

 **Herbe**

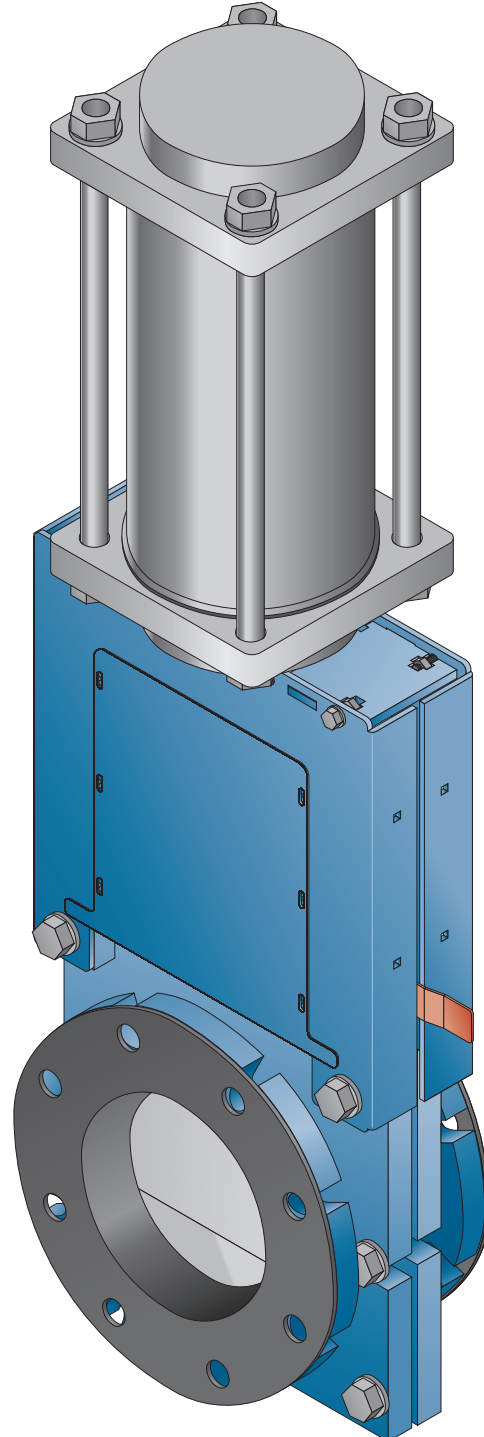
KNIFE GATE
VALVES





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The manufacturer reserves the right to make modifications without prior notice.



Design and Construction

The HERBE-HM valve is made up of two half-bodies in which two sleeves are placed, providing total, obstacle-free passage when the gate is open, as together they make a uniform flow and a perfect seal when the gate is closed, given that the sleeves exert uniform pressure on the gate in both directions.

The valve is two-way and the sleeves are made using a stainless steel integral reinforcement ring.

The construction in the sleeves that has been described ensures they fit comfortably into the body of the valve and that they are resistant to the high performance required when the knife gate is in operation.

Assembly

It can be installed in any position but, as manufacturers, we recommend it be placed vertically wherever possible, and providing the minimum distances are respected so that it can work correctly.

Maintenance

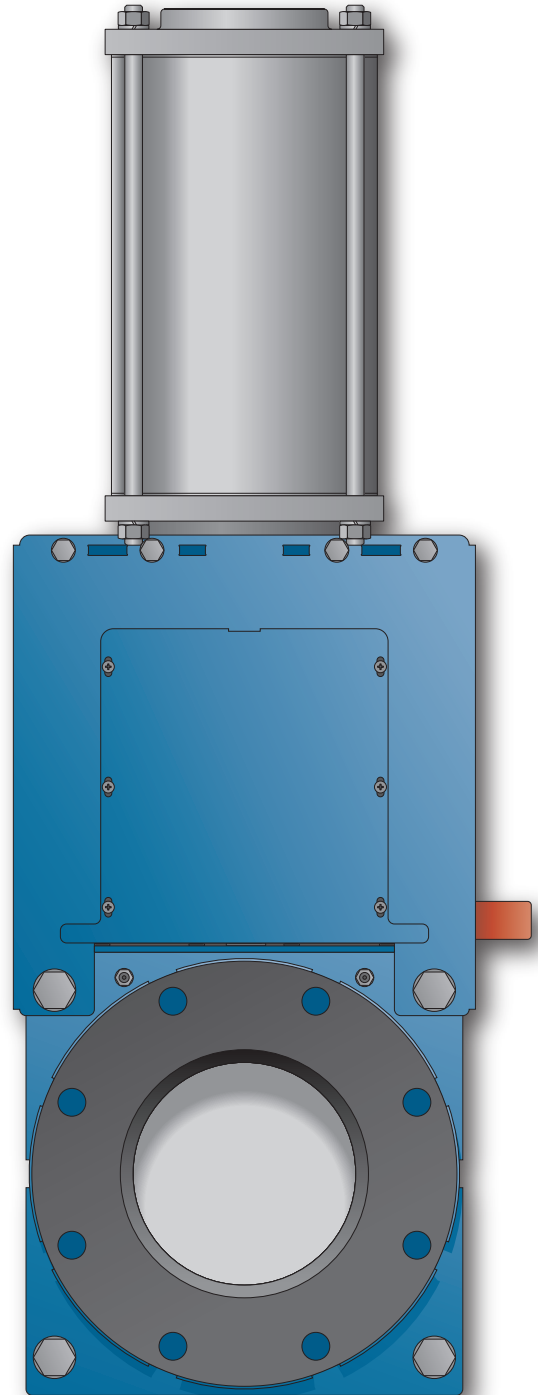
The sleeves are designed in such a way that they can be replaced quickly and easily whenever necessary, as no tools are needed for this process.

