

Butterfly Valve Type AK08



description:

Butterfly valve to control a liquid or gaseous media in a pipeline system.

features:

- suitable for neutral and not neutral **gaseous & liquid media**
- **for smokes and powders with metal seat**
- stainless steel disc
- long neck for isolation
- ISO 5211 mounting pad
- CE PED 2014/68/EU certified

connection

DN40 – DN300
bigger sizes on demand

temperature

-30°C to +350°C – metal seat
-20°C to +110°C – EPDM seat

pressure

up to 16,0 bar–
depending on design

type	body- & disc-material	seal	temperature	pressure	handle	Zulassung
AK0810	stainless steel 1.4408 / A351 CF8M	EPDM	-20°C bis +110°C	PN16	lever or gear	Directive 2014/68/EU: CE N° 0038 or 0094 Risk Category III module H, ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 (on request)
AK0813		metal (no tightness)	-30°C bis +350°C			

design:

stem:

actuator:

flange:

standards:

Butterfly valve wafer type
stainless steel 1.4401 / AISI 316
lever with 9 levels up to DN200 aluminium
EN 1092-1 PN10/16, ANSI 150
Fabrication according to ISO 9001:2015
Designing according to ISO 10631 und EN 593
Length according to ISO 5752, EN 558

Torque (without safety coefficient):

type AK0810

diameter

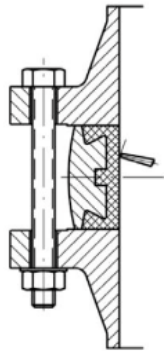
torque (Nm)	pressure (bar)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
	16 bar	9	11	20	29	47	82	130	210	360	475

type AK0813

diameter

torque (Nm)	pressure (bar)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
	10 bar (under 180°C)	5	5	5	5	5	10	10	15	25	35
	10 bar (over 180°C)	5	5	10	15	25	45	60	80	110	120

max. tightening torque:



bolting
DN

bolting type	max. torque (Nm)			
	5,6 / A307 Gr.B	8,8 / A193 B7	10,9	12,9
M12 (1/2")	41,16	84,28	117,6	142,1
M14 (9/16")	66,64	132,3	186,2	225,4
M16 (5/8")	102,9	205,8	289,1	347,9
M18 (3/4")	142,1	284,2	396,9	475,3
M20 (3/4")	196	401,8	568,4	676,2
M22 (7/8")	259,7	539	764,4	911,4
M24 (1")	338,1	695,8	980	1176
M27 (1 1/8")	499,8	1029	1470	1764
M30 (1 1/4")	666,4	1421	1960	2352

Kv-value (m³/h) EPDM seat:

diameter	40	50	65	80	100	125	150	200	250	300
Kv at 10° opening	3	3	6	7	9	21	45	55	64	100
Kv at 20° opening	5	7	10	16	22	33	69	131	246	275
Kv at 30° opening	10	15	21	37	51	91	149	254	442	472
Kv at 40° opening	16	33	40	56	88	153	281	420	710	953
Kv at 50° opening	22	44	57	84	134	232	302	631	1056	1450
Kv at 60° opening	31	48	86	182	187	331	597	904	1522	2093
Kv at 70° opening	36	54	102	246	255	468	822	1388	2128	2972
Kv at 80° opening	36	54	102	246	336	560	1015	1758	3096	4193
Kv at 90° opening	36	54	102	246	336	560	1072	1758	3096	4480

Kv-value (m³/h) metal seat:

Nennweite	40	50	65	80	100	125	150	200	250	300
Kv at 0° opening	2	3	5	7	10	14	19	21	23	34
Kv at 10° opening	3	10	12	14	16	39	45	61	95	135
Kv at 20° opening	5	11	15	22	29	51	69	138	213	310
Kv at 30° opening	10	19	27	47	59	110	149	260	407	508
Kv at 40° opening	16	39	47	72	96	173	281	427	673	990
Kv at 50° opening	26	61	64	118	143	253	302	638	1015	1490
Kv at 60° opening	48	75	94	179	195	357	498	910	1473	2135
Kv at 70° opening	35	61	109	246	265	500	702	1388	2062	3013
Kv at 80° opening	35	61	109	246	345	598	1015	1751	2993	4224
Kv at 90° opening	35	61	109	246	345	598	1072	1751	2993	4507

