

# GACHOT

The GACHOT V501 gate valve offer the most possible reliability for process and critical applications

## Features

- Construction complies with NF EN 1984
- Straight-through flow and full port
- Cast body (investment casting)
- Double stainless steel gate, perfect tightness
- Non-rotating and rising stem with rolled thread and back seat protecting the stuffing box in position and ensuring the repacking under pressure
- Stem Threading outside of the carried fluid
- Heat treated yoke sleeve (Sulfinuz process) avoiding seizing
- Low pressure drop
- High service reliability
- Perfect tightness in both flow directions
- Easy operation, low operating torque
- Very low carbon content stainless steel
- Excellent corrosion resistance
- Bolted gland and bonnet
- Encapsulated bonnet gasket and everlasting gland packing made of PTFE ensuring a permanent sealing
- Replaceable seats ensuring the interchangeability
- Position Indicator



## Applications

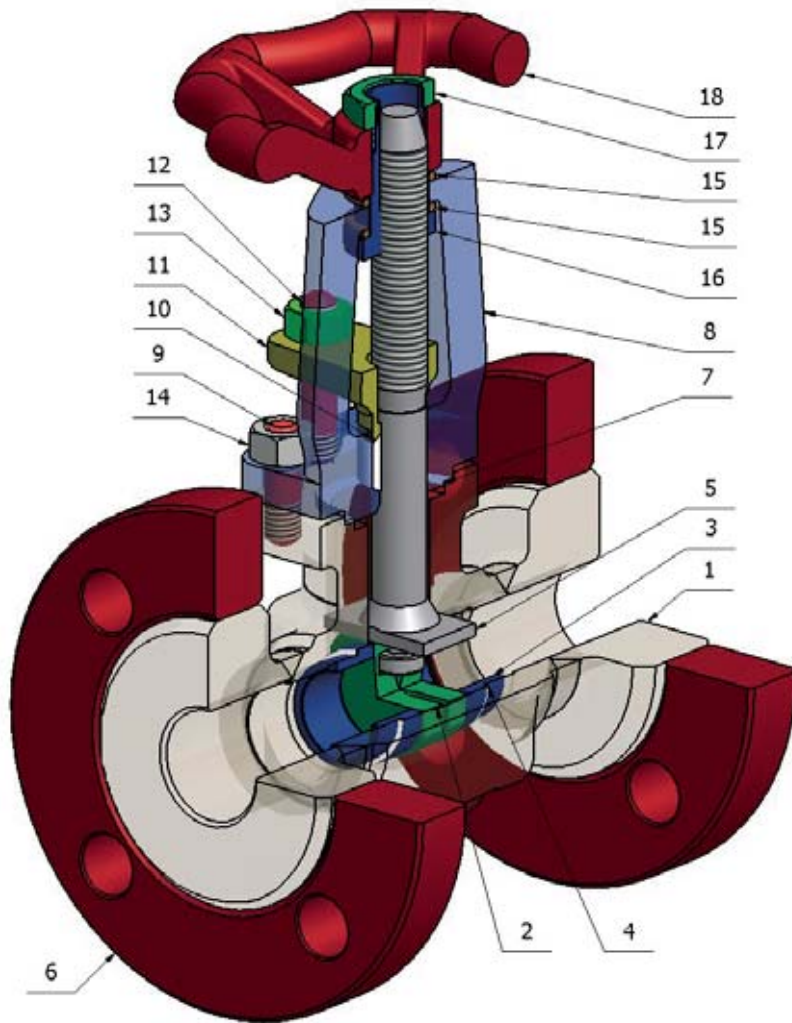
Resin, Latex, Polymers,  
 Slurry, Fluid with particles,  
 Liquid sulphur, Phosgene gas,  
 High velocity steam,  
 Cryogenic, High temperature,  
 Vacuum

## Characteristics

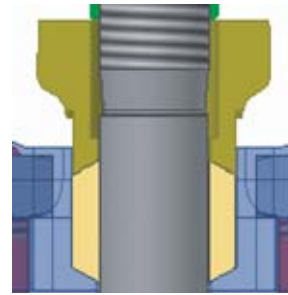
Sizes (mm)	: DN08 to DN150
Temperature (°C)	: -50 to +250
Pressure (bar)	: PN100 to PN20
Connections	
DN08 to DN25	: BSPP / NPT / BW (union ring) / SW
DN10 to DN150	: Flanged PN16-40 / Class 150 / Class 300

