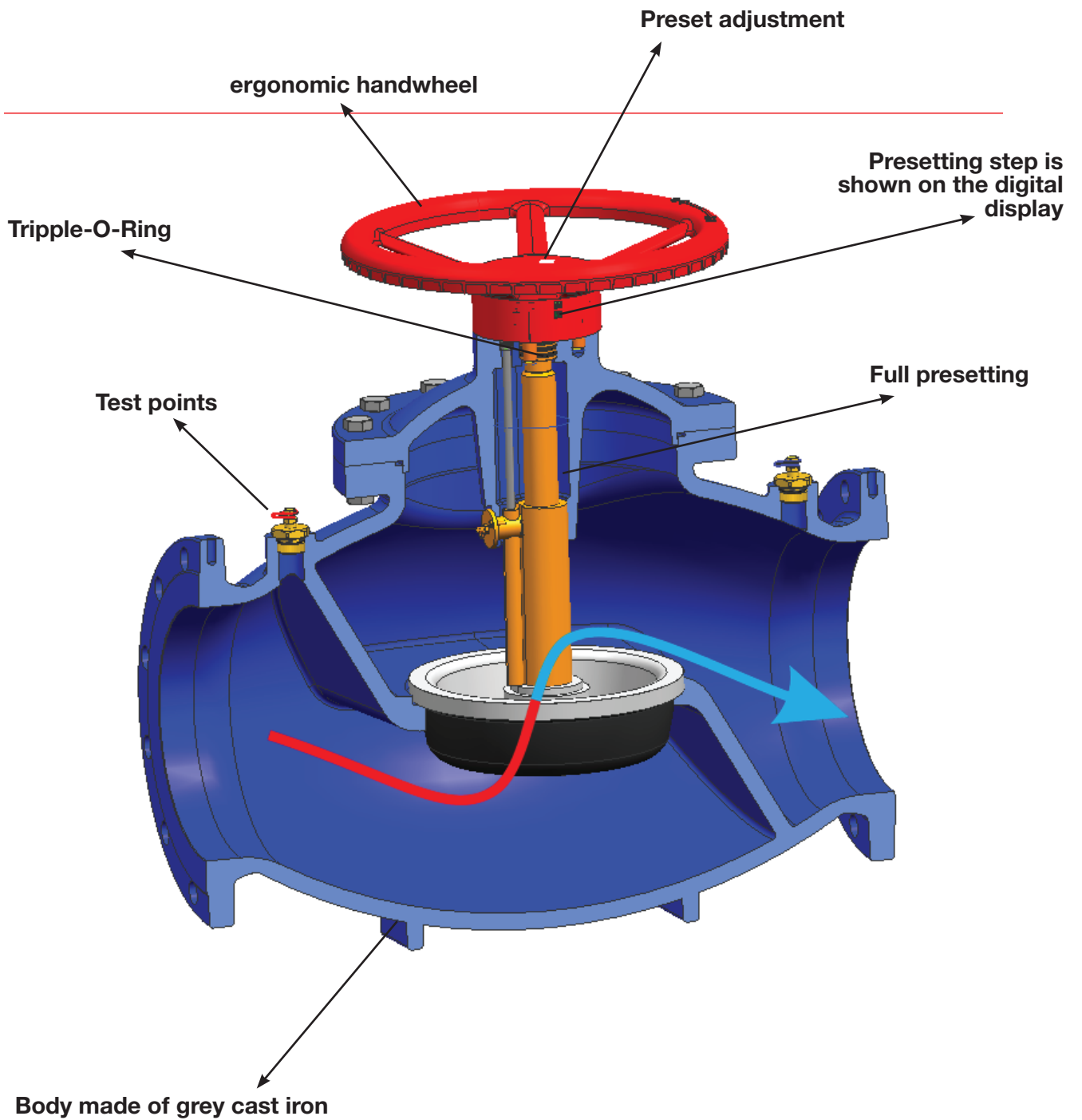


# HERZ - Balancing Valves Cast Iron







4218 GF STRÖMAX-circuit regulating valve in a flanged version is available in nominal sizes of DN 50 to DN 300. All HERZ valves are factory-equipped with test points, which can be upgraded with extended test points. The flanged upper parts of HERZ 4218 GF STRÖMAX are made of cast iron.

