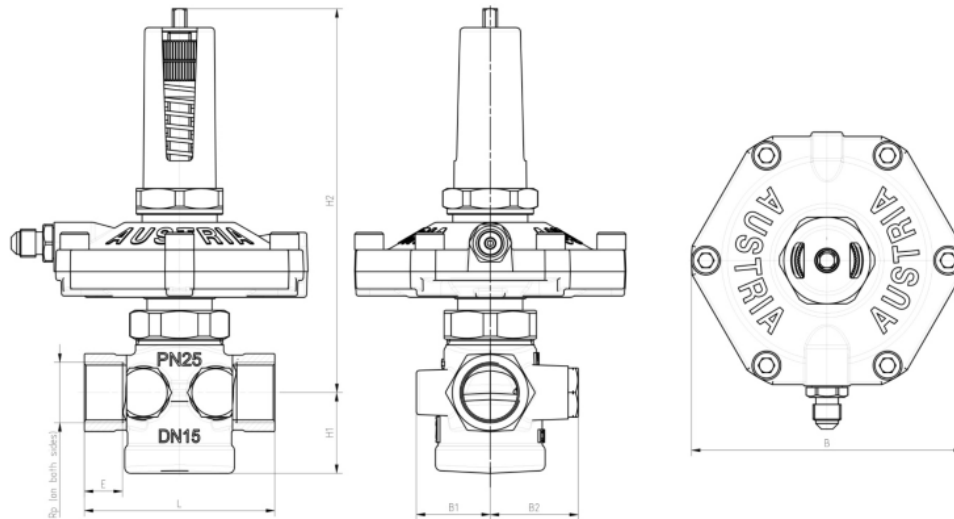


HERZ Differential Pressure Control Valve 4202

Data sheet for **4202** Issue 1018

Dimensions in mm



Order number	DN	Rp	L	H1	H2	B	B1	B2	E
1 4202 41	15	½"	66	28	133	95	26	27	13
1 4202 61									
1 4202 71									
1 4202 42	20	¾"	76	28	133	95	28	29	14
1 4202 62									
1 4202 72									
1 4202 43	25	1"	90	28	133	95	28	29	17
1 4202 63									
1 4202 73									
1 4202 44	32	1¼"	114	45	133	95	32	32	19
1 4202 64									
1 4202 74									
1 4202 45	40	1½"	132	57	133	95	41	41	19
1 4202 65									
1 4202 75									
1 4202 46	50	2"	140	57	133	95	41	41	23
1 4202 66									
1 4202 76									

Technical data

Max operating pressure	16 bar
Max differential pressure over the body	2 bar
Min operating temperature	-20°C
Max operating temperature	up to DN32 130°C
Max operating temperature	from DN40 110°C

DP Range 4202 4x	5 - 30 kPa
DP Range 4202 6x	25 - 60 kPa
DP Range 4202 7x	45 - 80 kPa

Important note: The capillary must be connected when you make pressure tests and any isolating valves in the capillary must be open. During flushing, capillary isolating valves should be shut to prevent the valve from attempting to regulate the flow. To prevent damage of the body and the diaphragm a maximum differential pressure of 2 bar between supply and return is allowed at all times.

Application

The differential pressure controller is a straight-version linear controller and works without auxiliary power. The nominal differential pressure can be continuously adjusted from 50 to 300 mbar and 250 to 600 mbar, respectively. The value for the setting can be read from the diagram. The nominal set point is factory preset to a minimum. If necessary, the nominal set point can be adjusted using the pre-setting key (1 4002 01). A capillary (1000 mm) is included and should be connected to the circuit regulating valve in the flow.

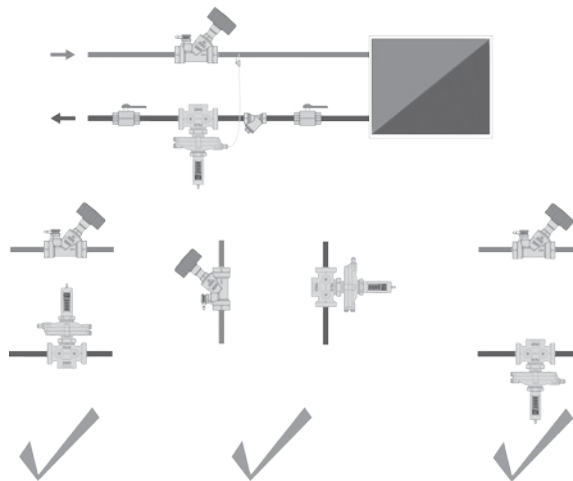
Materials

Body: dezincification-resistant brass
 Membranes and O-rings: EPDM
 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. [%]

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

Installation

The valve is fitted in the return flow in any orientation. The arrow on the valve body should align with the direction of flow.
 It is recommended that an isolation valve is fitted both upstream and downstream of the differential pressure controller



kv values

DN 15		DN 20	DN 25	DN 32	DN 40	DN 50
4202	2,66	4,36	5,38	9,48	14,95	14,95

☑ Connection elements

- 1 **6220** .. Iron pipe connection, consisting of nut, seal and pipe nipple with male pipe thread
- 1 **6236** .. Soldering connection, consisting of nut, seal and soldering nipple
- 1 **6240** .. Welding connection, consisting of nut, seal and welding nipple
- 1 **6210** .. Iron pipe connection consisting of nut, seal and pipe nipple with male pipe thread
- 1 **6235** .. Soldering connection, consisting of nut, seal and soldering nipple

☑ Tips

The valves must be installed for the correct application using clean fittings. A HERZ strainer (4111) should be fitted to prevent impurities..

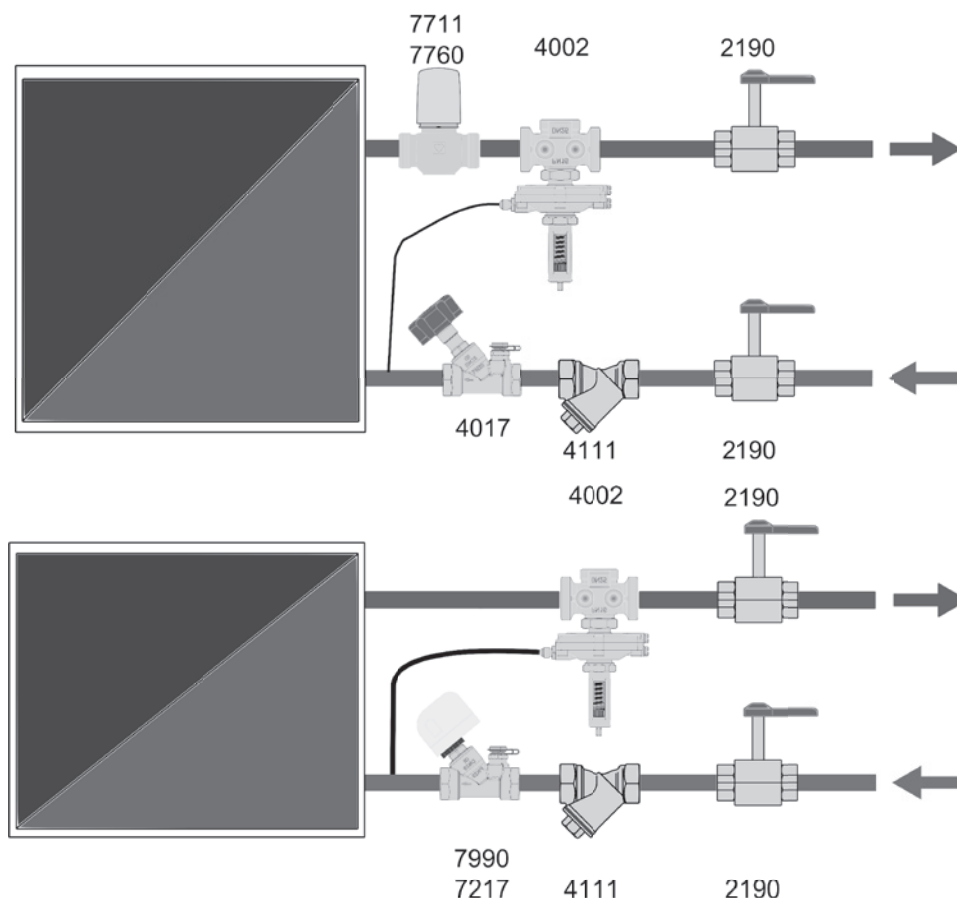
☑ Test points

Two test points are fitted on the same side of the valve and factory sealed. Thanks to this arrangement they are easily accessible and measurement devices can be quickly fitted, no matter in what position the valve has been installed.

☑ Pre-setting

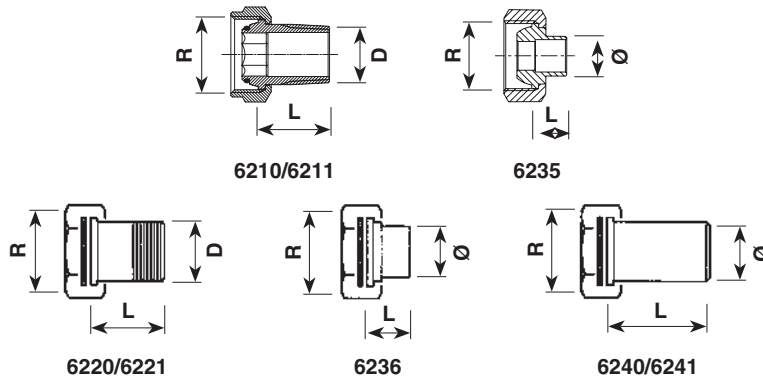
The valve setting is clearly shown on the scale on the valve indicator. The preset value can be easily adjusted. Once set, the differential pressure controller can always be adjusted to any position.

☑ Application examples

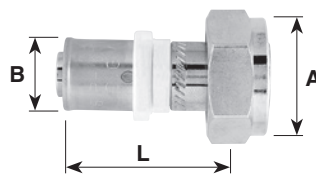


Please note: all diagrams are indicative in nature and do not claim to be complete.

