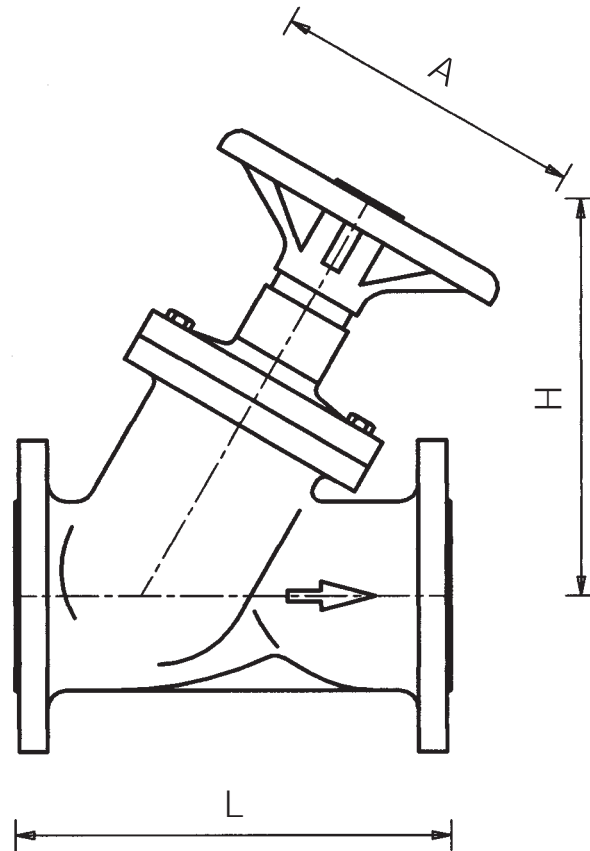


STRÖMAX-MFS

Circuit Control Valve with Measuring Valves
Inclined Model

Standard Sheet for
4218 MFS
Edition 0700 (1299)



Order Number	DN	L	H	A Ø	Weight kg
1 4218 06	50	230	250	166	15
1 4218 07	65	290	278	166	21
1 4218 08	80	310	292	166	26
1 4218 09	100	350	310	166	37
1 4218 13	125	400	350	250	65
1 4218 11	150	480	385	250	82
1 4218 14	200	600	450	250	139

Dimensions in mm

STRÖMAX-MFS circuit control valve with measuring valves, inclined model.

Body of cast iron, PN 16, length according to ÖNORM EN 558-1, Basis Series 1, connections to the fitting at both flanges according to ÖNORM EN 1092-2-, Type 21, PN 16 (Table 9).

Non-rising hand wheel, digital display of pre-setting steps, measuring valves are included and can be installed optionally either to the right or to the left. Blue enamel coat. With pre-setting marker 1 **6517** 05.

Model

The valve is supplied with the connection necks for the measuring valves closed by means of plugs. 2 measuring valves, straight models, R = 1/4", order number 1 **0280** 09, are included.

Measuring Valves

Water heating systems. For connecting pipe systems or connecting pipe systems to heat exchangers. Serves for reliably shutting off the flow medium and for hydraulic balancing (pre-setting) of the system.

Field of Application

We reserve the right to make modification necessitated by technological progress.

HERZ Armaturen

Richard-Strauss-Straße 22 • A-1230 Wien



Operating temperature 5 to 120 °C
 Storage temperature -40 to +60 °C
 Operating pressure PN 16

Hot water purity according to ÖNORM H 5195 and/or VDI-guideline 2035.

Operating Data

Direction of flow

The direction of flow must be in accordance with the arrow on the valve body.

Spindle seal

The valve spindle is sealed by means of a sealing system of pure graphite.

Pre-setting

Pre-setting is performed by limiting the valve lift. The desired pre-setting step is set by means of the hand wheel (digital display), and is locked by means of the adjustment screw after removing the cover cap. In valves DN 50 - 100, this is done by means of the key included with the valve, in valves from DN 125 onward by means of a screwdriver.

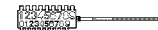
The valve can be actuated at any time without affecting the pre-setting.

Shutting off, limiting the flow rate

The valve is shut off and the flow rate is limited by means of a non-rising threaded spindle with EPDM-coated cone and seat seal actuated by means of a red hand wheel. Pre-setting is performed by inside limitation of the valve lift. The current pre-setting step is displayed digitally below the hand wheel in any position. Threaded necks for measuring valves Rp 1/4" ISO 7/1.

Pre-setting marker

The pre-setting marker supplied with the valve 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.



Special Design Features

The valve is shut by turning the hand wheel clockwise and is opened by turning anticlockwise.

Valve adjustment

The valve spindle has a linear scale (red figures on white background) for reading the valve setting. The rotating decimal scale on the hand wheel hub shows the accurate position between whole turns.

Pre-setting for DN 50 to DN 100

The valves are supplied in open position, the entire valve lift is available.

The pre-setting spindle is located below the red cap in the middle of the hand wheel. The cap can be easily removed by hand. It also accommodates the pre-setting key.

After setting the desired pre-setting step, it can be locked by pushing the pre-setting key onto the pre-setting spindle and turning it anticlockwise up to the stop.

