

VG211



Two-way Valves, Flanged PN 16 (232 psi)

VG211 can be used in a wide range of applications, such as heating, cooling and air handling systems.

The valve can handle the following types of media:

- Hot and chilled water.
- Water with antifreeze additives such as glycol (50%)
- Steam up to 200°C

If the valve is used for media at temperatures below 0 °C (32 °F), it should be equipped with a stem heater in order to prevent ice formation on the valve stem.

SPECIFICATIONS

Design two-way plug valve
 Pressure class PN 16(232 psi)
 Flow characteristic Equal percentage
Rangeability Kv/Kv min.
 DN15-20 >50
 DN25-100 >35
 Leakage0,02% of Kvs
 Delta Pm 6 bar (86 psi)
 Max. temperature of medium: 200 °C (392 °F)
 Min. temperature of medium: -10 °C (14 °F)
 Connections Flange according to ISO 7005-2

Materials

Body Cast iron
 Stem Stainless steel
 Plug Stainless steel
 Seat Stainless steel

Size		Kv m ³ /h	Cv	Part number	Stroke
DN	in.				
15	½"	0.6	.07	731-1149-000	16.5
15	½"	1	1.3	731-1151-000	
15	½"	1.6	1.9	731-1153-000	
15	½"	2.5	2.9	731-1155-000	
15	½"	4.0	4.7	731-1157-000	
20	¾"	6.3	7.4	731-1159-000	25
25	1"	10	11.7	731-1161-000	
32	1¼"	16	18.7	731-1163-000	
40	1½"	24	27.8	731-1165-000	45
50	2"	38	44.5	731-1167-000	
65	2½"	63	73	731-1169-000	45
80	3"	110	126,5	731-1171-000	
100	4"	140	161	731-1173-000	

Key to Technical specification

- The rangeability is the ratio of Kv and Kv_{min} (Cv and Cv_{min}).
- Kv (Cv) is the flow through the valve in m³/h at the specified valve lift and at a pressure drop of 100 kPa across the valve.
- Kv_{min} (Cv_{min}) is the minimum controllable flow (m³/h) at a pressure drop of 100 kPa
- Delta Pm is the maximum pressure drop across the fully open valve.

FUNCTION

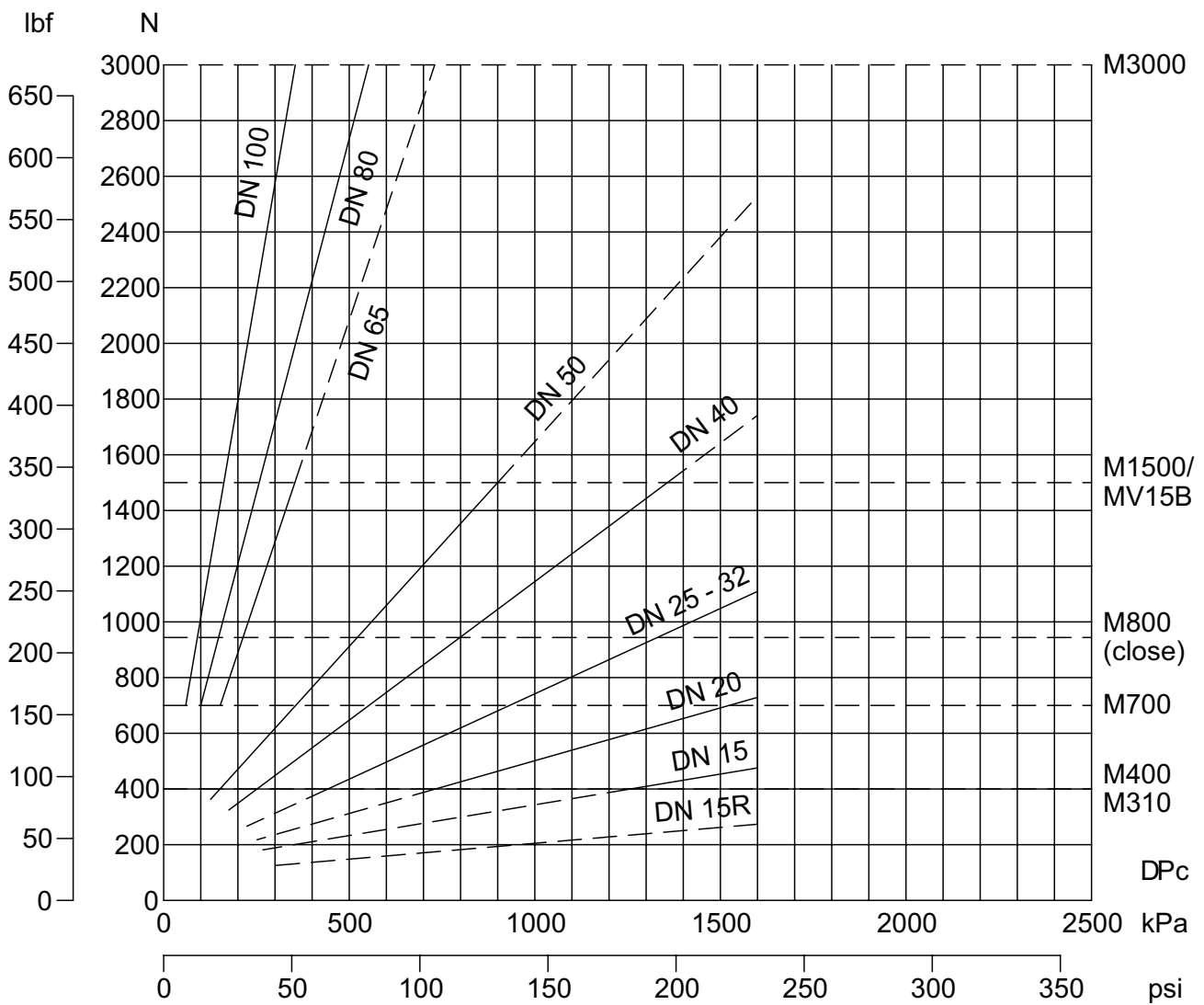
The valve opens with the stem up.