# V501 Gate Valve

Parts identification DN08/25



## Packing detail



## Seat / wedge detail



## Parts list

Item	Qty	Description	Material
1	1	Body	Stainless steel 1.4409
2	2	Gate	Stainless steel 1.4404
3	2	Seat	Stainless steel 1.4404
4	2	Seat gasket	PTFE
5	1	Stem	Stainless steel 1.4404
6	2	Flange	Carbon steel A 42
7	1	Body gasket	PTFE
8	1	Bonnet	Stainless steel 1.4409
9	4	Gland stud	A4-70
10	1	Packing	PTFE
11	1	Gland packing	Stainless steel 1.4404
12	2	Gland stud	A2-70
13	2	Bolting	A2-70
14	4	Bolting	A2-70
15	2	Friction washer	CELORON
16	1	Nut	Stainless steel 1.4404 (SULFINUZE)
17	1	Handwheel nut	Stainless steel 1.4404
18	1	Handwheel	Cast Iron

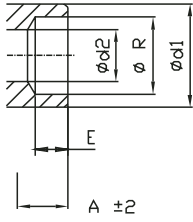
## Options

- Stellite gr.12 seats
- Stellite gr.6 gates
- Graphite body seal and packing
- Stainless steel flanges
- Pneumatic/electric actuator
- Limit switches
- Locking device

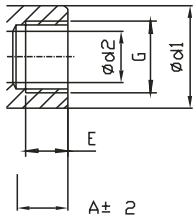
# V501 Gate Valve

## Dimensions DN08/25

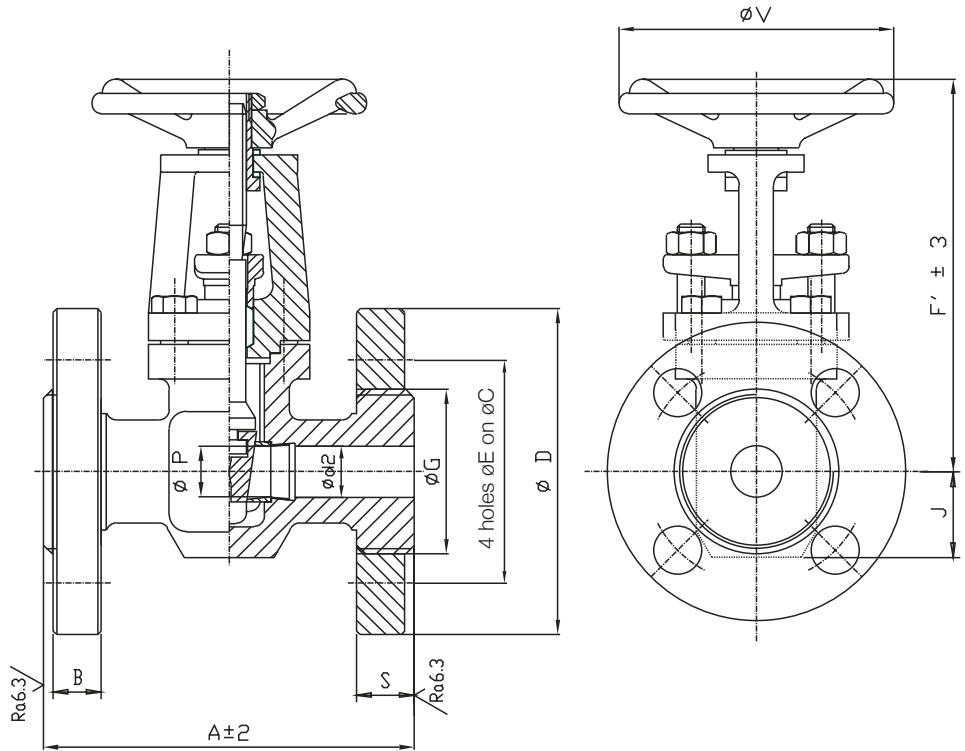
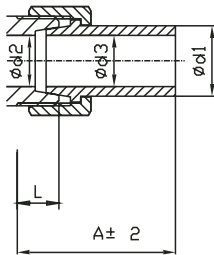
### SW ends