The sleeves' useful life is something that the manufacturer cannot establish, given that said life will depend on normally unknown factors, such as pressure, temperature, chemical aggression, handling, etc.

We recommend you fully grease the valve every three months.

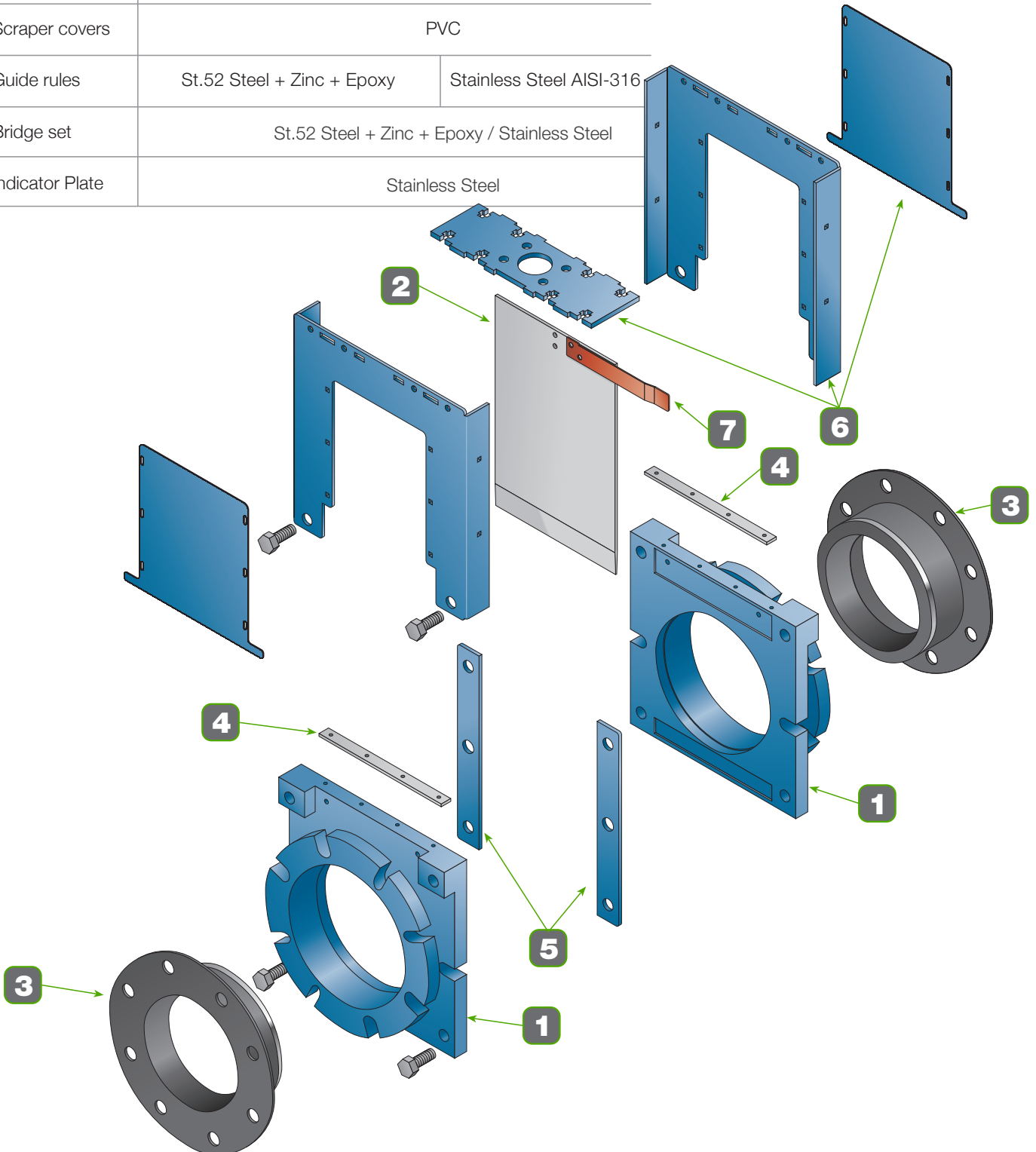
Applications

Mining slurry.
Mining.
Powder.
Chemical.
Cement.





DESCRIPTION	EN-GJL-250	CF8M
1 Body	EN-GJL-250 Grey Cast Iron + Epoxy	CF8M Stainless Steel
2 Gate	Stainless Steel AISI-304	Stainless Steel AISI-316
3 Sleeves	Natural rubber / EPDM / Chlorobutyl / Nitrile...	
4 Scraper covers	PVC	
5 Guide rules	St.52 Steel + Zinc + Epoxy	Stainless Steel AISI-316
6 Bridge set	St.52 Steel + Zinc + Epoxy / Stainless Steel	
7 Indicator Plate	Stainless Steel	



The manufacturer reserves the right to make modifications without prior notice.



Features

The HERBE-HM valves meet a wide range of requirements against abrasion, corrosion, temperature and pressure.

They can be used in wet or dry services transporting large particles and heavy materials.

The elastomer sleeves are easy to replace.

There are no metal parts in contact with the flow of liquid that may cause obstruction.

