MANUAL BALANCING VALVES - DOUBLE REGULATING VALVE- STAINLESS STEEL - DR200X



Specifications

DN mm	DN 50 - 600
DN inch	2 - 24”
Temperature	-45°C to 200°C
Pressure range	16 Bars
Connection	Flanges - EN 1092-1
Body material	Stainless steel CF3M
Application	Cold/hot water, glycol solution concentration < 50%, sea water
Tests Standard	Tightness test according to EN 12266-2
Options	Suitable for data center

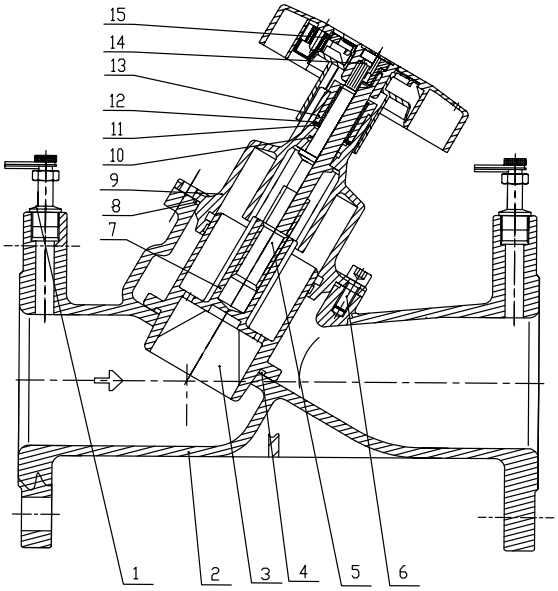
ADVANTAGES

- **OMEAX static balancing valves can be used in heating and cooling systems to balance flow rates.**
- **The digital handwheel accurately displays the desired setting (0.1-turn resolution), allowing operators to adjust the balancing valve quickly.**
- **The valve allows the maximum flow rate to be locked at any position without affecting opening and closing operations. When locked, the valve can be adjusted between the fully closed position and the preset maximum opening.**
- **The balanced valve core and complete shut-off design allow easy closure by turning the handwheel, regardless of the fluid pressure.**
- **Self-sealing measuring plugs: Two test plugs are located on either side of the valve. Use a hydraulic balancing instrument to measure the differential pressure and easily adjust the flow rate using the handwheel.**
- **Ideal for data center cooling systems, ensuring precise flow balancing and improved energy efficiency.**

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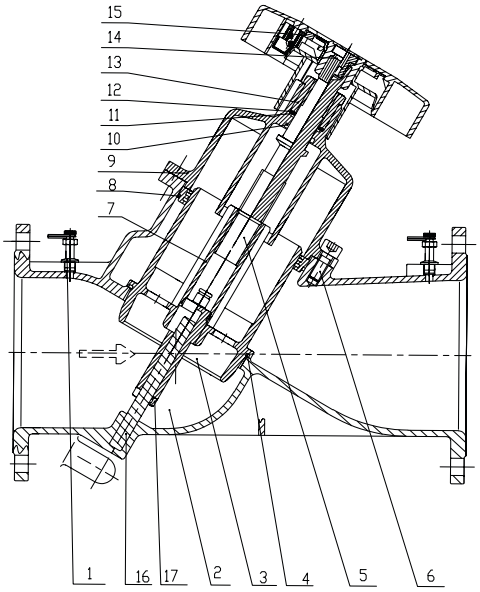
PARTS LIST

DN 50-150



N°	Designation	Qty	Materials	Materials for Data Centers
1	Pipe Joint	2	Brass	Stainless steel
2	Valve body	1	CF3M	CF3M
3	Valve disc	1	CF3M	stainless steel 316L
4	O-ring	1	Silicone	VMQ
5	Valve stem	1	Brass	Stainless steel
6	Screw	6	A2-70	A2-70
7	Valve stem nut	1	Brass	Stainless steel
8	O-ring	1	NBR	NBR
9	Valve cover	1	CF3M	CF3M
10	O-ring	1	NBR	RPTFE
11	Gasket	1	100Hv	FKM
12	Graphite Gasket	1	Graphite	Stainless steel
13	Hat	1	Brass	Brass
14	Screw plug	1	Brass	Brass
15	Handwheel	1	Plastic	Plastic

