

PTFE LINED BUTTERFLY VALVE - WAFER

TYPE DVC4930



armatec



GENERAL

DIMENSIONS/PRESSURE:

DN40 - DN300 = PN10

VACUUM SERVICE:

-0,1BAR

SURFACE:

EPOXY COATING C2M, 120µm

FACE-TO-FACE:

EN558-1 SERIES 20

OPERATION:

FREE STEM

COUNTER FLANGES:

DN40-DN300, PN10/16/ANSI 150

APPROVALS:

EN12266-1/P12 LEAKAGE RATE A,
CE 97/23/EG, TA LUFT

OPTIONS

OPERATION:

HANDLE, GEAR, ACTUATOR
(PNEUMATIC/ELECTRIC)

DIMENSIONS:

DN350 - DN1200 ON REQUEST

PRESSURE:

PN16, PN6, PN3

COUNTER FLANGES:

PN16, ANSI150, JIS 10K

MATERIAL BODY:

STAINLESS STEEL, POLISHED, DUROPLAST,
CARBON STEEL

MATERIAL DISC:

PFA, POLISHED STAINLESS, TITANIUM,
HASTELLOY C

MATERIAL SEAT:

UHMPE, ATEX PTFE

MATERIAL BACKUP RING:

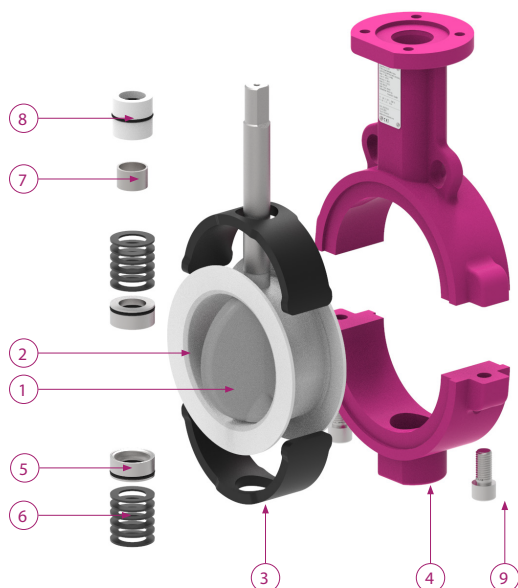
FPM, EPDM

DESIGN:

LUG

APPROVAL:

ATEX

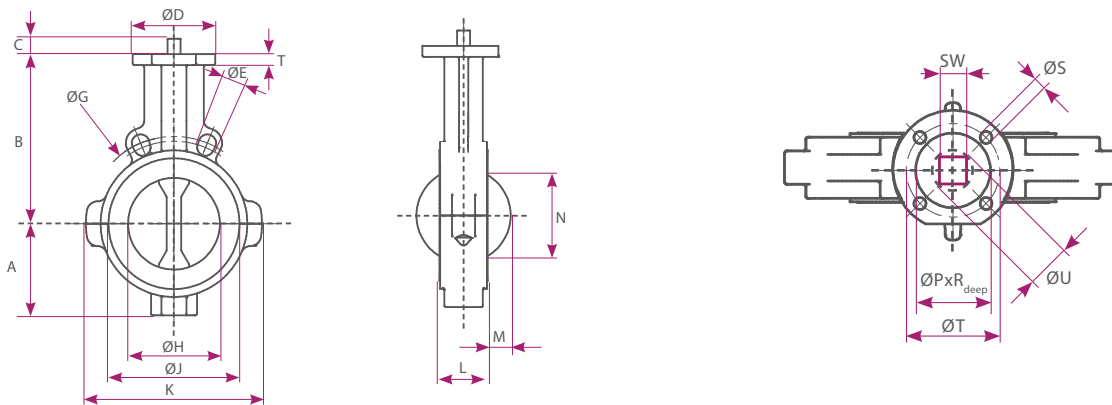


POS	DESCRIPTION	MATERIALS
1	DISC (DN40-250)	DUPLEX 1.4469
1	DISC (DN300-600)	STAINLESS STEEL 1.4404
1	SHAFT (DN40-250)	DUPLEX 1.4469
1	SHAFT (DN300-600)	DUPLEX 1.4462
2	LINER	PTFE (FOOD)
3	BACKUP RING	SILICONE
4	HUS	DUCTILE IRON 5.3103
5	PUSHER	1.4301 WITH FPM O-RING
6	BELLEVILLE SPRINGS	CARBON STEEL
7	SHAFT BUSHING	PTFE STAINLESS STEEL
8	TOP BUSHING	POM WITH FPM O-RING
9	BODY BOLTS	STAINLESS STEEL 12.9 A4

DESCRIPTION

- **High quality industrial butterfly valve**, EN 10204 3.1 certificate, CE/PED and Option: ATEX (zone 0, 1, 2 and 20, 21, 22)
- **PTFE liner on flexible silicone backup ring** ensures perfect tightness at full differential pressure.
- **Extensive choice of materials** provides for many applications.
- **One-piece stem and disc design** ensures perfect rotation with no slug.
- **ISO 5211 mounting flanges** and 45° square stem enables direct mounting of actuators without the use of bracket or coupling.
- **Bearing and pressure packages** reduces friction, prolongs service life and ensures a TA-Luft approved stem packing.
- **Self-centering solution during mounting** covers several flange standards.
- **2-pcs. body construction** makes it possible to replace liner.

DIMENSIONS

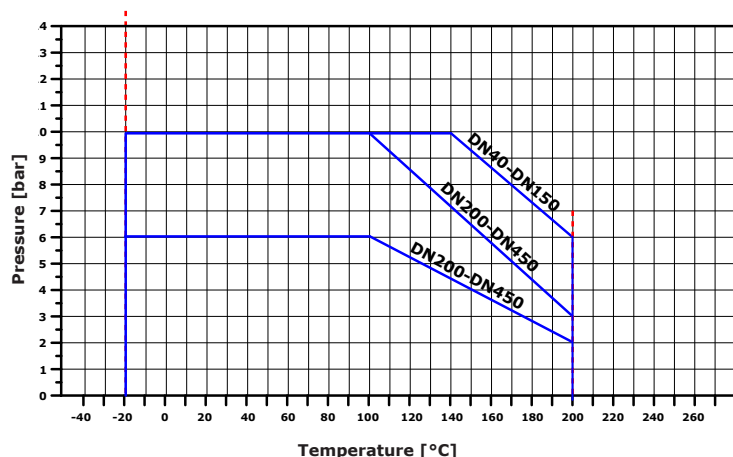


DIM	BUTTERFLY VALVE																
[MM]	A [MM]	B [MM]	C [MM]	ØD [MM]	T [MM]	ØE [MM]	ØG [MM]	ØH [MM]	ØJ [MM]	K [MM]	L [MM]	M [MM]	N [MM]	SW [MM]	ØS [MM]	ISO	WEIGHT [KG] FREE STEM
DN40	53	94	17	65	10	4x18	110	46.4	76	138	33	7	34	9	4x7	F05	1.8
DN50	60	130	17	90	12	4x18	125	50.0	85	124	43	6	31	11	4x9	F07	3.0
DN65	70	146	17	90	12	4x18	145	62.0	106	148	46	11	47	11	4x9	F07	4.1
DN80	84	165	17	90	12	8x18	160	75.0	122	165	46	17	63	11	4x9	F07	4.8
DN100	100	185	17	90	12	8x18	180	100.0	143	192	52	27	90	14	4x9	F07	6.1
DN125	110	202	17	90	12	8x18	210	125.0	166	223	56	38	118	14	4x9	F07	8.3
DN150	130	217	22	90	12	8x22	240	141.0	193	253	56	47	137	17	4x9	F07	10.7
DN200	158	245	26	125	16	8x22	295	195.0	251	312	60	71	190	19	4x11	F10	17.8
DN250	194	270	30	125	16	12x22	350	244.0	301	374	68	92	240	22	4x11	F10	28.0
DN300	225	308	30	125	16	12x22	400	295.0	349	424	78	112	290	22	4x11	F10	48.0
DN350	255	330	28	150	16	16x22	460	335.6	414	586	92	125	328	27	4x13	F12	59.0
DN400	290	365	28	150	18	16x26	515	389.9	460	650	102	146	378	27	4x13	F12	90.0
DN450	314	400	37	175	20	20x26	565	437.9	515	700	114	164	424	36	4x17	F14	110.0
DN500	342	435	37	175	20	20x26	620	491.4	570	745	127	184	477	36	4x17	F14	141.0
DN600	401	510	47	210	20	20x30	725	579.9	672	870	154	215	561	46	4x21	F16	231.0

