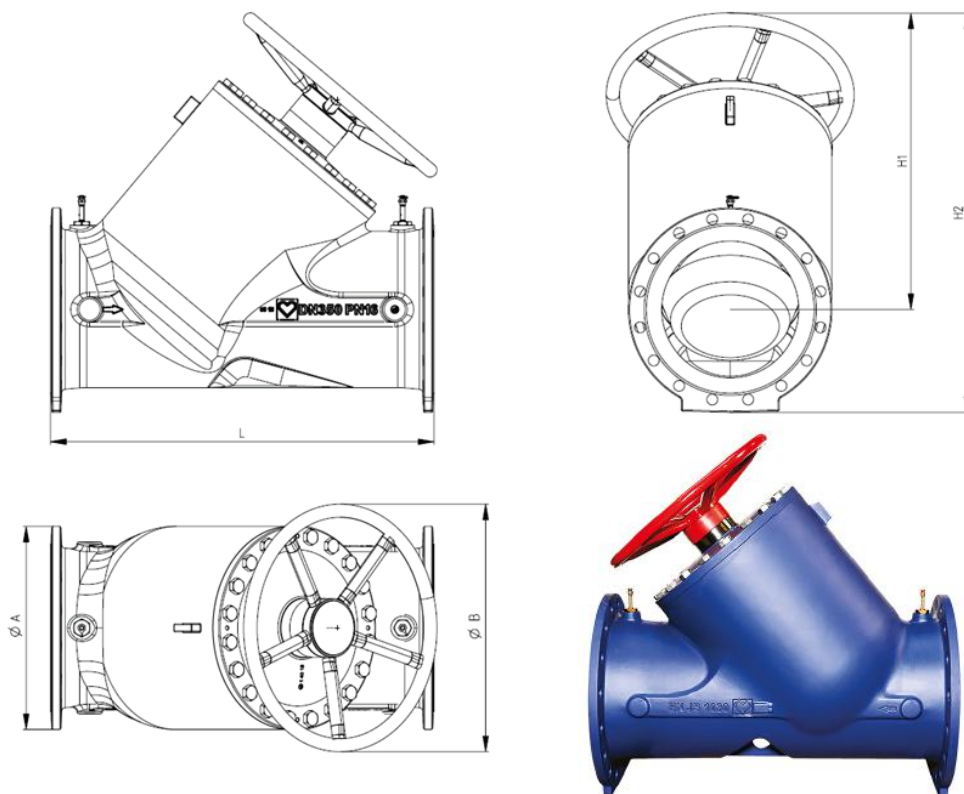


Commissioning valve STRÖMAX 4218 GF

Commissioning valve for differential pressure measurement in flanged design

Standard sheet 4218 GF / 4220 GF

☒ 4218 GF / 4220 GF with test points

☒ Dimensions in mm, order numbers

Order number	DN	PN	L	H1	H2	Ø A	Ø B	kg	flanged according to	kvs
1 4218 89	350	16	980	758	1021	520	634	536	EN 1092-2	2917,6
1 4220 89		25			1046	555		560		2917,6
1 4218 90	400	16	1100	805	1103	580		547		3854,8
1 4220 90		25			1124	620		611		3854,8
1 4218 92	500	16	1250	1051	1413	715	1034	968		5250,6
1 4220 92		25			1421	730		1109		5250,6

☒ Model

STRÖMAX GF double regulating and commissioning valve with measuring valves, DN 350-500, body nodular cast iron GJS 400-15 according to EN 1561, flange according to EN 1092, PN 16 or PN 25, blue enamel. Valve upper part nodular cast iron GJS 400-15, with non-rising spindle, spindle sealing by means of a triple O-ring. Presetting steps are displayed digitally.

☑ Transport

The valve must not be lifted by the handwheel !!!

The valve is delivered from the factory ready for installation. The handwheel and the two test points are not installed on delivery. To prevent possible contamination of the seat during storage and transport, the valve is closed. To avoid contamination during storage and transport, the flange cover must remain in place.

