

Südmo Butterfly Valves Hygienic Shut-Off Valves Variable Connections and Configurations





Hygienic Shut-Off Valves The Butterfly Valve Programme Model 2000

Südmo Butterfly Valves can be implemented in any area of the process industry. Therefore the pneumatic or manual Butterfly Valves are used in the brewery, dairy, beverage and other food-stuffs industry, as well as in the pharmaceutical, chemical and cosmetics industry.



The butterfly programme contains all common kinds of connections, e.g., welding ends, threaded or clamp connections.

Two further variants of manual actuators are available (with locking mechanism as an option) as well as pneumatic actuators in the executions "air to open/spring to close", "spring to open/air to close" and "air to open/air to close".

Generally the pneumatic butterfly valves are equipped with a feed back support for proximity switches type M12 round. Manual butterfly valves can be equipped with feed back supports easily at any time.

In addition, options like rotary angle limiters or remote control tops can easily be provided.

The Südmo Butterfly Valve Programme in Detail

Solid butterfly discs forged in high-grade stainless steel. The streamline design of the butterfly disc guarantees low flow resistance.

Butterfly discs supported with slide bearings for simple installation through self-positioning. The components reduced friction gives a long operating life of the sealing. Seal geometry with expansion grooves ensures low wear and long life of seal.

FDA-certificated seal materials as standard:

EPDM, VMQ, FPM and HNBR are available for the complete programme. Body flanges are available with many different connection variants.

Classified for the Ex-range.

Please request documentation seperately.

High Quality Materials for the Manufacture only

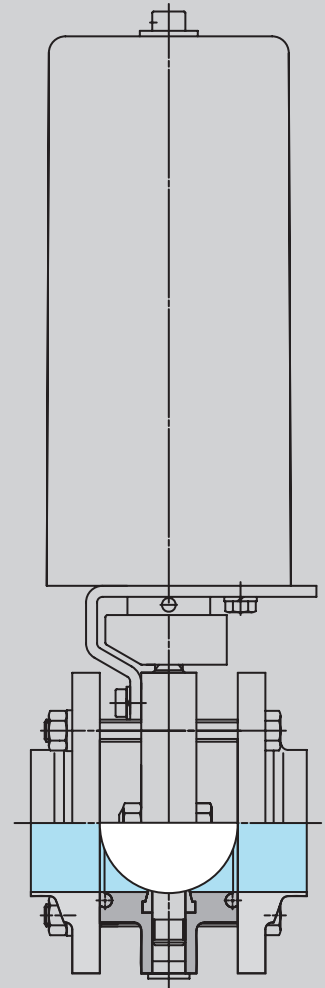
In the manufacture of Südmo valves great emphasis is set to the quality of the utilized materials.

The complete range is characterised by a high variability, easy handling and all product wetted parts are made of stainless steel type 1.4404 (AISI 316L).

Generally all seals are FDA-approved. Furthermore the special design minimizes the friction between valve disc and disc seal, therefore leading to low wear and tear, along with a longer life-time of the seals and longer maintenance intervals.

Easy maintenance and quick change of seals without any special tools are the standard for the whole range.

As well, the Südmo Butterfly Valve Programme is highly resistant to aggressiv media.





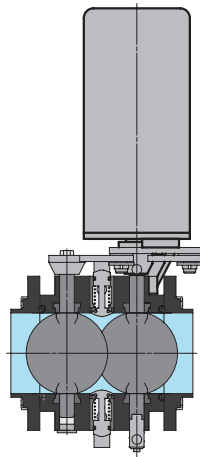
The Südmo Multi Way Butterfly Valves in Detail

Multi Way Butterfly Valves are used as a simple routing system. With a common device the two valve discs are being switched reversely. While one disc opens, the other shuts and vice versa. Due to the triple way arrangement the valve discs only allow one flow direction while the other way simultaneously is shut off.

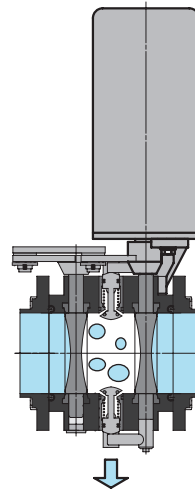
The Südmo Leakage Butterfly Valves in Detail

Südmo leakage butterfly valves provide double safety. Two butterfly discs are parallelly switched by a common device and a single actuator. Thus media that must not mix can easily be separated from each other. In addition the tightness of the seals can be supervised by means of the leakage outlets. These two safety devices therefore provide optimum protection, e.g., in case of the separation of CIP-media and product of highest importance.