### BSPP ends



### BW - Union ring ends



### Dimensions - Flanged ends

DN	P	d2	J	F'	V	PN 40						Class 150						Class 300						Mass (Kg)
						A	B	S	E	C	D	A	B	S	E	C	D	A	B	S	E	C	D	
08	9.5	10.7	22.5	115	80																			
10	9.5	10.7	22.5	115	80	108	14	18	16	60	90													2.4
12	9.5	10.7	22.5	115	80																			
15	13.8	15	22.5	115	80	108	14	18	16	65	95	108	11.1	18	15.8	60,3	89	140	14,3	18	15,8	66,7	95	2.5
20	19.5	20.5	30	140	100	117.5	16	20	18	75	105	117.5	12.7	20	15,8	69,8	99	152	15,9	20	19	82,6	117	3.8
25	19.5	25	30	140	100	127	16	22	18	85	115	127	14.3	22	15,8	79,4	108	165	17,5	22	19	88,9	124	4.6

Note: Flange finish Ra 6.

### Dimensions - Welded ends and Screwed ends

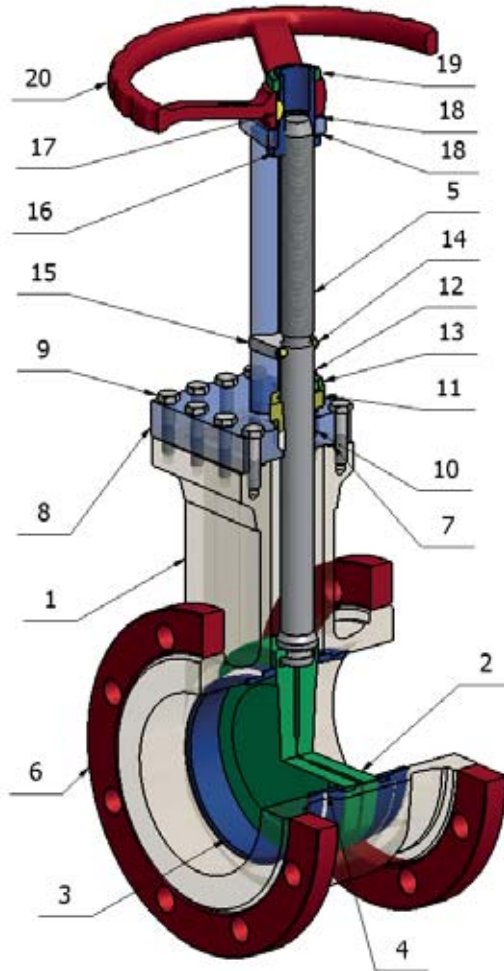
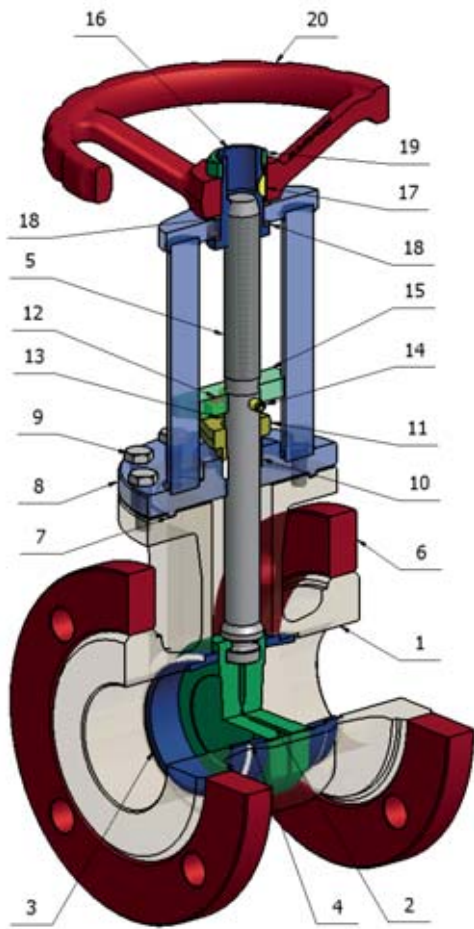
DN	A	Socket or screwed								Union ring (BW)			
		SW		BSPP		NPT		Weight (Kg)	A	L	d3xd1	Weight (Kg)	
		d1	E	R**	E	G	E						G
8	77	30	9.5	14	13	1/4"	10.2	1/4"	1.3	123	77	8x13	1.2
12	77	30	9.5	17.8	13	3/8"	10.4	3/8"	1.3	145	77	15x20.6	1.3
15	77	30	9.5	22.4	15	1/2"	13.6	1/2"	1.4	145	77	15x20.6	1.4
20	95	40	11	27.7	22	3/4"	13.9	3/4"	1.7	165	95	20x26	1.8
25	95*	40*	12.7	34.5	22	1"	17.4	1"	1.8	141	95	26x33	1

