

KNIFE GATE VALVE TYPE MV



Uni directional knife gate valve for fluids, bulk solids capable to flow and suspensions up to 5%

TECHNICAL DATA

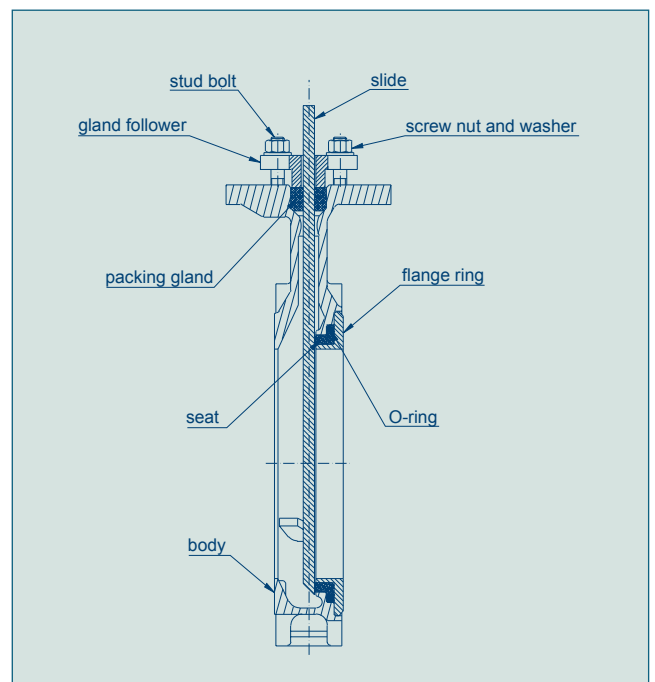
Nominal diameter:	DN 50 - DN 1200
Face-to-face:	works standard
Flange drilling:	EN 1092 PN 10 EN 1092 PN 16 ANSI B16.5 Class 150 JIS B2238 10 K BS 10 Table D
Marking:	DIN EN 19
Tightness check:	ISO 5208, Class A TAPPI TIS 405-8, MSS SP-81
Temperature range:	max. 300°C (depending on pressure, medium and material)
Actuators:	hand wheel, ratchet wrench, chain wheel, bevel gear, pneumatic cylinder, electric motor, hydraulic cylinder
Operating pressure:	DN 50 - DN 125: 16 bar DN 150 - DN 300: 10 bar DN 350 - DN 600: 6 bar DN 700 - DN 1000: 4 bar