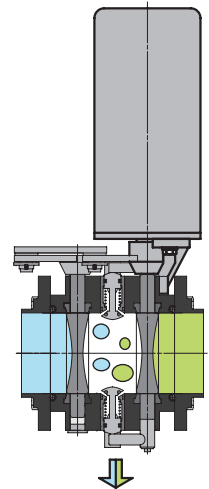
- = Product
- = E.G.: Acid or base



Butterfly Valve open



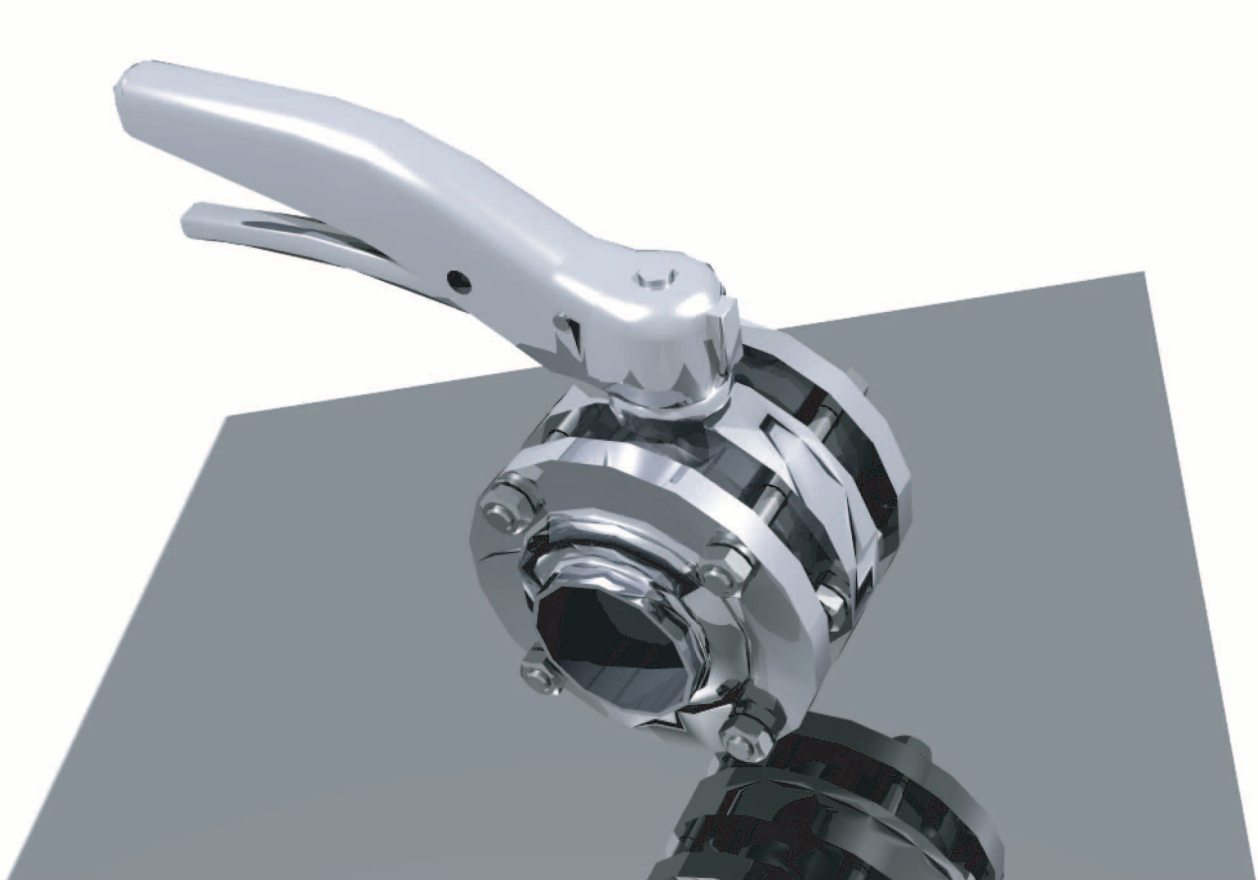
Butterfly Valve closed



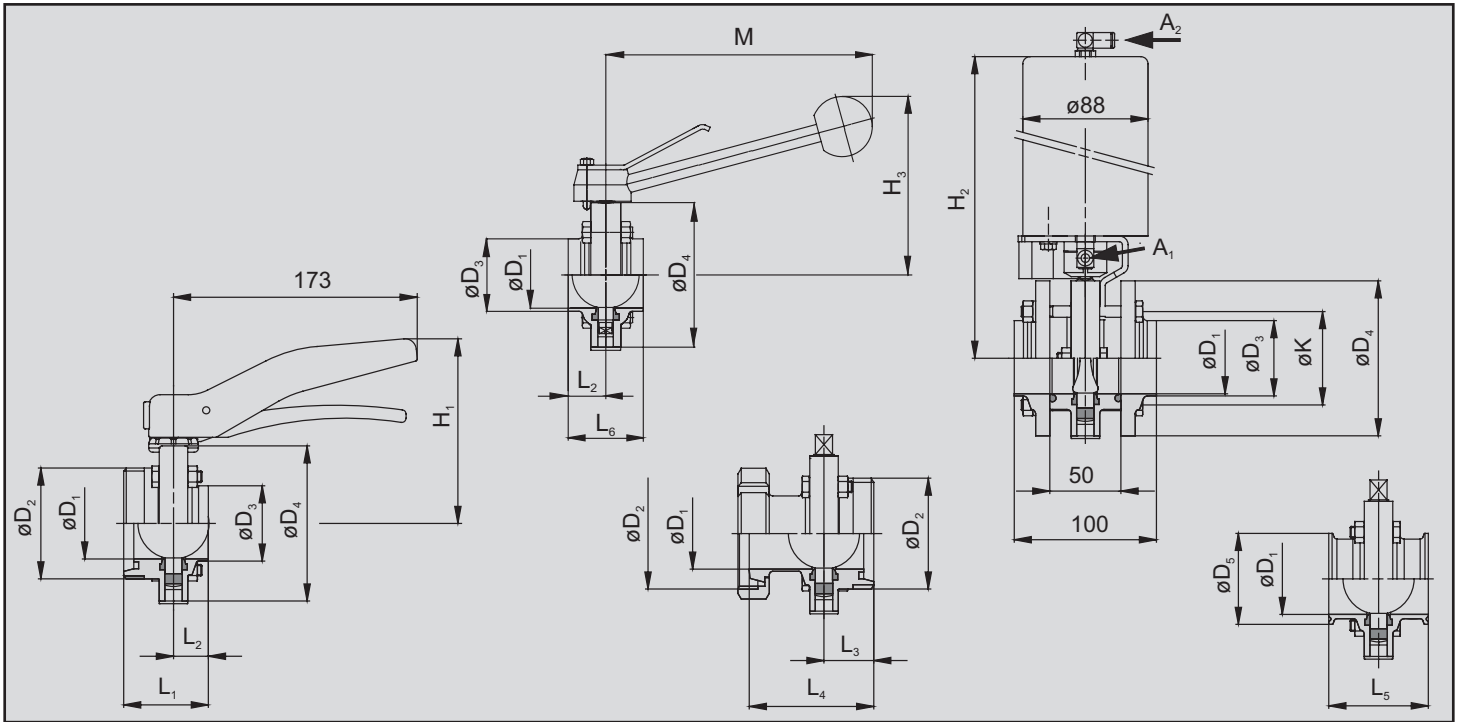
Flushing alternatively sterilisation of the leakage chamber

Materials	Product wetted parts	1.4404 (AISI 316 L)
	Optional	1.4435 (AISI 316 L)
	Parts not product wetted	1.4301 (AISI 304)
Sealing Elements	Sealing materials (FDA-approved)	EPDM, optional: HNBR, VMQ, FPM, PTFE and other sealing materials on request
Temperatures	Continuous operating temperature	130° C (EPDM) / 265° F*
	Sterilization temperature	150° C (EPDM) / 300° F* (approx. 20 min.)
Pressures	Operating pressure	Standard 10 bar
	Control air pressure	Min. 6 bar - max. 8 bar
Surfaces	Product wetted surfaces	Ra ≤ 0,8 µm
	Others	Bright-turned, Ra ≤ 1,6 µm
	Optional	Surfaces product wetted e-polished, higher quality surfaces on request