Storage: temperature -10°C to 50°C , humidity max. 70%

☑ Test points

Two test points 1 0284 XX and presetting marker 1 6517 05 are included. The position of the measuring valves is optional. This arrangement ensures the best accessibility and optimal connection of measuring devices in all installation positions.

☑ Drilling size

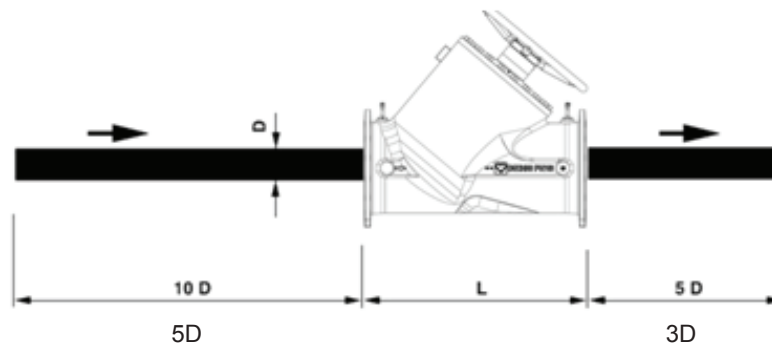
Pipe thread 1/4, for mounting measuring valves.

☑ Application

For hydraulic balancing in heating or cooling systems, regulating and shutting off distribution circuits, heat exchangers, heating and cooling terminals.

☑ Installation

Any installation position. The direction of flow according to the arrow on the housing must be observed. The inlet section of 5x the pipe diameter and the outlet section of 3x the pipe diameter must be observed.

**☑ Technical data****4218:**

Max. operation temperature: 110°C
Min. operation temperature: -10°C
Max. operation pressure: 16 bar

4220:

Max. operation temperature: 110°C
Min. operation temperature: -10°C
Max. operation pressure: 25 bar

Heating water quality according to ÖNORM H 5195 or VDI guideline 2035. Ethylene and propylene glycol can be used in a ratio of 25-50 vol. [%] are mixed.

☑ Material

Upper part	Ductile iron EN-GJS-400-15
Body	Ductile iron EN-GJS-400-15
Spindle	Stainless steel
Regulating spindle	Stainless steel
Valve cone	Ductile iron EN-GJS-400-15 according to EN 1561 / EPDM coated
Counter	Plastic material
O-Ring	EPDM

☑ Coated

Base coating based on alkyd hair (resin primer) and contains lead and chromate corrosion protection. Surface coating with epoxy resin. Solvent content is less than accepted in the VOC Plant Ordinance in 2002.

Gloss: matt

Dry film thickness: ~ 100 microns

☑ Constructive peculiarities**Flow direction**

When installing, observe the direction of flow according to the arrow on the housing.

Mounting position

The non-rising valve spindle is arranged at an angle to the valve axis and thus offers optimal accessibility and easy handling in every position.

Triple O-ring

The maintenance-free triple O-ring seal ensures permanent, secure sealing of the valve spindle and smooth operation of the valve.

Seal between upper part and housing (EPDM)

The temperature-resistant and permanently elastic soft seal is corrosion-resistant and allows low closing forces.

☑ Differential pressure measurement

The STRÖMAX GF double regulating and commissioning valve is equipped with two measuring valves: It is possible to measure the differential pressure with suitable measuring devices and to determine the flow rate accordingly.

☑ Mass flow tolerances

The maximum deviation of the mass flow from the characteristic curve of control valves according to VDI guidelines.

☑ Preset

The valve is delivered in the closed position. The presetting allows the maximum possible stroke. The handwheel mechanism is set so that the digital display shows 0.0 when the valve is closed.