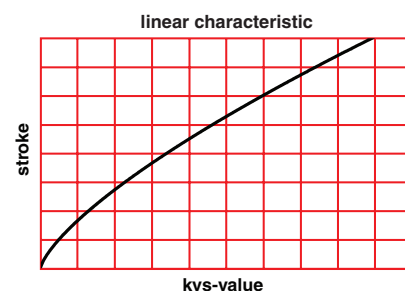
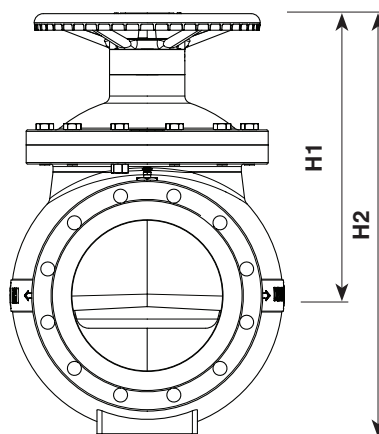
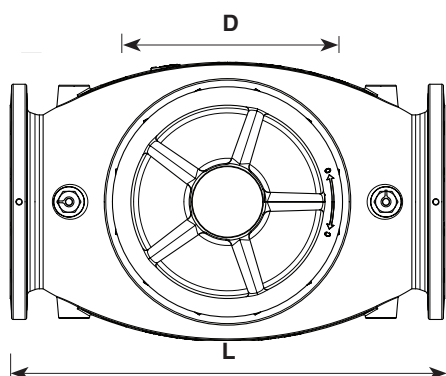
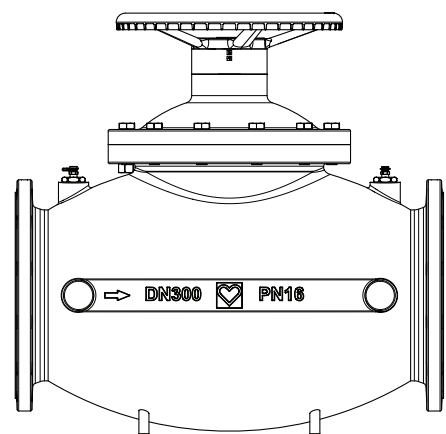
The pre-setting marker is fastened as a tag above the valve or pipe. The setting of the respective valve is marked by cutting or breaking off the teeth at the figures for full and partial turns. This permits checking and/or restoration of the original pre-setting made on the occasion of the system set-up after servicing without having to rely on documentation.

### Presetting

1. Set the hand wheel to the desired position (Digital display on handwheel)
2. Red numbers are 1/10 of turn, blue numbers are a full turn.
3. The presetting spindle is beneath the cover. The spindle can be adjusted with an 8mm screwdriver. 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 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.

Minimum operating temperature    - 10 °C  
 Maximum operating temperature    110 °C  
 Maximum operating pressure        16 bar



Order numbers <b>4218 GF</b>	DN	L	H1	H2	D	kg
1 <b>4218</b> 80	50	230	169	252	130	16,8
1 <b>4218</b> 81	65	290	186	278	154	23,6
1 <b>4218</b> 82	80	310	207	307	170	30
1 <b>4218</b> 83	100	350	235	345	200	40,5
1 <b>4218</b> 84	125	400	259	384	279	63
1 <b>4218</b> 85	150	480	307	450	280	88
1 <b>4218</b> 86	200	600	447	618	350	161
1 <b>4218</b> 87	250	730	503	705	420	257
1 <b>4218</b> 88	300	852	562	842	482	383

# STRÖMAX 4218 GF

## Function

Two test points are fitted on the same side of the valve and factory sealed. This arrangement ensures the best accessibility in any position and optimum connection of measuring instruments.

## Field of application

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

### HERZ STRÖMAX- GF 4218 linear

Dn	50	65	80	100	125	150	200	250	300
kvs	49	75	110	165	241	372	704	812	1383
Pos.	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.

## STRÖMAX 4218 GMF

The differential pressure is measured by an appropriate measuring device and the specific flow rate is determined. All HERZ-measuring computers directly determine the corresponding flow rate. The flow can be limited by default. The preset value remains the same even when the valve is closed. The presetting is displayed digitally on handwheel.

### Function

Two test points are fitted on the same side of the valve and factory sealed. This arrangement ensures the best accessibility in any position and optimum connection of measuring instruments.

### Field of application

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

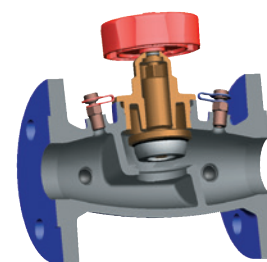
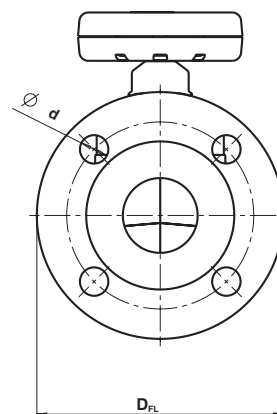
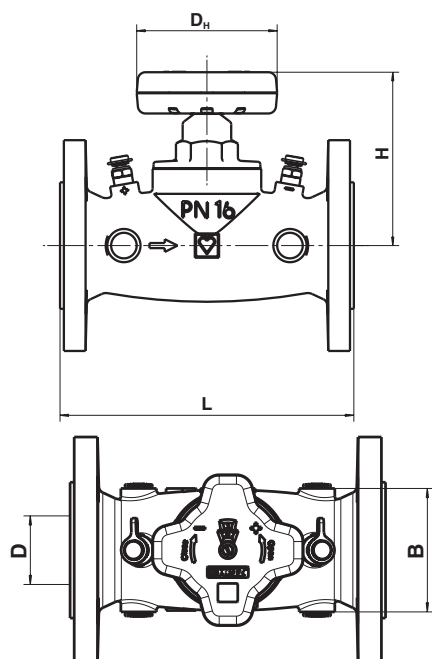
### Presetting