☑ HERZ-Connection elements



Valve dimension	Order number	R	D	Ø	L
DN 15	1 6210 21	3/4	1/2	–	25
DN 15	1 6210 26	3/4	1/2	–	21
DN 15	1 6210 11	3/4	1/2	–	30
DN 15	1 6211 00	3/4	3/8	–	24
DN 20	1 6210 02	1	3/4	–	30
DN 20	1 6210 12	1	1/2	–	30
DN 25	1 6220 63	1¼	1	–	35
DN 32	1 6220 64	1½	1	–	40
DN 40	1 6220 65	1¾	1½	–	49
DN 50	1 6220 66	2¾	2	–	56
DN 15	1 6235 21	3/4	–	12	13
DN 15	1 6235 31	3/4	–	15	13
DN 15	1 6235 41	3/4	–	18	18
DN 20	1 6235 12	1	–	18	18
DN 25	1 6236 63	1¼	–	28	24
DN 32	1 6236 64	1½	–	35	27
DN 40	1 6236 65	1¾	–	42	31
DN 50	1 6236 66	2¾	–	54	37
DN 25	1 6240 63	1¼	–	34	51
DN 32	1 6240 64	1½	–	42	54
DN 40	1 6240 65	1¾	–	48	57
DN 50	1 6240 66	2¾	–	60	60



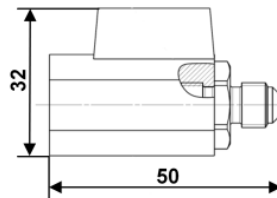
Valve dimension	Order number	A	B	L
DN 15	P 7014 81	G 3/4	14 x 2	50
DN 15	P 7016 81	G 3/4	16 x 2	50
DN 15	P 7018 81	G 3/4	18 x 2	50
DN 15	P 7020 81	G 3/4	20 x 2	50
DN 25	P 7026 43	G 1¼	26 x 3	50
DN 25	P 7032 43	G 1¼	32 x 3	50
DN 25	P 7040 43	G 1¼	40 x 3,5	70
DN 32	P 7032 44	G 1½	32 x 3	50
DN 32	P 7040 44	G 1½	40 x 3,5	70
DN 32	P 7050 44	G 1½	50 x 4	70

☑ **Accessories and spare parts**

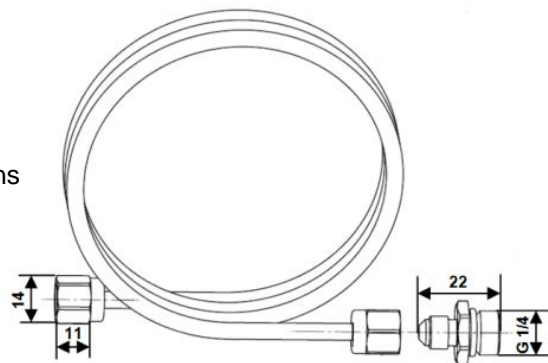
- 1 **4117** xx HERZ-STRÖMAX circuit control valves, angle version
- 1 **4217** xx HERZ- STRÖMAX circuit control valves, straight version
- 1 **4017** xx HERZ- STRÖMAX circuit control valves with integrated metering orifice plate
- 1 **4125** xx HERZ shut-off valves, angle version
- 1 **4115** xx HERZ shut-off valves, angle version
- 1 **4215** xx HERZ shut-off valves, straight version, also variants with male threads. For details please refer to the corresponding data sheets.

- 1 **0284** 01 test point for HERZ circuit control valve, blue cap (return)
- 1 **0284** 02 test point for HERZ circuit control valve, red cap (flow)
- 1 **0284** 11 test point for HERZ circuit control valve, extended model, blue cap (return)
- 1 **0284** 12 test point for HERZ circuit control valve, extended model, red cap (flow)
- 1 **0284** 21 HERZ test point with draining function, blue cap (return)
- 1 **0284** 22 HERZ test point with draining function, red cap (flow)
- 1 **0284** 00 test point adapter set
- 1 **0273** 09 screw plug 1/4
- 1 **4006** 02 HERZ pre-setting key for differential pressure control

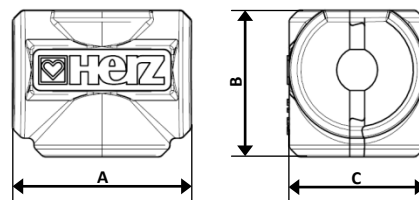
1 **4002** 78
control capillary
with ball valve G 1/8



1 **4002** 80
control capillary with connections
G 1/4
length 2000 mm



1 **4096** 1x
Insulation shell
made of EPP (expanded polypropylene)
According to DIN 4102 and E after DIN EN 13501-1
Weight 45 kg/m³



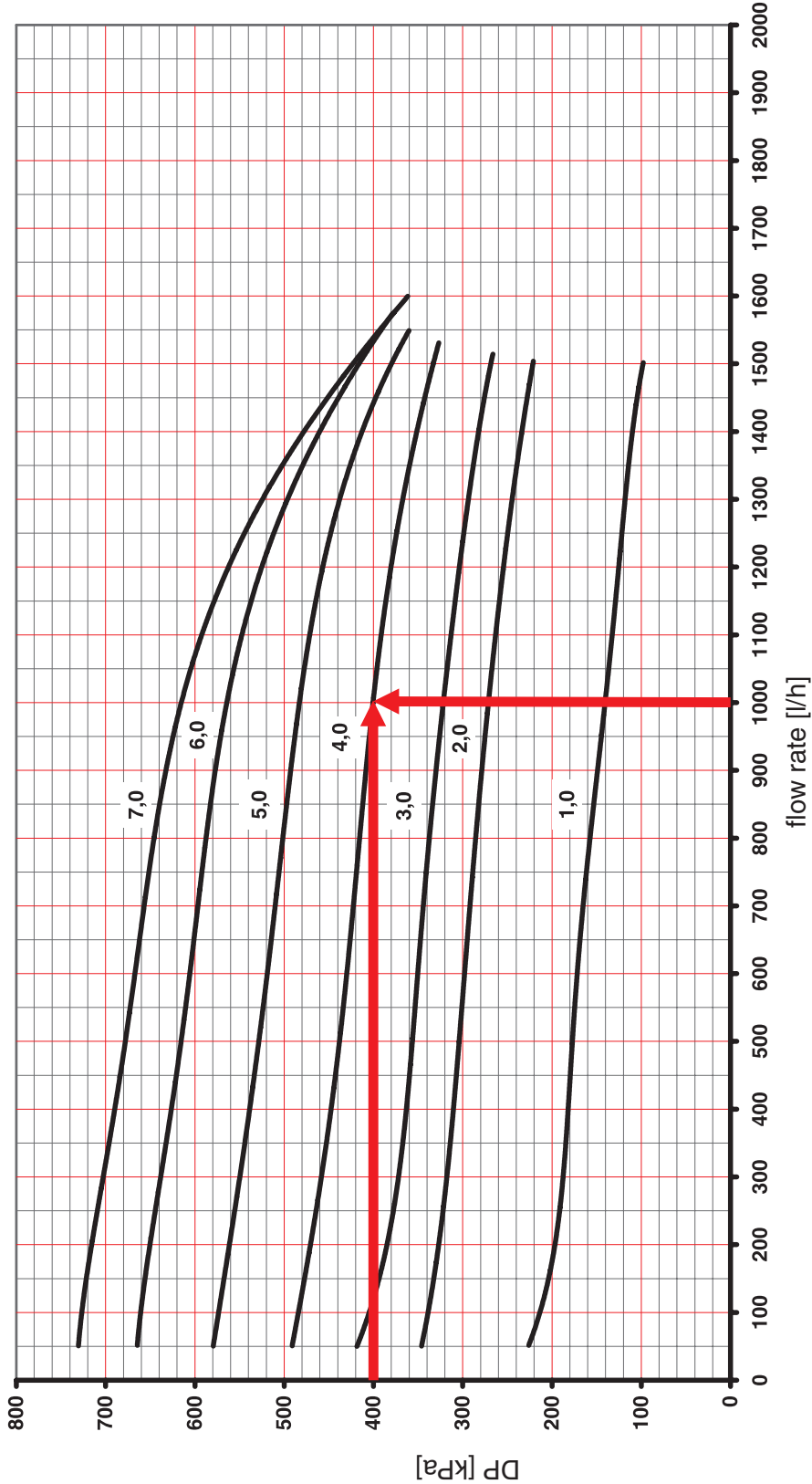
Order number	DN	A	B	C
1 4095 11	15	96	78,5	75
1 4095 12	20	110	82	83
1 4095 13	25	112	84	100
1 4095 14	32	152	120	110
1 4095 15	40	170	130	123
1 4095 16	50	179	130,5	147