DN 200-600

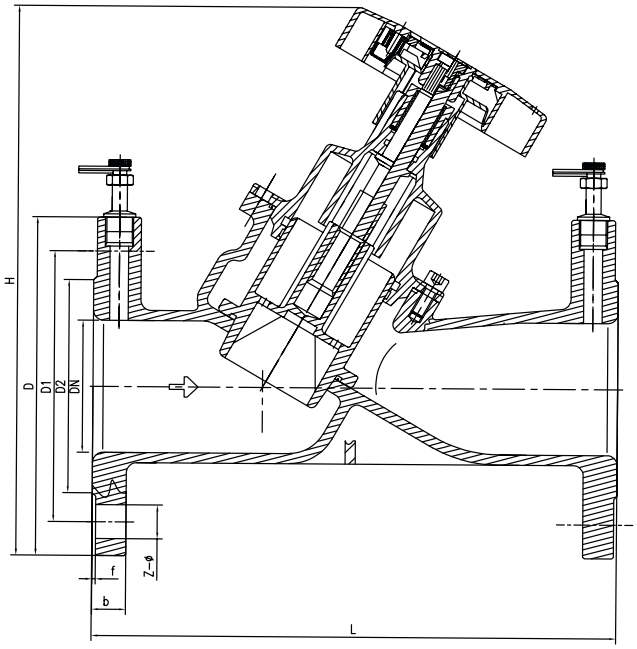


N°	Designation	Qty	Materials
1	Pipe Joint	2	Brass
2	Valve body	1	CF3M
3	Valve disc	1	CF3M
4	O-ring	1	Silicone
5	Valve stem	1	Brass
6	Screw		A2-70
7	Valve stem nut	1	Brass
8	O-ring	1	NBR
9	Valve cover	1	CF3M
10	O-ring	1	NBR
11	Gasket	1	100Hv
12	Graphite Gasket	1	Graphite
13	Hat	1	Brass
14	Screw plug	1	Brass
15	Handwheel	1	Plastic
16	Positioning rod	1	CF3M
17	Positioning set	1	Brass

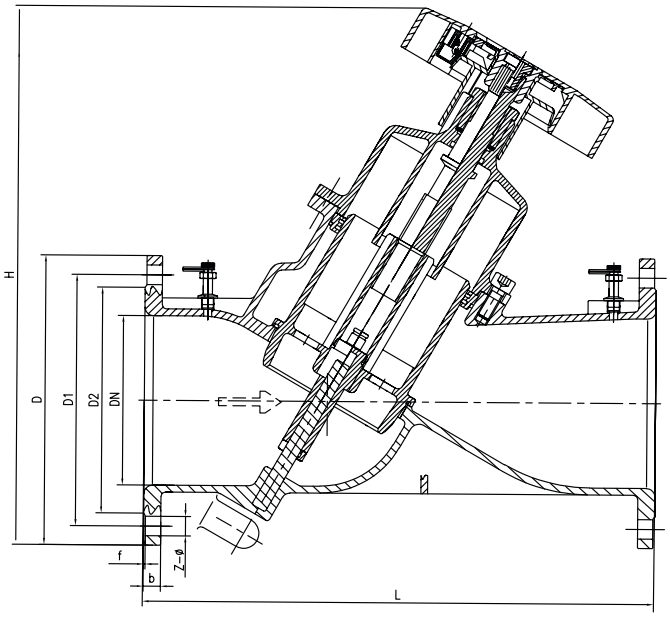
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DIMENSIONS

DN 50-150



DN 200-600



DN mm	DN inch	PN	PFA bar
50	2”	-	16
65	2”1/2	-	16
80	3”	-	16
100	4”	-	16
125	5”	-	16
150	6”	-	16
200	8”	-	16
250	10”	-	16
300	12”	-	16
350	14”	-	16
400	16”	-	16
450	18”	-	16
500	20”	-	16
600	24”	-	16

