

PRODUCT DATA SHEET

Engelsberg check valves

Type 102 - Standard swing check | Type 202 - Spring loaded swing check

Type 302 - Spring loaded swing check | Type 435 - Y-type check valve



Standard Swing check valve (type 102) for liquid and gas flow. The disk design allows quick shut-off to prevent backflow; however, it opens at very low flowrate. Available in soft-seated or metal seated design or soft seated (optional). Type 202 and 302 can supplied with spring loaded disc for controlled opening and closing also in various mounting directions. Wafer type design for mounting between flanges.

Material: Titanium ASTM grade 2, 254 SMO, Duplex, Hastelloy C-276, 904L, 316 SST

Dimension: DN20-DN600 (3/4"-24")

End connections: Wafer

Pressure class: PN10 up to PN64 (ANSI class 150/300)

Pressure test: Acc. to EN12266-1

Temperature: -50°C to 350°C

Leakage class: Rate A acc. to EN12266-1

Design: Standard, Spring Loaded, Non-SlamType

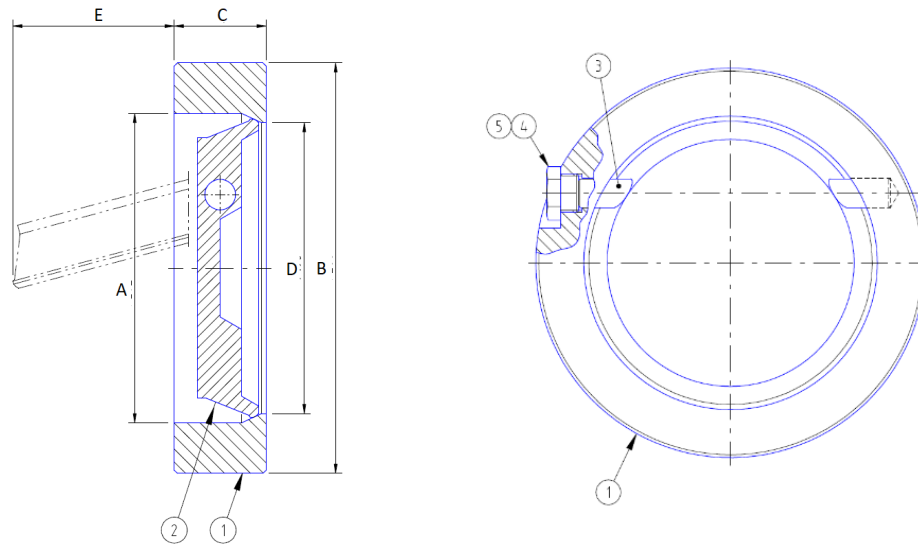
Approvals: CE-marked acc. to PED 2014/68/EU

Ordering code

Part no.	Position	EB	1	2	3	4	-	5	6	-	7	8	9	10	11	-	12	13	14	15	16	17	18	-	20
Part No. code example	EB		1	0	2	-	1	3	-	4	0	1	5	0	-	5	0	-	S	D	5	4	-		

EB	Valve series (1-4)		Body material (5-6)		End connection (7-8)		Pressure rating (9-11)		Size (12-14)		Design (15-16)		Shaft seal (17-18)		Spring material (19-20)	
	102	Swing Check Valve	10	316 SST / EN 1.4408	28	BSP female	10	DIN PN10	8	SL	Spring loaded	10	316 SST	10	316 SST	
EB	202	Spring loaded swing check valve	12	Duplex / EN 1.4462	40	Wafer	16	DIN PN16	10	NS	Non slam	54	PTFE	14	Hastelloy C-276	
	302	Spring loaded swing check valve	13	Titanium Gr.2			25	DIN PN25	15	SD	Standard	55	Copper			
	435	Y-type globe check valve	14	Hastelloy C-276			40	DIN PN40	20							
			16	254 SMO/ EN 1.4547			64	DIN PN64	25							
			17	904L/ EN 1.4539			100	DIN PN100	32							
			19	Super Duplex/ EN 1.4469			150	ANSI class 150	40							
			20	Super Duplex/ EN1.4410			300	ANSI class 300	50							
							80									
							100									
							150									
				200												
				250												
				300												
				350												
				400												
				500												
				600												
	XXXX		-XX		-XX		XX(X)		-XX(X)		XX		XX		XX	Special

