	Ø J	K	L	Weight (kg) DCX4P	
													Manual	Automatic
US ½" (12.7 x 1.65)	27.5	30	44	128	145	224.5	8.7	328	510	59	40	42.5	1.2	2
US ¾" (19.05 x 1.65)	29	35	44	131	148	227.5	8.6	331	515	59	41.5	47.5	1.2	2
US 1" (25.4 x 1.65)	33.5	40	55.5	131	163	242.5	12.2	346	540	71	46	52.5	1.8	3.2

Weight with Sorio® top: + 1.3 kg

DCX4 REVERSE

This valve manages any direction of flow, ensuring optimal sealing performance. It integrates easily into existing lines and facilitates installation on parallel pipelines. It is optimised for pressures coming from below the valve.

THE + PRODUCTS



Optimum cleanability thanks to the floating PFA seal



Modular valve thanks to interchangeable components



Easy maintenance through clamped assembly of sub-assemblies

SPECIAL FEATURES

- Spherical body with thick walls for excellent resistance to expansion stress.
- The solid bodies are assembled by Tri-clamp to meet all orientation constraints.
- Actuator can be dismantled and easily converted to NO (Normally Open), NC (Normally Closed) or DA (Double Acting).
- One-piece valve machined from a single piece of material, eliminating the risk of breakage and unscrewing

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: stainless steel AISI 316L / 1.4404
- Shut-off unit: stainless steel AISI 316L / 1.4404
- Plug seal: PFA, EPDM, FKM or HNBR floating seal
- Actuator: stainless steel AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth - Nut
- Standards:
 - SMS - DIN - US standard
 - US standard
 - SMS - DIN
 - SMS - DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

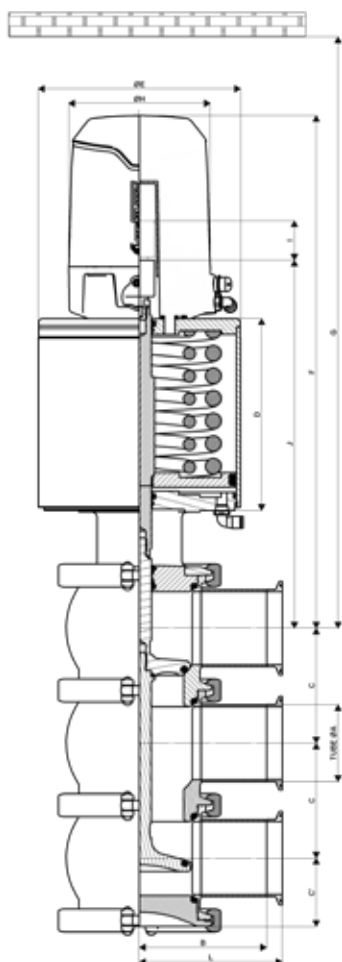
- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : 140°C / 284°F
- Minimum temperature : -5°C / 23°F
- Maximum operating pressure. : 8 bar (800 kPa) / 116 psi
- Actuator supply pressure: 5.5 (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

Long stroke for maximum valve clearance



TUBE Ø A	B	C	C'	D	Ø E	F	G with top	Ø H	Stroke I	J	L	Weight (kg) without top
SMS 22.6/25	55	55	36.5	110	89	339	500	117	14	217.5	68	7.2
SMS 35.6/38	70	70	45.15	110	89	346	540	117	19.5	224	83	7.9
SMS 48.5/51	82	80	47.65	123	114	375	600	117	27	254	95	11.9
SMS 60.3/63.5	105	95	56.5	159	167	424	675	117	32.5	304	118	24.9
SMS 72.9/76.1	110	105	60.15	159	167	431	715	117	33	309.5	123	25.3
SMS 100/104	130	150	91.15	181	217	481	865	117	39	361	155	64.5
DIN 26/29	55	55	36.5	110	89	339	500	117	14	217.5	-	7.2
DIN 32/35	55	65	41.95	110	89	344	525	117	16	225.5	-	7.7
DIN 38/41	70	70	45.15	110	89	346	540	117	19.5	224	-	7.9
DIN 50/53	80	80	47.65	123	114	375	600	117	27	254	-	11.9
DIN 66/70	108	100	58.5	159	167	427	695	117	31.5	307.5	-	25.5
DIN 81/85	115	130	79.65	159	167	436	770	117	33	315	-	28
DIN 100/104	130	150	91.15	181	217	481	865	117	39	361	-	64.5
DIN 125/129	160	165	92.65	285	270	651	1100	117	74.5	511	-	110.7
DIN 150/154	180	195	110.15	285	270	664	1175	117	73.5	523	-	116.8
US 1" (22.1/25.4)	51	82.5	36.5	110	89	339	555	117	14	217.5	64	7.9
US 1 1/2" (34.8/38.1)	57	82.5	45.15	110	89	346	565	117	19.5	224	70	8.1
US 2" (47.5/50.8)	76	95	47.65	123	114	375	630	117	27	254	89	12.5
US 2 1/2" (60.2/63.5)	76	108	56.5	159	167	424	710	117	32.5	302.5	89	25.5
US 3" (72.9/76.1)	82	120	60.15	159	167	431	745	117	33	309.5	95	26.3
US 4" (97.4/101.6)	130	165	91.15	181	217	481	895	117	38.5	361.5	146	66.5

Weight with Sorio® top: + 0.9 kg

For DN's: 125 DIN 150 DIN + 1.4 kg

MIXPROOF VALVES

- **DOUBLE-SEALED SHUT-OFF VALVES**

NEOS PFA	16
NEOS ELASTOMER	17

- **INDEPENDENT DOUBLE PLUGS VALVES**

VEOX®	18
VEOX® 3 BODY	19
VEOX® MULTI-SIZE	20
VEOX® PMO	22

NEOS

The NEOS double-sealed shut-off valve with leak detection is particularly suitable for CIP applications, in the PFA version. The deformable PTFE diaphragm provides a physical barrier to the outside of the valve. The leakage chamber warns of a sealing point failure, preventing any risk of mixing between channels.

THE + PRODUCTS



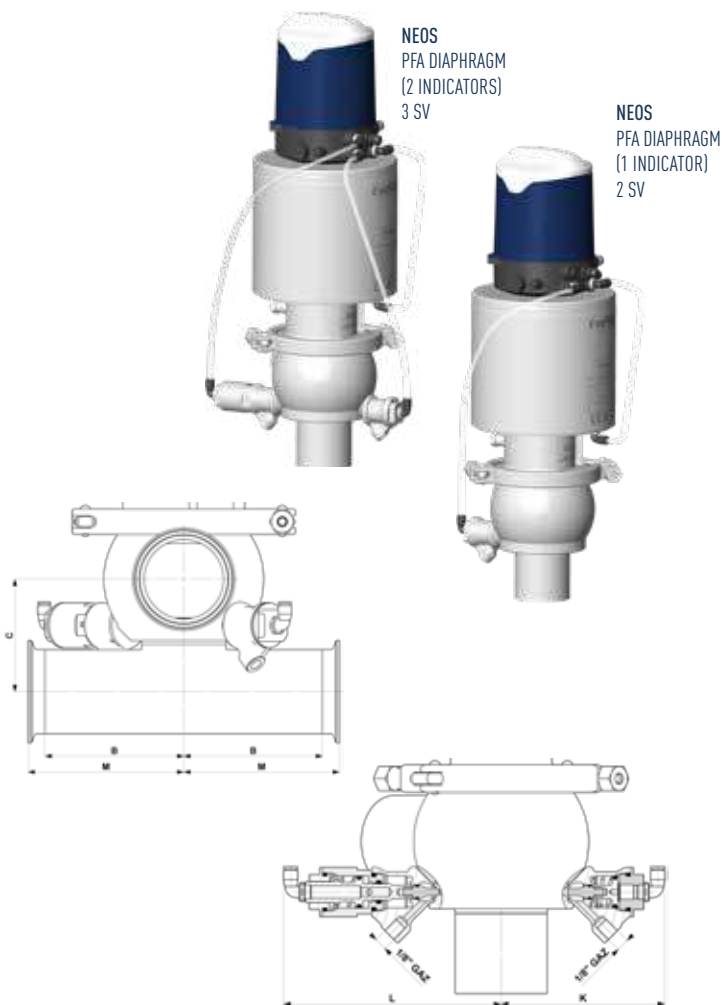
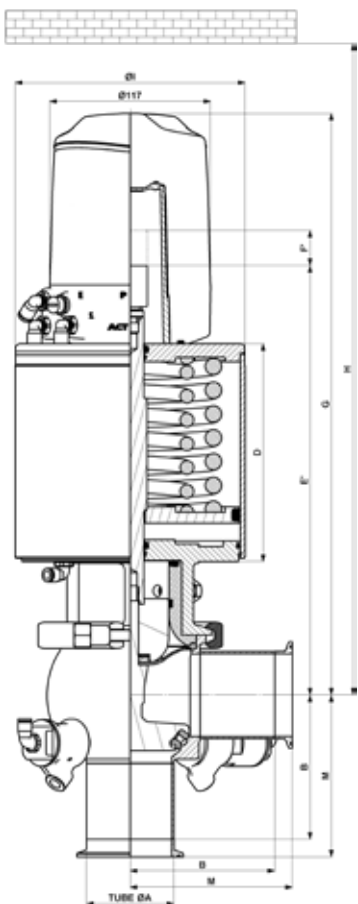
Physical barrier with no risk of contamination



Highly resistant to aggressive products, in PFA version



Optimum cleanability of chamber and leak detector with valve closed



SPECIAL FEATURES

- Channelling of splashes in the event of diaphragm failure
- Equipped with a NO (Normally Open) leak indicator
- Floating seal profile to facilitate fluid flow on both sides of the seal

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 104

MATERIAL

- Body: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: PFA floating seal
- Sealing diaphragm: Deformable PTFE
- Actuator: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth - Nut
- Standards:
 - SMS - DIN - US standard
 - US standard
 - SMS - DIN
 - SMS - DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link, 2 solenoid valves

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +110°C / 230°F
- Minimum temperature: 5°C / 41°F
- Sterilisation temperature: up to 140°C / 284°F for 30 minutes (steam for static mode)
- Temperature delta: 100°C / 212°F
- Maximum operating pressure: 8 bar (800 kPa) / 116 psi
- Actuator supply pressure: 5 bar (500 kPa) / 72 psi
8 bar (800 kPa) / 116 psi

*The temperature/pressure combination must be considered for optimum use.

OPTIONS

- Micro-washing valve for cleaning the leakage chamber, valve closed.
- Cross-body version for pigging the lower channel



TUBE Ø A	B	C	D	E	E'	Stroke F	Stroke F'	G	H	Ø I	K	L	M	Weight (kg)
Without top NEOS Diaphragm/PFA														
SMS 22.6/25	55	45	110	232	228	8	13	340	480	89	93	130	67.85	
SMS 35.6/38	70	55	110	233	233	13	13	346	485	89	93	130	82.85	4.8
SMS 48.5/51	82	70	123	266	266	19	19	375	515	114	101	138	94.85	7.8
SMS 60.3/63.5	105	85	159	314	314	26	26	424	565	167	114	151	117.85	17.9
SMS 72.9/76.1	110	95	159	318	318	26	26	431	575	167	114	151	122.85	18.1
SMS 100/104	130	125	181	368	368	36	36	481	620	217	128	166	155	39.8
DIN 26/29	55	47	110	232	228	8	13	340	480	89	93	130	70	4.6
DIN 32/35	55	51	110	232	232	13	13	344	485	89	93	130	70	4.7
DIN 38/41	70	55	110	233	233	13	13	346	485	89	93	130	85	4.8
DIN 50/53	80	71	123	266	266	19	19	375	515	114	101	138	95	7.9
DIN 66/70	108	93	159	316	316	26	26	427	570	167	114	151	128	18.1
DIN 81/85	115	105	159	322	322	26	26	434	580	167	116	153	135	18.6
DIN 100/104	130	125	181	368	368	36	36	481	620	217	128	166	155	39.8
US 1" [22.1/25.4]	51	45	110	232	228	8	13	340	480	89	93	130	64	4.6
US 1½" [34.8/38.1]	57	55	110	233	233	13	13	346	485	89	93	130	70	4.8
US 2" [47.5/50.8]	76	70	123	266	266	18	18	375	515	114	101	138	89	7.9
US 2½" [60.2/63.5]	76	85	159	314	314	26	26	424	565	167	114	151	87.75	17.9
US 3" [72.9/76.1]	82	95	159	318	318	26	26	431	575	167	114	151	94.4	18.3
US 4" [97.4/101.6]	130	125	181	368	368	36	36	481	620	217	128	166	145.45	40.4

Weight with Sorio® top:

+ 0.9 kg

ELASTOMER NEOS

The NEOS double-seal shut-off valve with leak detection is a cost-effective alternative to mixproof double-seal plugs valves. The elastomer version, with EPDM or FKM seals, is suited for contaminated process fluids. The leakage chamber warns of a sealing point failure, preventing any risk of mixing between channels.

THE + PRODUCTS



Physical barrier with no risk of contamination



Cost-effective alternative to independent double plugs valves



Optimum cleanliness of chamber and leak detector with valve closed

SPECIAL FEATURES

- Equipped with a NO (Normally Open) leak indicator
- Suited to process fluids with particles

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 104

MATERIAL

- L-shaped or T-shaped body: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: EPDM or FKM elastomer
- Actuator: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth - Nut
- Standards:
 - SMS - DIN - US standard
 - US standard
 - SMS - DIN
 - SMS - DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link, 2 solenoid valves

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

OPERATING CONDITIONS - ELASTOMER VERSION

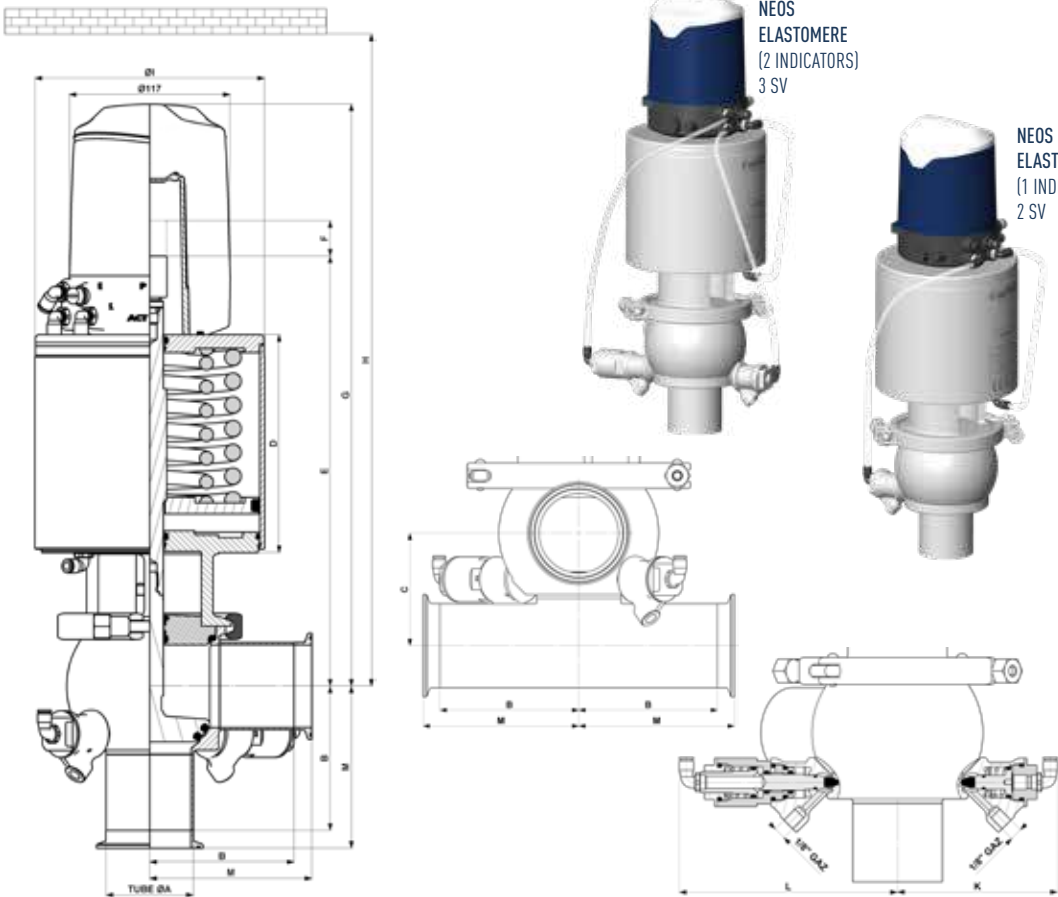
Most unfavourable temperature/pressure combination.

These data may vary depending on the maximum temperature and operating pressure.

