

STERIVALVE BUTTERFLY VALVE



Sterivalve is a sanitary butterfly valve designed to intercept bulk solid products (powders, granules, etc) flow.

SECTORS pharmaceutical, API, chemical, nutraceutical, food and nuclear industries.
FIELD OF APPLICATION interception of products flow on containers, hoppers and pipes.

FEATURES, AUTOMATION AND DOCUMENTATIONS

Valve Body Materials	Finishing	Gasket Material	Connections
Stainless Steel EN 1.4404 (AISI 316L)	Parts in contact with product: Ra<0,5µ. Other parts: Ra<1,2µ	Silicone	Machined-out spigot H=15mm; thickness 3 mm
Hastelloy C22/C276	Welds: completely grounded and polished	EPDM	Tri-Clamp BS4825-3 H=15mm
PEEK	Electropolishing upon request	Antistatic EPDM	Tri-Clamp DIN 32676 Reihe A, B or C, H=15mm
PTFE Lined Stainless Steel	Other finishing upon request	PTFE Filmed EPDM	Tri-Clamp ISO 2582 H=15mm
Low δ-ferrite Stainless Steel		FKM	Connection flange for SteriFlange and aseptic gasket
Other types of Stainless Steel Available upon request		PTFE Filmed FKM	Connection for Steriflange with Bayonet system: to facilitate the SteriFlange mounting
		PTFE	

Opening	Support Style	Control System	Certificates and Declarations
Hand Lever 0°-90° (+/-45°)	Hand lever support	Inductive sensor switches	Material certificate EN 10204-3.1 for metallic parts
Push & Turn Lever: a special handle that facilitates the valve opening	Actuator support	Position cam	FDA 21 CFR 177.2600 or FDA 21 CFR 177.1550 for polymeric parts
Quarter turn gearbox, manually or automatically operated	Quick release support: clamp connection between the valve and the actuator	Electropneumatic or pneumatic positioner	USP class VI biocompatibility declaration (*)
Pneumatic Actuator, made of anodised aluminium, single or double effect	Integrated support with clamp	Solenoid valve, 5/2 or 3/2 type	Food grade material declaration according to Regulation (CE) 1935/2004, 2023/2006, 10/2001 (*)
Pneumatic Actuator, made of stainless steel, single or double effect	Docking system: automatic valve-opening system that can be placed on a discharge station	PLC Control Panel	Traceability report (*)
SteriBox: stainless steel enclosure for actuator			Roughness test map (*) Torque Measurement Test
			Gas tightness test to EN12266-1, test P12
			ATEX 94/9 /CE (*)
			PED certificate (*)
			CE declaration of incorporation as per Directive 2006/42/EC

(*) Documentation available upon request

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STERIVALVE data sheet – last updated 2015.04.14

INTERCEPTION
STERIVALVE

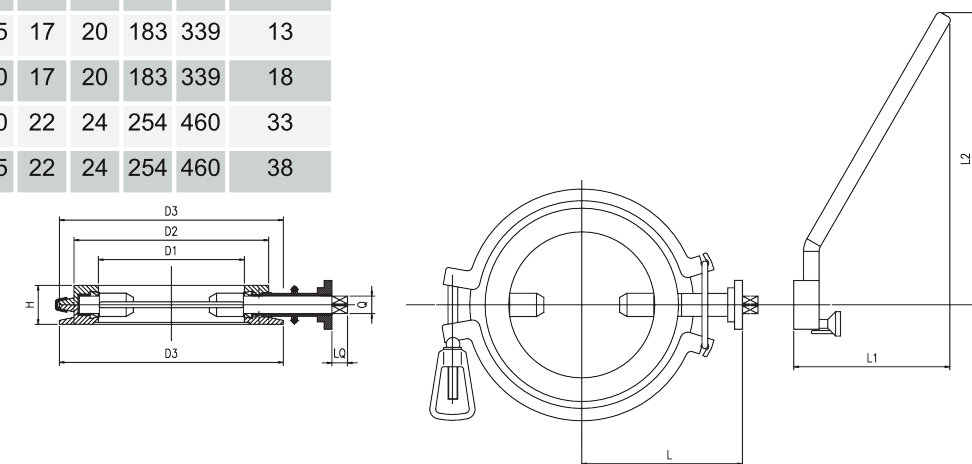
INTERCEPTION

- INTERRUPTION OF PRODUCT FLOW ON CONTAINERS
- INTERRUPTION OF PRODUCT FLOW ON HOPPERS
- INTERRUPTION OF PRODUCT FLOW ON PIPES