After locking, return the key into the cap, and return cap to its initial position.

Pre-setting DN 125 to DN 200

Pre-setting is performed basically in the same way as with DN 50 to DN 100 valves, however with a screwdriver.

Each valve is supplied with illustrated instructions for pre-setting.

Instructions for Pre-setting

Circuit control valves STRÖMAX-MFS can be equipped with two measuring valves, one before and the other after the valve seat. These measuring valves permit measuring the differential pressure and direct pre-setting, as well as checking the pre-setting by means of the HERZ-measuring computer (1 8902 00) or any other differential pressure measuring instrument.

Warning: Opening of the measuring valves is permitted only when a measuring instrument is connected. Otherwise, hot water may cause injury.

After measuring, first shut the measuring valves and only then remove the couplings from the measuring valves.

**Differential Pressure Measurement
HERZ-Measuring Computer**

Valve body: Cast iron ÖNORM EN 1561-GJL-250,
Material number EN-JL 1040

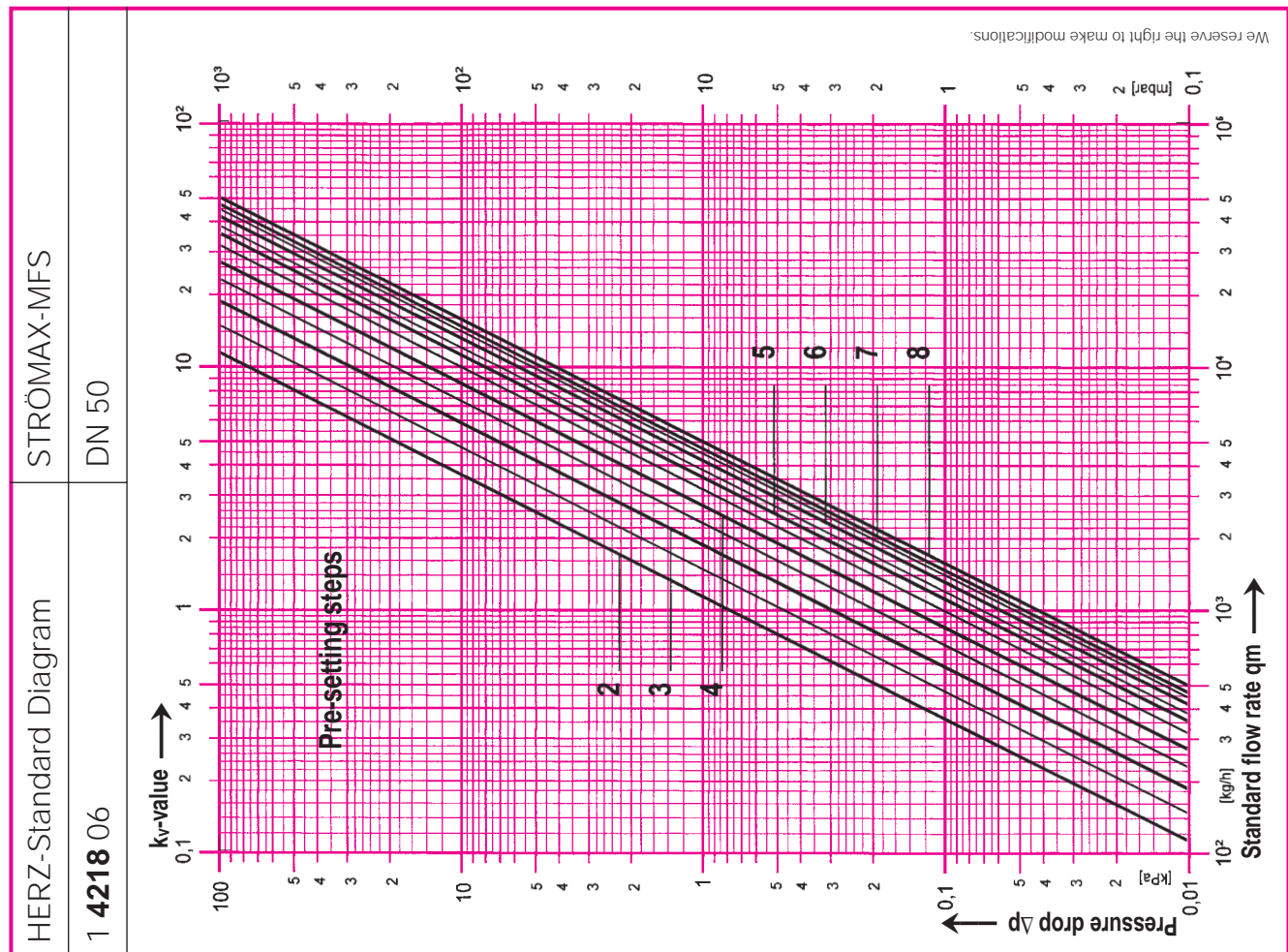
Cone coating: EPDM

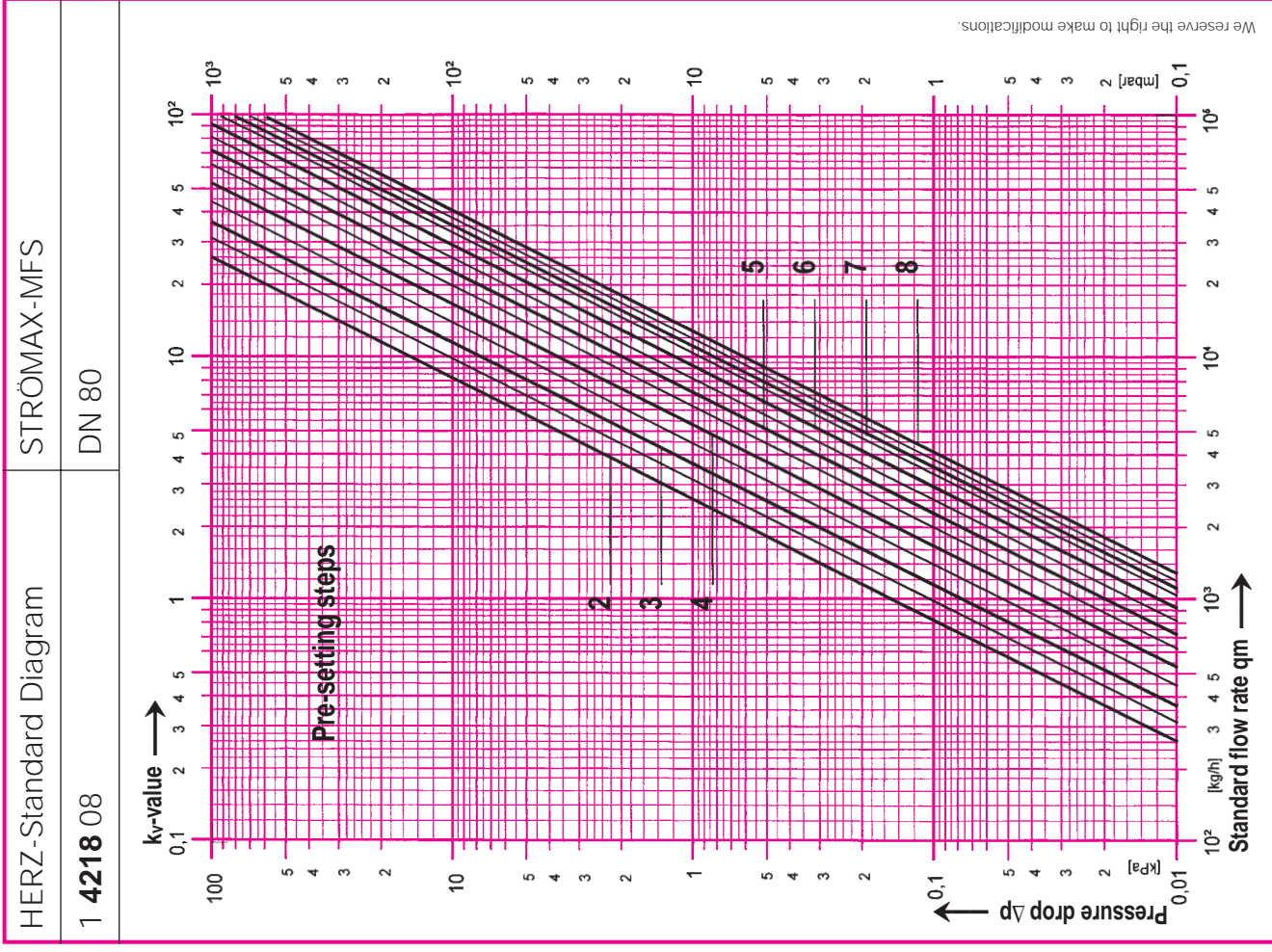
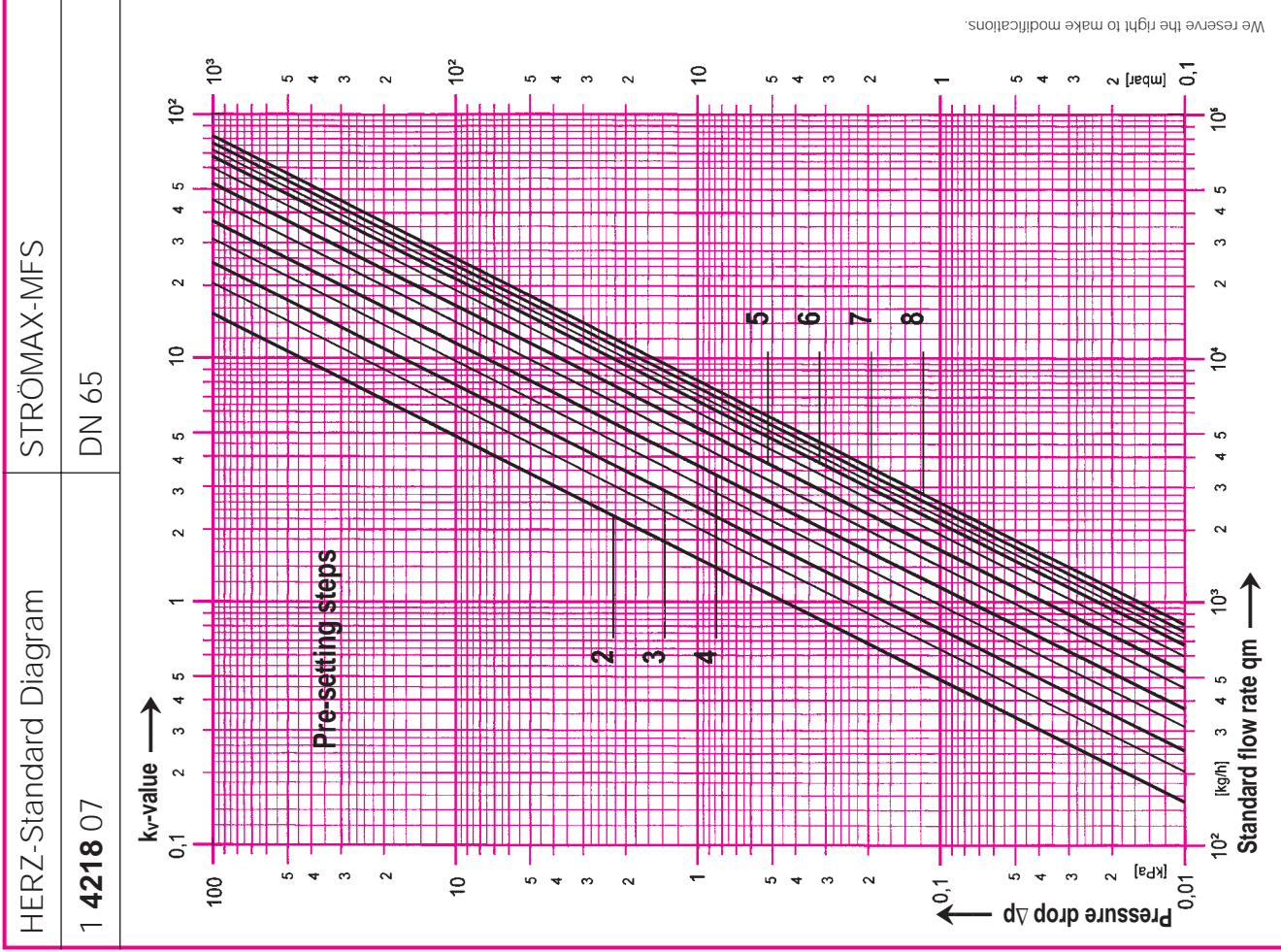
Spindle: DN 50 to DN 100: brass
DN 125 to DN 200: stainless steel

