

HydroCom VFC / VFN

Flanged regulating valves PN 16/PN 25
DN 50...600



Cast iron regulating and shutoff valve for the static hydronic balancing of pipelines in closed heating and cooling systems. The valve offers a measuring function across the valve seat.

Functions

- Flow control
- Blockable and lead-sealable presetting
- Pipeline shutoff
- Flow measurement connection

Features

- + Valve data can be read off the handwheel
- + Body made of nodular cast iron
- + Available up to DN 600 with flanges according to EN 1092-2 PN 16 or PN 25

Product Details

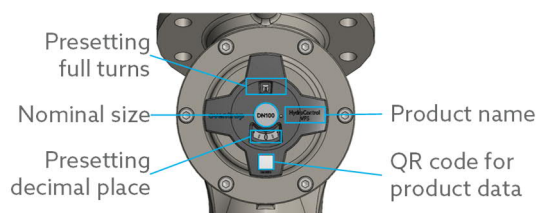
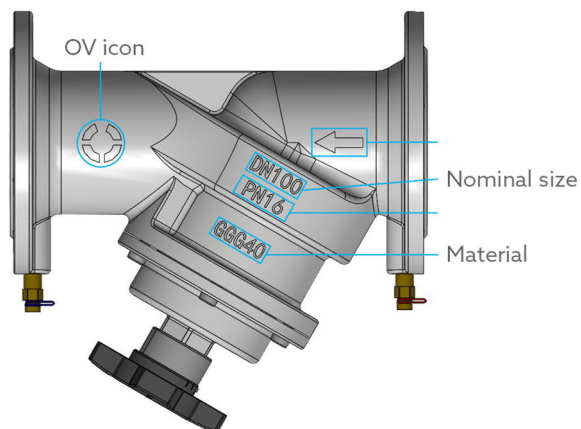
Technical Data

Nominal sizes	DN 50...600
Versions	HydroCom VFC with flanges according to EN 1092-2 PN 16 HydroCom VFN with flanges according to EN 1092-2 PN 25
Operating temperature	-10...95 °C
Operating pressure	PN 16 or PN 25
Medium	Heating and cooling water according to VDI 2035 or ÖNORM 5195 Water / glycol mixtures with max. 50% glycol content
Kvs values	64.8 ... 5182

Materials

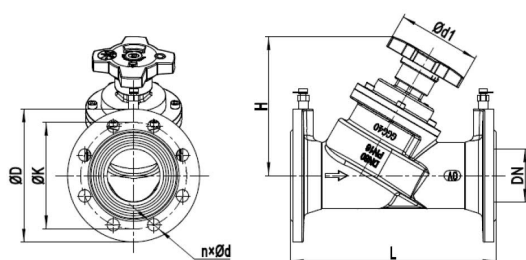
Component	Material
Handwheel set with presetting	Up to DN 300: Polyamide plastic From DN 350: Nodular cast iron
Y-pattern body, bonnet and regulating plug	Nodular cast iron
Spindle and measuring valves	Brass
Seals	EPDM

Marking

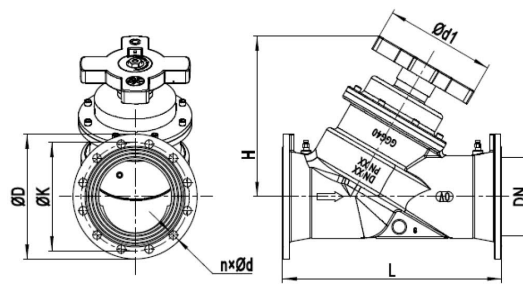


Further markings, on other side of body, for casting date and location.

Dimensions and Item numbers



HydroCom VFC DN 50...150

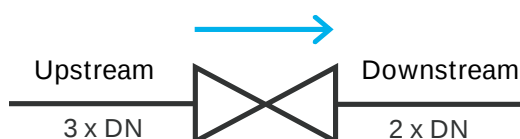


HydroCom VFN DN 200...600

DN	Kvs	L [mm]	H [mm]	Ød1 [mm]	HydroControl VFC (PN 16)					HydroControl VFN (PN 25)				
					ØD [mm]	ØK [mm]	n x Ød [mm]	Weight [kg]	Item no.	ØD [mm]	ØK [mm]	n x Ød [mm]	Weight [kg]	Item no.
50	64.8	230	203	125	165	125	4 x 19	10	1062850	165	125	4 x 19	10	1062870
65	94.0	290	200	125	185	145	4 x 19	16	1062851	185	145	8 x 19	16	1062871
80	125	310	210	125	200	160	8 x 19	20	1062852	200	160	8 x 19	20	1062872
100	221	350	246	125	220	180	8 x 19	28	1062853	235	190	8 x 23	29	1062873
125	264	400	256	125	250	210	8 x 19	38	1062854	270	220	8 x 28	40	1062874
150	361	480	286	125	285	240	8 x 23	53	1062855	300	250	8 x 28	54	1062875
200	727	600	436	300	340	295	12 x 23	99	1062856	360	310	12 x 28	112	1062876
250	1088	730	469	300	405	355	12 x 28	146	1062857	425	370	12 x 31	163	1062877
300	1276	850	511	300	460	410	12 x 28	200	1062858	485	430	16 x 31	226	1062878
350	2250	980	595	400	520	470	16 x 28	302	1062859	555	490	16 x 34	314	1062879
400	3050	1100	635	400	580	525	16 x 31	416	1062860	620	550	16 x 37	428	1062880
450	3720	1200	688	400	640	585	20 x 31	567	1062861	670	600	20 x 37	578	1062881
500	4180	1250	745	400	715	650	20 x 34	606	1062862	730	660	20 x 37	627	1062882
600	5182	1450	820	400	840	770	20 x 37	757	1062863	845	770	20 x 41	792	1062883

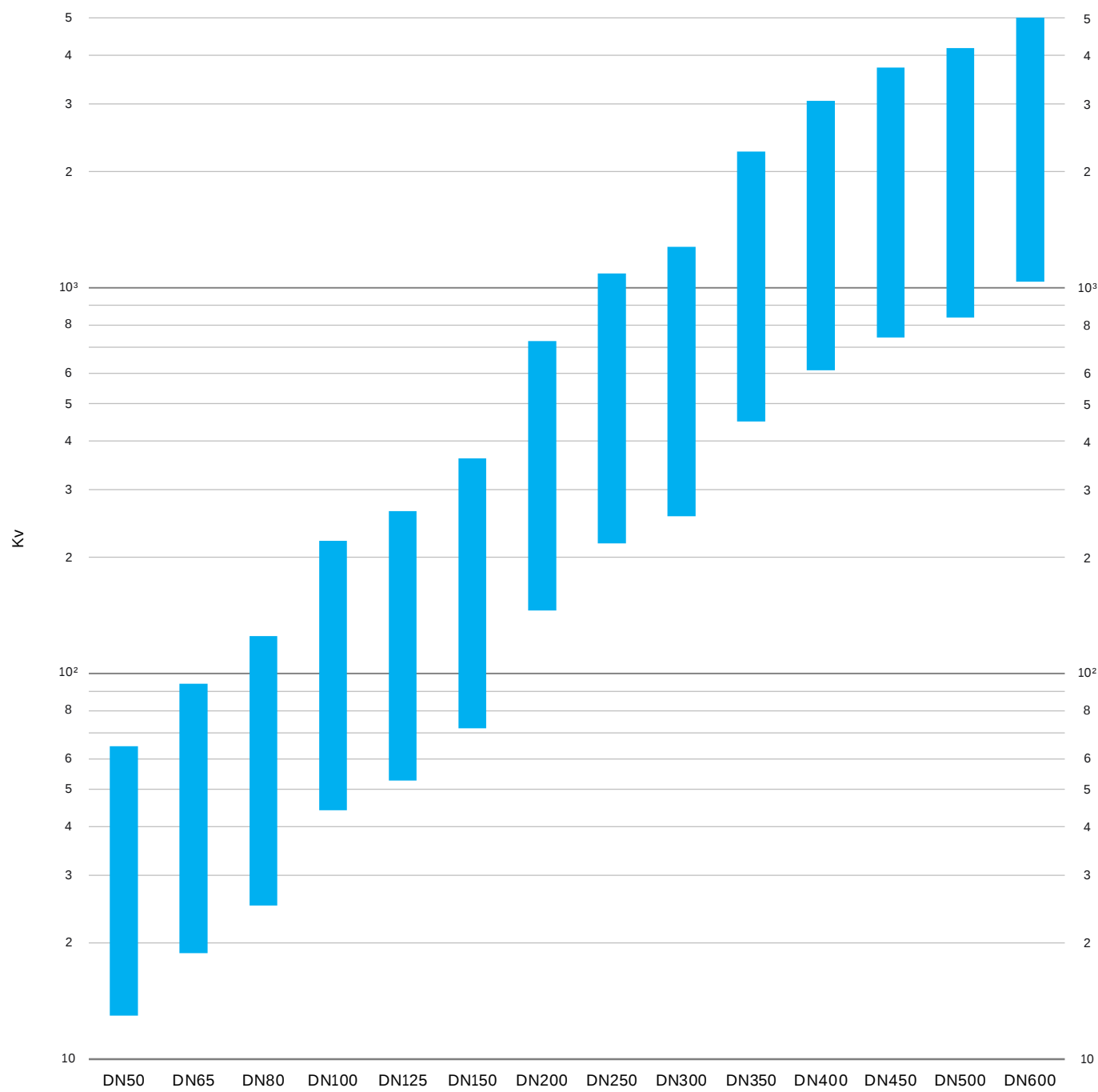
Installation

Calming sections must be provided upstream and downstream of the valve.