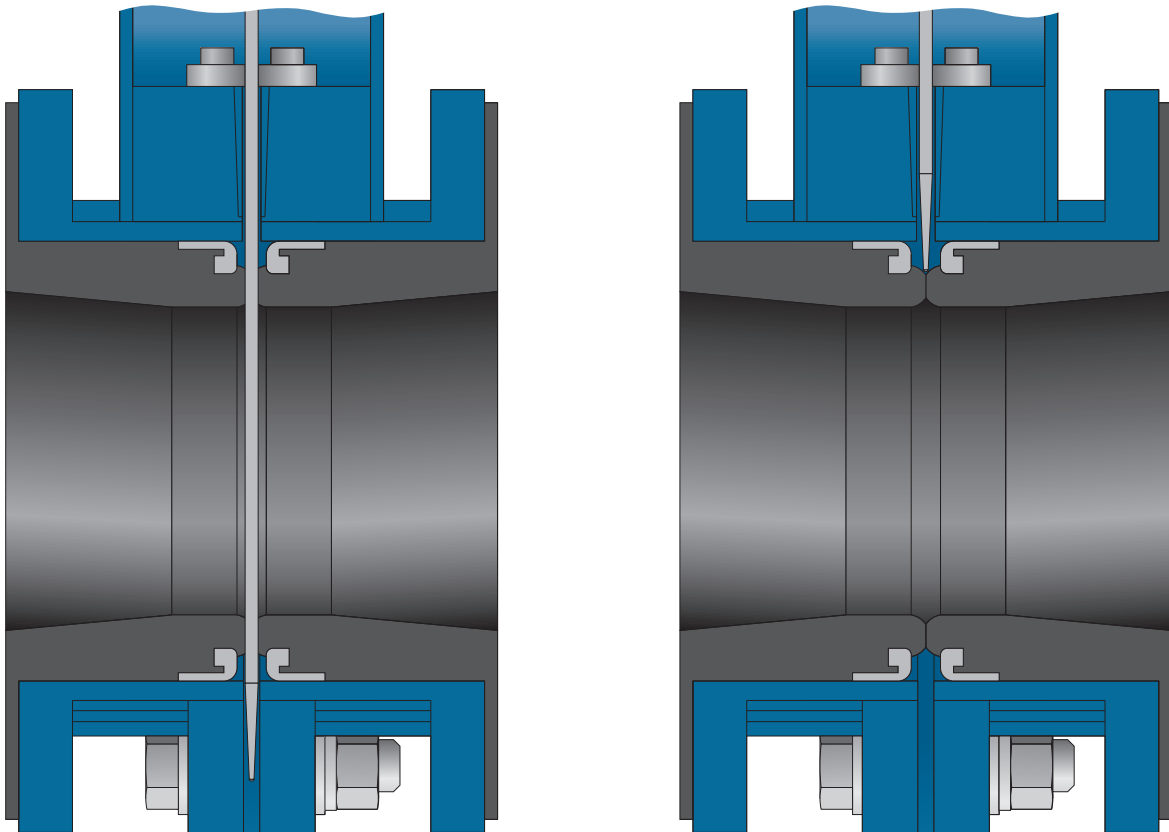
The total flow removes turbulence, reducing the pressure drop to a minimum.

Thanks to its 100% seal and air-tightness, it achieves zero leakage in the lower part of the valve.

The double seal and complete closure provide versatility in the flow direction, enabling the valve to be two-way.

There are no cavities in which solids may be caught, thus avoiding the possibility of them obstructing the completely sealed closure of the gate.

There is no need for an inlet door or stem packing, which means there is no chance of packaging or maintenance leaks.



The manufacturer reserves the right to make modifications without prior notice.



Sleeves

Natural rubber

Advantages: Excellent tensile strength, excellent breaking strength and abrasion resistance, and good flexibility at low temperatures.

Limitations: poor resistance to ozone, acids, hydrocarbon fuels and grease.

Maximum continuous operating temperature: 70°C.

EPDM

Advantages: It has excellent weather resistance, very good low temperature flexibility, good resistance to alkalis, acids, alcohols, ketones, glycols and dissolved oxygens, high resistance to water and steam.

Limitations: poor resistance to mineral hydrocarbon fuels, oil and grease-based fluids, and synthetic hydrocarbon lubricants.

Maximum continuous operating temperature: 120°C.

Chlorobutyl

Advantages: Excellent impermeability to gas and steam, very good resistance to heat, oxygen, ozone and sunlight. Excellent resistance to alkalis and oxygenated solvents, high resistance to water and steam.

Limitations: poor resistance to petrol, gasoline and hydrocarbons. Maximum continuous operating temperature: 120°C.

Nitrile

Advantages: Very good resistance to oil, gasoline, alkalis and acids. Good resistance to dissolved hydrocarbons.

Limitations: poor resistance to ozone and oxygenated solvents.

Maximum continuous operating temperature: 90°C.

Hypalon

Advantages: High resistance to harsh chemical substances.

Maximum continuous operating temperature: 90°C.

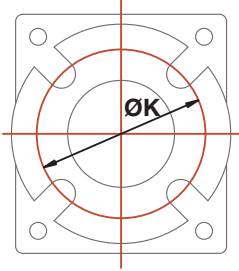
* Other materials also available on request.



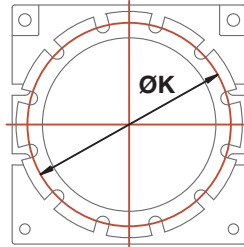
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Flanges DIN PN10