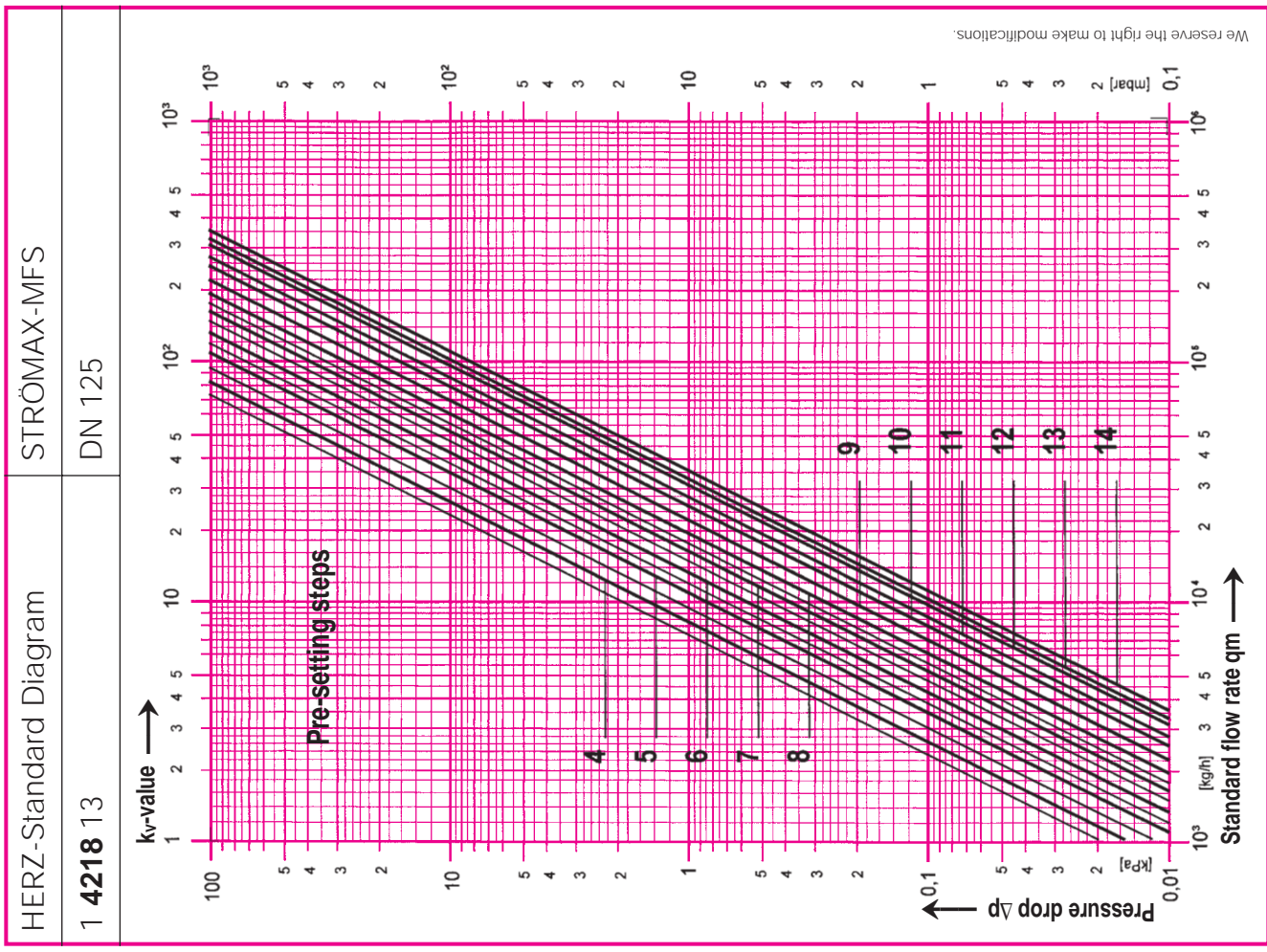