\* For SW d1=42 and A=117.5

\*\* Allowance +0.8/0

# V501 Gate Valve

Parts identification DN32/150



## Parts list

Item	Qty	Description	Material
1	1	Body	Stainless steel 1.4409
2	2	Gate	Stainless steel 1.4404
3	2	Seat	Stainless steel 1.4404
4	2	Seat gasket	PTFE
5	1	Stem	Stainless steel 1.4404
6	2	Flange	Carbon steel A 42
7	1	Body gasket	PTFE
8	1	Bonnet	Stainless steel 1.4404
9	*	Screw H M8x25	A4-70
10	1	Packing	PTFE
11	1	Gland packing	Stainless steel 1.4404
12	2	Gland stud	A2-70
13	2	Bolting H M8	A2-70
14	1	Pin ISO8752 - 6x30	Stainless steel 1.4310
15	1	Stem guide	Stainless steel 1.4404
16	1	Nut	Stainless steel 1.4404 (SULFINUZE)
17	1	Disc Key 5x19	Stainless steel XC 42
18	2	Friction washer	CELORON
19	1	Handwheel nut	Stainless steel 1.4404
20	1	Handwheel	Stainless steel AISI 304

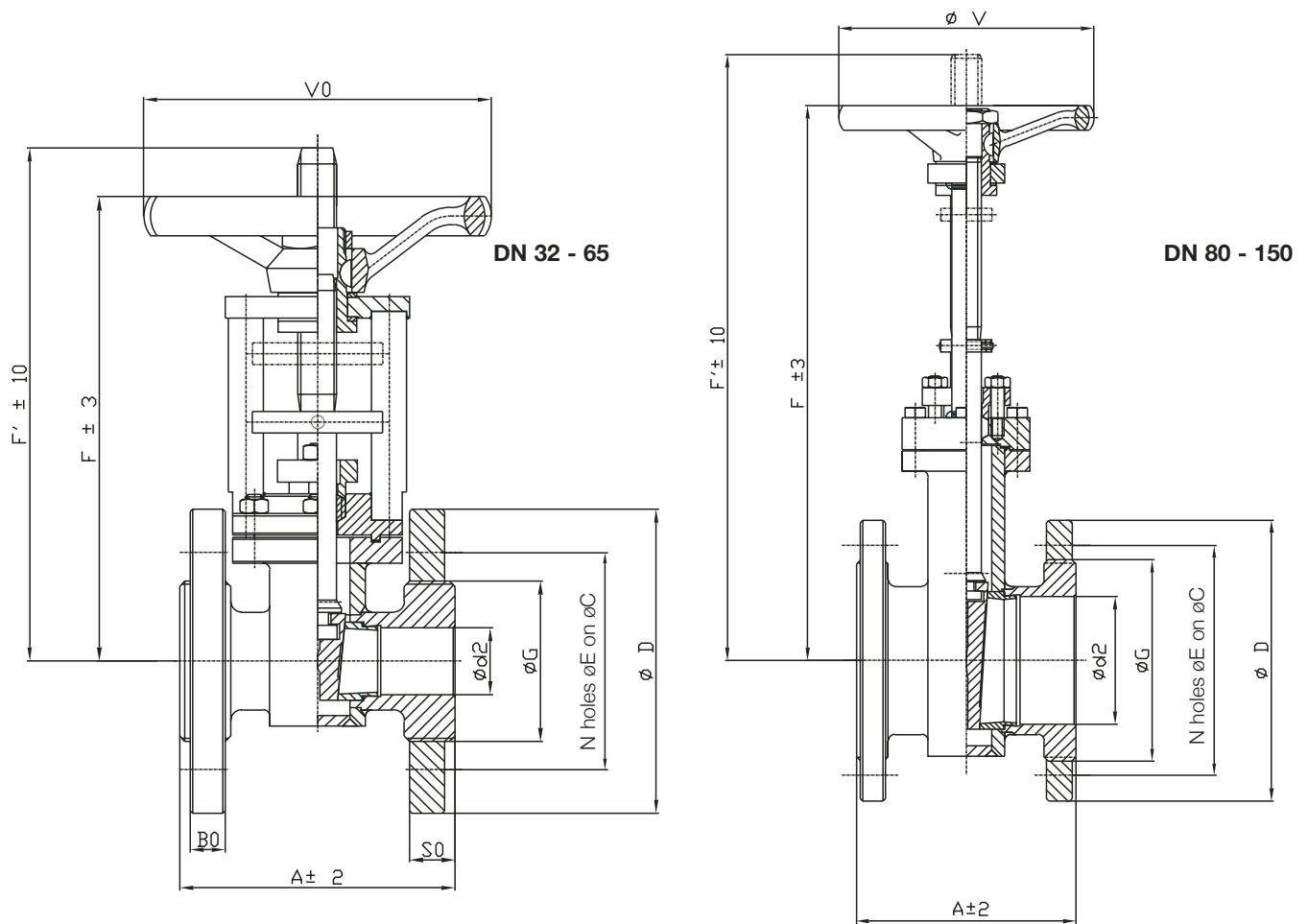
\* Qty's according to valve diameter

## Options

- Stellite gr.12 seats
- Stellite gr.6 gates
- Graphite body seal and packing
- Stainless steel flanges
- Pneumatic/electric actuator
- Limit switches
- Locking device