The valve will be delivered in opened position. The pre- setting permits the maximum possible stroke. when the valve is fully closed, the hand wheel digital display will indicate 0.0

1. Set the hand wheel to the desired position (Digital display on handwheel).
2. Remove the hand wheel securing screw, the handwheel should not be removed.
3. The presetting spindle is now accessible, screw in with a screwdriver blade width 3 x 60 until stop position is reached.
4. Replace the hand wheel securing screw.
5. To mark the adjusted position on the presetting marker and fix it on the valve.

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

**Minimum operating temperature**    - 10 °C  
**Maximum operating temperature**    110 °C  
**Maximum operating pressure**        16 bar



Order number <b>4218 GMF</b>	DN	L	H	B	DH	DFL	D	d	kg	kvs
1 <b>4218 43</b>	25	160	107	58	71	115	25	14	3,71	12,2
1 <b>4218 44</b>	32	180	113	64	71	140	32	19	4,80	17,3
1 <b>4218 45</b>	40	200	113	72	71	150	40	19	6,35	28,6
1 <b>4218 46</b>	50	230	133	90	110	165	50	19	9,81	38
1 <b>4218 47</b>	65	290	145	112	110	185	65	19	13,70	60,3
1 <b>4218 48</b>	80	310	145	116	110	200	80	19	16,28	68,5
1 <b>4218 49</b>	100	350	190	166	190	220	100	19	29,70	99,55
1 <b>4218 50</b>	125	400	230	220	190	250	125	19	48,00	186,58
1 <b>4218 51</b>	150	480	264	244	190	285	150	23	66,60	279,05

**HERZ STRÖMAX 4218 GMF**

DN	25	32	40	50	65	80	100	125	150
<b>kvs</b>	12,2	17,3	28,6	38	60,3	68,5	99,55	186,58	279,05
<b>Position</b>	kv	kv	kv	kv	kv	kv	kv	kv	kv
0,5	0,35	1,15	1,40	2,70	8,36	11,50	0,00	1,58	8,75
<b>1,0</b>	0,75	1,90	2,50	7,80	11,56	15,90	12,35	4,36	17,50
1,5	1,15	2,65	3,60	12,90	14,76	20,30	18,04	10,72	26,08
<b>2,0</b>	1,90	3,40	4,70	18,60	17,80	24,69	23,74	17,08	34,66
2,5	4,10	4,15	5,95	22,60	20,15	27,74	29,84	20,27	38,27
<b>3,0</b>	6,30	4,90	7,20	27,80	22,50	30,60	35,96	23,45	41,88
3,5	7,70	7,35	9,85	29,30	26,55	36,10	42,56	24,93	44,53
<b>4,0</b>	9,10	9,80	12,55	31,60	31,60	41,70	49,20	26,41	47,17
4,5	9,80	12,40	16,05	33,60	38,10	50,70	51,10	28,09	50,34
<b>5,0</b>	10,50	15,00	19,70	35,50	43,90	60,30	53,00	29,77	53,50
5,5	10,55	15,80	21,60	37,15	47,40	62,00	57,50	32,57	57,43
<b>6,0</b>	10,65	16,60	23,50	37,84	51,00	63,78	61,96	35,37	61,36
6,5	10,70		25,15		53,85	65,88	66,86	38,62	66,14
<b>7,0</b>	11,50		26,80		56,70	67,80	71,81	41,87	70,92
7,5	11,53		27,30		58,50		77,11	46,01	76,30
<b>8,0</b>	11,53		27,80		60,30		82,42	50,14	81,68
8,5			28,20				87,77	54,94	87,87
<b>9,0</b>			28,60				93,20	59,74	94,06
9,5							99,55	65,47	100,52
<b>10,0</b>								71,19	106,98
10,5								87,53	114,74
<b>11,0</b>								85,87	122,50
11,5								95,99	132,72
<b>12,0</b>								106,10	142,93
12,5								117,92	155,86
<b>13,0</b>								129,73	168,79
13,5								141,12	181,98
<b>14,0</b>								152,51	195,17
14,5								162,60	207,69
<b>15,0</b>								172,69	220,21
15,5								179,64	233,05
<b>16,0</b>								186,58	245,88
16,5									255,72
<b>17,0</b>									265,56
17,5									272,31
<b>18,0</b>									279,05

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

## Flow measuring orifice plates

### Function

The orifice plate made of stainless steel PN 16 and has two measuring valves. The design of the orifice is in accordance with BS 1042, the performance curve characteristics are according to BS 7350.