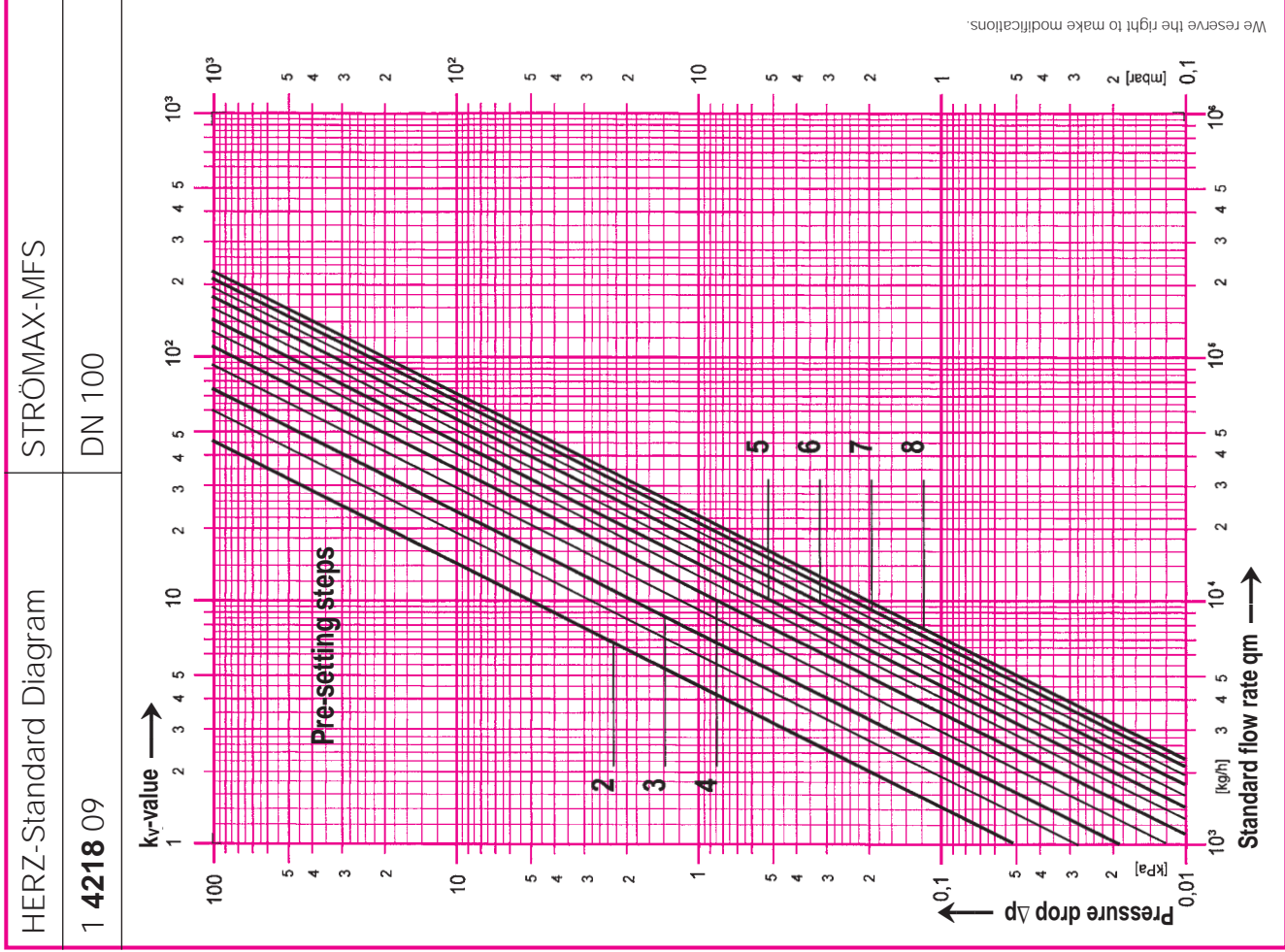
Stuffing box seal: pure graphite

