

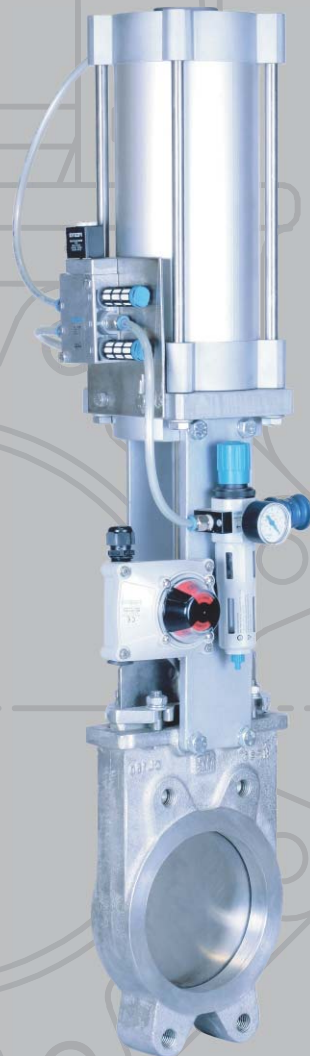


®

MIRAB CO.

Manufacturer of Industrial Valves
and Relevant Equipment

Knife Gate Valves



Knife Gate Valves

Size: DN 50 - DN 1000 mm

Pressure: PN 6 - PN 10 bar

Face to face: according to DIN 3202-K1

Flanges: DIN EN 1092-2 (DIN 2501)

size	pressure
DN 50 - DN 250	10 bar
DN 300 - DN 400	6 bar
DN 450	5 bar
DN 500 - DN 600	4 bar
DN 700 - DN 1000	2 bar

Product Features:

Knife valves are designed for top performance and a long maintenance free lifetime. The stainless steel Knife gate is precision - buffed for tight shut off. Its knife - like edge cuts through heavy or high viscous fluids. Knife edges are machine chamfered to reduce packing wear. The brass stem nut makes opening & closing the valve smooth and speedy with low torque requirements.

Knife valve can be installed between two pipe flanges as wafer type and shall be used in different industries. Because of special design the least contact would occur between moveable parts and body. The gate moves upward and downward through layers of packing without touching the body and never collect any heavy viscous fluids or pulverized material and powder on the blade.

Knife valve can tolerate heat expansion according to the fluid temperature that passes through. Knife valves can be installed in the end of all casting parts of Knife pipe line as a lug.

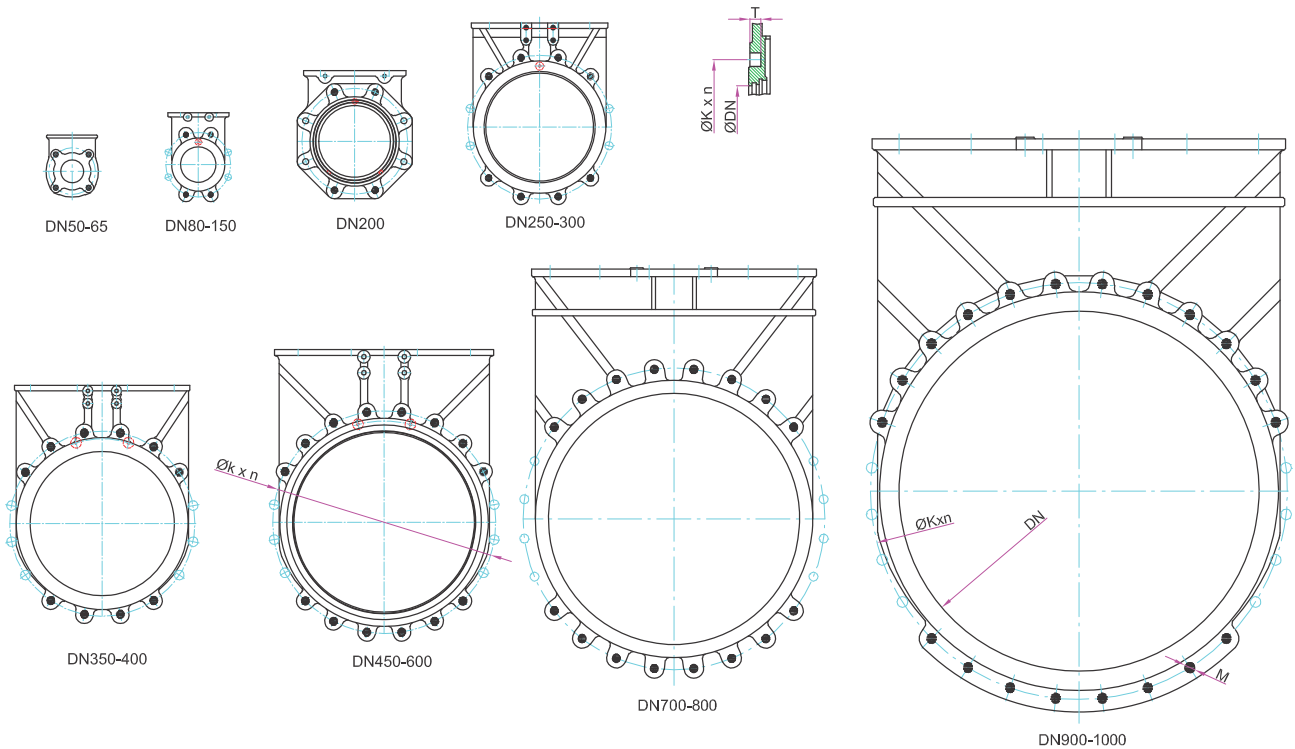
Corrosion protection:

Valves are coated with epoxy powder, electrostatics and min. thickness 250 µm.

Hydrostatic test Pressure (bar) according to DIN EN 12266-1			
Size (mm)	Nominal pressure (bar)	Pressure test with water (bar)	
		Closure Test	Shell Test
DN 50-250	10	11	17
DN 300-400	6	7	12
DN 450	5	5.5	10
DN 500-600	4	4.4	8
DN 700-1000	2	2.2	3

Application:

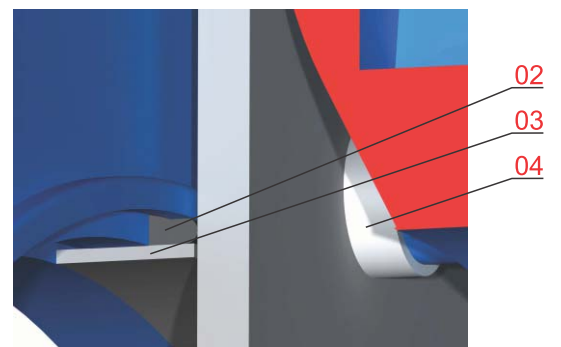
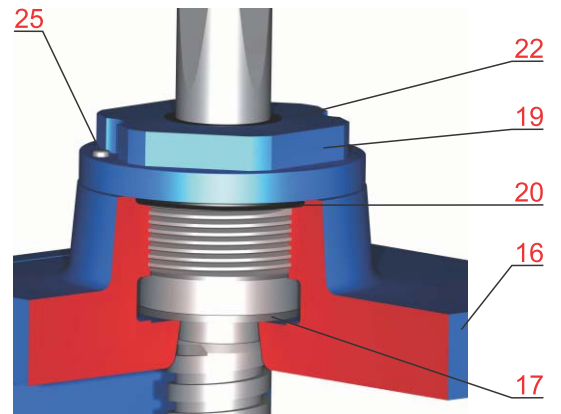
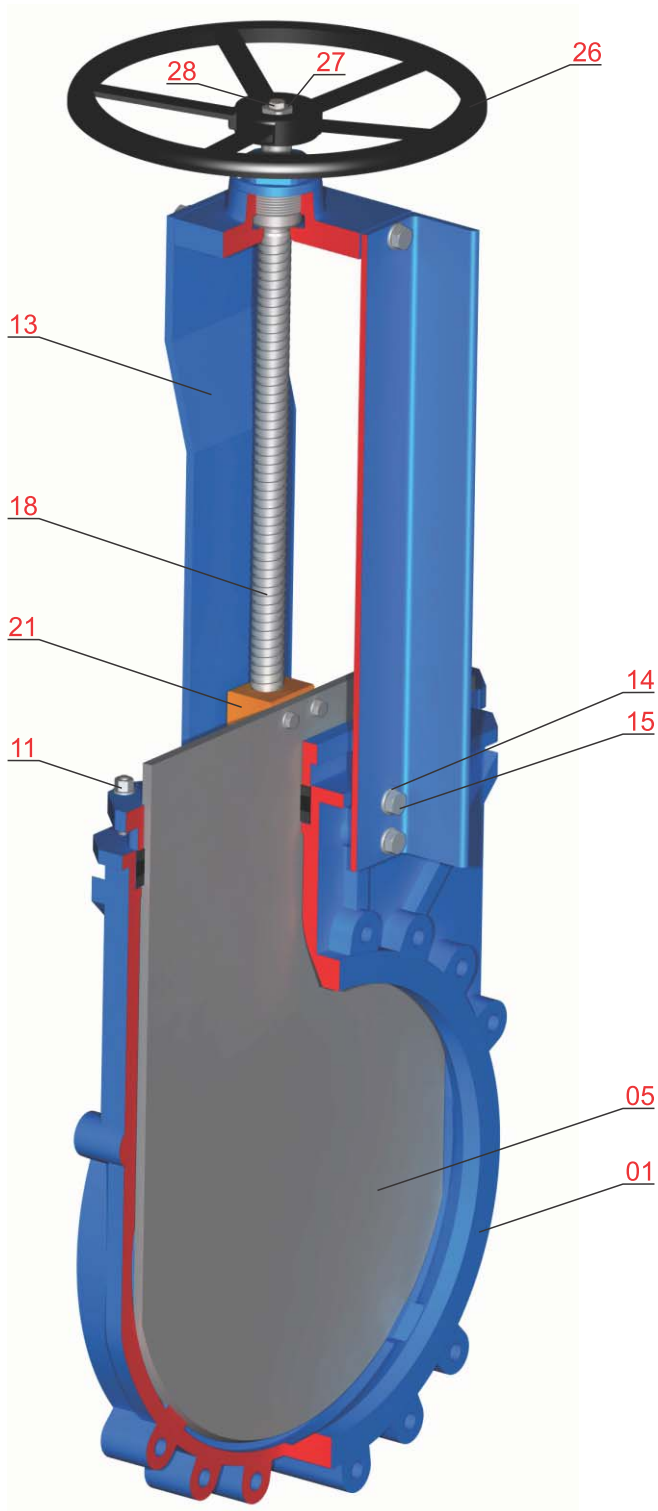
- Syrups
- Chemical plants
- Thermal Power Plants
- Displacing powder material.
- Food and drinking industries
- Paste industries particularly paper paste.
- Glue and adhesive production with heavy viscosity, sewage water, chemical sludge

