



## General Description

Model KG02 is a bidirectional knife gate valve suitable for most industrial application cases. With one piece body design, it combines robust and economy giving best cost effective result.

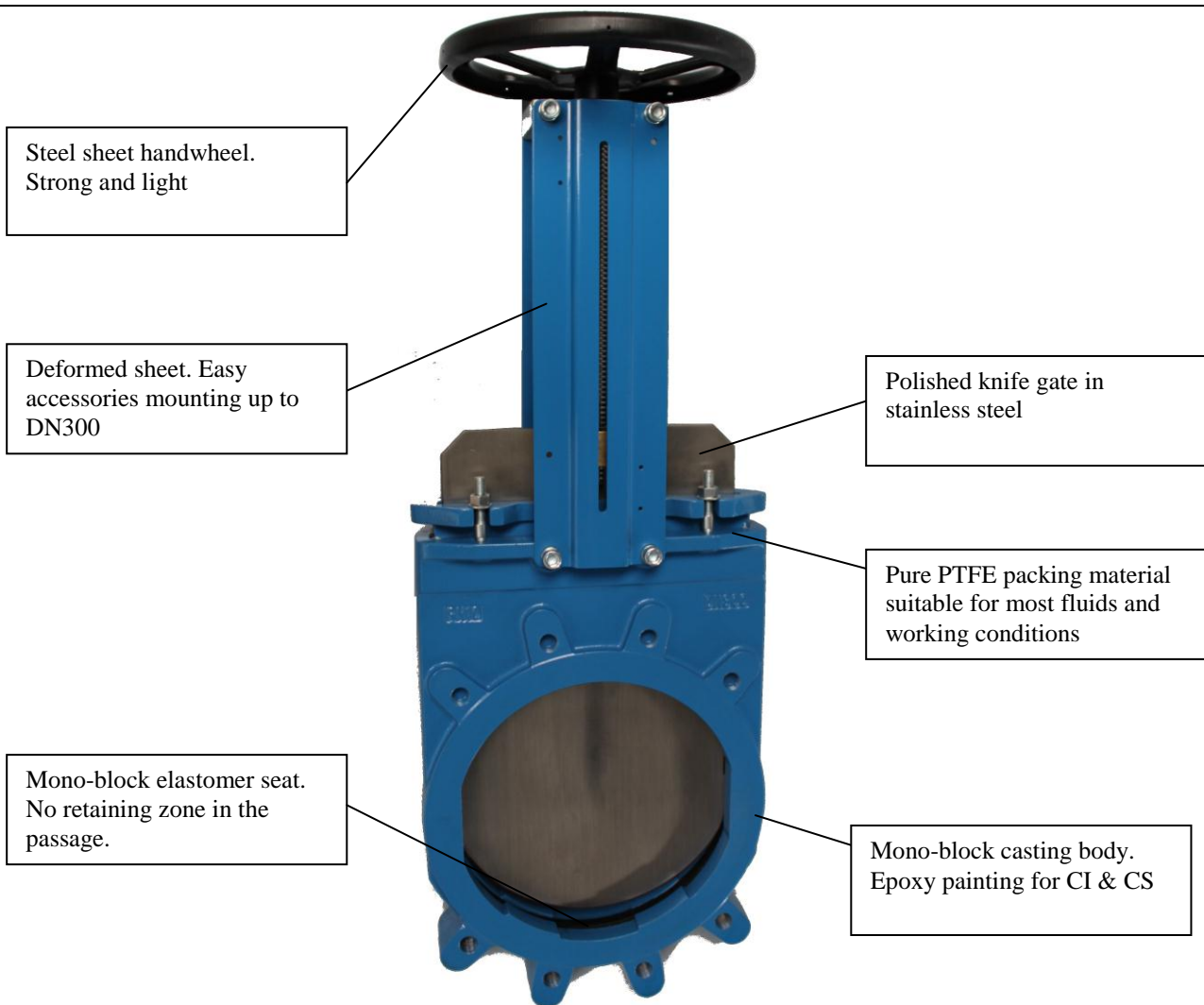
Wide industrial application with domains covering mining, water treatment, pulp & paper, solid pneumatic conveying, chemical particles, power plant, food and beverage, etc.

