

Globe Valve

BOA-Compact

PN 6/16
DN 15-200

Flow Characteristics



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Flow Characteristics BOA-Compact

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Contents

Flow Characteristics 4

Globe Valves 5

 Soft-seated Globe Valves to DIN/EN 5

 BOA-Compact 5

Flow Characteristics

The characteristic curves are based on water with a temperature of 5 to 30 °C. The flow velocity (v) in the valve passage (DN) should not exceed 4 m/s. Due to the elastic closing process on soft-seated globe valves we recommend to set the number of stem turns starting from the OPEN position.

Table 1: Description of units

Unit	Description
Q	Volume flow rate in m ³ /h
v	Flow velocity in m/s

Globe Valves

Soft-seated Globe Valves to DIN/EN

BOA-Compact



Description

Globe valve to DIN/EN with flanged ends, short face-to-face length to EN 558/14, slanted seat design with vertical bonnet, single-piece body, EPDM-encapsulated throttling plug, soft main and back seat, position indicator, locking device, travel stop, insulating cap with anti-condensation feature; maintenance-free, full insulation possible.

Applications

Hot-water heating systems up to 120 °C. Air-conditioning systems. Not suitable for fluids containing mineral oils, steam or fluids liable to attack EPDM and cast iron. Other fluids on request.

Flow characteristics

DN 15, PN 6/16

Table 2: Selection table

Kv [m³/h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
9,3	0,9	12,6	(0)
8,4	1,1	9	(3,6)
7,5	1,4	7	(5,6)
6,0	2,2	5	(7,6)
4,5	3,9	4	(8,6)
2,7	10,5	3	(9,6)
1,3	49,3	2	(10,6)

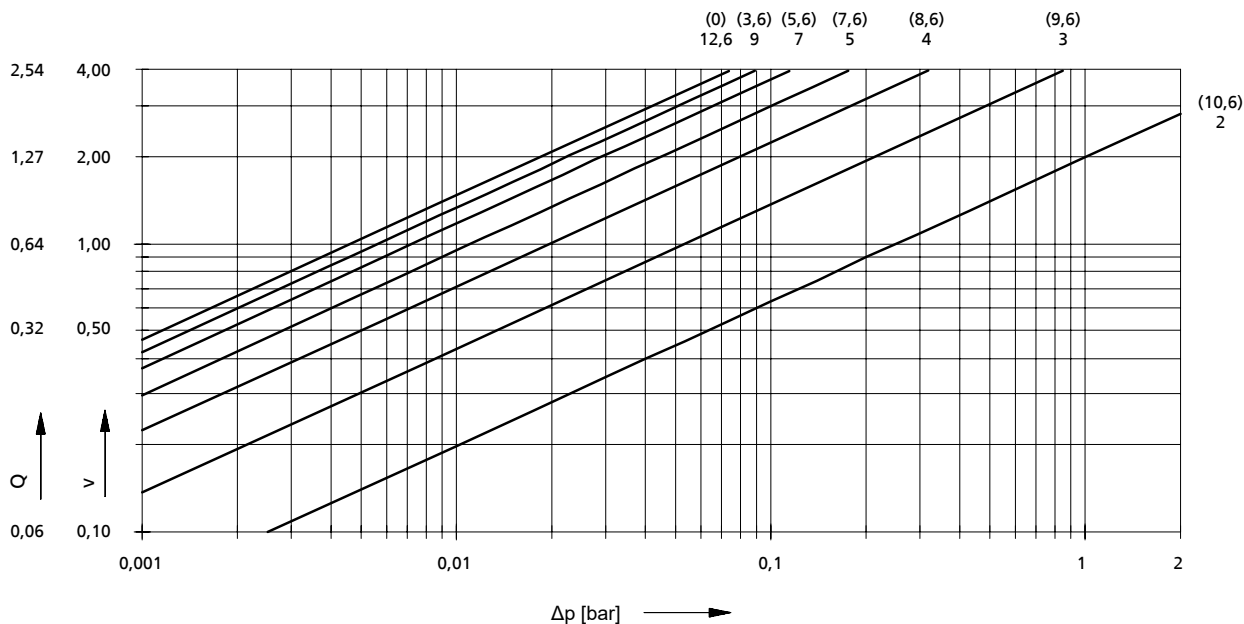


Fig. 1: DN 15

DN 20, PN 6/16

Table 3: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
19,6	0,7	13,3	(0)
17,2	0,8	11	(2,3)
14,3	1,2	9	(4,3)
10,6	2,2	7	(6,3)
7,1	4,9	5	(8,3)
4,8	11,3	4	(9,3)
2,7	34,4	3	(10,3)
1,2	174	2	(11,3)