DN	L	D	D1	D2	F	B	Z-Ø	H
50	230	165	125	99	2	20	4-Ø18	265
65	290	185	145	118	2	20	4-Ø18	285
80	310	200	160	132	2	20	8-Ø18	324
100	350	220	180	156	2	22	8-Ø18	355
125	400	250	210	184	2	22	8-Ø18	410
150	480	285	240	211	2	24	8-Ø22	477
200	600	340	295	263	2	24	12-Ø22	613
250	730	405	355	319	2	26	12-Ø26	740
300	850	460	410	370	2	28	12-Ø26	828
350	980	520	470	429	2	30	16-Ø26	970
400	1100	580	525	480	2	32	16-Ø30	1100
450	1100	640	585	548	2	40	20-Ø30	1200
500	1100	715	650	609	2	44	20-Ø33	
600	1300	840	770	720	2	54	20-Ø36	

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KV VALUE

Turns	DN														
	20	25	32	40	50	65-2	80	100	125	150	200	250	300	350	400
0.5	0.511	0.61	1.14	1.76	2.56	1.8	2	2.6	5.4	6.6	–	–	–	–	–
1	0.756	1.04	1.91	3.30	4.2	3.4	4	6	10.4	12	–	–	–	–	–
1.5	1.18	2.10	3.10	4.60	7.1	4.8	6	9	15.4	22	–	–	–	–	–
2	1.90	3.61	4.65	6.10	11.8	6.6	8	11.5	21.5	40	40	90	–	–	–
2.5	2.80	5.31	7.11	8.81	16.1	9.3	11	16	27	65	50	110	–	–	–
3	3.88	6.90	9.50	12.5	21.5	16.3	14	26	36	100	65	140	150	109	125
3.5	4.76	8.00	11.9	16.0	26.4	25.5	19.6	44	55	135	90	195	230	129	148
4	5.71	8.71	14.1	19.1	33	35.4	29	63	83	169	120	255	300	148	171
4.5	–	–	–	–	–	44.5	41	80	114	207	165	320	370	170	208
5	–	–	–	–	–	52	55	98	141	242	225	385	450	207	264
5.5	–	–	–	–	–	60.6	68	115	167	279	285	445	535	254	326
6	–	–	–	–	–	66	80	132	197	312	340	500	620	302	386
6.5	–	–	–	–	–	73	92	145	220	340	400	545	690	352	449
7	–	–	–	–	–	77	103	159	249	367	435	590	750	404	515
7.5	–	–	–	–	–	80.6	113	175	276	391	470	660	815	471	590
8	–	–	–	–	–	85	120	190	300	420	515	725	890	556	680
9	–	–	–	–	–	–	–	–	–	–	595	820	970	784	894
10	–	–	–	–	–	–	–	–	–	–	650	940	1040	957	1140
11	–	–	–	–	–	–	–	–	–	–	710	1050	1120	1100	1250
12	–	–	–	–	–	–	–	–	–	–	765	1185	1200	1260	1400
13	–	–	–	–	–	–	–	–	–	–	–	–	1320	1420	1560
14	–	–	–	–	–	–	–	–	–	–	–	–	1370	1610	1730
15	–	–	–	–	–	–	–	–	–	–	–	–	1400	1760	1940
16	–	–	–	–	–	–	–	–	–	–	–	–	1450	1870	2140
17	–	–	–	–	–	–	–	–	–	–	–	–	–	1960	2280
18	–	–	–	–	–	–	–	–	–	–	–	–	–	2040	2410
19	–	–	–	–	–	–	–	–	–	–	–	–	–	2130	2530
20	–	–	–	–	–	–	–	–	–	–	–	–	–	2200	2630
21	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2710
22	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2780

For example

DN25 balancing valve setting, required flow rate 1.8 m³/h, pressure drop 20Kpa.