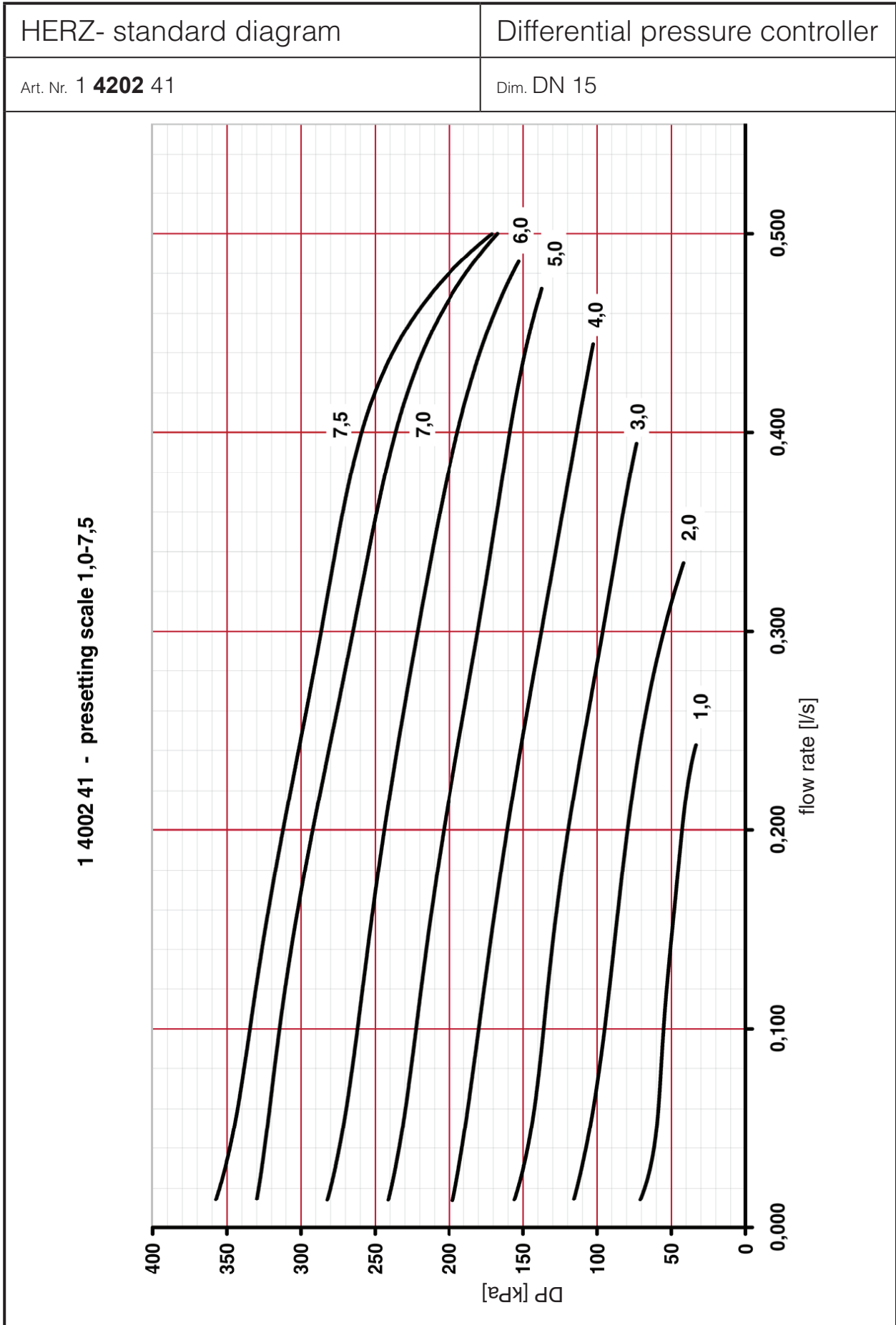
Dimensioning

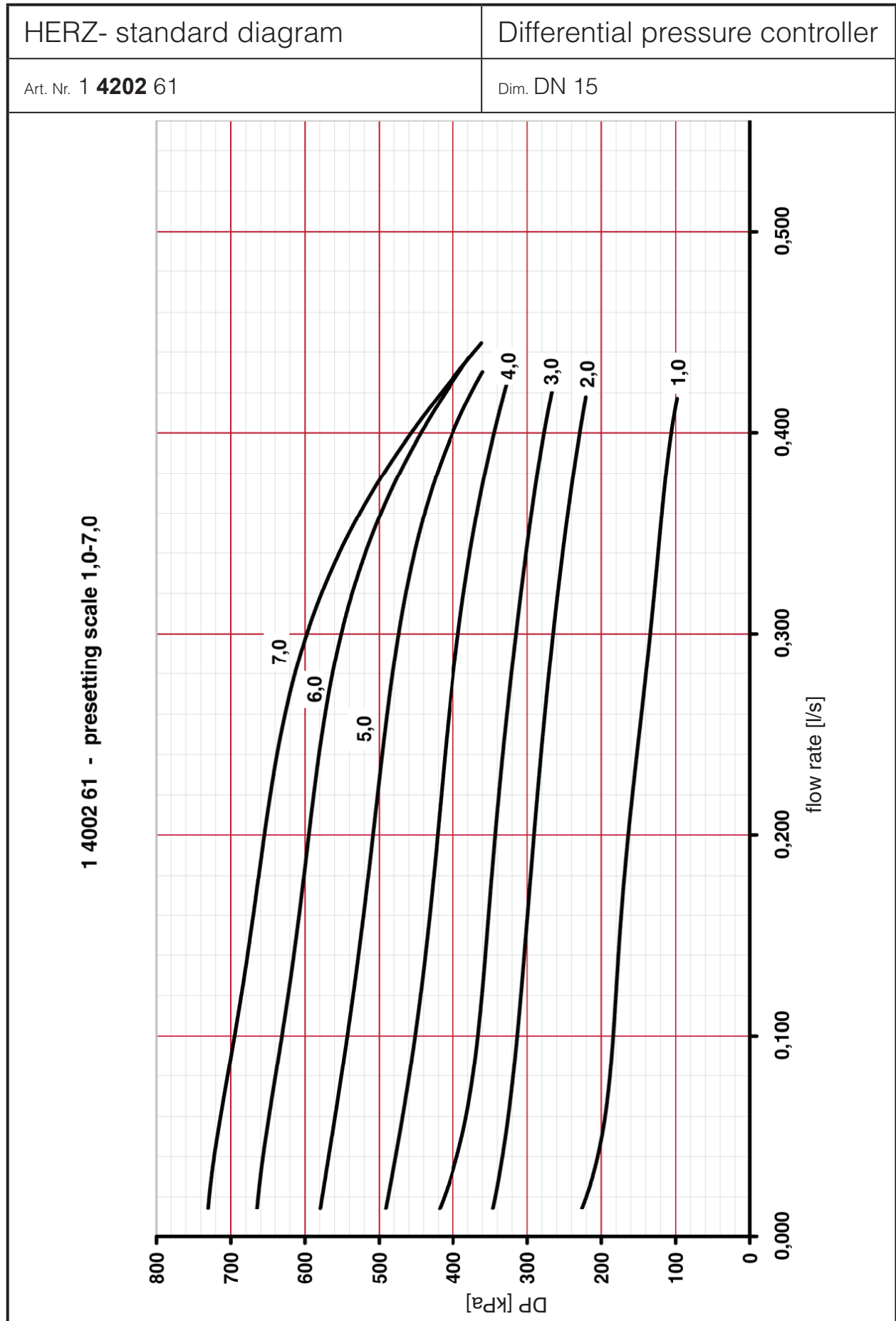
Example: required differential pressure 400 mbar
 flow rate 1000 l/h

- preset at position 4

Use the flow chart to determine the preset position for the valve, in the example below it can be clearly seen that the preset position is 4.0