## Design Features

- One piece molded metal body ,
- Bidirectional design with the special seat form resulting in minimum operating torque,
- Nearly full port opening with no retaining zone,
- Zero leakage with elastomer seat,
- All types of actuators. Handwheel, pneumatic, chain wheel and electric,
- Wafer to ISO PN10, PN16 or ANSI 150LBS ,
- Fully lug version (KG02L) available on request,



## Construction advantages



## Valve Coding system

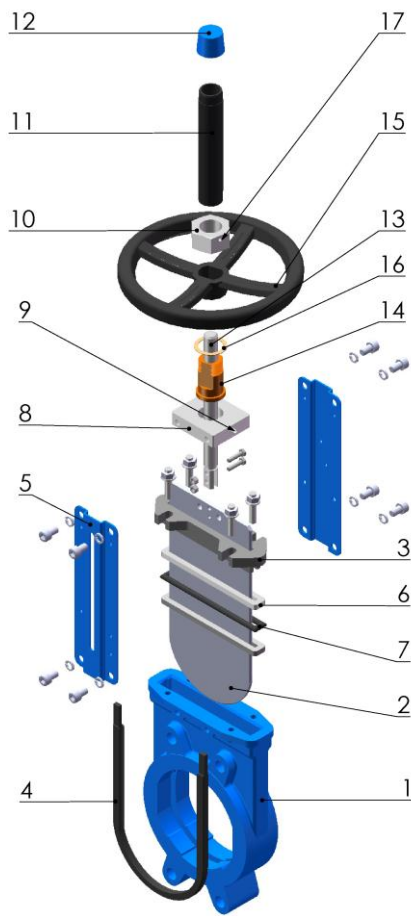
See document « VALVE CODING SYSTEM ».

## Technical Information

Sizes	Flange drilling	Face-to-face dimension	Leakage rate
DN50-1200	EN 1092 PN 10 EN 1092 PN 16 ANSI B16.5 Class 150 ANSI B16.47 Class 150, serie A JIS B 2238 10K BS 10 Table D*	KG01 : Factory standard KG02 : Factory standard KG05: MSS SP-81, TAPPI TIS 405-8	EN 12266-1 DIN3230 ISO5208 MSS SP-81



**STANDARD VERSION PARTS LIST**



17	FIXING SCREW	SS304	SS304
16	WASHER	BRASS	BRASS
15	HANDWHEEL	STEEL	STEEL
14	STEM NUT	BRONZE	BRONZE
13	SPINDLE	SS303	SS303
12	HOOD COVER	PLASTIC	PLASTIC
11	HOOD	STEEL	STEEL
10	FIXING SCREW	STEEL	STEEL
9	OIL HOLE	STEEL	STEEL
8	YOKE	STEEL	STEEL
7	O-RING	NBR	EPDM
6	PACKING	PTFE	PTFE
5	SUPPORT	STEEL	STEEL
4	SEAT	NBR	EPDM
3	PACKING GLAND	AL/DI	CF8M
2	KNIFE	SS304	SS316
1	BODY	GG25	CF8M
<b>POS</b>	<b>NAME</b>	<b>CI VERSION</b>	<b>SS VERSION</b>

Other materials possible upon client's specification

**Working pressure and temperature**

Valve body is designed as per PN10.

Shell test pressure: 1.5 times working pressure.

Tightness test pressure: 1.1 times differential working pressure.

**Standard working pressure table**

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
P(bar)	10	10	10	10	10	8	7	5	5	4	4	3	3	3

*Important note: working pressure can be adjusted according to client's request.*

Working temperature is mainly determined by the seat materials, packing materials and body materials.



**Seat material temperature range**

Material	Temperature range	Application	To avoid
EPDM	-20 to 120°C	drinking water, acides,	grease, mineral oils
NBR	-10 to 90°C	oils & petroleum, abrasive, sea water	Oxidizing agents
FPM/VITON	-10 to 180°C	chemicals, ozone, oils and fat	
Silicone	-20 to 200°C	High temperature, food	Moist media
Metal seat		Depending on body & packing material	

**Packing material temperature range**

Material	Temperature range
PTFE	0 to 180°C
Graphite	-10 to 650°C



**Body material temperature range**

Material	Temperature range
Cast iron	-15 to 250°C
Ductile iron	-30 to 350°C
Carbon steel	-29 to 425°C
Stainless steel	-196 to 600°C

