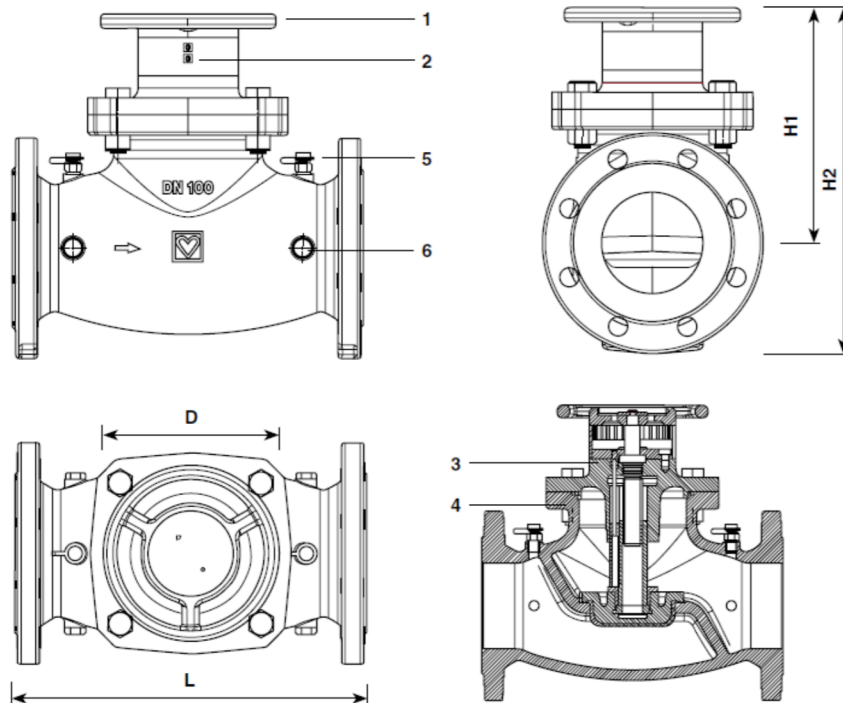


# Circuit regulating valve STRÖMAX 4218 GF

## Circuit Regulating Valve for Differential Pressure Measurement, flanged version, Screw-down model, with Test Points

Data sheet for 4218 GF, Issue 0920

4218 GF with test points



1. Hand wheel
2. Digital display of presetting
3. Upper part made of grey cast iron GJL 250
4. Body made of grey cast iron GJL 250
5. Test Points 1/4
6. Plugs 1/4

Flange dimension according  
to EN 1092-2

Order number	DN	PN	L	H1	H2	D	kvs	kg
1 4218 80	50	16	230	169	252	150	49	16,8
1 4218 81	65	16	290	186	280	150	75	23,6
1 4218 82	80	16	310	208	308	175	110	30
1 4218 83	100	16	350	235	345	175	165	38
1 4218 84	125	16	400	260	385	265	241	63
1 4218 85	150	16	480	308	451	265	372	88
1 4218 86	200	16	600	449	619	450	704	161
1 4218 87	250	16	730	503	705	450	812	256
1 4218 88	300	16	852	562	842	450	1383	383

**Models**

STRÖMAX-GF-circuit regulating valve with test points, DN 50 - 300 Screw-down model, grey cast iron body GJL 250 acc. EN 1561, flange acc. EN 1092, PN 16, blue enamel coating. Upper part grey cast iron GJL 250, with non-rising spindle, spindle seal by means of triple O-Ring. Presetting step is shown on the digital display.

☑ **Transportation**  
**Don't lift or carry the valve with the hand wheel!**

The valve is pre-finished ex factory delivered. To prevent the possible impurities on the seat during the storing and transportation the valve is closed. In order to avoid any fouling during storing and transportation, the flange covering must be fitted.

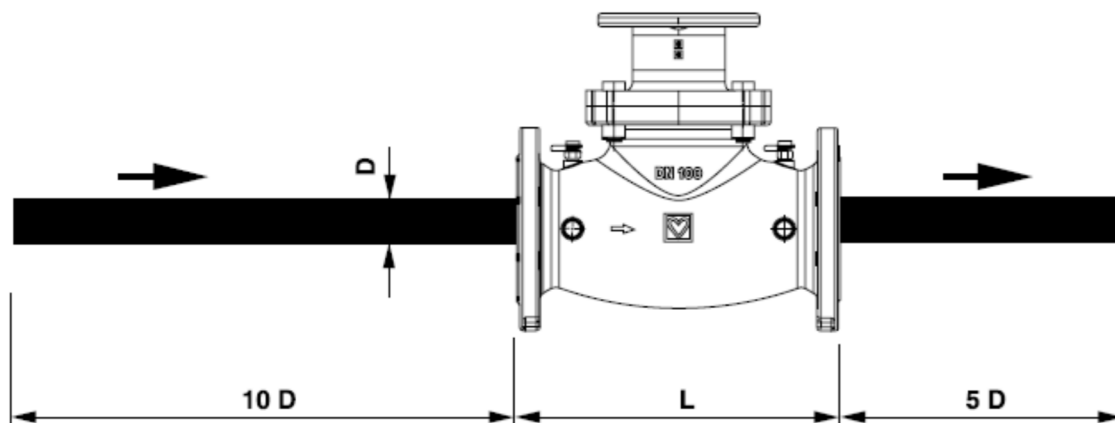
Storing: Temperature  $-10^{\circ}$  to  $+50^{\circ}$  °C, humidity max. 70%

☑ **Test points**  
 Two test points 1 **0284** and presetting marker 1 **6517 05** are included. Test points position optional. This alignment allows the best access in all kind of installations and optimal connection of measuring devices.

☑ **Bore size**  
 Pipe thread 1/4, for test points mounting

☑ **Field of application**  
 For hydraulic balancing in heating or cooling systems for isolating of manifolds, risers, heat exchangers, heating and cooling systems.

☑ **Mounting**  
 Mounting position optional. The flow direction according to the arrow marked on the valve body. It is recommended installing 10 x straight pipe diameters upstream and 5 x straight pipe diameters downstream of the valve.



☑ **Operational data**  
 Maximum operating temperature  $120^{\circ}$  °C up to DN200 (DN250 & DN300  $110^{\circ}$  °C)  
 minimum operating temperature  $-10^{\circ}$  °C  
 Maximum operating pressure 16 bar

Water purity in accordance with the ÖNORM H 5195 and VDI 2035 standards

Ethylene and propylene glycol can be mixed to a ratio of 25 - 50 vol. [%]

Ammonia contained in hemp can damage brass valve bodies, EPDM gaskets can be affected by Mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection.