* Depending on operating parameters



Butterfly Valves

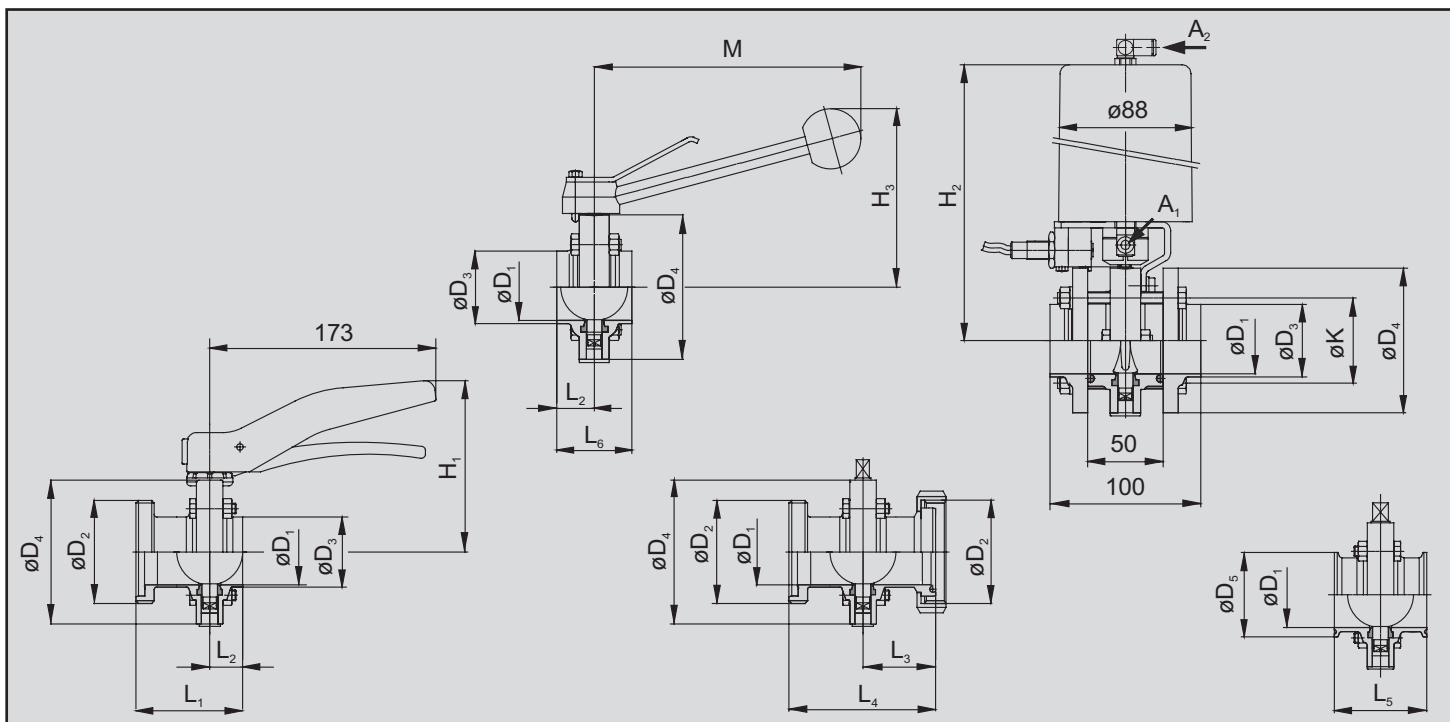


Metric	øD ₁	øD ₂ ²⁾	øD ₃	øD ₄	øD ₅	H ₁	H ₂	H ₃	øK	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	M
15	16	Rd 34 x 1/8"	19	62	----	110	263	88	50	55	25	30	71,5	----	50	150
20	20	Rd 44 x 1/6"	23	70	----	113	267	92	50	60	25	35	77,5	----	50	150
25	26	Rd 52 x 1/6"	29	84	50,5	120	274	102	67	60	25	35	81,5	70	50	150
32	32	Rd 58 x 1/6"	35	90	----	123	277	105	73	60	25	35	81,5	----	50	150
40	38	Rd 65 x 1/6"	41	96	50,5	126	280	108	80	60	25	35	85,5	70	50	150
50	50	Rd 78 x 1/6"	53	109	64	133	286	126	93	60	25	35	87,5	70	50	177
65	66	Rd 95 x 1/6"	70	126	91	142	294	135	110	62	25	37	93,5	74	50	177
80	81	Rd 110 x 1/4"	85	141	106	149	302	142	125	85	42,5	42,5	121,5	85	85	177
100	100	Rd 130 x 1/4"	104	161	119	159	313	152	145	85	42,5	42,5	128,5	85	85	177

OD-Tube	øD ₁	øD ₂ ²⁾	øD ₃	øD ₄	øD ₅	H ₁	H ₂	H ₃	øK	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	M
1"	22,1	IDF 37,05 x 1/8"	25,4	84	50,5	120	274	103	67	60	25	35	----	70	50	150
1 1/2"	34,8	IDF 50,57 x 1/8"	38,1	96	50,5	126	280	109	80	60	25	35	----	70	50	150
2"	47,5	IDF 64,08 x 1/8"	50,8	109	64	133	286	126	93	60	25	35	----	70	50	177
2 1/2"	60,2	IDF 77,59 x 1/8"	63,5	126	77,5	142	294	134	110	62	25	37,5	----	74	50	177
3"	72,9	IDF 91,11 x 1/8"	76,2	141	91	149	302	142	125	85	42,5	42,5	----	85	85	177
4"	97,4	IDF 118,14 x 1/8"	101,6	161	119	159	313	152	145	85	42,5	42,5	----	85	85	177