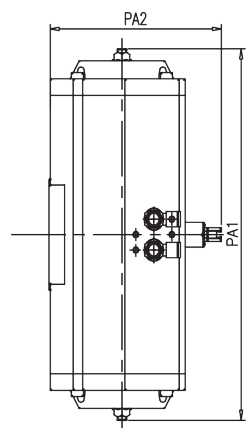
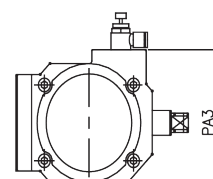
 **STERIVALVES**
Process Advantage

VALVE DIMENSIONS [mm] AND WEIGHT [kg]

D1	D2	D3	H	L	Q	LQ	L1	L2	WEIGHT
80	130	145	36	120	11	12	121	229	3
100	150	180	36	130	11	12	121	229	5
150	200	230	40	165	14	16	161	300	6
200	250	280	40	190	14	16	161	300	8
250	300	330	45	225	17	20	183	339	13
300	350	380	45	250	17	20	183	339	18
350	420	450	65	290	22	24	254	460	33
400	470	500	65	315	22	24	254	460	38



PNEUMATIC ACTUATOR DIMENSIONS AND SUPPORT FLANGE TYPE (ISO 5211) DOUBLE ACTING



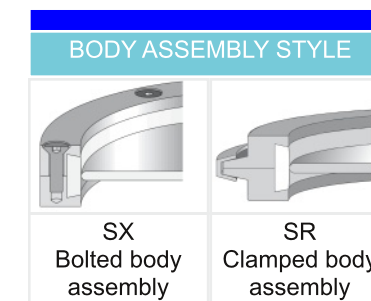
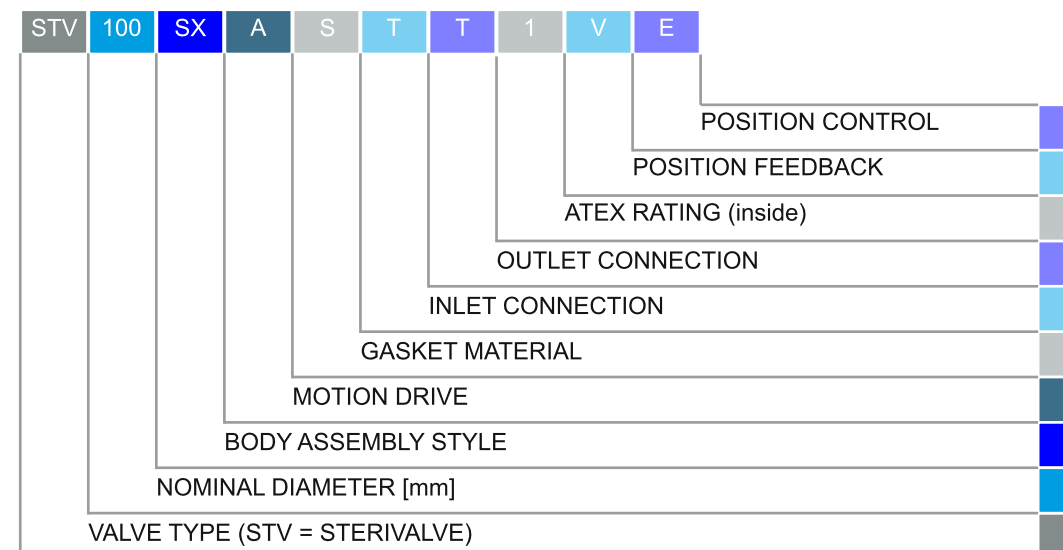
Silicone Gasket					EPDM/PTFE/FKM Gasket					
Actuator Flange	PA1 [mm]	PA2 [mm]	PA3 [mm]	Weight [kg]	ND [mm]	Actuator Flange	PA1 [mm]	PA2 [mm]	PA3 [mm]	Weight [kg]
F04	165	120	85	2	80	F04	165	120	85	2
F04	165	120	85	2	100	F05/F07	177	120	96	3
F05/F07	177	142	96	3	150	F05/F07	239	142	113	4
F05/F07	239	142	96	4	200	F07/F10	230	142	113	5
F05/F07	230	161	113	5	250	F07/F10	246	161	138	8
F07/F10	246	195	113	8	300	F07/F10	290	195	138	9
F07/F10	246	195	113	9	350	F07/F10	290	195	113	9
F07/F10	290	195	138	13	400	F07/F10	351	195	151	13