FEATURES

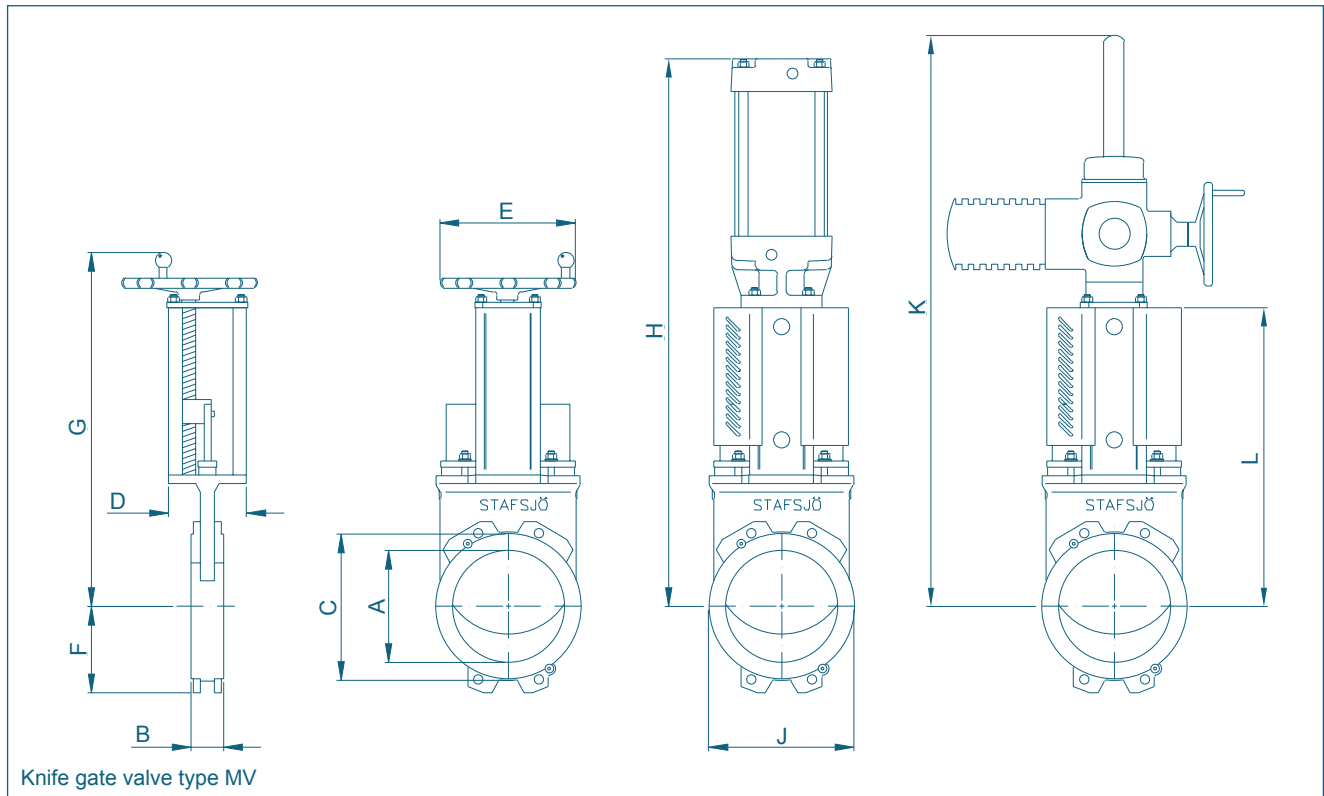
- Box packing TwinPack™ gives high operation reliability
- Easy replacement of seat by mechanically locked retainer ring
- Low maintenance
- Can be disassembled, material specific recycling possible

GENERAL APPLICATIONS, e.g.:

- Sludge, powder, granulates and other solid media
- Pulp, recycled pulp
- Waste water
- Food industry
- Breweries and beverage industry



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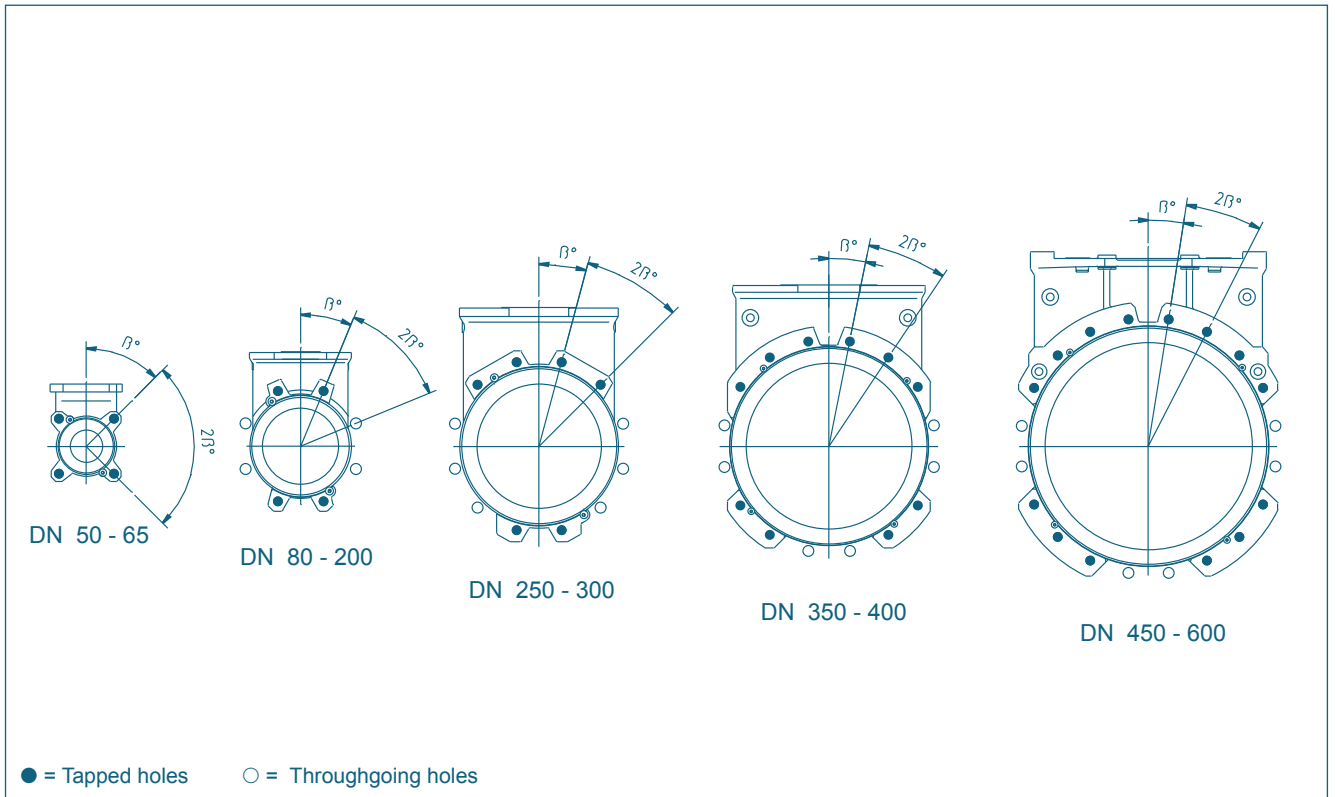