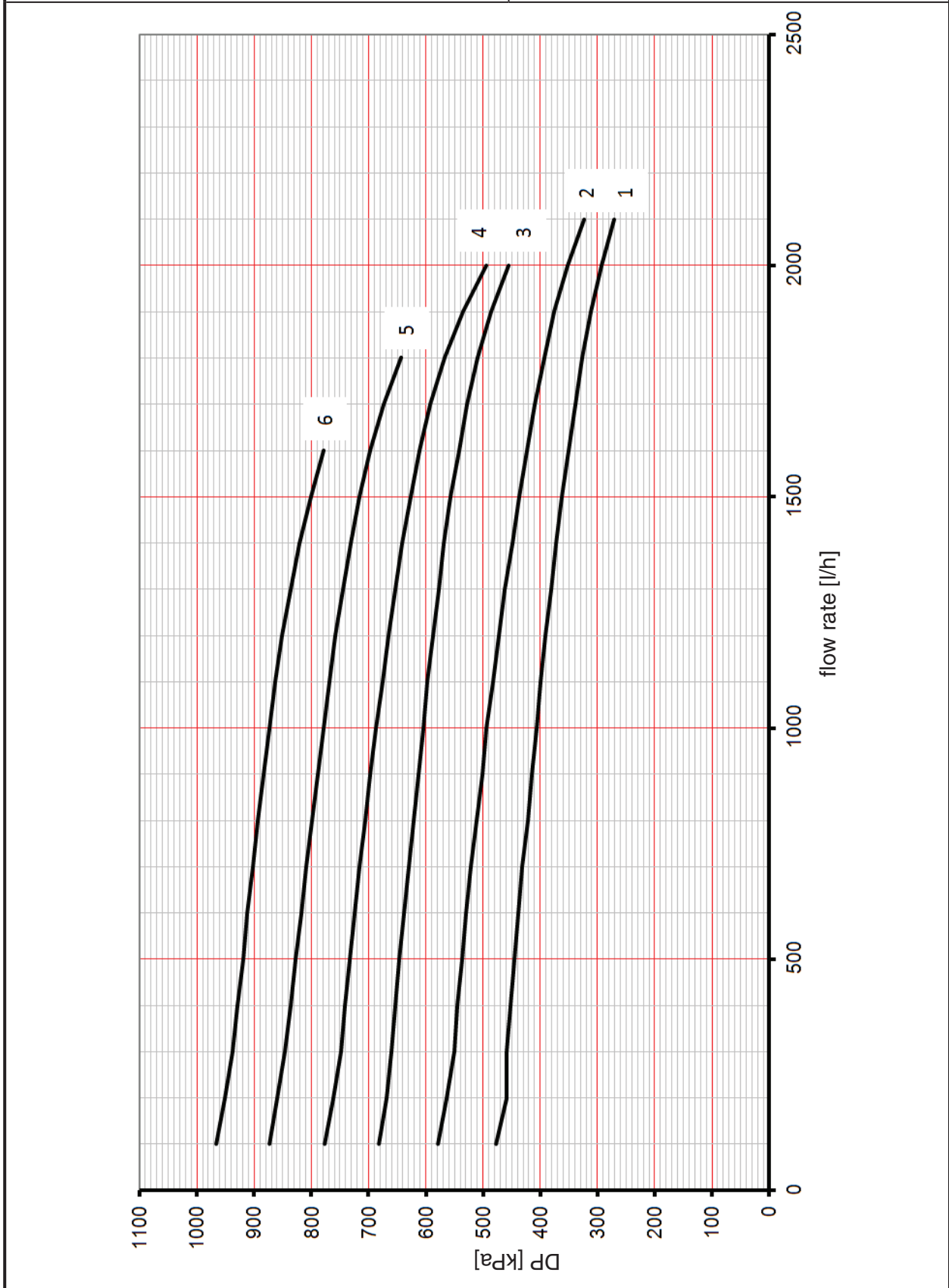






HERZ- standard diagram Differential pressure controller

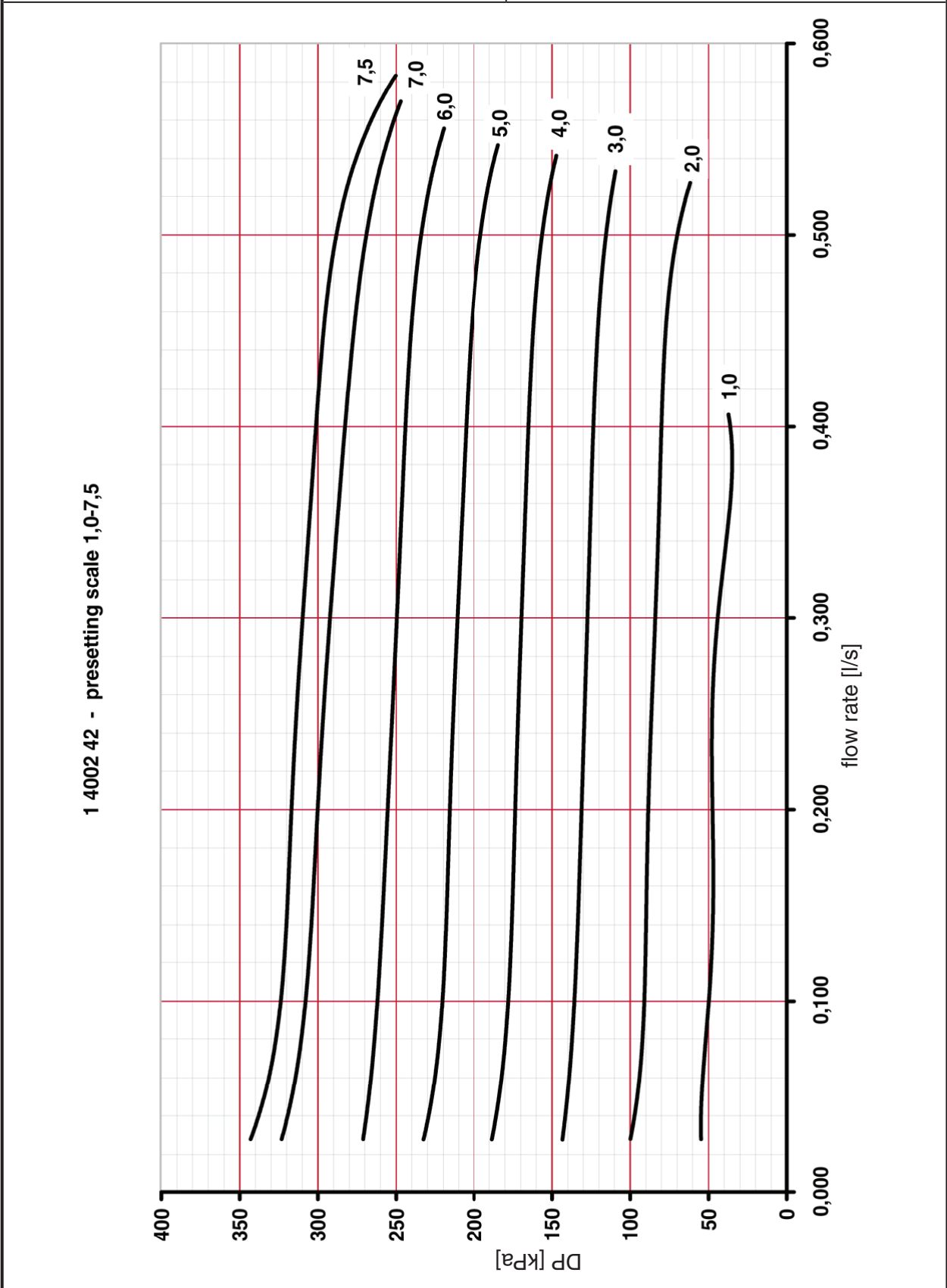
Art. Nr. 1 **4202** 71 Dim. DN 15

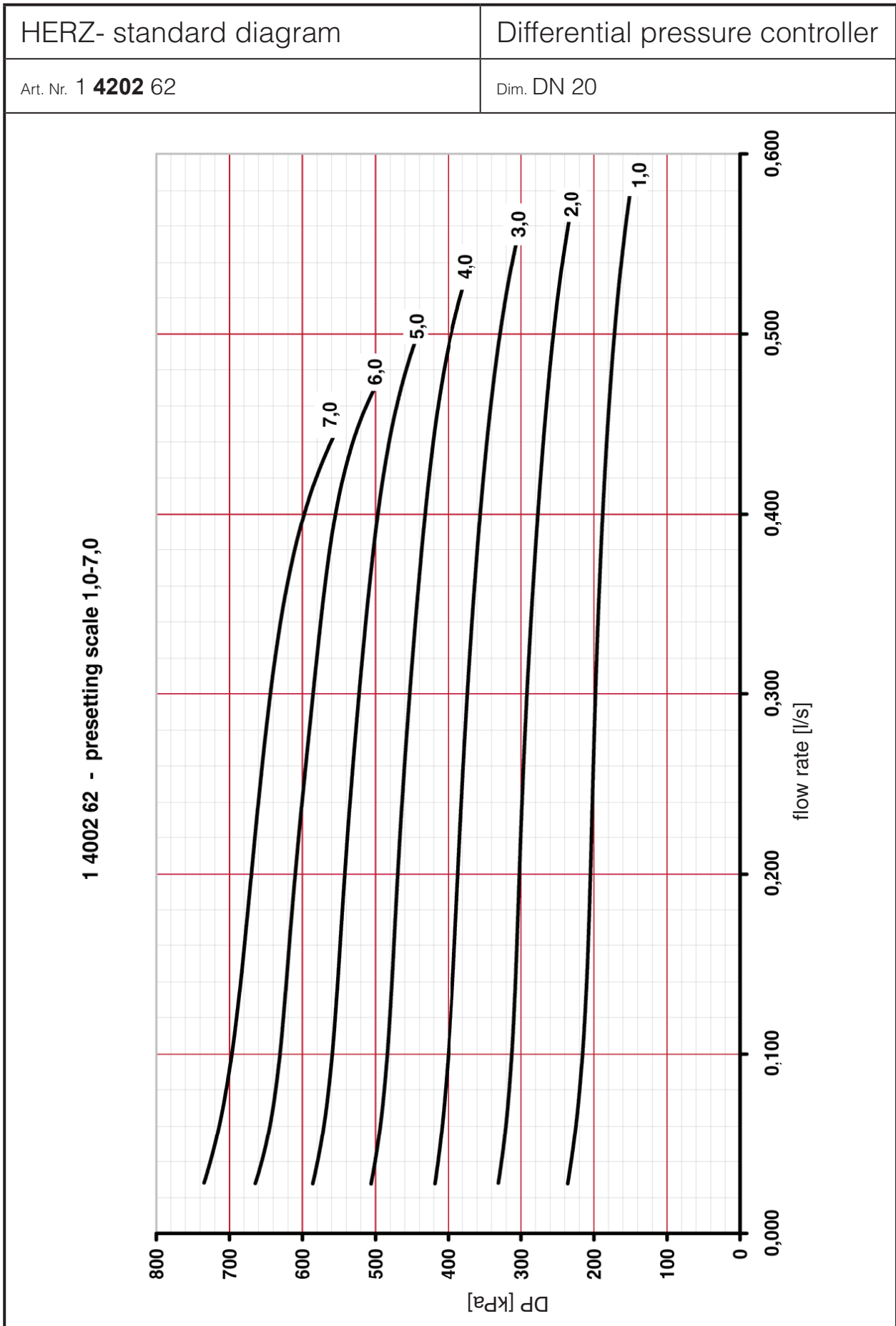


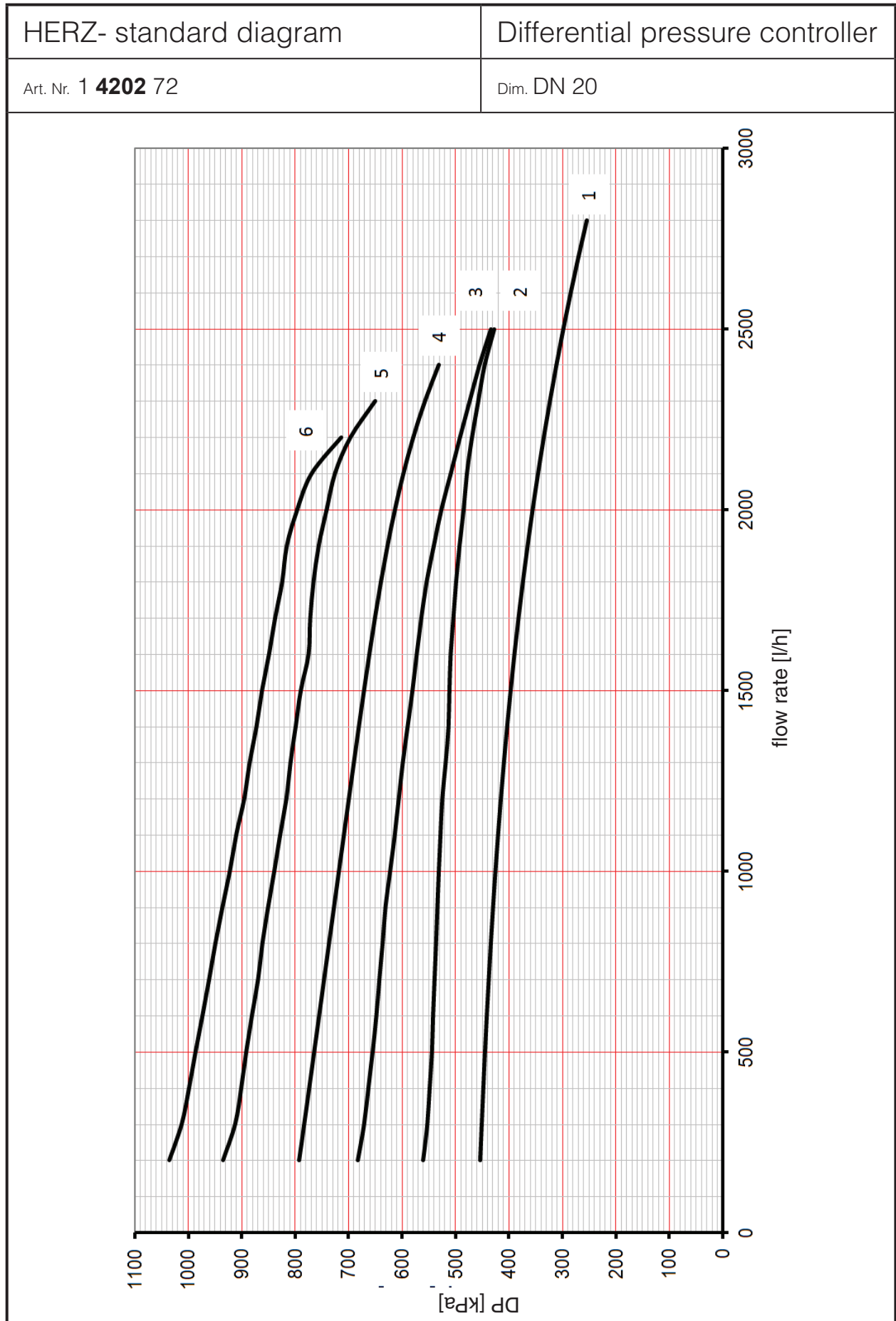
HERZ- standard diagram Differential pressure controller