**Materials**

Upper part	grey cast iron GJL 250 acc. EN 1561
Body	grey cast iron GJL 250 acc. EN 1562
Spindle	DN 50 - DN 100 brass, DN 125 - DN 300 stainless steel
Control spindle	Brass / stainless steel
Valve cone	grey cast iron GJL 250 acc. EN 1561/ EPDM coated
Counter	plastic material
O-Rings	EPDM

**Coating**

Base coat based on alkyd resins (resin primer) and contains lead and chromate anticorrosive.  
 Top coating with epoxy resin.  
 Solvent content is less than in the VOC plant regulation in 2002 accepted.  
 Gloss: matt Dry film thickness (DFT): ~ 100 microns

**Constructional characteristics**

**Flow direction**

Ensure that the flow direction is in accordance with the arrow shown on the valve body.

**Mounting position**

The non-rising valve spindle is mounted vertically to the valve axis and consequently offers optimum accessibility and easy valve handling in every position.

**Seat seal**

The spindle seal is equipped with an tripple O-Ring.

**Tripple-O-Ring**

The spindle seal is equipped with an elastic tripple O-Ring and is guaranteed to be impermeable and offer easy handling.

**Seal between Upper Part and body (EPDM)**

The permanently elastic soft seal provides constant temperature. It is corrosion-resistant and allows minor closing pressure.

**Differential pressure measurement**

The Strömax GF Circuit regulating valve is equipped with two test points: so it is possible to measure the differential pressure by use of the proper measuring devices and to determine the flow rate accordingly.

**Mass flow rate tolerance**

The maximum deviation of mass flow rate to characteristic of circuit regulating valves according to VDI-guidelines.

**Pre-adjustment**

The valve will be delivered in closed position. The pre- setting permits the maximum possible stroke. The handwheel mechanics are so adjusted that with closed valve the digital display indicates 0.0.

**Presetting and fixing**

**Presetting**

1. Desired presetting stage in accordance with data (Digital display on handwheel)
2. 1/10 of turn are the red numbers, full turn are the blue.
3. The presetting spindle is beneath the cover. The spindle can be adjusted with a scredriver 8 mm. To preset turn anti clockwise up to stop. The valve is now able to close and open back to the preset position. Replace the cover on the handwheel.
4. The pre-setting marker (1 6517 05) is fastened as a tag above the valve or pipe. The setting of the respective valve is marked by cutting or breaking off the teeth at the figures for full and partial turns. This permits checking and/or restoration of the original pre-setting made on the occasion of system set-up after servicing without having to rely on documentation.

The setting of flowrate is achieved with a measuring device referring to the flow charts. Please see the operating instructions from the measuring device.

**Digital display factory setting**

If the valve is closed valve 0.0 is displayed on the digital display. If you have to remove the complete handwheel (turning handle, numeric wheels, baseplate) it is important to do this as following instruction:

1. Set the complete upper part and fastening the three allen screws and the four hexagon screws.
2. Close the valve clockwise.
3. If you see 0.0 on the digital display it is correct.
4. After this you can assemble the handwheel.
5. Fixing the attachment bolt.
6. Now you can preset the valve.

**Accessories**

- 1 **6517 05** Pre-setting marker
- 1 **8900 04** HERZ-Measuring computer for one-hand operation
- 1 **0276 00** Draining valve 3/8 with handle and swivelling hose connection
- 1 **0284 00** Test point addaptors

**Spare Parts**

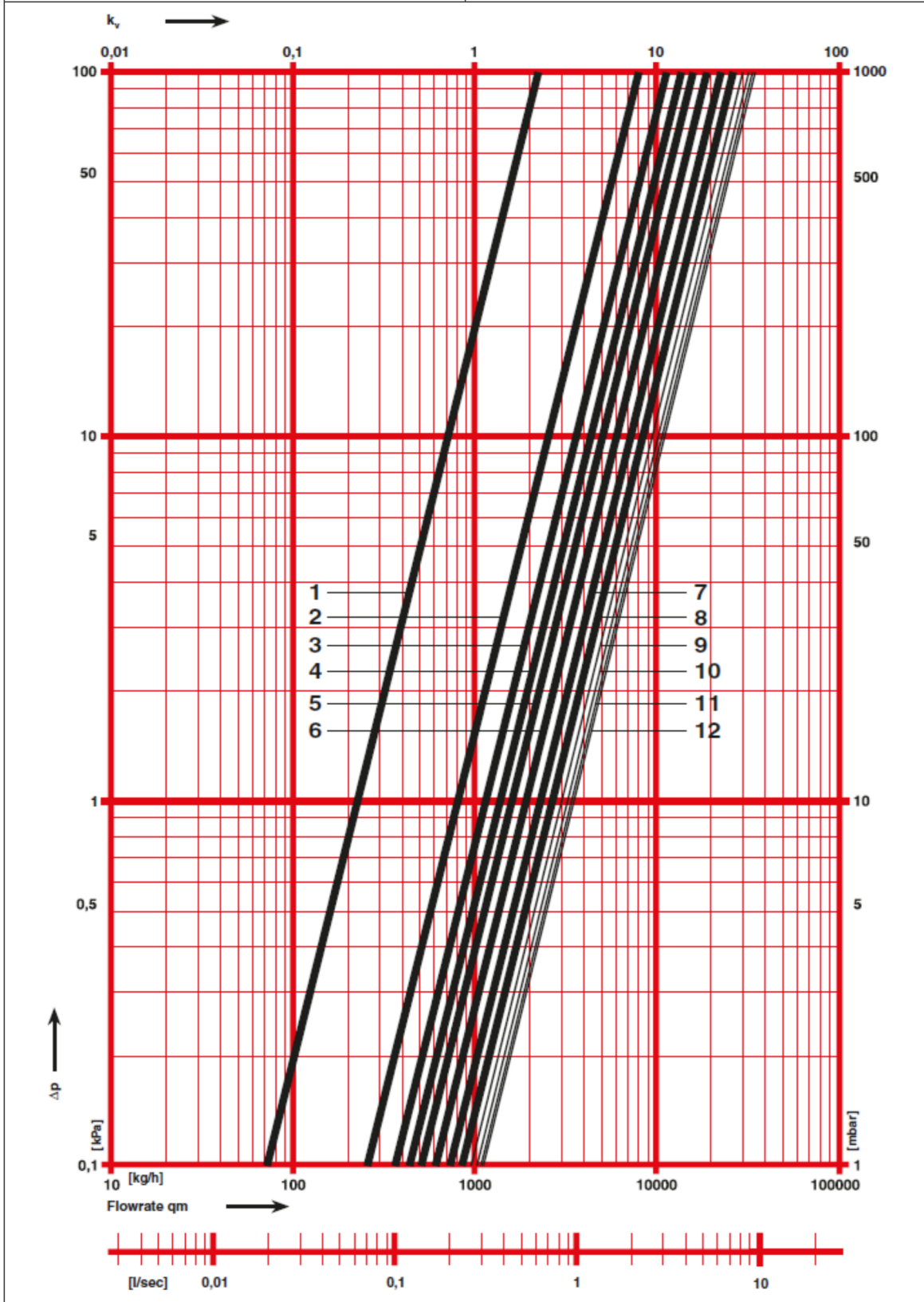
- 1 **0273 00** Screw plug 3/8
- 1 **0284 01** test points, blue
- 1 **0284 02** test points, red