- Maximum temperature: +50°C / 122°F, depending on the seal
- Minimum temperature: +50°C / 41°F, depending on the seal
- Sterilisation temperature: up to 130°C / 266°F for 30 minutes (steam for static mode)
- Maximum operating pressure: 6 bar (600 kPa) / 87 psi
- Actuator supply pressure: 5 bar (500 kPa) minimum / 72 psi
8 bar (700 kPa) maximum / 116 psi

OPTIONS

- Micro-wash valve for cleaning the leakage chamber, valve closed (requires 3rd solenoid valve)
- Cross-body version for pigging the lower channel



TUBE Ø A	B	C	D	E	E'	Stroke F	Stroke F'	G	H	Ø I	K	L	M	Weight (kg)
														Without top NEOS Elastomer
SMS 22.6/25	55	45	110	232	228	8	13	340	480	89	93	130	67.85	4.4
SMS 35.6/38	70	55	110	233	233	13	13	346	485	89	93	130	82.85	4.6
SMS 48.5/51	82	70	123	266	266	19	19	375	515	114	101	138	94.85	7.5
SMS 60.3/63.5	105	85	159	314	314	26	26	424	565	167	114	151	117.85	17.1
SMS 72.9/76.1	110	95	159	318	318	26	26	431	575	167	114	151	122.85	17.3
SMS 100/104	130	125	181	368	368	36	36	481	620	217	128	166	155	36.7
DIN 26/29	55	47	110	232	228	8	13	340	480	89	93	130	70	4.4
DIN 32/35	55	51	110	232	232	13	13	344	485	89	93	130	70	4.5
DIN 38/41	70	55	110	233	233	13	13	346	485	89	93	130	85	4.6
DIN 50/53	80	71	123	266	266	19	19	375	515	114	101	138	95	7.5
DIN 66/70	108	93	159	316	316	26	26	427	570	167	114	151	128	17.3
DIN 81/85	115	105	159	322	322	26	26	434	580	167	116	153	135	17.8
DIN 100/104	130	125	181	368	368	36	36	481	620	217	128	166	155	36.7
US 1" [22.1/25.4]	51	45	110	232	228	8	13	340	480	89	93	130	64	4.4
US 1 1/2" [34.8/38.1]	57	55	110	233	233	13	13	346	485	89	93	130	70	4.6
US 2" [47.5/50.8]	76	70	123	266	266	18	18	375	515	114	101	138	89	7.6
US 2 1/2" [60.2/63.5]	76	85	159	314	314	26	26	424	565	167	114	151	87.75	17.1
US 3" [72.9/76.1]	82	95	159	318	318	26	26	431	575	167	114	151	94.4	17.4
US 4" [97.4/101.6]	130	125	181	368	368	36	36	481	620	217	128	166	145.45	37.2

Weight with Sorio® top:

+ 0.9 kg

VEOX®

The Veox® valve with double independent plugs with no loss of product on opening, incorporates a physical break between two circuits. This technology makes it possible to identify any leaks and the crossing of two fluids of different types in complete safety. The pulse of the plugs ensures complete cleaning without opening the valve.

THE + PRODUCTS



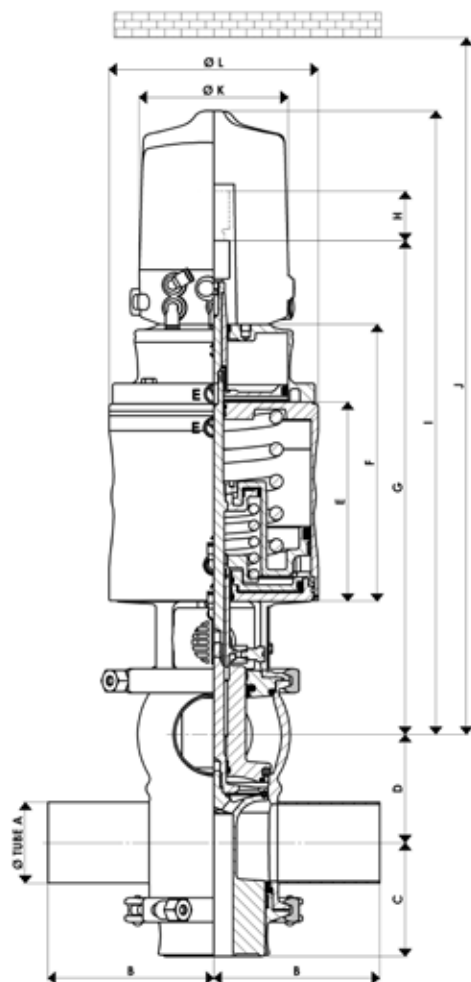
Hygienic and safe design



Flexible valve range thanks to modular upper plugs



30% reduction in product loss during valve pulses



Scan the id to find out more.

SPECIAL FEATURES

- Optimum, complete valve cleanability thanks to independent plug pulses and floating PFA seal (patented technology)
- 3 interchangeable seals:
 - one-piece stainless-steel plug with PFA floating seal
 - all-elastomer seal EPDM, FKM or HNBR
 - PEEK plug for extreme conditions, up to 13 bar
- Sliding radial seal with stainless-steel insert on the lower plug, limiting expansion and increasing the valve's pressure and temperature performance.
- 22 body configurations machined from one piece, guaranteeing excellent resistance to mechanical and thermal deformation
- **Clean concept:** cleaning of the outer face of the balancer with each pulse of the lower plug, without clogging in sticky applications
- One-piece balancer machined from one piece of material, offering high resistance to water hammer.
- Fully maintainable, one-piece machined actuator, adaptable to all versions of the Veox® range, guaranteeing instantaneous plug pulses
- Clamp mounting for easy dismantling and reduced maintenance time
- High modularity of options and variants available for the Veox® mixproof valve range

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- **Body:** Stainless steel AISI 316 / 1.4404
- **Shut-off unit:** Stainless steel AISI 316 / 1.4404
- **Plug seal:** PFA - elastomer (EPDM, FKM or HNBR) or PEEK valve
- **O-rings:** PTFE and elastomer (EPDM or FKM)
- **Actuator:** Stainless steel AISI 304 / 1.4301

CONNECTIONS

- **Connector type:**
 - To be welded
 - Threaded
 - Smooth - Nut
 - Clamp
- **Standards:**
 - SMS - DIN - US standard
 - SMS - DIN
 - SMS - DIN
 - US

SIGNALLING EQUIPMENT

- Surface-mounted on double stainless-steel brackets
- **Sorio® control top**
 - Digital, AS-i (2.0, 2.1 or 3.0) or IO-Link
 - 2 or 3 solenoid valves
 - M12 connection or cable gland
 - Plastic or stainless-steel housing
- **Option:** lantern sensor for upper plug breakaway

SURFACE STATE

- **Outside RA:** 1.2 µm (150 grit)
- **Interior RA:** 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- **Maximum temperature :**
 - 95°C / 203°F for the PFA version
 - 120°C / 248°F for the elastomer and PEEK version
- **Minimum temperature :** 5°C / 41°F (depending on sealing)
- **Flash steam:** for 20 minutes, between 120°C / 248°F and 140°C / 284°F depending on the seal
- **Maximum operating pressure :**
 - PFA: 10 bar / 145 psi
 - Elastomer: 11 bar / 159 psi
 - PEEK: 13 bar / 188 psi
- **Actuator supply pressure:** minimum 5 bar / 72 psi maximum 7 bar / 101 psi

OPTIONS

- Available without plug pulse or with 1 or 2 bottom plug pulses
- Piggable version: a pig passes through the lower track



SMS	DIN	US	TUBE Ø A	B	C	D	E	F	G	Stroke H	I	J	Ø K	Ø L	Weight (kg)
25	-	-	25 x 1.2	105	43.6	40	129	183	330.5	20	433	575	117	129	11.9
-	-	1"	25.4 x 1.65	105	43.6	40	129	183	330.5	20	433	575	117	129	12
-	25	-	29 x 1.5	105	45.6	45	129	183	331.5	21.5	434	575	117	129	12.1
-	32	-	35 x 1.5	105	48.6	50	129	183	334.5	21.5	437	585	117	129	12.5
38	-	-	38 x 1.2	105	64.6	55	129	183	336.5	27	439	605	117	129	12.5
-	-	1 1/2"	38.1 x 1.65	105	64.6	55	129	183	336.5	27	439	605	117	129	12.7
-	40	-	41 x 1.5	105	65.6	60	129	183	337.5	27	440	615	117	129	12.8
51	-	-	51 x 1.25	105	72.1	70	129	183	344	32	446	650	117	129	13.3
-	-	2"	50.8 x 1.65	105	72.1	70	129	183	344	32.5	446	650	117	129	13.3
-	50	-	53 x 1.5	105	72.1	70	129	183	344	32	446	650	117	129	13.3
63	-	-	63.5 x 1.6	130	87.85	85	156	217	387.5	38.5	490	725	117	164	22.2
-	-	2 1/2"	63.5 x 1.65	130	87.85	85	156	217	387.5	38.5	490	725	117	164	22.2
-	65	-	70 x 2	130	91.1	90	156	217	390	38	493	740	117	164	22.8
76	-	-	76.1 x 1.6	130	94.6	95	156	217	393.5	38.5	496	755	117	164	23.1
-	-	3"	76.1 x 1.6	130	94.6	95	156	217	393.5	38.5	496	755	117	164	23.1
-	80	-	85 x 2	130	98.6	110	156	217	397.5	38.5	501	780	117	164	24.1
-	-	4"	101.6 x 2.1	155	124.6	125	190	268	460.5	56.5	594	925	117	186	33.3
104	100	-	104 x 2	155	124.6	125	190	268	460.5	56.5	594	925	117	186	33.2
-	125	-	129 x 2	200	142.5	155	197	276	504	56.5	638	1030	117	219	65.1
-	150	-	154 x 2	200	155	180	197	276	521.5	56.5	655	1100	117	219	72.8

Weight with Sorio® top: + 0.9 kg

For DN 104 SMS, 100 DIN, 4" US, 125 DIN and 150 DIN: + 1.4 kg

VEOX® 3-BODY

The Veox® 3-body double independent plugs combines the functions of mixproof between the two upper channels and bypass between the two lower channels. The pulse of the plugs ensures complete cleaning without opening the valve.

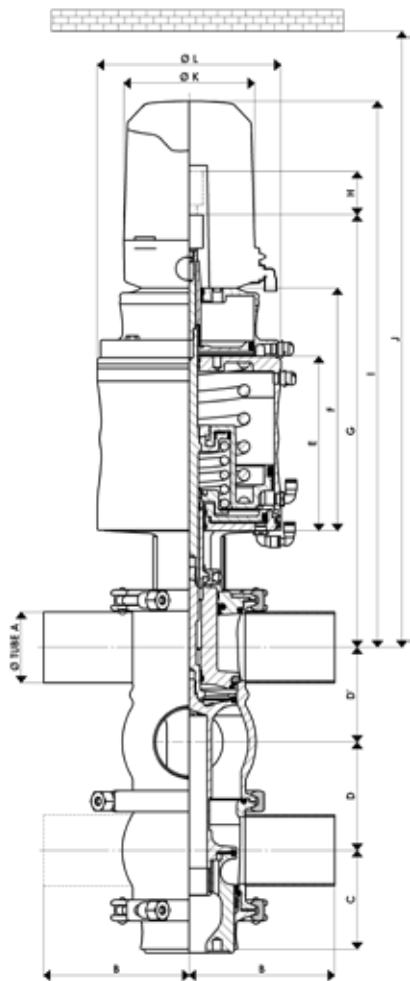
THE + PRODUCTS



Hygienic and safe design



Flexibility of the process lines



Scan the id to find out more.

SPECIAL FEATURES

- Optimum, complete valve cleanability thanks to independent plug pulses and floating PFA seal (patented technology)
- Upper sealing block with double independent stainless-steel plug, with:
 - PFA floating seal
 - or all-elastomer seal EPDM, FKM or HNBR
- Lower sealing block with sliding radial seal and stainless-steel insert to limit expansion and increase the valve's pressure and temperature performance.
- The bodies are machined from a single piece of material, guaranteeing excellent resistance to mechanical and thermal deformation:
 - 2 upper bodies that can be configured according to the 22 models available for the standard version
 - 1 lower body, L- or T-shaped configuration
- Clean concept: cleaning of the outer face of the balancer with each pulse of the lower plug, without clogging in sticky applications
- One-piece balancer machined from one piece of material, offering high resistance to water hammer.
- Fully maintainable one-piece machined actuator adaptable to all versions of the Veox® range, guaranteeing instantaneous plug pulses
- Clamp mounting for easy dismantling and reduced maintenance time

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: Stainless steel AISI 316 / 1.4404
- Shut-off unit: Stainless steel AISI 316 / 1.4404
- Plug seal: PFA - elastomer (EPDM, FKM or HNBR) or PEEK valve
- O-rings: PTFE and elastomer (EPDM or FKM)
- Actuator: Stainless steel AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Threaded
 - Smooth - Nut
 - Clamp
- Standards:
 - SMS - DIN - US standard
 - SMS - DIN
 - SMS - DIN
 - US

SIGNALLING EQUIPMENT

- Surface-mounted on double stainless-steel brackets
- Sorio® control top
 - Digital, AS-i (2.0, 2.1 or 3.0) or IO-Link
 - 2 or 3 solenoid valves
 - M12 connection or cable gland
 - Plastic or stainless-steel housing
- Option: lantern sensor for upper plug breakaway

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature : - 95°C / 203°F for the PFA version
 - 120°C / 248°F for the elastomer and PEEK version
- Minimum temperature : 5°C / 41°F (depending on sealing)
- Flash steam: for 20 minutes, between 120°C / 248°F and 140°C / 284°F depending on the seal
- Maximum operating pressure : - PFA: 10 bar / 145 psi
 - Elastomer: 11 bar / 159 psi
 - PEEK: 13 bar / 188 psi
- Actuator supply pressure: minimum 5 bar / 72 psi
 - maximum 7 bar / 101 psi

OPTIONS

- Available without plug pulse or with 1 or 2 bottom plug pulses
- Piggable version: a pig passes through the lower channel



SMS	DIN	US	TUBE Ø A	B	C	D	D'	E	F	G	Stroke H	I	J	Ø K	Ø L	Weight (kg)
25	-	-	25 x 1.2	105	43.1	50	40	129	183	330.5	20	433	610	117	129	13.7
-	-	1"	25.4 x 1.65	105	43.1	50	40	129	183	330.5	20	433	610	117	129	13.8
-	25	-	29 x 1.5	105	45.6	54	45	129	183	331.5	21	434	625	117	129	14.1
38	-	-	38 x 1.2	105	64.6	60	55	129	183	336.5	27	439	670	117	129	14.3
-	-	1 1/2"	38.1 x 1.65	105	64.6	60	55	129	183	336.5	27	439	670	117	129	14.5
-	40	-	41 x 1.5	105	65.6	62	60	129	183	337.5	27.5	440	675	117	129	14.5
51	-	-	51 x 1.25	105	72.1	75	70	129	183	343.5	32	446	725	117	129	15.2
-	-	2"	50.8 x 1.65	105	72.1	75	70	129	183	344	32	446	725	117	129	15.4
-	50	-	53 x 1.5	105	72.1	75	70	129	183	344	32	446	725	117	129	15.3
63	-	-	63.5 x 1.6	130	88.6	97	85	156	217	387.5	38.5	490	825	117	164	25.2
-	-	2 1/2"	63.5 x 1.65	130	88.6	97	85	156	217	387.5	38.5	490	825	117	164	25.2
-	65	-	70 x 2	130	91.1	104	90	156	217	390	38	493	840	117	164	26.2
76	-	-	76.1 x 1.6	130	94.6	110	95	156	217	393.5	38.5	496	860	117	164	26.6
-	-	3"	76.1 x 1.6	130	94.6	110	95	156	217	393.5	38.5	496	860	117	164	26.6
-	80	-	85 x 2	130	98.85	118	110	156	217	403	38.5	501	895	117	164	28.2
-	-	4"	101.6 x 2.1	155	124.6	140	125	190	268	460.5	56.5	594	1065	117	186	38.6
104	100	-	104 x 2	155	124.6	140	125	190	268	460.5	56.5	594	1065	117	186	38.4
-	125	-	129 x 2	200	142.5	170	155	197	276	504	56.5	638	1200	117	219	71.6
-	150	-	154 x 2	200	155	198	180	197	276	521.5	56.5	655	1300	117	219	84.3

Weight with Sorio® top: + 0.9 kg
For DN 104 SMS, 100 DIN, 4" US, 125 DIN and 150 DIN: + 1.4 kg

VEOX® MULTI-SIZE

The multi-size version of the Veox® valve with two independent plug benefits from the innovations of the standard version. The difference in diameter between the high and low flow channel means that production processes can be optimised. The mixproof valve with two independent plugs makes it possible to safely detect any leaks or the crossing of two fluids of different types. The pulse of the plugs ensures complete cleaning without opening the valve.

THE + PRODUCTS

+7

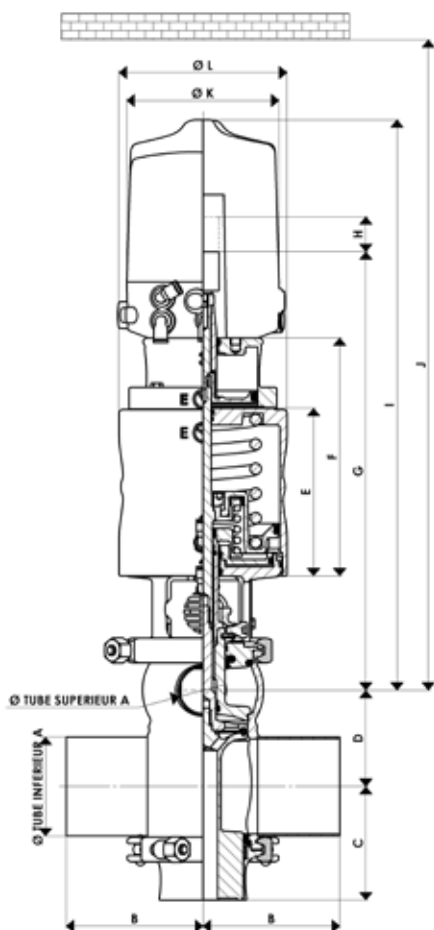
Allows to combine from 1 to 7 diameters between the upper and lower channels



Avoids line changes in the process



The absence of reduction eliminates the risk of line fragility



Scan the id
to find out more.