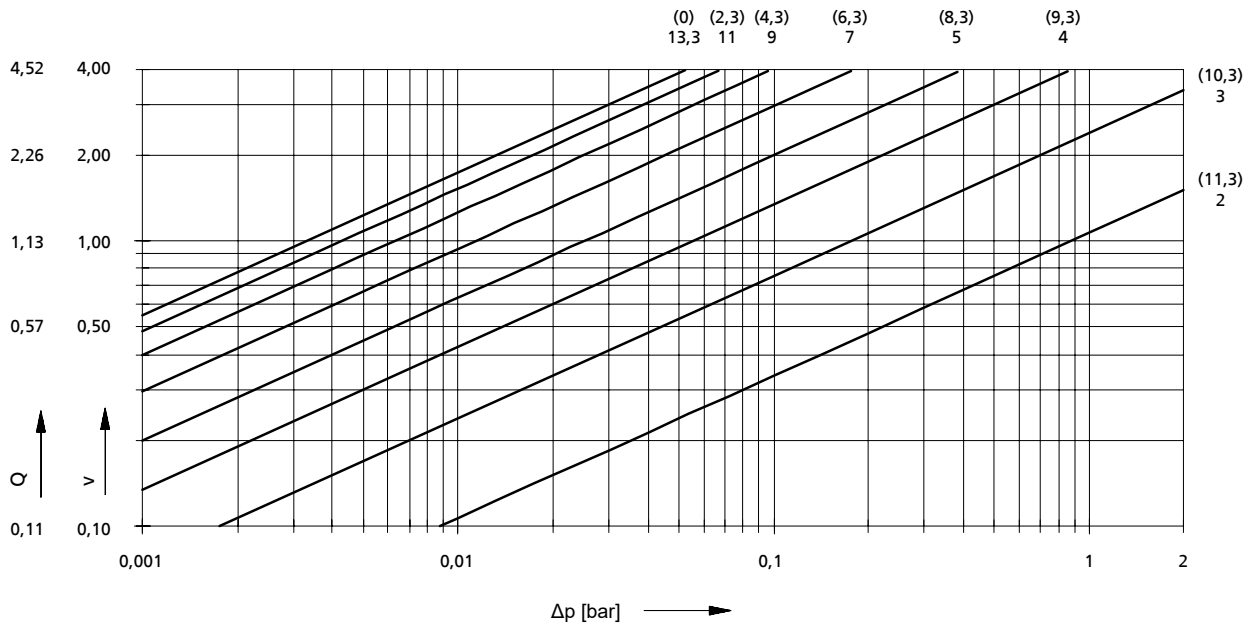


Fig. 2: DN 20

DN 25, PN 6/16

Table 4: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
20,3	1,5	13,6	(0)
17,6	2,0	11	(2,6)
14,3	3,0	9	(4,6)
10,6	5,4	7	(6,6)
6,6	14,1	5	(8,6)
4,8	27,0	4	(9,6)
2,7	86,5	3	(10,6)
1,2	451	2	(11,6)