All specifications and statements within this document are according to information available at the time of printing and meant for informational purpose only. Herz Armaturen reserves the right to modify and change products as well as its technical specifications and/or its functioning according to technological progress and requirements. It is understood that all images of Herz products are symbolic representations and therefore may visually differ from the actual product. Colours may differ due to printing technology used. In case of any further questions don't hesitate to contact your closest HERZ Branch-office.

<b>Dn</b>	<b>50</b>	<b>65</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>
<b>kvs</b>	49	75	110	165	241	372	704	812	1383
<b>Pos.</b>	kv	kv	kv	kv	kv	kv	kv	kv	kv
0,5	0,44	3,7	4,04	7,54	16,72	15,68	4,124	42,13	47,09
<b>1,0</b>	2,24	5,2	7,79	13,44	26,32	24,98	12,43	61,63	66,49
1,5	5,24	6,7	11,54	19,34	35,92	34,28	33,195	81,13	85,89
<b>2,0</b>	8,04	7,97	15,24	25,28	45,55	43,59	53,96	100,65	105,29
2,5	9,74	9,22	17,24	29,93	53,15	52,04	74,725	117,3	124,69
<b>3,0</b>	11,46	10,46	19,26	34,61	60,74	60,49	95,49	133,92	144,09
3,5	12,61	12,96	20,56	37,71	69,09	64,89	116,255	153,82	163,49
<b>4,0</b>	13,8	15,43	22,86	40,89	77,46	69,31	137,02	173,71	182,95
4,5	14,8	17,43	24,96	45,29	86,11	77,81	169,12	194,61	212,6
<b>5,0</b>	16	19,53	27,05	49,65	94,78	86,33	201,22	215,54	242,25
5,5	17,5	21,03	30,7	54,95	103,73	96,28	233,32	239,14	271,9
<b>6,0</b>	19,1	22,79	34,39	60,27	112,71	106,26	265,48	262,7	301,57
6,5	20,95	24,24	39,94	67,47	124,36	118,16	302,38	289,65	323,52
<b>7,0</b>	22,83	25,49	45,53	74,68	136,05	130,1	339,28	316,64	345,47
7,5	24,83	27,74	52,68	82,33	152	150,2	376,18	358,24	367,42
<b>8,0</b>	26,65	30,01	59,85	90,01	167,92	170,26	412,98	399,81	389,29
8,5	28,35	32,81	66,3	96,96	178,42	193,91	442,38	456,36	455,27
<b>9,0</b>	30,08	35,6	72,73	103,97	188,92	217,54	471,78	512,88	520,57
9,5	31,28	38,85	77,38	109,92	200,52	236,74	501,18	554,88	585,87
<b>10,0</b>	32,44	42,05	82,07	115,92	212,12	255,9	530,55	596,85	664,16
10,5	33,24	44,85	86,07	121,07	220,47	272	545,6	646,65	724,76
<b>11,0</b>	34,08	47,66	90,17	126,18	228,85	288,11	560,65	696,48	785,36
11,5	34,53	44,66	93,42	130,58	235,75	301,56	575,7	738,53	845,96
<b>12,0</b>	34,96	51,63	96,7	134,97	242,65	315,05	590,75	780,57	906,57
12,5		54,13	99,05	138,87	249,2	327,65	605,8	813,17	957,77
<b>13,0</b>		56,49	101,38	142,74	255,79	340,27	620,86	845,73	1008,97
13,5		58,49	104,08	146,74		347,57	634,71	886,63	1060,17
<b>14,0</b>		60,77	106,78	150,79		354,84	648,56	927,53	1111,34
14,5		62,47		154,54		363,04	662,41	949,88	1174,89
<b>15,0</b>		64,21		158,31		371,26	676,33	972,25	1238,44
15,5		65,56		161,46		380,41		993	1301,99
<b>16,0</b>		66,94		164,59		389,54		1013,7	1365,63
16,5				167,04				1039,3	1406,38
<b>17,0</b>				169,45				1064,89	14473,13
17,5								1073,79	1487,88
<b>18,0</b>								1082,72	1528,67
18,5									1571,57
<b>19,0</b>									1614,47
19,5									1657,37
<b>20,0</b>									1700,28
20,5									1721,43
<b>21,0</b>									1742,58
21,5									1763,73
<b>22,0</b>									1784,91

Due to different installation conditions in the laboratory and in the operating place the table can contain deviations of measurement results.