SPECIAL FEATURES

- Optimum, complete valve cleanability thanks to independent plug pulses and floating PFA seal (patented technology)
- 3 interchangeable seals:
 - one-piece stainless-steel plug with PFA floating seal
 - all-elastomer seal EPDM, FKM or HNBR
 - PEEK plug for extreme conditions, up to 13 bar
- Sliding radial seal with stainless-steel insert on the lower plug, limiting expansion and increasing the valve's pressure and temperature performance.
- 22 body configurations machined from one piece, guaranteeing excellent resistance to mechanical and thermal deformation
- **Clean concept:** cleaning of the outer face of the balancer with each pulse of the lower plug, without clogging in sticky applications
- One-piece balancer machined from one piece of material, offering high resistance to water hammer.
- Fully maintainable, one-piece machined actuator, adaptable to all versions of the Veox® range, guaranteeing instantaneous plug pulses
- Clamp mounting for easy dismantling and reduced maintenance time
- High modularity of options and variants available for the Veox® mixproof valve range

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- **Body:** Stainless steel AISI 316 / 1.4404
- **Shut-off unit:** Stainless steel AISI 316 / 1.4404
- **Plug seal:** PFA - elastomer (EPDM, FKM or HNBR) or PEEK valve
- **O-rings:** PTFE and elastomer (EPDM or FKM)
- **Actuator:** Stainless steel AISI 304 / 1.4301

CONNECTIONS

Connector type:

- To be welded
- Threaded
- Smooth - Nut
- Clamp

Standards:

- SMS - DIN - US standard
- SMS - DIN
- SMS - DIN
- US

SIGNALLING EQUIPMENT

- Surface-mounted on double stainless-steel brackets
- Sorio® control top
 - Digital, AS-i (2.0, 2.1 or 3.0) or IO-Link
 - 2 or 3 solenoid valves
 - M12 connection or cable gland
 - Plastic or stainless-steel housing
- Option: lantern sensor for upper plug breakaway

SURFACE STATE

- **Outside RA:** 1.2 µm (150 grit)
- **Interior RA:** 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- **Maximum dynamic temperature:**
 - 95°C / 203°F for the PFA version
 - 120°C / 248°F for the elastomer and PEEK version
- **Minimum temperature :** 5°C / 41°F (depending on sealing)
- **Flash steam:** for 20 minutes, between 120°C / 248°F and 140°C / 284°F depending on the seal
- **Maximum operating pressure. :**
 - PFA: 10 bar / 145 psi
 - Elastomer: 11 bar / 159 psi
 - PEEK: 13 bar / 188 psi
- **Actuator supply pressure:** minimum 5 bar / 72 psi maximum 7 bar / 101 psi

OPTIONS

Available without plug pulse or with 1 or 2 bottom plug pulses



DIN	TUBE Ø A upper	TUBE Ø A lower	B	C	D	E	F	G	H	I	J	Ø K	Ø L	Weight (kg)		
														Elastomer	PFA	PEEK
25-38 SMS	25 x 1.2	38 x 1.2	105	51	45	129	183	331	20	438	790	117	129	12.7	-	12
25-51 SMS	25 x 1.2	51 x 1.25	105	57	52	129	183	331	20	438	790	117	129	13	-	12.3
25-63 SMS	25 x 1.2	63.5 x 1.6	105	64	58	129	183	331	20	438	790	117	129	13.1	-	12.4
38-25 SMS	38 x 1.2	25 x 1.2	105	45	45	129	183	337	20	444	790	117	129	12.7	-	12
38-51 SMS	38 x 1.2	51 x 1.25	105	76	63	129	183	337	27	444	790	117	129	13.2	13.2	12.7
38-63 SMS	38 x 1.2	63.5 x 1.6	105	82	67	129	183	337	27	444	790	117	129	13.4	13.4	12.9
38-76 SMS	38 x 1.2	76.1 x 1.6	105	88	74	129	183	337	27	444	790	117	129	13.6	13.6	13.1
51-25 SMS	51 x 1.25	25 x 1.2	105	45	52	129	183	344	20	451	800	117	129	12.9	-	12.1
51-38 SMS	51 x 1.25	38 x 1.2	105	69	61	129	183	344	27	452	800	117	129	13	13	12.5
51-63 SMS	51 x 1.25	63.5 x 1.6	105	81	74	129	183	345	32	452	800	117	129	13.6	13.6	12.9
51-76 SMS	51 x 1.25	76.1 x 1.6	130	87	81	129	183	345	32	452	800	117	129	13.7	13.7	13.1
51-104 SMS	51 x 1.25	104 x 2	130	102	94	129	183	345	32	452	800	117	129	14.9	14.9	14.3
63-38 SMS	63.5 x 1.6	38 x 1.2	105	64.6	67	129	183	349.5	27	452	645	117	129	13.1	13.1	12.5
63-51 SMS	63.5 x 1.6	51 x 1.25	105	71.6	76	129	183	349	32	452	665	117	129	13.4	13.4	12.9
63-76 SMS	63.5 x 1.6	76.1 x 1.6	130	93.85	90	156	217	387.5	38.5	490	735	117	164	22.7	22.8	21.4
63-104 SMS	63.5 x 1.6	104 x 2	130	107.6	103	156	217	387.5	38.5	490	760	117	164	24.6	24.7	23.3
76-38 SMS	76.1 x 1.6	38 x 1.2	105	64.6	74	129	183	355	27	458	660	117	129	13.5	13.5	12.8
76-51 SMS	76.1 x 1.6	51 x 1.25	105	71.85	82	129	183	355	32	458	685	117	129	13.8	13.8	13.1
76-63 SMS	76.1 x 1.6	63.5 x 1.6	130	88.6	90	156	217	393.5	38.5	496	740	117	164	22.5	22.5	21
76-104 SMS	76.1 x 1.6	104 x 2	130	106.6	110	156	217	393.5	38.5	496	780	117	164	25.1	25.1	23.7
104-51 SMS	104 x 2	51 x 1.25	130	82.1	98	156	217	408	38.5	511	770	117	164	24.3	24.3	22.6
104-63 SMS	104 x 2	63.5 x 1.6	130	87.85	105	156	217	408	38.5	511	785	117	164	24.3	24.3	22.5
104-76 SMS	104 x 2	76.1 x 1.6	130	93.6	110	156	217	408	38.5	511	795	117	164	24.7	24.7	23
Refer to catalogue PS1-CAT-015 for dimensions in US																
Weight with Sorio® top:															+ 0.9 kg	
25-32 DIN	29 x 1.5	35 x 1.5	105	48.85	46	129	183	331.5	21	434	575	117	129	12.2	-	11.9
25-40 DIN	29 x 1.5	41 x 1.5	105	52.1	49	129	183	331.5	21	434	580	117	129	12.4	-	12.2
25-50 DIN	29 x 1.5	53 x 1.5	105	57.1	55	129	183	331.5	21	434	590	117	129	12.6	-	12.4
25-65 DIN	29 x 1.5	70 x 2	105	66.6	64	129	183	331.5	21	434	610	117	129	13.2	-	12.9
32-25 DIN	35 x 1.5	29 x 1.5	105	45.85	47	129	183	334.5	21	437	580	117	129	12.2	-	11.9
32-40 DIN	35 x 1.5	41 x 1.5	105	52.1	52	129	183	334.5	21	437	590	117	129	12.6	-	12.3
32-50 DIN	35 x 1.5	53 x 1.5	105	57.35	58	129	183	334.5	21	437	600	117	129	12.8	-	12.5
32-65 DIN	35 x 1.5	70 x 2	105	66.6	67	129	183	334.5	21	437	620	117	129	13.1	-	12.8
40-25 DIN	41 x 1.5	29 x 1.5	105	46.35	49	129	183	338	21	440	590	117	129	12.5	-	12.1
40-32 DIN	41 x 1.5	35 x 1.5	105	48.6	52	129	183	338	21	440	595	117	129	12.6	-	12.2
40-50 DIN	41 x 1.5	53 x 1.5	105	72.35	64	129	183	337.5	27.5	440	630	117	129	13	13	12.5
40-65 DIN	41 x 1.5	70 x 2	105	80.35	72	129	183	337.5	27.5	440	645	117	129	13.3	13.3	12.8
40-80 DIN	41 x 1.5	85 x 2	105	88.35	78	129	183	337.5	27.5	440	655	117	129	13.9	13.9	13.4
50-25 DIN	53 x 1.5	29 x 1.5	105	46.1	55	129	183	344	20	446	605	117	129	12.6	-	12.2
50-32 DIN	53 x 1.5	35 x 1.5	105	48.6	58	129	183	343.5	20	446	615	117	129	12.8	-	12.4
50-40 DIN	53 x 1.5	41 x 1.5	105	66.35	65	129	183	344	27	446	635	117	129	13	13	12.4
50-65 DIN	53 x 1.5	70 x 2	105	80.35	78	129	183	344	32	446	665	117	129	13.7	13.7	13.1
50-80 DIN	53 x 1.5	85 x 2	105	88.35	85	129	183	344	32	446	680	117	129	14.4	14.4	13.8
65-32 DIN	70 x 2	35 x 1.5	105	63.35	70	129	183	351.5	27	454	650	117	129	13.2	13.2	12.6
65-40 DIN	70 x 2	41 x 1.5	105	65.85	74	129	183	351.5	27	454	655	117	129	13.3	13.3	12.7
65-50 DIN	70 x 2	53 x 1.5	105	71.85	78	129	183	351.5	32	454	670	117	129	13.7	13.7	13.1
65-80 DIN	70 x 2	85 x 2	130	98.6	101	156	217	390.5	38	493	755	117	164	23.4	23.4	22
65-100 DIN	70 x 2	104 x 2	130	107.1	105	156	217	390.5	38	493	770	117	164	24.8	24.9	23.5
65-125 DIN	70 x 2	129 x 2	130	120.6	116	156	217	390.5	38	493	795	117	164	29.4	29.5	28.1
65-150 DIN	70 x 2	154 x 2	130	133.1	130	156	217	390.5	38	493	820	117	164	28.9	28.9	27.5
80-40 DIN	85 x 2	41 x 1.5	130	77.6	85	156	217	398	34.7	501	735	117	164	23.1	23.1	21.5
80-50 DIN	85 x 2	53 x 1.5	130	82.6	90	156	217	398	38.5	501	745	117	164	23	23	21.5
80-65 DIN	85 x 2	70 x 2	130	90.85	99	156	217	398	38.5	501	760	117	164	23.6	23.6	22
80-100 DIN	85 x 2	104 x 2	130	107.1	114	156	217	398	38.5	501	795	117	164	25.6	25.6	24.1
80-125 DIN	85 x 2	129 x 2	130	120.6	125	156	217	398	39	501	815	117	164	30.3	30.3	28.8
80-150 DIN	85 x 2	154 x 2	130	133.6	138	156	217	398	38.5	501	845	117	164	29.7	29.7	28.1
100-65 DIN	104 x 2	70 x 2	130	91.6	108	156	217	408	38.5	511	790	117	164	24.8	22.8	22.7
100-80 DIN	104 x 2	85 x 2	130	98.1	120	156	217	408	38.5	511	810	117	164	25.1	25.2	23.4
100-125 DIN	104 x 2	129 x 2	155	137.1	136	190	268	460.5	56.5	594	950	117	186	36.1	36.2	34.5
100-150 DIN	104 x 2	154 x 2	155	149.6	150	190	268	460.5	56.5	594	975	117	186	37	37.1	35.4
125-65 DIN	129 x 2	70 x 2	130	90.6	121	156	217	422.5	38	525	830	117	164	28.3	28.3	27.1
125-80 DIN	129 x 2	85 x 2	130	98.6	132	156	217	422.5	38	525	850	117	164	28.7	28.7	27.4
125-100 DIN	129 x 2	104 x 2	155	125.6	136	190	268	476	56	608	965	117	186	36.4	36.5	34.7
125-150 DIN	129 x 2	154 x 2	200	156	166	197	276	504	56.5	638	1055	117	219	72.5	72.8	68.6
150-65 DIN	154 x 2	70 x 2	130	90.85	133	156	217	433.5	38.5	536	865	117	164	28.3	28.3	27
150-80 DIN	154 x 2	85 x 2	130	98.1	144	156	217	433.5	38	536	885	117	164	28.9	28.9	27.7
150-100 DIN	154 x 2	104 x 2	155	124.35	150	190	268	487.5	56.5	621	1005	117	186	39.2	39.3	37.5
150-125 DIN	154 x 2	129 x 2	200	143.5	166	197	276	521.5	55.5	655	1075	117	219	71.9	72.1	67.9
Weight with Sorio® top:															+ 0.9 kg	
For DN 100-125 DIN, 100-150 DIN, 125-100 DIN, 125-150 DIN, 150-100 DIN and 150-125 DIN:															+ 1.4 kg	

VEOX® PMO

The Veox® PMO valve with double independent plugs with no loss of product on opening, incorporates a physical break between two circuits. Its design complies with the 3A (85-03) recommendations. This technology makes it possible to identify any leaks and the crossing of two fluids of different types in complete safety. The pulse of the plugs ensures complete cleaning without opening the valve.

THE + PRODUCTS



Hygienic design



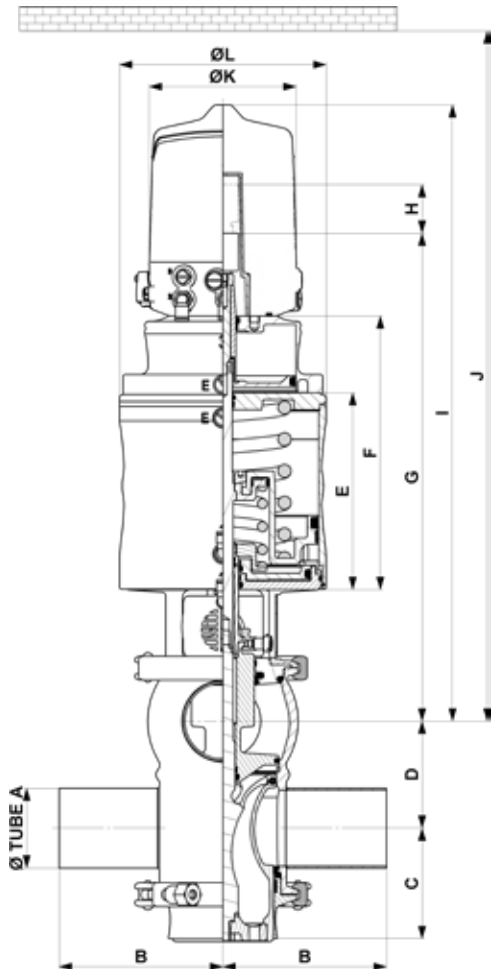
Continuous production while cleaning is in progress



30% reduction in product loss during plug pulses



Double safety ensured by plug deflectors and optimally sized leakage chamber



SPECIAL FEATURES

- Optimum and complete valve cleanability thanks to independent plug pulses, without valve opening
- Sliding radial seal with stainless-steel insert on the lower plug, limiting expansion and increasing the valve's pressure and temperature performance.
- The bodies are machined from a single piece of material, guaranteeing excellent resistance to mechanical and thermal deformation
- One-piece balancer machined from one piece of material, offering high resistance to water hammer.
- Fully maintainable actuator guarantees instantaneous plug pulses
- Clamp mounting for easy dismantling and reduced maintenance time
- Leak indicator to warn of possible leaks

TECHNICAL CHARACTERISTICS

DIMENSIONS

US from 1" to 4"

MATERIAL

- Body: Stainless steel AISI 316L / 1.4404
- Shut-off unit: Stainless steel AISI 316L / 1.4404
- Plug seal: EPDM or FKM elastomer
- O-rings: PTFE and elastomer (EPDM or FKM)
- Actuator: Stainless steel AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
- Standards:
 - US
 - US

SIGNALLING EQUIPMENT

- Sorio® control top
 - Digital, AS-i (2.0, 2.1 or 3.0) or IO-Link
 - 2 or 3 solenoid valves
 - M12 connection or cable gland
 - Plastic or stainless-steel housing
- Option: lantern sensor for upper valve breakaway

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- | | EPDM | FKM |
|--|-----------------------------------|---------------|
| • Minimum temperature: | -5°C / 23°F | 5°C / 41°F |
| • Maximum temperature: | 120°C / 248°F | 120°C / 248°F |
| • Flash steam for 20 minutes at 150°C / 302°F | | |
| • Maximum operating pressure: 10 bar / 145 psi | | |
| • Actuator supply pressure: 5 bar (500 kPa) minimum / 72 psi | | |
| | 7 bar (700 kPa) maximum / 101 psi | |



US	TUBE Ø A	B	C	D	E	F	G	Ø H	I	J	Ø K	Ø L
1"	25.4 x 1.65	105	48	40	129	183	322	22.5	438	526	117	129
1½"	38.1 x 1.65	105	69	55	129	183	328	27	443	592	117	129
2"	50.8 x 1.65	105	78	70	129	183	335	32	451	635	117	129
2½"	63.5 x 1.65	130	89	85	156	217	379	38	495	710	117	164
3"	76 x 1.65	130	97	95	156	217	385	38	501	740	117	164
4"	101.6 x 2.1	155	128	125	190	268	465	56	580	896	117	186
6"	152.4 x 2.75	200	155	180	190	268	521	56	636	1006	117	218

ASEPTIC VALVES

- **DIAPHRAGM SHUT-OFF VALVES**

DCX3 24

DCX4 25

- **ASEPTIC BEARING SHUT-OFF VALVES**

DCX3 26

DCX3

For sensitive processes requiring an aseptic solution, DCX3 shut-off valves can be fitted with a deformable PTFE diaphragm to provide a physical barrier and prevent any risk of external contamination. The surface area of the diaphragm is equivalent to that of the shut-off plug, promoting pressure equalisation.