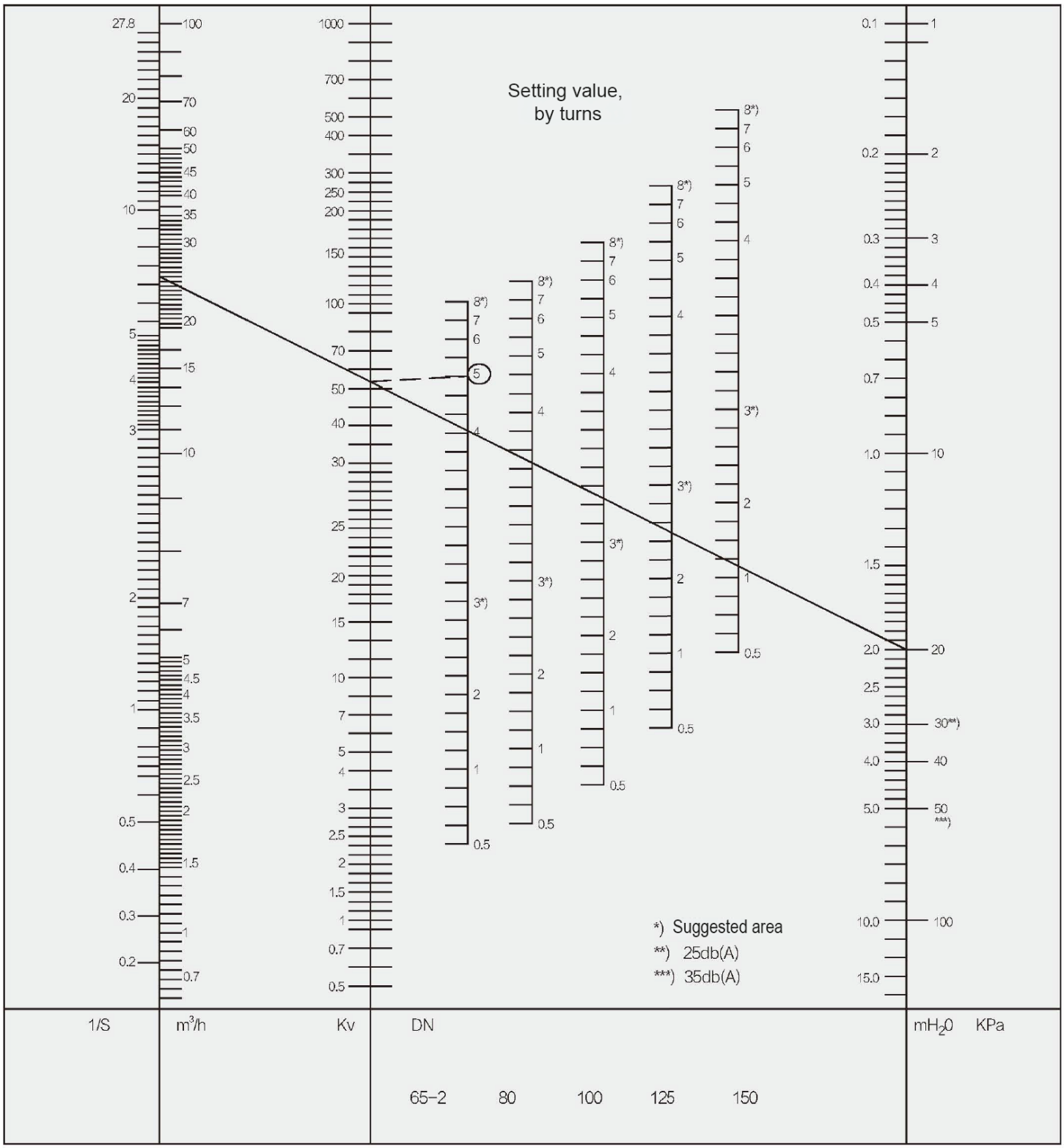
Solution:
Connecting the two points (1.8 m³/h, 20 kPa) on the line graph to get Kv = 4, then horizontally match the DN 25 line to find the opening of approximately 2.1 turns.

Note:
If the flow rate exceeds the scale range, you can convert the reading by using Kv values multiplied by 10 (or divided by 10) for calculation.