HERZ – standard diagram	STRÖMAX 4218 GF
Order Nr.: 1 4218 80	Dim. DN 50



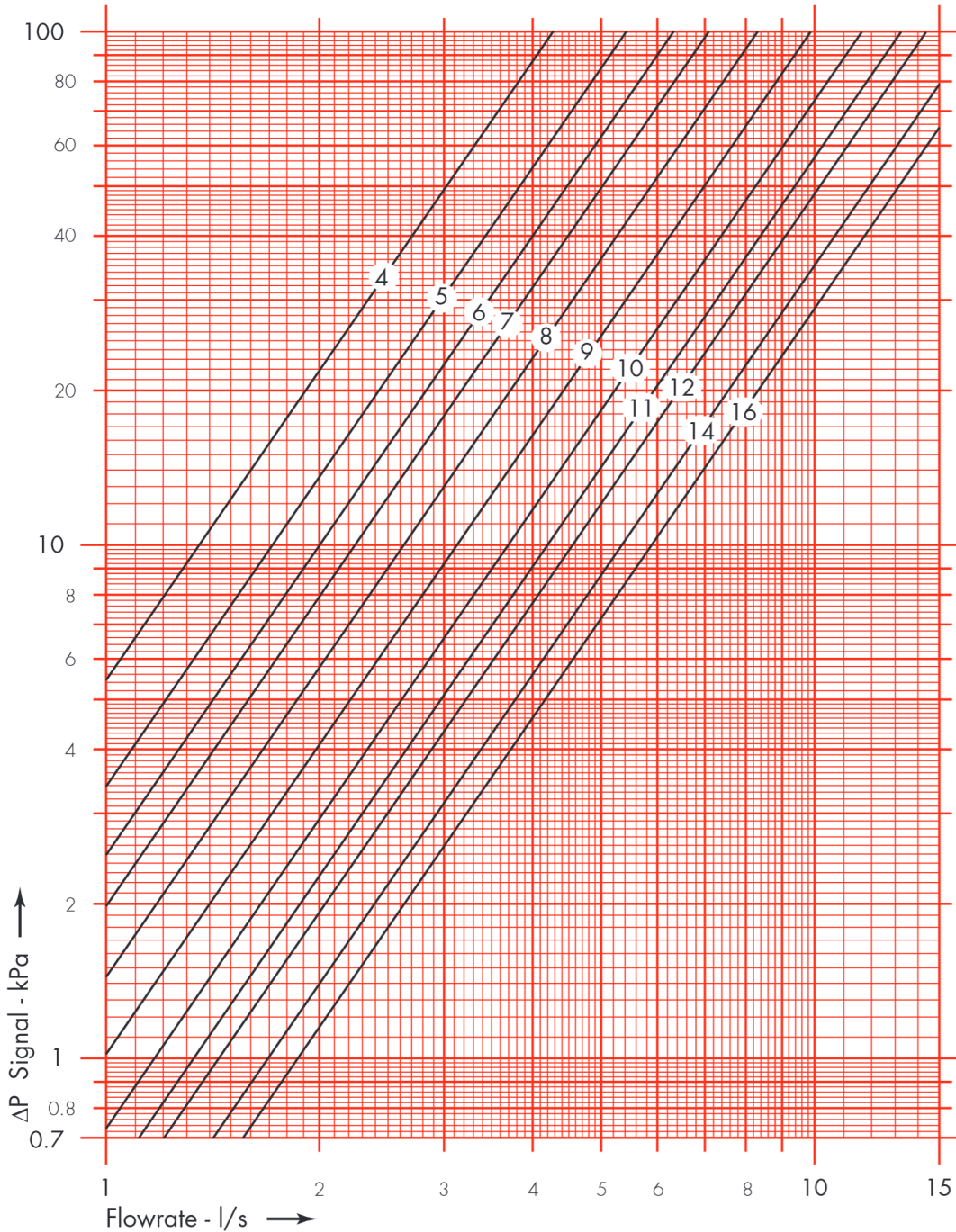
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 81

Dim. DN65

Position	4	5	6	7	8	9	10	12	14	16
Kvs	15.4	19.5	22.8	25.5	30.0	35.6	42.1	51.6	60.8	66.9



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com  
 Fax: 01483 502025 Website: www.herzvalves.com



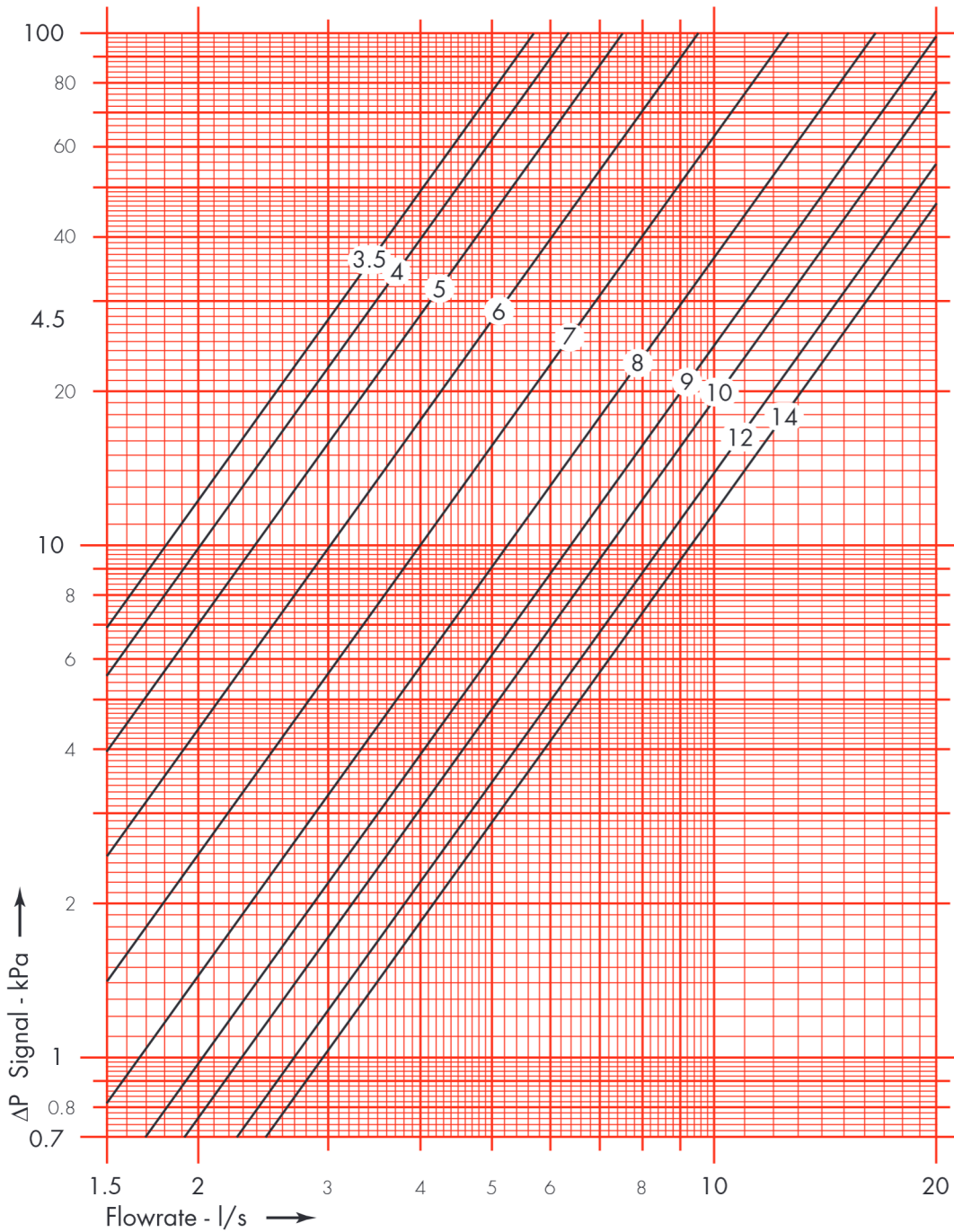
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 82

