

Kombi-F V4SV Series

Flanged Static Balancing Valve

Product Specifications



Features

- Simplified pipe design and calculation
- Quick and easy installation
- Easy to measure and regulate water flowrate in site by the measuring computer
- Easy to measure differential pressure in site
- Balancing through stroke limitation with digital presetting and visible presetting display
- Equipped with both pressure test cocks for differential pressure measurement
- Non rising hand wheel for convenience operation
- Stroke limitation-screw protected by protection cap.
- Valve stem made of stainless steel SS416
- Cast iron body with corrosion resistant painting of epoxy powder

Application

Honeywell V4SV series flanged static balancing valve is a key hydraulic balance product used for precise flow regulating of water pipelines system in HVAC application to ensure static hydraulic balance across whole water system.

Honeywell V4SV series can ensure the actual flow of each terminal equipment and pipeline in line with the design flow in the phase of system initial commissioning by site commissioning with flow measuring computer.

Honeywell V4SV series are widely used in main pipes, branch pipes and terminal equipment pipelines in HVAC water system, it also can be used in other application with the same function requirement.

Honeywell V4SV series flanged static balancing valve is a two-way manual, high accuracy flow regulating valve, with the dimensions of DN65~DN350, which is composed of valve housing, valve seat, test cocks, handwheel and stroke indicator, etc.

Specifications

- **Size Range:** DN65 ~ DN350
- **Flow precision:** 5%
- **Pressure Rating:** PN16 $\frac{1.6}{1.6}$ MPa
- **End Connections:** Flange ISO7005-2
- **Medium:** Water, water-glycol mixture
- **Media Temperature:** -10 ~ 120°C
- **Material:** body of cast iron GG25, epoxy coated
stem of stainless steel SS416
disc of stainless steel SS410/SS304
test cocks of brass
seat sealing of EPDM
handwheel of ductile cast iron GGG40
stroke display of ABS plastic
- **Ambient Temperature:** 0 ~ 65°C
- **Shipping&Storage Temperature:** -40 ~ 65°C
- **Atmosphere:** non-corrosive, non-explosive

Dimensions and Ordering information

DN	Kvs Value	L	H	D	K	n × d	Weight kg	OS-No.
65	74.4	290	365	185	145	4 × 19	19.5	V4SV065
80	111	310	395	200	160	8 × 19	24.3	V4SV080
100	165	350	430	220	180	8 × 19	34.5	V4SV100
125	242	400	495	250	210	8 × 19	54.3	V4SV125
150	372	480	530	285	240	8 × 23	70.7	V4SV150
200	704	600	665	340	295	12 × 23	146	V4SV200
250	812	730	600	405	355	12 × 28	265	V4SV250
300	1380	850	685	460	410	12 × 28	360	V4SV300
350	1651	980	775	520	470	16 × 28	535	V4SV350

Note: All dimensions in mm unless stated otherwise.