☑ Adjustment and fixation**Presetting process**

1. Set the required presetting level according to the calculation (digital display on the handwheel)
 2. 1/10 of the revolution are the red numbers and the whole revolution are the blue numbers.
 3. The presetting spindle is located under the cover in the handwheel. The spindle can be adjusted with an 8mm screwdriver. To preset, turn it counterclockwise as far as it will go. The valve is now able to close and open the preset position. Replace the cover on the handwheel
 4. The preset marker (1 6517 05) is attached as a tag over the valve or pipe. The setting of the respective valve is marked by cutting off or breaking off the teeth on the figures for full and partial turns. This allows you to review and / or restore the original preset made during system setup after maintenance without relying on documentation.
- The flow rate is set with a measuring device using the flow charts. Please observe the operating instructions for the measuring device.

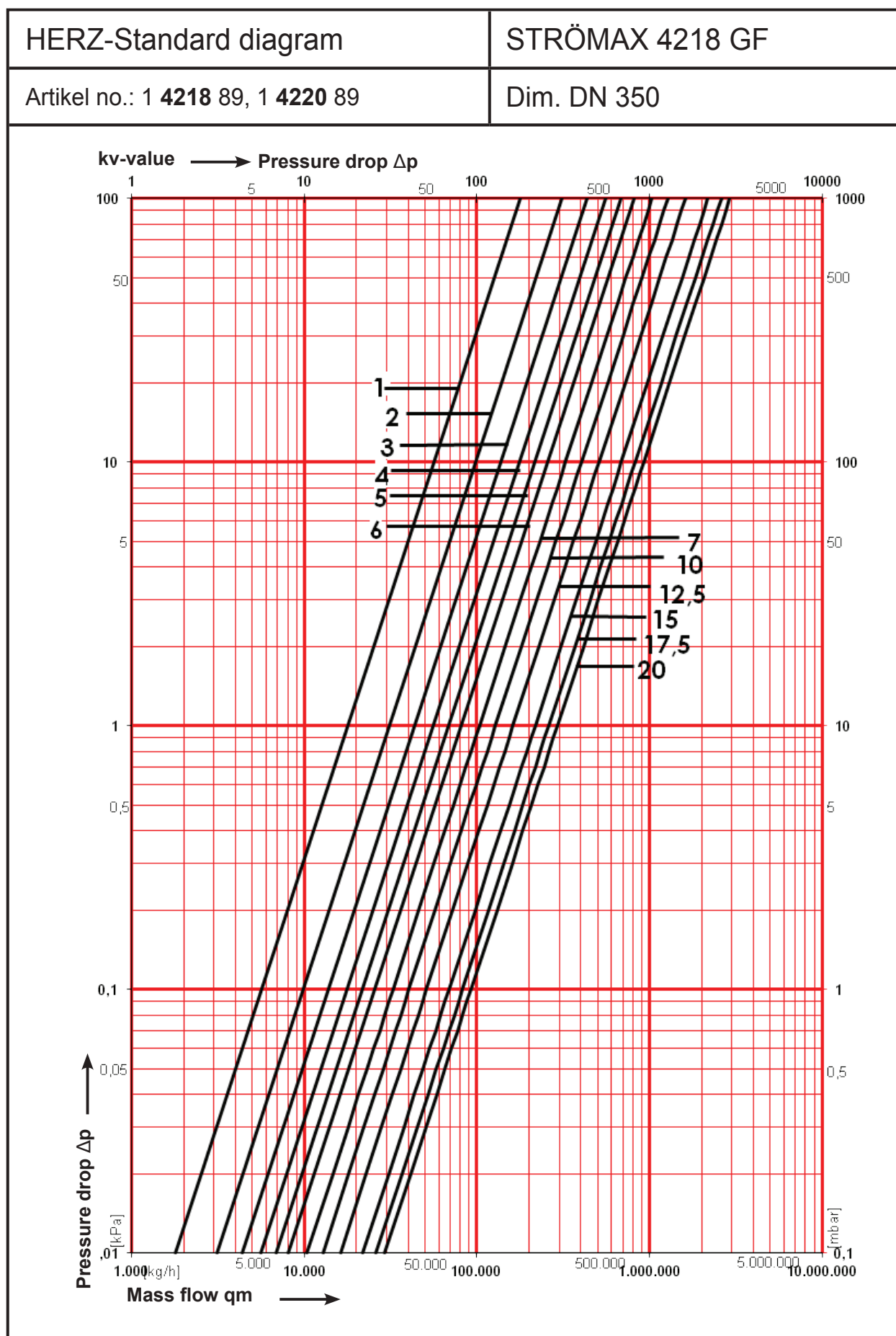
☑ Digital display, factory settings

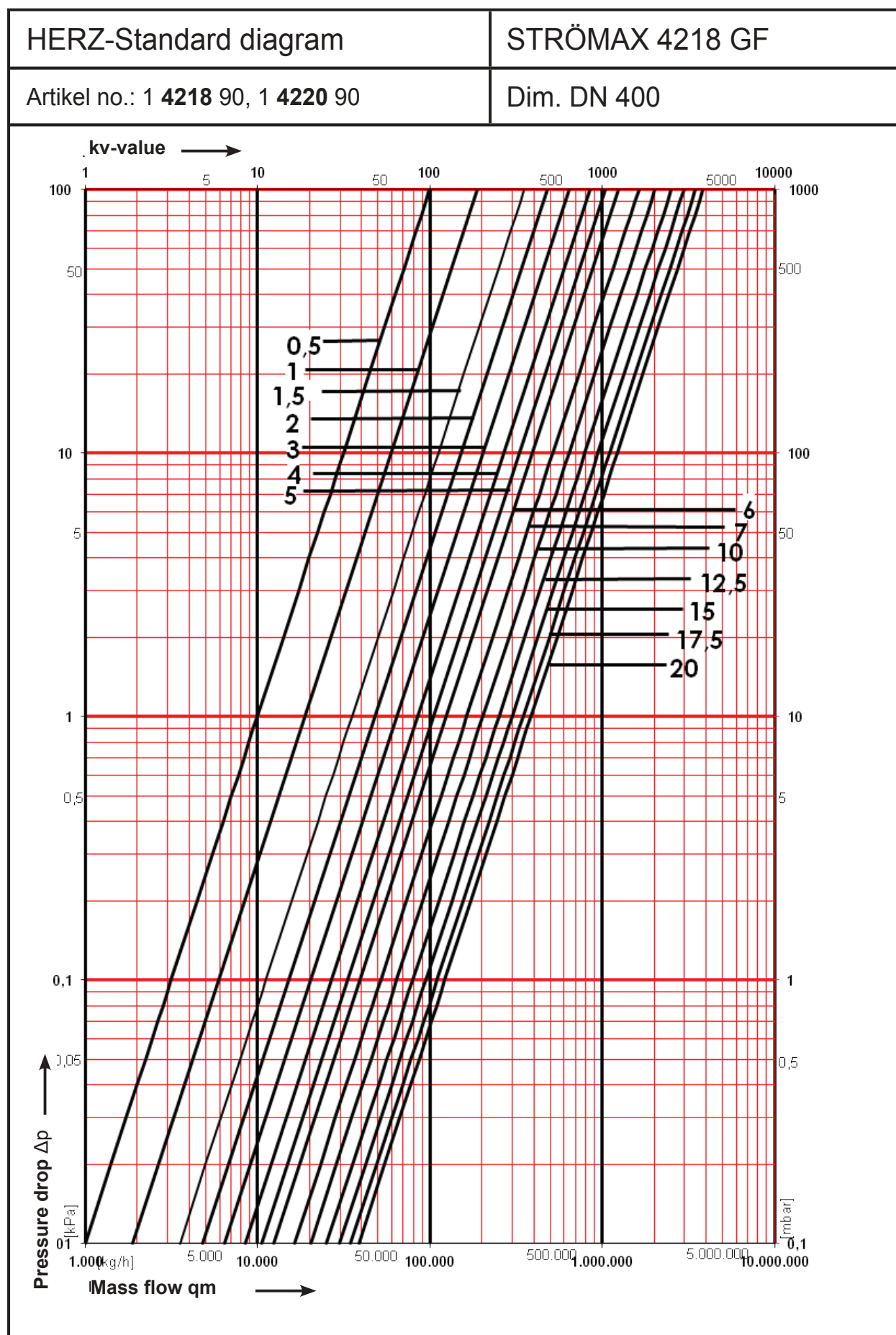
When the valve is closed, 0.0 is shown on the digital display. If you have to remove the complete handwheel (rotary handle, number wheels, base plate), do this as follows:

1. Adjust the complete upper part and fasten the three Allen screws and the four hexagon screws
2. Close the valve clockwise.
3. If the digital display shows 0.0, it is correct.
4. You can then mount the handwheel on the spindle
5. Screw in the handwheel fastening screw
6. The valve can now be set to the desired position.

☑ Equipment

1 6517 05	Presetting flag
1 0284 01	Test point, blue
1 0284 02	Test point, red



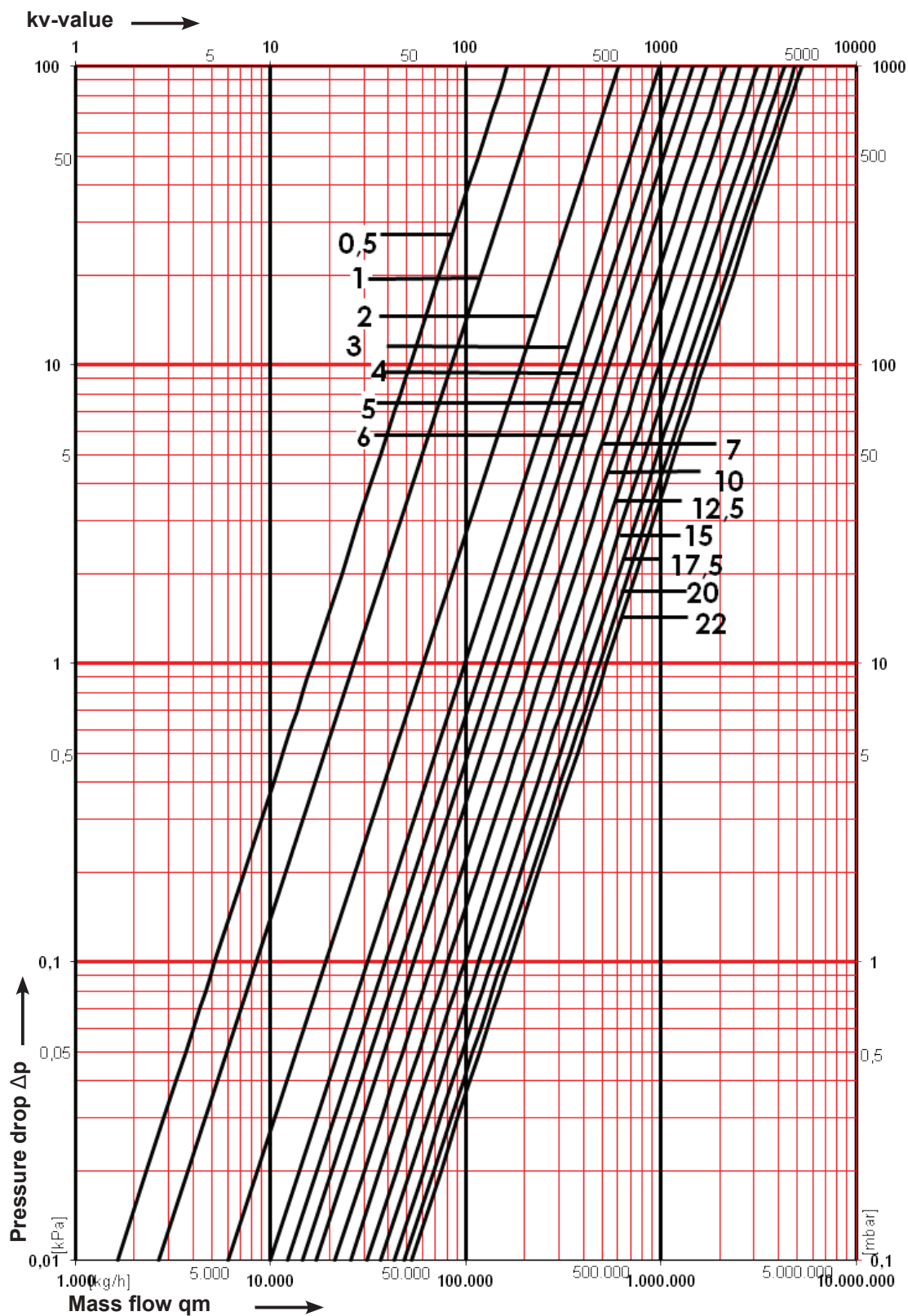


HERZ-Standard diagram

STRÖMAX 4218 GF

Artikel no.: 1 4218 92, 1 4220 92

Dim. DN 500



DN	350		400		500	
Kvs	2917,6		3854,8		5250,6	
Pos.	kv [m³/h]	Oppening [%]	kv [m³/h]	Oppening [%]	kv [m³/h]	Oppening [%]
0,5	-	-	99,4	6%	163,1	2%
1,0	178,0	5%	187,2	9%	265,5	5%
1,5	266,6	8%	352,3	11%	409,0	7%
2,0	311,3	10%	476,5	14%	605,2	9%
2,5	374,9	13%	549,0	16%	840,9	11%
3,0	434,1	15%	644,9	18%	986,7	14%
3,5	500,0	18%	740,4	21%	1149,1	16%
4,0	559,9	20%	844,5	23%	1222,6	18%
4,5	627,4	23%	945,0	26%	1453,5	20%
5,0	686,1	25%	1046,2	28%	1455,8	23%
5,5	749,0	28%	1155,0	31%	1639,6	25%
6,0	808,4	30%	1242,8	33%	1702,5	27%
6,5	872,4	33%	1319,5	35%	1839,2	30%
7,0	921,3	35%	1436,9	38%	1919,7	32%
7,5	991,3	38%	1498,6	40%	2022,8	34%