Dim. DN80

Position	3.5	4	5	6	7	8	9	10	12	14
Kvs	20.6	22.9	27.1	34.4	45.5	59.9	72.7	82.1	96.7	107



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com  
 Fax: 01483 502025 Website: www.herzvalves.com





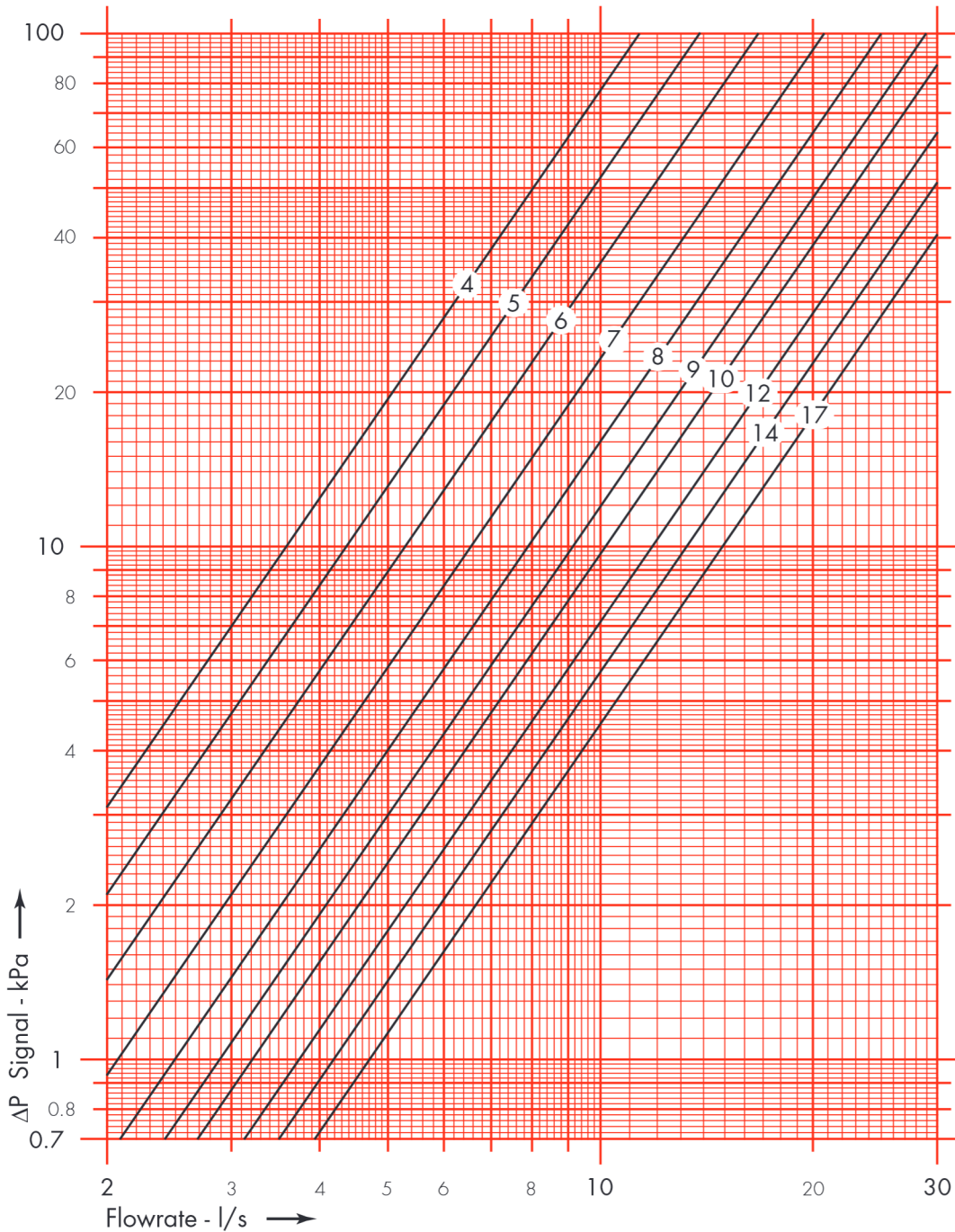
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 83

Dim. DN100

Position	4	5	6	7	8	9	10	12	14	17
Kvs	40.9	49.7	60.3	74.7	90.0	104	116	135	151	169



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com  
 Fax: 01483 502025 Website: www.herzvalves.com