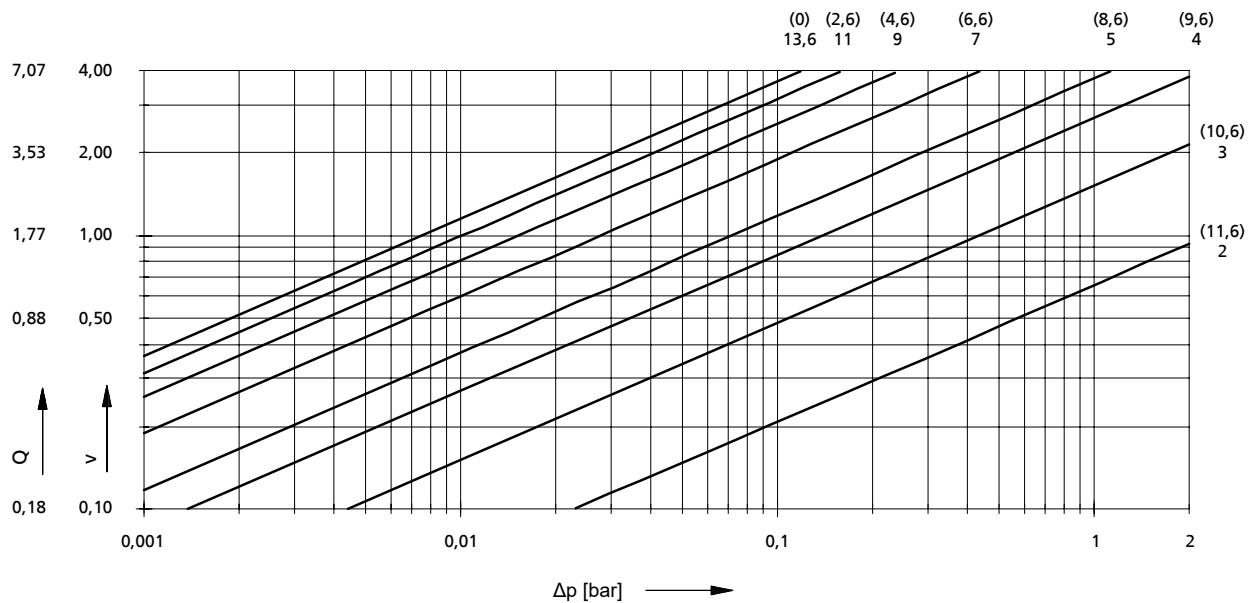


Fig. 3: DN 25

DN 32, PN 6/16

Table 5: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
31,1	1,7	18,2	(0)
27,6	2,2	15	(3,2)
24,7	2,7	13	(5,2)
21,3	3,6	11	(7,2)
17,5	5,4	9	(9,2)
13,5	9,0	7	(11,2)
9,1	19,8	5	(13,2)
6,9	34,6	4	(14,2)
4,8	71,3	3	(15,2)
2,8	210	2	(16,2)

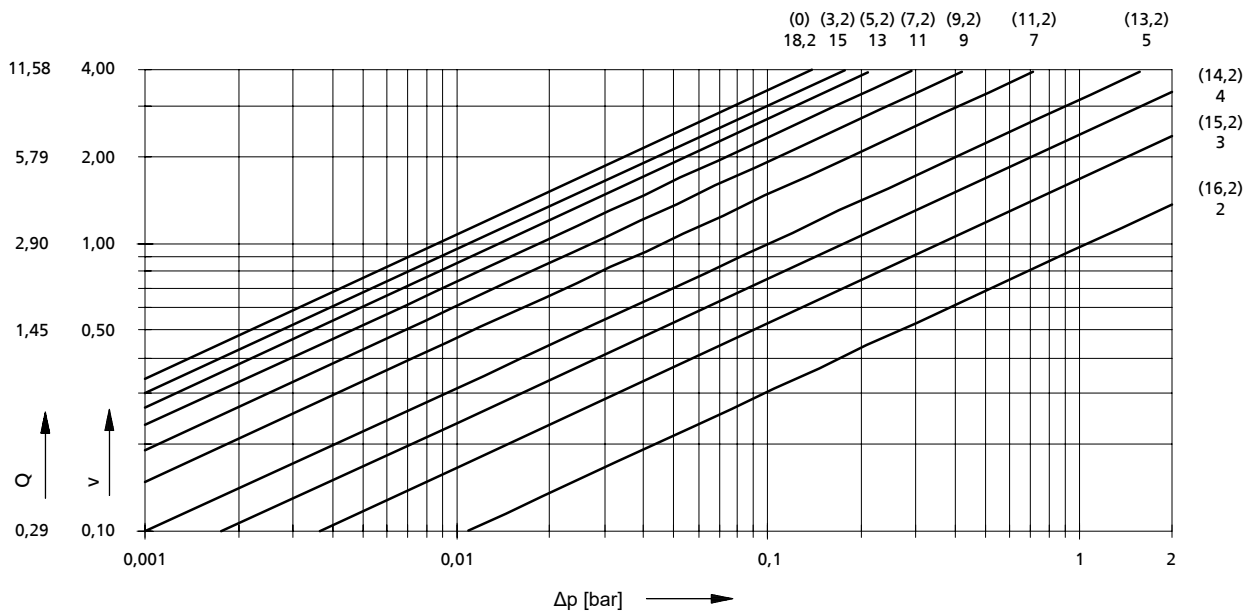


Fig. 4: DN 32

DN 40, PN 6/16

Table 6: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
55,7	1,3	20,3	(0)
48,9	1,7	17	(3,3)
43,6	2,1	15	(5,3)
37,7	2,8	13	(7,3)
31,5	4,1	11	(9,3)
24,7	6,6	9	(11,3)
18,1	12,2	7	(13,3)
11,6	30,0	5	(15,3)
8,2	59,9	4	(16,3)
5,0	161	3	(17,3)
1,8	1252	2	(18,3)