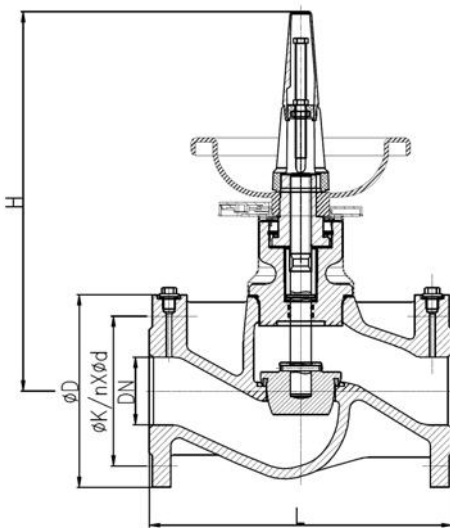


Fig.1 V4SV DN65-DN80

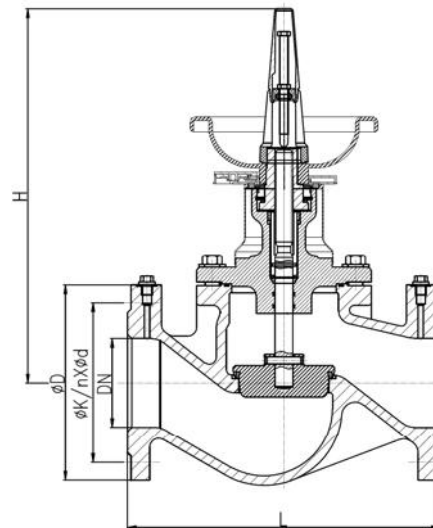


Fig.2 V4SV DN100-DN200

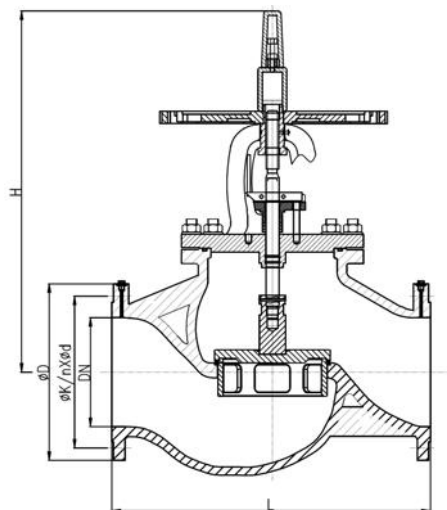
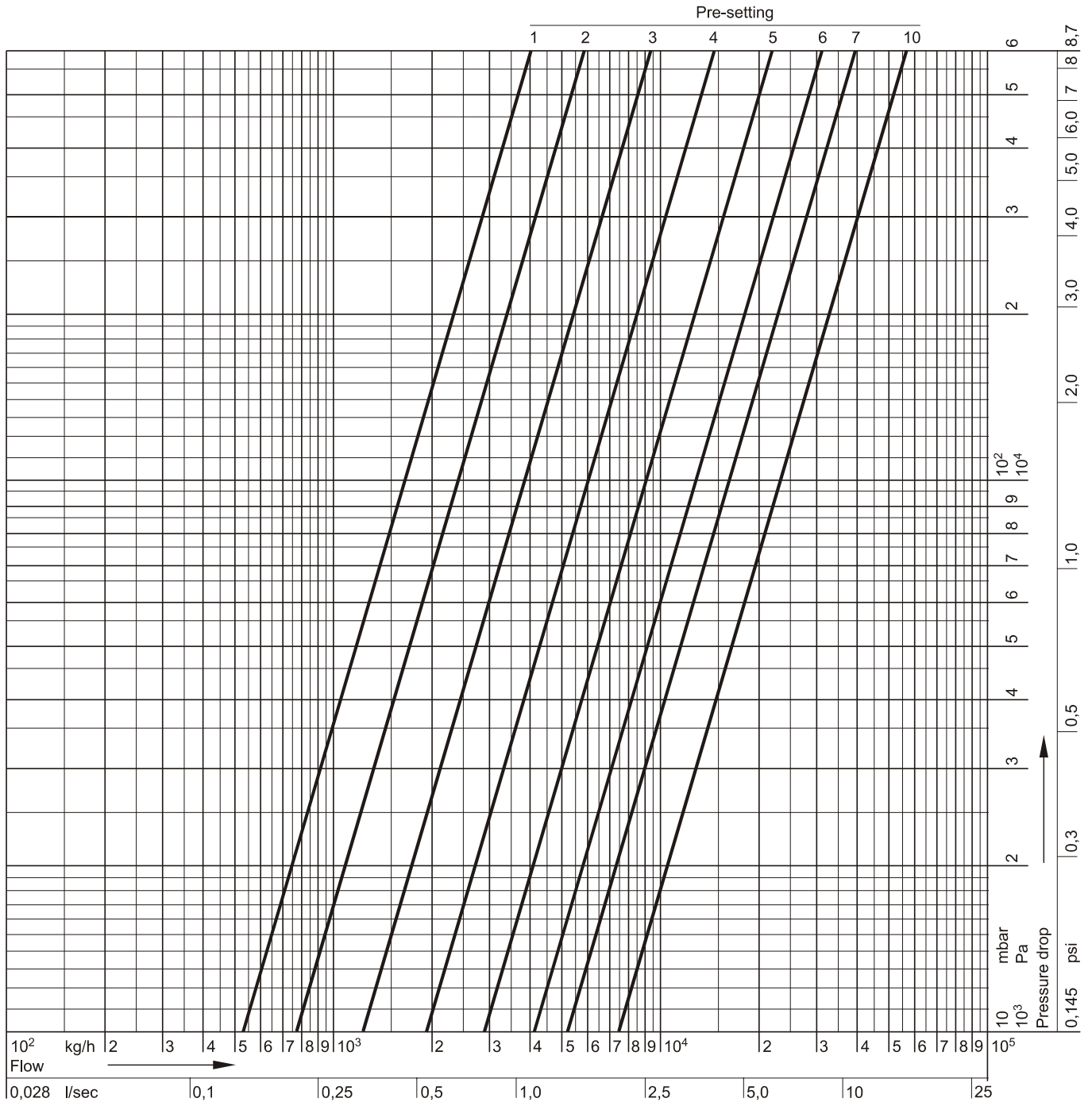