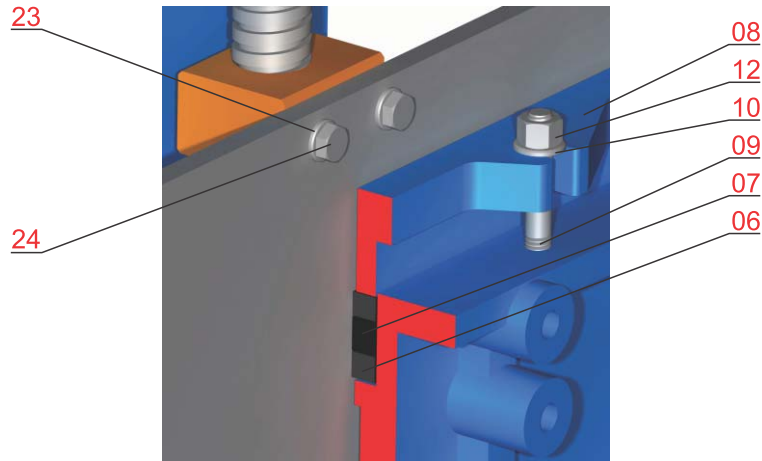
Flange Drilling specification


This table is mentioned to PN 10

DN	ØK mm	n	M	T (Depth) mm	● (Blind taped Bolts)	○ (Through bolts)
50	125	4	M16	10	4	-
65	145	4	M16	10	4	-
80	160	8	M16	10	4	4
100	180	8	M16	10	4	4
125	210	8	M16	10	4	4
150	240	8	M20	14	4	4
200	295	8	M20	14	4	4
250	350	12	M20	18	6	6
300	400	12	M20	18	6	6
350	460	16	M20	22	10	6
400	515	16	M24	24	10	6
450	565	20	M24	24	14	6
500	620	20	M24	24	14	6
600	725	20	M27	24	14	6
700	840	24	M27	28	16	8
800	950	24	M30	28	16	8
900	1050	28	M30	35	20	8
1000	1160	28	M33	35	20	8

Part List





Part No.	Part Name	Part Material	1	2
01	Body	*EN 1563/EN-GJS-400-15	•	
02	Sealing	EPDM (NBR on Request)	•	•
03	Rubber holder	DIN EN 10088-31/1.4301		
04	Blade guidance	PTFE	•	
05	Blade	DIN EN 10088-31/1.4301		
06	Packing	Graphite	•	•
07	Rubber	EPDM (NBR on Request)	•	
08	Stuffing box	*EN 1563/ EN-GJS-400-15		
09	Stud bolt	DIN EN 10088-31/1.4301		
10	Flat washer	ISO 3506-2 Gr.A2 Property Class 70		
11	Spring washer	Steel-FST		
12	Nut	ISO 3506-1 Gr.A2 Property Class 70		
13	Brocket	St 37-2		
14	Spring washer	DIN ISO 898-2 Property Class 8		
15	Hex. Bolt	DIN ISO 898-1 Property Class 8.8		
16	Gland	*EN 1563/ EN-GJS-400-15		
17	PTFE Washer	POM	•	
18	Stem	DIN EN 10088-3/1.4021		
19	Cap	*EN 1563/ EN-GJS-400-15		
20	O-ring	NBR (EPDM on Request)	•	•
21	Stem nut	DIN EN 12163/2.0540	•	
22	Wiper	EPDM(NBR on Request)	•	•
23	Flat washer	DIN ISO 898-2 Property Class 8,Zinc Plated		
24	Hex. Bolt	DIN ISO 898-1 Property Class 8.8,Zinc Plated		
25	Pin	1.2210	•	•
26	Hand wheel	EN 1563/ EN-GJS-400-15 / St 37-2		
27	Flat washer	DIN ISO 898-2 Property Class 8,Zinc Plated		
28	Hex. Bolt	DIN ISO 898-1 Property Class 8.8,Zinc Plated		