Sizing

Kv alignment chart



Quick item number reference

Determine the item number by adding the end number from below table to leading digits '10628'. A DN 100 valve with PN 16 flanges has the item number '10628' + '53' = '1062853'.

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN 16	50	51	52	53	54	55	56	57	58	59	60	61	62	63
PN 25	70	71	72	73	74	75	76	77	78	79	80	81	82	83

Kv Values

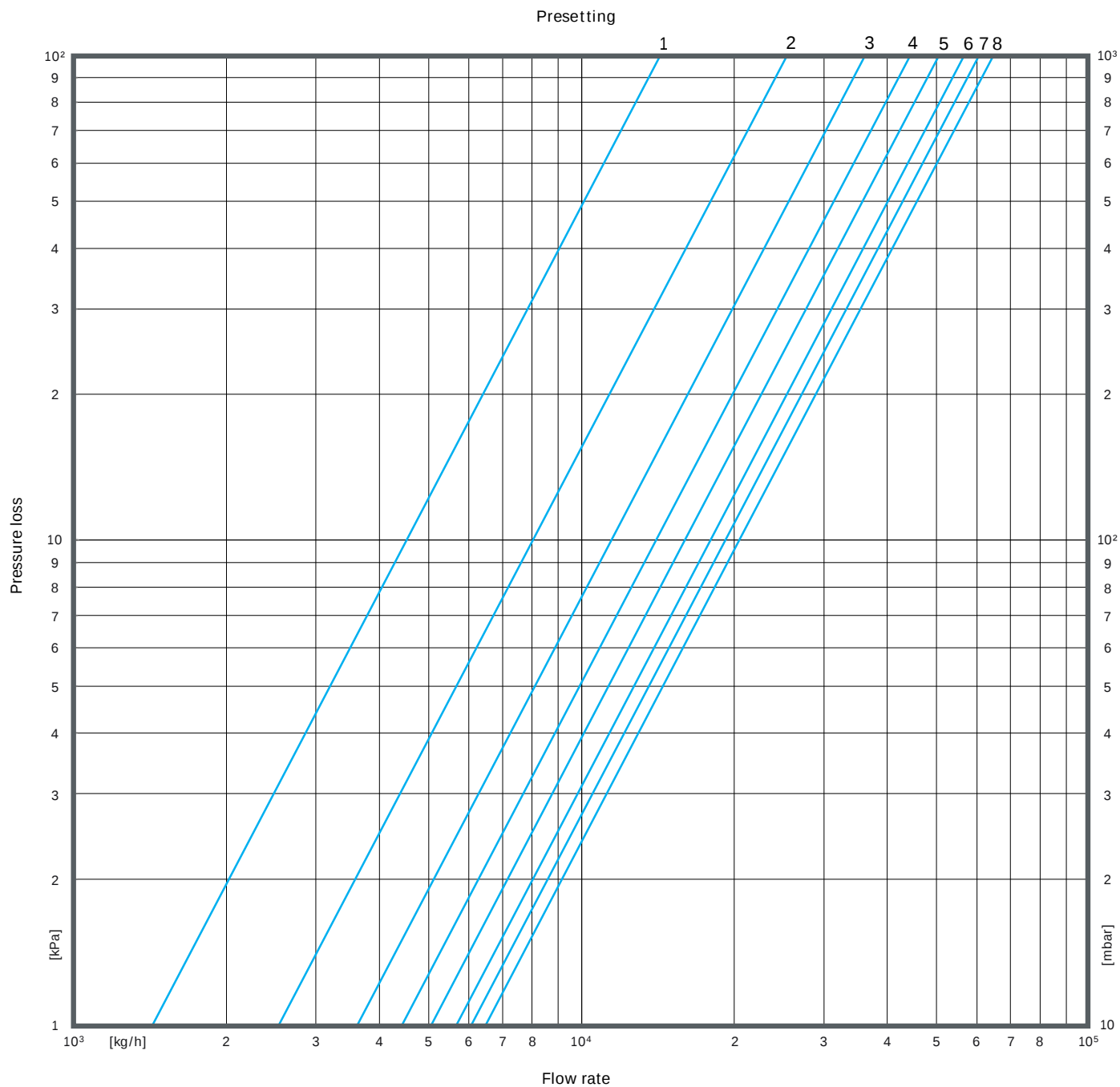
V	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400	DN450	DN500	DN600	V
1	14.3	13.7	14.0	16.4	23.6	17.2	47.7	70.4	60.3	170	238	275	352	396	1
1.1	15.8	15.4	15.0	18.0	26.0	20.2	53.0	78.2	68.5	182	257	298	378	420	1.1
1.2	16.8	16.3	16.0	19.9	28.5	23.9	58.2	86.4	77.7	192	274	318	406	444	1.2
1.3	17.9	18.2	17.0	21.9	31.0	27.5	63.9	94.4	87.7	201	289	338	432	467	1.3
1.4	19.0	19.8	17.9	23.8	33.9	31.7	69.5	103.6	97.7	210	304	357	458	490	1.4
1.5	20.1	21.0	18.5	25.6	36.2	35.8	74.6	112.0	107.7	217	318	376	482	514	1.5
1.6	21.2	22.3	19.6	27.3	39.0	39.2	80.2	120.8	118.2	225	332	393	508	537	1.6
1.7	22.2	24.0	20.5	29.0	41.9	44.0	86.0	129.8	129.6	232	346	410	534	562	1.7
1.8	23.4	25.7	21.7	31.0	44.2	47.8	91.8	138.8	139.6	241	361	428	558	587	1.8
1.9	24.2	27.0	22.6	32.9	46.5	51.5	97.6	147.6	149.6	250	377	446	584	615	1.9
2	25.4	28.5	24.2	34.6	49.5	54.4	103.4	156.3	159.6	261	393	465	611	643	2
2.1	26.5	30.0	25.8	36.2	51.9	56.9	109.2	164.8	168.8	273	411	487	642	675	2.1
2.2	27.8	31.8	27.8	38.0	54.0	59.0	114.8	173.8	178.4	286	429	509	672	705	2.2
2.3	28.8	33.0	29.8	39.9	56.3	60.8	120.8	182.4	188	299	448	531	702	740	2.3
2.4	29.9	34.8	32.0	41.6	58.7	62.2	126.2	191.0	197.7	312	466	553	733	770	2.4
2.5	31.0	36.2	34.2	43.2	61.0	63.5	132.1	200.0	207.6	327	485	575	767	806	2.5
2.6	32.1	38.0	36.4	44.9	63.5	64.8	137.8	208.8	216.8	342	506	597	799	840	2.6
2.7	33.3	39.5	39.0	46.4	65.8	66.0	144.0	217.6	225.6	357	526	619	831	880	2.7
2.8	34.2	41.0	41.2	48.0	68.0	67.8	150.8	225.9	233.8	372	546	641	862	916	2.8
2.9	35.2	42.2	43.5	49.8	70.5	69.8	157.8	233.9	242	389	567	663	896	953	2.9
3	36.2	43.8	45.9	51.5	73.5	71.6	164.9	241.9	249.5	405	587	685	928	987	3
3.1	37.0	45.0	48.2	52.4	76.2	74.2	172.2	249.8	256.2	422	608	706	964	1026	3.1
3.2	38.0	46.2	50.5	53.9	79.8	77.2	180.2	256.6	262.6	440	629	727	1000	1065	3.2
3.3	38.9	47.8	53.4	54.8	82.8	80.0	188.2	263.4	268.2	459	650	746	1036	1104	3.3
3.4	39.8	48.8	55.8	56.0	86.0	83.8	196.2	269.6	273.9	478	671	765	1072	1143	3.4
3.5	40.7	50.0	58.3	57.0	89.5	87.6	204.8	275.9	278.8	498	692	784	1108	1183	3.5
3.6	41.5	51.4	60.3	58.0	93.0	90.5	214.0	282.2	283.6	518	713	805	1144	1222	3.6
3.7	42.1	52.2	63.5	59.2	96.1	93.9	223.4	289.2	288	538	736	826	1180	1261	3.7
3.8	42.8	53.6	65.6	60.4	99.8	97.6	232.4	296.0	293.6	558	759	848	1216	1300	3.8
3.9	43.7	54.2	67.8	62.0	103.0	99.8	243.6	303.8	299.8	577	783	874	1253	1339	3.9
4	44.4	55.4	69.7	63.6	106.1	102.2	253.8	311.3	305.4	597	808	900	1289	1378	4
4.1	45.0	56.2	71.8	65.4	109.5	104	265.6	319.9	312	617	834	930	1324	1417	4.1
4.2	45.9	57.1	73.2	67.3	112.0	105.5	277.5	329.4	317.4	636	862	970	1358	1455	4.2
4.3	46.4	58.0	74.7	69.0	115.0	106.8	290.4	338.4	322.8	656	890	1007	1392	1494	4.3
4.4	47.0	58.6	76.2	71.2	118.0	107.8	303.5	348.0	328	676	920	1048	1427	1532	4.4
4.5	47.7	59.7	77.8	73.4	120.6	108.3	317.0	358.2	334	695	949	1085	1462	1571	4.5
4.6	48.2	60.1	79.0	75.8	123.8	109.2	331.0	368.4	340.9	715	980	1128	1496	1610	4.6
4.7	48.8	60.8	80.2	78.0	126.4	110.0	344.0	378.2	348	735	1010	1166	1530	1648	4.7
4.8	49.4	61.7	81.7	80.2	129.8	110.8	358.5	388.4	356.3	755	1041	1207	1565	1687	4.8
4.9	50.0	62.2	82.3	83.0	132.0	112.0	372.5	399.4	365.8	775	1070	1242	1600	1726	4.9
5	50.6	63.0	83.5	85.9	135.0	113.6	385.9	409	377.5	795	1100	1284	1634	1764	5
5.1	51.2	63.8	84.2	88.9	137.8	115.5	401.5	423.2	390.5	818	1134	1319	1669	1800	5.1
5.2	51.9	64.2	85.2	92.2	140.2	117.4	418.8	437.9	406.0	842	1168	1354	1704	1835	5.2