8,0	1030,5	40%	1629,8	43%	2124,2	36%
8,5	1102,5	42%	1692,3	45%	2221,1	38%
9,0	1146,4	45%	1826,3	47%	2341,6	41%
9,5	1211,8	47%	1915,0	50%	2429,9	43%
10,0	1276,8	50%	2022,9	52%	2556,3	45%
10,5	1327,9	52%	2165,9	55%	2653,1	47%
11,0	1421,4	55%	2220,7	57%	2776,9	50%
11,5	1459,9	57%	2443,9	59%	2880,5	52%
12,0	1585,3	60%	2415,9	62%	2993,2	55%
12,5	1614,5	62%	2742,3	64%	3106,3	57%
13,0	1783,8	65%	2612,5	67%	3214,2	59%
13,5	1800,9	67%	2707,1	69%	3328,0	62%
14,0	1987,2	70%	2798,9	71%	3421,5	64%
14,5	2012,5	72%	2900,6	74%	3539,0	66%
15,0	2173,5	75%	2985,9	76%	3676,5	68%
15,5	2231,3	77%	3090,4	79%	3772,8	71%
16,0	2354,8	80%	3186,0	81%	3919,9	73%
16,5	2442,6	82%	3281,9	83%	4024,7	75%
17,0	2458,4	85%	3363,9	86%	4164,2	77%
17,5	2603,1	87%	3467,7	88%	4281,3	79%
18,0	2608,4	90%	3542,3	91%	4393,9	82%
18,5	2738,9	92%	3649,1	94%	4525,7	84%
19,0	2758,2	95%	3714,4	96%	4603,6	86%
19,5	2862,9	97%	3823,3	99%	4741,4	88%
20,0	2917,6	100%	3854,8	100%	4849,6	91%
20,5					4962,1	93%
21,0					5080,3	95%
21,5					5189,5	97%
22,0					5250,6	100%

Due to different installation conditions in the laboratory and at the place of use, the table may contain deviations in the measurement results.