When the stem is down, the valve is closed.

SPECIFICATION OF ACTUATOR

Use the diagram below to select actuator motor for the VG211 to close required Delta P_c. A suitable actuator is selected.

ACTUATOR POWER



INSTALLATION

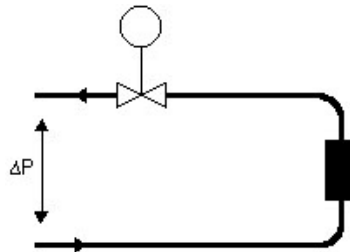
The valve should be mounted with flow direction in accordance with the valve marking.

It is recommended to install the valve in the return pipe, in order to avoid exposing the actuator to high temperatures.

The valve must not be installed with the actuator mounted below the valve.

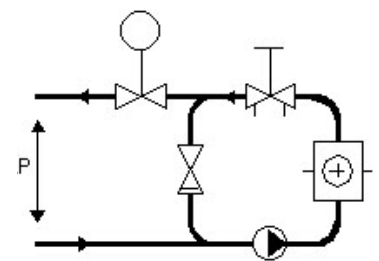
To ensure that suspended solids will not become jammed between the valve plug and seat, a filter should be installed upstream of the valve, and the pipe system should be flushed before the valve is installed.

INSTALLATION



A. Typical installation without local circulating pump.

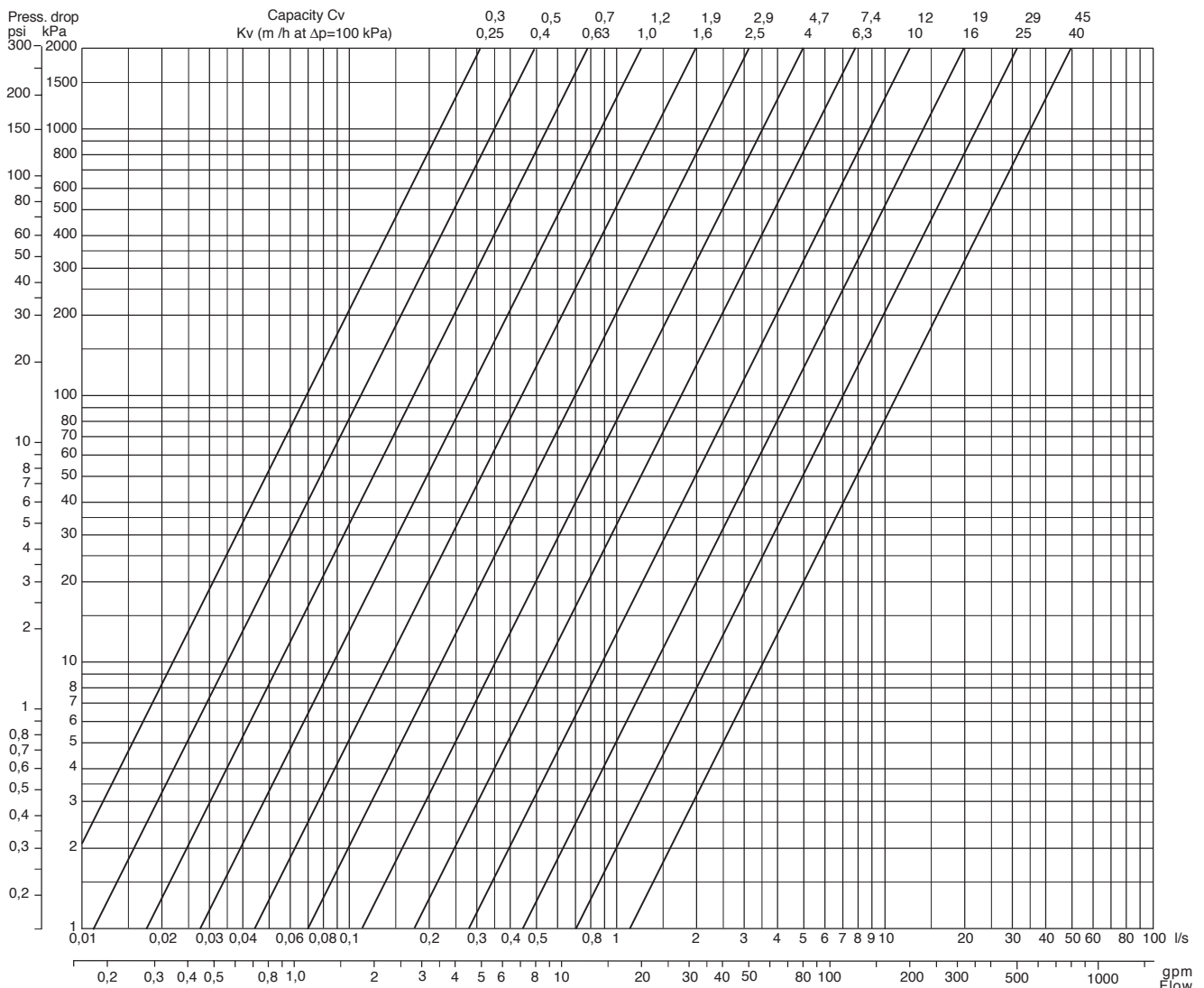
To provide a good function, the pressure drop across the valve should be no less than half of the available pressure (Delta P). This corresponds to a valve authority of 50%.