V	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400	DN450	DN500	DN600	V
5.3	52.6	65.0	85.7	95.9	143.2	119.0	436.8	452.6	422.8	866	1204	1389	1738	1870	5.3
5.4	53.2	65.8	86.0	99.6	146.0	120.8	453.5	467.4	440.8	890	1239	1424	1772	1906	5.4
5.5	53.8	66.5	86.2	103.4	148.2	122.8	471.8	482.6	459.8	914	1275	1459	1806	1941	5.5
5.6	54.4	67.2	86.7	107.0	150.8	125.6	487.4	497.2	479.6	937	1310	1494	1840	1976	5.6
5.7	55.0	68.0	87.6	110.9	154.0	127.8	504.6	511.5	499.2	961	1344	1529	1874	2011	5.7
5.8	55.8	68.5	88.0	114.9	156.5	130.0	518.6	525.4	518.2	984	1377	1564	1911	2046	5.8
5.9	56.3	69.5	88.7	118.2	159.8	133.5	530.6	539.6	537.0	1007	1409	1599	1948	2083	5.9
6	56.8	70.1	90.5	122.0	162.6	136.4	541.3	554.2	555.9	1030	1440	1634	1983	2118	6
6.1	57.3	71.0	92.3	125.5	165.8	139.8	548.8	567.8	568.8	1052	1467	1665	2026	2161	6.1
6.2	57.8	71.8	94.5	128.9	168.4	143.8	553.6	581.0	583.8	1073	1493	1696	2069	2200	6.2
6.3	58.1	72.4	97.0	132.7	171.9	148.0	557.0	595.3	597.6	1094	1517	1728	2112	2240	6.3
6.4	58.5	73.6	99.8	135.8	175.0	152.5	559.4	609.0	611.6	1115	1540	1759	2155	2280	6.4
6.5	59.0	74.4	102.8	139.0	178.2	157.8	561.0	622.6	625.8	1135	1563	1788	2198	2326	6.5
6.6	59.4	75.2	105.8	142.6	181.6	162.3	562.9	635.5	639.6	1156	1586	1819	2241	2368	6.6
6.7	59.8	76.0	108.3	146.0	184.6	167.6	564.0	648.6	654.0	1177	1607	1849	2280	2413	6.7
6.8	60.0	77.0	111.0	149.8	188.2	172.0	565.8	660.8	666.5	1199	1630	1880	2327	2457	6.8
6.9	60.2	77.8	113.2	153.0	191.8	175.9	568.0	672.4	678.8	1222	1654	1914	2370	2502	6.9
7	60.7	78.7	115	156.6	195.3	180.0	571.9	683.1	691.2	1246	1678	1947	2413	2545	7
7.1	61.2	79.6	116.2	160.3	199.5	183.8	576.9	691.8	702.3	1272	1704	1987	2452	2596	7.1
7.2	61.8	80.4	117.5	164.1	202.8	187.6	582.8	699.2	712.4	1300	1730	2028	2491	2645	7.2
7.3	62.0	81.3	118.0	168.3	206.5	190.0	588.9	704.8	722.1	1329	1757	2070	2530	2694	7.3
7.4	62.2	82.2	118.5	172.4	210.5	193.3	595.5	710.6	731.4	1359	1784	2112	2568	2741	7.4
7.5	62.7	83.0	119.0	176.2	214.5	196.2	602.7	715.4	740.0	1389	1810	2156	2608	2796	7.5
7.6	63.2	84.0	119.6	180.2	218.5	199.6	609.2	721.0	749.6	1419	1837	2197	2648	2848	7.6
7.7	63.8	84.8	119.7	184.0	222.5	201.8	616.8	727.4	758.4	1448	1864	2238	2686	2901	7.7
7.8	64.0	85.8	119.9	187.8	226.2	204.8	623.5	734.8	768.3	1476	1892	2280	2726	2952	7.8
7.9	64.2	86.6	120.1	191.6	230.2	207.8	630.8	745.0	778.8	1503	1919	2322	2765	3001	7.9
8	64.8	87.4	120.5	194.6	233.8	210.9	637.2	758	790.4	1527	1946	2364	2804	3054	8
8.1		88.0	121.0	197.8	237.6	214.0	643.8	773.2	802.4	1549	1976	2398	2844	3110	8.1
8.2		88.8	121.5	200.6	240.4	216.8	650.6	795.0	816.2	1569	2004	2432	2885	3165	8.2
8.3		89.6	122.0	203.4	243.8	219.6	657.1	817.0	829.8	1588	2033	2467	2926	3219	8.3
8.4		90.2	122.2	205.9	246.4	222.2	663.8	841.0	843.8	1606	2063	2499	2968	3274	8.4
8.5		90.8	122.5	208.0	249.8	225.0	670.8	867.0	858.8	1623	2091	2532	3008	3330	8.5
8.6		91.6	123.0	210.8	252.5	228.0	677.0	895.0	873.8	1640	2121	2564	3049	3385	8.6
8.7		92.0	123.5	213.0	255.5	231.5	683.0	919.0	888.6	1656	2150	2595	3090	3442	8.7
8.8		92.8	124.0	215.8	258.4	234.8	689.0	939.0	903.8	1673	2180	2628	3131	3497	8.8
8.9		93.6	124.3	218.0	261.5	236.0	694.6	959.0	918.2	1689	2209	2661	3171	3554	8.9
9		94.0	124.7	220.5	264.3	243.2	699.2	973.7	933.3	1707	2238	2694	3212	3610	9
9.1							248.0	703.4	981.0	943.6	1725	2267	2722	3244	9.1
9.2							254.0	706.8	984.7	953.6	1743	2297	2749	3277	9.2
9.3							260.0	710.0	987.2	963.6	1760	2326	2777	3309	9.3
9.4							266.4	712.6	989.0	972.8	1778	2355	2806	3342	9.4
9.5							274.0	715.2	990.3	983.4	1797	2386	2832	3374	9.5
9.6							280.4	717.4	991.2	992.8	1814	2416	2860	3407	9.6
9.7							287.0	719.6	991.8	1003	1832	2444	2887	3438	9.7

V	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400	DN450	DN500	DN600	V
9.8						293.6	722.0	992.6	1014	1849	2471	2915	3470	4102	9.8
9.9						299.8	724.6	993.0	1025	1867	2497	2942	3500	4162	9.9
10						304.8	726.9	994.0	1037	1884	2522	2970	3528	4220	10
10.1						307.9		995.6	1049	1901	2542	3000	3555	4270	10.1
10.2						314.0		996.8	1062	1918	2562	3030	3582	4332	10.2
10.3						317.9		997.6	1076	1936	2580	3060	3607	4380	10.3
10.4						321.8		998.2	1090	1953	2596	3090	3633	4431	10.4
10.5						325.6		999.8	1105	1970	2610	3120	3657	4479	10.5
10.6						328.2		1000	1119	1987	2624	3150	3680	4526	10.6
10.7						331.8		1002	1133	2003	2640	3180	3704	4574	10.7
10.8						334.2		1004	1146	2019	2655	3210	3728	4615	10.8
10.9						337.6		1007	1158	2034	2671	3240	3751	4655	10.9
11						340.2		1011	1169	2048	2689	3270	3774	4698	11
11.1						344.0		1016	1178	2061	2709	3296	3796	4736	11.1
11.2						345.6		1022	1186	2074	2727	3323	3819	4770	11.2
11.3						347.8		1030	1194	2087	2750	3350	3843	4802	11.3
11.4						349.9		1038	1200	2098	2769	3376	3864	4830	11.4
11.5						351.8		1045	1206	2110	2791	3402	3886	4859	11.5
11.6						353.8		1054	1212	2121	2811	3427	3908	4885	11.6
11.7						355.8		1063	1217	2131	2833	3453	3929	4906	11.7
11.8						357.6		1072	1222	2142	2854	3477	3950	4929	11.8
11.9						359.6		1080	1227	2152	2874	3501	3971	4957	11.9
12						361.3		1088	1232	2162	2894	3525	3992	4980	12
12.1									1238	2172	2910	3546	4011	5005	12.1
12.2									1242	2181	2927	3567	4031	5024	12.2
12.3									1247	2190	2943	3588	4050	5045	12.3
12.4									1252	2199	2958	3606	4069	5065	12.4
12.5									1256	2208	2974	3625	4088	5084	12.5
12.6									1260	2216	2989	3644	4106	5105	12.6
12.7									1264	2224	3004	3662	4124	5124	12.7
12.8									1268	2233	3019	3681	4142	5144	12.8
12.9									1272	2241	3034	3700	4161	5161	12.9
13									1276	2250	3050	3720	4180	5182	13