THE + PRODUCTS



Safe aseptic design with leak indicator



Suitable for greasy and corrosive products



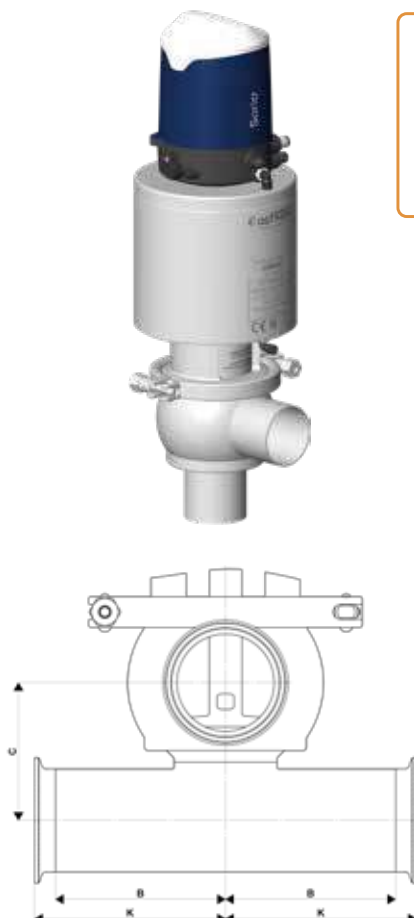
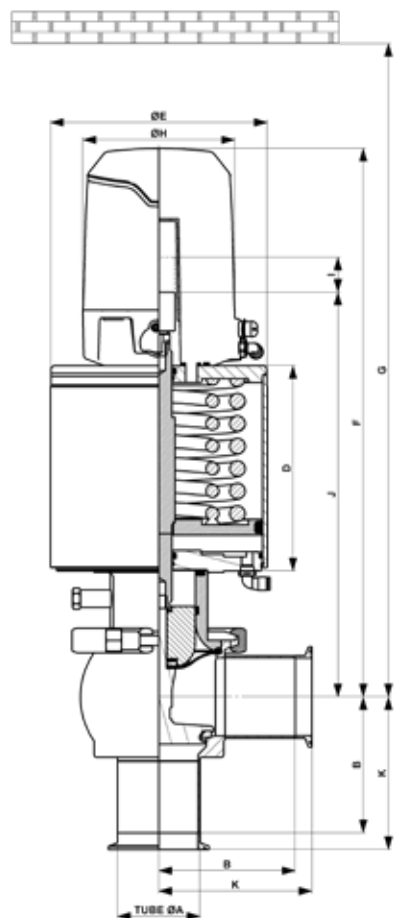
Optimum cleanliness



Diaphragm life up to 100,000 operations at 90°C



Quick and easy maintenance



SPECIAL FEATURES

- Robust one-piece plug eliminates the risk of breakage and unscrewing.
- Spherical body machined from one piece of material, guaranteeing excellent resistance to expansion stresses
- Pneumatic actuator that can be dismantled and easily converted to NO (Normally Open), NC (Normally Closed) or DA (Double Acting).
- Actuator and disconnecter connected by clamps for easy maintenance and modularity of components
- Leak indicator, to show any leaks in the event of a diaphragm rupture

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: cross, L, T: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: PFA floating seal and PTFE diaphragm
- O-ring: EPDM or FKM
- Actuator: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth, Nut
- Standards:
 - SMS, DIN, US standard
 - US standard
 - SMS, DIN
 - SMS, DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

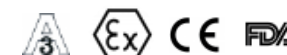
- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +140°C / 284°F (depending on sealing)
- Minimum temperature: +5°C / 41°F (depending on sealing)
- Maximum operating pressure: 6 bar (800 kPa) / 87 psi (depending on sealing)
- Actuator supply pressure: 4.5 bar (450 kPa) minimum / 65 psi 7 bar (700 kPa) maximum / 101 psi
- Resistance to vacuum: 0.4 bar / 5.80 psi

OPTIONS

- Deformable PTFE sealing diaphragm and alcohol barrier
- Available up to DN 250 on request



TUBE Ø A	B	C	D	Ø E	F	G with top	Ø H	Stroke I	J	L	Weight (kg) without top
SMS 22.6/25	55	45	110	89	339	480	117	13	227	70	4
SMS 35.6/38	70	55	110	89	346	485	117	13	234	85	4.2
SMS 48.5/51	82	70	123	114	375	505	117	18	266	97	7.4
SMS 60.3/63.5	105	85	159	167	424	565	117	28	313	125	17.2
SMS 72.9/76.1	110	95	159	167	430	570	117	27	321	130	17.3
SMS 100/104	130	125	181	217	481	630	117	36	368	155	37.4
DIN 26/29	55	47	110	89	339	480	117	13	227	-	4
DIN 32/35	55	51	110	89	344	485	117	13	231	-	4.1
DIN 38/41	70	55	110	89	346	485	117	13	234	-	4.3
DIN 50/53	80	71	123	114	375	505	117	18	266	-	7.4
DIN 66/70	108	93	159	167	427	565	117	28	316	-	17.3
DIN 81/85	115	105	159	167	436	575	117	26	325	-	17.7
DIN 100/104	130	125	181	217	481	630	117	36	368	-	37.4
DIN 125/129	160	155	285	270	651	845	117	52	538	-	77.8
DIN 150/154	180	180	285	270	663	885	117	49	553	-	74
US 1" (22.1/25.4)	51	45	110	89	339	480	117	13	227	64	4.1
US 1 1/2" (34.8/38.1)	57	55	110	89	346	485	117	13	234	70	4.3
US 2" (47.5/50.8)	76	70	123	114	375	505	117	18	266	89	7.5
US 2 1/2" (60.2/63.5)	76	85	159	167	424	565	117	28	313	89	17.2
US 3" (72.9/76.1)	82	95	159	167	430	570	117	27	321	95	17.5
US 4" (97.4/101.6)	130	125	181	217	481	630	117	36	368	146	37.9

Weight with Sorio® top:		+ 0.77 kg
For DN:	125 DIN	+ 1.29 kg
	150 DIN	

DCX4

For sensitive processes requiring an aseptic solution, DCX4 shut-off valves can be fitted with a deformable PTFE diaphragm to provide a physical barrier and prevent any risk of external contamination. The surface area of the diaphragm is equivalent to that of the shut-off plug, promoting pressure equalisation.

THE + PRODUCTS



Safe aseptic design with leak indicator



Suitable for greasy and corrosive products



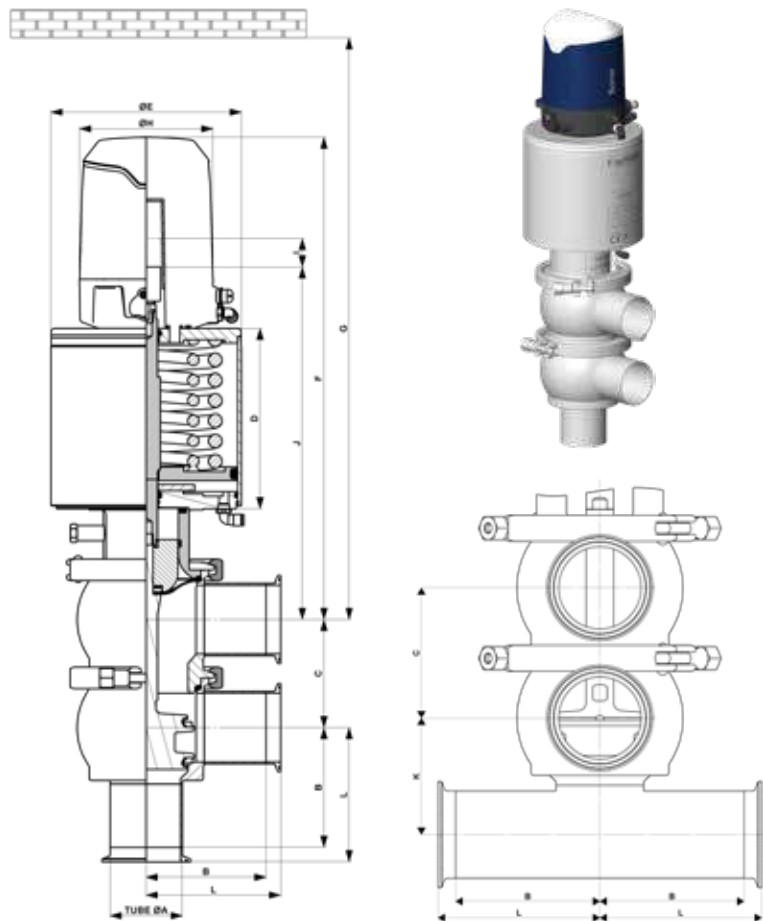
Optimum cleanliness



Diaphragm life up to 100,000 operations at 90°C



Quick and easy maintenance



SPECIAL FEATURES

- Robust one-piece plug eliminates the risk of breakage and unscrewing.
- Spherical body machined from one piece of material, guaranteeing excellent resistance to expansion stresses
- Pneumatic actuator that can be dismantled and easily converted to NO (Normally Open), NC (Normally Closed) or DA (Double Acting).
- Actuator and disconnecter connected by clamps for easy maintenance and modularity of components
- Leak indicator, to show any leaks in the event of a diaphragm rupture

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: L/L, T/L: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: PFA floating seal and PTFE diaphragm
- O-ring: EPDM or FKM
- Actuator: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth, Nut
- Standards:
 - SMS, DIN, US standard
 - US standard
 - SMS, DIN
 - SMS, DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital, AS-i or IO-Link

SURFACE STATE

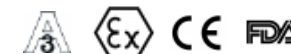
- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +140°C / 284°F (depending on sealing)
- Minimum temperature: +5°C / 41°F (depending on sealing)
- Maximum operating pressure: 6 bar (800 kPa) / 87 psi (depending on sealing)
- Actuator supply pressure: 4.5 bar (450 kPa) minimum / 65 psi 7 bar (700 kPa) maximum / 101 psi
- Resistance to vacuum: 0.9 bar / 13 psi

OPTIONS

- Deformable PTFE sealing diaphragm and alcohol barrier
- Available up to DN 250 on request



TUBE Ø A	B	C	D	Ø E	F	G with top	Ø H	Stroke I	J	K	L	Weight (kg) without top
SMS 22.6/25	55	55	110	89	339	525	117	11	227	45	68	5.6
SMS 35.6/38	70	70	110	89	346	555	117	11	234	55	83	6.1
SMS 48.5/51	82	80	123	114	375	595	117	17	266	70	95	9.5
SMS 60.3/63.5	105	95	159	167	424	660	117	25	313	85	118	21.7
SMS 72.9/76.1	110	105	159	167	430	675	117	25	321	95	123	22
SMS 100/104	130	150	181	216	481	780	117	35	368	125	155	51.8
DIN 26/29	55	55	110	89	339	525	117	11	227	47	-	5.6
DIN 32/35	55	65	110	89	344	550	117	11	227	51	-	5.9
DIN 38/41	70	70	110	89	346	555	117	11	233	55	-	6.1
DIN 50/53	80	80	123	114	375	595	117	25	266	71	-	9.8
DIN 66/70	108	100	159	167	427	670	117	25	316	93	-	22.1
DIN 81/85	115	130	159	167	436	705	117	35	325	105	-	23.3
DIN 100/104	130	150	181	216	481	780	117	35	368	125	-	51.8
DIN 125/129	160	165	285	270	651	1015	117	44	541	155	-	97.1
DIN 150/154	180	195	285	270	663	1080	117	44	551	180	-	92.6
US 1" [22.1/25.4]	51	82.5	110	89	339	560	117	11	227	45	64	6
US 1 1/2" [34.8/38.1]	57	82.5	110	89	346	570	117	11	234	55	70	6.3
US 2" [47.5/50.8]	76	95	123	114	375	610	117	17	263	70	89	10.2
US 2 1/2" [60.2/63.5]	76	108	159	167	424	670	117	25	313	85	89	22.1
US 3" [72.9/76.1]	82	120	159	167	430	690	117	25	321	95	95	22.7
US 4" [97.4/101.6]	130	165	181	216	481	795	117	35	368	125	146	53.3

Weight with Sorio® top:		+ 0.77 kg
For DN's:	125 DIN	+ 1.29 kg
	150 DIN	

DCX3

The aseptic bearing shut-off valve is fitted with a fluid circulation (washing or rinsing) or steam circulation bearing. This device sterilises the valve components in contact with the outside environment before they come into contact with the process fluid when the valve is operated, thus eliminating any risk of contamination.

THE + PRODUCTS



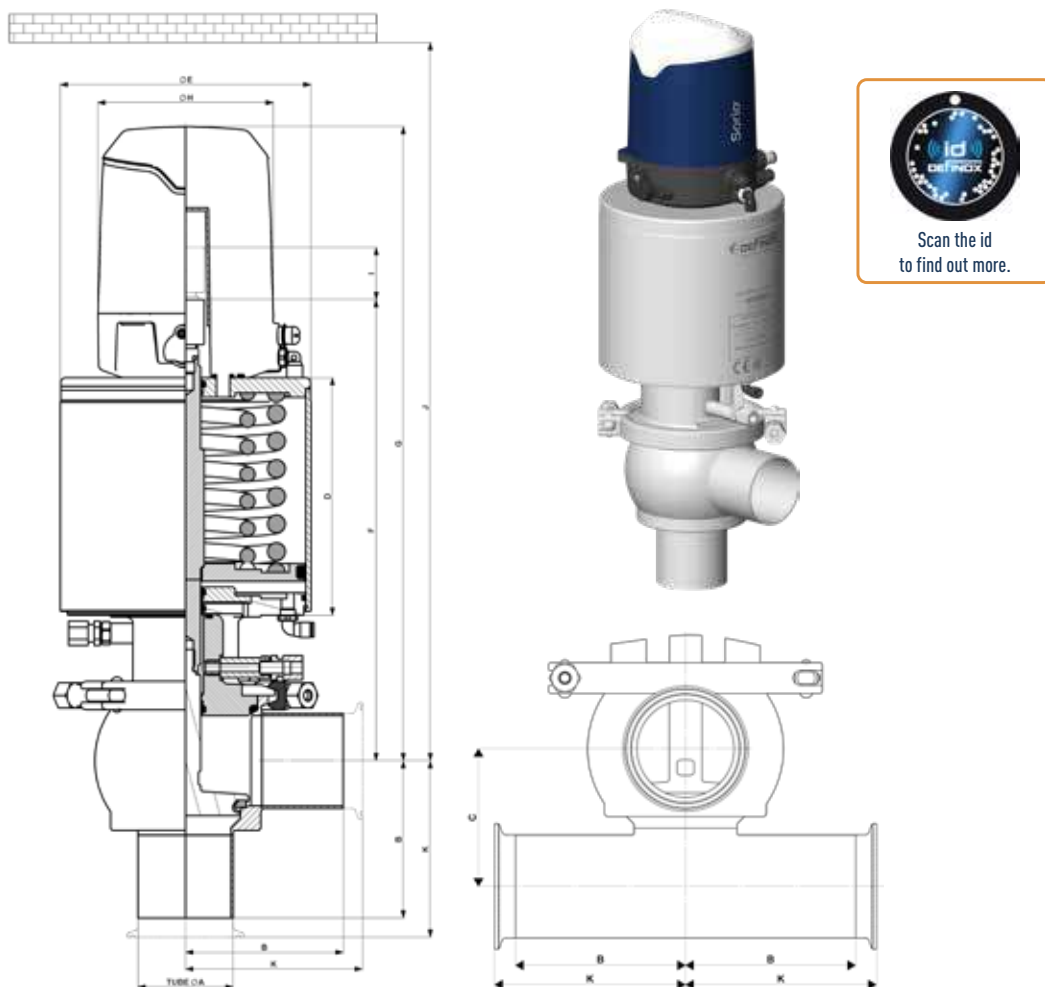
Optimum cleanability thanks to the floating PFA seal



Sterilisation by liquid or steam circulation



Resistance to expansion stress



SPECIAL FEATURES

- Robust one-piece plug eliminates the risk of breakage and unscrewing.
- Spherical body machined from one piece of material, guaranteeing excellent resistance to expansion stresses
- Pneumatic actuator that can be dismantled and easily converted to NO (Normally Open), NC (Normally Closed) or DA (Double Acting).
- Actuator and disconnecter connected by clamps for easy maintenance and modularity of components

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- Body: L-, T- or cross-shape: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: PFA, EPDM, FKM floating seal
- Actuator: AISI 304 / 1.4301 stainless steel

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth, Nut
- Standards:
 - SMS, DIN, US standard
 - US standard
 - SMS, DIN
 - SMS, DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

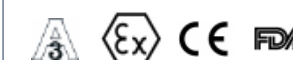
- Maximum temperature: +140°C / 284°F
- Minimum temperature: -5°C / 23°F
- Maximum operating pressure: 8 bar (800 kPa) / 116 psi
- Actuator supply pressure: 5.5 bar (550 kPa) minimum / 80 psi
8 bar (800 kPa) maximum / 116 psi
- Resistance to vacuum: 0.4 cm³/s

VARIANTS

All-elastomer version for use with loaded or abrasive products

OPTIONS

Cooling bearing to compensate for the effects of steam on the process fluid



TUBE Ø A	B	C	D	Ø E	F	G	Ø H	Stroke I	J with top	K	Weight (kg) without top
SMS 22.6/25	55	45	110	89	223	339	117	18	480	70	3.9
SMS 35.6/38	70	55	110	89	225	346	117	21	485	85	4.1
SMS 48.5/51	82	70	123	114	245	375	117	29	505	97	7
SMS 60.3/63.5	105	85	159	167	304	424	117	36	565	125	16.4
SMS 72.9/76.1	110	95	159	167	310	431	117	36	570	130	16.5
SMS 100/104	130	125	181	217	365	481	117	41	630	155	34.1
DIN 26/29	55	47	110	89	223	339	117	18	480	-	3.9
DIN 32/35	55	51	110	89	227	344	117	18	485	-	4
DIN 38/41	70	55	110	89	225	346	117	21	485	-	4.1
DIN 50/53	80	71	123	114	245	375	117	29	505	-	7
DIN 66/70	108	93	159	167	307	427	117	36	565	-	16.5
DIN 81/85	115	105	159	167	316	436	117	36	575	-	17
DIN 100/104	130	125	181	217	365	481	117	41	630	-	34.1
DIN 125/129	160	155	285	270	617	651	117	73	845	-	70.1
DIN 150/154	180	180	285	270	529	664	117	73	885	-	72
US 1" (22.1/25.4)	51	45	110	89	222	339	117	18	480	64	4
US 1 1/2" (34.8/38.1)	57	55	110	89	225	346	117	21	485	70	4.1
US 2" (47.5/50.8)	76	70	123	114	255	375	117	29	505	89	7.1
US 2 1/2" (60.2/63.5)	76	85	159	167	305	424	117	36	565	89	16.4
US 3" (72.9/76.1)	82	95	159	167	310	431	117	36	570	95	16.7
US 4" (97.4/101.6)	130	125	181	217	365	481	117	41	630	146	34.6

Weight with Sorio® top:		+ 0.77 kg
For DN's:	125 DIN	
	150 DIN	+ 1.29 kg

SAMPLING VALVES

- SAMPLING VALVES

PEX / PEAX

28

PEX / PEAX

PEX / PEAX sampling valves provide simple, safe sampling using two sterilisation methods: flame sterilisation or circulation of a cleaning product or steam. Their modular design and wide range of connections mean that they can be adapted to suit any configuration.