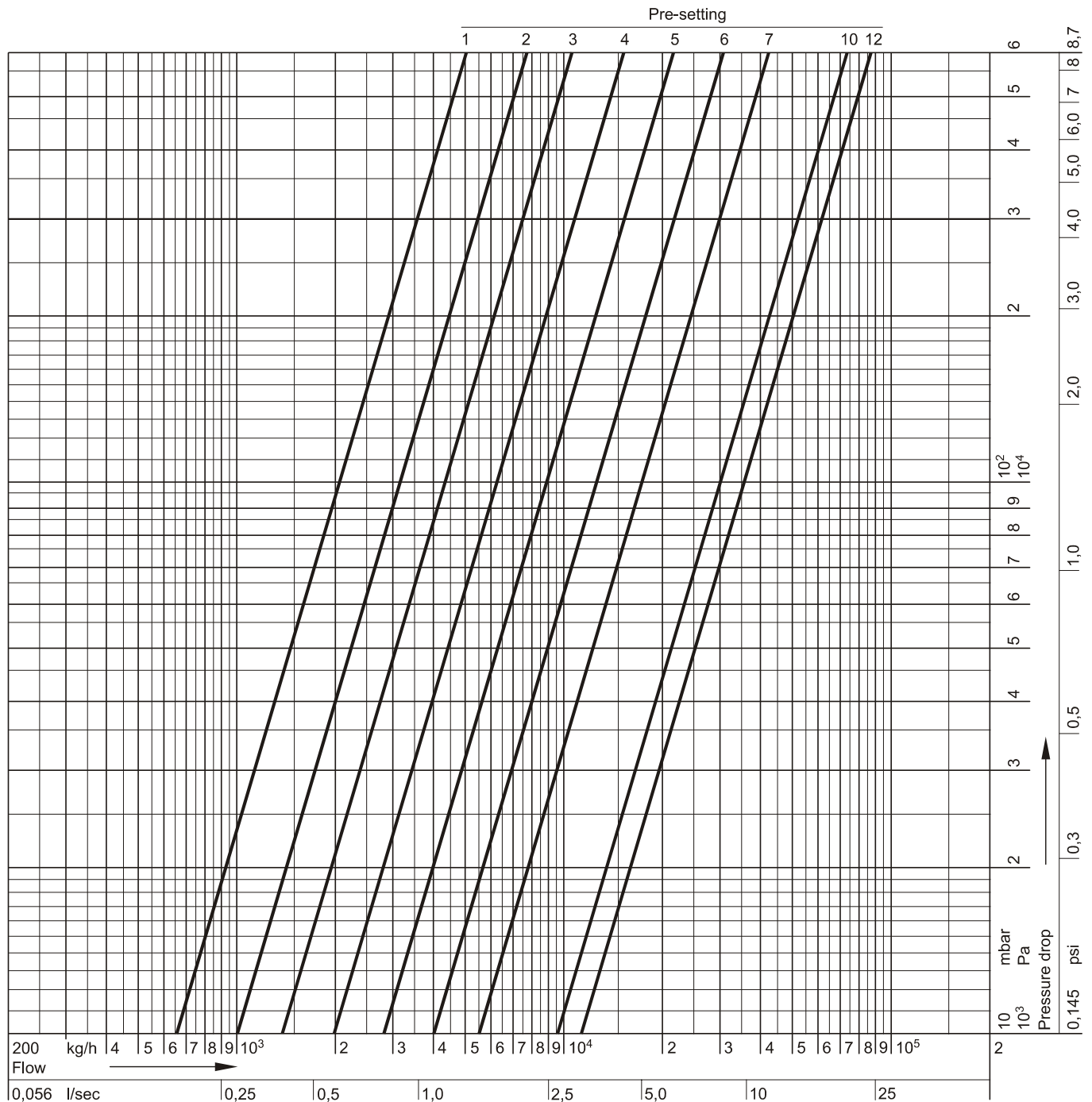
Fig.3 V4SV DN250-DN350

Flow Data V4SV Kombi-F, DN65



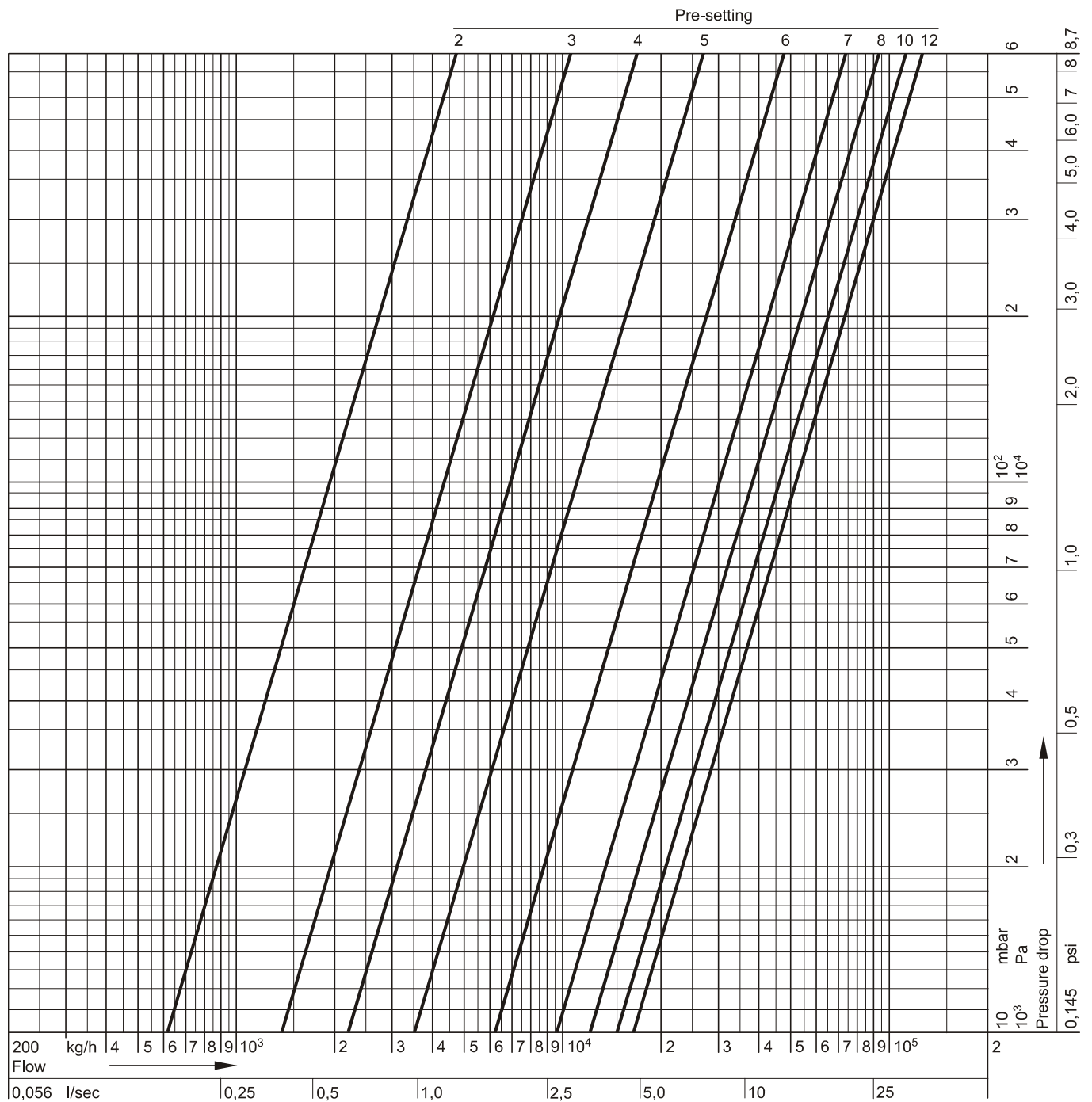
Pre-setting	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.0	9.0	10.0 = open
k_v -value	2.98	5.30	6.64	7.80	9.60	12.1	15.2	19.0	23.6	29.1	35.2	41.3	47.0	52.1	60.7	67.9	$k_{vs} = 74.4$
cv-value	3.49	6.20	7.77	9.13	11.2	14.2	17.8	22.2	27.6	34.0	41.2	48.3	55.0	61.0	71.0	79.4	87.0

Flow Data V4SV Kombi-F, DN80



Pre-setting	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0 = open
k_v -value	3.65	6.60	8.52	10.0	11.7	13.7	16.1	19.2	23.2	28.1	40.4	55.4	70.9	84.8	96.1	104	$k_{vs} = 111$
cv-value	4.27	7.72	9.97	11.7	13.7	16.0	18.8	22.5	27.1	32.9	47.3	64.8	83.0	99.2	112	122	130