Flow charts

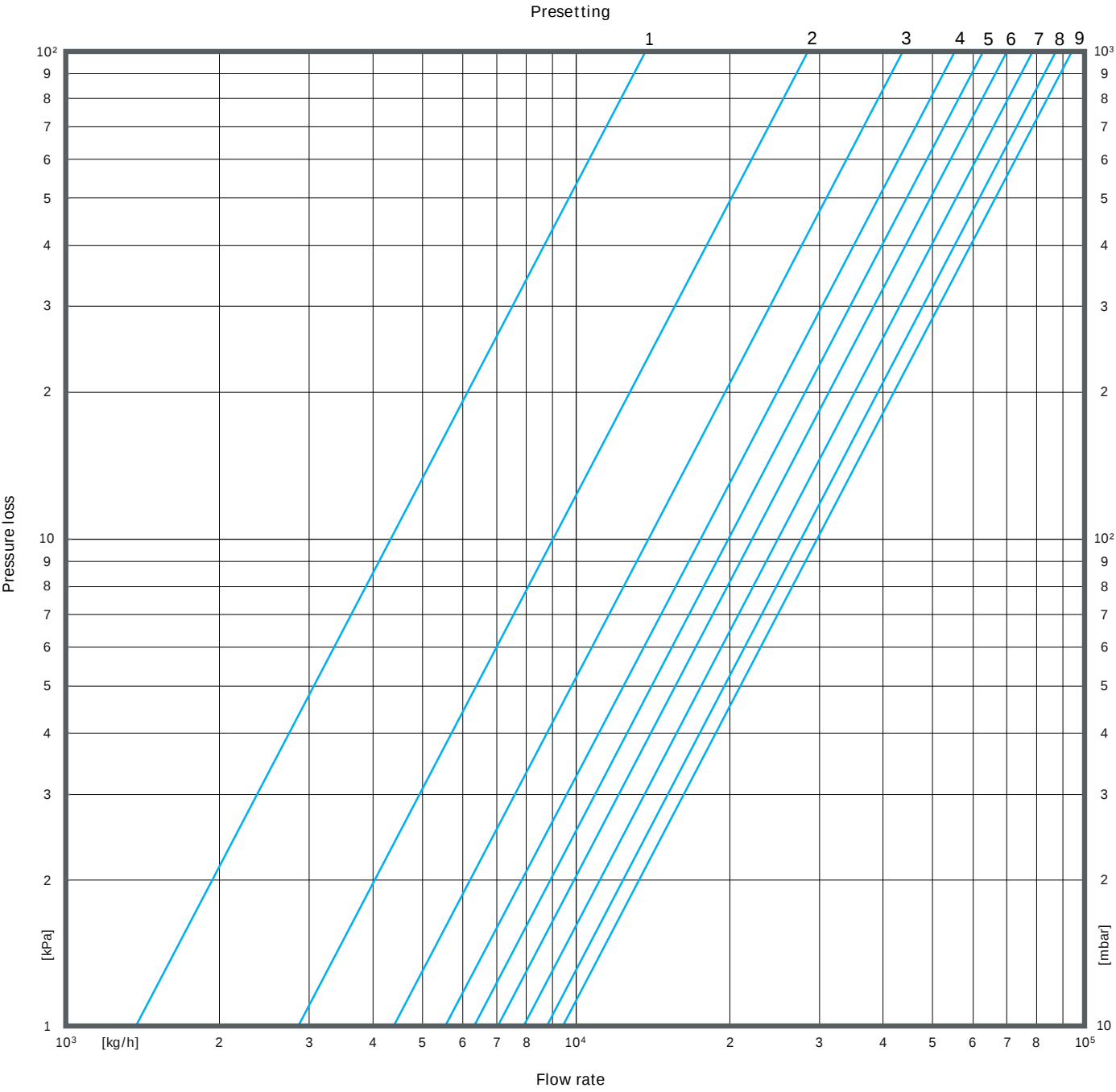
DN 50



Kv values

Setting	1	2	3	4	5	6	7	8
Kv value	14,3	25,4	36,2	44,4	50,6	56,8	60,7	64,8

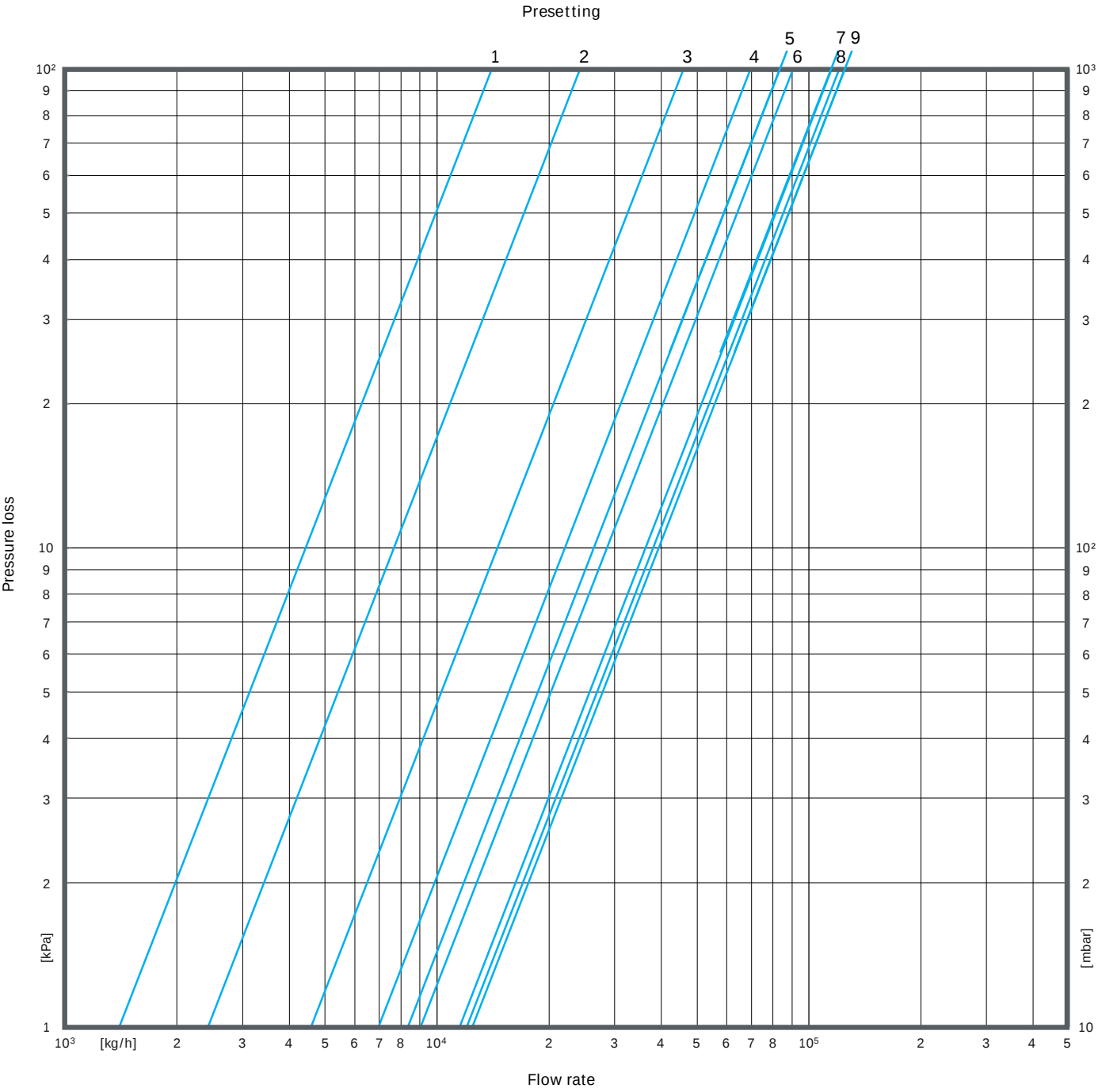
DN 65



Kv values

Setting	1	2	3	4	5	6	7	8	9
Kv value	13,7	28,5	43,8	55,4	63,0	70,1	78,7	87,4	94,0