Silicone Gasket					EPDM/PTFE/FKM Gasket					
Actuator Flange	PA1 [mm]	PA2 [mm]	PA3 [mm]	Weight [kg]	ND [mm]	Actuator Flange	PA1 [mm]	PA2 [mm]	PA3 [mm]	Weight [kg]
F04	177	142	96	4	80	F05/F07	239	142	96	5
F05/F07	239	142	96	5	100	F05/F07	230	161	113	6
F05/F07	230	161	113	6	150	F07/F10	246	195	113	9
F07/F10	246	195	113	9	200	F07/F10	290	195	138	11
F07/F10	290	195	138	11	250	F07/F10	351	208	151	15

FUNCTIONAL PARAMETERS

ND [mm]	Tightness Test EN12266-1 test P12 [barg]	Max working speed		Nominal Torque Rating [Nm]		Expected gasket max. working life [Cycles]	
		[Cycles/min]	[m/s]	Silicone gasket	EPDM, PTFE, FKM gasket	Silicone gasket	EPDM, PTFE, FKM gasket
80	3,0	35	0,14	22	25	20'000	15'000
100	3,0	35	0,18	28	30	20'000	15'000
150	2,0	25	0,19	50	55	20'000	15'000
200	1,5	20	0,20	65	90	20'000	15'000
250	1,0	14	0,18	110	130	20'000	15'000
300	0,5	10	0,15	130	165	20'000	15'000
350	0,3	10	0,18	165	200	20'000	15'000
400	0,3	8	0,16	220	240	20'000	15'000

VALVE CONFIGURATION



Nominal Diameter	Motion Drive	Gasket Material	Inlet Connection	Outlet Connection	ATEX Rating (inside)	Position Feedback	Position Control
080	L=lever	S=silicone	T=Tri-clamp flange	T=Tri-clamp flange	N=Not rated	N=Visual	N=None
100	Q=45° lever	E=EPDM	C=welding spigot	C=welding spigot	1=cat. 1D	I=Inductive sensor	V=Solenoid Valve
150	P=Push&Turn	V=FKM	N=none	N=none	2=cat. 2GD		P=Pneumatic Positioner
200	K=45° P&T	T=PTFE	B=bayonet	B=bayonet			E=Electropneumatic Positioner
250	A=free shaft	C=cond. EPDM	F=Flange for SteriFlange	F=Flange for SteriFlange			
300	D=with actuator						
350	S=w/spring return actuator						
400	I=w/s.s. actuator						
	X=w/s.s. spring return actuator						

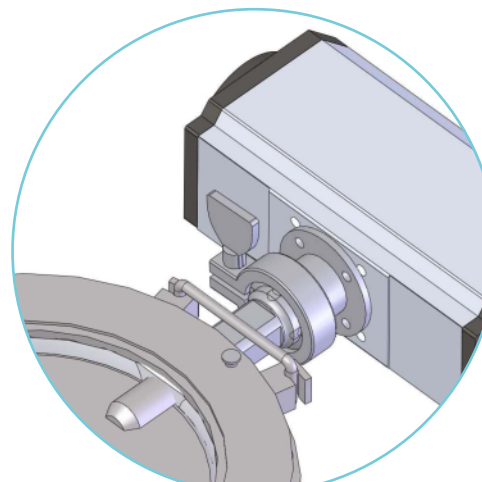


Figure 1: Quick Release System
The valve is connected to the actuator by means of a clamp. Once the valve is unclamped it can be easily removed.