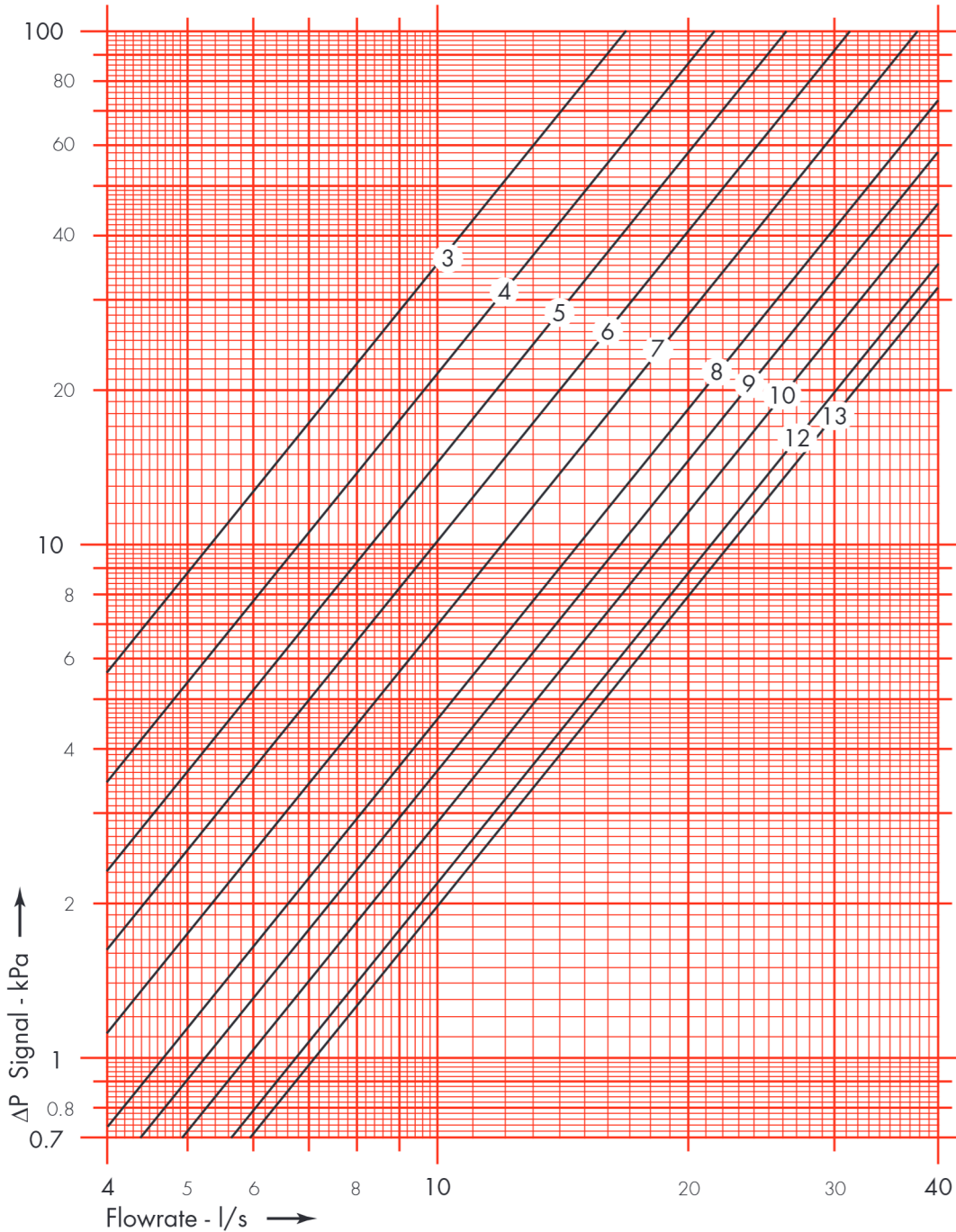
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 84

Dim. DN125

Position	3	4	5	6	7	8	9	10	13
Kvs	60.7	77.5	94.8	113	136	168	189	212	256



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com

Fax: 01483 502025 Website: www.herzvalves.com



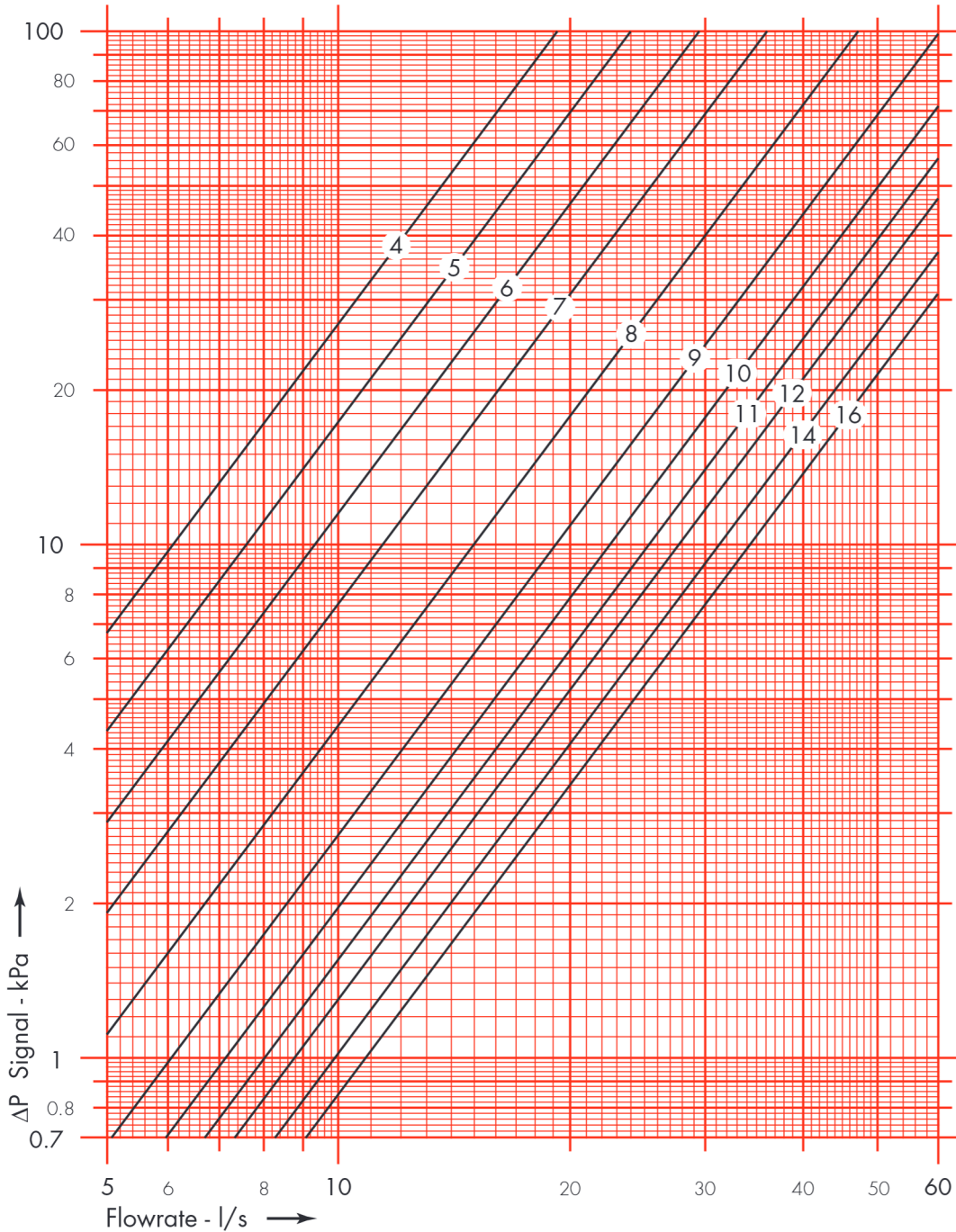
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 85