Head-loss-calculation:

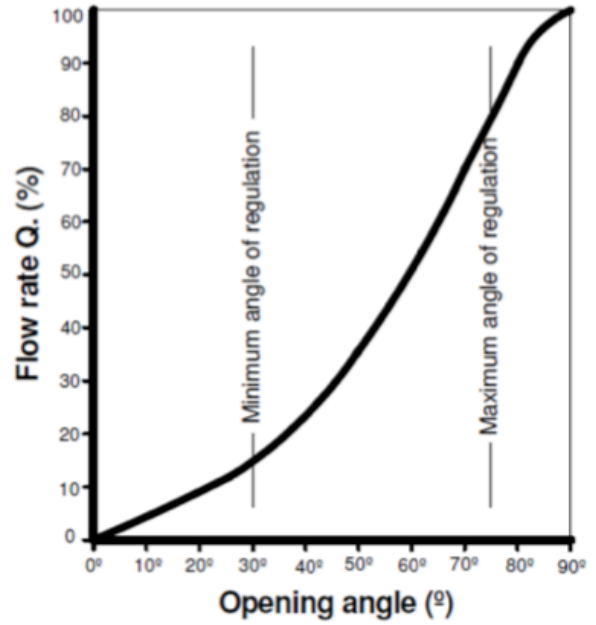
$$\Delta p = (Q/Kv)^2 \times SG$$

Q: flow in m³/h

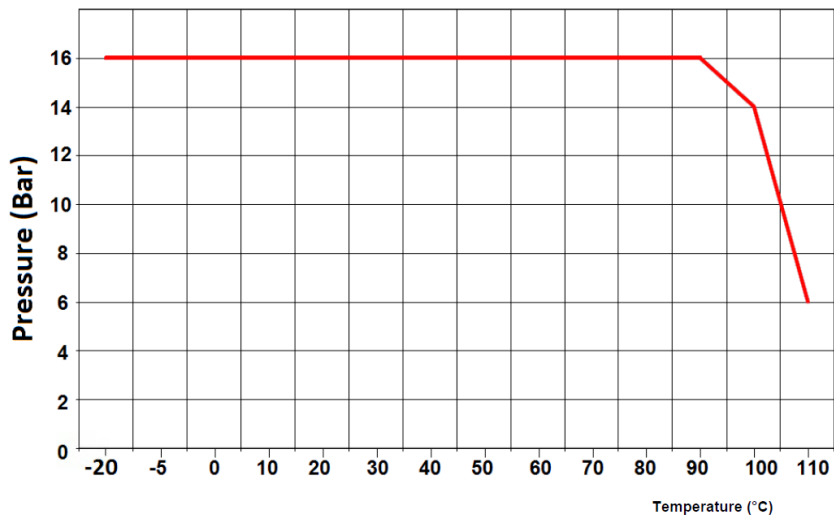
Δp: Head-loss in bar

SG: specific gravity (=1 for water)

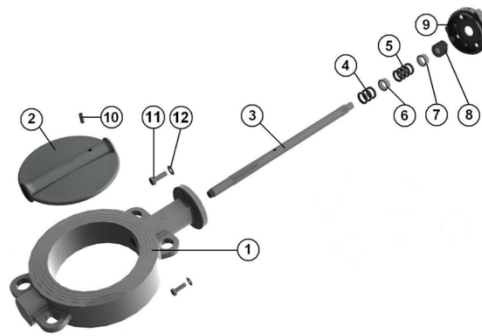
Kv: Volume of water in m³/h, that will flow through a given restriction or valve opening with a pressure drop of 1 bar at 20°C)



pressure-temperature-diaphragm (EPDM-seat):