THE + PRODUCTS



Hygienic design, without risk of contamination



Certified optimal cleanability

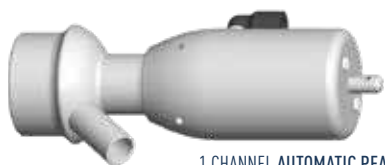


Compact, modular, tailor-made solution

1-WAY VALVES: FLAME STERILISATION OF THE VALVE CHANNEL



1 CHANNEL MANUAL PEX1



1 CHANNEL AUTOMATIC PEAX1

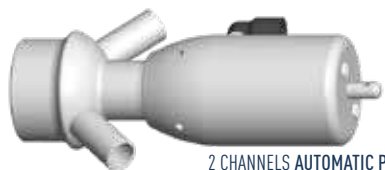


Scan the id
to find out more.

2-WAY VALVES: STERILIZATION BY CIRCULATION OF A STERILIZING CLEANING PRODUCT OR STEAM INJECTION

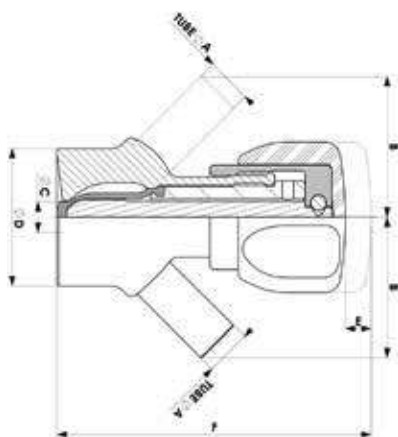


2 CHANNELS MANUAL PEX2

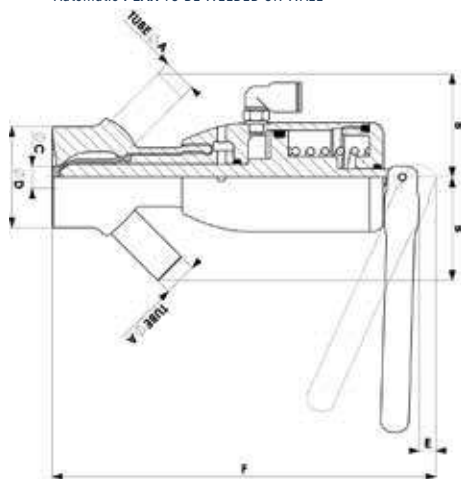


2 CHANNELS AUTOMATIC PEAX2

Manual PEX TO BE WELDED ON WALL



Automatic PEAX TO BE WELDED ON WALL



SPECIAL FEATURES

- Flame sterilisation: 1 channel (PEX1 / PEAX1)
- Sterilisation by circulation of a sterilising cleaning product or 2 channels steam injection (PEX2 / PEAX2)
- PFA sealing designed for dynamic flows, with good resistance to mechanical and chemical stresses
- Neutral elastomer profiled diaphragm, FDA approved
- One-piece body machined from a single piece of material, optimising flow, cleanability and sterilisation
- Ergonomic handle with opening and closing stopper
- Quick and easy interchangeability of the operating device

TECHNICAL CHARACTERISTICS

DIMENSIONS

DIN 1/8 - 10/12 - 16/18

MATERIAL

- **Body:** Stainless steel AISI 316L / 1.4404
- **Sealing:** PFA / EPDM or PFA / FKM valve, VMQ diaphragm (standard), EPDM, FKM or acid-resistant FKM
- **Handle:** White plastic. Custom colours available on request
- **Actuator:** Stainless steel AISI 304 / 1.4301

CONNECTIONS

- **Types of connection:** depending on the constraints or location of the connection
- **Connector type:**
 - Wall weld
 - To be butt-welded to tube
 - Gas thread
- **Standards:**
 - Clamp Ø 50.4 mm
 - Mini clamp Ø 34 mm
 - Micro clamp Ø 25.4 mm

SIGNALLING EQUIPMENT

Sorio® control top, digital, AS-i (2.0, 2.1 or 3.0) or IO-Link

SURFACE STATE

- **Outside RA:** 1.2 µm (150 grit)
- **Interior RA:** 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- **Maximum temperature :** 120°C / 248°F
- **Minimum temperature :** 0°C / 32°F
- **Maximum operating pressure. :** 10 bar / 145 psi
- **Actuator supply pressure:** minimum 4 bar / 58 psi
maximum 6 bar / 87 psi

- **Air connection:** Ø 4/6

OPTIONS

- Operating lever, for manual control in an automatic cycle
- Alternative channel connections: clamp, ferrule clamp, 3/8" gas outlet,



Manual PEX to be welded on wall

TUBE Ø A	B	Ø C	Ø D to be welded on the wall	Path E	F to be welded on the wall	Weight (kg)
DIN 1/8	33	4,5	28	5	68	0.30
DIN 10/12	37	8	36	7	83	0.40
DIN 16/18	50	15	52	7	96	0.80

Automatic PEAX to be welded on wall

TUBE Ø A	B	Ø C	Ø D to be welded on the wall	Path E	F to be welded on the wall	Weight (kg)
DIN 1/8	33	4,5	28	5	115	0.60
DIN 10/12	37	8	36	7	140	0.70
DIN 16/18	50	15	52	7	160	1.55

Refer to the CAT-211 catalogue for dimensions of other versions (butt weld, gas thread and clamp).

TANK BOTTOM VALVES

- SINGLE-SEAL SHUT-OFF VALVES

DCX3 FC

30

- INDEPENDENT DOUBLE PLUGS VALVES

VEOX® FC

32

DCX3 FC

Fitted with a mass flange, the DCX3 FC tank bottom shut-off valve is used to isolate the tank from the process during the tank filling or withdrawal phases.

THE + PRODUCTS



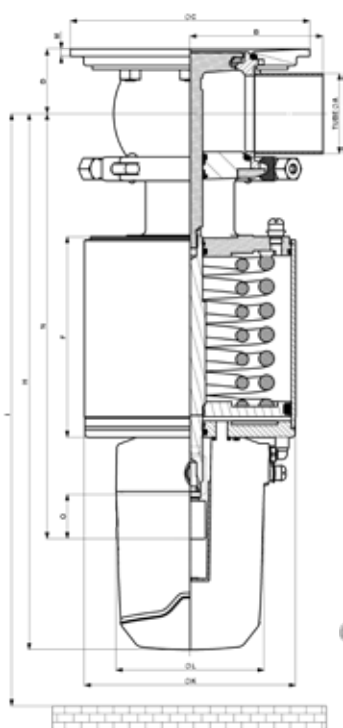
Optimum cleanability thanks to the floating seal



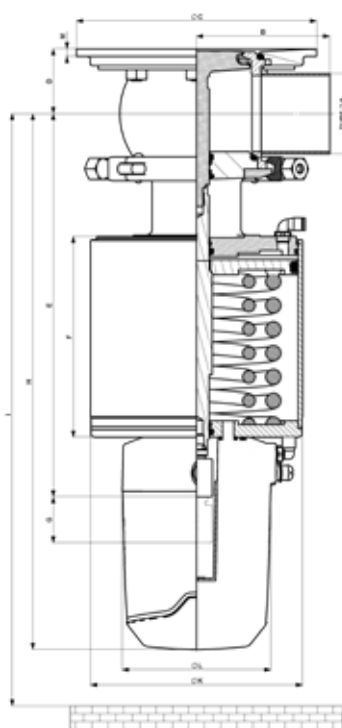
No retention zone, with a seal as close as possible to the tank wall



Suitable for contaminated or fragile fluids, thanks to the plug's complete release



DCX3 FC PFA
ASCENDING



DCX3 FC PFA
DESCENDING



Scan the id
to find out more.

SPECIAL FEATURES

- Body and plug shape ensure a seal as close as possible to the tank wall without a retention zone
- Robust one-piece plug, PFA floating seal, prevents the risk of breakage and unscrewing
- Two versions: ascending plug or descending plug

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 25 to DN 150

MATERIAL

- T- or L-shaped body: stainless steel AISI 316L / 1.4404
- Shut-off unit: stainless steel AISI 316L / 1.4404
- Flange: stainless steel AISI 316L / 1.4404
- Plug seal: PFA floating seal
- Body seal: EPDM, FKM
- Removable actuator: AISI 304 / 1.4301 stainless steel

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +140°C / +284°F
- Minimum temperature: -5°C / +23°C
- Maximum operating pressure: 7 bar (700 kPa) / 102 psi
- Actuator supply pressure: 5.5 bar (550 kPa) minimum / 80 psi
8 bar (800 kPa) maximum / 116 psi
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

- Long-stroke actuator for complete plug clearance (recommended for fragile or heterogeneous products)
- Manual Version

TUBE Ø A	B	Ø C	D	E	F	Stroke G descending plug	H	I with top	Ø K	Ø L	M	N	Stroke O ascending plug	Weight (kg) without top
SMS 22.6/25	55	139	31.5	219.5	109.5	24	338	480	89	117	6	236.5	22	5.2
SMS 35.6/38	70	139	37	224	109.5	26	345	485	89	117	6	241	20	5.4
SMS 48.5/51	82	159	45	254.5	123	29	375	515	114	117	6	280	29	8.5
SMS 60.3/63.5	105	189	51	303	159	37	424	565	167	117	6	336	36	18.3
SMS 72.9/76.1	110	189	57.5	309.5	159	36	431	570	167	117	6	342.5	36	18.6
SMS 100/104	130	249	78	362.5	181	41	481	640	217	117	10	399	41	39.3
DIN 26/29	55	139	32	221	109.5	19	340	480	89	117	6	235	19	5.2
DIN 32/35	55	139	36	222.5	109.5	21	343	480	89	117	6	240	21	5.3
DIN 38/41	70	139	38	224.5	109.5	21.4	346	485	89	117	6	242.7	20.7	5.4
DIN 50/53	80	159	45	254.5	123	29	375	515	114	117	6	280.2	28.2	8.5
DIN 66/70	108	189	55	306.5	159	36	427	570	167	117	6	340	36	18.3
DIN 81/85	115	249	69	354	181	41	473	620	217	117	10	391	41	38.3
DIN 100/104	130	249	78	363	181	41	481	640	217	117	10	399	41	39.3
DIN 125/129	160	295	88.5	516.5	285	73	651	845	270	117	10	-	-	76.2
DIN 150/154	180	295	102	527	285	75	664	880	270	117	10	-	-	77.7
US 1" (22.1/25.4)	51	139	31.5	219.5	109.5	19	338	480	89	117	6	235.5	21	5.2
US 1 1/2" (34.8/38.1)	57	139	37	224	109.5	21	345	485	89	117	6	241	21	5.4
US 2" (47.5/50.8)	76	159	45	254.5	123	29	375	515	114	117	6	280	28	8.5
US 2 1/2" (60.2/63.5)	76	189	51	303	159	36	424	565	167	117	6	336	36	18.3
US 3" (72.9/76.1)	82	189	57	309.5	159	36	431	570	167	117	6	342.5	36	18.6
US 4" (97.4/101.6)	130	249	78	362.5	181	41	481	640	217	117	10	399	41	39.3

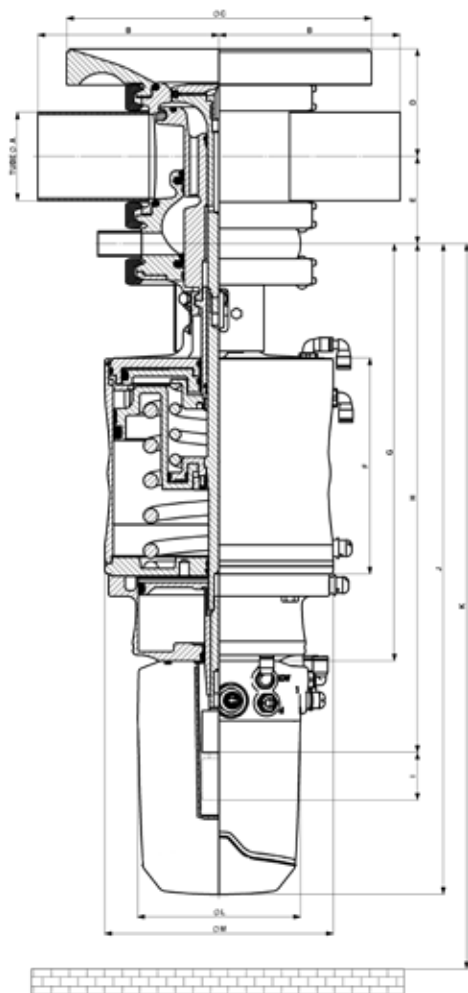
Weight with Sorio® top:		+ 0.77 kg
For DN:	125 DIN	+ 1.29 kg
	150 DIN	

VEOX® FC

The Veox® FC tank bottom double independent plugs isolates the tank from the rest of the process circuit. It incorporates a physical break between two circuits, allowing two fluids of different types to cross. The visualization of the leak is ensured by a fixed leak output.

THE + PRODUCTS

-  Optimum cleaning thanks to lifting plugs valves, without opening the valve
-  Hygienic and safe design
-  Pulsing of the lower plug, < 2s
-  Quick installation on tank



SPECIAL FEATURES

- Isolates the tank from the rest of the process circuit
- Body and plug shape ensure a seal as close as possible to the tank wall without a retention zone
- Washing of leak in airlock by lifting the lower plug
- PEEK version, suitable for extreme conditions up to 13 bar
- Sliding radial seal with stainless-steel insert on the lower plug, limiting expansion and increasing the valve's pressure and temperature performance.
- One-piece balancer machined from one piece of material, offering high resistance to water hammer.
- Fully maintainable actuator, adaptable to all versions of the VEOX range, guaranteeing instantaneous valve pulses
- Clamp mounting for easy dismantling and reduced maintenance time

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 38 to DN 150

MATERIAL

- L- or T-shaped body: stainless steel AISI 316L / 1.4404
- Shut-off unit: stainless steel AISI 316L / 1.4404
- Plug seal: PFA, EPDM, FKM floating seal
- Actuator: AISI 304 / 1.4301 stainless steel

CONNECTIONS

Mounted on a 360° weld-in flange, machined from a single piece of material, with no orientation constraints.