Dim. DN150

Position	4	5	6	7	8	9	10	12	14	16
Kvs	69.3	88.3	106	130	170	218	256	315	355	390



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com

Fax: 01483 502025 Website: www.herzvalves.com



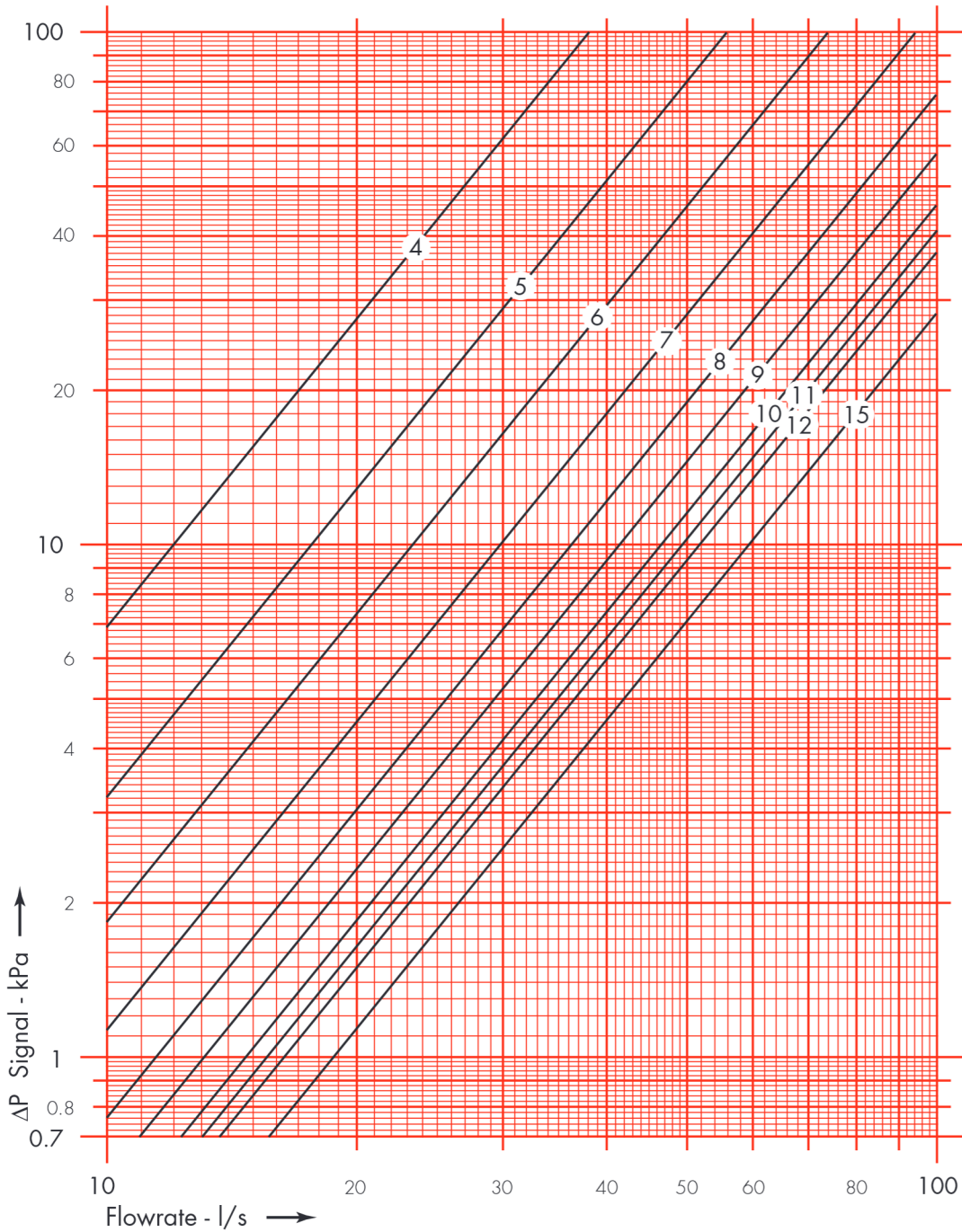
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 86

Dim. DN200

Position	4	5	6	7	8	9	10	11	12	15
Kvs	137	201	266	339	413	472	531	561	591	676



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com  
 Fax: 01483 502025 Website: www.herzvalves.com



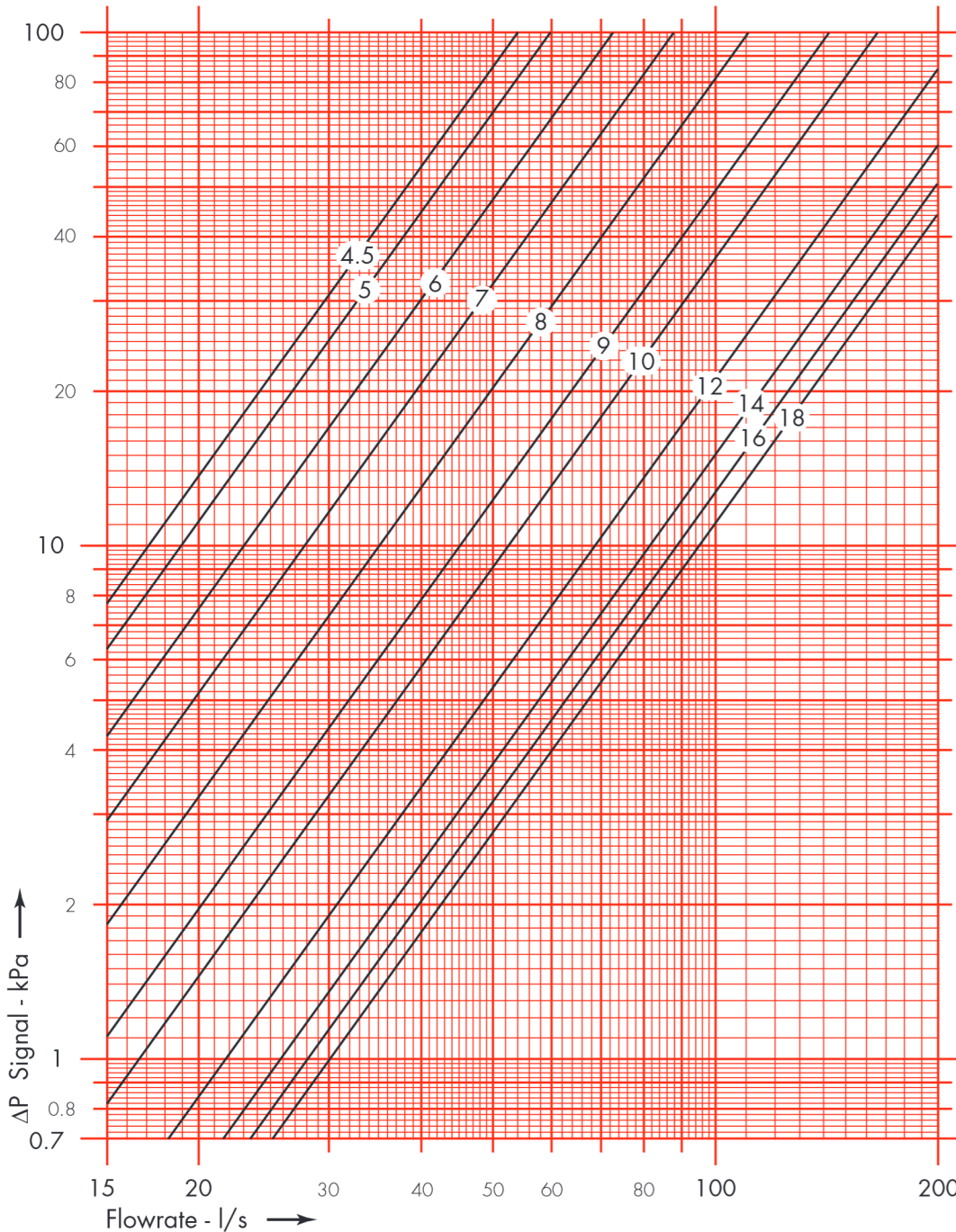
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 87