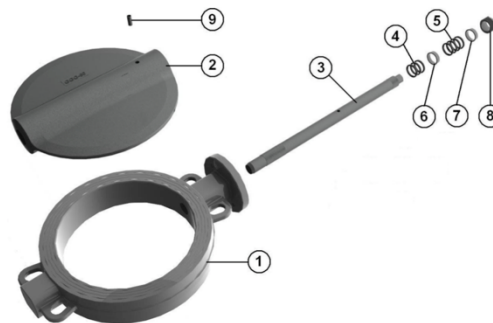


**materials metal seat:
DN40 - DN200**



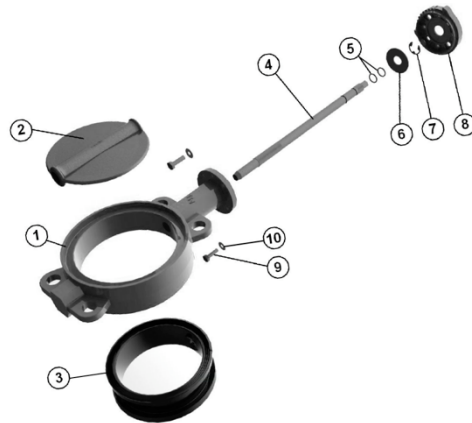
Position	Designation	materials
1	Body	ASTM A351 CF8M
2	Disc	
3	Stem	AISI 316
4	Gasket	Graphit
5	Gasket	
6	Ring	AISI 316
7	Ring	
8	Socket	
9	Plate	ASTM A351 CF8M
10	Pin	AISI 316
11	Screw	A4
12	Washer	AISI 316I
	lever	Aluminium ADC 10 with epoxy painting

**materials metal seat:
DN250 - DN300**



Position	Designation	Material
1	Body	ASTM A351 CF8M
2	Disc	
3	Stem	AISI 316
4	Gasket	Graphit
5	Gasket	
6	Ring	AISI 316
7	Ring	
8	Socket	
9	Pin	
	lever	Ductile iron EN GJS-500-7 with epoxy painting

**materials EPDM seat:
DN40 - DN200**



Position	Designation	materials
1	Body	ASTM A351 CF8M
2	Disc	
3	Seat	EPDM
4	Stem	AISI 316
5	O-Ring	NBR
6	Ring	AISI 316
7	Circlips	
8	Plate	ASTM A351 CF8M
9	Plate screw	A4
10	Washer	AISI 316
	lever	Aluminium ADC 10 with epoxy painting

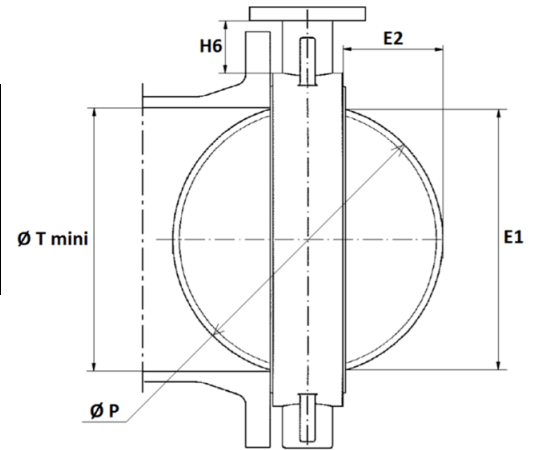
**material EPDM seat:
DN250 - DN300**



Position	Designation	materials
1	Body	ASTM A351 CF8M
2	Disc	
3	Seat	EPDM
4	Stem	AISI 316
5	O-Ring	NBR
6	Circlips	AISI 316
7	Ring	
8	Spring	
	lever	Ductile iron EN GJS-500-7 with epoxy painting

Neck and disc size (in mm):