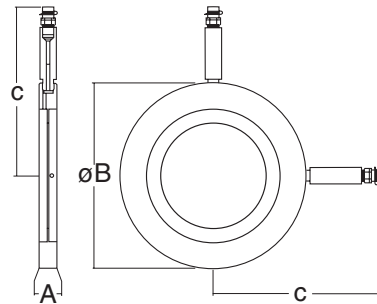
### Field of application

HERZ orifice plates are installed in the circuits of the hot water central heating and cooling systems, and ensure the balance of the hydraulic circuits.

The orifice plates are used either in a supply or in a return pipe.

They are either closely coupled with a balancing valve HERZ to form a complete set or used in connection with an isolation valve HERZ.

The balancing is accomplished by setting the control valve during the measurements of the pressure drop at orifice.



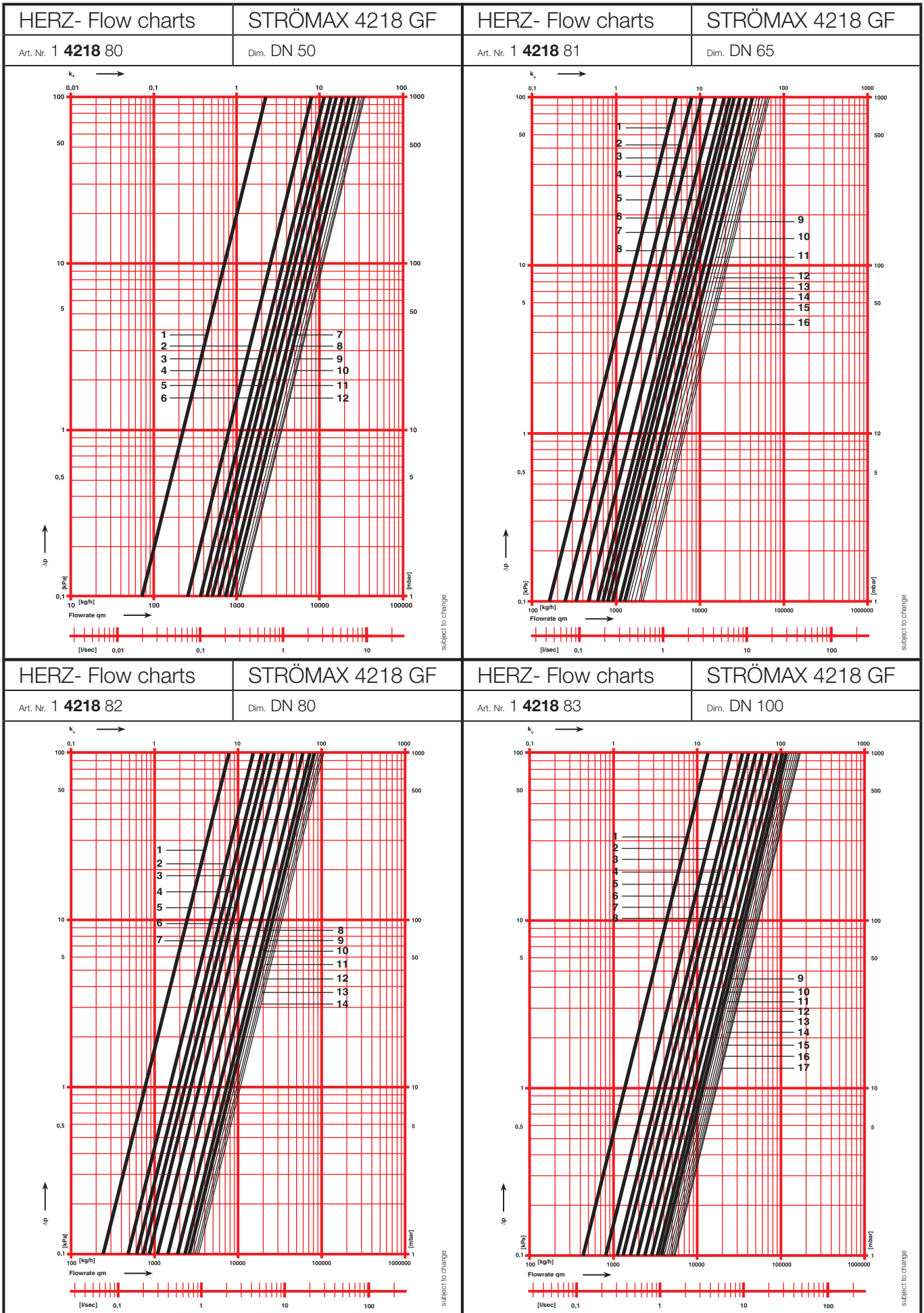
### Benefits :