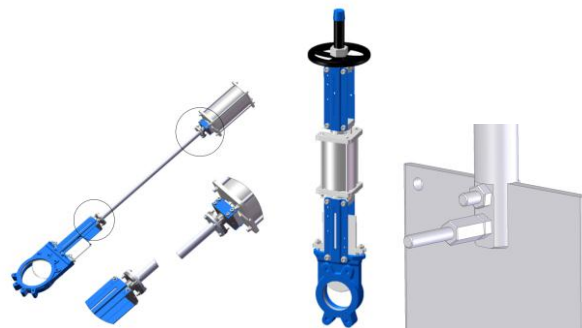


*Attention: all temperatures given are indicative. Please consult for extreme temperature application.*

**Accessories**

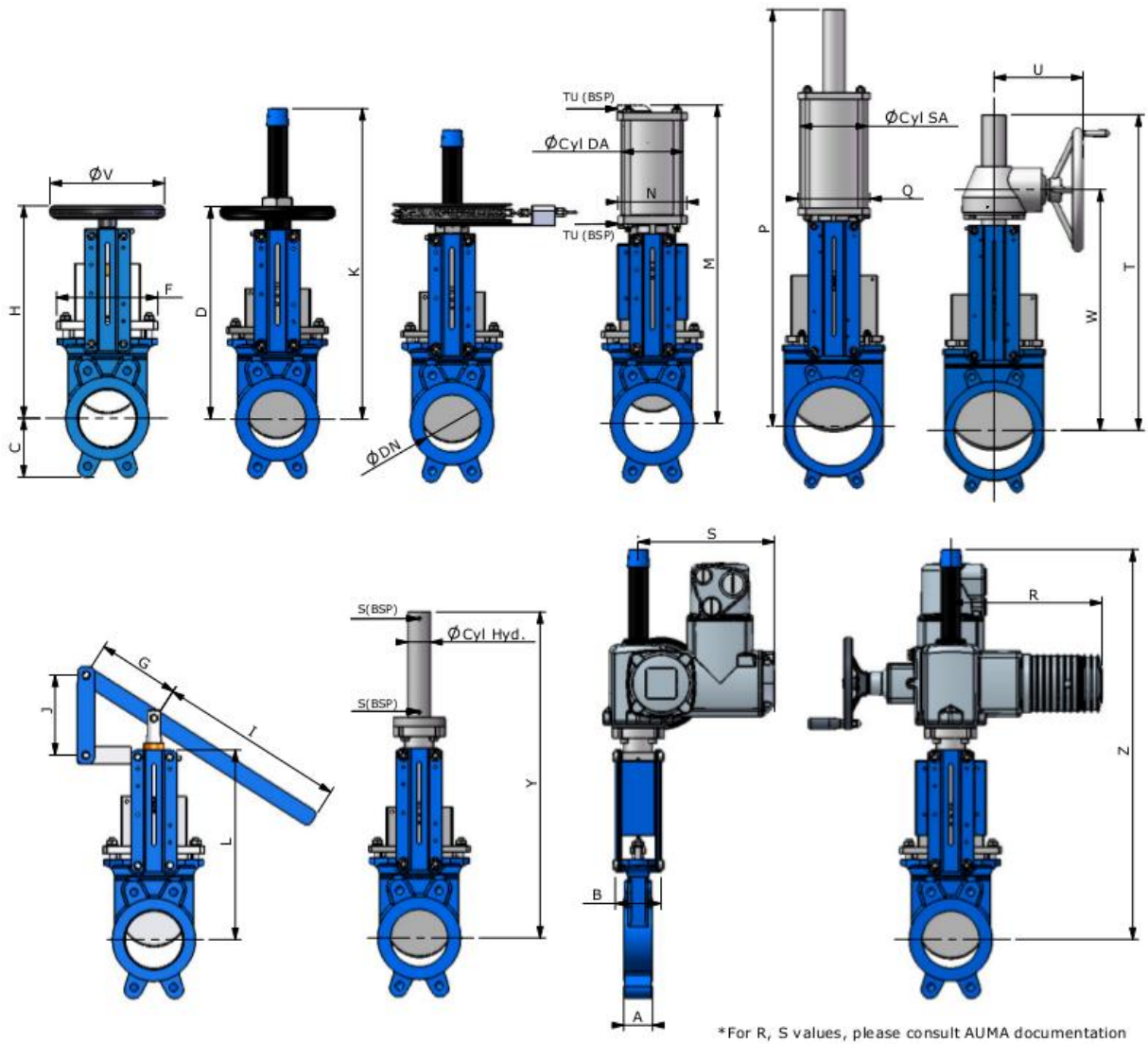
Mechanic or inductive limit switches  
Actuator manual override  
Solenoid valves  
Locking device  
Positionner

