

Knife gate valve with handwheel Series A1V2



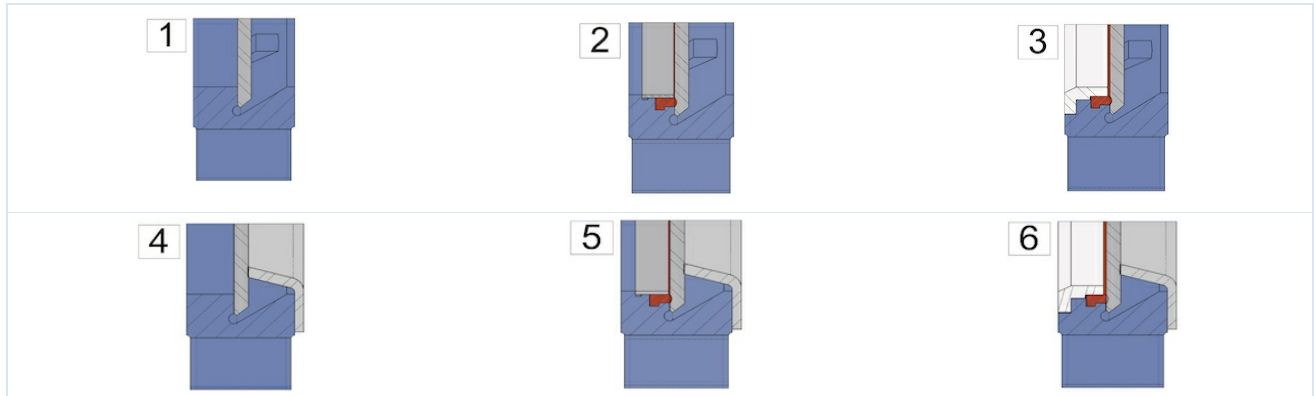
Design type	Knife gate valve with handwheel, Sandwich mounting version, single-acting sealing, rising stem, Manually adjustable packing
Actuation	by means of handwheel
Connection	Flanges DN50...DN500 according to EN1092-2 PN10
Materials	see material table
Medium temperature	Housing Grey cast iron EN-GJL-250 or rather Ductile iron EN-GJS-500-7 -10...120°C, Housing Stainless steel 1.4408 -30...120°C, additionally also dependent on the packing and sealing material - see table, higher temperatures on request
Operating pressure	up to nominal pressure according to table ATTENTION: Spool can be pressurized against the flow direction with 30% of the maximum operating pressure. This may result in slight leakage in the closed position.
Flow direction	Marked by an arrow. For dry media we recommend a flow opposite to the arrow direction. ATTENTION: Spool can be pressurized against the flow direction with 30% of the maximum operating pressure. This may result in slight leakage in the closed position.
Mounting type	Installation in rigid piping system
Mounting position	vertically upwards, other mounting position on request
Accessories	mounted mechanical limit switches or rather inductive proximity switches
ATEX	suitable for use in potentially explosive atmospheres Zone 2 and 22 (ATEX Zone 1 and 21 on request)
Special versions	Nominal sizes up to 1200mm, non-rising stem, single-acting or double-acting pneumatic actuator, Electric actuator, Sliding discs slide plate PTFE, Flushing bores, other nominal pressures on request



Material table:

Type	A1V2H2-5-...-B	A1V2I2-5-...
Housing	Grey cast iron EN-GJL-250 or rather Ductile iron EN-GJS-500-7 epoxy coated RAL5015, Coating 80µm	Stainless steel 1.4408
Slide plate	Stainless steel 1.4301	Stainless steel 1.4401
Connection plates	Steel coated	Steel coated
Pack (standard)	PTFE-synthetic/EPDM	PTFE-synthetic/EPDM
Seat seal (standard)	EPDM	EPDM
Sliding discs slide plate	RCH-1000(Polyethylene)	RCH-1000(Polyethylene)
Spindle	Stainless steel 1.4305	Stainless steel 1.4305
Handwheel	Ductile iron EN-GJS-500-7	Ductile iron EN-GJS-500-7