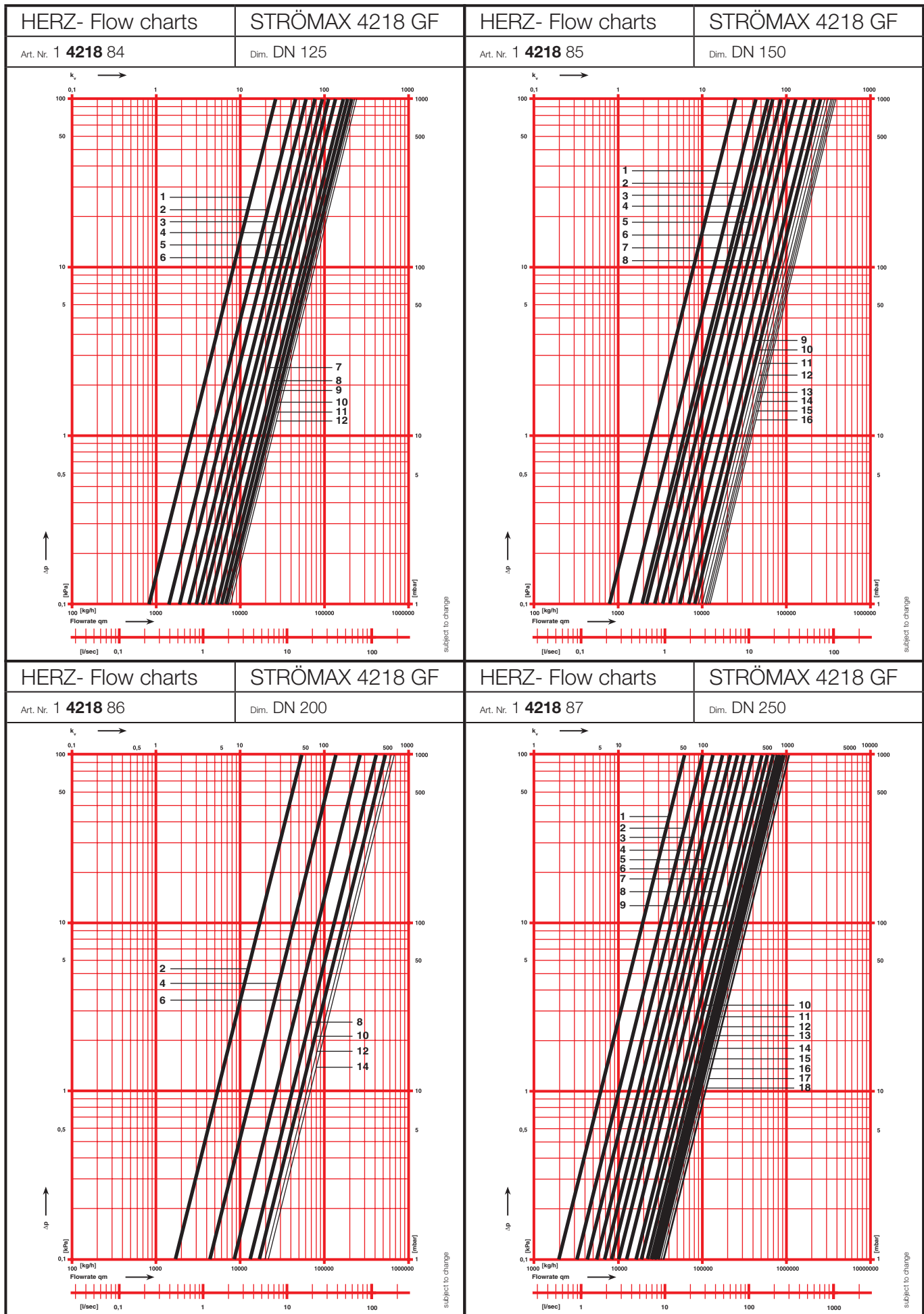
- Ease of use because of the use of only one characteristic of the orifice plate.
- Can be installed separately, e.g. as a fixed orifice.