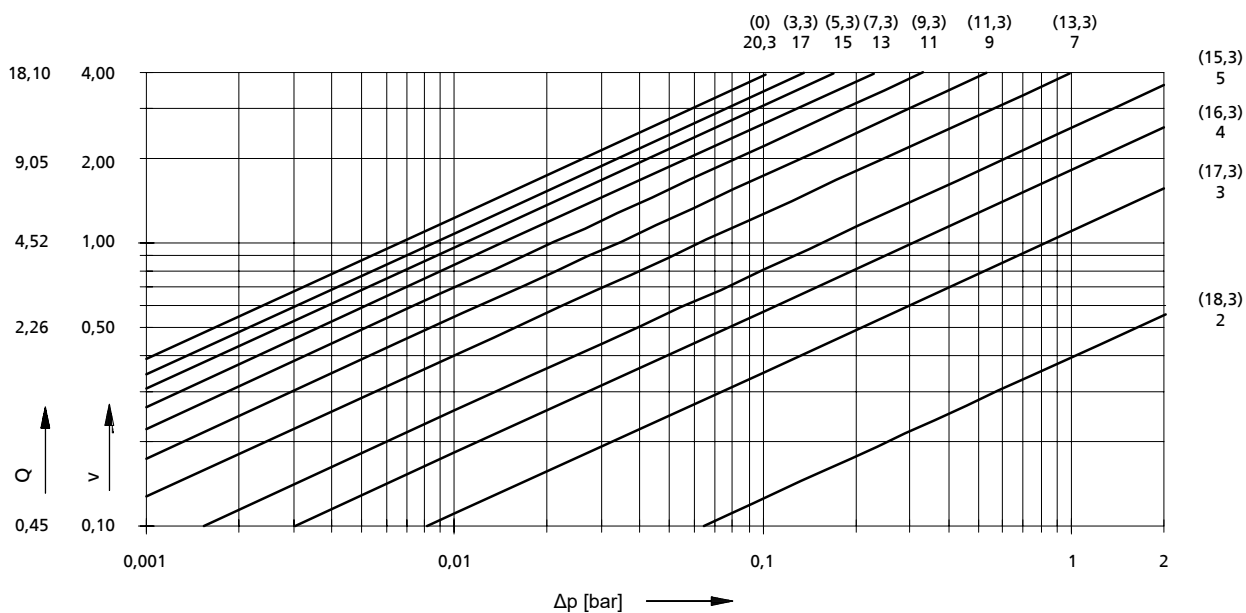


Fig. 5: DN 40

DN 50, PN 6/16

Table 7: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
82,9	1,5	18,3	(0)
73,1	1,8	15	(3,3)
63,8	2,4	13	(5,3)
52,6	3,5	11	(7,3)
42,3	5,5	9	(9,3)
32,3	9,4	7	(11,3)
22,2	19,8	5	(13,3)
15,9	38,9	4	(14,3)
10,4	90,0	3	(15,3)
5,5	329	2	(16,3)