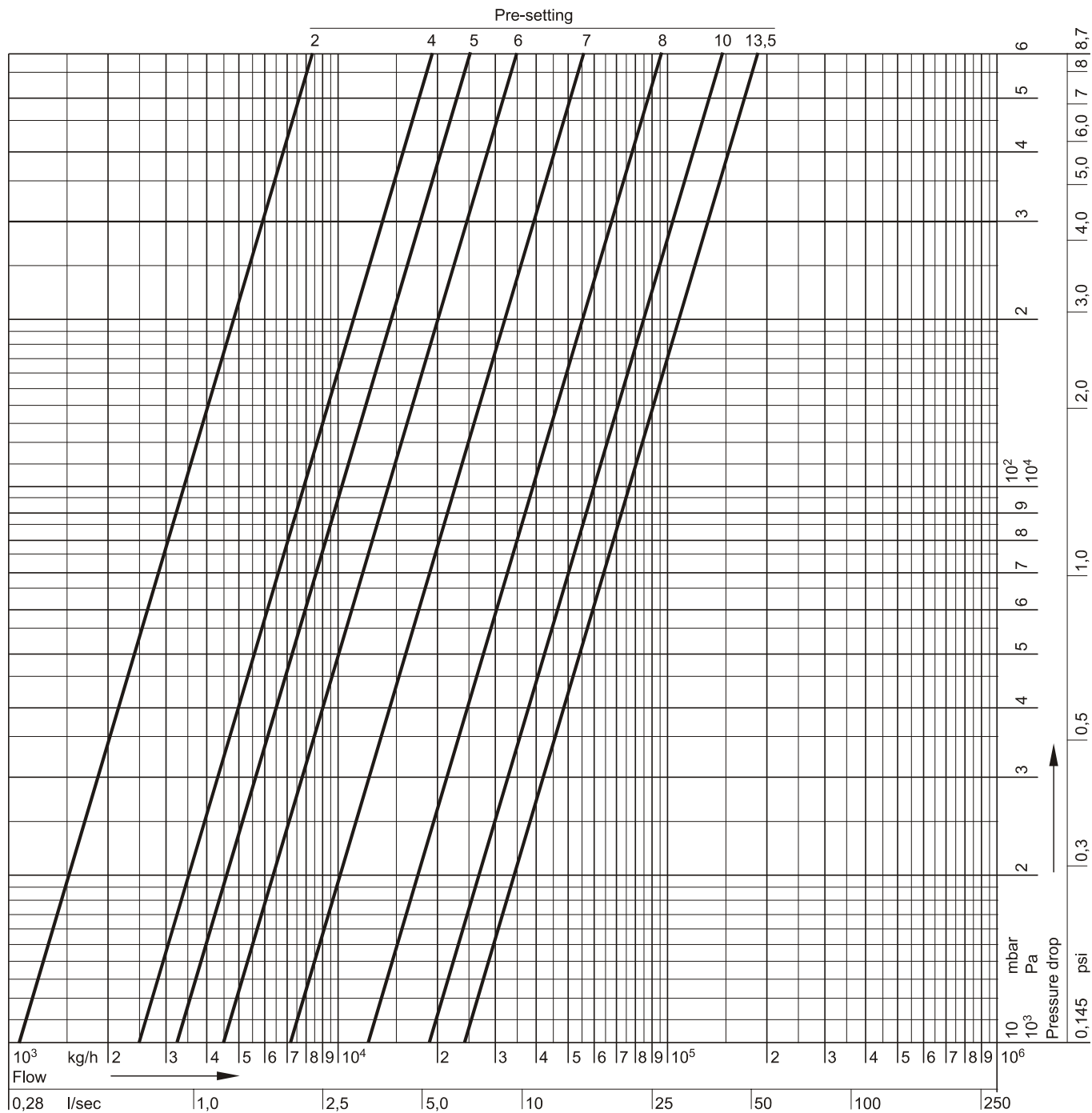
Flow Data V4SV Kombi-F, DN100



Pre-setting	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	9.0
k_v -value	3.80	6.20	9.60	13.4	17.3	21.8	27.6	35.7	47.2	62.4	79.3	96.6	110	121	137
cv-value	4.45	7.25	11.2	15.7	20.2	25.5	32.3	41.8	55.2	73.0	92.8	113	129	142	160

Pre-setting	10.0	11.0	12.0 = open
k_v -value	148	157	$k_{vs} = 165$
cv-value	173	184	193