²⁾ Connection according to DIN 11851
 Further variants of connections on request

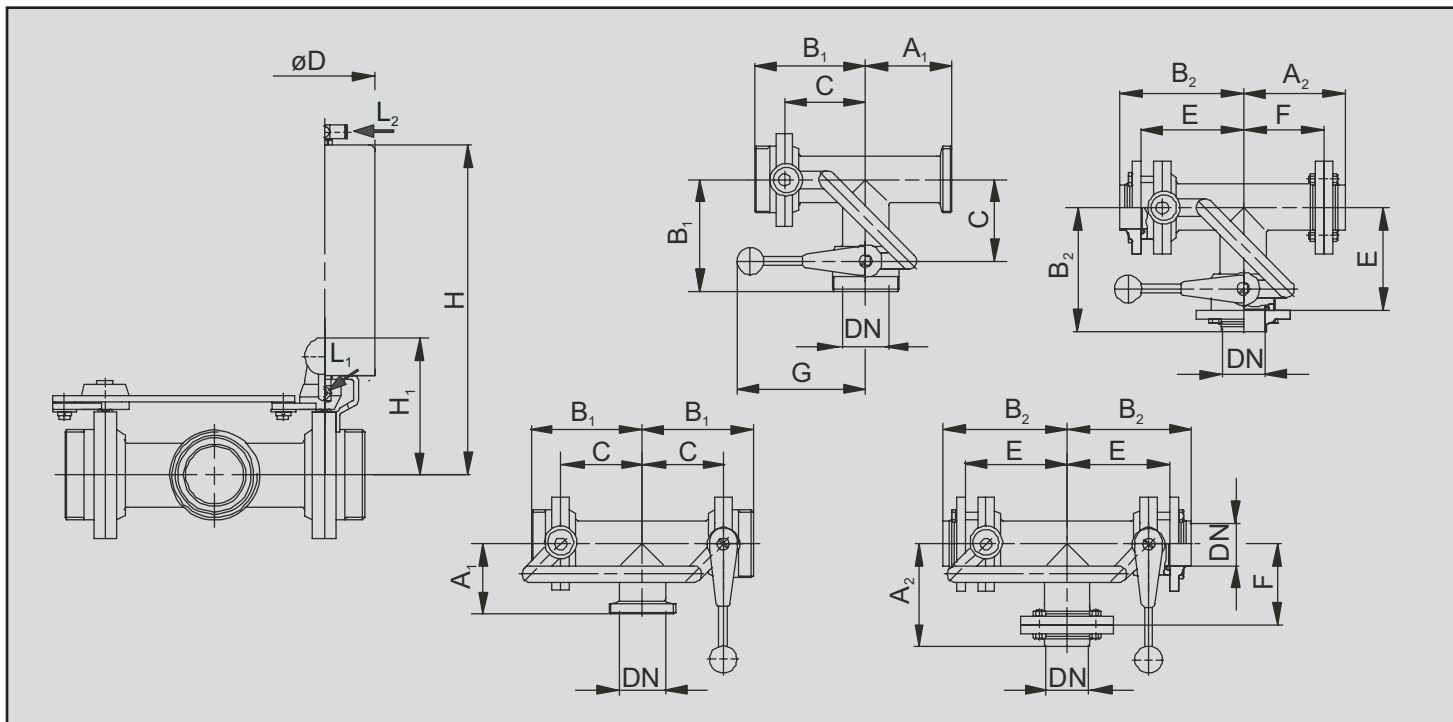
Butterfly Valves



ISO	ØD ₁	ØD ₂ ¹⁾	ØD ₃	ØD ₄	ØD ₅	H ₁	H ₂	H ₃	ØK	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	M
25	29,7	Rd 58 x 1/6"	33,7	84	50,5	120	274	103	67	80	25	50	105	70	50	150
32	38,4	Rd 65 x 1/6"	42,4	96	64	126	280	110	80	81	25	51	107	70	50	150
40	44,3	Rd 78 x 1/6"	48,3	96	64	126	280	110	80	81	25	55	111	70	50	150
50	56,3	Rd 95 x 1/6"	60,3	109	77,5	133	286	126	93	86	25	59	120	70	50	177
65	71,5	Rd 110 x 1/4"	76,1	141	91	149	303	142	125	127	42,5	80	164	85	85	177
80	84,3	Rd 130 x 1/4"	88,9	141	106	149	303	142	125	135	42,5	88	180	85	85	177
100	109,1	-----	114,3	161	130	159	314	152	145	-----	42,5	-----	-----	85	85	177

¹⁾ Connections according to DIN 11864-1
Further variants of connections on request