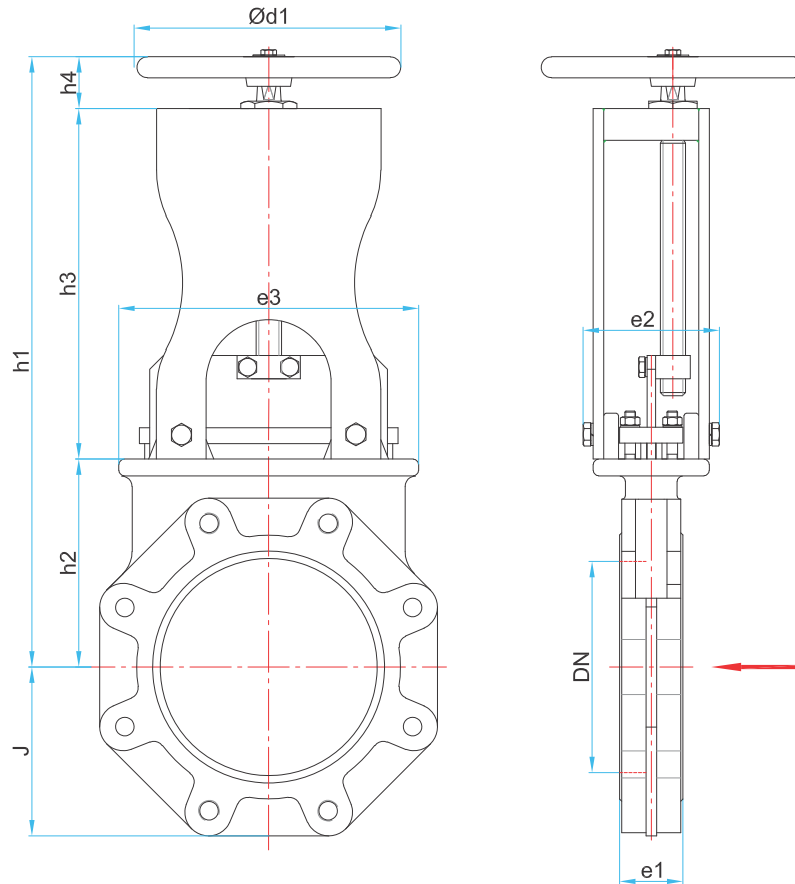
1- Recommended Spare Parts

2- Parts Subjected to Wear

*EN-GJS-500-7 available on request.