Stem extention  
Deflector (round, V form)  
Pneumatic DA + Gear  
Vanne guillotine haute pression





**Weight and Dimension table**



\*For R, S values, please consult AUMA documentation

DN	A	B	C	D	F	G	H	I	K	L	M	N	P	Q	T	U	V	W	Y	Z	Cyl DA	Cyl SA	Cyl Hyd.	TU (BSP)	S (BSP)
50	40	92	63	289	124	140	289	340	410	240	400	96	720	138	490	195	200	340	446	640	80	125	40	1/4"	1/2"
65	40	92	70	316	139	140	316	340	440	265	445	96	766	138	520	195	200	370	485	670	80	125	40	1/4"	1/2"
80	50	92	92	342	154	140	342	340	460	290	485	96	810	138	540	195	200	390	526	695	80	125	40	1/4"	1/2"
100	50	92	105	382	174	140	382	340	500	335	550	115	875	138	580	195	200	430	586	755	100	125	40	1/4"	1/2"
125	50	102	120	415	192	140	415	440	585	373	630	138	975	175	620	195	250	465	655	810	125	160	40	1/4"	1/2"
150	60	102	130	458	217	140	458	440	637	424	695	138	1066	175	690	195	250	520	732	870	125	160	40	1/4"	1/2"
200	60	120	160	575	270	230	575	640	815	533	870	175	1380	218	910	195	300	620	906	1010	160	200	50	1/4"	1/2"
250	70	120	198	676	326	230	676	680	1016	625	1035	218	1792	280	1020	195	300	720	1056	1125	200	250	50	1/4"	1/2"
300	70	120	234	776	380	230	776	680	1116	732	1185	218	1932	280	1110	195	300	820	1208	1280	200	250	63	1/4"	3/4"
350	96	290	256	906	438		906		1336		1380	270			1280	220	500	890	1380	1410	250		63	3/8"	3/4"
400	100	290	292	1012	493		1012		1442		1540	270			1390	220	500	990	1534	1560	250		63	3/8"	3/4"
450	106	290	308	1098	546		1098		1628		1680	382			1670	220	500	1080	1694	1730	320		80	1/2"	3/4"
500	110	290	340	1210	620		1210		1740		1840	382			1780	220	500	1190	1858	1896	320		80	1/2"	3/4"
600	110	290	400	1416	714		1416		2046		2145	382			1990	220	500	1400	2160	2124	320		80	1/2"	3/4"

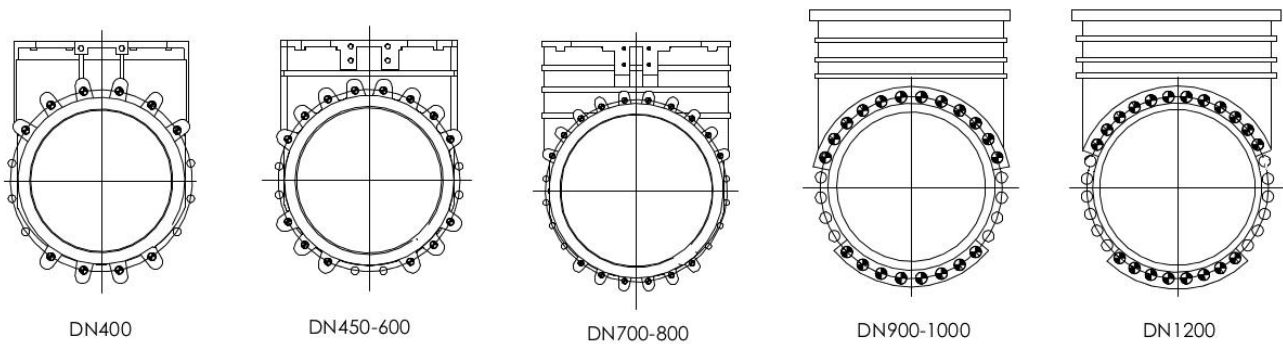
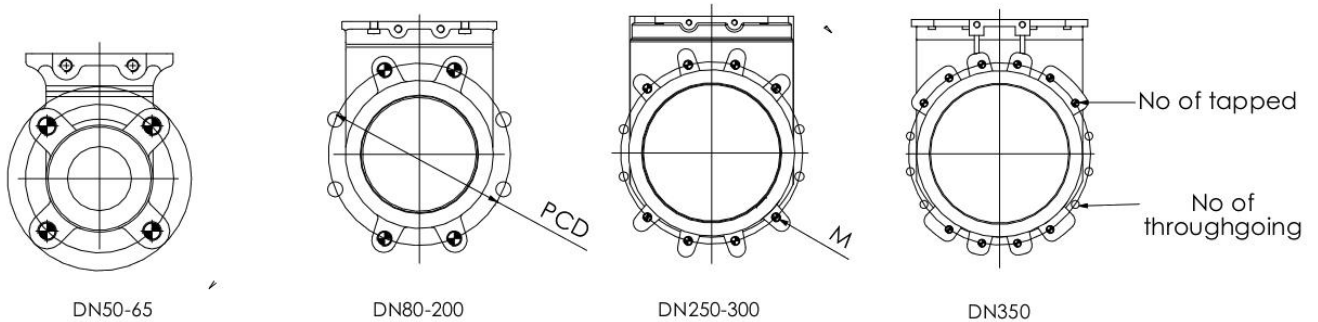


