



Wafer type (B)

Lug type (T)

Nominal Pressure: PN 10 / 16 / 25 / 40

Flanges acc. to PN 6-10-16-25-40, ANSI 150-300

Body: Stainless steel 1.4408

Seat: Inconel 718

Double offset disc: Stainless steel

1.4404 up to DN 50 – 125

1.4021 up to DN 150 – 400

Temperature range: -100° up to +500°C

Face to face acc. to DIN 3202, K1 / EN 558-1, GR20

Leakage class A acc. to EN 12266-1/P12

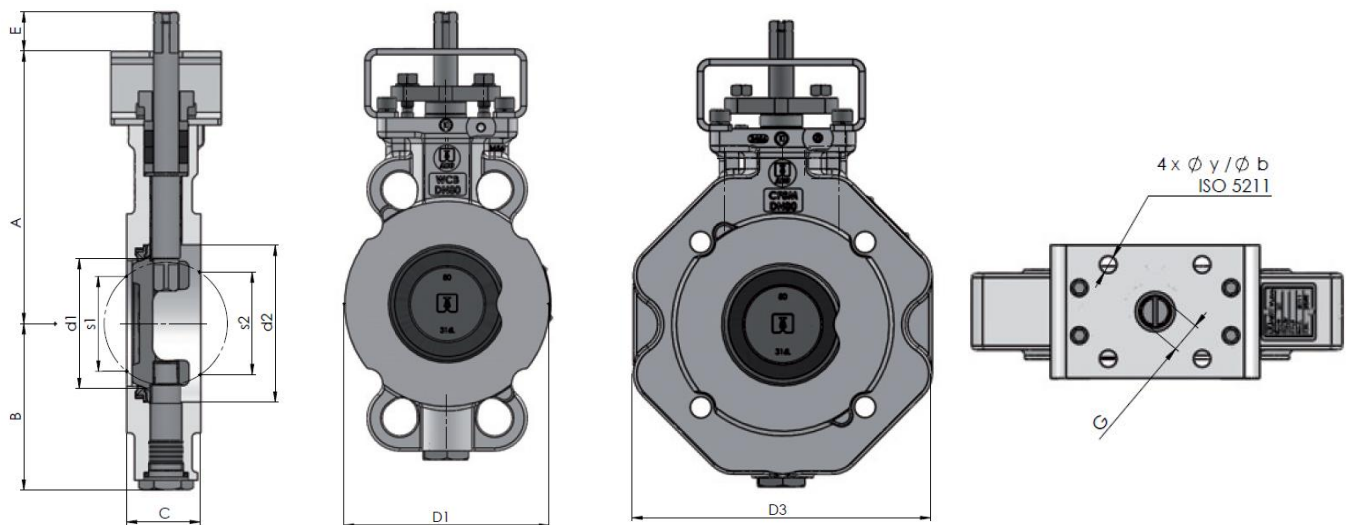
Options:

ATEX 94/9/EC Zone 1 and 21

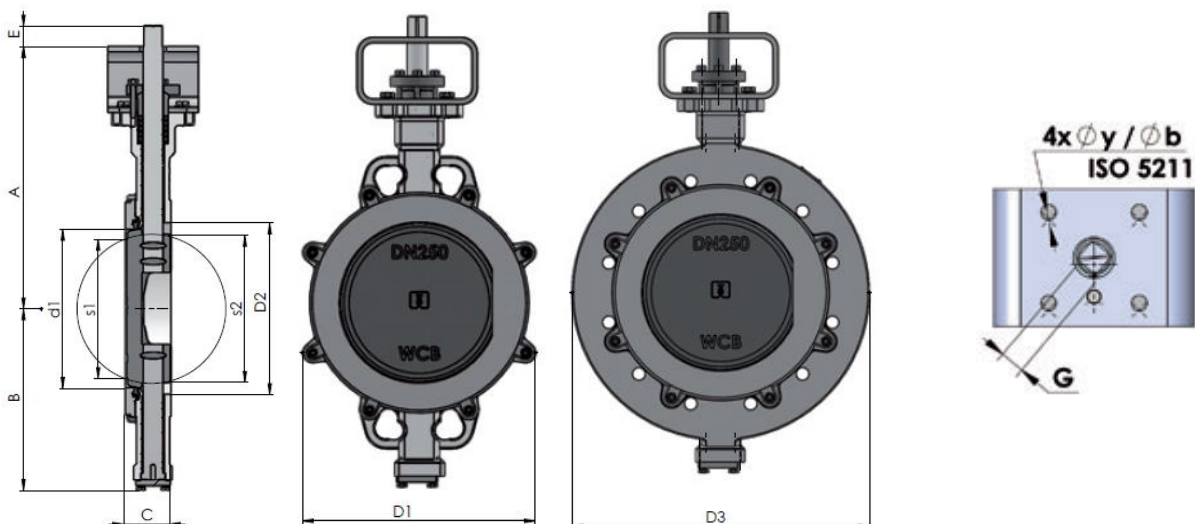
TA-Luft acc. to VDI 2440

Nominal Diameter	Wafer type (B)	Lug type (T)
DN50	AK-5590B-50	AK-5590T-50
DN65	AK-5590B-65	AK-5590T-65
DN80	AK-5590B-80	AK-5590T-80
DN100	AK-5590B-100	AK-5590T-100
DN125	AK-5590B-125	AK-5590T-125
DN150	AK-5590B-150	AK-5590T-150
DN200	AK-5590B-200	AK-5590T-200
DN250	AK-5590B-250	AK-5590T-250
DN300	AK-5590B-300	AK-5590T-300
DN350	AK-5590B-350	AK-5590T-350
DN400	AK-5590B-400	AK-5590T-400

Series	5	
Body	4	Stainless steel 1.4408
	5	Carbon steel 1.0625
	6	Low carbon content steel 1.1156
Seat	7	Metal/Metal 2.4668 Inconel 718 / Stainless steel 1.4401
	8	FireSafe (PTFE+Inconel)
	9	PTFE reinforced
Disc	0	Stainless steel
		DN 50 - 125: 1.4404
		DN 150 - 300: 1.4401 / 1.4021
		DN 350 - 800: 1.4408 / 1.4021



DN	d1	d2	A	B	C	D1	D3	S1	S2	E	G	ISO 5211	y	b	WAFER - Kg	LUG - Kg
50	49	68	163	93	44	104	154	12	37	25	14	F07	9	70	5,1	7,3
65	65	82	170	100	47	124	178	39	55	25	14	F07	9	70	5,8	9
80	81	100	174	106	47	140	196	65	72	25	14	F07	9	70	6,8	10,1
100	100	123	206	123	53	163	225	85	91	25	14	F07	9	70	8,5	12,2
125	123	146	215	137	56	193	260	113	110	25	14	F07	9	70	11,8	16,5



DN	d1	d2	A	B	C	D1	D3	S1	S2	E	G	ISO 5211	y	b	WAFER - Kg	LUG - Kg
150	146	155	307	214	57	252	318	136	143	25	17	F10	11	102	21	28
200	194	204	339	246	61	307	381	185	193	25	17	F10	11	102	29	41
250	240	259	395	275	69	349	450	224	236	31	22	F12	13	125	46	70
300	287	309	460	313	79	393	521	270	284	31	27	F14	17	140	67	105
350	313	242	508	355	92	448	577	300	308	45	27	F16	22	165	91	140
400	364	405	556	402	103	542	657	342	360	58	36	F16	22	165	132	211

Installation between flanges

DN	50	65	80	100	125	150	200	250	300	350	400
INCH	2"	2 ½"	3"	4"	5"	6"	8"	10"	12"	14"	16"
ISO PN 6	X	X	✓	X	*	*	*	*	*	*	*
ISO PN 10	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
ISO PN 16	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	*
ISO PN 25	✓	✓	✓	✓	✓	✓	✓	✓	*	*	*
ISO PN 40	✓	✓	✓	✓	✓	✓	✓	✓	*	*	*
ANSI 150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*
ANSI 300	✓	✓	✓	✓	✓	✓	✓	*	*	*	*
JIS 10K	✓	✓	*	*	*	✓	*	✓	*	*	-
JIX 16K	✓	✓	*	✓	✓	*	✓	✓	*	*	-

Technical Parameter

PTFE Seat

Operating Pressure	DN50 - DN100	50 bar
	DN125 - DN200	40 bar
	DN250 - DN800	25 bar
Operating Temperture	- 50°C + 200°C*	PTFE

Fire-Safe Seat

Operating Pressure	DN 50 - DN100	50 bar (25 bar)
	DN125 - DN200	40 bar (25 bar)
	DN 250 - DN 400	25 bar (25 bar)
Operating Temperature	- 50°C + 200°C*	FIRE SAFE