DN [mm]	Size [in]	Dimensions [mm]											Air supply	Hand wheel weight
		A	B	C	D	E	F	G	H	J	K	L		
50	2	52	41	91	80	200	56	360	475	116	620	230	1/4"	7
65	2 1/2	64	41	107	80	200	65	380	495	130	650	250	1/4"	7
80	3	79	51	124	80	200	88	405	545	135	690	275	1/4"	8
100	4	103	51	154	80	200	102	453	593	155	765	323	1/4"	10
125	5	128	56	179	80	250	116	495	685	178	830	365	1/4"	13
150	6	153	60	204	80	250	130	550	740	205	910	420	1/4"	15
200	8	202	60	267	145	315	160	694	1017	268	1115	555	1/2"	31
250	10	250	69	320	145	315	192	779	1102	320	1250	640	1/2"	40
300	12	302	78	374	145	315	230	879	1252	375	1400	740	1/2"	55
350	14	332	78	419	175	400	210	993	1415	420	1550	820	1/2"	90
400	16	380	89	479	175	400	245	1083	1555	490	1690	910	1/2"	120
450	18	428	89	535	200	520	280	1180	1680	560	1820	990	1/2"	180
500	20	470	114	580	250	520	313	1315	1865	625	2010	1127	1/2"	245
600	24	560	114	680	260	635	370	1540	2355	740	2340	1352	1"	340
700	28	665	118	800	310	635	390	1750	2513	865	2650	1565	1"	460
750	30	710	118	860	305	635	490	1880	2900	930	2830	1635	1"	700
800	32	760	118	900	310	635	490	1970	3030	985	2970	1780	-	540
900	36	855	118	1010	320	635	580	2220	3380	1160	3340	1985	-	900
1000	40	950	150	1110	320	635	640	2400	3670	1280	3630	2215	-	1500

Actuator EM is rotated 45° for DN 50 - 150.

Subject to change without notice

FLANGE DRILLINGS MV



Size DN [mm]	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Outside flange diameter [mm]	165	185	200	220	250	285	340	395	445	505	565	615	670	780
Bolt circle diameter [mm]	125	145	160	180	210	240	295	350	400	460	515	565	620	725
Face-to-face dimension [mm]	41	41	51	51	54	60	60	69	78	78	89	89	114	114
No. of throughgoing holes [○]	-	-	4	4	4	4	4	6	6	6	6	6	6	6
No. of tapped hole/side [●]	4	4	4	4	4	4	4	6	6	10	10	14	14	14
Bolt size	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24	M24	M27
β°	45	45	22,5	22,5	22,5	22,5	22,5	15	15	11,25	11,25	9	9	9
Screw lengths ¹⁾	8 ²⁾	8 ²⁾	12	12	12	14	13	17	20	19	22	22	27	27