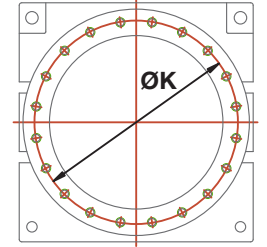
DN 50-65



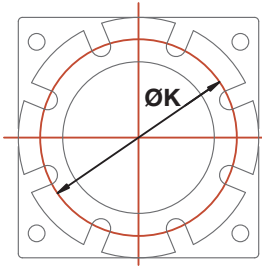
DN 250-300



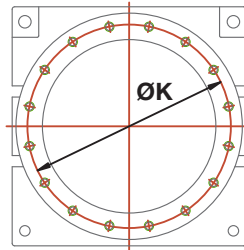
DN 450-500



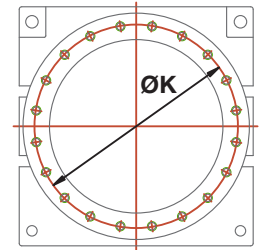
DN 80-200



DN 350-400



DN 600



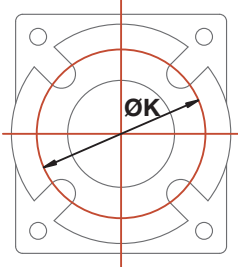
DN	K	Z	T
50	125	4	M-16
65	145	4	M-16
80	160	8	M-16
100	180	8	M-16
125	210	8	M-16
150	240	8	M-20
200	295	8	M-20
250	350	12	M-20
300	400	12	M-20
350	460	16	M-20
400	515	16	M-24
450	565	20	M-24
500	620	20	M-24
600	725	20	M-27

DN Nominal Diameter / K Diameter /
Z No. of bore holes / T Thread

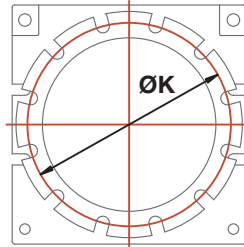
The manufacturer reserves the right to make modifications without prior notice.

Flanges ANSI 150lbs.

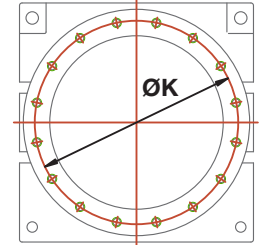
DN 2"-2 1/2"



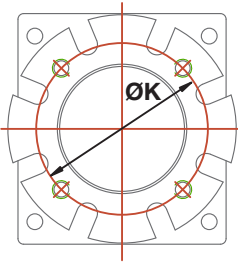
DN 10"-12"



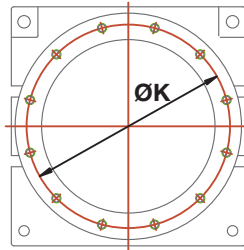
DN 16"-18"



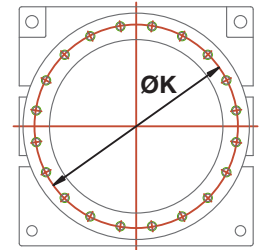
DN 3"



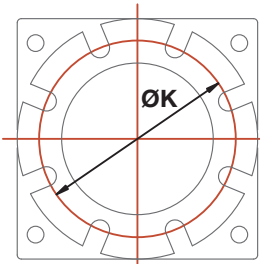
DN 14"



DN 20"



DN 4"-8"



DN	K	Z	T
2"	120.6	4	5/8"
2 1/2"	139.7	4	5/8"
3"	152.4	4	5/8"
4"	190.5	8	3/4"
5"	215.9	8	3/4"
6"	241.3	8	3/4"
8"	298.4	8	3/4"
10"	361.9	12	7/8"
12"	431.8	12	7/8"
14"	473.2	12	1"
16"	539.7	16	1"
18"	577.8	16	1 1/8"

DN Nominal Diameter / K Diameter /
Z No. of bore holes / T Thread

The manufacturer reserves the right to make modifications without prior notice.