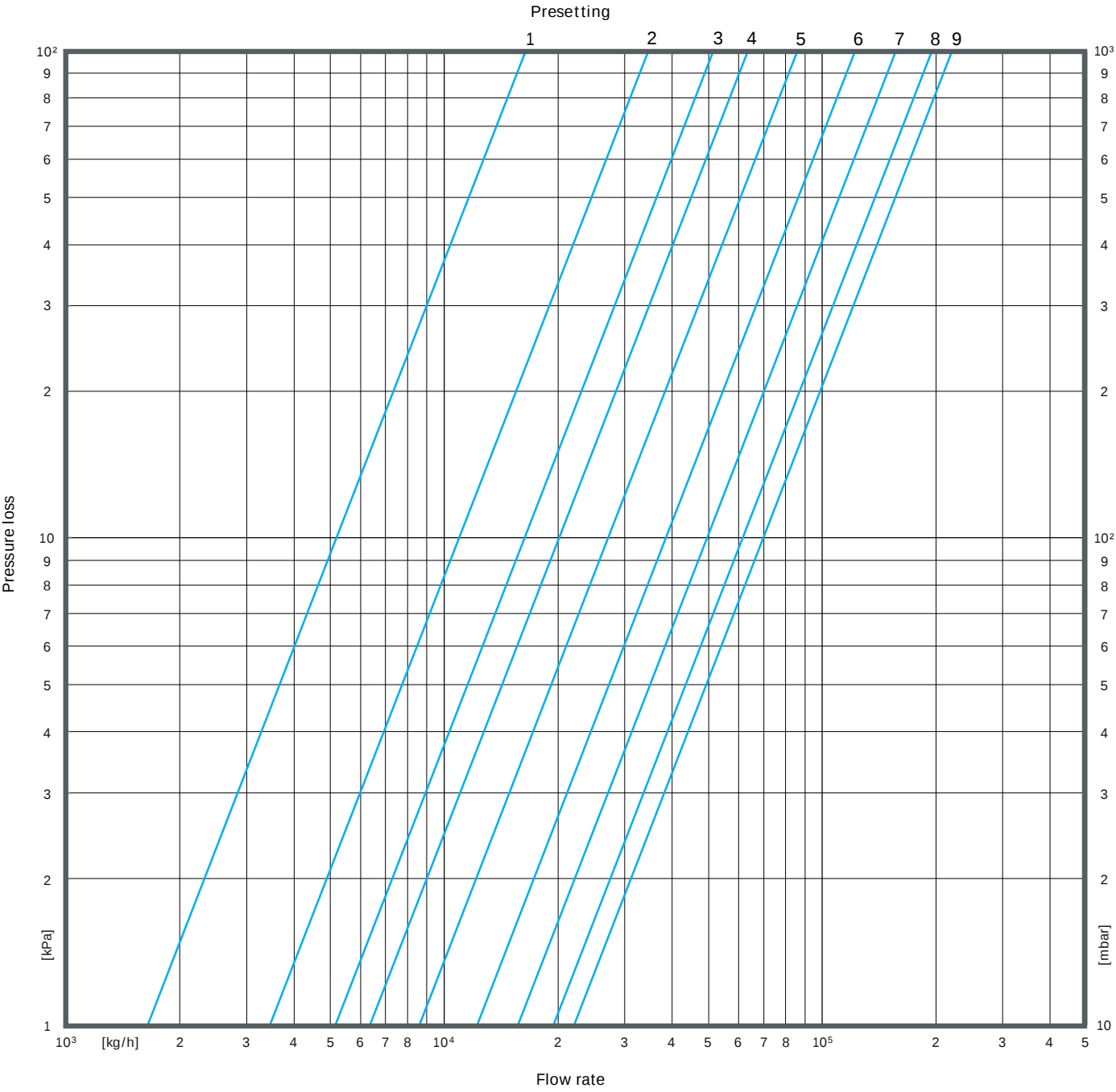
DN 80



Kv values

Setting	1	2	3	4	5	6	7	8	9
Kv value	14,0	24,2	45,9	69,7	83,5	90,5	115,0	120,5	124,7

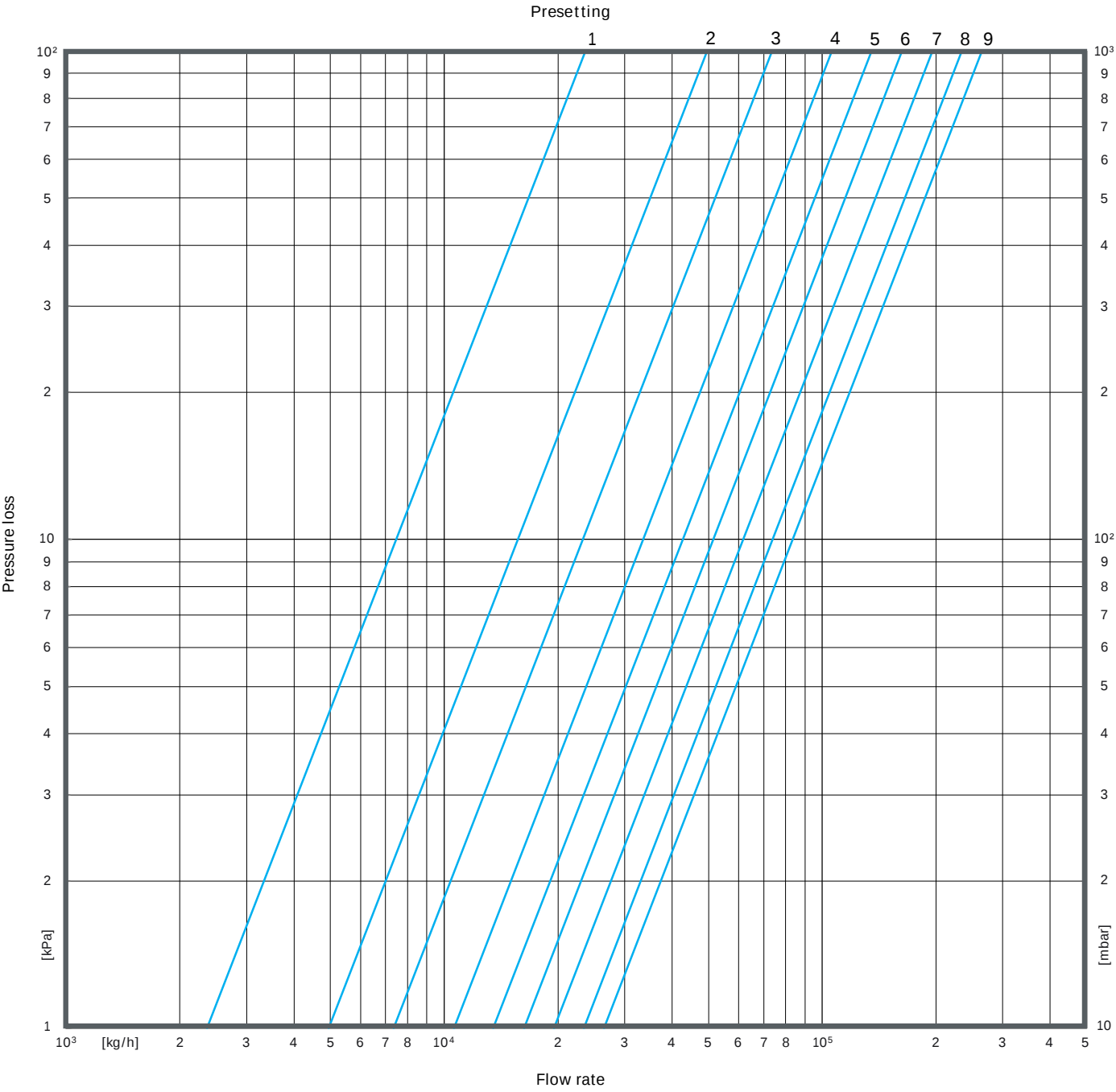
DN 100



Kv values

Setting	1	2	3	4	5	6	7	8	9
Kv value	16,4	34,6	51,5	63,6	85,9	122,0	156,6	194,6	220,5