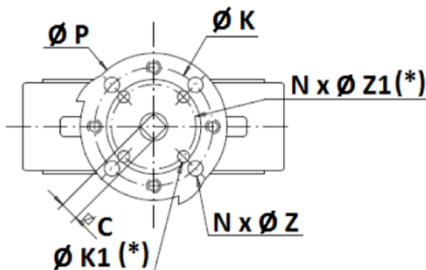
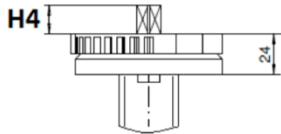
DN	40	50	65	80	100	125	150	200	250	300
E1	23	24,5	46	65	85	109	136	188	238	289
E2	3,5	3,5	9,5	17	24	33,5	45,5	69	90	110,5
H6 +/-2	76	82	80	80	88	93	89	99	71	76
P	40	50	65	80	100	123	147	198	248	299
T mini	26	27,5	49	8	88	112	139	191	241	292



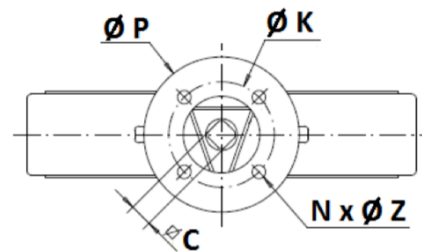
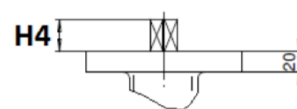
ISO mounting pad (in mm):

DN	40	50	65	80	100	125	150	200	250	300
C	8	8	9	11	11	14	14	17	19	22
K	70	70	70	70	70	70	70	70	102	102
ISO	F07	F07	F07	F07	F07	F07	F07	F07	F10	F10
Nx Z	4x9	4x9	4x9	4x9	4x9	4x9	4x9	4x9	4x11	4x11
H4	14	14	16	16	20	20	20	24	24	24
P	88	88	88	88	88	105	105	105	150	150

DN40 – DN200



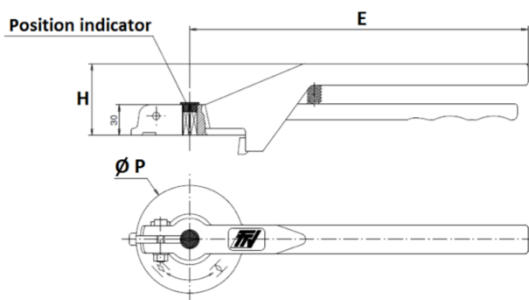
DN250 - DN300



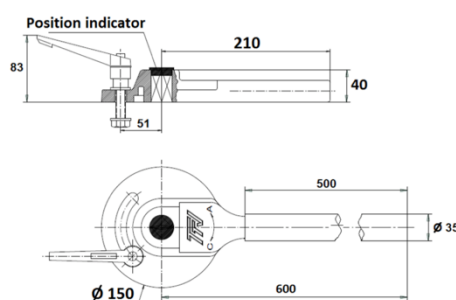
lever (in mm):

DN	40	50	65	80	100	125	150	200	250	300
E	205	205	205	205	205	330	330	330	500	500
H	57	57	57	57	57	70	70	70	83	83
P Ø	88	88	88	88	88	105	105	105	150	150