Dim. DN250

Position	4.5	5	6	7	8	9	10	12	14	18
Kvs	195	216	263	317	400	513	597	781	928	1083



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com  
 Fax: 01483 502025 Website: www.herzvalves.com



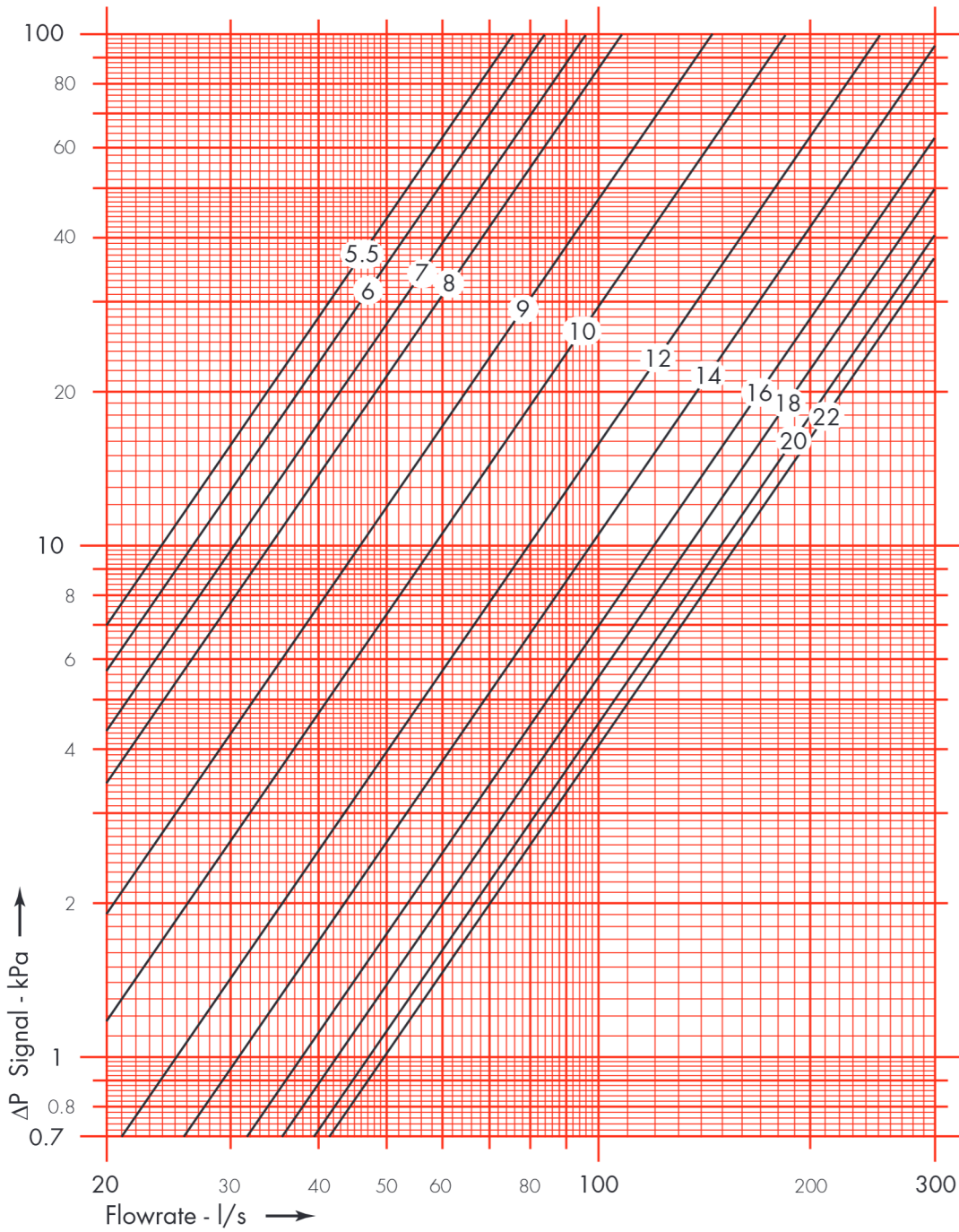
HERZ - Flow data - flow signal

Double Regulating Valve

Art. **4218** - 88

Dim. DN300

Position	5.5	6	7	8	9	10	12	14	18	22
Kvs	272	302	346	389	521	664	907	1111	1529	1785



We reserve the right to make design modifications

HERZ Valves UK Ltd.

Progress House, Moorfield Point, Moorfield Road  
 Skyfield Ind Estate, Guildford, Surrey GU1 1RU

Tel: 01483 502211 e-mail: sales@herzvalves.com

Fax: 01483 502025 Website: www.herzvalves.com