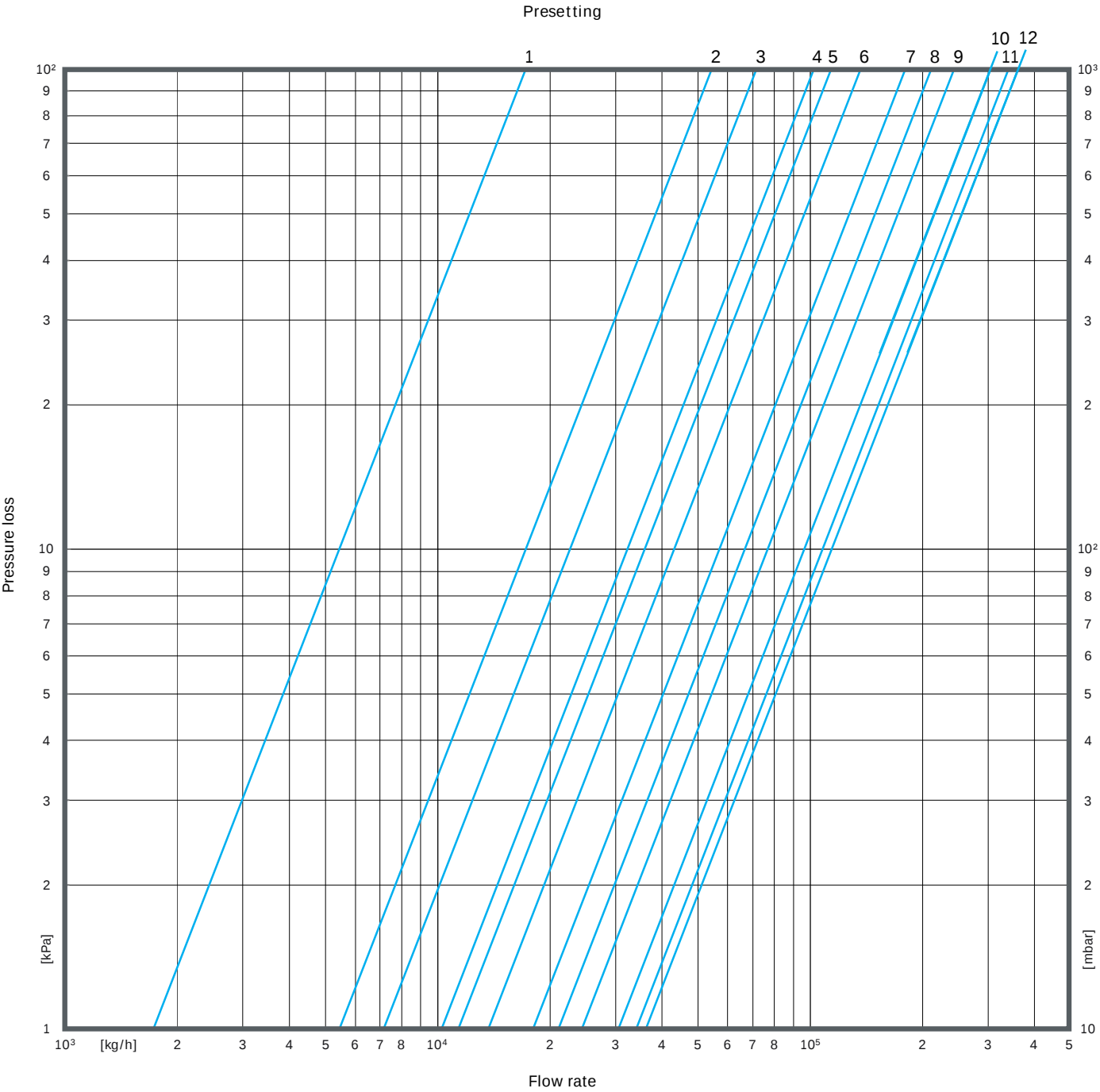
DN 125



Kv values

Setting	1	2	3	4	5	6	7	8	9
Kv value	23,6	49,5	73,5	106,1	135	162,6	195,3	233,8	264,3

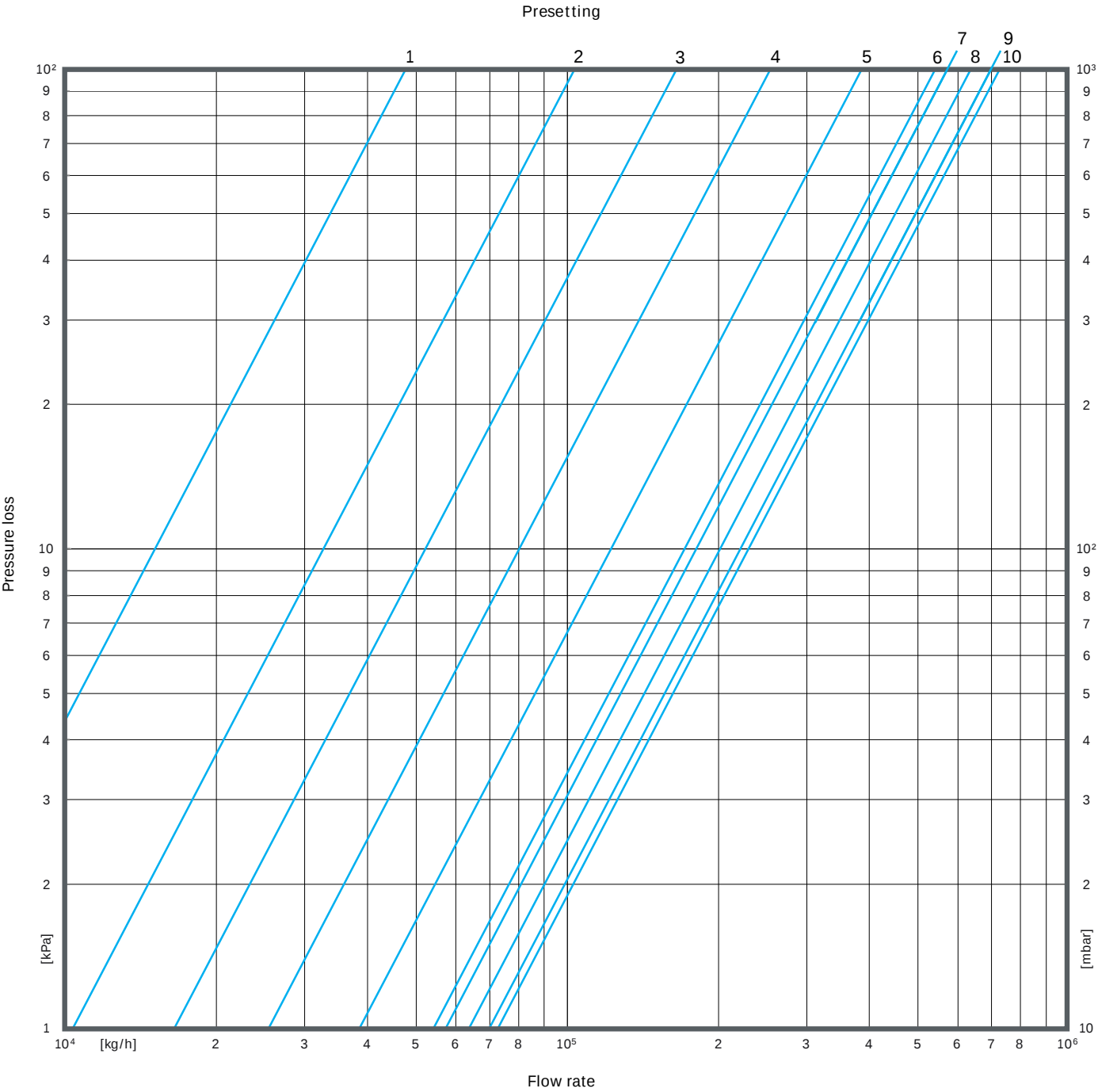
DN 150



Kv values

Setting	1	2	3	4	5	6	7	8	9	10	11	12
Kv value	17,2	54,4	71,6	102,2	113,6	136,4	180,0	210,9	243,2	304,8	340,2	361,3