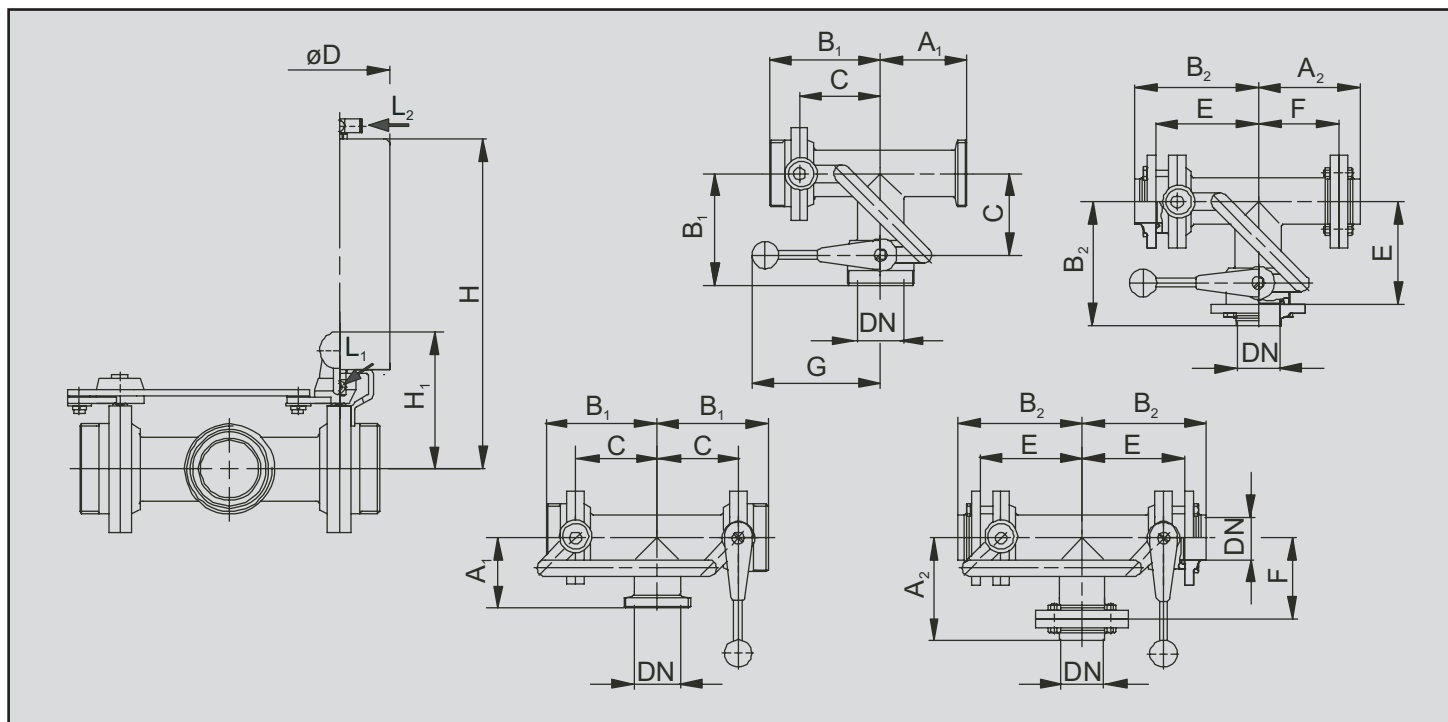
Multi-Way Butterfly Valves



Metric	Tube \varnothing	A1	A2	B1	B2	C	$\varnothing D$	E	F	G	H	H1
15	19 x 1,5	52	85	90	110	60	88	85	60	150	267	93
20	23 x 1,5	59	90	100	115	65	88	90	65	150	267	93
25	29 x 1,5	72	100	110	125	75	88	100	75	150	273	102
32	35 x 1,5	77	105	115	130	80	88	105	80	150	276	106
40	41 x 1,5	82	110	120	135	85	88	110	85	150	279	108
50	53 x 1,5	93	120	130	145	95	88	120	95	170	285	126
65	70 x 2	105	130	142	155	105	88	130	105	170	294	134
80	85 x 2	115	140	174	182	132	88	157	115	170	302	142
100	104 x 2	130	150	184	192	142	88	167	125	170	313	152