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LINE GRAPH DN65 - 150

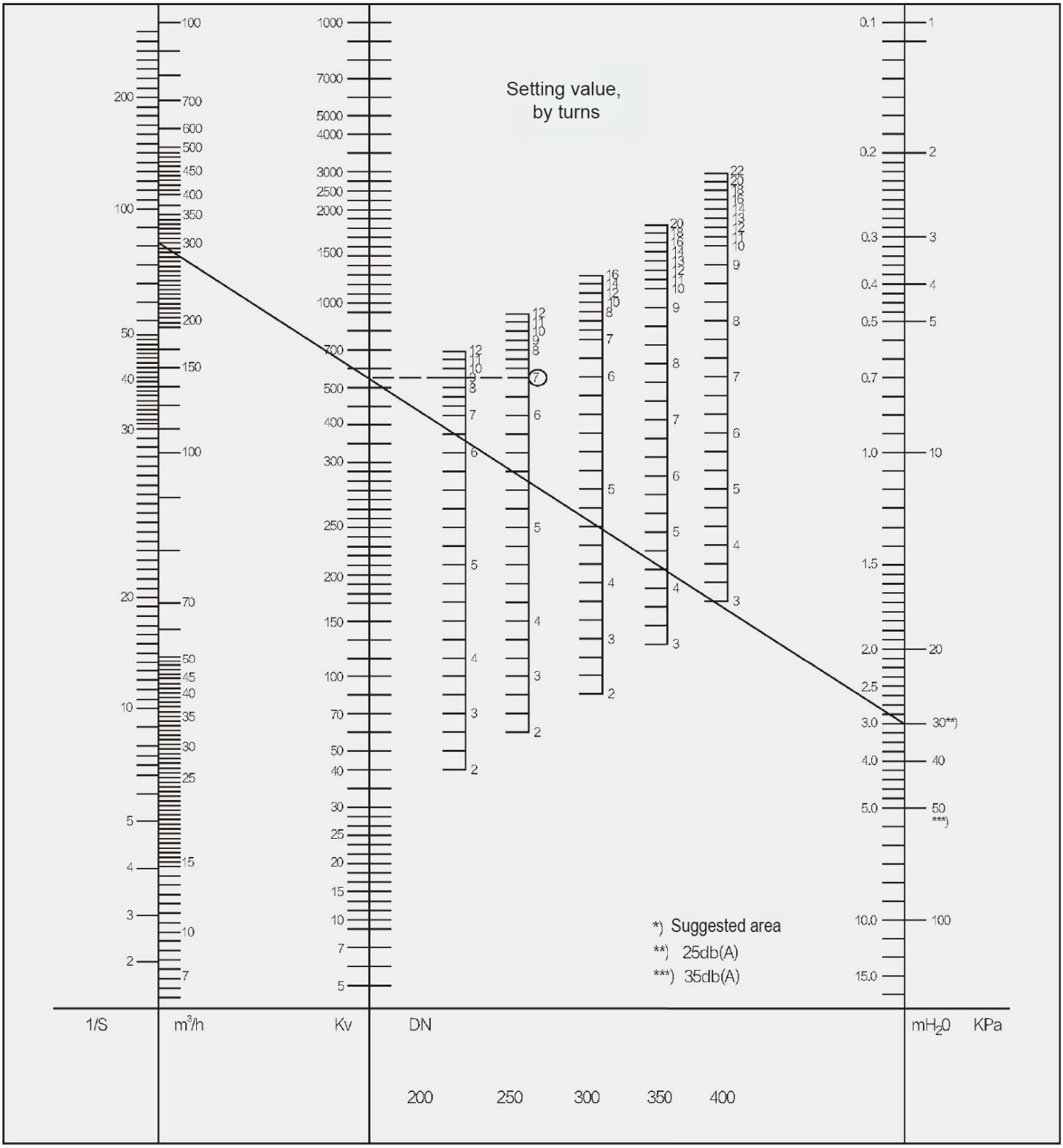
DN 65-150



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LINE GRAPH DN200 - 400

DN 200-400



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