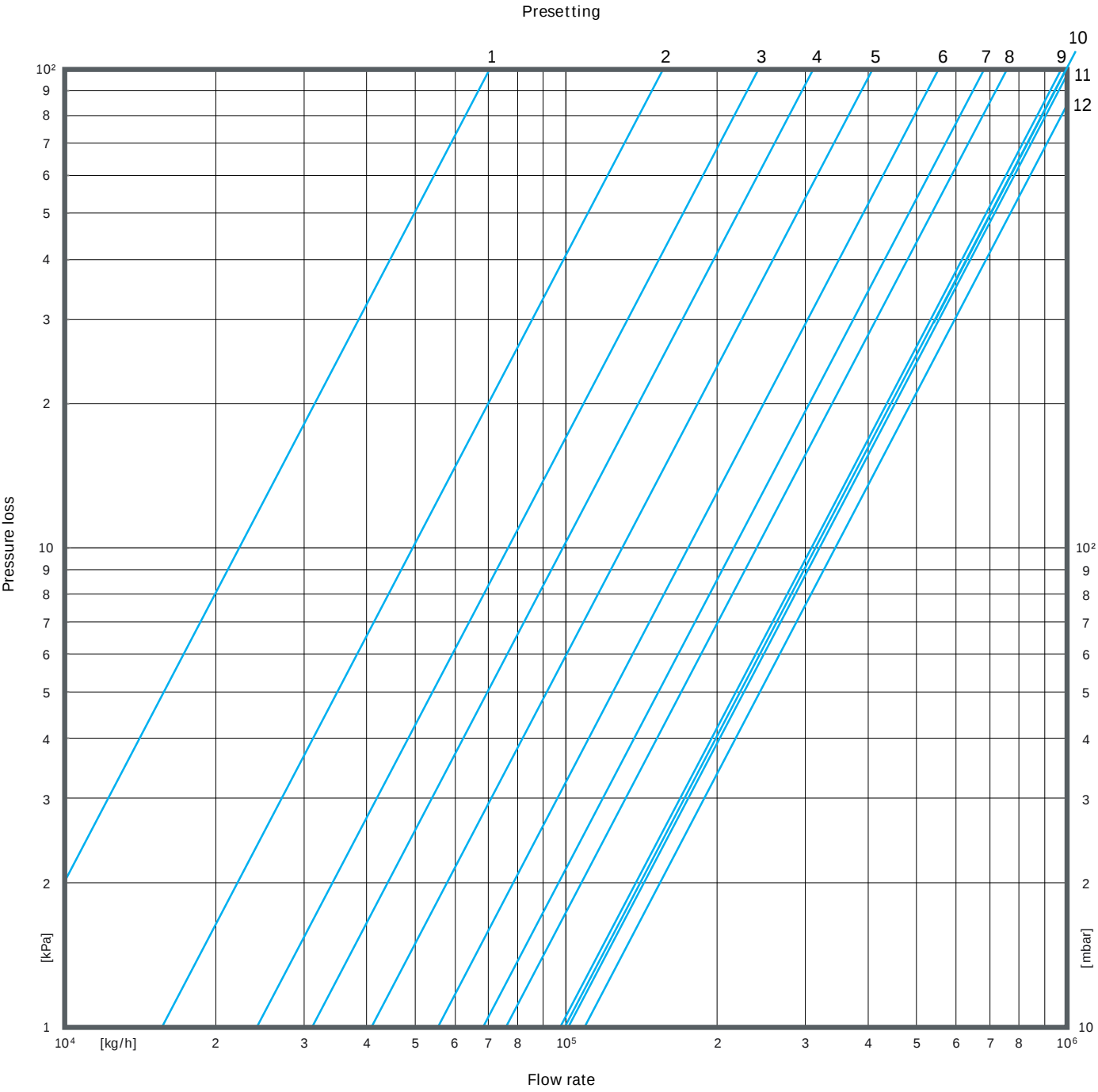
DN 200



Kv values

Setting	1	2	3	4	5	6	7	8	9	10
Kv value	47,7	103,4	164,9	253,8	385,9	541,3	571,9	637,2	699,2	726,9

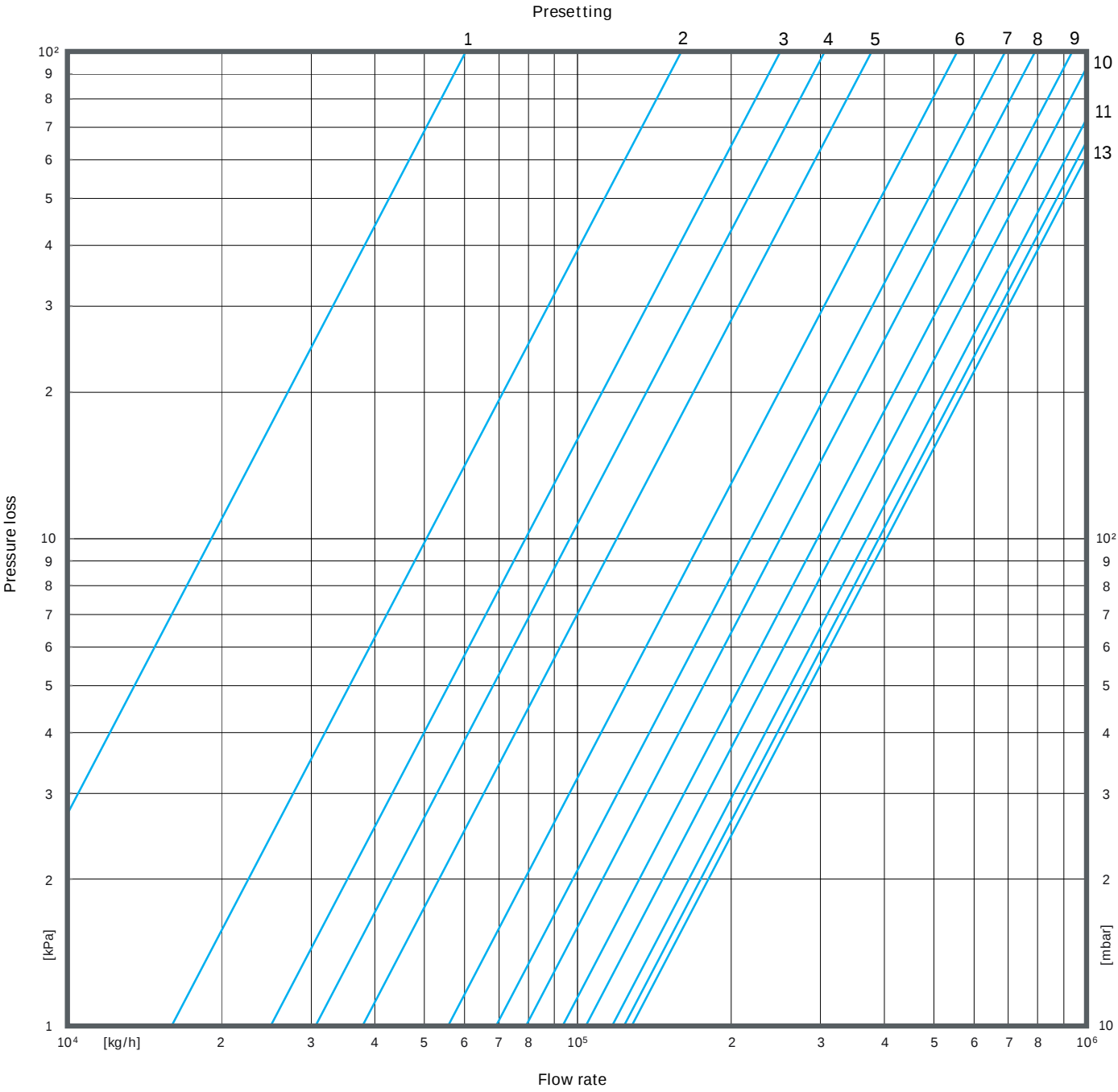
DN 250



Kv values

Setting	1	2	3	4	5	6	7	8	9	10	11	12
Kv value	70,4	156,3	241,9	311,3	409,0	554,2	683,1	758,0	973,7	994,0	1011	1088

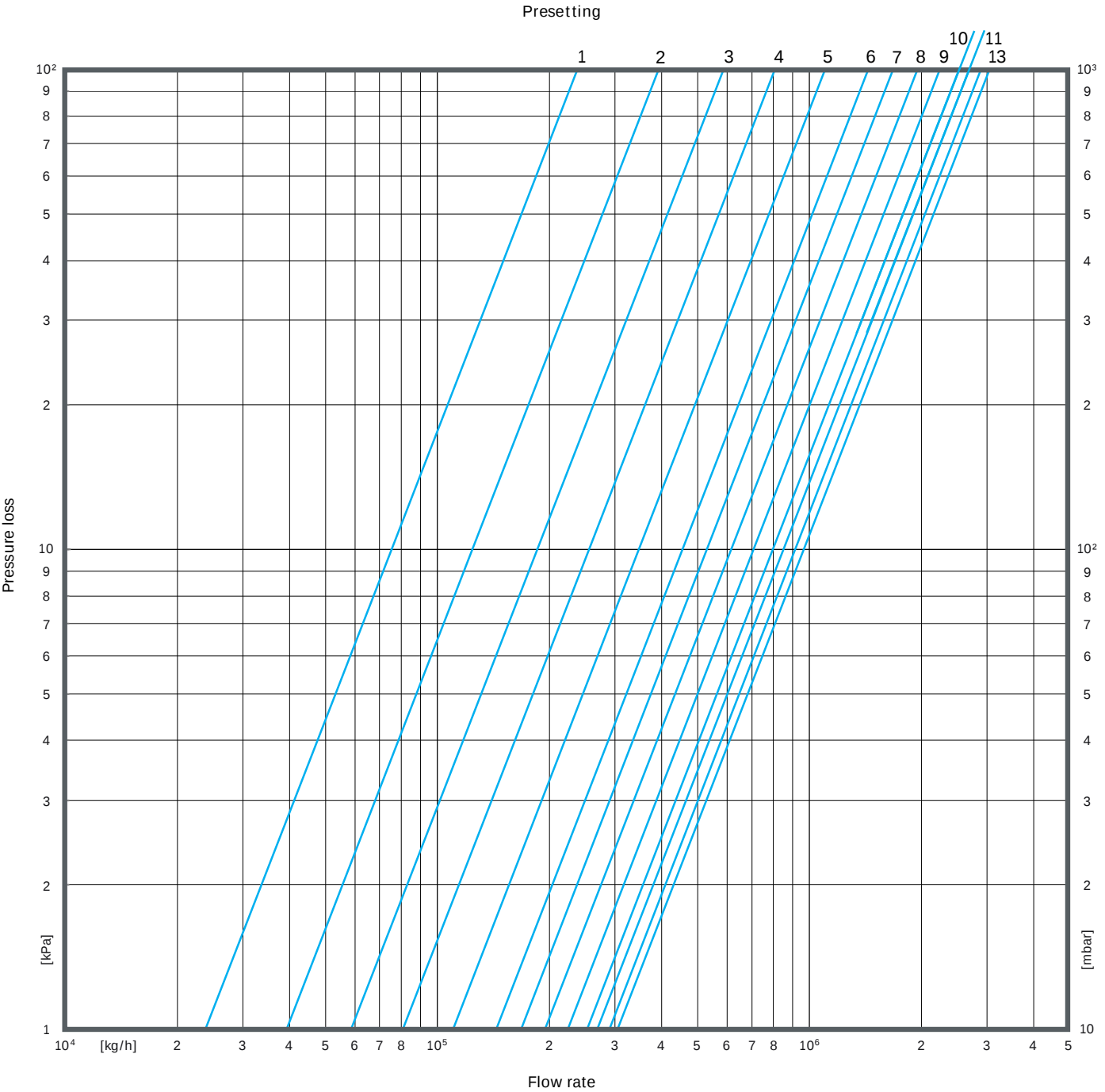
DN 300



Kv values

Setting	1	2	3	4	5	6	7	8	9	10	11	12	13
Kv value	60,3	159,6	249,5	305,4	377,5	555,9	691,2	790,4	933,3	1036	1168	1232	1276