SIGNALLING EQUIPMENT

- Detection in lantern
- Sorio® control top, digital, AS-i or IO-Link

SURFACE STATE

- Outside RA: 1.2 µm (150 grit)
- Interior RA: 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +120°C / 248°F (depending on the type of seal)
- Minimum temperature: -5°C / 23°F (depending on the type of seal)
- Temperature differential between high and low channels: 120°C maximum / 248°F
- Maximum operating pressure in line: 10 bar (1000 kPa) / 145 psi
- Maximum operating pressure in the tank: 11 bar (1100 kPa) / 159 psi
- Actuator supply pressure: 5 bar (500 kPa) minimum / (72 psi)
7 bar (700 kPa) maximum (101 psi)
Pressure with top in direct supply
- Resistance to vacuum: 0.4 cm³/s

OPTIONS

Aseptic steam bearing

SMS	DIN	US	TUBE Ø A	B	Ø C	D	E	F	G	H	Stroke I	J	K	Ø L	Ø M	Weight (kg) without top
38	-	-	38 x 1.2	89	189	77	52	128	183	326	28	428	570	116	129	16
-	-	1"½	38.1 x 1.65	130	189	77	52	128	183	326	28	428	570	116	129	16.2
-	40	-	41 x 1.5	105	189	77	52	128	183	326	28	428	570	116	129	16
51	-	-	51 x 1.25	105	189	71	59	128	183	326	28	428	570	116	129	16.1
-	-	2"	50.8 x 1.65	105	189	71	59	128	183	326	28	428	570	116	129	16.2
-	50	-	53 x 1.5	105	189	71	59	128	183	326	28	428	570	116	129	16.1
63	-	-	63.5 x 1.6	130	219	78	63	155	217	366	35	468	615	116	164	24.9
-	-	2"½	63.5 x 1.65	130	219	78	63	155	217	366	35	468	615	116	164	24.9
-	65	-	70 x 2	130	219	80	66	155	217	366	35	468	615	116	164	25.4
76	-	-	76.1 x 1.6	130	219	85	69	155	217	366	35	468	615	116	164	25.5
-	-	3"	76.1 x 1.6	130	219	85	69	155	217	366	35	468	615	116	164	25.5
-	80	-	85 x 2	130	219	89	74	155	217	366	35	468	615	116	164	25.9
-	-	4"	101.6 x 2.1	155	239	98	83	189	269	419	52	552	700	116	186	33.7
104	100	-	104 x 2	155	239	98	83	189	269	419	52	552	700	116	186	33.7
-	125	-	129 x 2	200	338	118	102	195	275	449	54	582	800	116	219	66.8
-	150	-	154 x 2	200	338	134	116	195	275	449	54	582	800	116	219	72.7

Weight with Sorio® top:		+ 0.9 kg
For DN:	100 DIN/104 SMS	+ 1.4 kg
	125 DIN	
	150 DIN	

CLEANING VALVES

- **SINGLE-SEAL SHUT-OFF VALVES**

DCX3 CLEAN FLUSH

33

DCX3 CLEAN FLUSH

The hygienic design of the DCX3 Clean Flush valve ensures effective and targeted cleaning of the interior of the tank and its equipment. It combines the functionality of cleaning valves with the benefits of aseptic valves

THE + PRODUCTS



Easy to install on double jacketed tanks



Hygienic design, flush to the tank wall



External leak detection of all seals and diaphragm



Quick installation on tank

SPECIAL FEATURES

- PTFE plug, aseptic, without O-ring
- Customised definition of the jet diffuser plate to suit the tank and mixer
- Mass flange mounting
- Easy assembly and orientation of the valve thanks to clamp connections

TECHNICAL CHARACTERISTICS

DIMENSIONS

DN 25 SMS

MATERIALS

- L- or T-shaped body: stainless steel AISI 316L / 1.4404
- Shut-off unit: stainless steel AISI 316L / 1.4404
- Flange seal and intermediate body: EPDM, FKM
- Plug: PTFE
- Actuator: stainless steel AISI 304 / 1.4301

SIGNALLING EQUIPMENT

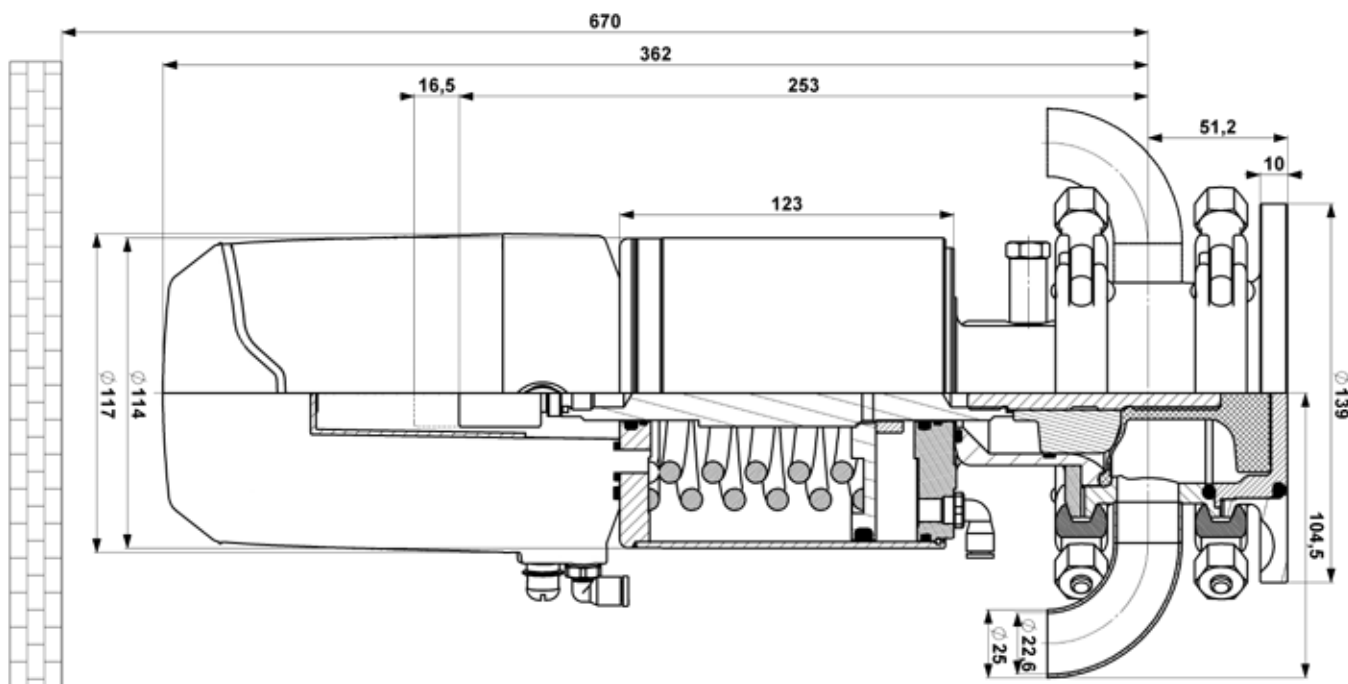
Sorio® control top, digital, AS-i or IO-Link

SURFACE STATE

- External RA = 1.2 µm (150 grit)
- Internal RA = 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +90°C / 194°F
- Minimum temperature: 5°C / 41°F
- Maximum operating pressure in line: 6 bar (600 kPa) / 87 psi
- Actuator supply pressure: 5.5 bar (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi



PROTECTION DEVICES

- NON-RETURN VALVE 35
- PRESSURE RELIEF VALVE 36
- VACUUM/PRESSURE RELIEF VALVE 37
- SHUT-OFF VALVE MECHANICALLY ADJUSTABLE
DCX3 38

NON-RETURN VALVE

A non-return valve (or check valve) is used to control the direction of flow of a fluid. This device lets the fluid pass in one direction, while blocking it if the direction of the flow were to reverse. It uses a guided plug with spring return.

THE + PRODUCTS



Certified hygienic design, with no retention zone



Low plug opening pressure



Minimum pressure drop in flow direction



Easy maintenance and installation thanks to a hygienic nut design

SPECIAL FEATURES

- Straight-through non-return valve
- Body machined from a solid piece of material
- Plug fitted with a seal pressed against its seat by a stainless-steel return spring

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 1/2" to DN 125

MATERIAL

- Body and plug: AISI 316L / 1.4404
- Flanges and clamp: AISI 316L / 1.4404
- Plug seals: PFA, elastomer (EPDM or FKM)
- Body seal: elastomer (EPDM or FKM)

CONNECTIONS

Tube outlet, clamp/clamp or flange spacer

CONDITIONS FOR OPERATION

- Maximum temperature: +120°C / 248°F
- Minimum temperature: 0°C / 32°F
- Maximum operating pressure: 10 bar (1000 kPa) / 145 psi
- Spring resistance: 0.03 to 0.2 bar, depending on diameter

OPTIONS

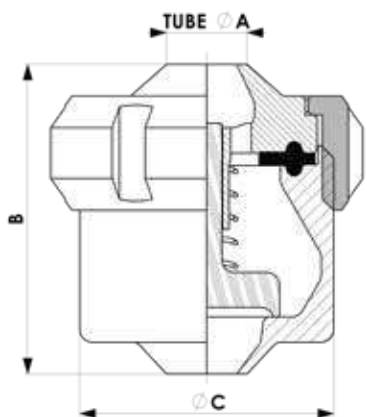
Metal-to-metal sealing, requiring parts to be matched (lapping the valve with its seat)

VARIANT

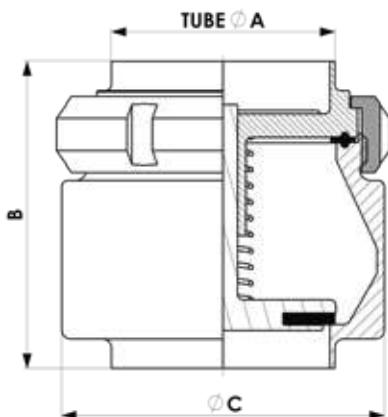
PFA plug seal, PTFE body seal suitable for CIP circuits and aggressive products



NON-RETURN VALVE
1-2" 3-4" WELD END

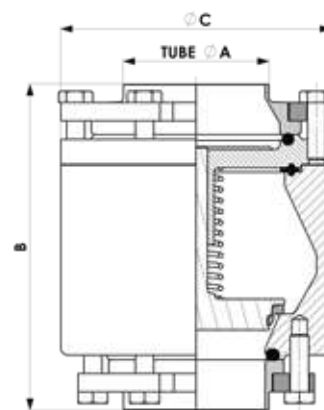


NON-RETURN VALVE
WELD END

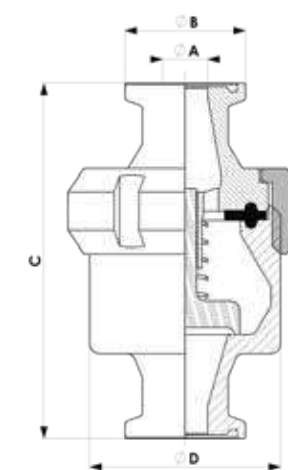


Scan the id
to find out more.

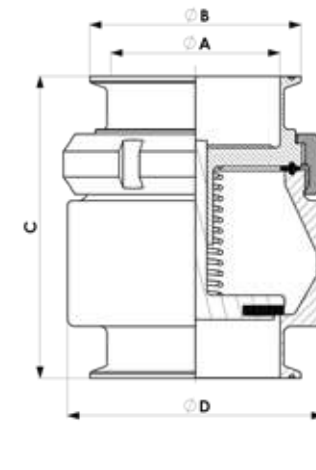
NON-RETURN VALVE
BETWEEN FLANGES



NON-RETURN VALVE
1-2" 3-4" CLAMP OUTLET



NON-RETURN VALVE
CLAMP OUTLET



Non-return valve weld end

SMS	DIN	US	TUBE Ø A	B	Ø C	Weight (kg)
-	-	1/2"	12.7 x 1.65	49	40	0.3
-	-	3/4"	19.05 x 1.65	49	40	0.3
25	-	-	25.4 x 1.65	75	60	0.65
-	-	1"	25.4 x 1.65	75	60	0.65
-	25	-	29 x 1.5	75	60	0.6
-	32	-	35 x 1.5	71	60	0.8
38	-	-	38.1 x 1.65	71	60	0.82
-	-	1 1/2"	38.1 x 1.65	71	60	0.82
-	40	-	41 x 1.5	66	60	1
51	-	-	50.8 x 1.65	75	74	1.1
-	-	2"	50.8 x 1.65	75	74	1.1
-	50	-	53 x 1.5	75	74	1.05
63	-	-	63.5 x 1.65	109	110	2.66
-	-	2 1/2"	63.5 x 1.65	109	110	2.66
-	65	-	70 x 2	105	110	2.63
76	-	-	76.1 x 1.6	105	110	2.31
-	-	3"	76.1 x 1.6	105	110	2.31
-	80	-	85.5 x 2.25	128	148	3.82
-	-	4"	101.6 x 2.1	124	148	4.43
104	100	-	104 x 2	124	148	4.4
-	125	-	129 x 2	142	178	5.6

Non-return valve between flanges

SMS	DIN	US	TUBE Ø A	B	Ø C	Weight (kg)
25	-	-	25.4 x 1.625	103	78	2.15
-	-	1"	25.4 x 1.625	103	78	2.15
-	25	-	29 x 1.475	103	78	2.16
38	-	-	38.1 x 1.625	103	78	2.06
-	-	1 1/2"	38.1 x 1.625	103	78	2.06
-	40	-	41 x 1.475	103	78	2.03
51	-	-	50.8 x 1.625	106	89	2.54
-	-	2"	50.8 x 1.625	106	89	2.54
-	50	-	53 x 1.475	106	89	2.5
63	-	-	63.5 x 1.62	142	118	5.4
-	-	2 1/2"	63.5 x 1.62	142	118	5.4
-	65	-	70 x 2	142	118	5.5
76	-	-	76.1 x 1.6	142	118	5.35
-	-	3"	76.1 x 1.6	142	118	5.35
-	80	-	85 x 2	152	150	7.42
-	-	4"	101.6 x 2.075	152	150	7.28
104	100	-	104 x 1.975	152	150	7.22
-	125	-	129 x 1.975	169	178	12.18

Non-return valve clamp outlet

SMS	DIN	US	TUBE Ø A	B	Ø C	Weight (kg)
-	-	1/2"	12.7 x 1.65	49	40	0.3
-	-	3/4"	19.05 x 1.65	49	40	0.3
25	-	-	25.4 x 1.65	75	60	0.65
-	-	1"	25.4 x 1.65	75	60	0.65
-	25	-	29 x 1.5	75	60	0.6
-	32	-	35 x 1.5	71	60	0.8
38	-	-	38.1 x 1.65	71	60	0.82
-	-	1 1/2"	38.1 x 1.65	71	60	0.82
-	40	-	41 x 1.5	66	60	1
51	-	-	50.8 x 1.65	75	74	1.1
-	-	2"	50.8 x 1.65	75	74	1.1
-	50	-	53 x 1.5	75	74	1.05
63	-	-	63.5 x 1.65	109	110	2.66
-	-	2 1/2"	63.5 x 1.65	109	110	2.66
-	65	-	70 x 2	105	110	2.63
76	-	-	76.1 x 1.6	105	110	2.31
-	-	3"	76.1 x 1.6	105	110	2.31
-	80	-	85.5 x 2.25	128	148	3.82
-	-	4"	101.6 x 2.1	124	148	4.43
104	100	-	104 x 2	124	148	4.4
-	125	-	129 x 2	142	178	5.6

PRESSURE RELIEF VALVE

The pressure relief valve prevents excessive pressure in the lines. Different springs cover a pressure range from 0 to 13 bar.

THE + PRODUCTS



Adjustable device



Possibility of pre-set adjustment, with seal



Easy dismantling with SMS nut

SPECIAL FEATURES

- Pre-set setting, protected by a cover at the top of the valve
- Can be sealed to secure the setting

TECHNICAL CHARACTERISTICS

DIMENSIONS

DN 1"½ and 2"

MATERIAL

- Body in L and plug: AISI 316L / 1.4404
- Seal: FKM, EPDM
- Setting device: AISI 304 / 1.4301

CONNECTIONS

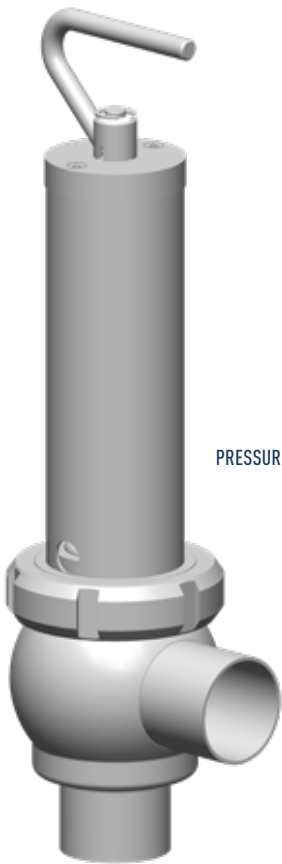
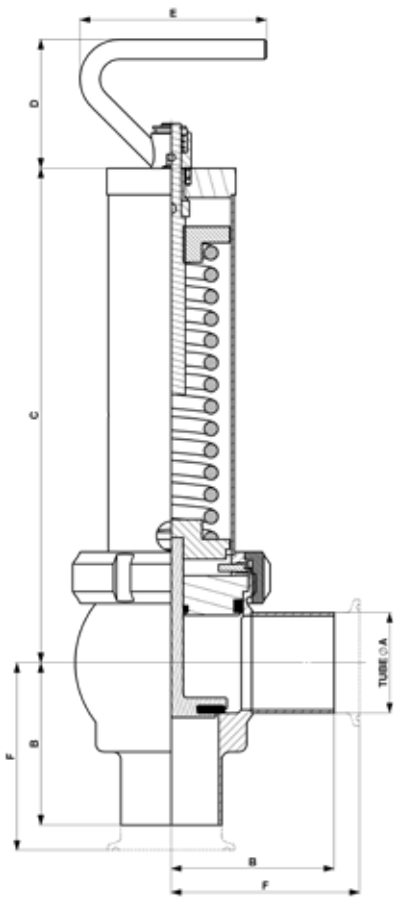
- Connector type:
 - To be welded
- Standards:
 - SMS, DIN, US standard

CONDITIONS FOR OPERATION

- Maximum temperature: +120°C / 248°F
- Minimum temperature: 0°C / 32°F
- Setting range: 0 to 13 bar (1300 kPa) / 0 to 188 psi

OPTIONS

The body can be fitted with a pressure gauge

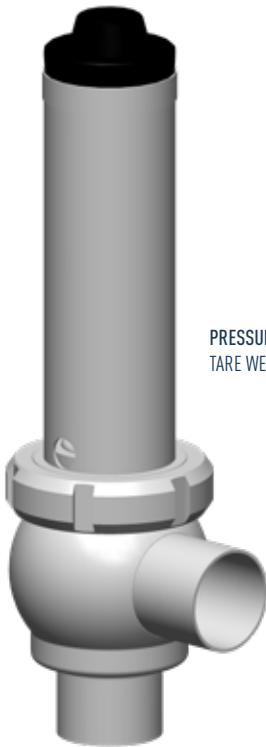
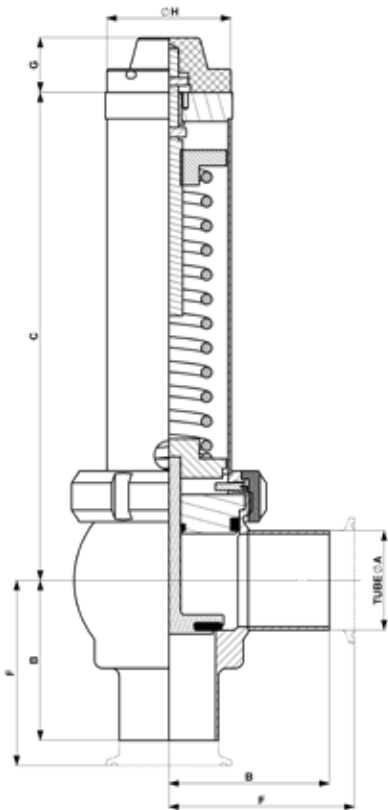


PRESSURE RELIEF VALVE



Scan the id
to find out more.