**Maximum operating temperature** 110 °C  
**Maximum operating pressure** 16 bar

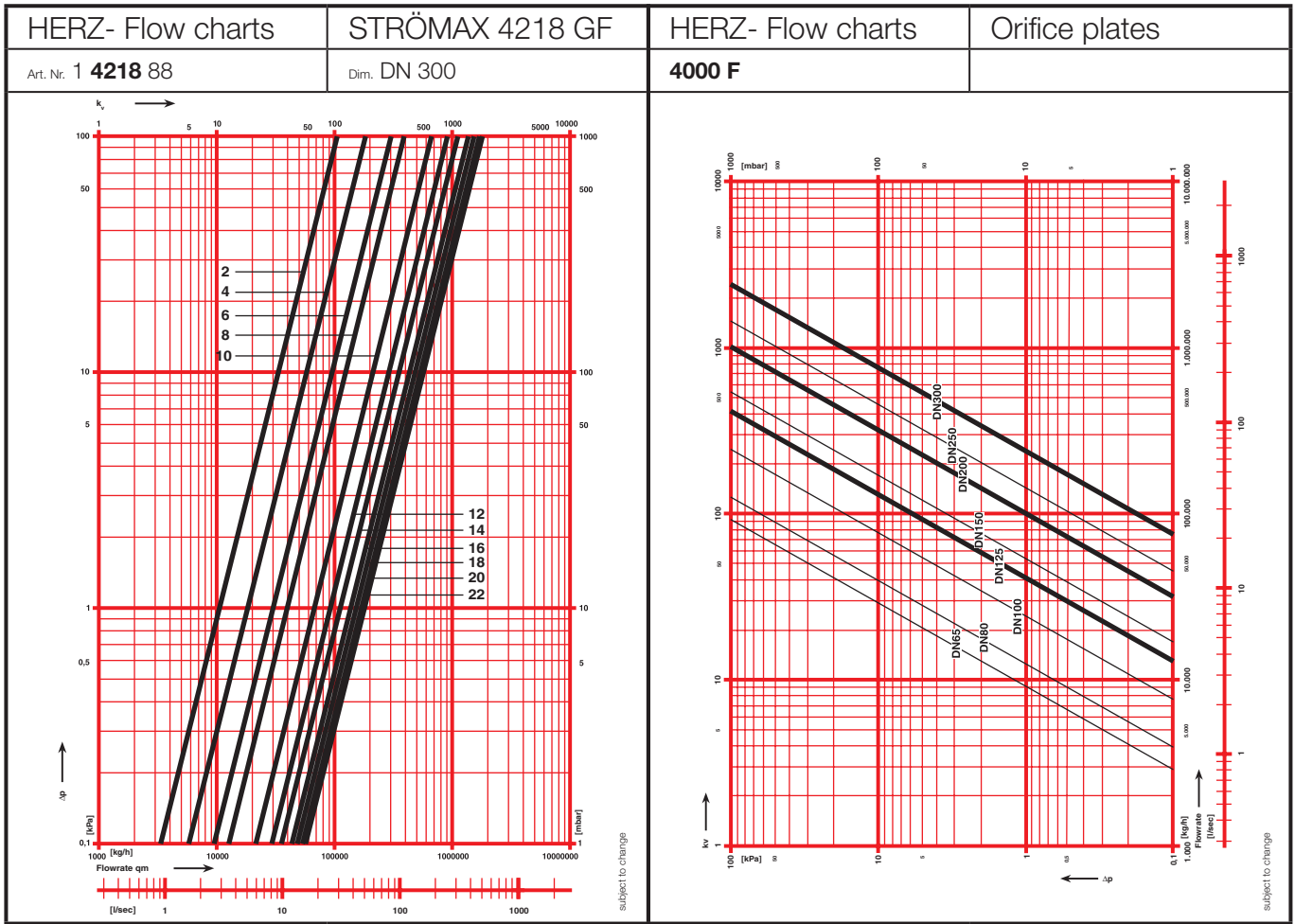


Order number Orifice plate	DN	A	B	C	kv	kg
1 4000 07	65	20	158	160	100,7	1,9
1 4000 08	80	20	166	170	133,8	2,2
1 4000 09	100	20	164	176	237,7	2,7
1 4000 10	125	20	194	191	339	3,2
1 4000 11	150	20	220	204	511	3,8
1 4000 12	200	20	275	232	858	5,5
1 4000 13	250	20	331	258	1235	7,0
1 4000 14	300	20	386	287	1793	10,0