DN40 – DN200



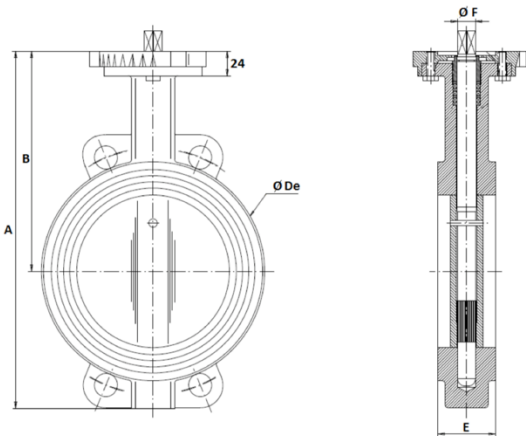
DN250 - DN300



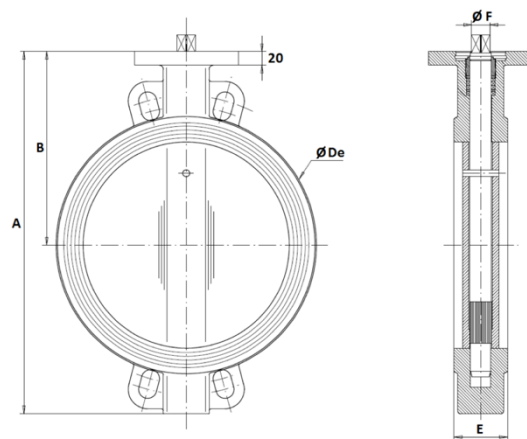
Valves with lever:

DN	40	50	65	80	100	125	150	200	250	300
A	205/206	228	248	265	298	331	349	430	461	524
B	140	156	161	169	187	206	215	255	248	280
Ø De	82	102	119	135	155	185	208	270	328	381
E	33	43	46	46	52	56	56	60	68	78
F Ø	9,5	9,5	12	14	14	17	17	21	23	26,5
weight (kg) - metal	3,07	4,57	4,89	5,95	7,58	10,22	12,23	19,0	30,0	40,0
weight (kg) - EPDM	2,46	3,66	4,4	4,6	6,0	7,6	9,2	14,7	24,7	33,0