Art. Nr. 1 **4202** 42

Dim. DN 20

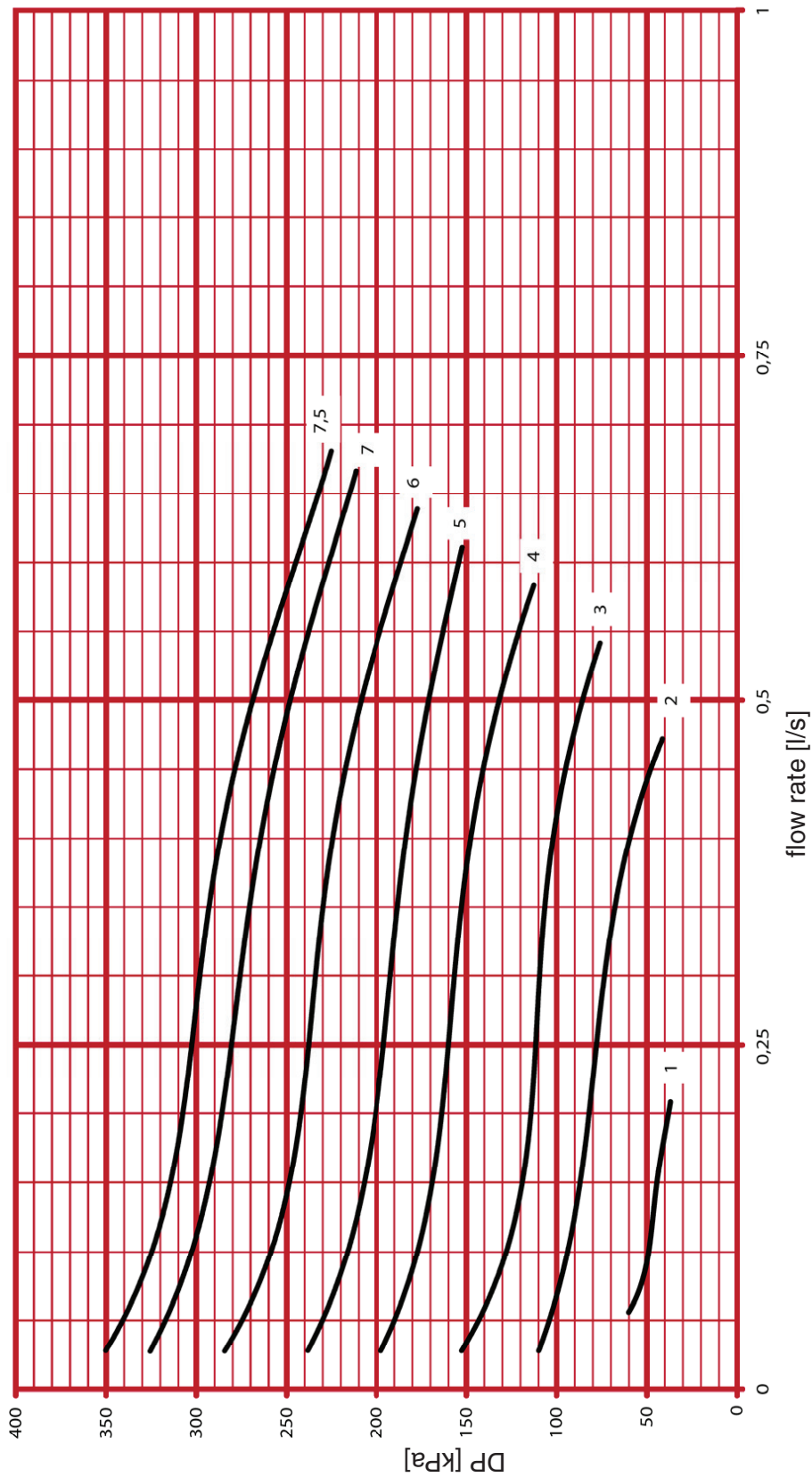






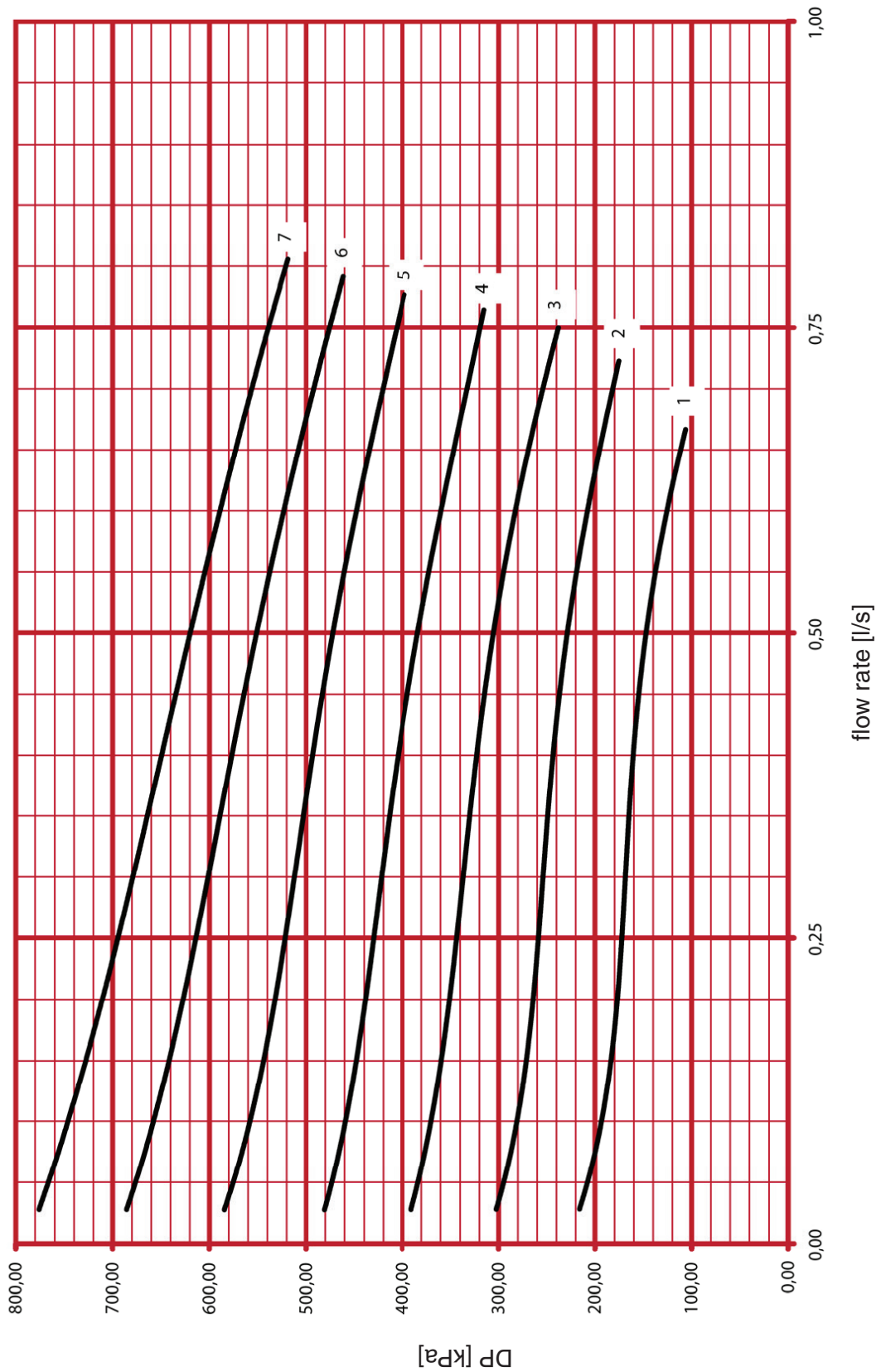
HERZ- standard diagram	Differential pressure controller
Art. Nr. 1 4202 43	Dim. DN 25

1 4003 43 - pressting scale 1,0-7,5



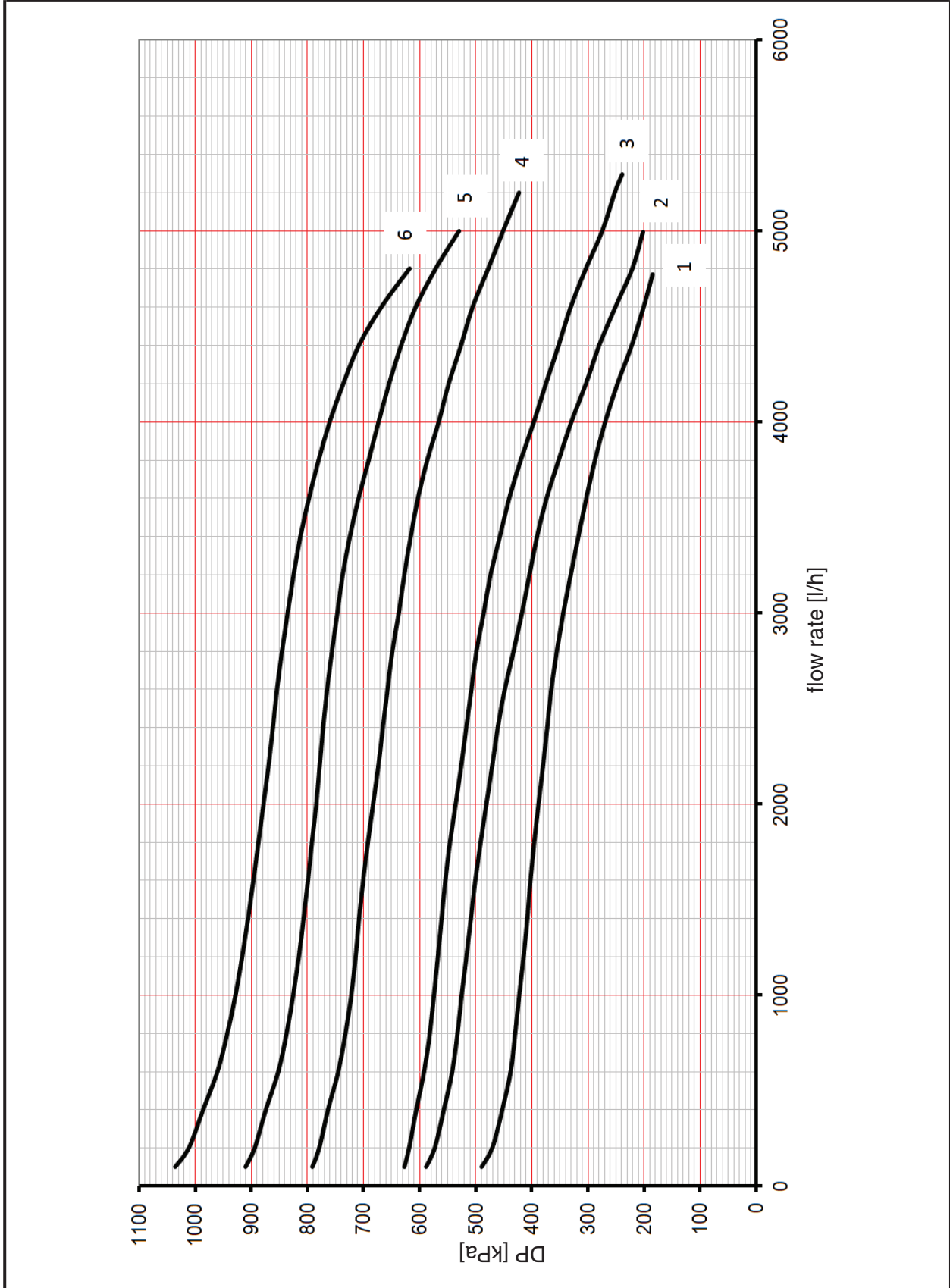
HERZ- standard diagram	Differential pressure controller
Art. Nr. 1 4202 63	Dim. DN 25