TUBE Ø A	B	C	D	E	F	G	Ø H	Weight (kg)
US 1"½ (34.8/38.1)	70	180	65	100	85	28	53	2.7
US 2" (47.5/50.8)	82	250	65	100	97	28	63.5	3.9



PRESSURE RELIEF VALVE
TARE WEIGHT

VACUUM PRESSURE RELIEF VALVE

The vacuum pressure relief valve is a device for protecting tanks during pressure and vacuum phases. The exhaust from these valves is not channelled.

THE + PRODUCTS



Easy maintenance



Compact design



Fixed calibration system

SPECIAL FEATURES

- Manual forced opening device for the 4" version
- No sticking thanks to PTFE plug, fitted with VMQ seal

TECHNICAL CHARACTERISTICS

DIMENSIONS

- Clamp DN 1 1/2, 2" et 2 1/2
- Clamp DN 4"

MATERIAL

- Valve: AISI 316L / 1.4404
- Pressure valve: PTFE
- Seals: FKM, VMQ

CONNECTIONS

Clamp or female connection DIN 50

CONDITIONS FOR OPERATION

- Maximum temperature: +80°C / 176°F
- Minimum temperature: 0°C / +32°F
- Vacuum: 30 mBar
- Pressure: 0.2 bar to 2 bar depending on spring / 3 to 29 psi



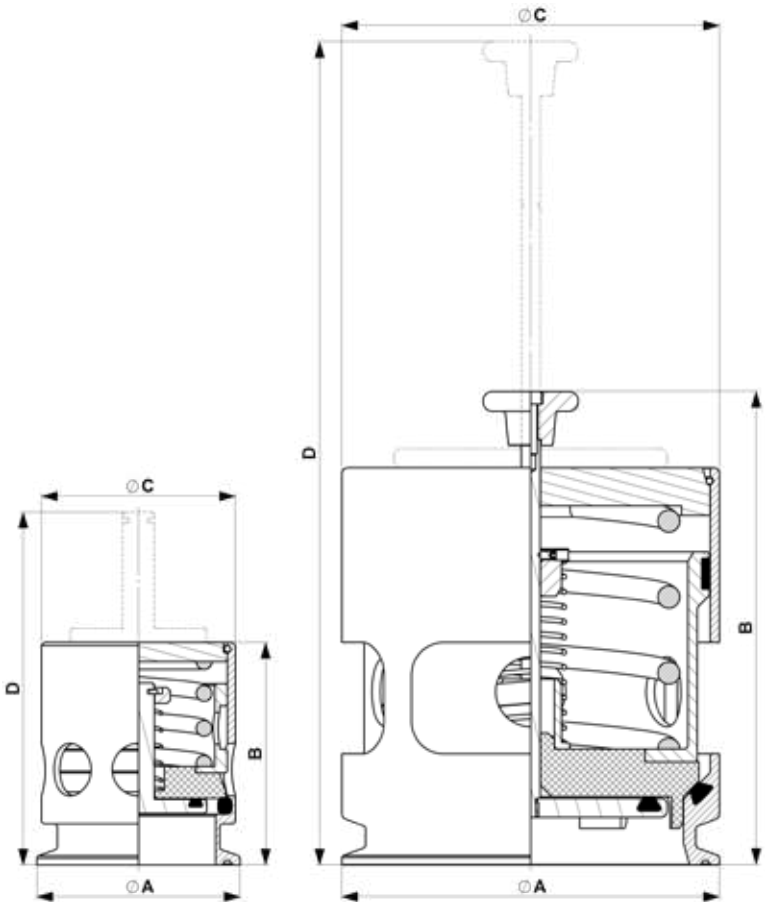
DN	Ø A	B	Ø C	D	Weight (kg)
US 1 1/2	50.4	89	61	130	0.81
US 2"	64	70	61	111	0.64
US 2 1/2	77.4	57	61	98	0.64
US 4"	119	149	119	259	3.44

PRESSURE VACUUM RELIEF VALVE
DN 1 1/2 TO 2 1/2



Scan the id
to find out more.

PRESSURE VACUUM RELIEF VALVE
DN 4"



DCX3 MECHANICALLY ADJUSTABLE RELIEF VALVE

The DCX3 shut-off valve combines safety and precision thanks to its adjustable fine pitch system. A preset pressure can be used to relieve the main circuit to protect certain appliances or circuits.

THE + PRODUCTS



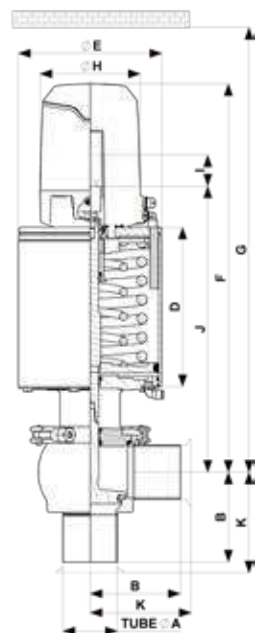
High response accuracy in the event of excess pressure



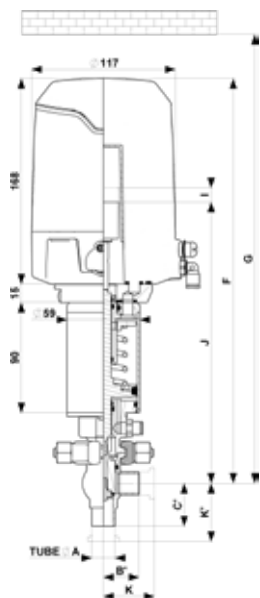
Minimised water hammer thanks to balanced valve



Optimum cleanliness



DCX3 VALVE
MECHANICALLY ADJUSTABLE



DCX3P FRACTIONAL VALVE
MECHANICALLY ADJUSTABLE



Scan the id
to find out more.

SPECIAL FEATURES

- Precise setting value adjustment
- Preset pressure value protection seal
- Reduced setting value tolerance
- Suitable for viscous, contaminated, or abrasive products
- Balanced valve for applications above 10 bar

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- DN 1/2" and DN 3/4" and from DN 25 to DN 104

MATERIAL

- Body: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: PFA floating seal, EPDM or FKM elastomer seal
- Actuator: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth, Nut
- Standards:
 - SMS - DIN - US standard
 - US standard
 - SMS - DIN
 - SMS - DIN

SIGNALLING EQUIPMENT

- Surface-mounted on single or double stainless-steel brackets
- Sorio® control top, digital version, AS-i or IO-Link

SURFACE STATE

- External RA = 1.2 µm (150 grit)
- Internal RA = 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +140°C / 284°F
- Minimum temperature: -5°C / 23°F
- Maximum operating pressure: 0.2 to 10 bar (20 to 1000 kPa)
3 to 145 psi, depending on diameter
- Actuator supply pressure: 5.5 bar (550 kPa) minimum / 80 psi
8 bar (800 kPa) maximum / 116 psi
- Resistance to vacuum: 0.4 cm³/s



TUBE Ø A	B	B'	C	C'	D	Ø E	F	G	Ø H	Stroke I	J	K	K'	Weight (kg) without top
SMS 22.6-25	55	-	45	-	109	89	313	460	117	18	171	70	-	6.7
SMS 35.6-38	70	-	55	-	109	89	333	480	117	22	189	85	-	6.9
SMS 48.5-51	82	-	70	-	132	114	347	490	117	30	228	97	-	9.7
SMS 60.3-63.5	105	-	85	-	190	167	442	590	117	37	298	125	-	18.5
SMS 72.9-76.1	210	-	95	-	190	167	445	590	117	37	304	130	-	18.5
SMS 100-104	130	-	125	-	217	216	504	650	117	40	361	155	-	38.4
DIN 26-29	55	-	47	-	109	89	313	460	117	18	170	-	-	6.7
DIN 32-35	55	-	51	-	109	89	331	480	117	18	191	-	-	6.9
DIN 38-41	70	-	55	-	109	89	333	480	117	22	189	-	-	6.9
DIN 50-53	80	-	71	-	132	114	347	490	117	30	228	-	-	9.7
DIN 66-70	108	-	93	-	190	167	444	590	117	37	299	-	-	18.5
DIN 81-85	115	-	105	-	190	167	490	600	117	40	311	-	-	37.4
DIN 100-104	130	-	125	-	217	216	504	650	117	40	361	-	-	38.4
US 1/2" (9.4-12.7)	-	27.5	-	30	-	-	328	500	-	12	227	40	42.5	
US 3/4" (15.75-19.05)	-	29	-	35	-	-	330	500	-	12	230	41.5	47.5	
US 1" (22.1-25.4)	51	-	45	-	109	89	313	460	117	18	170	64	-	6.7
US 1 1/2" (34.8-38.1)	57	-	55	-	109	89	333	480	117	22	189	70	-	6.9
US 2" (47.5-50.8)	76	-	70	-	132	114	347	490	117	30	228	89	-	9.7
US 2 1/2" (60.2-63.5)	76	-	85	-	190	167	442	590	117	37	298	89	-	18.5
US 3" (72.9-76.1)	82	-	95	-	190	167	445	590	117	37	304	95	-	18.5
US 4" (97.4-101.6)	130	-	125	-	217	216	504	650	117	40	361	146	-	38.4

Weight with Sorio® top:		+ 0.9 kg
For DN:	125 DIN	+ 1.4 kg
	150 DIN	

REGULATING VALVES

- REGULATING SHUT-OFF VALVES

DCX3 REGUL

40

DCX3 REGUL

Fitted with a positioner, the DCX3 shut-off valve can be used to precisely regulate a flow rate using a 4/20 mA or 0/10 V (I) signal.

THE + PRODUCTS



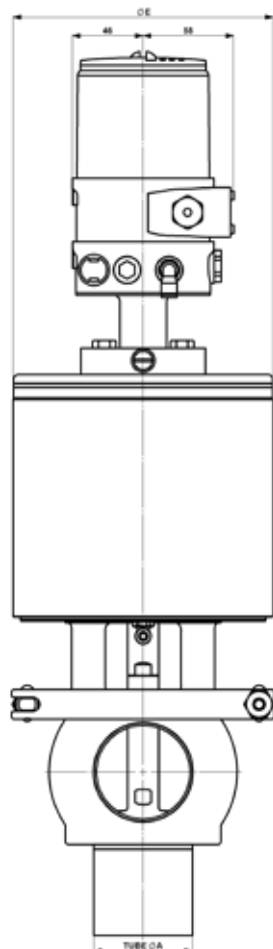
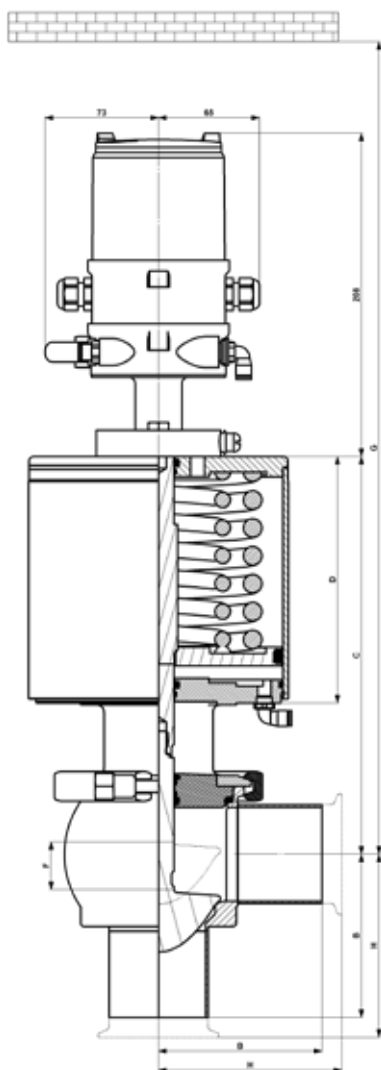
Plug geometry to suit the process



Precise, smooth adjustment of valve opening and closing



Easy to program



SPECIAL FEATURES

- 6 plug profiles available: sealed or profiled, reduced or very reduced section, EPDM, FKM or diaphragm
- Adaptable to aseptic bearing shut-off valve

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- DN 25 to DN 104

MATERIAL

- L-shaped body: AISI 316L / 1.4404
- Shut-off unit: AISI 316L / 1.4404
- Plug seal: EPDM or FKM elastomer seal
- Actuator: AISI 304 / 1.4301

CONNECTIONS

- Connector type:
 - To be welded
 - Clamp
 - Threaded
 - Smooth, Nut
- Standards:
 - SMS – DIN – US standard
 - US standard
 - SMS – DIN
 - SMS – DIN

SIGNALLING EQUIPMENT

Positioner (I)4/20 mA

SURFACE STATE

- External RA = 1.2 µm (150 grit)
- Internal RA = 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

- Maximum temperature: +140°C / 284°F
- Minimum temperature: -5°C / 23°F
- Maximum operating pressure: 8 bar (800 kPa) / 116 psi with elastomer seal
- Pressure setting tolerance: ± 15 %
- Actuator supply pressure: 5.5 bar (550 kPa) / 80 psi
8 bar (800 kPa) / 116 psi
- Resistance to vacuum: 0.7 cm³/s

OPTIONS

- Copy card for feedback
- Elastomer seal for absolute sealing



TUBE Ø A	B	C	D	Ø E	Stroke F	G	H	Weight (kg)
SMS 22.6/25	55	170	110	89	18.5	600	70	6
SMS 35.6/38	70	177	110	89	22	610	85	6.2
SMS 48.5/51	82	206	123	114	28.5	640	97	9.1
SMS 60.3/63.5	105	256	159	167	36.5	690	125	18.9
SMS 72.9/76.1	110	262	159	167	36	695	130	19
SMS 100/104	130	312	181	217	41	745	155	38.8
DIN 26/29	55	170	110	89	18.5	600	-	6
DIN 38/41	70	177	110	89	22	610	-	6.2
DIN 50/53	80	206	123	114	28.5	640	-	9.2
DIN 66/70	108	258	159	167	35.5	690	-	19.1
DIN 81/85	115	268	159	167	35	700	-	19.5
DIN 100/104	130	312	181	217	41	745	-	39.3
US 1" (22.1/25.4)	51	170	110	89	18.5	600	64	6.1
US 1 1/2" (34.8/38.1)	57	177	110	89	22	610	70	6.2
US 2" (47.5/50.8)	76	206	123	114	28.5	640	89	9.2
US 2 1/2" (60.2/63.5)	76	256	159	167	36.5	690	89	18.9
US 3" (72.9/76.1)	82	262	159	167	36	695	95	19.4
US 4" (97.4/101.6)	130	312	181	217	41	745	146	39.3

CONTROL AND SIGNALLING

- CONTROL TOP
SORIO®

42

SORIO® CONTROL TOP

The Sorio® control top is available in Digital, AS-i and IO-Link versions. Easy to use and install, it can be adapted to all types of valves, for all uses. It offers innovative diagnostic and adjustment functions. The IO-Link version enables predictive maintenance.

THE + PRODUCTS

-  Intelligent, easy to use ("copy past" function for setting parameters)
-  Learning in less than 5 seconds
-  Secure parameter setting with locking function
-  Reduction of line downtime thanks to diagnostics and preventive alerts
-  Low power consumption - 100 mA in operation
-  Customisable light distribution colours to differentiate between different types of flow

SPECIAL FEATURES

- Available with plastic housing and stainless-steel housing
- Only 4 cards to cover all valve technologies, for 3 communication modes: Digital, AS-i (3.1, 2.1 or 2.0) or IO-Link
- Permanent monitoring and self-diagnosis, providing real-time feedback on valve status
- 360° display of light distribution on all planes, making it easy to locate the valve from a distance
- M12 quick connection or cable gland

TECHNICAL CHARACTERISTICS

CHARACTERISTICS

- One top size for all versions
- Weight: 770 gr (1 SV) / 900 g (3 SV)
- Protection index: IP-69K
- Comes with: 1, 2 or 3 SV (solenoid valves)
- Magnetic linear sensor: accurate to 1/10th of a millimetre
- Stroke length: 0.1 – 80 mm

CONDITIONS FOR OPERATION

- Operating temperature: -10°C / 14°F to +60°C / 140°F
- Digital supply voltage - IO-Link: 24V CC ±10 %
- AS-i supply voltage: 29.5 / 31.5V DC
- Nominal power consumption: 30mA



OFFERING

An extended version of the Sorio® top to cover all uses

• Sorio® Basic top

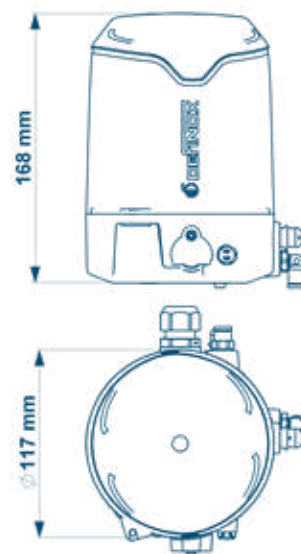
Supplied with a transparent white housing, the simplified version of the Sorio® control top is used to control and monitor valves (closing and opening phases). It is available in digital version and is fitted with a 1 to 3 SV terminal block, supplied without position detector, or with 1 or 2 detector(s).