DIM	MAX TORQUE [NM]	KV-VALUE (M3/H VED 1 BAR ΔP) 90°	MAST [NM]
DN40	25,7	102	48
DN50	30,4	124	89
DN65	42,1	211	89
DN80	53,8	318	89
DN100	70,2	660	183
DN125	93,6	985	183
DN150	128,7	1244	327
DN200	195,4	2523	456
DN250	325,3	3514	664
DN300	389,6	5315	664
DN350	526,5	8134	1227
DN400	585,0	11571	1227
DN450	702,0	15519	2909
DN500	760,5	19308	2909
DN600	1041,3	24807	6069

FLOW RATE [M3/H]								
DIM	OPENING ANGLE							
	20°	30°	40°	50°	60°	70°	80°	90°
DN40	1,4	5,1	11,0	22,0	38,0	56,0	75,0	102,0
DN50	2,1	6,7	14,0	28,0	46,0	69,0	92,0	124,0
DN65	4,4	14,0	27,0	49,0	80,0	118,0	158,0	211,0
DN80	8,1	22,0	41,0	75,0	123,0	179,0	240,0	318,0
DN100	17,0	48,0	91,0	160,0	259,0	375,0	502,0	660,0
DN125	28,0	74,0	145,0	244,0	39,0	563,0	754,0	985,0
DN150	39,0	97,0	194,0	316,0	503,0	717,0	958,0	1244,0
DN200	85,0	202,0	415,0	658,0	1036,0	1463,0	1956,0	2523,0
DN250	119,0	274,0	527,0	949,0	1484,0	2038,0	2727,0	3514,0
DN300	181,0	404,0	771,0	1329,0	2179,0	3083,0	4124,0	5315,0
DN350	277,0	602,0	1139,0	2034,0	3335,0	4718,0	6312,0	8134,0
DN400	393,0	856,0	1650,0	2893,0	4628,0	6711,0	8979,0	11571,0
DN450	528,0	1148,0	2173,0	3414,0	5742,0	8535,0	12043,0	15519,0
DN500	647,0	1434,0	2418,0	3980,0	6490,0	10268,0	14983,0	19308,0
DN600	843,0	1861,0	3473,0	5706,0	9427,00	14140,0	19349,0	24807,0

PRESSURE/TEMPERATURE



INSTALLATION

Basics

It is absolutely forbidden to mount the butterfly valve between flanges which are not positioned parallel to each other. The axis of the pipes and valves have to be aligned. Furthermore it is prohibited to weld on the pipe while the butterfly valve is mounted between the flanges. This would destroy the liner of the valve.

Recommended Locking Torques of the Flange Screws

The PTFE material of the liner tends to cold flow. Therefore the following maximum locked torques have to be applied. Tighten evenly in star pattern:

DN40	25Nm	DN250	95Nm
DN50	35Nm	DN300	105Nm
DN65	40Nm	DN350	145Nm
DN80	45Nm	DN400	165Nm
DN100	50Nm	DN450	185Nm
DN125	60Nm	DN500	215Nm
DN150	70Nm	DN600	230Nm
DN200	85Nm		