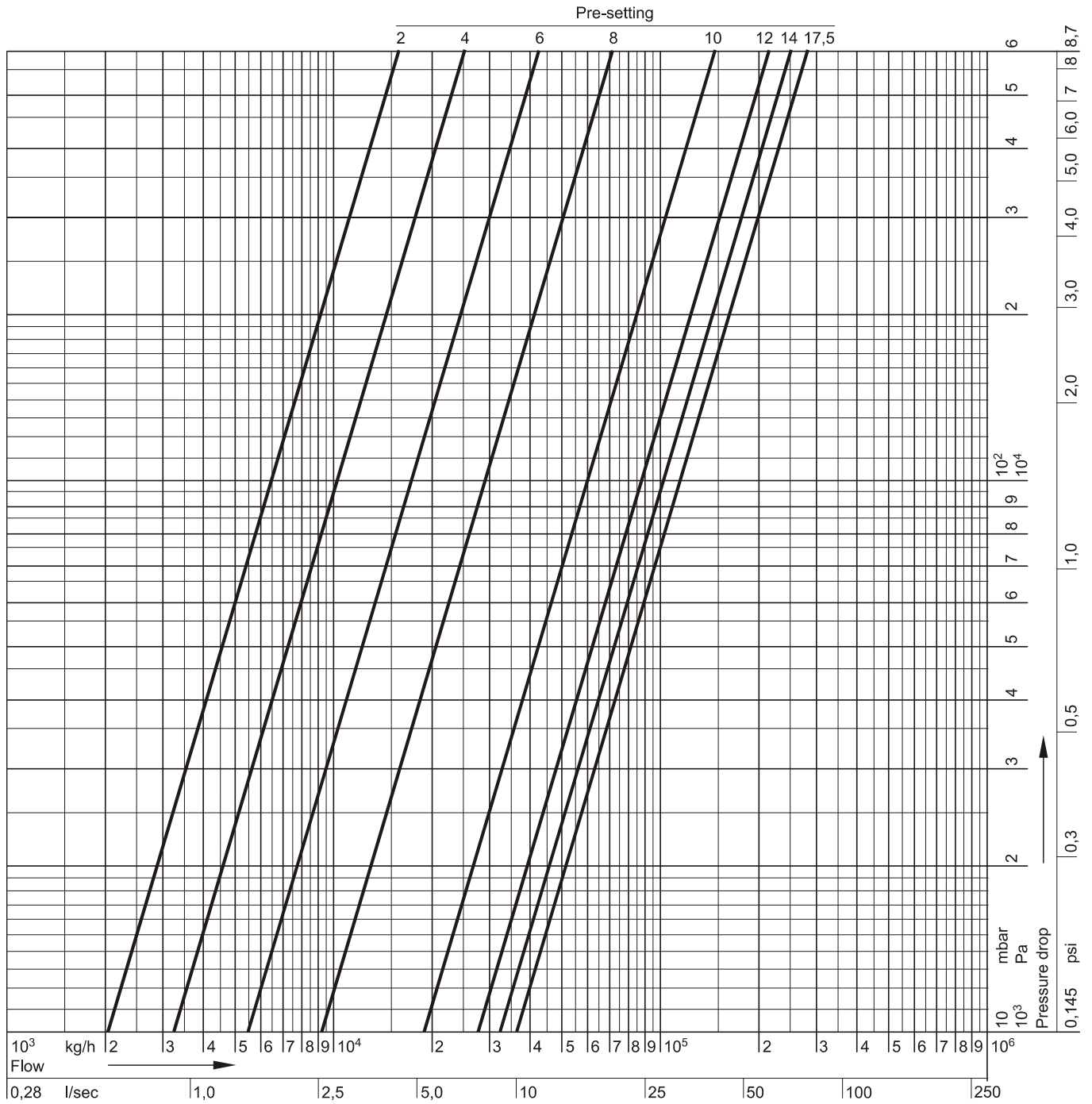
Flow Data V4SV Kombi-F, DN125



Pre-setting	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	9.0
k _v -value	8.30	11.3	14.4	17.7	21.1	24.6	28.2	32.3	37.4	44.9	56.1	72.5	93.2	120	162
cv-value	9.71	13.2	16.8	20.7	24.7	28.8	33.0	37.8	43.8	52.5	65.6	84.8	109	140	190

Pre-setting	10.0	11.0	12.0	13.0	13.5 = open
k _v -value	192	211	225	236	k _{vs} = 242
cv-value	225	247	263	276	283

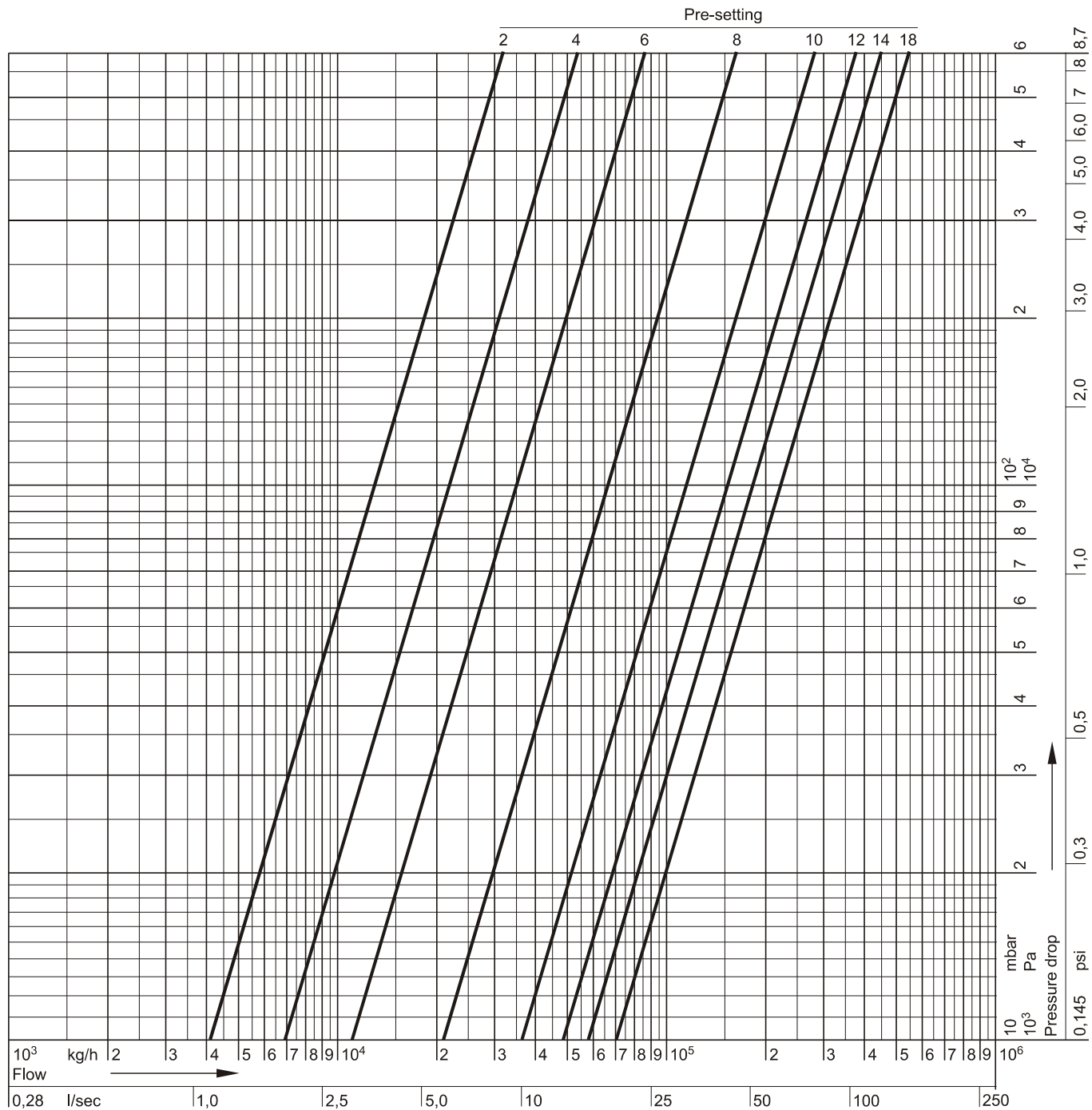
Flow Data V4SV Kombi-F, DN150



Pre-setting	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	9.0
k_v -value	16.2	20.4	23.8	26.7	29.5	33.0	37.6	42.3	48.0	54.5	61.5	69.6	80.0	92.9	136
cv-value	19.0	23.9	27.8	31.2	34.5	38.6	44.0	49.5	56.2	63.8	72.0	81.4	93.6	109	159