Seat variants single-sided sealing:



1 ...metal-to-metal sealing	2 ...soft-sealing with fixing ring (Standard)	3 ...soft-sealing with reinforced retaining ring or rather Wiper for slide plate
4 ...metal-seated with abrasion protection	5 ...soft-sealing with retaining ring and abrasion protection	6 ...soft-sealing with reinforced retaining ring or rather Wiper for slide plate and abrasion protection

Possible packages:

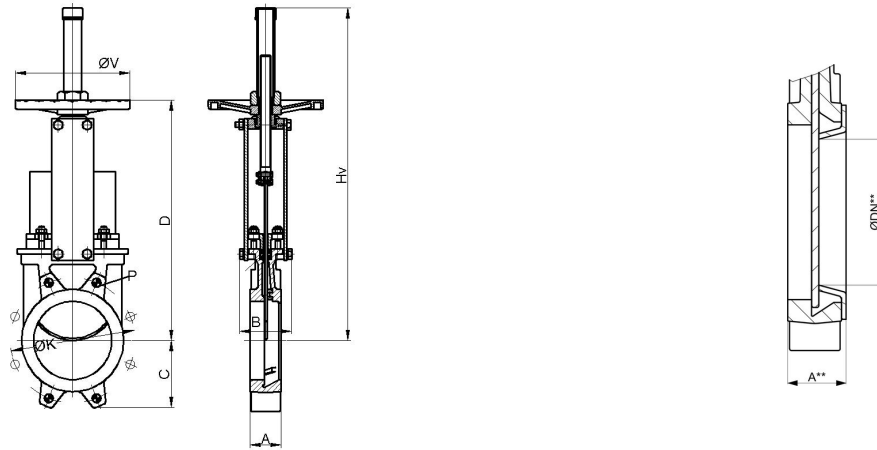
Package	Medium temperature [°C]	Application examples
PTFE-synthetic/EPDM	-15 ...+90	neutral fluids, Liquids with 5% solid content, Granules, Slurries
PTFE-synthetic/FKM	-15 ...+180	Liquids, Liquids with 5% solid content, Granules, Slurries
PTFE	-30 ...+200	for almost all liquids

Possible seat seals:

Seal	Medium temperature [°C]	Leakage [in % of the flow rate]	Application examples
EPDM	-5...+90	0	neutral fluids, Liquids with 5% solid content, Granules, Slurries
metallic	-20...+650	1,5	dry media and liquids with 5% solid content, Granules, Slurries
PTFE	-20 ...+180	0,5	Alkalis and acids
FKM	0...+180	0	Acids, Fuels and oil-containing liquids
NBR	-20...+90	0	Oils and oil-containing fluids
Silicone	-25...+200	0	Food and pharmaceutical products



Dimensions:



incl. Abrasion protection

Nominal size DN[mm]	ØDN**	max. operating pressure [bar]	A	A**	B	C	D	Hv	ØK	Depth* P	ØV	Kv value [m ³ /h]	Kv value*** [m ³ /h]	Weight [kg]
50	25	10	40	46	92	63	280	409	125	8	225	206	28	7
65	39	10	40	46	92	70	308	436	145	8	225	305	72	8
80	52	10	50	56	92	92	333	469	160	9	225	485	137	9
100	72	10	50	56	92	105	373	502	180	9	225	895	279	11
125	97	10	50	56	102	120	406	585	210	9	225	1550	548	13
150	119	10	60	66	102	130	458	644	240	10	225	2095	851	17
200	167	10	60	66	119	160	578	815	295	10	325	3834	1888	28
250	217	10	70	77	119	198	679	1016	350	12	325	5375	3400	40
300	259	6	70	77	119	234	779	1116	400	12	380	8083	4845	56
350	302	6	96	105	290	256	906	1336	460	21	450	10700	6808	94
400	352	6	100	109	290	292	1012	1442	515	21	450	14200	9746	116
450	400	5	106	115	290	308	1098	1628	565	22	450	18405	12442	162
500	449	4	110	119	290	340S	1210	1738	620	22	450	23215	15979	191