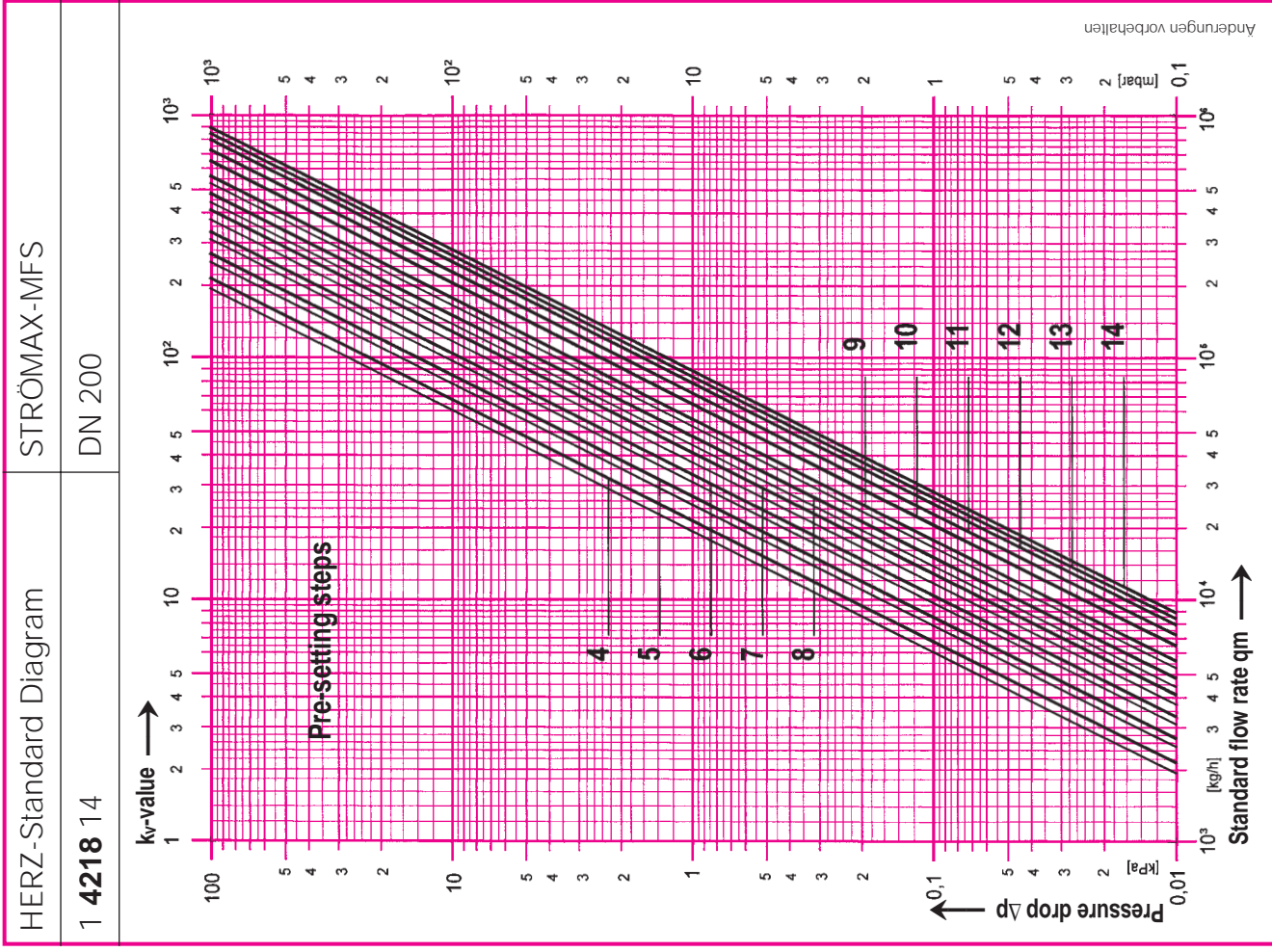
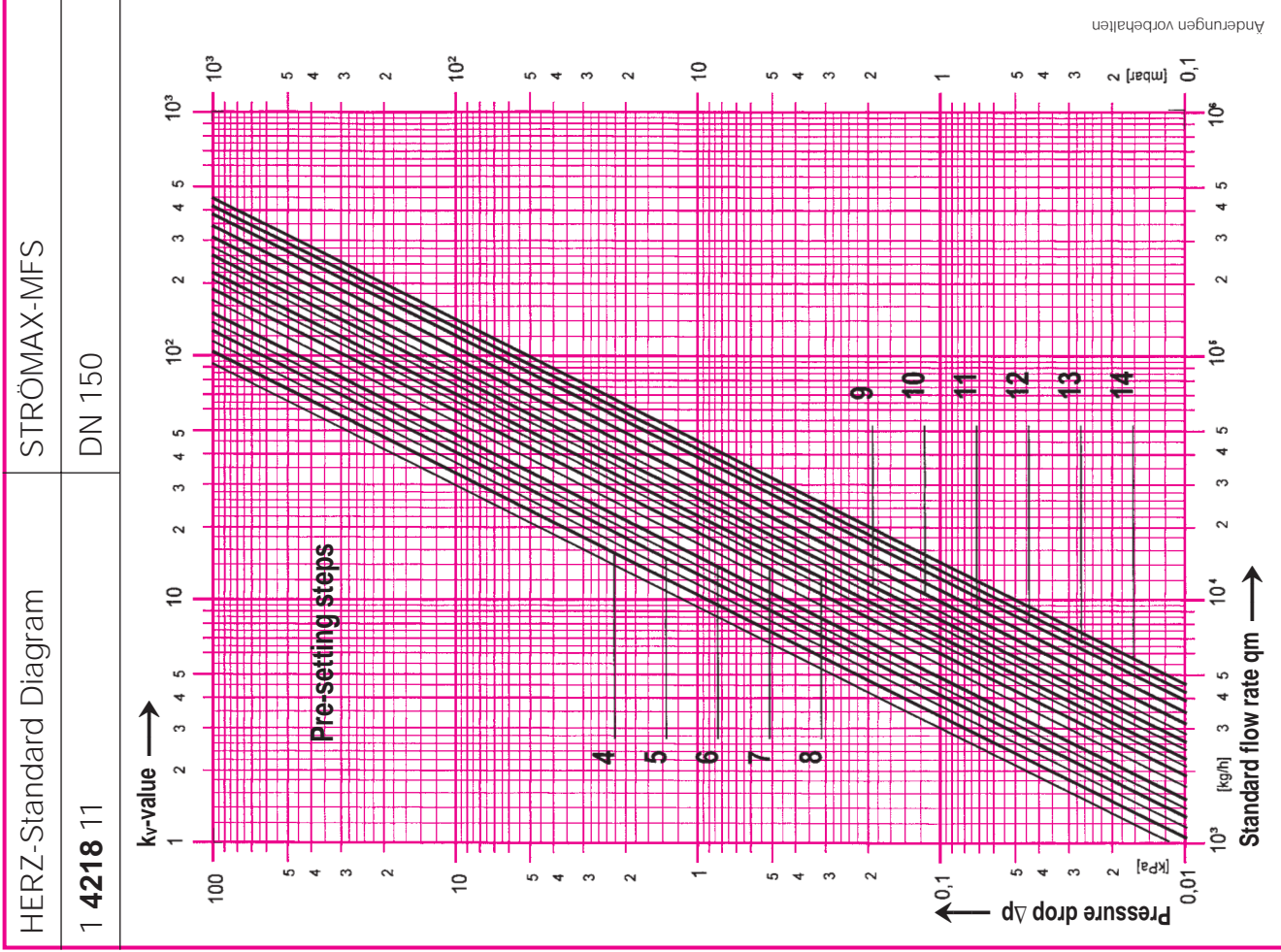
Materials

