

Gate valve, steel, DN 50-250, PN 16/25/40, flanges.



General

- Gate valve used where minimum pressure drop and/or bi-directional on-off service are required. Typical applications are water, chemicals, petrochemicals, steam, gases, and liquid gases (cryogenic service).
- In open position the wedge is fully retracted to ensure the lowest pressure drop.
- The hand wheel is retained by a clamping ring and it is not rising.
- Flexible wedge with very good result also in high and low temperature.
- Face-to-face design according to DIN 3202 F5.
- Full bore.
- Packing is made of four or more pure graphite rings with square section. The first and the last ring are reinforced with stainless steel.
- The standard installation position is with the vertical stem and upright.

Options

- DN 15-40, DN 300-800.
- Other flange connections.
- Other materials.
- Split wedge for horizontal installation.
- Electrical actuator.
- Seat covered with stellite or other special material overlays.
- PN 63 (VM 2977) and PN 100 (VM 2978).

Materials

DN	50	65	80	100	125	150	200	250
Body and wedge in steel EN 1.0619	•	•	•	•	•	•	•	•
Bonnet and flanges in steel EN 1.0619	•	•	•	•	•	•	•	•
Stem in stainless steel EN 1.4021	•	•	•	•	•	•	•	•
Gasket in stainless steel EN 1.4502	•	•	•	•	•	•	•	•
Gasket and packing in graphite + SS	•	•	•	•	•	•	•	•
Handwheel in pressed steel	•	•	•	•	•	•	•	•

(• = standard)

Technical Data

DN	50	65	80	100	125	150	200	250
Pressure rating PN 16 (VM 2974)	•	•	•	•	•	•	•	•
Pressure rating PN 25 (VM 2975)	•	•	•	•	•	•	•	•
Pressure rating PN 40 (VM 2976)	•	•	•	•	•	•	-	-
Kv-value m ³ /h	228	380	589	939	1554	2250	4020	6340

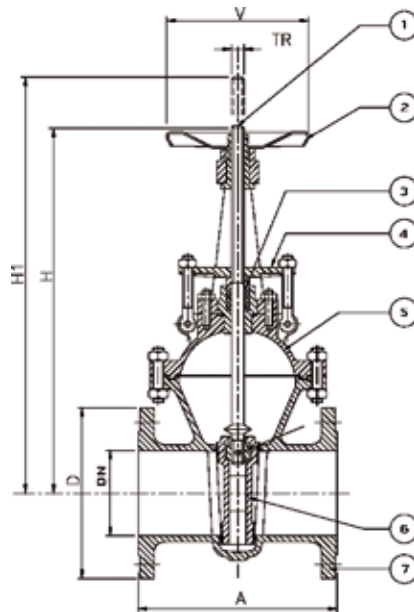
(• = standard)

Max Working Pressure bar (e) at Different Temperatures

	-10°C	0°C	+20°C	+100°C	+150°C	+200°C	+250°C	+300°C	+350°C	+400°C	+425°C	+450°C
VM 2974	16	16	15,8	14,9	13,7	12,4	11,4	10,3	9,6	9,2	7,5	5,9
VM 2975	25	25	24,7	23,3	21,4	19,4	17,8	16,1	15,0	14,4	11,8	9,2
VM 2976	40	40	39,8	37,6	34,5	31,4	28,7	26	24,2	23,3	19,1	14,8

Note that consideration must be taken to local conditions.

Dimensional Drawing



Dimensional Data (mm) and Weight VM 2974-2975

DN	50	65	80	100	125	150	200	250
A	250	270	280	300	325	350	400	450
D	165	185	200	235	270	300	360	425
H	340	360	410	500	535	615	720	975
H1	400	435	500	610	670	780	935	1240
TR	18x4	20x4	20x4	22x5	24x5	24x5	28x5	32x6
V	200	200	200	250	250	250	300	400
Weight (kg)	23	31	36	53	73	98	150	230

Dimensional Data (mm) and Weight VM 2976

DN	50	65	80	100	125	150
A	250	290	310	350	400	450
D	180	205	215	250	295	345
H	380	455	465	490	615	695
H1	440	530	545	600	750	860
TR	20x4	22x5	22x5	22x5	24x5	28x5
V	200	200	250	250	250	300
Weight (kg)	35	44	48	57	81	125

Details

1	Stem
2	Hand wheel
3	Packing
4	Gland
5	Bonnet
6	Wedge
7	Body

Markings

The valve is marked with DN, PN, materials, producer, and charge number.

Mounting

With the vertical stem upright.

Maintenance

The valve is maintenance free.

For best function regular exercise is recommended.

Order Number

DN	VM 2974	VM 2975	VM 2976
50	2974050	2975050	2976050
65	2974065	2975065	2976065
80	2974080	2975080	2976080
100	2974100	2975100	2976100
125	2974125	2975125	2976125
150	2974150	2975150	2976150
200	2974200	2975200	-
250	2974250	2975250	-