* min. operating temperature for WCB-Body -29°C, for LCC Body -46°C

Metal Seat

Operating Pressure	DN 50 - DN125	25 bar
Operating Temperature	- 100°C + 500°C*	metal/metal

* min. operating temperature for WCB-Body -29°C up to +425°C, for LCC Body -46°C up to +340°C

Operating Torques (Nm) PTFE Seat

DN	50	65	80	100	125	150	200	250	300	350	400
16 bar	25	35	40	55	110	140	220	470	650	850	1000
25 bar	30	40	45	65	120	160	260	650	900	1150	1400
40 bar	35	45	60	85	150	225	376	-	-	-	-
50 bar	35	45	60	85	-	-	-	-	-	-	-

Operating Torques (Nm) Metal/Metal - Fire-Safe Seat

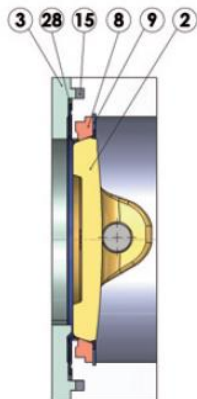
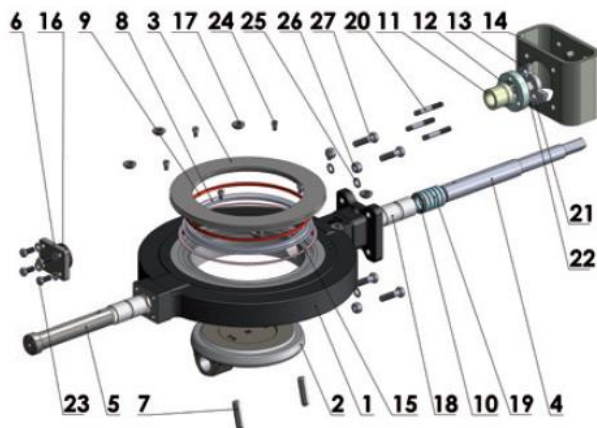
The torques include a safety factor.

DN	50	65	80	100	125	150	200	250	300	350	400
16 bar	50	70	100	150	220	260	330	776	1215	1686	2793
25 bar	50	70	100	150	220	290	450	1145	1825	2540	4249

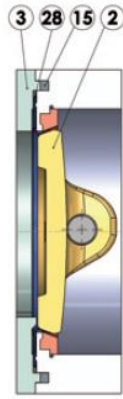
Flow value KV/CV

DN	50	65	80	100	125	150	200	250	300	350	400
KV	87	148	312	456	750	1125	1950	3100	4510	6120	8605
CV	102	173	364	532	876	1313	2277	3619	5265	7145	10046

KV-value is defined as the amount of water in cubic metres, which is flowing through the valve at pressure loss of 1 bar and temperature loss between 5-30°C.
The values apply for fully open valve at max. 10bar.



Detail von FIRE SAFE Dichtung



Detail von Metall/Metall Dichtung

Pos.	Name	Material
1	Body	Stainless steel
		Carbon Steel
2	Disc	Stainless steel (1.4404)
		Stainless steel (1.4021)
3	Ring flange	Stainless steel (1.0553)
		Stainless steel (1.4404)
4	Shaft	Stainless steel (1.4462/1.4021)
5	Pivot	Stainless steel (1.4462/1.4021)
6	Cover	Stainless steel (1.0553)
		Stainless steel (1.4401)
7	Pin	Stainless steel (1.4021/1.4462)
8	Seat	PTFE+25% glass fibre
9	Lock washer	Stainless steel 1.4404
10	Washer	Stainless steel 1.4404
11	Packing gland	Stainless steel 1.4401
12	Gland flange	Stainless steel 1.4404
13	Stop	Stainless steel
14	Bracket	Stainless steel 1.0553
15	Flange seal	Graphit min. 98%
16	Cover seal	Graphit
17	Retaining sleeve	Stainless steel 1.4401
18	Sleeve	Thermoplastic
19	Packing Gland	Graphit
20	Bolt	Stainless steel A4
21	Nut	Stainless steel A4
22	Washer	Stainless steel A4
23	Screw	Stainless steel A4
24	Screw	Stainless steel A4
25	Washer	Stainless steel A4
26	Nut	Stainless steel A4
27	Screw	Stainless steel A4
28	Seat	Inconel®