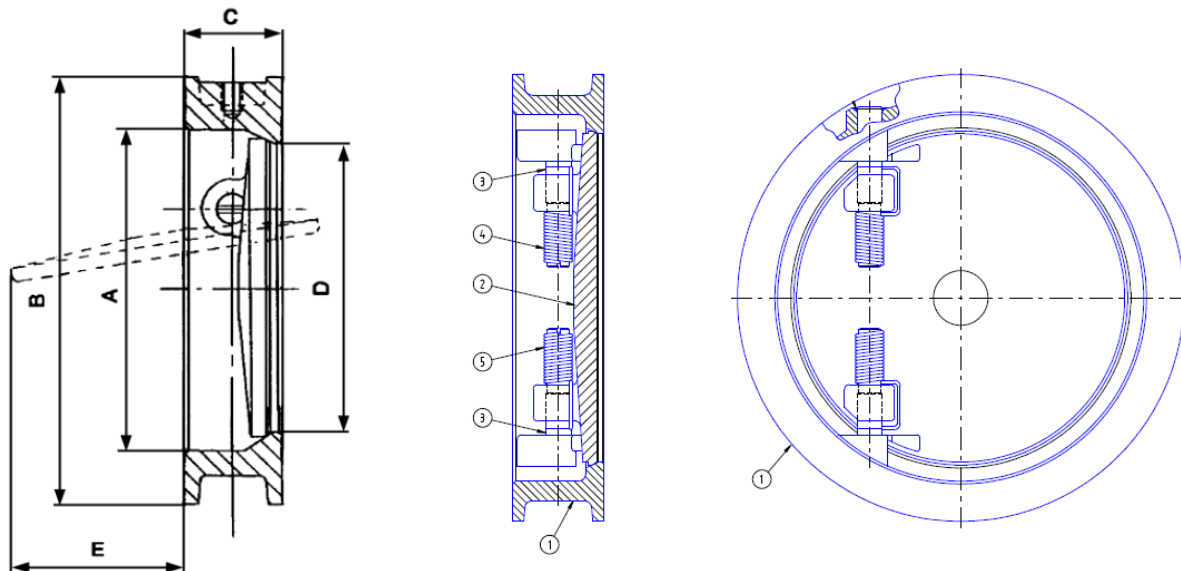
Type 102 - Standard swing check



Parts and material of construction								
No.	Part	Material						
1	Body	316 SST / EN 1.4408	Titanium Gr. 2	Hastelloy C-276	904L (EN 1.4539)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)	
2	Disc	316 SST / EN 1.4408	Titanium Gr. 2	Hastelloy C-276	904L (EN 1.4539)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)	
3	Shaft	316 SST / EN 1.4408	Titanium Gr. 2	Hastelloy C-276	904L (EN 1.4539)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)	
4	Plug	316 SST / EN 1.4408	Titanium Gr. 2	Hastelloy C-276	904L (EN 1.4539)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)	
5	Shaft seal	Copper	PTFE					
Temperature ratings								
Temperature range		-38°C to +310°C			-50°C to +200°C			
Pressure ratings								
DN20 to DN50		PN64 (ANSI 150/300)		PN40				
DN80 to DN250		PN40 (ANSI 150/300)						

Dimensions (Flanged connection)								
Size DN	Rating	A	B	C	D	E	Kv	Weight [kg]
20 (3/4")	PN64 (ANSI 150/300)	28	54	30	20	1	10	0,5
25 (1")	PN64 (ANSI 150/300)	28	64	30	24	1	16	0,7
32 (1 1/4")	PN64 (ANSI 150/300)	28	73	30	24	1	26	0,9
40 (1 1/2")	PN64 (ANSI 150/300)	42	86	40	36	10	40	1,8
50 (2")	PN64 (ANSI 150/300)	52	102	43	46	18	63	2,0
80 (3")	PN40 (ANSI 150/300)	80	138	46	72	36	152	4,0
100 (4")	PN40 (ANSI 150/300)	102	158	52	89	44	246	9,1
150 (6")	PN40 (ANSI 150/300)	152	212	56	138	83	1250	11,3
200 (8")	PN40 (ANSI 150/300)	202	268	60	190	106	2300	12,8
250 (10")	PN40 (ANSI 150/300)	245	320	68	228	138	3500	14,1