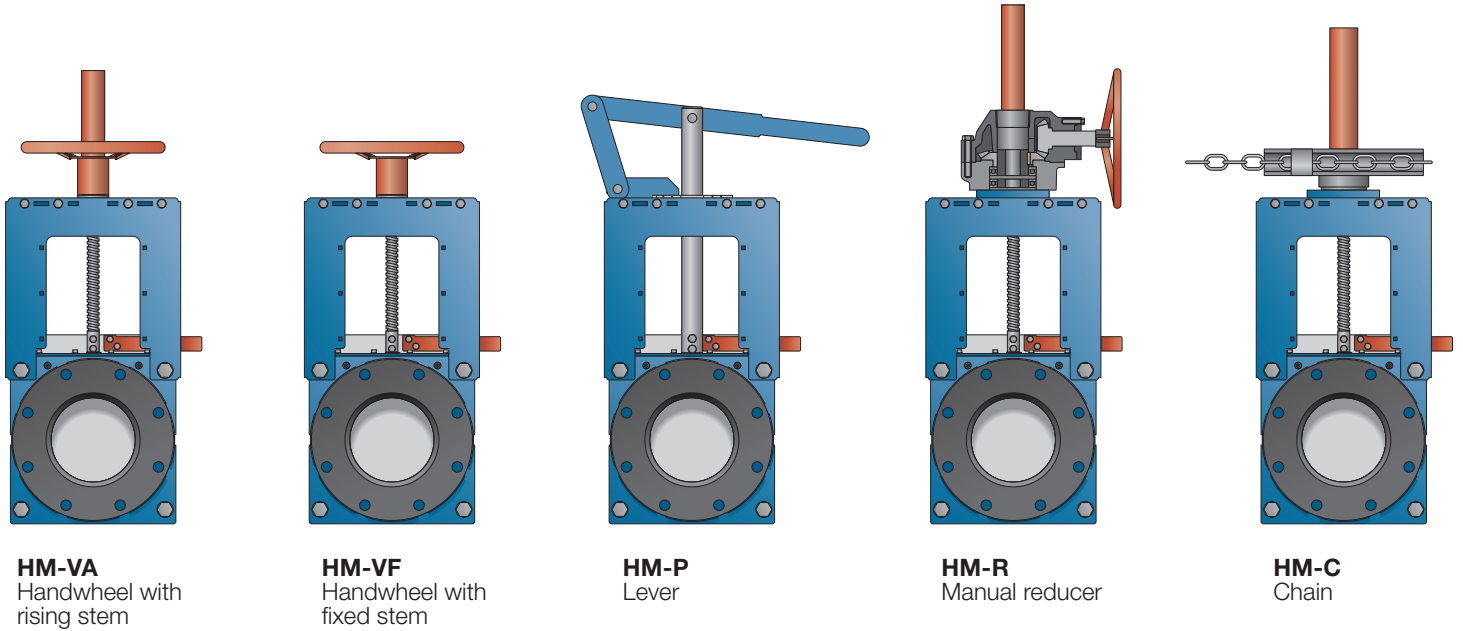


Drives

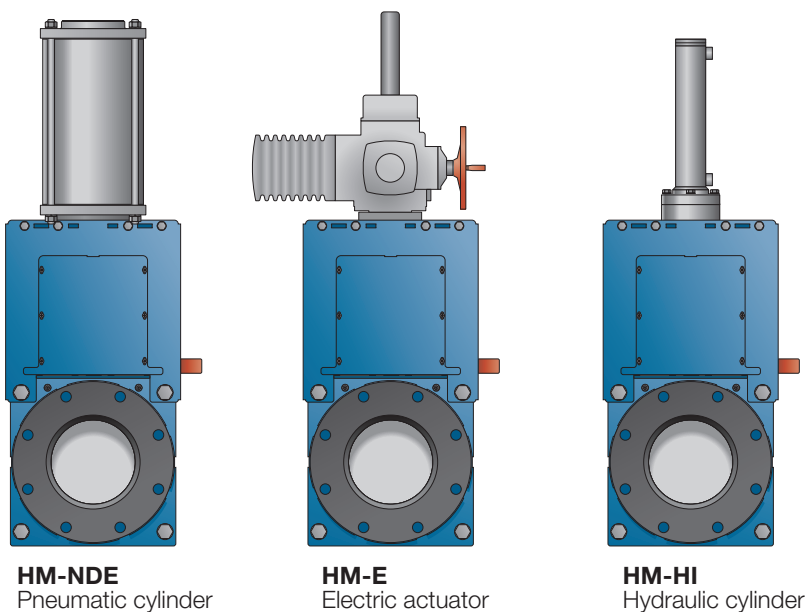
HERBE's HM knife gate valves can be operated with different types of drives, both manual and automatic. A correct choice of the type of drive will enable a more efficient use of the valve.

Please check with our Technical Department to select the most appropriate drive for your needs.

MANUAL



AUTOMATIC



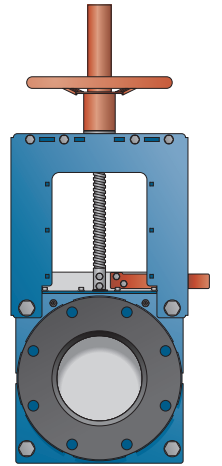
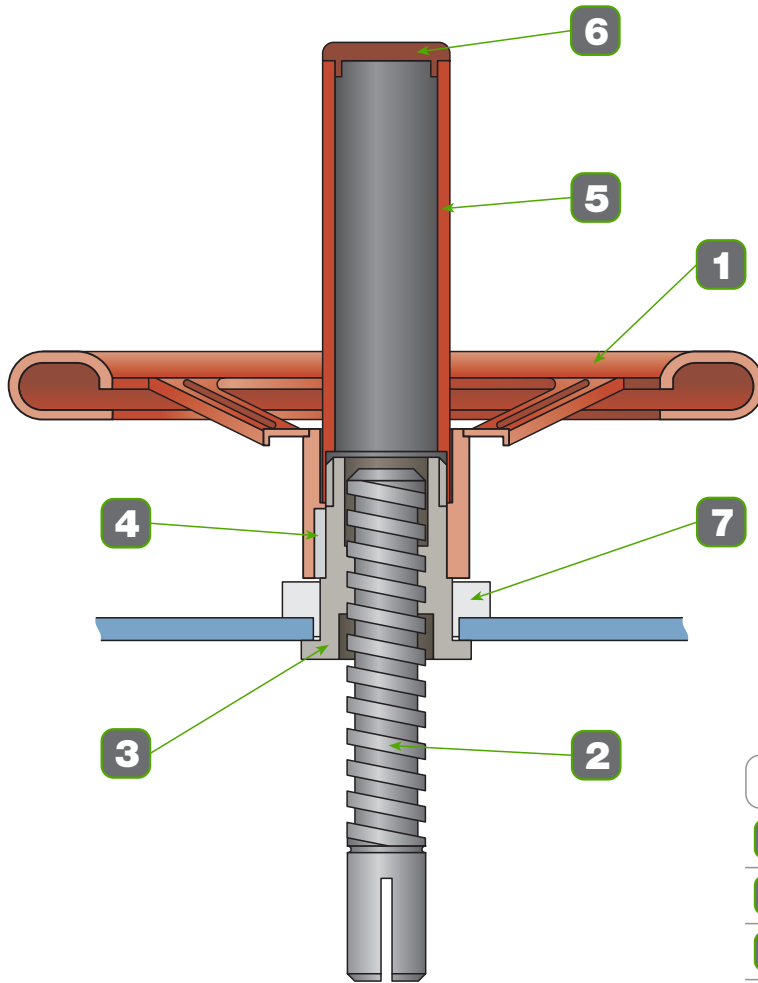
The manufacturer reserves the right to make modifications without prior notice.

HM-VA

VA. Handwheel with rising stem.

Particularly suitable for facilities in which space is not a problem.

Manufactured from DN 50 up to DN 450, for any other sizes, please check with our Technical Department.