# V501 Gate Valve

## Dimensions DN32/150

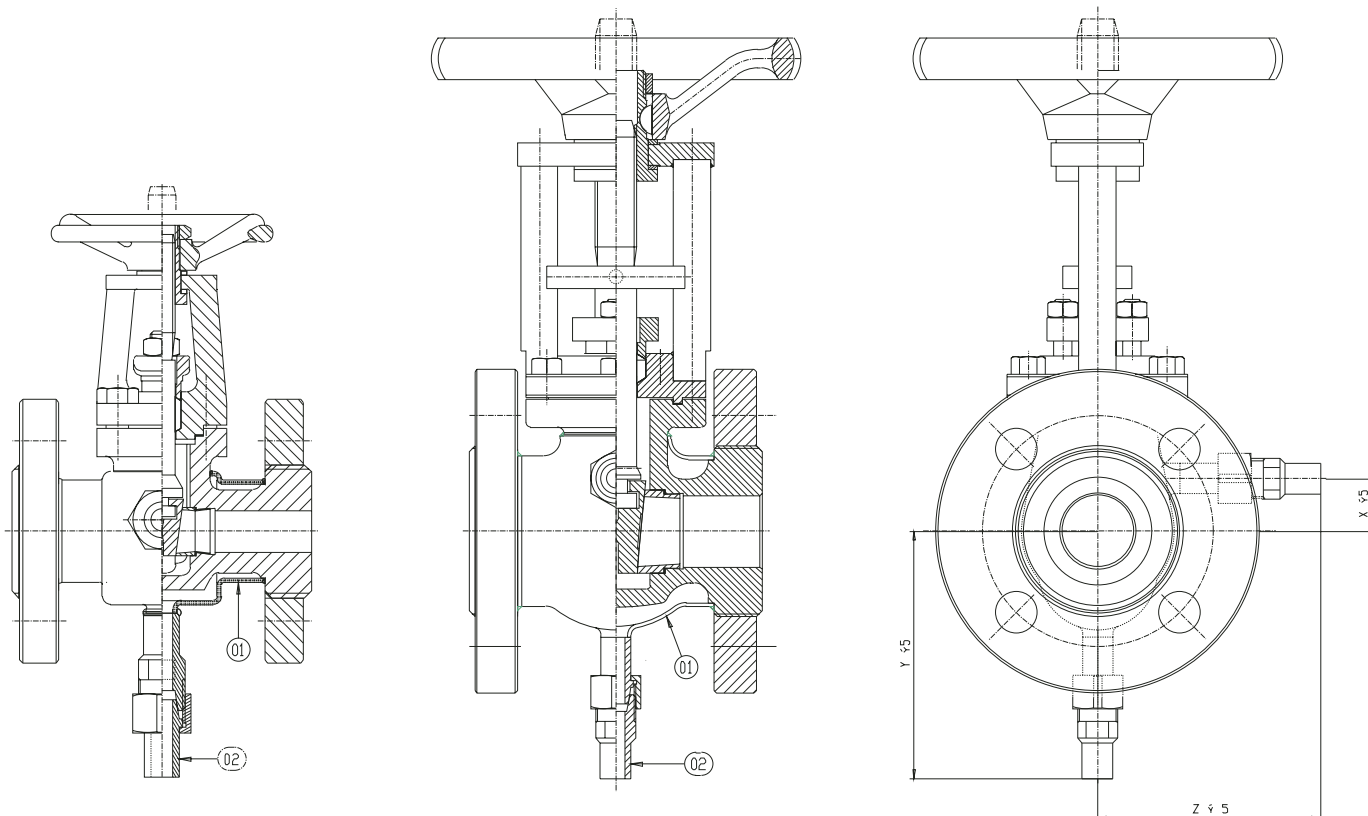


### Dimensions

DN	F	d2	N	F'	V	A	B	S	E	C	D	Weight	
												(Kg)	PN
<b>Flanged ends - PN16 / PN40</b>													
32	215	31	4	211	160	127	16	21	18	100	140	8	40
40	247	41	4	262	160	136	16	20,5	18	110	150	9,5	40
50	275	51	4	293	160	142	18	21	20	125	165	11,9	40
65	320	65	4	347	200	154	18	21	18	145	185	16,5	16
80	380	80	8	423	200	160	20	21,5	18	160	200	23	16
100	435	100	8	496	300	172	20	23,5	18	180	220	29	16
125	523	125	8	615	300	186	22	23	18	210	250	46	16
150	585	150	8	695	300	200	22	23,5	22	240	285	57	16
<b>Flanged ends - Class 150</b>													
32	215	31	4	211	160					On request			8
40	247	41	4	262	160	165	17,5	22	15,8	98,4	127	9,5	40
50	275	51	4	293	160	178	19,1	22	19	120,6	152	11,9	40
65	320	65	4	347	200					On request			16,5
80	380	80	8	423	200	203	23,9	23	19	152,4	190	23	16
100	435	100	8	496	300	229	23,9	25	19	190,5	229	29	16
125	523	125	8	615	300					On request			46
150	585	150	8	695	300	267	25,4	27	22,2	241,3	279	57	16
<b>Flanged ends - Class 300</b>													
32	215	31	4	211	160					On request			8
40	247	41	4	262	160	190	20,6	22	22	114,3	156	9,5	40
50	275	51	4	293	160	216	22,2	30,5	19	127	165	11,9	40
65	320	65	4	347	200					On request			16,5
80	380	80	8	423	200	283	28,6	34	22	168,3	210	23	16
100	435	100	8	496	300	305	31,8	38	22	200	254	29	16
125	523	125	8	615	300					On request			46
150	585	150	8	695	300	403	36,5	38,5	22	270	318	57	16

# V501 Gate valve

## Dimensions with heating jacket



### Parts list

Item	Qty	Description	Material
1	1	Heating jacket	Stainless steel 1.4404
2	2	Union ring	Stainless steel 1.4404

### Dimensions

DN	15	20	25	32	40	50	65	80	100	125	150
X	2,5	3,5	3,5	22	33	45	57	75	85	139	149
Y	89	92	92	101	107	111	126	150	168	179	200
Z	86	88	88	85	99	101	119	142	158	170	183
BW end	08	08	08	08	08	08	15	15	15	15	15