Type 202 - Spring loaded swing check

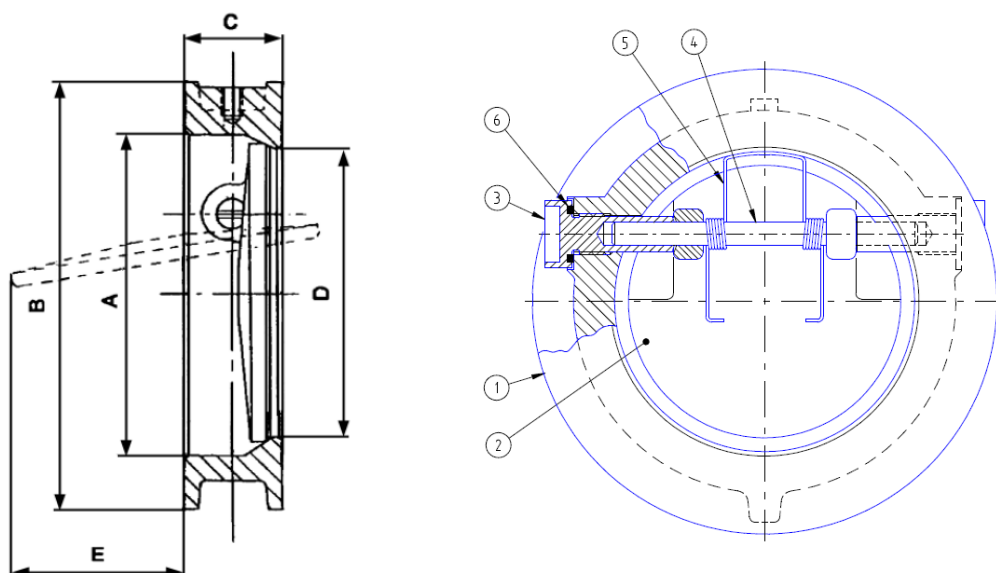


Parts and material of construction							
Pos.	No.	Part	Material				
1	1	Body	316 SST / EN 1.4408	Super Duplex / (EN 1.4469)	Hastelloy C-276	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
2	1	Disc	329 SST / EN 1.4460	Super Duplex / (EN 1.4469)	Hastelloy C-276	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
3	1	Shaft	Duplex AISI 329/ EN 1.4462	Super Duplex / (EN 1.4469)	Hastelloy C-276	254 SMO (EN 1.4547)	Hastelloy C-276
4	1	Spring	316 SST / EN 1.4401	Hastelloy C-276			
5	2	Plug	316 SST / EN 1.4401	Super Duplex / (EN 1.4469)	Hastelloy C-276	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
6	1	Seat	316 SST / EN 1.4401	Super Duplex / (EN 1.4469)	Hastelloy C-276	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
7	2	Shaft seal		PTFE			PTFE
Temperature ratings							
Temperature range			-50°C to +300°C				
Pressure ratings							
DN350 to DN400			PN25				
DN500 to DN600			PN10				

Dimensions (Flanged connection)								
Size DN	Rating	A	B	C	D	E	Kv	Weight [kg]
350 (14")	PN25 (ANSI 150/300)	352	438	90	308	191	6900	43
400 (16")	PN25 (ANSI 150/300)	402	490	100	360	226	9000	56
500 (20")	PN10 (ANSI 150)	502	585	120	457	290	14250	82
600 (24")	PN10 (ANSI 150)	602	685	130	553	350	20500	138

In steam design, max 60° open angle.

Type 302 - Spring loaded swing check



Parts and material of construction						
Pos.	No.	Part	Material			
1	1	Body	316 SST / EN 1.4408	Super Duplex / (EN 1.4410)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
2	1	Disc	329 SST / EN 1.4460	Super Duplex / (EN 1.4410)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
3	2	Plug	316 SST / EN 1.4401	Super Duplex / (EN 1.4410)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
4	1	Shaft	Duplex AISI 329 / EN 1.4462	Super Duplex / (EN 1.4410)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
5	1	Spring	316 SST / EN 1.4401	Hastelloy C-276		
6	2	Shaft seal	316 SST / EN 1.4401	PTFE		
7	1	Seat	316 SST / EN 1.4401	Super Duplex / (EN 1.4410)	254 SMO (EN 1.4547)	Duplex (EN 1.4462)
Temperature ratings						
Temperature range		-50°C to +350°C		-50°C to +300°C		
Pressure ratings						
DN100 to DN300		PN64 (ANSI 150/300)		PN40 (ANSI 150/300)		

Dimensions (Flanged connection)								
Size DN	Rating	A	B	C	D	E	Kv	Weight [kg]
100 (4")	PN40 (ANSI 150/300)	102	158	40	88	49	560	3,1
150 (6")		154	212	45	135	86	1250	5,5
200 (8")		204	268	60	182	116	2300	10,8
250 (10")		254	320	68	228	146	3500	17
300 (12")		304	378	78	277	176	5000	27,5