1 4002 63 - presstting scale 1,0-7,5



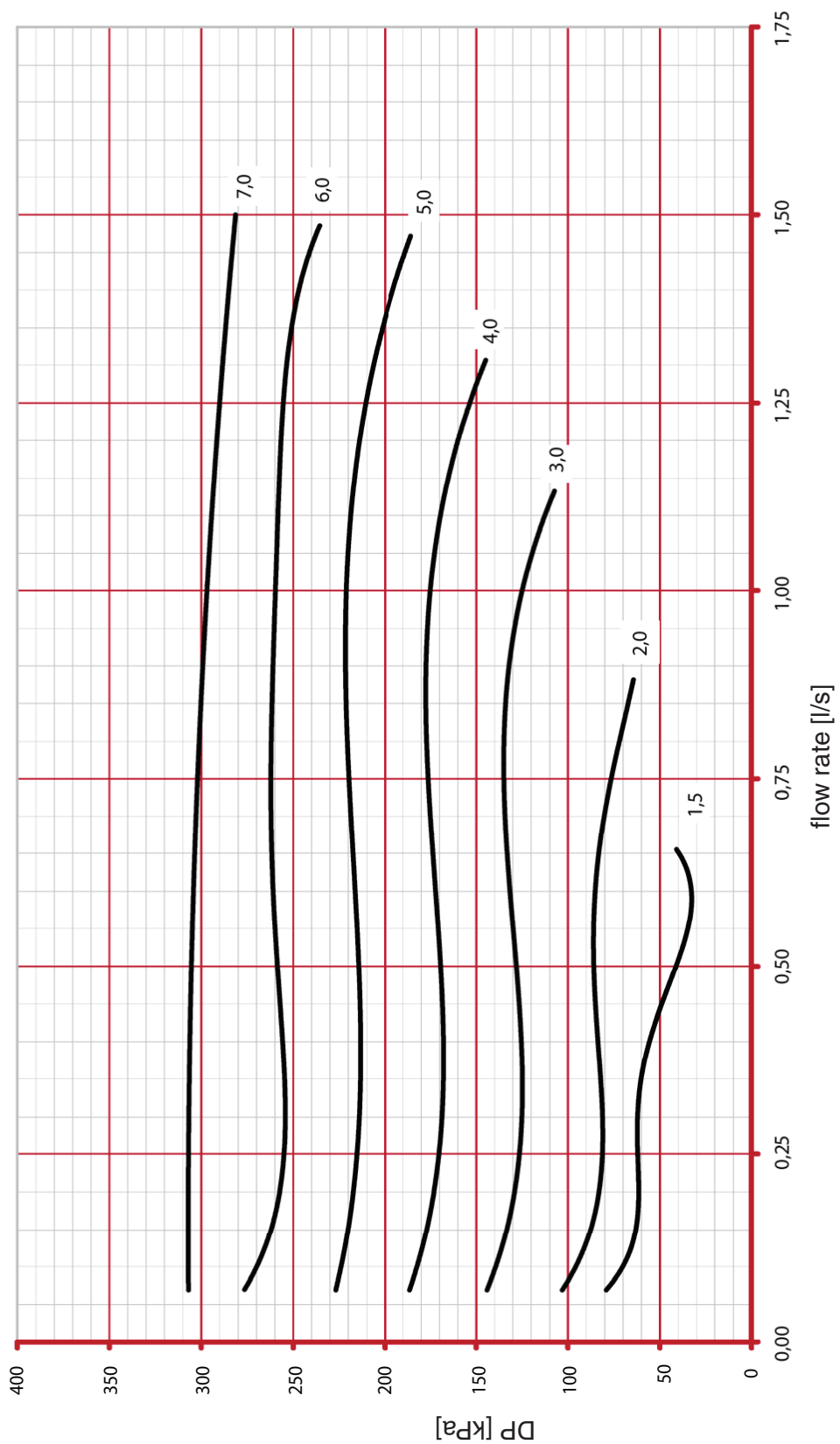
HERZ- standard diagram	Differential pressure controller
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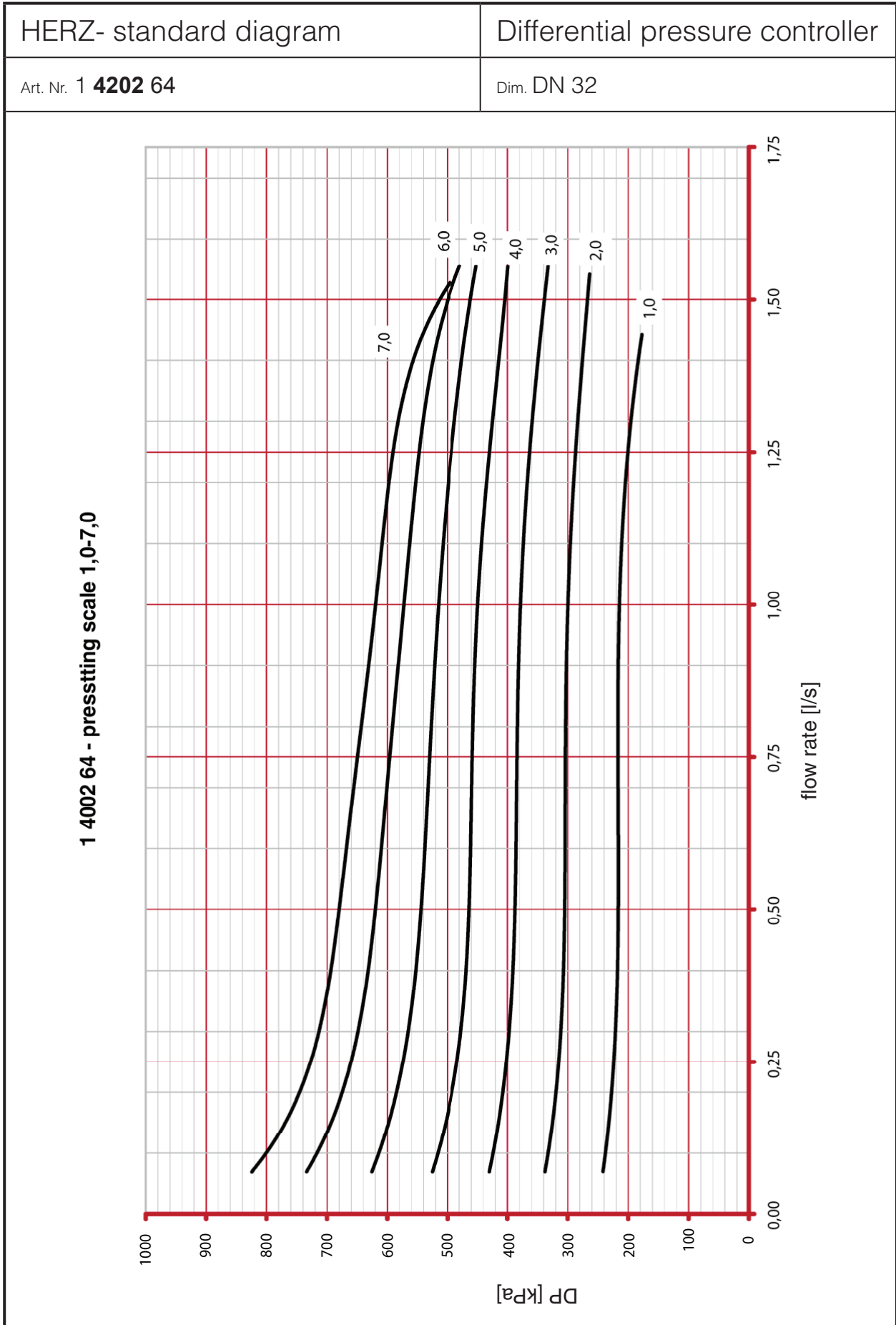
Art. Nr. 1 4202 73	Dim. DN 25
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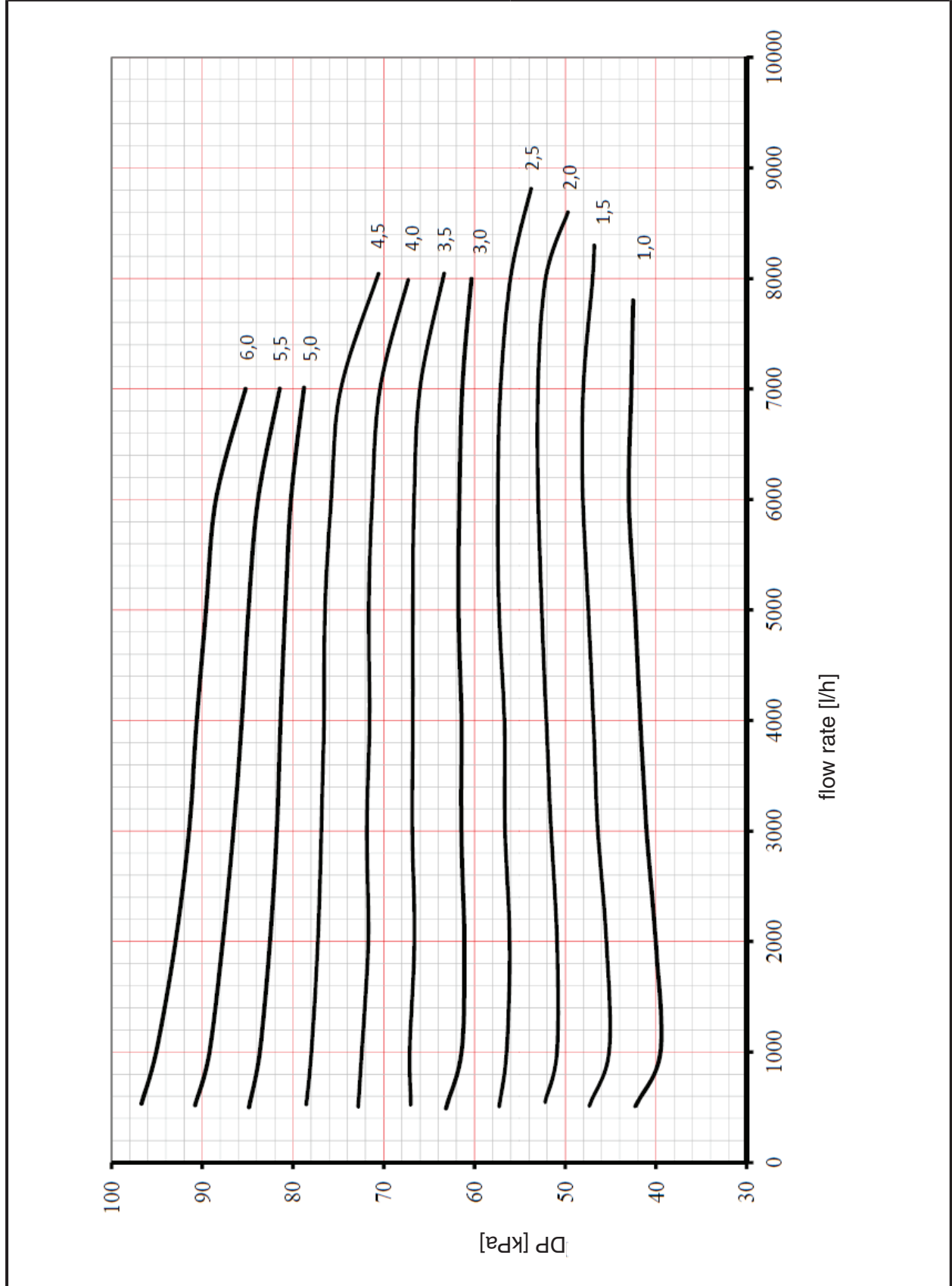
HERZ- standard diagram	Differential pressure controller
Art. Nr. 1 4202 44	Dim. DN 32