### Pressure ratings (bar)

DN	15	20	25	32	40	50	65	80	100	125	150
Service					16					10	
Test					24					16	

### Options

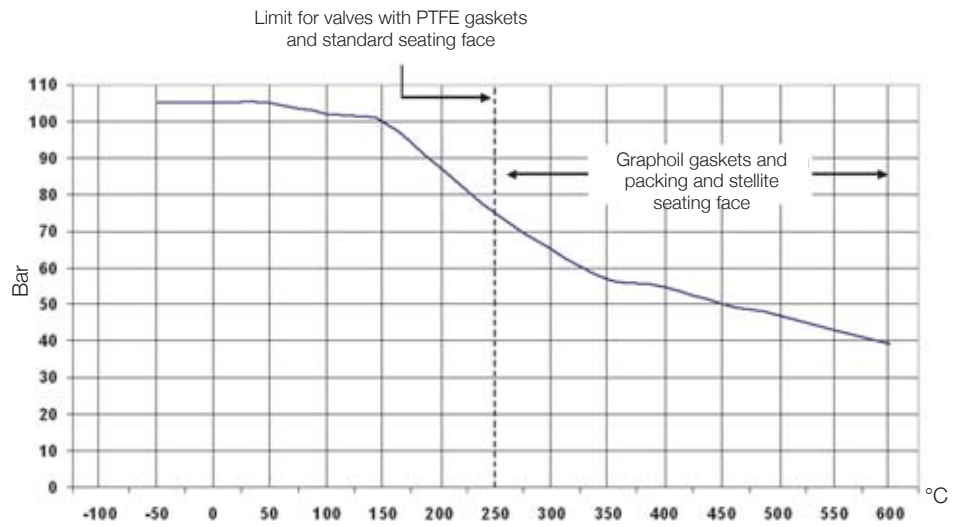
- Heating jacket with flange connection
- Reinforced heating jacket for higher pressure
- Oversized flanges



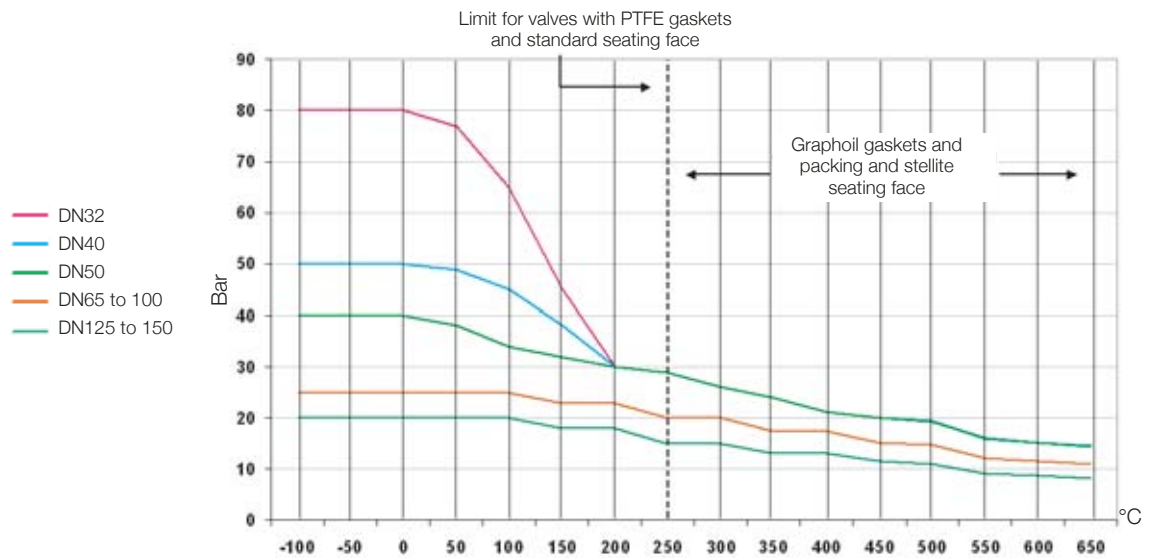
## Notes

- For flanged valves, the maximum operating pressure has to be limited according to the lowest value between body rating and flange rating
- For BW valves, pressure has to be limited according to union-ring PN:
  - PN63 for DN08
  - PN40 for DN12 and DN15
  - PN25 for DN20 and DN25

## Pressure/temperature ratings DN08 - DN25



## Pressure/temperature ratings DN32 - DN150



## Cv / Kv

DN	08	10	15	20	25	32	40	50	65	80	100	125	150
Cv	4	5	8	32	35	65	155	230	320	625	1085	1765	2520
Kv	3.5	4.3	6.9	27	30	56	134	198	276	539	935	1521	2172

## Testing

- All valves are tested according to NF EN 12266-1 and ISO 5208
- Hydrostatic shell test: 1.5 MOP – No visible leakage
- Pneumatic test: 6 bar – No visible leakage