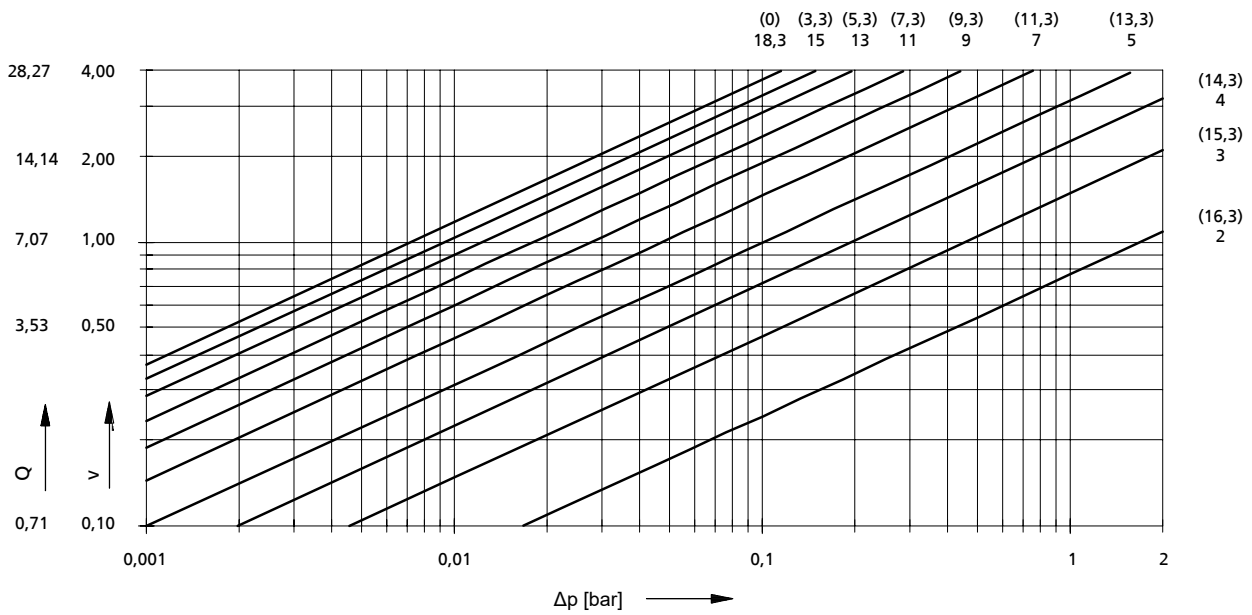


Fig. 6: DN 50

DN 65, PN 6/16

Table 8: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
137	1,5	21,8	(0)
122	1,9	19	(2,8)
109	2,4	17	(4,8)
95,8	3,1	15	(6,8)
81,0	4,3	13	(8,8)
66,0	6,4	11	(10,8)
51,3	10,6	9	(12,8)
39,6	17,8	7	(14,8)
27,3	37,5	5	(16,8)
21,3	61,8	4	(17,8)
15,7	113	3	(18,8)
10,2	271	2	(19,8)

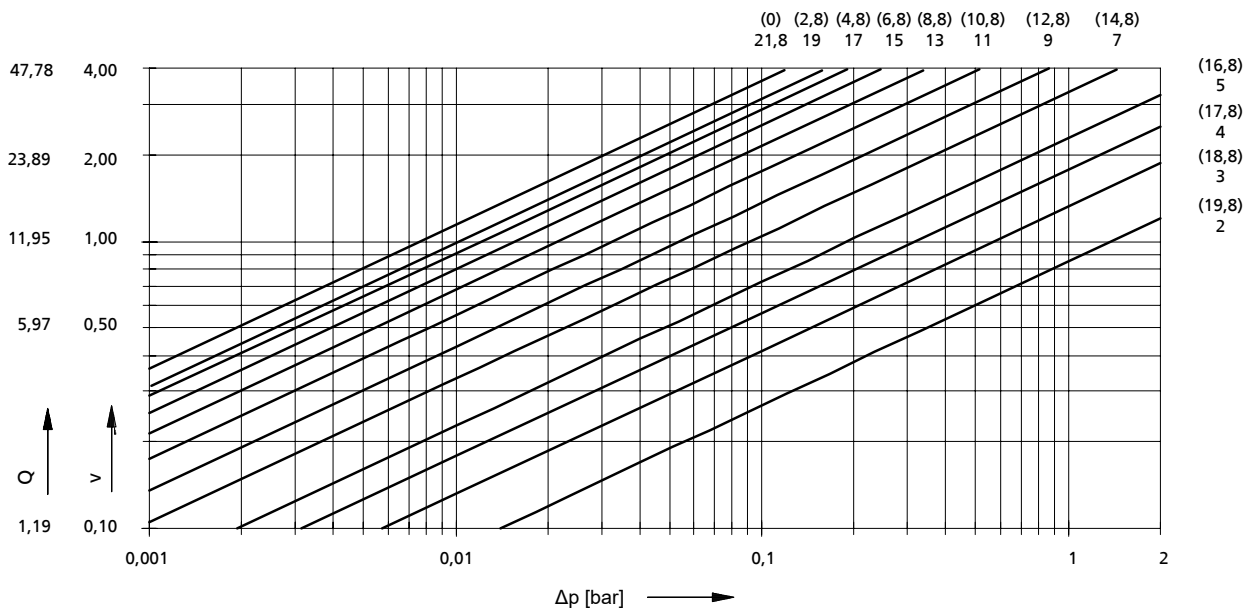


Fig. 7: DN 65

DN 80, PN 6/16

Table 9: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
192	1,8	23,6	(0)
165	2,4	19	(4,6)
128	3,9	15	(8,6)
107	5,6	13	(10,6)
88,6	8,2	11	(12,6)
71,2	12,7	9	(14,6)
54,2	21,8	7	(16,6)
39,1	42,0	5	(18,6)
30,7	68,0	4	(19,6)
22,1	132	3	(20,6)
13,4	357	2	(21,6)