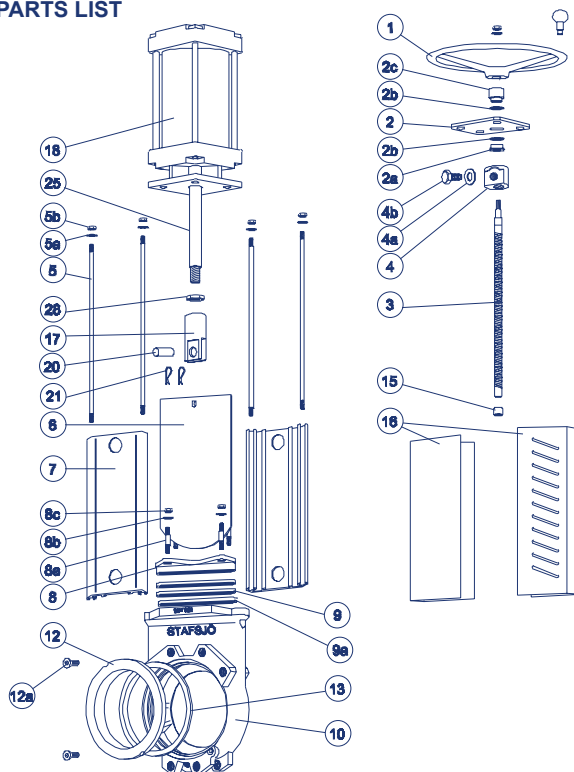
¹⁾ Add the values in the table with the thickness of the pipe flanges, the washers and the estimated thickness of the gasket.

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²⁾ The screws on the seatside have to be 3 mm longer.

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MATERIAL SPECIFICATION AND PARTS LIST



Parts list of DN 50-800 (monobloc valve body)

Pos.	Description	Material	Material-No.	ASTM	Pos.	Description	Material	Material-No.	ASTM
1	Hand wheel	Aluminium	AlSi9Cu3(Fe)		8b	Washer	Stainless steel	X5CrNi18 M 10	1.4301
	DN>300 Cast iron	GG 20	0.6020	A48No30B	8c	Nut	A2, zinc	X5CrNi18 M 10	1.4301
2	Yoke	Stainless steel	X5CrNi18 M 10	1.4301	9	Box packing*	Twin Pack™		
2a	Bearing	Brass	CuZn39Pb3	C 36000	9a	Box bottom	Plastic, DN 500-800		
2b	Slide washer	POM			10	Valve body	Stainless steel		
2c	Bearing	Brass	CuZn39Pb3	C 36000	12	Retainer ring	Stainless steel		
3	Stem	Stainless steel	X6Cr17	1.4016	12a	Locking screw	Stainless steel	X5CrNi18 M 10	1.4301
	DN>250	X12CrMoS17	1.4104		13	Seat*	EPDM		
4	Stem nut	Brass	CuZn39Pb3	C 36000	15	Bushing	Oil-bronze		
4a	Washer	Stainless steel	X5CrNi18 M 10	1.4301	16	Gate guard, not for HW	Stainless steel	X5CrNi18 M 10	1.4301
4b	Screw	Stainless steel	X5CrNi18 M 10	1.4301	17	Gate clevis	Stainless steel	X10CrNiS 18-9	1.4305
5	Tie rod	Stainless steel	X5CrNi 18 M 10	1.4301	18	Cylinder	See data sheet		
5a	Washer	Stainless steel	X5CrNi18 M 10	1.4301	20	Clevis pin	Stainless steel	X10CrNiS 18-9	1.4305
5b	Nut	Stainless steel	X5CrNi18 M 10	1.4301	21	Split pin	Stainless steel		
6	Gate	Stainless steel	X5CrNi18 M 10	1.4601	25	Piston rod	Stainless steel	X12CrMoS17	1.4104
7	Beam	Aluminium	AlMgSi 0,5	AA 6063	28	Locking nut	Stainless steel	X10CrNiS 18-9	1.4305
8	Gland	Stainless steel							
8a	Stud bolt	A2, zinc	X5CrNi18 M 10	1.4301					

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* Recommended spare parts

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