

Needle valve Type 6000

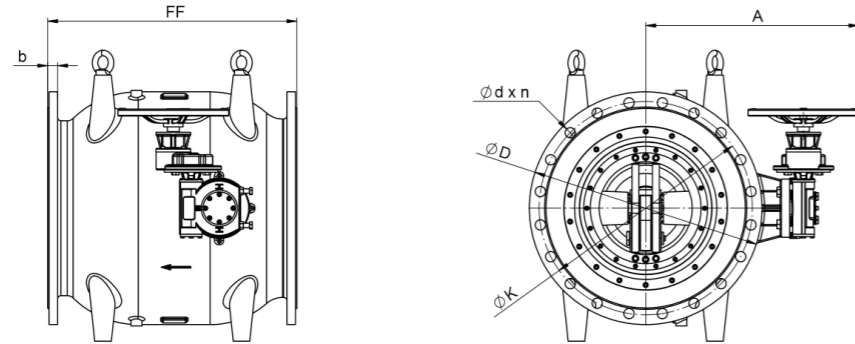
DN/NPS:	DN200 – DN1200
Working pressure:	PN10, PN16 and PN25
Top flange:	ISO 5211
Marking:	EN19
Test standard:	EN 12266-1

Needle valves (plunger valves) are widely used for flow control or control of flows with high pressure differences. Long service life is guaranteed as the bearings do not come into contact with the medium. Thanks to the special inner construction, the flow cross section is circular which allows for precise control. The flow is always guided to the center of the connecting pipe where cavitation bubbles will be formed and restored without damaging the equipment.

Upstream and downstream pressure in combination with required flow rate define the type of ring to be used in order to have excellent cavitation behavior and minimum pressure loss. It is strongly recommended to have at least 10x DN straight pipeline upstream and downstream of the needle valve. The needle valve is suitable for use in water treatment, water distribution, in dams, power plants and the industry. Needle valves can be operated manually, electrically (on/off modulating) or operated hydraulically with a counter weight.



Needle valve Dimensions



DN	PN	ØD	ØK	Ød	n	b	A	FF	Weight (Kg)
200	10	340	295	23	8	20	375	400	86
300	10	460	400	23	12	24,5	445	500	150
400	10	565	515	28	16	24,5	660	600	365
500	10	670	620	28	20	26,5	725	750	593
600	10	780	725	31	20	30	770	900	1010
700	10	895	840	31	24	32,5	915	1050	1565
800	10	1015	950	34	24	35	915	1200	2020
900	10	1115	1050	34	28	37,5	995	1350	2615
1000	10	1230	1160	37	28	40	1190	1500	3685
1200	10	1455	1380	41	32	45	1360	1800	6120
200	16	340	295	23	12	20	375	400	86
300	16	460	410	28	12	24,5	445	500	150
400	16	580	525	31	16	28	660	600	370
500	16	715	650	34	20	31,5	725	750	615
600	16	840	770	37	20	36	770	900	1050
700	16	910	840	37	24	39,5	915	1050	1580
800	16	1025	950	41	24	43	915	1200	2030
900	16	1125	1050	41	28	46,5	995	1350	2630
1000	16	1255	1170	44	28	50	1190	1500	3720
1200	16	1485	1390	50	32	57	1360	1800	6180
200	25	360	310	28	12	22	375	400	88
300	25	485	430	31	16	27,5	445	500	156
400	25	620	550	37	16	32	660	600	386
500	25	730	660	37	20	36,5	725	750	625
600	25	845	770	41	20	42	770	900	1055
700	25	960	875	44	24	46,5	915	1050	1630
800	25	1085	990	50	24	51	915	1200	1505
900	25	1185	1090	50	28	55,5	995	1350	2720
1000	25	1320	1210	57	28	60	1190	1500	3840
1200	25	1530	1420	57	32	69	1360	1800	6295

Needle valve Parts list

PART N°	PART NAME	MATERIAL
1	Body	EN GJS 400 15
1A	Piston guiderails	Bronze by welding
2	Bushing	Bronze
3	O-Ring	EPDM
4	Shaft	Stainless steel EN 1.4021 / AISI 420
5	Key	Stainless steel EN 1.4021 / AISI 420
6	Crank	Stainless steel EN 1.4021 / AISI 420
7	Bushing	Bronze
8	Pin	Stainless steel EN 1.4021 / AISI 420
9	Washer	Stainless steel EN 1.4301 / AISI 304
10	Bolt	Stainless steel EN 1.4301 / AISI 304
11	Bushing	Stainless steel EN 1.4301 / AISI 304
12	Push rod	Stainless steel EN 1.4301 / AISI 304
13	Piston rod	Stainless steel EN 1.4301 / AISI 304
14	Bushing	Bronze
15	Pin	Stainless steel EN 1.4021 / AISI 420

PART N°	PART NAME	MATERIAL
16	O-Ring	EPDM
17	Piston	Stainless steel EN 1.4301 / AISI 304
18	Bolt	Stainless steel EN 1.4301 / AISI 304
19	Sealing ring	EPDM
20	Retaining ring	Stainless steel EN 1.4301 / AISI 304
21	Bolt	Stainless steel EN 1.4301 / AISI 304
22	Cover	AISI 1050
23	Bolt	Stainless steel 8.8
24	Cover	EN GJS 400 15
25	Bolt	Stainless steel EN 1.4301 / AISI 304
26	Gear box	
27	Washer	Stainless steel 8.8
28	Bolt	Stainless steel 8.8
29	Lifting eye	ASTM A105