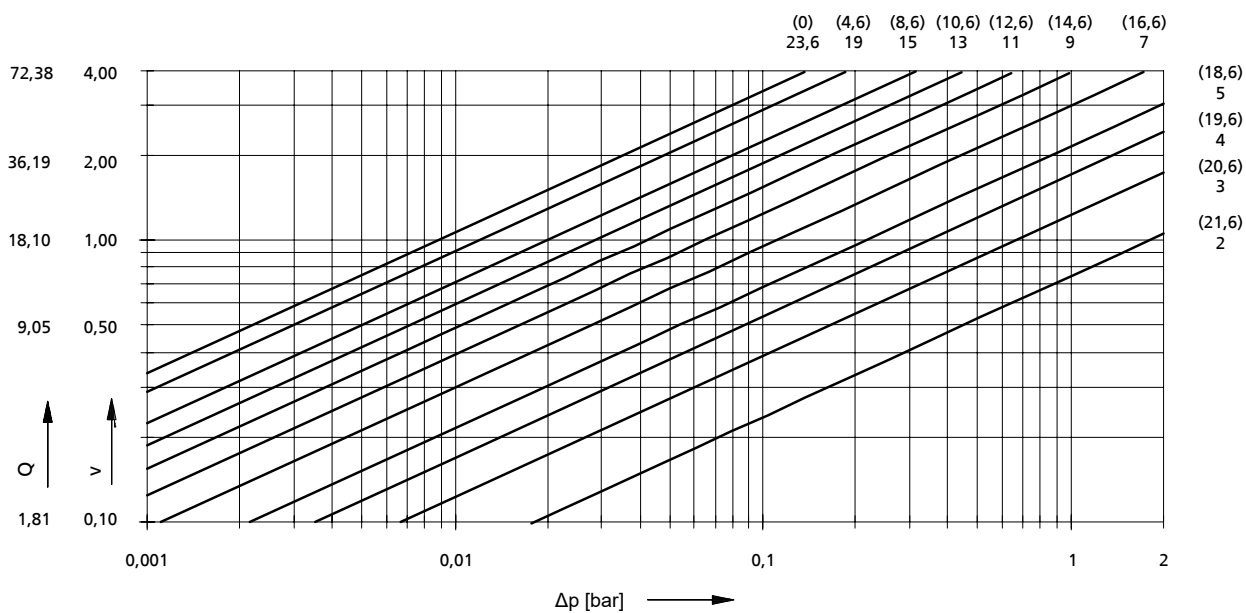


Fig. 8: DN 80

DN 100, PN 6/16

Table 10: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
304	1,7	22,2	(0)
256	2,4	17	(5,2)
192	4,3	13	(9,2)
155	6,5	11	(11,2)
122	10,6	9	(13,2)
88,4	20,0	7	(15,2)
60,9	42,2	5	(17,2)
46,8	71,7	4	(18,2)
31,4	158	3	(19,2)
16,1	602	2	(20,2)