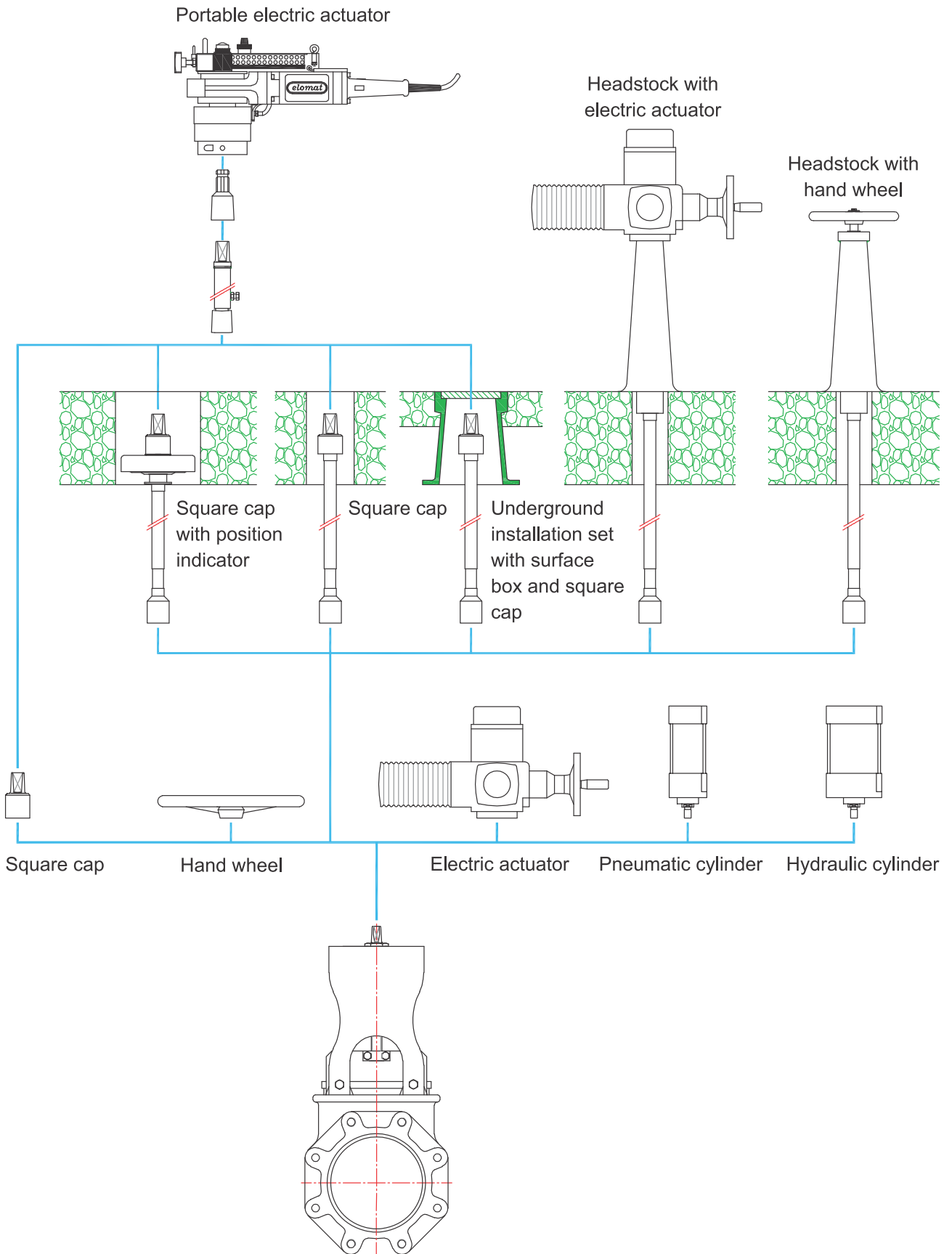
Dimensions & Weight



DN	e1	e2	e3	h1	h2	h3	h4	Ød1	J	Weight Kg
50	43	90	110	307	105	135	67	180	64	7.5
65	46	90	120	331	115	149	67	180	71	8.5
80	46	92	140	386	124	192	70	180	100	10.5
100	52	100	170	422	145	192	64	240	110	12
125	56	100	185	455	157	233	64	240	117	15
150	56	102	213	486	180	242	64	240	134	17
200	60	127	284	586	197	308	82	320	160	35
250	68	144	330	723	265	365	93	320	197.5	44
300	78	144	380	792	290	408	94	320	222.5	58
350	78	144	438	902	344	459	99	319	248	96
400	102	159	489	1019	385	519	115	500	282.5	108
450	114	194	546	1097	432	603	62	500	313	168
500	127	194	610	1244	480	643.5	120.3	500	335	192
600	154	233.5	714	1473	590	763	120	500	387.5	245
700	165	296	834	1726	686	890	150	800	500	405
800	190	296	1015	1934	795	989	150	800	500	455
900	203	296	1040	2168	900	1118	150	800	615	680
1000	216	296	1150	2350	980	1213	150	800	615	865



Types of Actuators



MIRAB Co' PRODUCTS

Butterfly Valves Family: Double Flanged Type, Butt-weld End, Wafer Type, Lug Type, Hydraulic Actuated, Pneumatic Actuated.