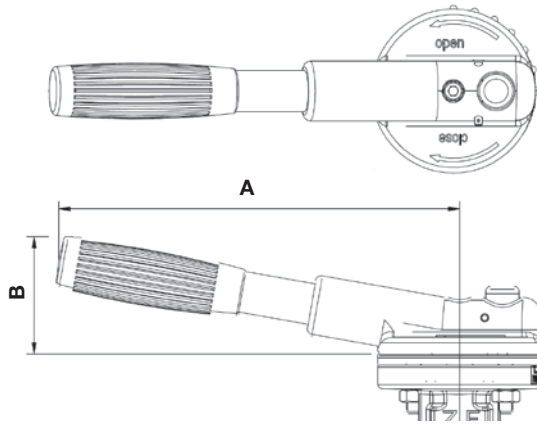
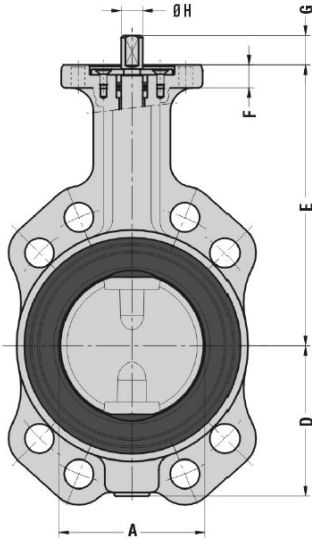
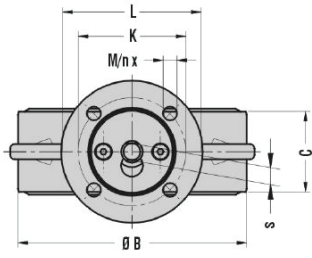






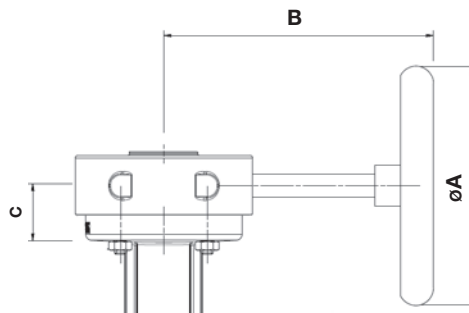


			Order number
	<b>Test point adaptors</b>		1 <b>0284 00</b>
	<b>Test point extension</b> 1 Set = 2 Pcs	<b>1/4</b>	1 <b>0284 10</b>
	<b>Test points for HERZ-STRÖMAX-Circuit regulating valves</b> (manufactured from 2004), brass version, blue cap (return) for flow computer.	<b>1/4</b>	1 <b>0284 01</b>
	<b>Test points for HERZ-STRÖMAX-Circuit regulating valves</b> (manufactured from 2004), brass version, red cap (flow) for flow computer.	<b>1/4</b>	1 <b>0284 02</b>
	<b>Test points for HERZ-STRÖMAX-Circuit regulating valves</b> BrassExtended model for insulated valves up to 40mm version, blue cap (return) for flow computer.	<b>1/4</b>	1 <b>0284 11</b>
	<b>Test points for HERZ-STRÖMAX-Circuit regulating valves.</b> Brass version, red cap (flow) for flow computer. Extended model for insulated valves up to 40 mm.	<b>1/4</b>	1 <b>0284 12</b>
	<b>Test points with draining function</b> Brass version, red cap (flow).	<b>1/4</b>	1 <b>0284 22</b>
	<b>Test points with draining function</b> Brass version, blue cap (return).	<b>1/4</b>	1 <b>0284 21</b>
	<b>Test points long version with draining function, blue cap</b>	<b>1/4</b>	1 <b>0284 23</b>
	<b>Test points long version with draining function, red cap</b>	<b>1/4</b>	1 <b>0284 24</b>
	<b>Presetting marker</b> Plastic tag for marking the presetting step. Can be mounted on the valve or pipe.		1 <b>6517 05</b>
	<b>Test points with pulse pipe connection</b> brass version, blue cap (return) for flow computer.	<b>1/4</b>	1 <b>0284 03</b>
	<b>Test points with pulse pipe connection</b> brass version, red cap (flow) for flow computer.	<b>1/4</b>	1 <b>0284 03</b>



Lever dimensions			
DN	A	B	kg
50 - 80	195	60	0,4
100 - 125	240	65	0,7
150 - 200	390	70	0,9

For the dimensions DN250 and DN 300 hand-wheel with worm gear is used



Gearbox dimensions				
DN	A	B	C	kg
250 - 300	315	203	37	3

DN	Type BA	Type BB	A	B	C	D	E	F	G	H	s	ISO 5211	K	L	M	n	~ kg Type BA	~ kg Type BB
50	1 4219 01	1 4219 11	50,1	94	43	68	125	13	16	12	9	F05	70	88	9	4	3,56	4,167
65	1 4219 02	1 4219 12	63,6	112	46	80	149,5	12,5	16	12	9	F05	70	88	9	4	3,84	4,7
80	1 4219 03	1 4219 13	73,3	131	46	88	156,5	12,5	16	12	9	F05	70	88	9	4	4,515	6,085
100	1 4219 04	1 4219 14	97,1	150	52	102	182	15	21	18	14	F07	70	88	9	4	6,07	7,74
125	1 4219 05	1 4219 15	122	179,5	56	120	201	15	21	18	14	F07	70	88	9	4	8,07	9,941
150	1 4219 06	1 4219 16	145,6	205	56	132	214	15	21	18	14	F07	70	88	9	4	9,84	12,38
200	1 4219 07	1 4219 17	195	262	60	163	245	18	24	22	17	F07	70	88	9	4	15	19,18
250	1 4219 08	1 4219 18	244,5	316	68	191,5	283	20	30	28	22	F10	102	130	11	4	24,1	31,23
300	1 4219 09	1 4219 19	297,6	366	78	216	308	20	30	28	22	F10	102	130	11	4	34,42	43,35