Further variants of connections on request

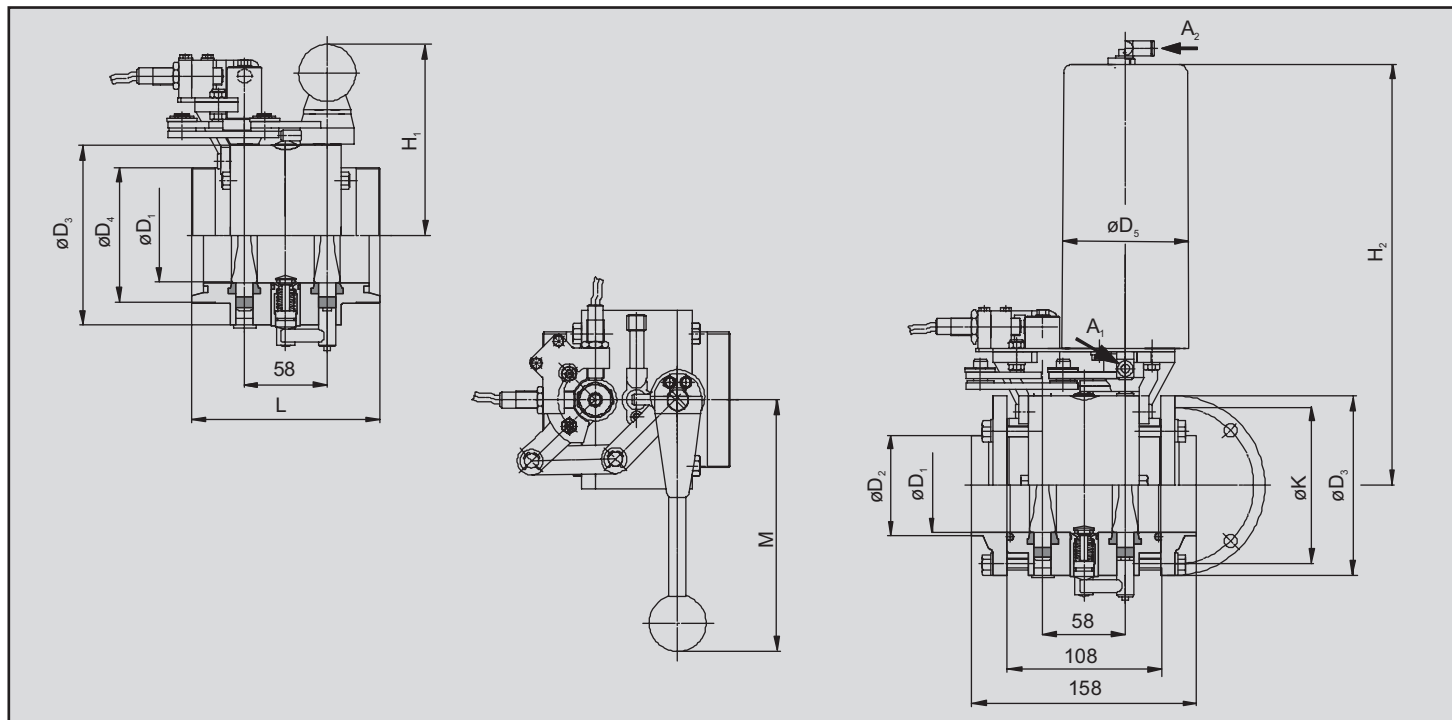
Multi-Way Butterfly Valves



OD-Tube	Tube ϕ	A1	A2	B1	B2	C	ϕD	E	F	G	H	H1
1"	25,4 x 1,65	65	94	104	119	69	88	94	69	150	273	102
1 1/2"	38,1 x 1,65	85	114	124	139	89	88	114	89	150	279	108
2"	50,8 x 1,65	110	139	149	164	114	88	139	114	170	285	126
2 1/2"	63,5 x 1,65	135	164	176	189	139	88	164	139	170	294	134
3"	76,1 x 1,65	155	184	218	226	176	88	201	159	170	302	142
4"	101,6 x 2,11	195	224	258	266	216	88	241	199	170	313	152