**Weight table and AUMA configuration**

DN	WEIGHT (kg)									AUMA configuration		
	HW RS	HW NRS	Chainwheel	Lever	Pneumatic DA	Pneumatic SA	Bevel gear	Hydraulic	Electric	Tr stem	ISO top	AUMA Type (Form A)
50	7	7	7	8	7	19	17	7	24	20X4	F10	SA 07.1
65	8	8	8	8.5	8	22	18	8	25	20X4	F10	SA 07.1
80	9	9	9	10	9	23	19	9	26	20X4	F10	SA 07.1
100	10	10	10	11	11	24	20	12	27	20X4	F10	SA 07.1
125	13	13	13	14	16	35	24	15	30	20X4	F10	SA 07.5
50	16	16	16	17	19	36	26	20	32	20X4	F10	SA 07.5
200	28	28	28	28	32	66	50	31	42	25X5	F10	SA 07.5
250	42	42	42	43	51	130	65	44	55	25X5	F10	SA 07.5
300	56	56	56	57	65	145	78	62	72	25X5	F10	SA 07.5
350	108	108	108		122		106	100	99	35X6	F10	SA 10.1
400	130	130	130		146		134	138	136	35X6	F10	SA 10.1
450	166	166	166		185		175	161	166	35X6	F10	SA 14.1
500	203	203	203		266		216	223	245	35X6	F10	SA 14.1
600	293	293	293		358		285	325	362	35X6	F10	SA 14.1



**Wafer valve flange details**



1200	1380	12	20	M36
1000	1160	8	20	M33
900	1050	8	20	M30
800	950	8	16	M30
700	840	8	16	M27
600	725	6	14	M27
500	620	6	14	M24
450	565	6	14	M24
400	515	6	10	M24
350	460	6	10	M20
300	400	6	6	M20
250	350	6	6	M20
200	295	4	4	M20
150	240	4	4	M20
125	210	4	4	M16
100	180	4	4	M16
80	160	4	4	M16
65	145	0	4	M16
50	125	0	4	M16
DN	PCD (mm)	No of throughgoing	No of tapped	Bolt size
	<b>PN 10</b>			



600	730	6	18	M30
500	620	6	14	M24
450	565	6	14	M24
400	510	6	10	M24
350	445	6	10	M22
300	410	6	6	M24
250	355	6	6	M24
200	295	6	6	M20
150	240	4	4	M20
125	210	4	4	M16
100	180	4	4	M16
80	160	4	4	M16
65	145	0	4	M16
50	125	0	4	M16
DN	PCD (mm)	No of throughgoing	No of tapped	Bolt size
	<b>EN 1092 PN 16</b>			

600	749.3	6	14	1-1/4"
500	635.0	6	14	1-1/8"
450	577.8	6	10	1-1/8"
400	539.8	6	10	1"
350	476.2	4	8	1"
300	431.8	6	6	7/8"
250	362.0	6	6	7/8"
200	298.4	4	4	3/4"
150	241.3	4	4	3/4"
125	215.9	4	4	3/4"
100	190.5	4	4	5/8"
80	152.4	0	4	5/8"
65	139.7	0	4	5/8"
50	120.6	0	4	5/8"
DN	PCD (mm)	No of throughgoing	No of tapped	Bolt size (UNC)
	<b>ANSI B16.5 class 150</b>			