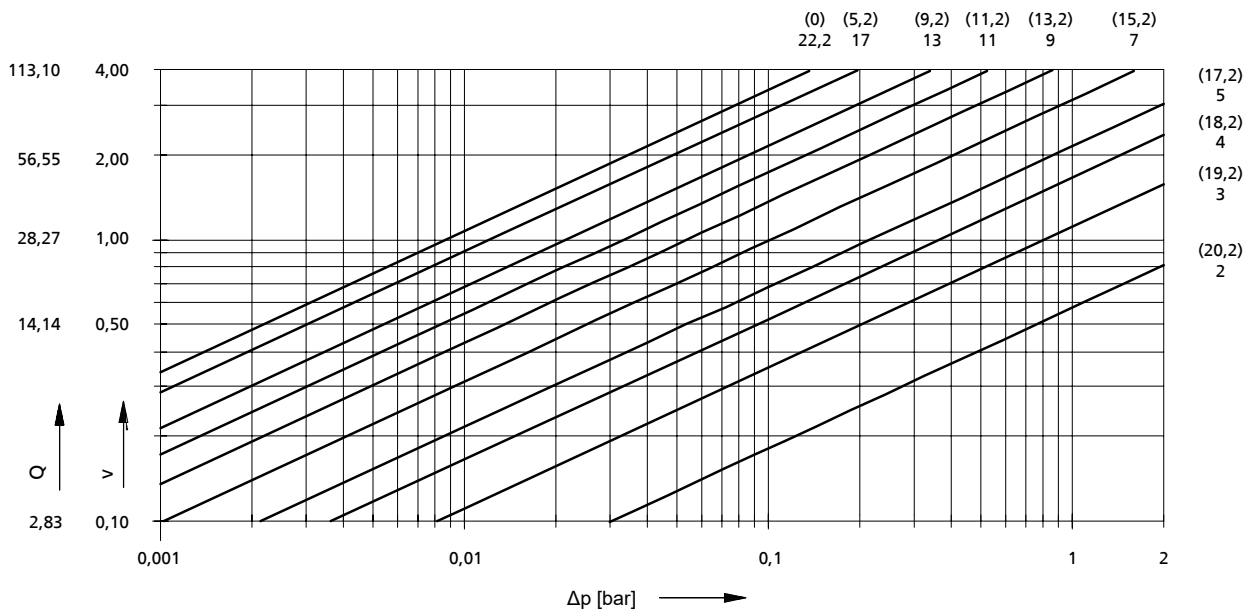


Fig. 9: DN 100

DN 125, PN 6/16

Table 11: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
438	2,0	21,5	(0)
393	2,5	19	(2,5)
345	3,2	17	(4,5)
297	4,4	15	(6,5)
252	6,0	13	(8,5)
209	8,8	11	(10,5)
165	14,1	9	(12,5)
122	25,9	7	(14,5)
84,0	54,2	5	(16,5)
42,8	209	3	(18,5)

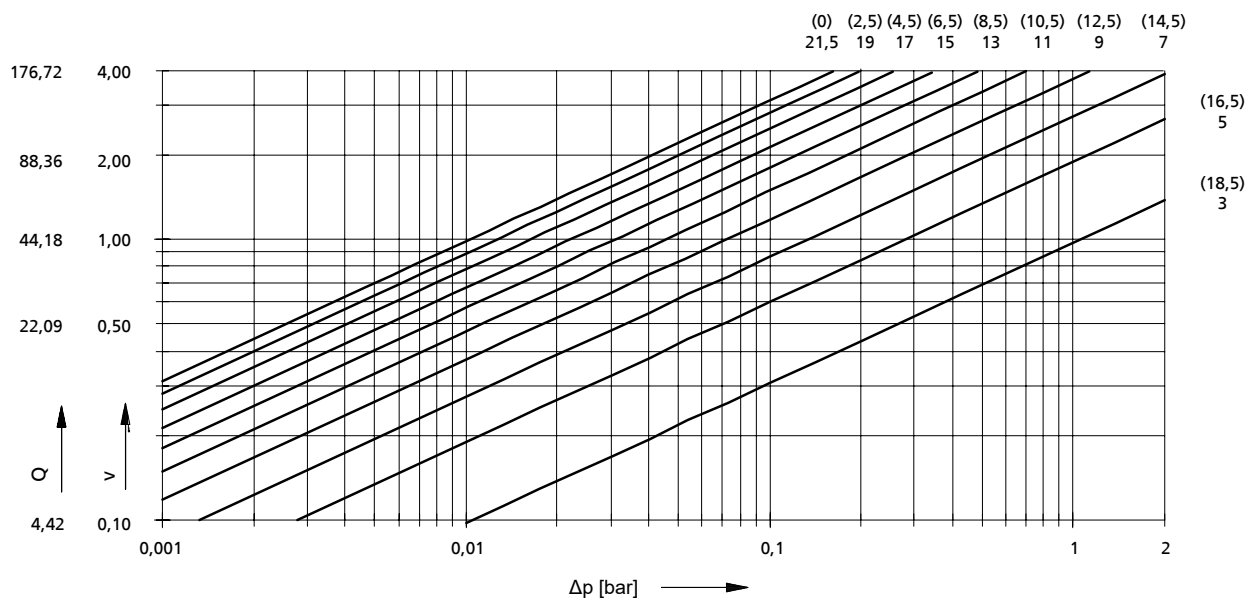


Fig. 10: DN 125

DN 150, PN 6/16

Table 12: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
558	2,6	24,8	(0)
504	3,1	22	(2,8)
453	3,9	20	(4,8)
402	4,9	18	(6,8)
353	6,4	16	(8,8)
304	8,6	14	(10,8)
257	12,1	12	(12,8)
209	18,2	10	(14,8)
160,6	30,8	8	(16,8)
122,4	53	6	(18,8)
82,2	117	4	(20,8)