1 4002 44 - pressting scale 1,0-7,0





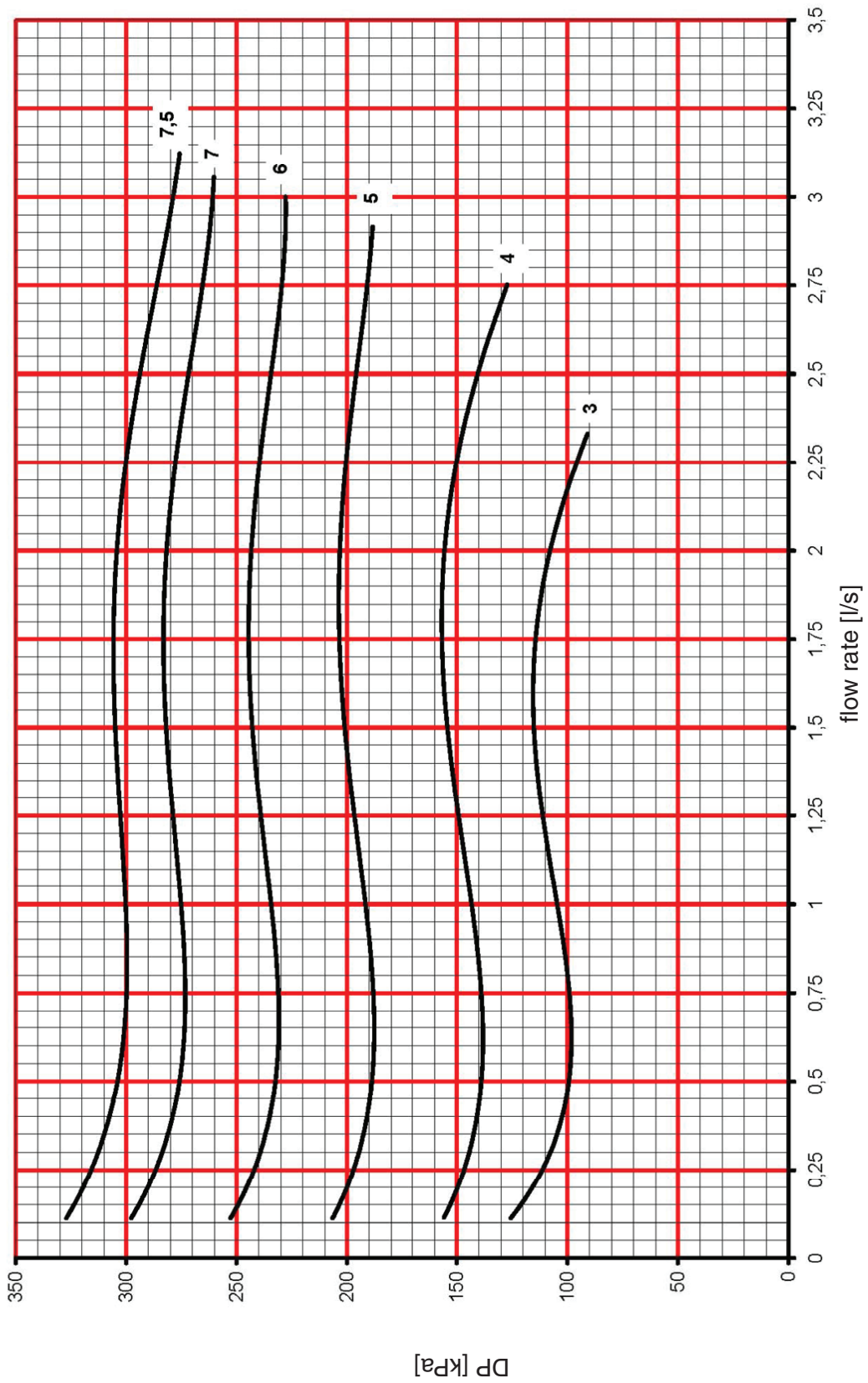
HERZ- standard diagram	Differential pressure controller
Art. Nr. 1 4202 74	Dim. DN 32



HERZ- standard diagram	Differential pressure controller
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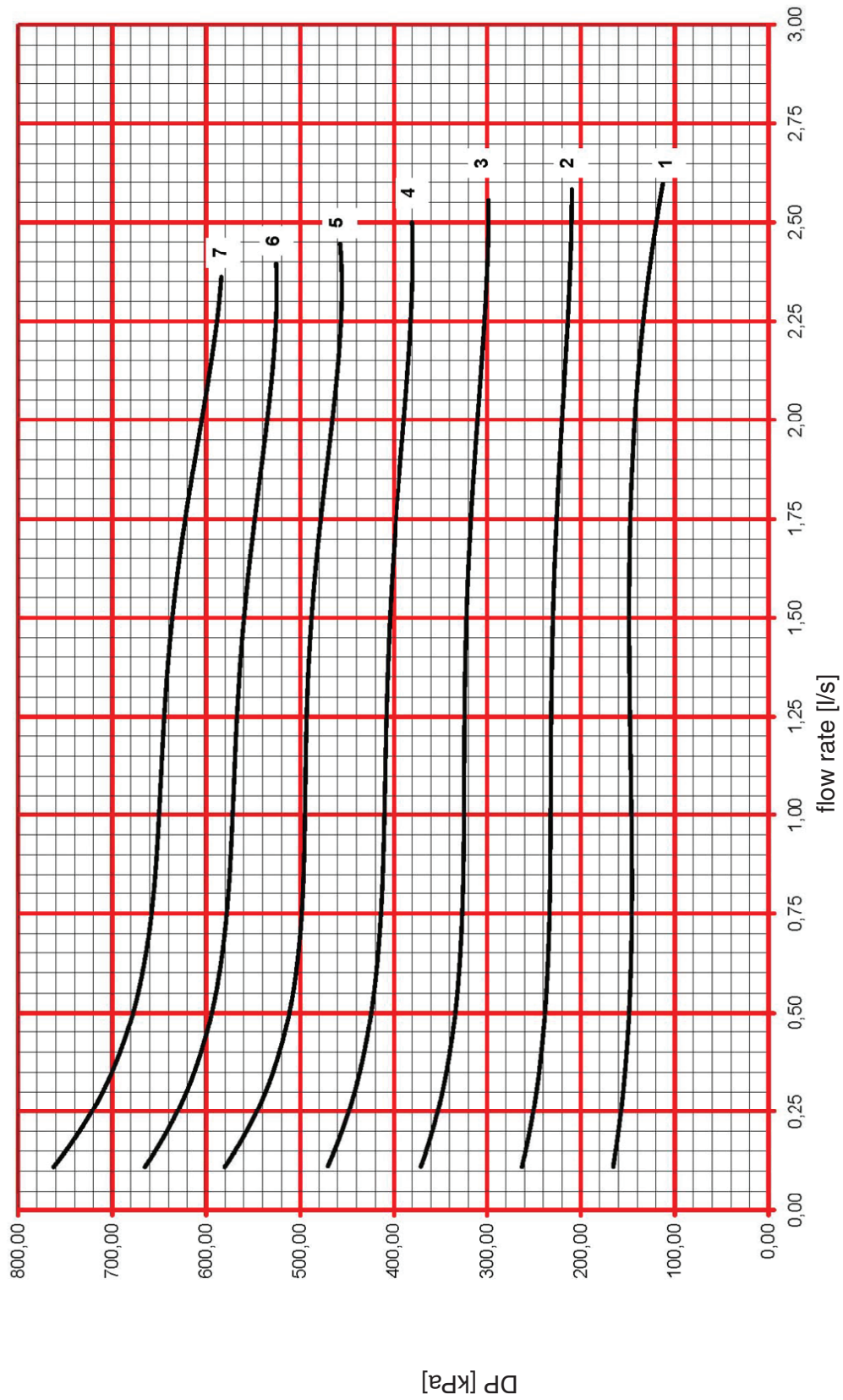
Art. Nr. 1 4202 45	Dim. DN 40
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1 4002 45 - presetting scale 1,0-7,0