Gate Valves Family: Soft-Sealing Gate Valve, Metal Seat Gate Valve, Knife Gate Valve, Sluice Gate Valve.

Non Return Valves Family: Tilting Disc with Counter Weight, Tilting Disk with Counter Weight and Hydraulic Damper, Swing Check Valve, Silent Check Valve, Foot Valve, Nozzle Check Valve, Wafer Pattern Check Valve, Flap Valve.

Air Vent Family: Single Chamber - Double Orifices , Double Chambers - Double Orifices, Sewage Air Valves, Large - Orifice Air Valve.

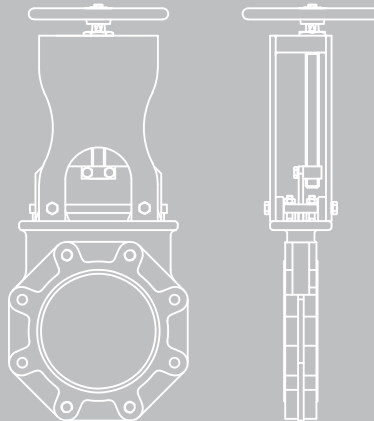
Control Valves Family: Automatic Control Valves, Needle Valve, Globe Valve, Fixed Cone Free Discharge Valve, Hollow Jet Valve, Sleeve Valve.

Hydrant Valves Family: Standing Type, Pit Type, Wet Barrel Fire Fighting Valve, Post Indicator Valve.

Strainers Family: Y Type, T Type, One Side Flanged Type.

Fittings Family: Dismantling Joint F1&F2, Pipe Coupling, Flange.

Actuators: Electrical, Hydraulic, Pneumatic, Portable Electrical.



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