Further variants of connections on request

Leakage Butterfly Valves

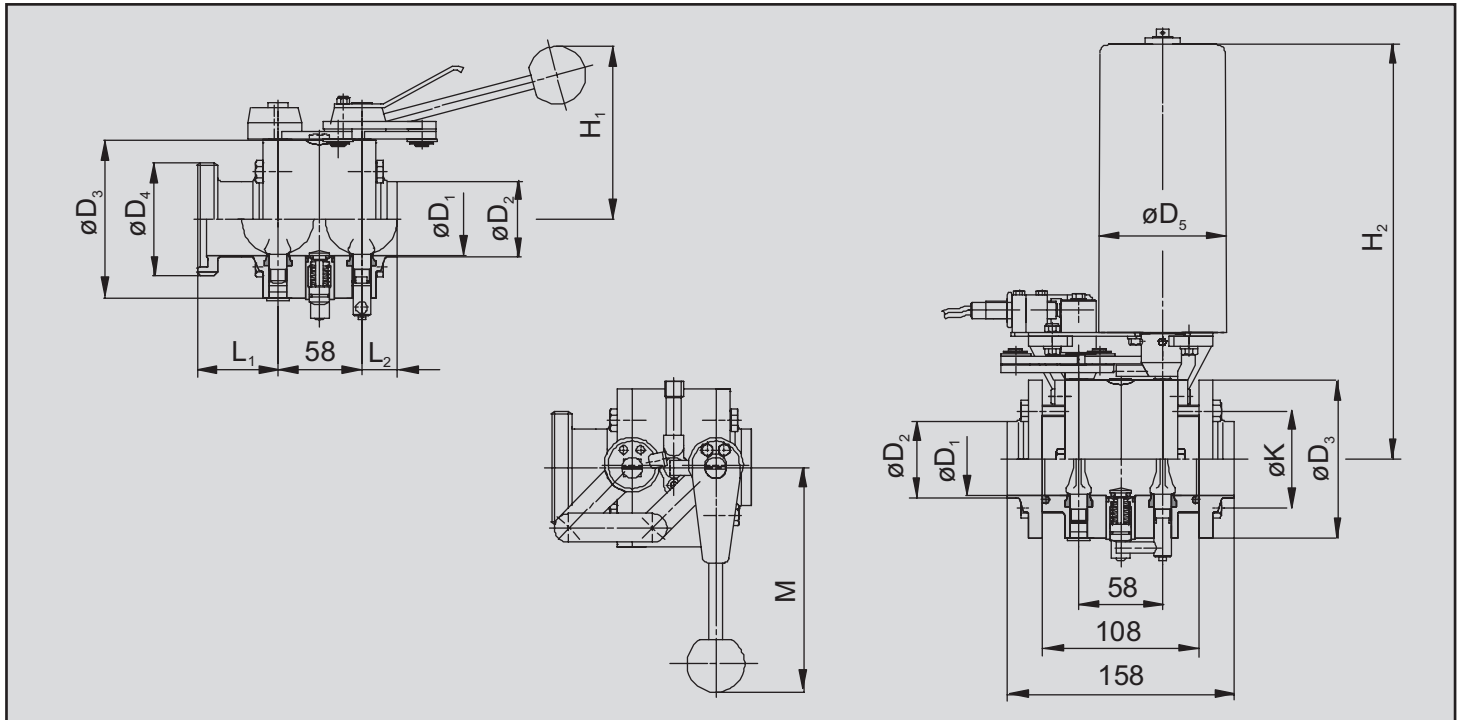


Metric	$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D_4$ ²⁾	$\varnothing D_5$	H1	H2	$\varnothing K$	L	M
25	26	29	84	Rd 52 x 1/6"	88	104	276	67	128	150
32	32	35	90	Rd 58 x 1/6"	88	107	279	73	128	150
40	38	41	96	Rd 65 x 1/6"	88	110	282	80	128	150
50	50	53	109	Rd 78 x 1/6"	88	126	288	93	128	177
65	66	70	126	Rd 95 x 1/6"	88	135	297	110	132	177
80	81	85	141	Rd 110 x 1/4"	88	142	304	125	143	177
100	100	104	161	Rd 130 x 1/4"	127	152	357	145	143	177

OD-Tube	$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D_4$ ²⁾	$\varnothing D_5$	H1	H2	$\varnothing K$	L	M
1"	22,1	25,4	84	IDF 37,05 x 1/8"	88	104	276	67	128	150
1 1/2"	34,8	38,1	96	IDF 50,57 x 1/8"	88	110	282	80	128	150
2"	47,5	50,8	109	IDF 64,08 x 1/8"	88	126	288	93	128	177
2 1/2"	60,2	63,5	126	IDF 77,59 x 1/8"	88	135	297	110	133	177
3"	72,9	76,2	141	IDF 91,11 x 1/8"	88	142	304	125	143	177
4"	97,4	101,6	161	IDF 118,14 x 1/8"	127	152	357	145	143	177

²⁾ Connection according to DIN 11851
Further variants of connections on request

Leakage Butterfly Valves



ISO	$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D_4$ ¹⁾	$\varnothing D_5$	H_1	H_2	$\varnothing K$	L_1	L_2	M
25	29,7	33,7	84	Rd 58 x 1/6"	88	104	276	67	55	25	150
32	38,4	42,4	96	Rd 65 x 1/6"	88	110	282	80	56	25	150
40	44,3	48,3	96	Rd 78 x 1/6"	88	110	282	80	56	25	150
50	56,3	60,3	109	Rd 95 x 1/6"	88	126	288	93	61	25	177
65	71,5	76,1	141	Rd 110 x 1/4"	88	142	304	125	84,5	42,5	177
80	84,3	88,9	141	Rd 130 x 1/4"	88	142	304	125	92,5	42,5	177
100	109,1	114,3	161	-----	127	152	357	145	-----	42,5	177

¹⁾ Connection according to DIN 11864-1
Further variants of connections on request

Südmo Components GmbH reserves the right to make changes in the technical specifications at any time.



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