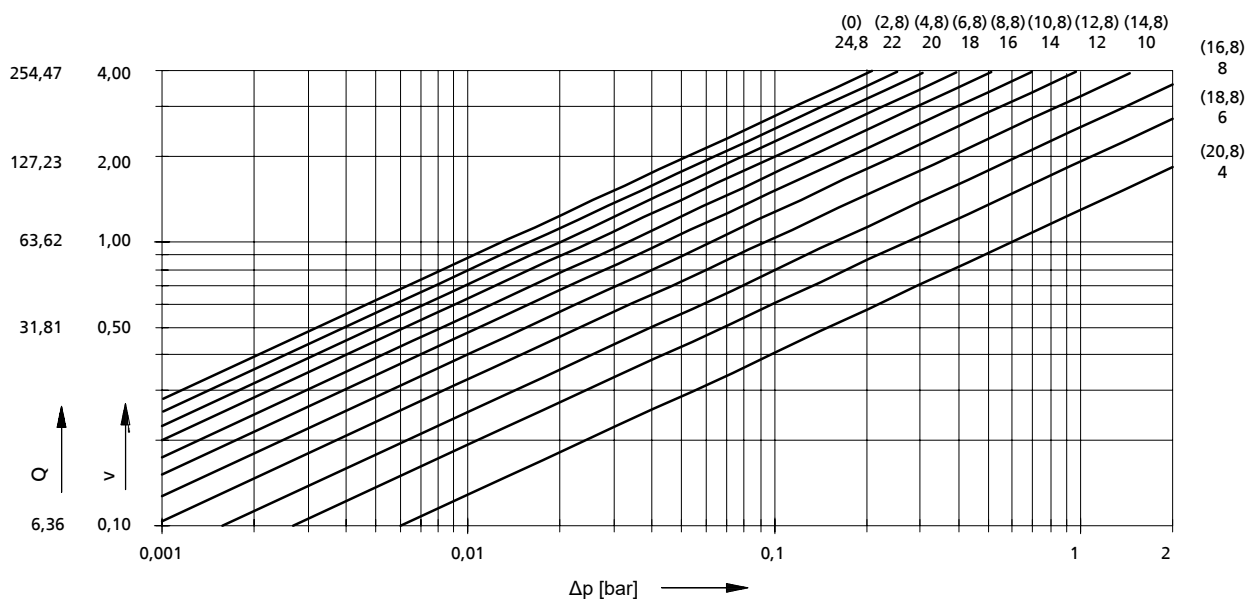


Fig. 11: DN 150

DN 200, PN 6/16

Table 13: Selection table

Kv [m ³ /h]	Loss coefficient [ζ]	Number of stem turns n1 from CLOSED position	Number of stem turns n2 from OPEN position
1008	2,5	19	(0)
902	3,1	17	(2)
796	4,0	15	(4)
690	5	13	(6)
584	8	11	(8)
477	11	9	(10)
371,4	19	7	(12)
265,3	36	5	(14)
159,2	101	3	(16)
53,1	909	1	(18)

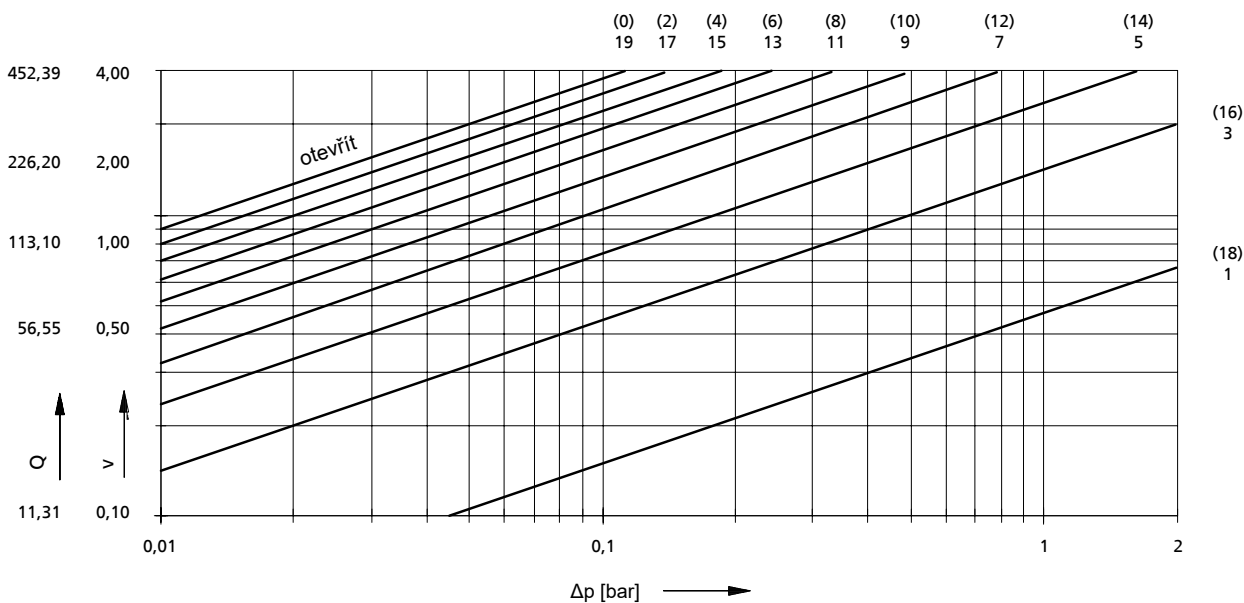


Fig. 12: DN 200



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