<p>The valves come with the following equipment:</p> <ul style="list-style-type: none"> ● yellow flange cover covering the flange holes ● screw plugs providing a tight seal for all of the 4 necks for measuring valves. ● up to DN 100: plastic hand wheel cap ● up to DN 100: pre-setting key under the cap in the hand wheel ● 2 straight measuring valves, dimension 1/4" ● pre-setting marker ● instructions for pre-setting 	<p>Equipment</p>
<p>STRÖMAX-MFS-circuit control valves are maintenance free.</p> <p>When the sealing elements are worn, it is possible to either change the cone or the entire hand wheel. The spindle seal and the seal of the upper part are available as accessories.</p>	<p>Maintenance</p>
<p>Lift the valves only at the jack rings provided for this purpose.</p>	<p>Important for Transport</p>
<p>The warranty period for STRÖMAX-MFS circuit control valves is 24 months from the date of manufacture (according to test stamp) which goes beyond the statutory warranty period. This valve series is excluded from the HERZ-5-year warranty.</p>	<p>Warranty</p>
<p>For pre-setting values refer to the HERZ-Standard Diagrams or to the Table of k_V-Values. They are valid for measurement through the measuring valves.</p>	<p>k_V-Values</p>
<p>1 6640 00 HERZ-universal key for actuating the measuring valves 1 8902 00 HERZ-measuring computer with printer interface</p> <p>Thermal insulation shells upon enquiry.</p>	<p>Accessories</p>
<p>1 0280 09 Measuring valve, straight model 1 6517 05 Pre-setting marker</p>	<p>Spare Parts</p>