Minimum operating temperature - 20 °C  
 Maximum operating temperature 110 °C  
 Maximum operating pressure (DN 50 - 200) 16 bar (for water)  
 Maximum operating pressure (DN 250 - 300) 10 bar (for water)

HERZ butterfly valves are available in sizes of 50 to 300.  
 The flow can be limited by default. The default settings are indicated by the position of the lever.



## Function

The butterfly valves can be used as isolating and regulating valves, which is achieved by the lever locking in the notch plate.

The lever is made of fiberglass-reinforced polyamide with spring-activated locking mechanism and integrated locking hole.

The top flange is made for the standard gears and actuating drives according to an ISO 5211.

The rubber liner protects the body against internal corrosion. No additional seals are required.

After final mounting the body of the butterfly valve is tested on body strength, body leakage, seat tightness and functionality according to an ISO 5208.

## Field of application

Suitable for water and air systems in heating, cooling, air conditioning, ventilation, fire fighting applications and for agriculture. The valves are suitable for water and air.

The butterfly valves have the body Type "BA, WT": JL 1040, according to EN 1561, Type "BB, LT": JS1030, according to EN 1563.

The body has blue color (RAL 5000). Inside the body is a rubber liner made of EPDM in accordance with an ISO 1691, the disc is made of carbon steel, covered with nickel and the drive shaft split into 2 parts is made of Stainless Steel 1.4408 according to EN 10088.

The valves are available in Semi-lugged (type BA, WT) or Fully-lugged (type BB, LF) versions.

Type „BA, WT“

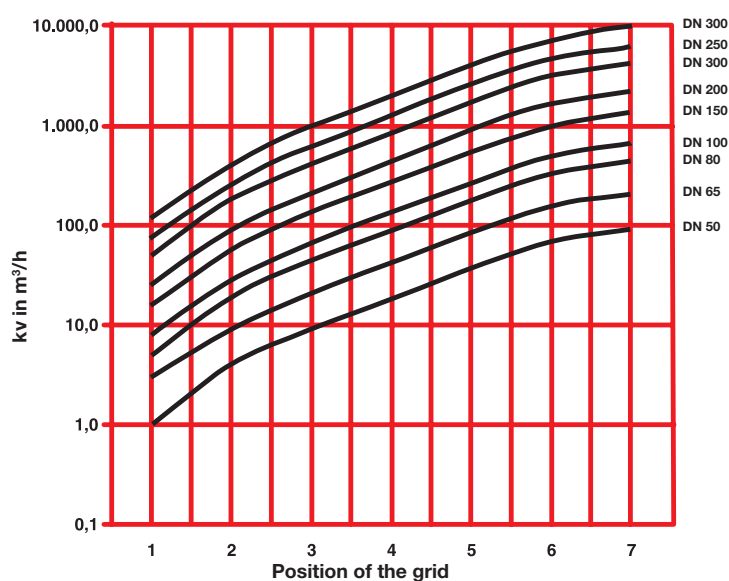


Type „BB, LT“



DN	Dim.	kv	zeta
50	2"	91 m <sup>3</sup> /h	1,18
65	2,5"	206 m <sup>3</sup> /h	0,66
80	3"	436 m <sup>3</sup> /h	0,34
100	4"	660 m <sup>3</sup> /h	0,36
125	5"	1300 m <sup>3</sup> /h	0,22
150	6"	2100 m <sup>3</sup> /h	0,18
200	8"	4100 m <sup>3</sup> /h	0,15
250	10"	6090 m <sup>3</sup> /h	0,17
300	12"	9570 m <sup>3</sup> /h	0,14

kv-value depending on the lever position





**HERZ Valves UK**

Progress House, Moorfield Point  
Moorfield Road, Slyfield Industrial Estate  
Guildford, Surrey GU1 1RU  
Telephone: +44 (0)1483 502211, Fax: +44 (0)1483 502025  
E-Mail: sales@herzvalves.com  
www.herzvalves.com

**HERZ Armaturen GmbH**

Richard-Strauss-Str. 22, A-1230 Vienna  
Tel.: +43 (0)1 616 26 31-0, Fax: +43 (0)1 616 26 31-227  
E-Mail: office@herz.eu

[www.herz.eu](http://www.herz.eu)