*Thread depth, DN600 ...DN1200 on request

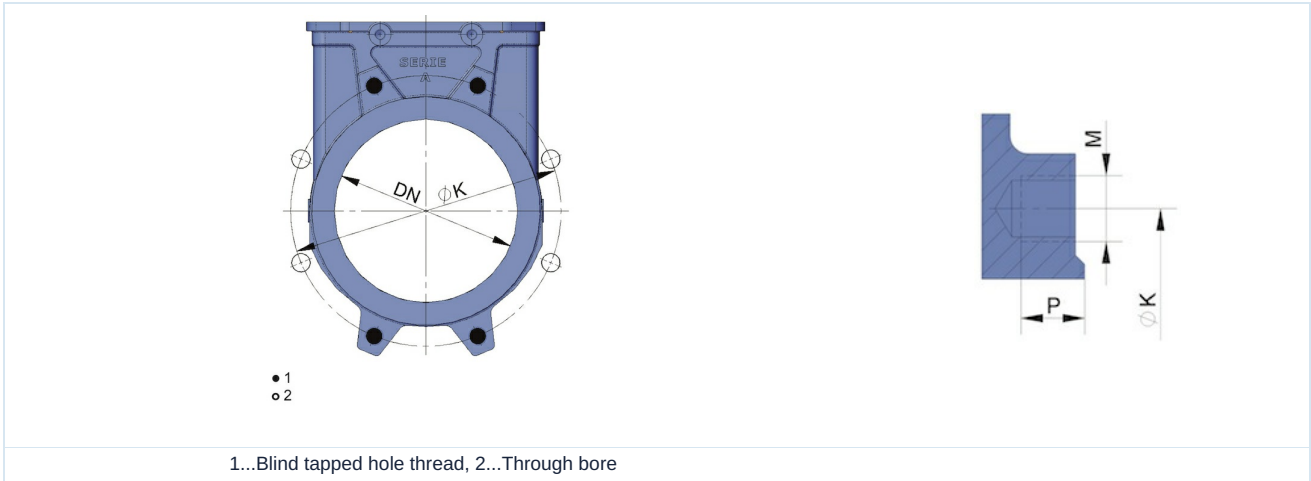
***Kv value incl. Abrasion protection

Limit switch

Type	MSU01A	MSU05	MSU03	MSU04
				
Manufacturer/type	Siemens 3SE5122	IFM IG0011	IFM IGS208	IFM NG501A
Description	N/O / N/C	M18, 20-250VAC/DC, NO, 2-wire, Cable 2m	M18, 10-30VDC, NO, 2-wire or 3-wire, Cable 2m	M18, ATEX EEx i, Cable 2m
Ambient temperature	-25 ...+85°C	-25 ...+80°C	-25 ...+70°C	-20 ...+70°C
Degree of protection	IP66	IP67	IP67	IP67
maximum switching capacity	230VAC/6A 24VDC/0,27A	AC 250mA, DC 100mA	DC 100mA	-



Flange information:



Nominal size DN[mm]	Number of blind tapped holes	Number of through holes	ØK	M	Depth Blind tapped hole thread P
50	4	-	125	M16	8
65	4	-	145	M16	8
80	4	4	160	M16	9
100	4	4	180	M16	9
125	4	4	210	M16	9
150	4	4	240	M20	10
200	4	4	295	M20	10
250	6	6	350	M20	12
300	6	6	400	M20	12
350	10	6	460	M20	21
400	10	6	515	M24	21
450	14	6	565	M24	22
500	14	6	620	M24	22

DN600 ...DN1200 on request

Illustrations non-binding
Design, dimensional and material changes reserved

Armatures / Valves, butterfly valves and gate valves - manually operated / Knife gate valve