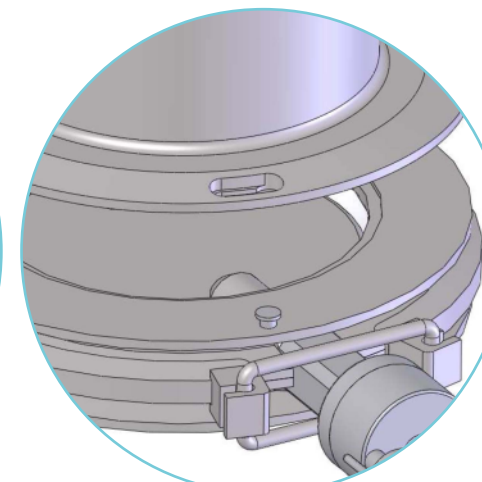


Figure 2: Bayonet Connection
The valve is equipped with two pins that have the corresponding slots on the counter-flange. The valve can be easily mounted even by a single operator. The connection is secured by means of a clamp (not shown).

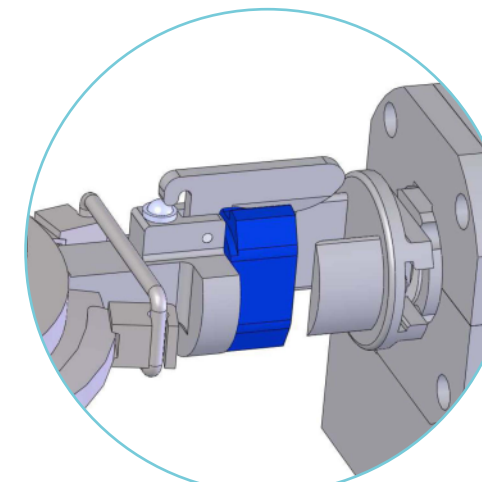


Figure 3: Docking System
The valve shaft has a wedge that is connected to the actuator by means of a wedge-fork type connection. The actuator stands fixed and the valve is free to move around mounted on a container, for example.

ATEX ZONE CLASSIFICATION/VALVE CATEGORY

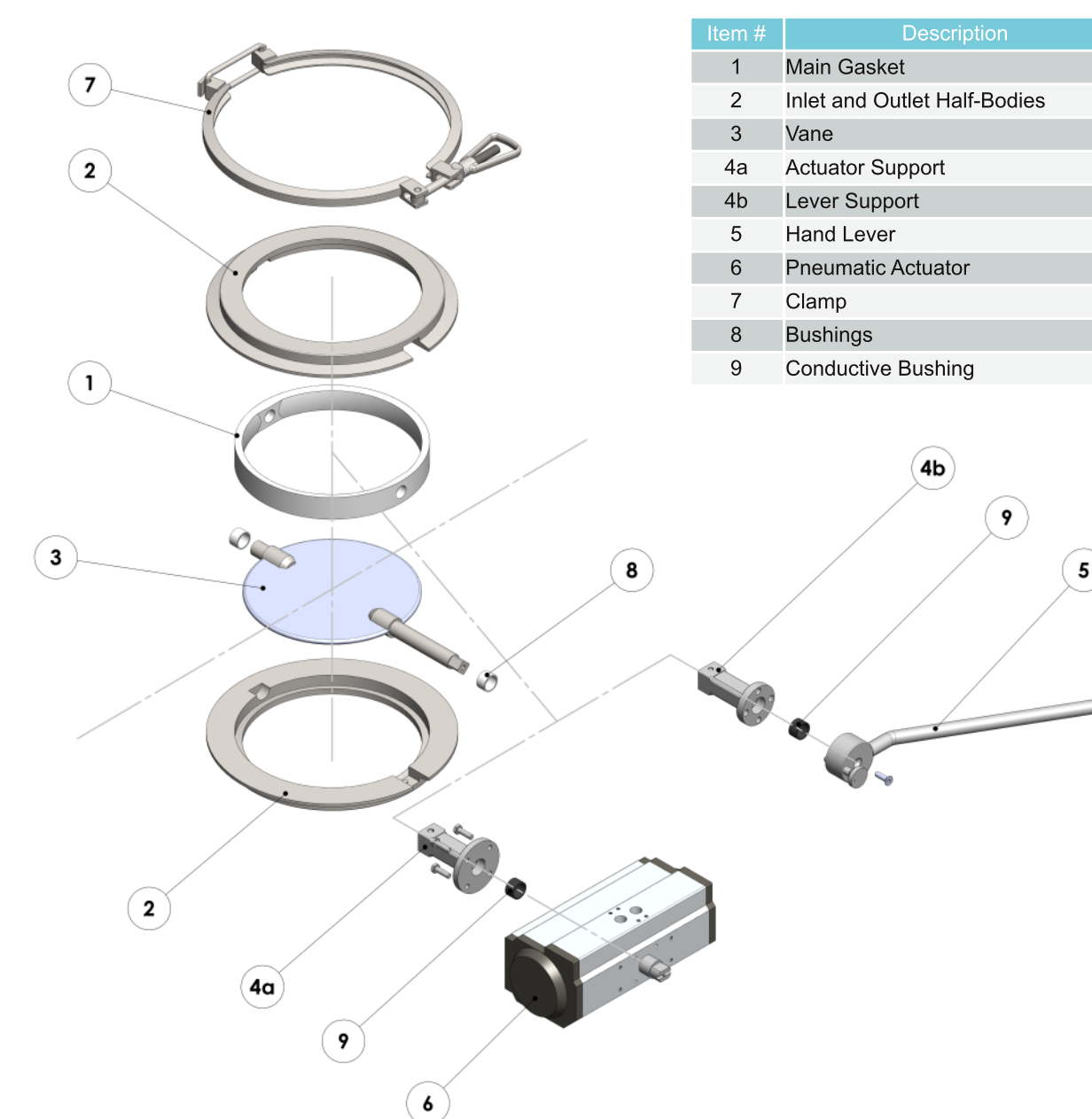
Working temperature range: -20 °C < Ta < +60 °C
Gas class: IIB
MIE Powder > 1mJ
Temperature class: T4, T=135 °C