• Sorio® ATEX top

The ATEX version of the Sorio® control top is available in digital, AS-i or IO-Link versions and comes with 1, 2 or 3 SV (solenoid valves), M12 connection or cable gland. This top is adaptable to all types of valves and can be combined with ATEX valves.

• Sorio® double-acting pigging top

The Sorio® top is available in a double-acting monostable or bistable version for scraping applications. It is available in digital, AS-i or IO-Link versions. It is fitted with a solenoid valve. The device includes the ProcessLine module for connecting sensors on the AS-i version. For the double-acting versions, monostable or bistable and additional air complete the range.



SORIO® TOP
BASIC



SORIO® TOP
ATEX M12



SORIO® TOP
DOUBLE PIGGING ACTING

SORIO® TOP
PLASTIC HOUSING



SORIO® TOP
STAINLESS-STEEL HOUSING



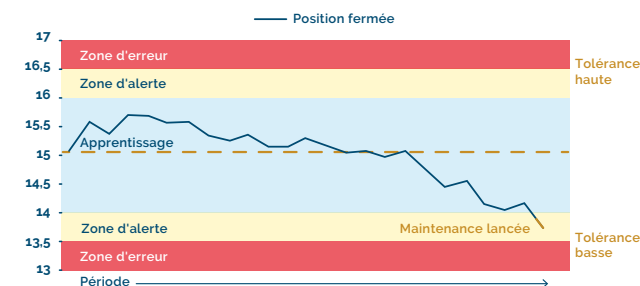
SORIO®
1 SV (SOLENOID VALVE)
IO-LINK



MODULE
1 SV (SOLENOID VALVE)
DIGITAL / IO-LINK

WARNING FUNCTION

The "warning" function, available exclusively with the Sorio® top, warns of behaviour outside pre-set operating tolerances before a fault occurs.



PIGGING SYSTEM

- PIGGING STATIONS AND PIGGERS
STARMOTION®

43

STARMOTION®

Pigging systems can be used to recover residual mass in production lines. Using Starmotion® solutions, a pig is pushed through the pipe by a fluid. The residual product is recovered at the end of the line. Once the pipe has been scraped and cleaned, the line is ready for a new production cycle. The pigging solutions developed by Definox are modular and easily adaptable to all types of process.

THE + PRODUCTS



+ 98% product recovery



Hygienic solution, including in-line pig for cleaning



A return on investment of less than 1 year



Low energy consumption



Quick series changeover;
Optimum line availability

SPECIAL FEATURES

- 2 stations: 1 stop station - 1 station can be cleaned online
- 3 configurations:
 - Automatic in-line cleaning
 - Automatic in-line cleaning at all points of the production line
 - Manual off-line cleaning.
- Station design, without retention
- The lips are turned over, making it easier to move the pig and reducing wear.
- Bayonet fitting for secure removal in the event of pressure in the line
- Clamp collar with safety sensors to detect the presence of the pig

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN25 to DN150

MATERIALS

- Body: AISI 316L / 1.4404
- O-ring: EPDM or FKM
- Actuator: AISI 304 / 1.4301
- Other materials on request: 254 SMO, AL-6XN, Uranus B6, Hastelloy C22, 904L.

CONNECTIONS

- Aseptic screw connection DIN 11864-1
- Aseptic flange connection DIN 11864-2
- Aseptic clamp connection DIN 11864-3.

SURFACE STATE

- External RA = 1.2 µm (150 grit)
- Internal RA = 0.8 µm (180 grit)

CONDITIONS FOR OPERATION

EPDM

FKM

- Minimum static temperature: -30°C / -22°F
- Maximum static temperature: +130°C / 266°F
- Maximum operating pressure: 10 bar (1000 kPa) / 145 psi

- Actuator supply pressure: 5.5 bar (550 kPa) minimum / 80 psi
- 7 bar (700 kPa) maximum / 101 psi

SIGNALLING EQUIPMENT

- Sorio® double-acting, monostable or bistable control top
- Available in digital, AS-i and IO-Link versions
- Mounted on pig insertion actuators and pig stop actuators, including the ProcessLine module for connecting sensors on the AS-i version

VARIANTS

- Double-jacketed to maintain the process fluid temperature
- Double pig, ensuring distribution of a process fluid to several distribution points,
- Meeting the requirements of 3A regulation N°101-00.

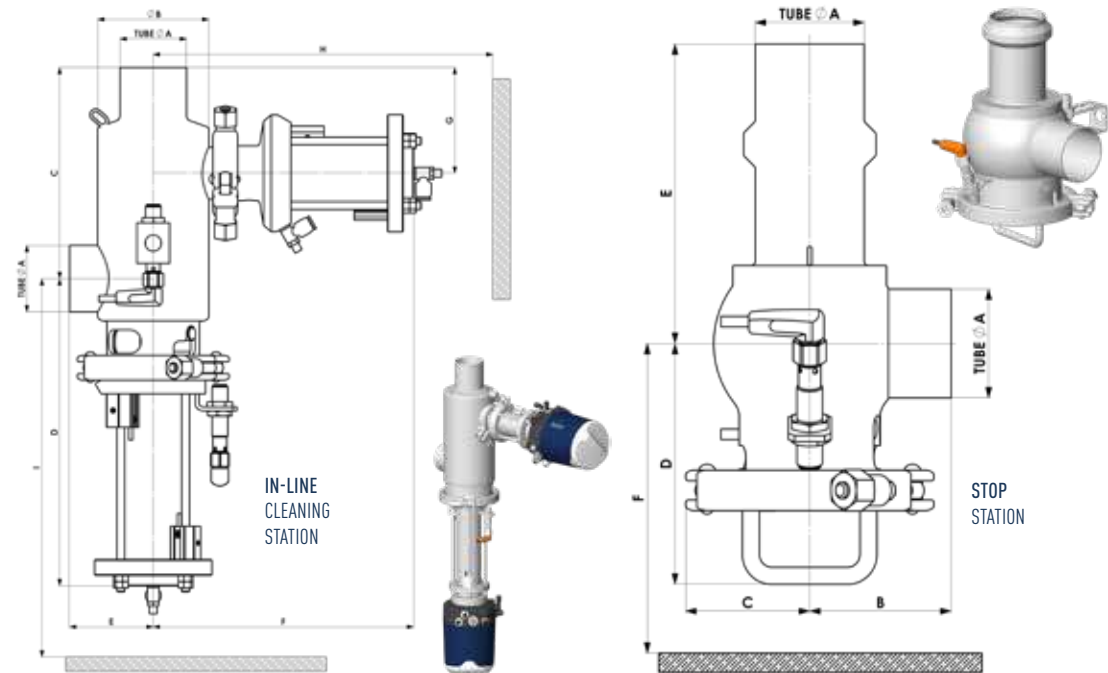
A WIDE RANGE OF ACCESSORIES AVAILABLE

- Pig detection pen
- Pig extraction tool
- Air push module
- On-line pig detection
- Piggable valves (single or double sealing)

SCRAPERS

The design of our pigs provides a low coefficient of friction while allowing maximum recovery of the pigged product.

- **One-piece pig:** This VMQ pig cannot be dismantled. The magnet is trapped in a cage, making it safe to use. It offers optimum sanitary qualities for sensitive applications.
SMS, DIN or US standard - From DN 25 to DN 104
- **Dismountable pig:** The dismantlable version offers attractive operating costs. The lip seals can be replaced according to wear and adapted to the process fluid.
SMS, DIN or US standard - From DN25 to DN150



Through station, weld end

SMS	DIN	US	TUBE Ø A	Ø B	C	D	E	F	G	H	I	Weight (kg)
25	-	-	25 x 1.2	51	109	188	38	154	58	450	550	3
-	-	1"	25.4 x 1.65	51	120	188	53	154	68	500	600	3
-	25	-	29 x 1.5	51	108	189	36	154	59	450	550	3
38	-	-	38 x 1.2	70	146	206	60	163	83	450	550	5
-	-	1 1/2"	38.1 x 1.65	70	150	206	60	163	87	500	600	5
-	40	-	41 x 1.5	70	148	207	59	163	87	500	600	5
51	-	-	51 x 1.25	85	162	236	64	200	81	500	600	7
-	-	2"	50.8 x 1.65	85	178	235	65	200	96	550	650	7
-	50	-	53 x 1.5	85	165	236	64	200	85	550	650	7
63	-	2 1/2"	63.5 x 1.6	115	239	298	78	214	122	550	650	10
-	65	-	70 x 2	115	242	300	96	214	130	550	650	11
76	-	3"	76.1 x 1.6	129	239	304	83	222	126	550	650	11
-	80	-	85 x 2	154	271	365	115	234	139	650	750	18
104	100	-	104 x 2	154	296	375	127	234	135	650	750	18
-	-	4"	101.6 x 2.1	154	298	373	108	234	136	650	750	18
-	150	-	154 x 2	254	463	510	201	344	227	700	900	41
-	-	6"	152.4 x 2.75	254	465	509	202	344	227	700	900	42

Non-crossing station, weld end

SMS	DIN	US	TUBE Ø A	B	C	D	E	F	Weight (kg)
25	-	-	25 x 1.2	52	80	100	88	400	3
-	-	1"	25.4 x 1.65	62	80	100	98	400	3
-	25	-	29 x 1.5	54	80	101	86	400	3
38	-	-	38 x 1.2	62	80	106	116	500	3
-	-	1 1/2"	38.1 x 1.65	52	80	106	106	500	3
-	40	-	41 x 1.5	61	80	107	104	500	3
51	-	-	51 x 1.25	67	80	113	141	500	4
-	-	2"	50.8 x 1.65	67	80	113	142	500	4
-	50	-	53 x 1.5	66	80	114	142	500	4
63	-	2 1/2"	63.5 x 1.6	101	100	120	171	550	6
-	65	-	70 x 2	101	100	122	176	550	6
76	-	3"	76.1 x 1.6	101	100	126	177	550	6
-	80	-	85 x 2	101	100	130	187	550	6
104	100	-	104 x 2	122	130	147	227	550	15
-	-	4"	101.6 x 2.1	122	130	146	227	550	16
-	150	-	154 x 2	146	160	173	339	650	25
-	-	6"	152.4 x 2.75	146	160	172	340	650	26

Refer to the PS1-CAT-207 catalogue for the dimensions of stations with clamp, threaded, or between-flange outlet.

CUSTOM SOLUTIONS

- VALVE ASSEMBLIES OR MANIFOLDS 46
- STARMANIFOLD STARWHEEL® INJECTION SYSTEMS 47
- OTHER SPECIFIC VALVES

MANIFOLD

The careful, robust design of Definox valve assemblies meets the most stringent requirements of sanitary processes. To meet the ergonomic and safety concerns of manufacturers, Definox incorporates devices into its valve assemblies to make them easier to install and to access. The geometry, size, and function issues for which they are intended, including the most complex, are fully considered in the design and production of these assemblies.

THE + PRODUCTS



Hygienic design without retention zones



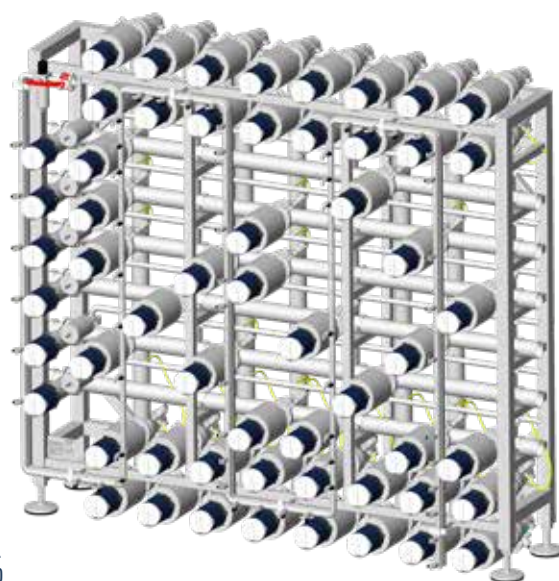
Robust, highly adaptable assemblies



Ergonomic solution for easy valve access, handling, and maintenance



MANIFOLD



VERTICAL
MANIFOLD

MANIFOLDS FOR MULTIPLE FUNCTIONS

In a plant, manifolds establish the links between the processing machines, the different types of tanks and the cleaning units.

They enable liquids to be transferred and lines to be cleaned, by managing the arrivals and returns of rinsing, cleaning, or sterilisation lines.

Manifolds perform the following functions:

- Distribution
- Reception
- Filling
- Injection
- Cleaning and sterilisation of process lines

CO2 MANAGEMENT

The vertical "gazblock" manifold recovers and distributes CO2 and CIP to beer storage tanks.

UNLIMITED CUSTOMISATION

- Lifting rings for handling
- Ladder and gateway for easy maintenance
- Frame with adjustable legs
- Removable tray for collecting drips
- Hygienic frame with square at 45° angle

TECHNICAL CHARACTERISTICS

DIMENSIONS

- SMS, DIN or US standards
- From DN 10 to DN 250
- Unlimited number of valves

MATERIALS

- In standard: AISI 316L / 1.4404
- Other materials on request: 254 SMO, AL-6XN, Uranus B6, Hastelloy C22, 904L.

VALVE CONTROL AND OPERATION

- Sorio® control top, digital version, AS-i or IO-Link
- Wire path, for digital and IO-Link versions
- Vampire socket welded to frame for AS-i connection



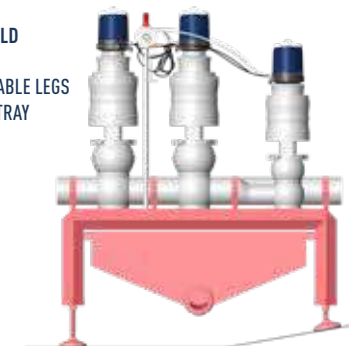
MANIFOLD
(FRAME, GATEWAY, STAIRCASE)



MANIFOLD
WIRE PATH



MANIFOLD
FRAME
ADJUSTABLE LEGS
+ DRIP TRAY



AIR
NETWORK
MANIFOLD



TAILOR-MADE

DEFINOX is renowned for its ability to design customised equipment adapted to modern sanitary processes. Our team of project managers, supported by our in-house design and engineering department, use customer specifications to study the solutions best suited to production and cleaning constraints. Our industrial flexibility means we can produce customised assemblies or specific valves to meet our customers' requirements.

THE + PRODUCTS



Hygienic design without retention zones



High degree of adaptability



Support for the deployment and commissioning of complex assemblies

BASED ON SPECIFICATIONS DRAWN UP WITH OUR ENGINEERS

Our experts use calculations of mechanical and thermal stresses or fluid mechanics to define the technical solutions. Fluid simulations provide additional visual insight. These resources, as well as the support throughout the study process, make it easier to find the right solution.

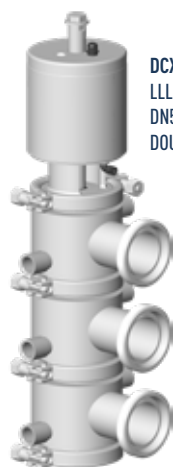


SOLUTIONS DESIGNED TO COVER MULTIPLE FUNCTIONS

DOUBLE-JACKET SOLUTIONS

Special valves and double-jacketed manifold to keep the process fluid at the right temperature

VEOX MANIFOLD DOUBLE JACKET



DCX4 REVERSE
LLL THREADED
DN50 DIN
DOUBLE JACKET



SECURE STATION
THROUGH BODY
DOUBLE ENVELOPE

COMPACT MANIFOLD

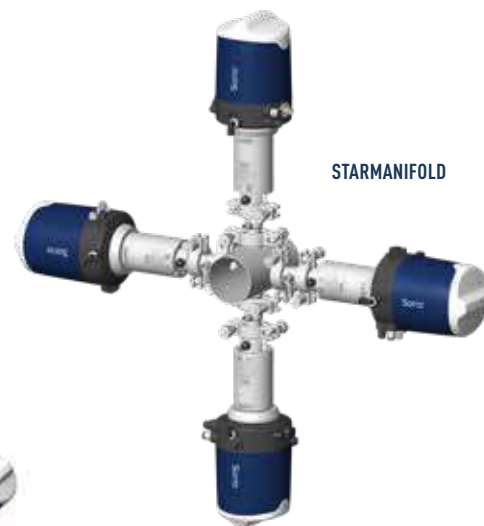
Compact gravity manifold developed for packaging lines



COMPACT
MANIFOLD

STARINJECTION

Starwheel® and Starmanifold® injection systems enable customised, multi-point injection of flavourings, colourings, and additives into the process fluid, as close as possible to the fluid stream. Depending on injection requirements, valves can be installed or removed quickly.



STARMANIFOLD

POWDER SAMPLING VALVE PEV

To facilitate powder sampling on production lines, Definox offers a volumetric sampling valve.

A piston stem is used to sample a given quantity at a given frequency, without stopping production. The valve is positioned on a vertical powder line. The sample is collected by gravity in the hollow part of the piston.

VOLUMETRIC SAMPLING VALVE PEV



SET DCX3
ADJUSTABLE VALVE





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