STRÖMAX-MFS Table of k_v -Values

Pre-setting steps	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
2,0	10,9	15,3	26,2	45,2			
2,1	11,6	16,3	27,3	48,1			
2,2	12,4	17,2	28,4	51,0			
2,3	13,1	18,2	29,6	54,0			
2,4	13,8	19,1	30,7	56,9			
2,5	14,5	20,1	31,8	59,8			
2,6	15,2	21,0	32,9	62,8			
2,7	15,9	22,0	34,1	65,7			
2,8	16,6	22,9	35,2	68,7			
2,9	17,4	23,9	36,3	71,6			
3,0	18,1	24,9	37,5	74,5			
3,1	19,0	26,1	39,0	78,0			
3,2	19,9	27,3	40,6	81,4			
3,3	20,7	28,6	42,2	84,8			
3,4	21,6	29,8	43,8	88,3			
3,5	22,5	31,0	45,4	91,7	72,2	92,2	195
3,6	23,4	32,3	47,0	95,1	74,1	94,1	200
3,7	24,2	33,5	48,6	98,6	75,9	96,0	205
3,8	25,1	34,7	50,2	102	77,7	97,8	209
3,9	26,0	36,0	51,8	106	79,5	99,7	214
4,0	26,9	37,2	53,3	109	81,3	102	219
4,1	27,7	38,8	55,3	112	83,8	104	225
4,2	28,6	40,3	57,2	116	86,3	106	230
4,3	29,4	41,8	59,1	119	88,8	109	236
4,4	30,3	43,4	61,1	122	91,3	111	242
4,5	31,1	44,9	63,0	125	93,8	113	248
4,6	32,0	46,4	64,9	129	96,3	116	254
4,7	32,8	48,0	66,8	132	98,8	118	259
4,8	33,6	49,5	68,8	135	101	121	265
4,9	34,5	51,0	70,7	139	104	123	271
5,0	35,3	52,6	72,6	142	106	125	277
5,1	35,9	54,0	74,7	146	109	128	283
5,2	36,6	55,5	76,8	149	111	130	289
5,3	37,1	57,0	78,9	153	114	132	294
5,4	37,8	58,5	81,0	156	116	135	300
5,5	38,4	60,0	83,1	160	119	137	306
5,6	39,0	61,4	85,2	163	121	139	312
5,7	39,6	62,9	87,3	167	124	142	318
5,8	40,2	64,4	89,3	170	126	144	324
5,9	40,8	65,9	91,4	174	129	147	329
6,0	41,4	67,3	93,5	178	131	149	335
6,1	41,9	68,2	95,3	181	134	152	343
6,2	42,4	69,1	97,2	184	137	156	350
6,3	42,9	70,0	99,0	187	140	160	357
6,4	43,4	70,8	101	190	143	163	365
6,5	43,9	71,7	103	194	146	167	372
6,6	44,4	72,6	104	197	149	170	380
6,7	44,9	73,5	106	200	151	174	387
6,8	45,4	74,3	108	203	154	177	395
6,9	45,9	75,2	110	207	157	181	402
7,0	46,4	76,1	112	210	160	184	409

STRÖMAX-MFS Table of k_v -Values							
Pre-setting steps	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200
7,1	46,7	76,7	113	211	163	188	417
7,2	47,0	77,2	115	213	166	191	424
7,3	47,3	77,8	117	214	169	195	432
7,4	47,7	78,4	118	215	171	199	439
7,5	48,0	78,9	120	217	174	202	446
7,6	48,3	79,5	122	218	177	206	454
7,7	48,6	80,1	123	220	180	209	461
7,8	48,9	80,7	125	221	183	213	469
7,9	49,2	81,2	127	223	186	216	476
8,0	49,8	81,8	128	224	188	220	484

STRÖMAX-MFS Table of k_v -Values							
Pre-setting steps	DN 125	DN 150	DN 200	Pre-setting steps	DN 125	DN 150	DN 200
8,1	191	224	492	11,1	278	345	729
8,2	194	228	500	11,2	281	349	736
8,3	197	232	509	11,3	283	353	743
8,4	200	236	517	11,4	286	357	750
8,5	203	240	526	11,5	289	361	757
8,6	206	244	534	11,6	292	365	763
8,7	209	248	542	11,7	295	368	770
8,8	212	253	551	11,8	298	372	777
8,9	215	257	559	11,9	301	376	784
9,0	217	261	568	12,0	303	380	791
9,1	220	265	576	12,1	306	384	796
9,2	223	269	585	12,2	308	387	801
9,3	226	273	593	12,3	310	390	806
9,4	229	277	601	12,4	313	393	811
9,5	232	281	610	12,5	315	397	816
9,6	235	285	618	12,6	317	400	821
9,7	238	289	627	12,7	319	403	826
9,8	241	293	635	12,8	322	407	831
9,9	244	297	644	12,9	324	410	836
10,0	246	302	652	13,0	326	413	840
10,1	249	305	659	13,1	329	416	845
10,2	252	309	666	13,2	331	420	850
10,3	255	313	673	13,3	333	423	855
10,4	258	317	680	13,4	336	426	860
10,5	261	321	687	13,5	338	430	865
10,6	264	325	694	13,6	340	433	870
10,7	266	329	701	13,7	343	436	875
10,8	269	333	708	13,8	345	439	880
10,9	272	337	715	13,9	347	443	885
11,0	275	341	722	14,0	349	446	890