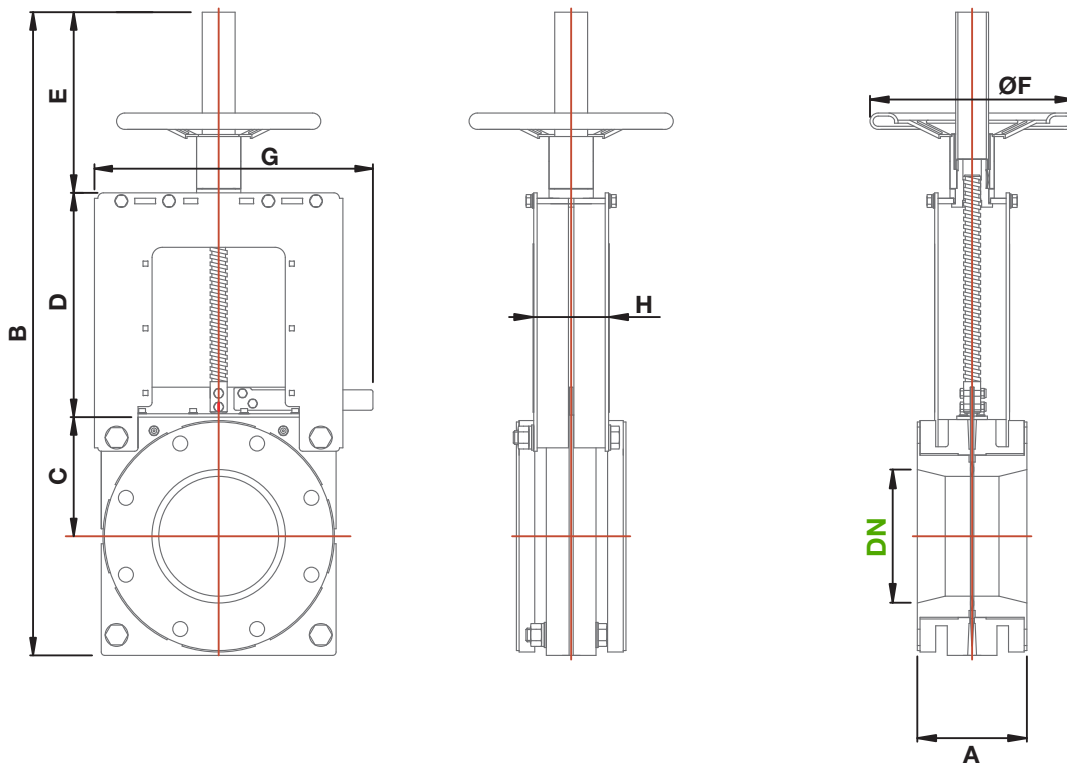


	DESCRIPTION	MATERIAL	U.
1	Handwheel	Steel + Epoxy	1
2	Stem	AISI-303 / AISI-316	1
3	Nut	Bronze	1
4	Cotter	Bichromate steel	1
5	Protection	Steel + Epoxy	1
6	Plug	Plastic	1
7	Bearing	Nylon	1

The manufacturer reserves the right to make modifications without prior notice.

HM-VA

Measurements.



DN	A	B	C	D	E	ØF	G	H	PN
2"/DN50	130	445	85	149	125	200	200	78	10
3"/DN80	139	526	104	171	147	200	236	73	10
4"/DN100	151	662	115	206	176	200	280	84	10
5"/DN125	163	737	128	239	241	250	319	93	10
6"/DN150	163	801	147	265	241	250	345	94	10
8"/DN200	161	945	175	329	265	300	409	110	7
10"/DN250	218	1,177	205	389	378	350	467	113	7
12"/DN300	240	1,322	230	450	412	350	535	101	7
14"/DN350	248	1,505	265	509	466	400	607	138	7
16"/DN400	250	1,725	297	592	538	500	659	152	7
18"/DN450	270	1,842	320	627	575	500	706	148	3.5

Assembly between Flanges ANSI 150lbs. / PN10 / DN Nominal Diameter / ØF Handwheel diameter
 PN Nominal Pressure in bar. / Measurements in mm.

The manufacturer reserves the right to make modifications without prior notice.

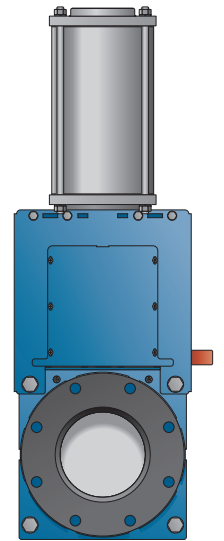
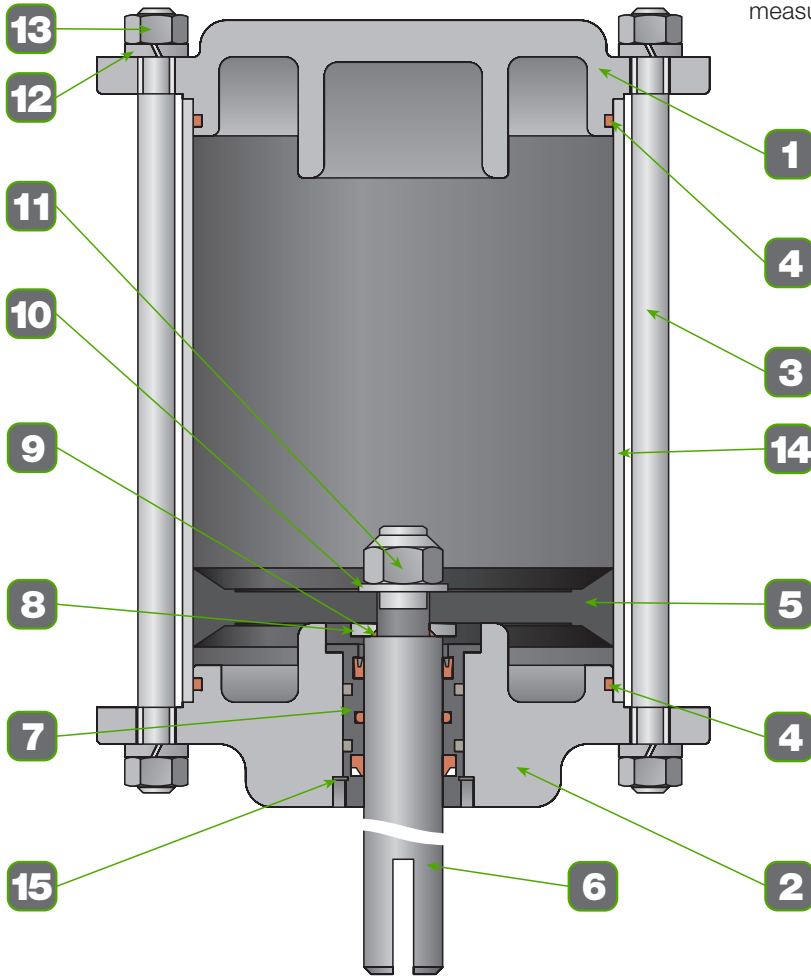
HM-NDE