Valve Category inside	Valve Category outside	Process Zone (inside)			
		20	0/20	1/21	2/22
1D	2D				
2GD	2GD				

The classification of the area hazards is customer's duty according to the directive 99/92/EC. The installer is to verify the compatibility between the zone classification and the valve category. Manual valves are out of ATEX directives application scope.

EXPLODED VIEW



Item #	Description
1	Main Gasket
2	Inlet and Outlet Half-Bodies
3	Vane
4a	Actuator Support
4b	Lever Support
5	Hand Lever
6	Pneumatic Actuator
7	Clamp
8	Bushings
9	Conductive Bushing

WEAR PARTS

ND [mm]	GASKET MATERIAL							BUSHING KIT
	Silicone	EPDM	PTFE Filmed EPDM	Antistatic EPDM	PTFE Lined Silicone	PTFE Filmed FKM	FKM	
80	GSK-080-S	GSK-080-E	GSK-080-E-T	GSK-080-C	GSK-080-T	GSK-080-V-T	GSK-080-V	KIT004
100	GSK-100-S	GSK-100-E	GSK-100-E-T	GSK-100-C	GSK-100-T	GSK-100-V-T	GSK-100-V	KIT004
150	GSK-150-S	GSK-150-E	GSK-150-E-T	GSK-150-C	GSK-150-T	GSK-150-V-T	GSK-150-V	KIT005
200	GSK-200-S	GSK-200-E	GSK-200-E-T	GSK-200-C	GSK-200-T	GSK-200-V-T	GSK-200-V	KIT005
250	GSK-250-S	GSK-250-E	GSK-250-E-T	GSK-250-C	GSK-250-T	GSK-250-V-T	GSK-250-V	KIT006
300	GSK-300-S	GSK-300-E	GSK-300-E-T	GSK-300-C*	GSK-300-T	GSK-300-V-T	GSK-300-V	KIT006
350	GSK-350-S	GSK-350-E*	GSK-350-E-T*	GSK-350-C	GSK-350-T*	GSK-350-V-T*	GSK-350-V*	KIT007
400	GSK-400-S	GSK-400-E	GSK-400-E-T*	GSK-400-C	GSK-400-T*	GSK-400-V-T*	GSK-400-V*	KIT007

(* Available upon request)

Note: Wear parts listed above refer to the standard valve configuration. We recommend to check the valve manual before ordering or to contact sales department.

It is advisable to replace the wear parts after 18 months from purchase.



Each valve is individually assembled, tested and CE marked in our facilities in Lucca (Italy). The serial number is then etched on the valve to guarantee the manufacturing quality and the traceability.