Pre-setting	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	17.5 = open
k_v -value	193	240	274	300	320	337	352	365	$k_{vs} = 372$
cv-value	226	281	321	351	374	394	412	427	435

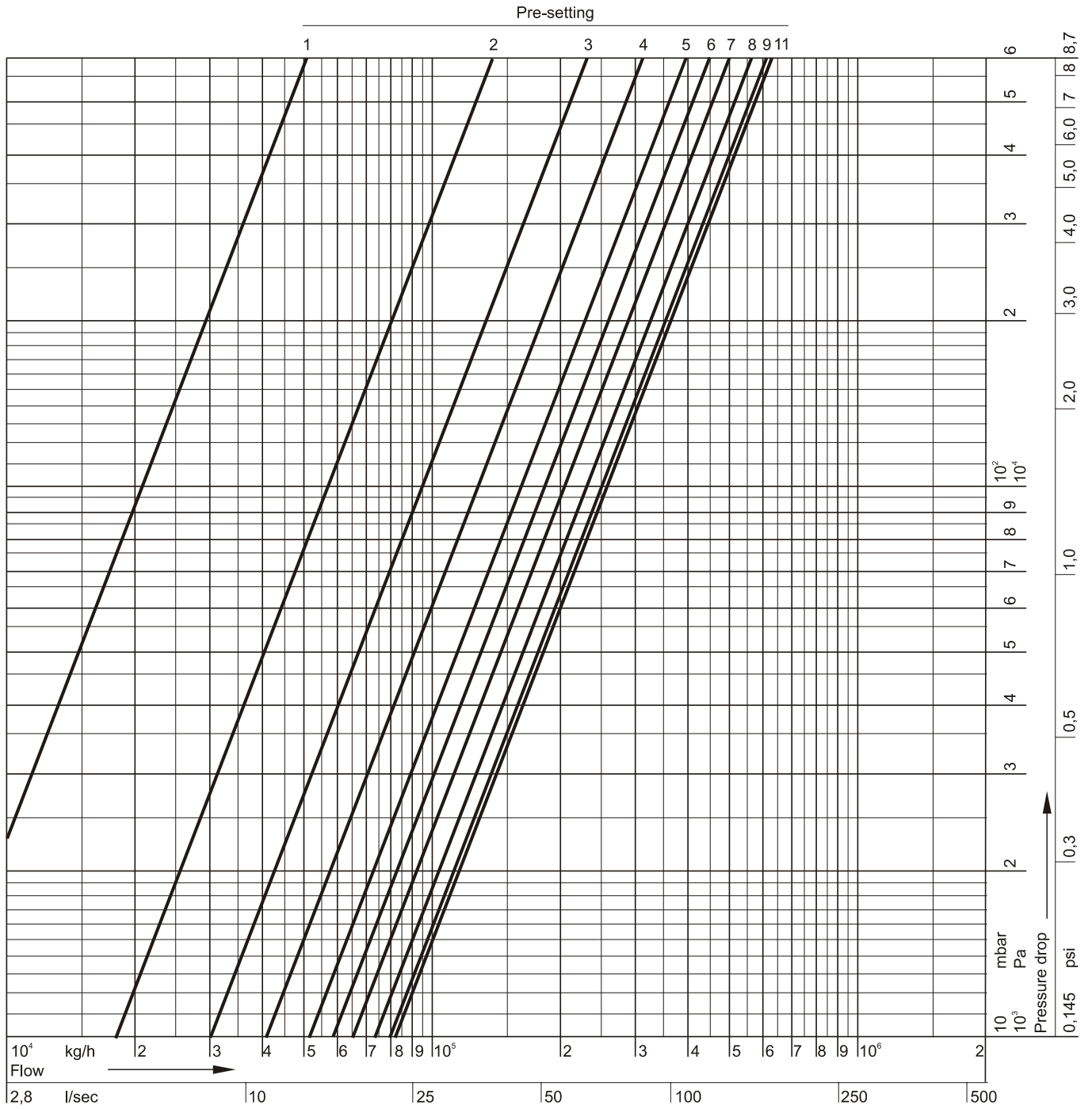
Flow Data V4SV Kombi-F, DN200



Pre-setting	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	9.0
k_v -value	32.5	41.3	48.9	55.5	62.1	69.3	77.8	88.1	101	115	133	154	179	208	284
cv-value	38.0	48.3	57.2	64.9	72.7	81.1	91.0	103	118	135	156	180	209	243	332