NDE. Double acting pneumatic cylinder.

The supply pressure of the cylinder must be 6 Kg/cm².

Whenever an anomaly is detected in the normal operation of the cylinder, you should carry out a maintenance procedure by changing the seals or gaskets (their duration will depend on the number of operations).

Manufactured from DN 50 up to DN 450, for any other measurements, please check with our Technical Department.



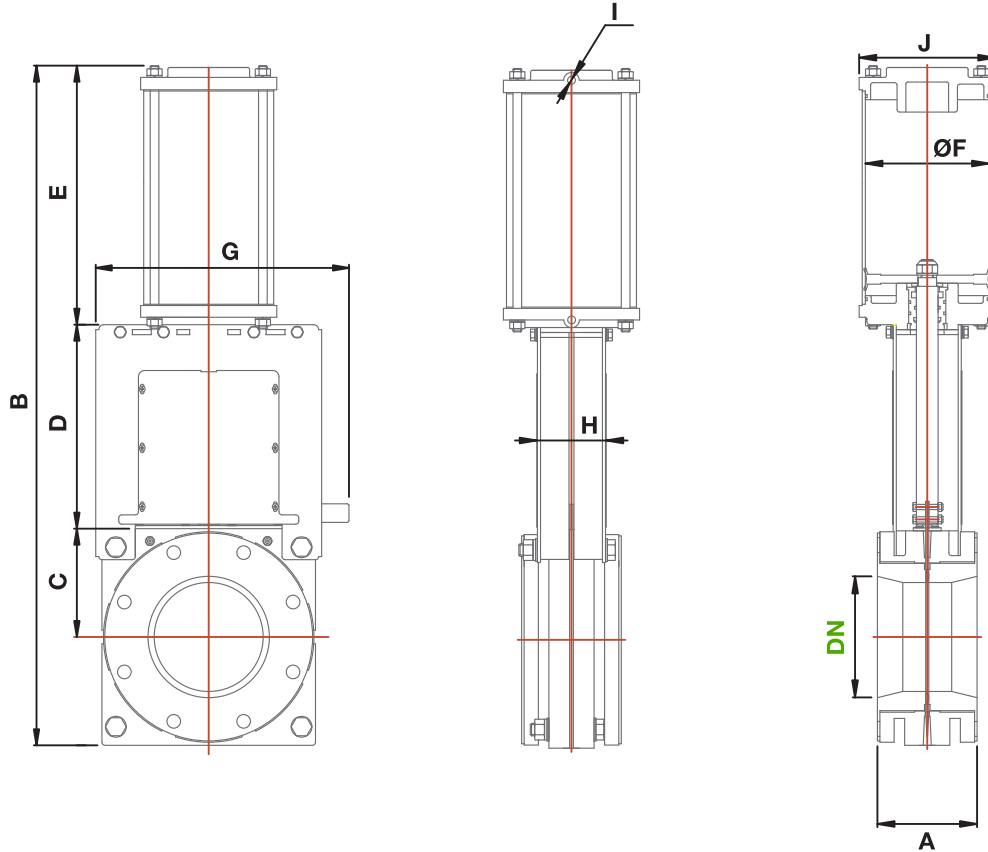
DESCRIPTION	MATERIAL	U.
1 Top cover	Aluminium	1
2 Bottom cover	Aluminium	1
3 Tie-rods	Bichromate steel	4
4 O-ring	NBR	2
5 Piston	NBR	1
6 Shaft	AISI-303 / AISI-316	1
7 Bushing	Delrin	1
Collar	NBR	1
Inner ring	NBR	1
Outer ring	NBR	2
Scraper	Polyurethane	1

DESCRIPTION	MATERIAL	U.
8 Washer	Bichromate steel	1
9 O-ring	NBR	1
10 Washer DIN 125	Bichromate steel	1
11 Self-locking nut DIN985	Bichromate steel	1
12 Grower washer DIN127	Bichromate steel	8
13 Nut DIN 934	Bichromate steel	8
14 Liner	Aluminium	1
15 Safety ring	Bichromate steel	1

The manufacturer reserves the right to make modifications without prior notice.

HM-NDE

Measurements.