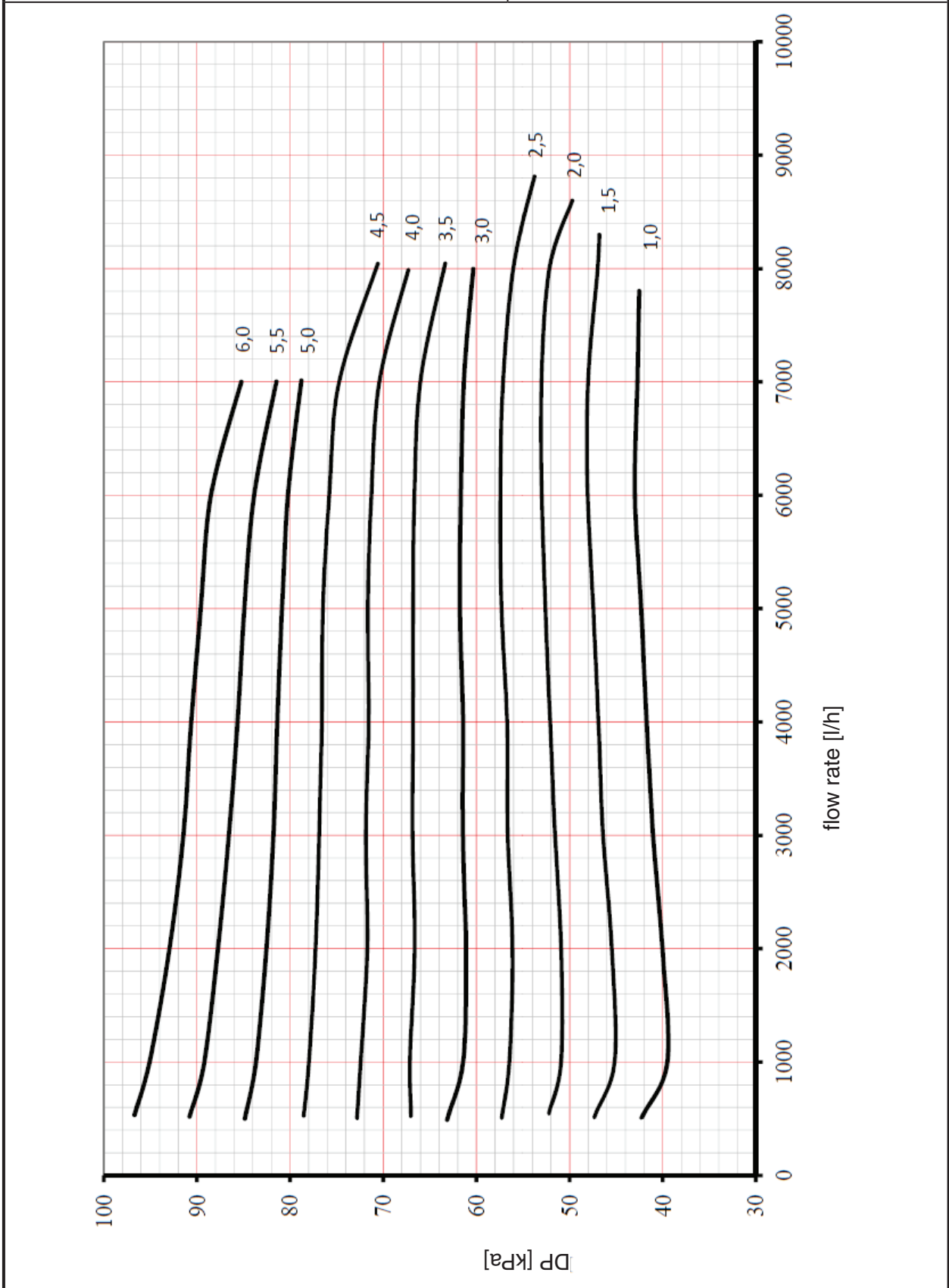
HERZ- standard diagram	Differential pressure controller
Art. Nr. 1 4202 65	Dim. DN 40

1 4002 65 - presetting scale 1,0-7,0



HERZ- standard diagram	Differential pressure controller
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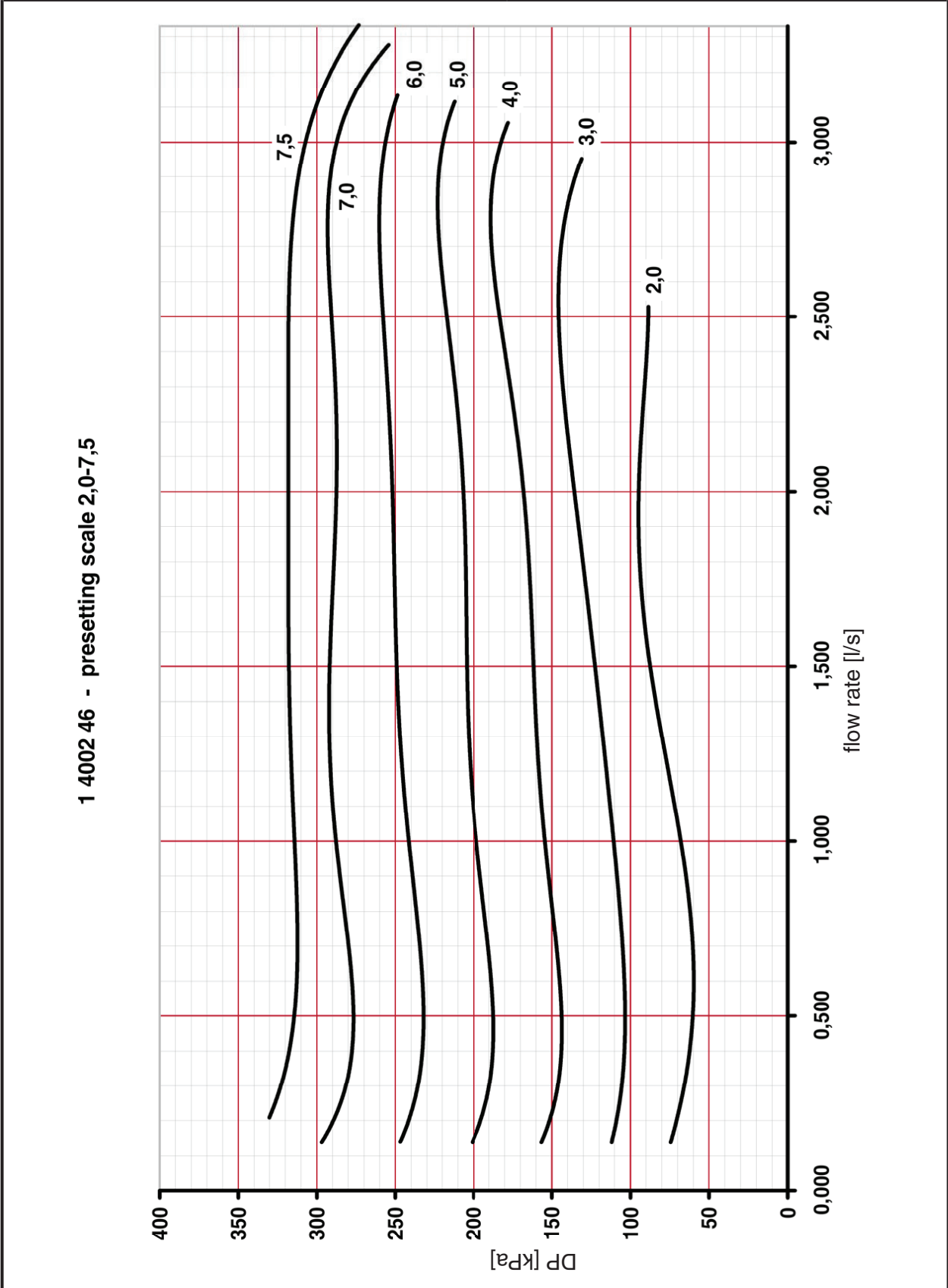
Art. Nr. 1 4202 75	Dim. DN 40
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HERZ- standard diagram Differential pressure controller

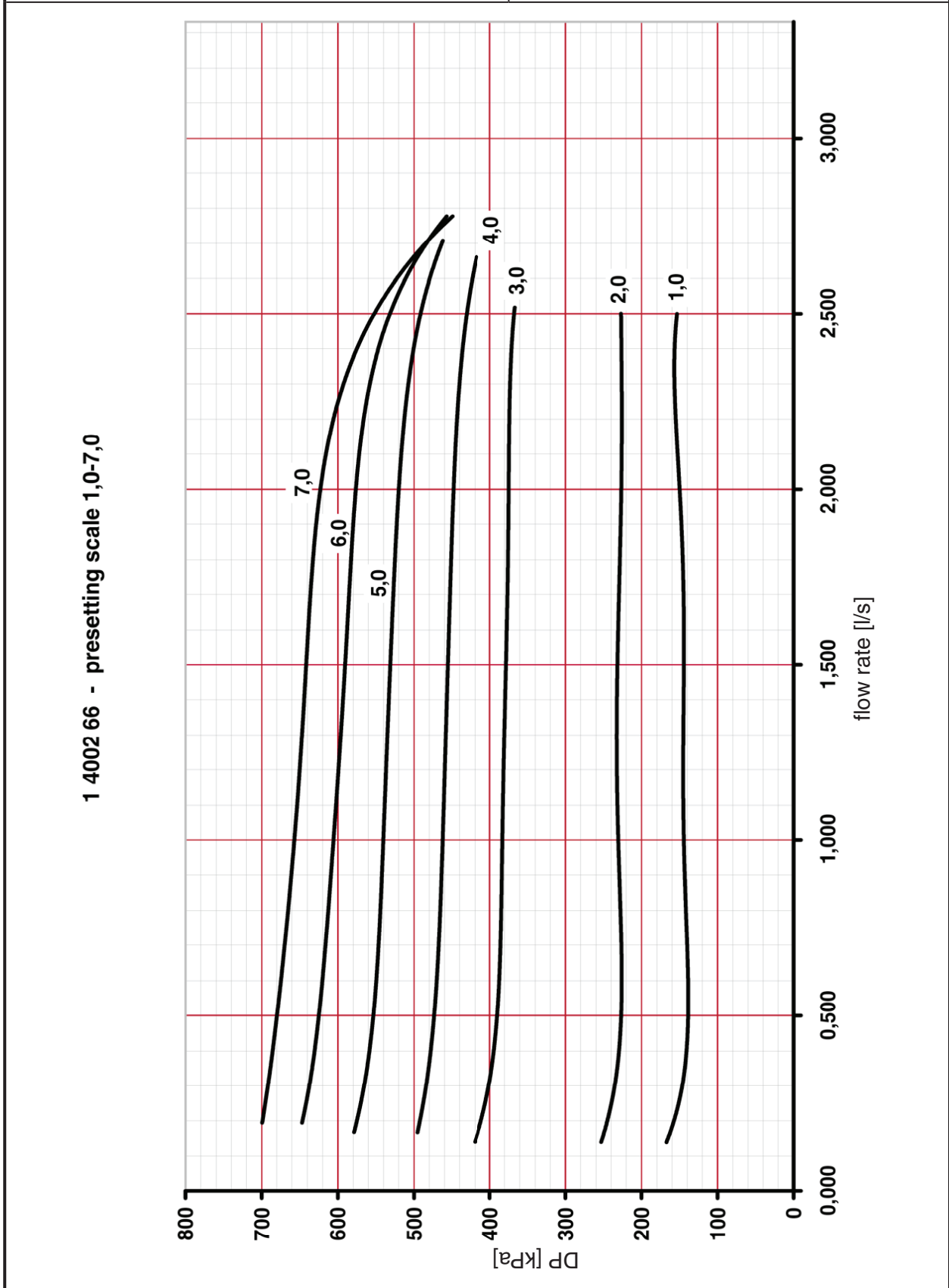
Art. Nr. 1 **4202** 46

Dim. DN 50



HERZ- standard diagram	Differential pressure controller
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Art. Nr. 1 4202 66	Dim. DN 50
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HERZ- standard diagram	Differential pressure controller
Art. Nr. 1 4202 76	Dim. DN 50