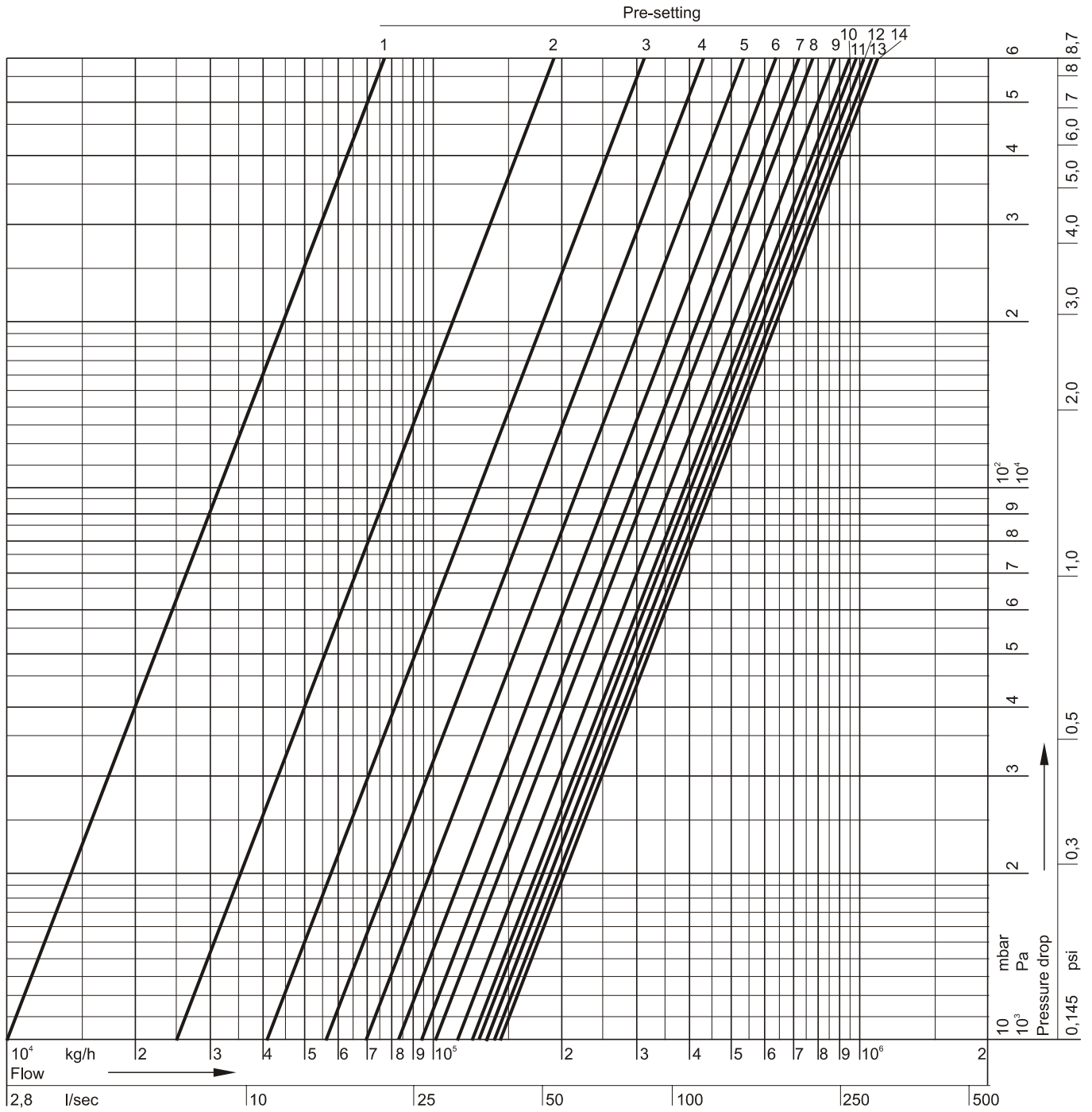
Pre-setting	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0 = open
k_v -value	364	435	489	537	575	613	646	677	$k_{vs} = 704$
cv-value	426	509	572	628	673	717	756	792	824

Flow Data V4SV Kombi-F, DN250



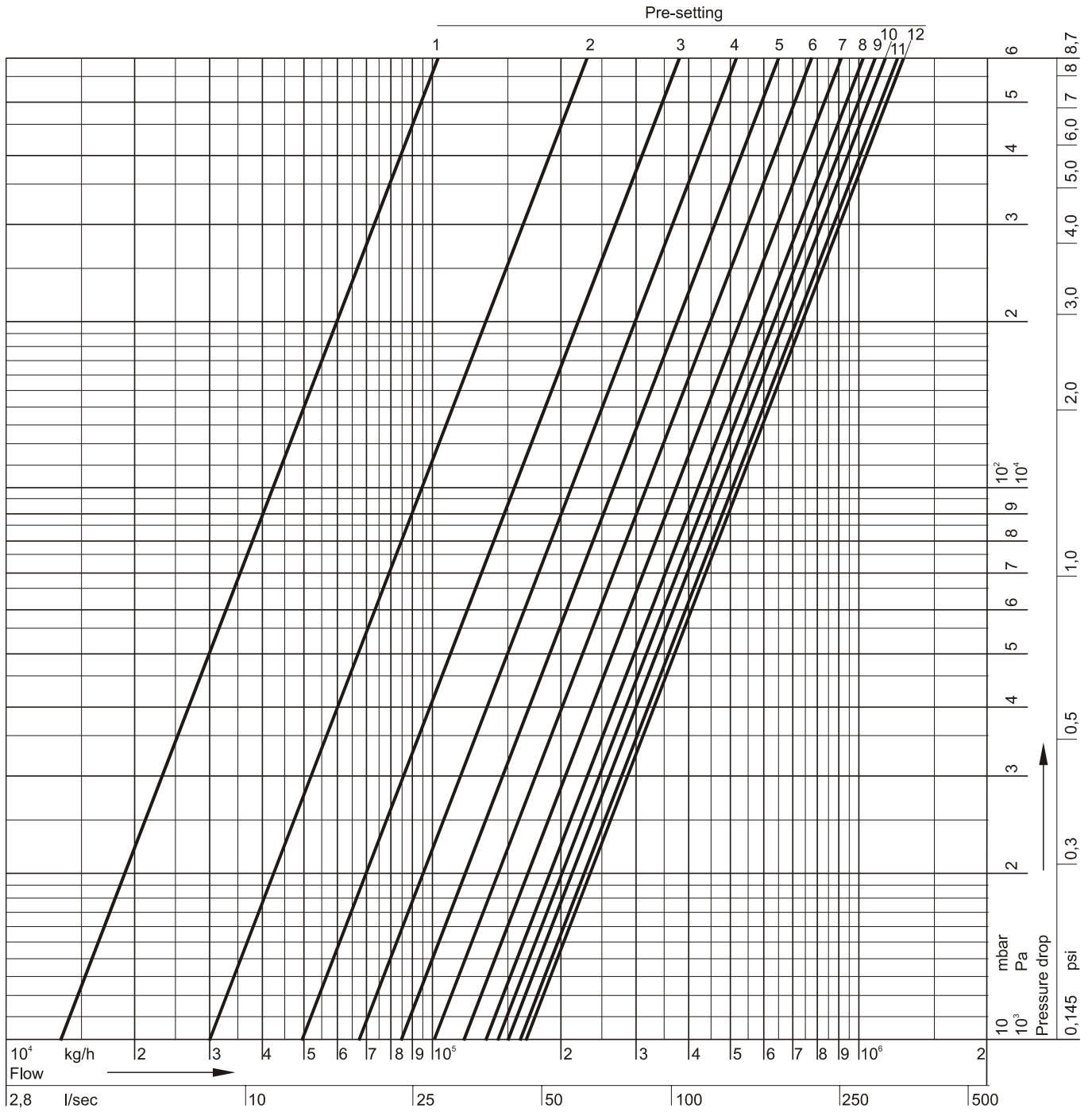
Pre-setting	1	2	3	4	5	6	7	8	9	11.0 = open
k _v -value	66	178	297	410	514	587	649	731	800	k _{vs} = 812
cv-value	77	208	347	480	601	687	759	855	936	950