DN	A	B	C	D	E	ØF	G	H	I	J	PN
2"/DN50	130	544	85	149	224	80	200	78	1/4"GAS	100	10
3"/DN80	139	630	104	171	251	100	236	73	3/8"GAS	114	10
4"/DN100	151	718	115	206	282	125	280	84	3/8"GAS	144	10
5"/DN125	163	818	128	239	322	160	319	93	3/8"GAS	180	10
6"/DN150	163	905	147	265	345	160	345	94	3/8"GAS	180	10
8"/DN200	161	1,098	175	329	418	200	409	110	1/2"GAS	220	7
10"/DN250	218	1,285	205	389	485	200	467	113	1/2"GAS	220	7
12"/DN300	240	1,430	230	450	520	200	535	101	1/2"GAS	220	7
14"/DN350	248	1,649	265	509	610	250	607	138	1/2"GAS	274	7
16"/DN400	250	1,863	297	592	676	250	659	152	1/2"GAS	274	7
18"/DN450	270	2,017	320	627	750	300	706	148	3/4"GAS	327	3.5

Assembly between Flanges ANSI 150lbs. / PN10 / DN Nominal Diameter / ØF Cylinder diameter / I inlets
 PN Nominal Pressure in bar. / Measurements in mm.

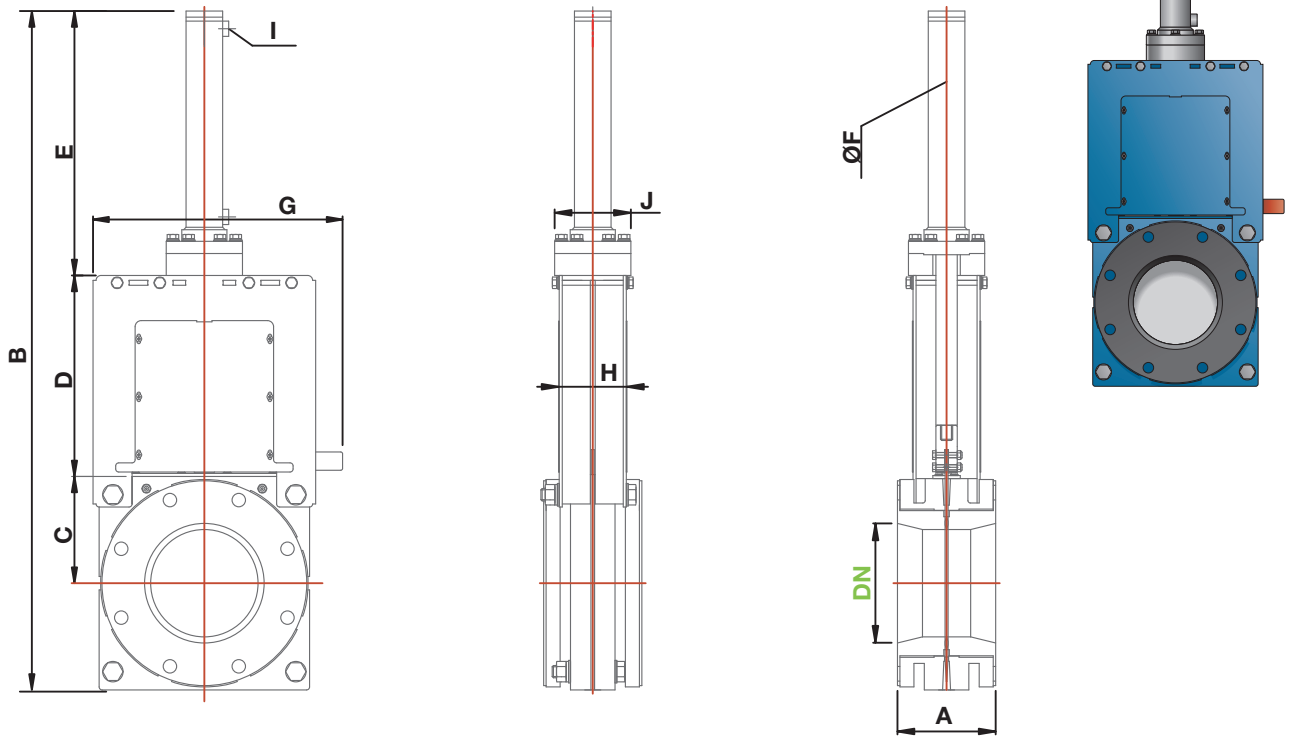
The manufacturer reserves the right to make modifications without prior notice.

HM-HI

HI. Hidraulic cylinder.

Manufactured from DN 50 up to DN 450, for any other sizes, please check with our Technical Department.

Measurements.



DN	A	B	C	D	E	ØF	G	H	I	J	PN
2"/DN50	130	571	85	149	252	40	200	78	3/8"G	100	10
3"/DN80	139	651	104	171	272	40	236	73	3/8"G	100	10
4"/DN100	151	743	115	206	307	40	280	84	3/8"G	100	10
5"/DN125	163	833	128	239	338	40	319	93	3/8"G	100	10
6"/DN150	163	935	147	265	376	50	345	94	3/8"G	125	10
8"/DN200	161	1113	175	329	434	50	409	110	3/8"G	125	7
10"/DN250	218	1313	205	389	514	63	467	113	1/2"G	145	7
12"/DN300	140	1468	230	450	558	63	535	101	1/2"G	145	7
14"/DN350	148	1689	265	509	650	80	607	138	1/2"G	170	7
16"/DN400	250	1902	297	592	716	80	659	152	1/2"G	170	7
18"/DN450	270	2036	320	627	761	80	706	148	1/2"G	170	3.5

Assembly between Flanges PN10 / DN Nominal Diameter / ØF Cylinder diameter / I inlets
 PN Nominal Pressure in bar. / Measurements in mm.

The manufacturer reserves the right to make modifications without prior notice.



Herbe

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