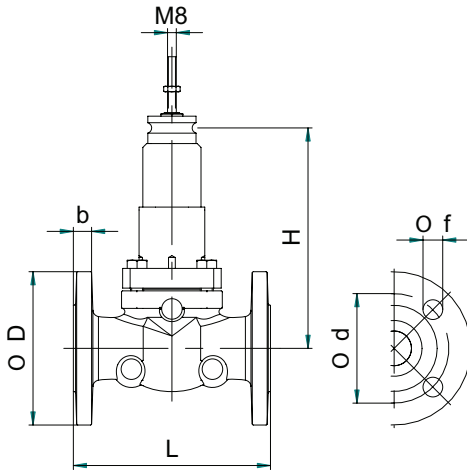
B. Typical installation with local circulating pump.

The KV (CV) value of the valve to be selected so that the entire available pressure drop (Delta P) falls across the control valve.

PRESSURE DROP CHART



DIMENSIONS AND WEIGHT



SPARE PARTS

Stuffing box

VG211 spare max 200 °C (392 °F)

Item number 1-001-0811-0

DN	L	H	Ø D	b	ød	øf	Holes	Weight Kg
15	130 (5)	148 (5.8)	95 (3.7)	16 (0.6)	65 (2.5)	14 (0.5)	4	3.05
20	150 (6)	151 (5.9)	105 (4.1)	16 (0.6)	75 (3)	14 (0.5)		4.05
25	160 (6.3)	153 (6)	115 (4.5)	16 (0.6)	85 (3.3)	14 (0.5)		5.05
32	180 (7)	201 (7.9)	140 (5.5)	18 (0.7)	100 (4)	18 (0.7)		8.07
40	200 (8)	209 (8.2)	150 (6)	18 (0.7)	110 (4.3)	18 (0.7)		10.03
50	230 (9)	217 (8.5)	165 (6.5)	20 (0.8)	125 (5)	18 (0.7)		13.07
65	270 (10.6)	232 (9.1)	185 (7.3)	20 (0.8)	145 (5.7)	18 (0.7)		19.6
80	310 (12.2)	248 (9.7)	200 (7.9)	22 (0.86)	160 (6.3)	18 (0.7)	8	31.7
100	350 (13.8)	272 (10.7)	220 (8.6)	24 (0.94)	180 (7.1)	18 (0.7)		43.5

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