Flow Data V4SV Kombi-F, DN300



Pre-setting	1	2	3	4	5	6	7	8	9	10	11	12	13	14.0 = open
k_v -value	109	248	411	560	696	825	944	1044	1138	1226	1291	1324	1345	$k_{vs} = 1380$
cv-value	128	290	481	655	814	965	1104	1221	1331	1434	1510	1549	1573	1615

Flow Data V4SV Kombi-F, DN350



Pre-setting	1	2	3	4	5	6	7	8	9	10	11	12.0 = open
k_v -value	128	300	495	677	851	1019	1163	1272	1386	1513	1606	$k_{vs} = 1651$
cv-value	150	351	579	792	996	1192	1361	1488	1622	1770	1879	1932

Installation

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service person.
4. Always conduct a thorough checkout when installation is completed.

IMPORTANT:

5. For trouble-free operation of the product, good installation practice must include initial system flushing, chemical water treatment and the use of a 50 micron (or finer) system side stream filter(s). Remove all filters before flushing.

6. Suggest using a tentative pipe to do the initial system flushing. Then plumb the valve in the piping.
7. Do not use boiler additives, solder flux and wetted materials which are petroleum based or contain mineral oil, hydrocarbons, or ethylene glycol acetate. Compounds which can be used, with minimum 50% water dilution, are diethylene glycol, ethylene glycol, and propylene glycol (antifreeze solutions).
8. The valve may be installed with flow direction same as the arrow on the valve body. Wrong installation will lead to hydronic system paralysis.
9. A pair of test cocks attached in the packing case. Make sure it should be installed before initial commissioning and flushing. Make sure it isn't damaged after installation.

Accessories

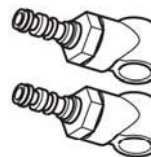
Measuring Equipment

'BasicMES' handheld measuring Computer



230V, 0-10bar
VM241A1002
 Computer is supplied with case and accessories

Set of 2 measuring adapters



for all dimensions

VA3600A008

Spare Parts

Spare set of 2 pressure test cocks G1/4"



for all dimensions

VA2600A008

Installation Example

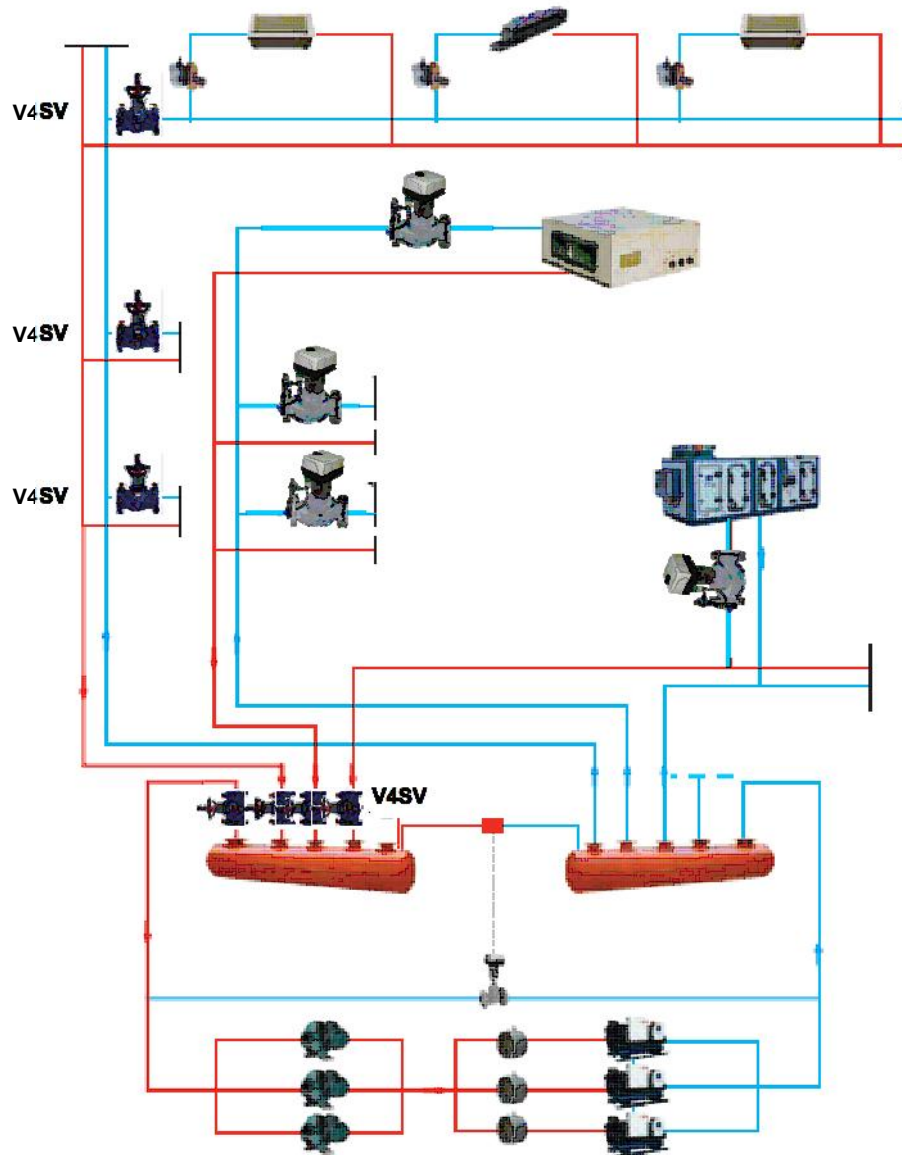


Fig. 4 V4SV in a HVAC cooling system

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Subject to change without notice.