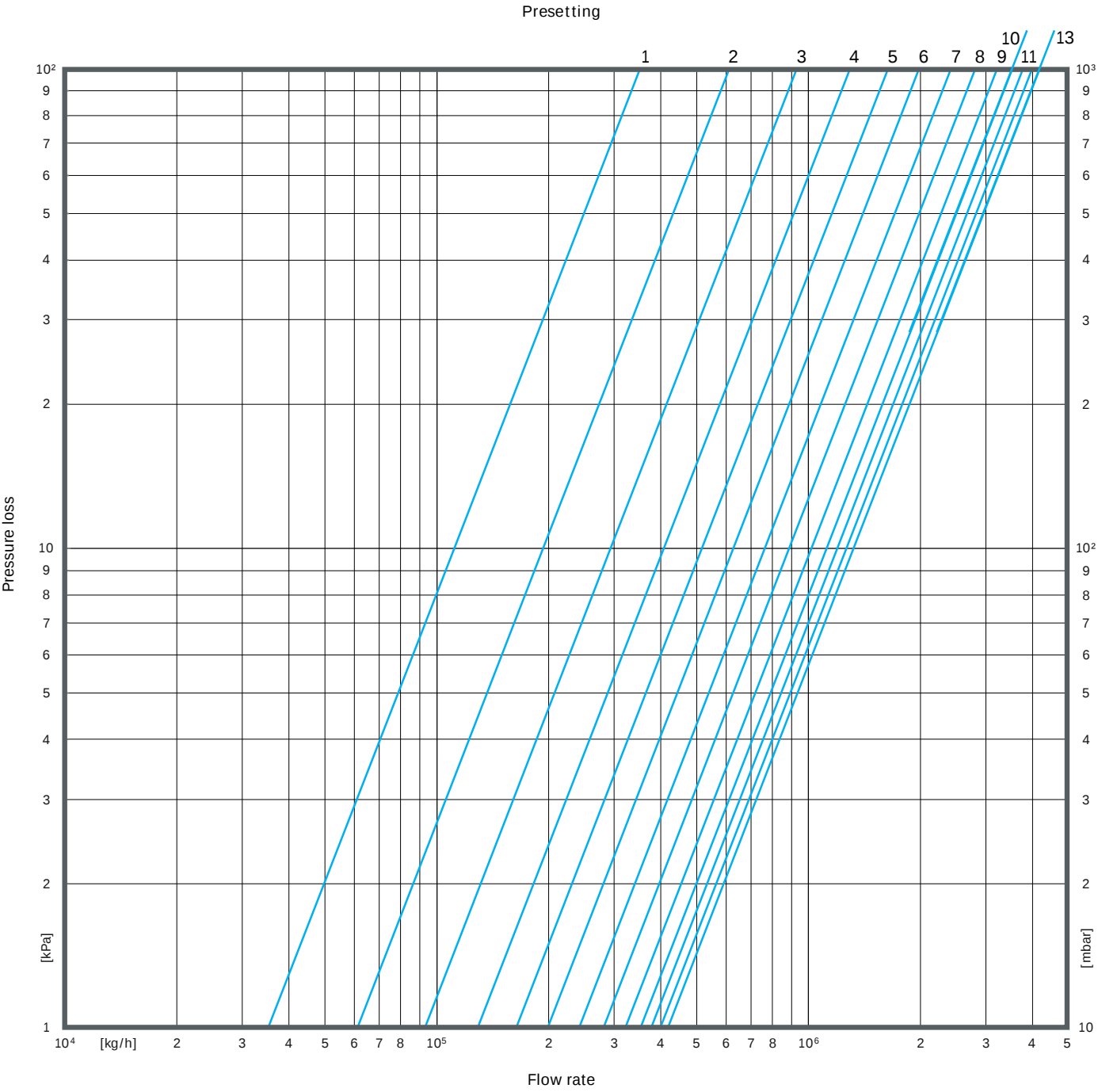
DN 400



Kv values

Setting	1	2	3	4	5	6	7	8	9	10	11	12	13
Kv value	238	393	587	808	1100	1440	1678	1946	2238	2522	2689	2894	3050

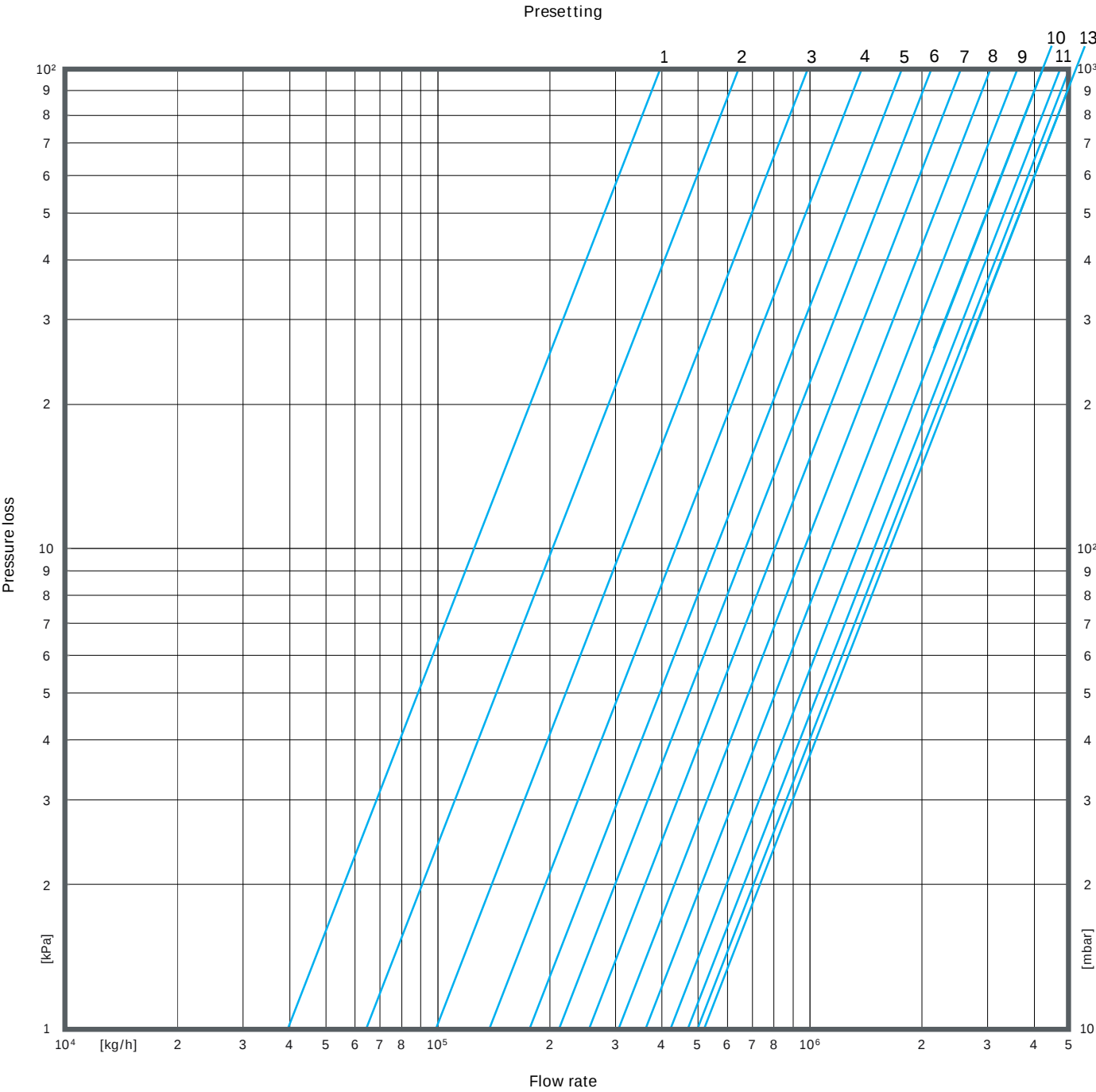
DN 500



Kv values

Setting	1	2	3	4	5	6	7	8	9	10	11	12	13
Kv value	352	611	928	1289	1634	1983	2413	2804	3212	3528	3774	3992	4180

DN 600



Kv values

Setting	1	2	3	4	5	6	7	8	9	10	11	12	13
Kv value	396	643	987	1378	1764	2118	2545	3054	3610	4220	4698	4980	5182

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