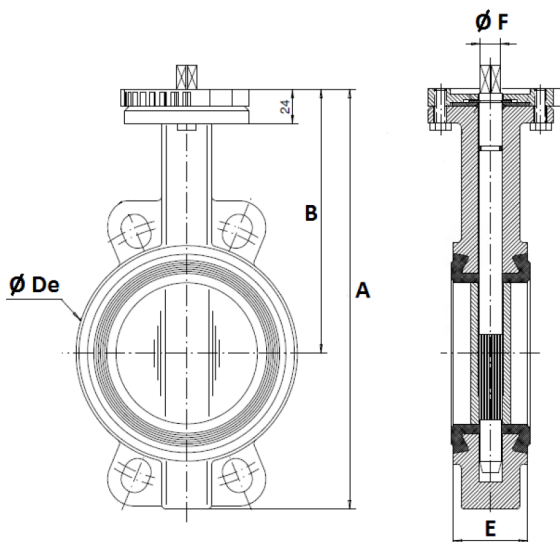
DN40 – 200 metal



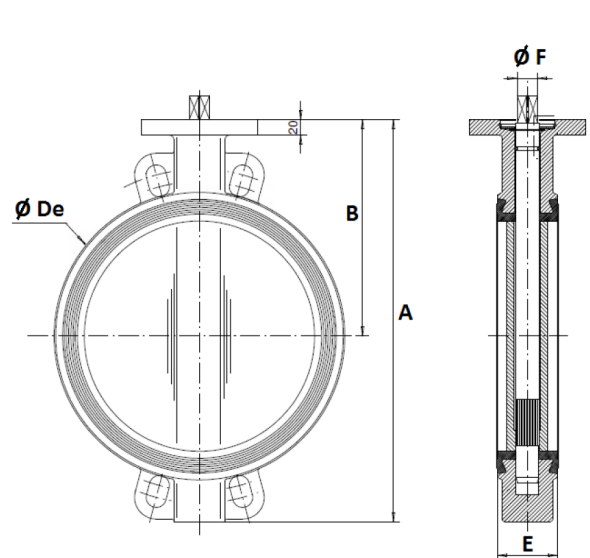
DN250 – 300 metal



DN40 – 200 EPDM

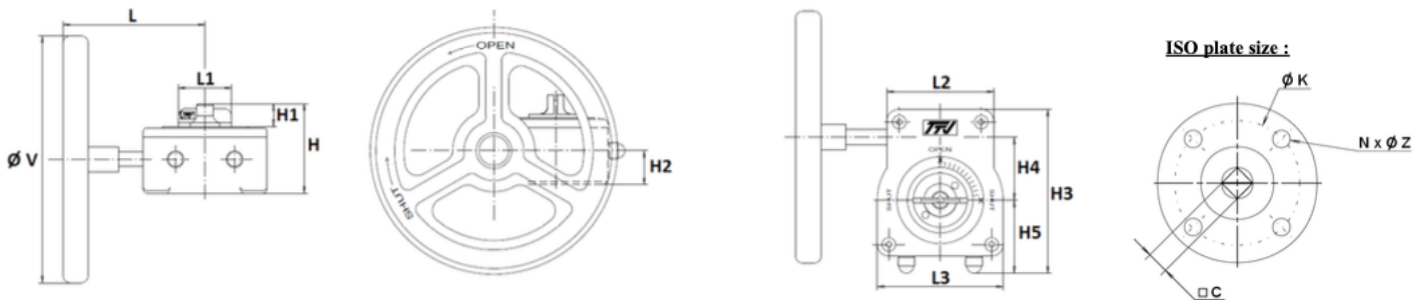


DN250 – 300 EPDM

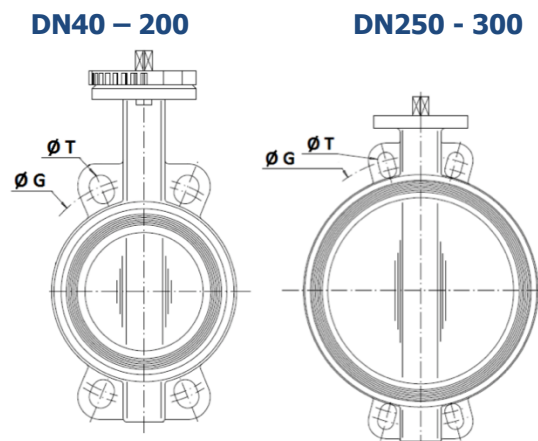


Valves with gear (in mm):

DN	40	50	65	80	100	125	150	200	250	300
L	115	115	115	115	115	115	115	115	223,5	223,5
L1	43	43	43	43	43	43	43	43	55	55
L2	85	85	85	85	85	85	85	85	110	110
L3	100	100	100	100	100	100	100	100	142	142
H	73	73	73	73	73	73	73	73	103	103
H1	19	19	19	19	19	19	19	19	33	33
H2	27,5	27,5	27,5	27,5	27,5	27,5	27,5	27,5	42	42
H3	130	130	130	130	130	130	130	130	176	176
H4	50	50	50	50	50	50	50	50	60	60
H5	58	58	58	58	58	58	58	58	82	82
Ø V	140	140	140	140	140	200	200	200	300	300
C	8	8	9	11	11	14	14	17	19	22
Ø K	70	70	70	70	70	70	70	70	102	102
ISO	F07	F07	F07	F07	F07	F07	F07	F07	F10	F10
N x Ø Z	4 x M8	4 x M8	4 x M8	4 x M8	4 x M8	4 x M8	4 x M8	4 x M8	4 x M10	4 x M10
weight (kg)	1,35	1,35	1,35	1,35	1,35	1,75	1,75	1,75	4,0	4,0


Between flanges size:

DN	DN	40	50	65	80	100	125	150	200	250	300
PN10	Ø G	110	125	145	160	180	210	240	295	350	400
	Ø T	18	18	18	18	18	18	23	23	23	23
PN16	Ø G	110	125	145	160	180	210	240	295	355	410
	Ø T	18	18	18	18	18	18	23	23	27	27
Class 150	Ø G	98,5	120,6	139,7	152,4	190,5	215,9	241,3	298,5	362	431,8
	Ø T	16	19	19	19	19	23	23	23	26	26



Article-number:

Type	flange	seat	Actuation	size
AK08 – butterfly-valve	1 – PN10/PN16/ANSI150	0 - EPDM 3 – metall	00 – lever 01 – gear	07 – DN40 08 – DN50 09 – DN65 10 – DN80 11 – DN100 12 – DN125 13 – DN150 14 – DN200 15 – DN250 16 – DN300

Example: AK08130015:

AK08	1	3	00	15
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Image similar, subject change without notice.