

## INDEX OF INDUSTRIAL VALVES

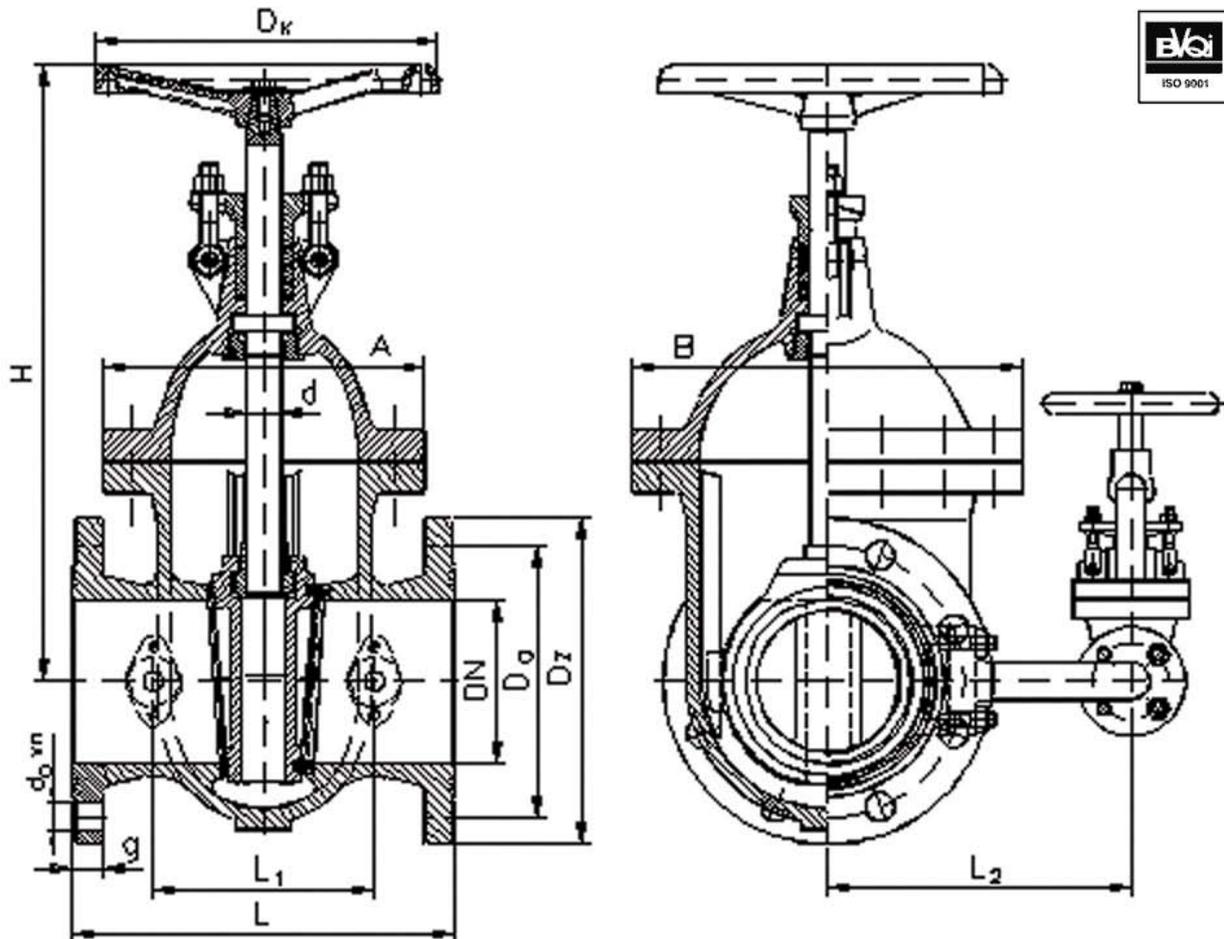
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Fig. 043/043A

PN 2,5 2,0 1,6 MPa

**FLANGED OVAL WEDGE GATE VALVES WITH NON RISING STEM**  
**MADE OF CAST CARBON STEEL**  
**0043A WITH BYPASS /for DN 400÷DN 700 /**

**Application:**

For non-aggressive media.

Nominal pressure: 2,5 MPa, 2,0 MPa, 1,6 MPa

Max. temperature: 250 °C

Flanges drilled acc to DIN PN 25 DIN 2501. Other drilling :on request.

F to F dimensions acc DIN 3202 F5

DN 40 ÷400 – gate valves can be installed on the pipelines in the horizontal or vertical position, DN 500 ÷700 - valves should be installed on horizontal pipelines in the vertical position only.

Standard execution: with handwheel. On request gate valves can be supplied with electric actuators, gear boxes or prepared for the actuators or the remote control systems.

**Materials:**

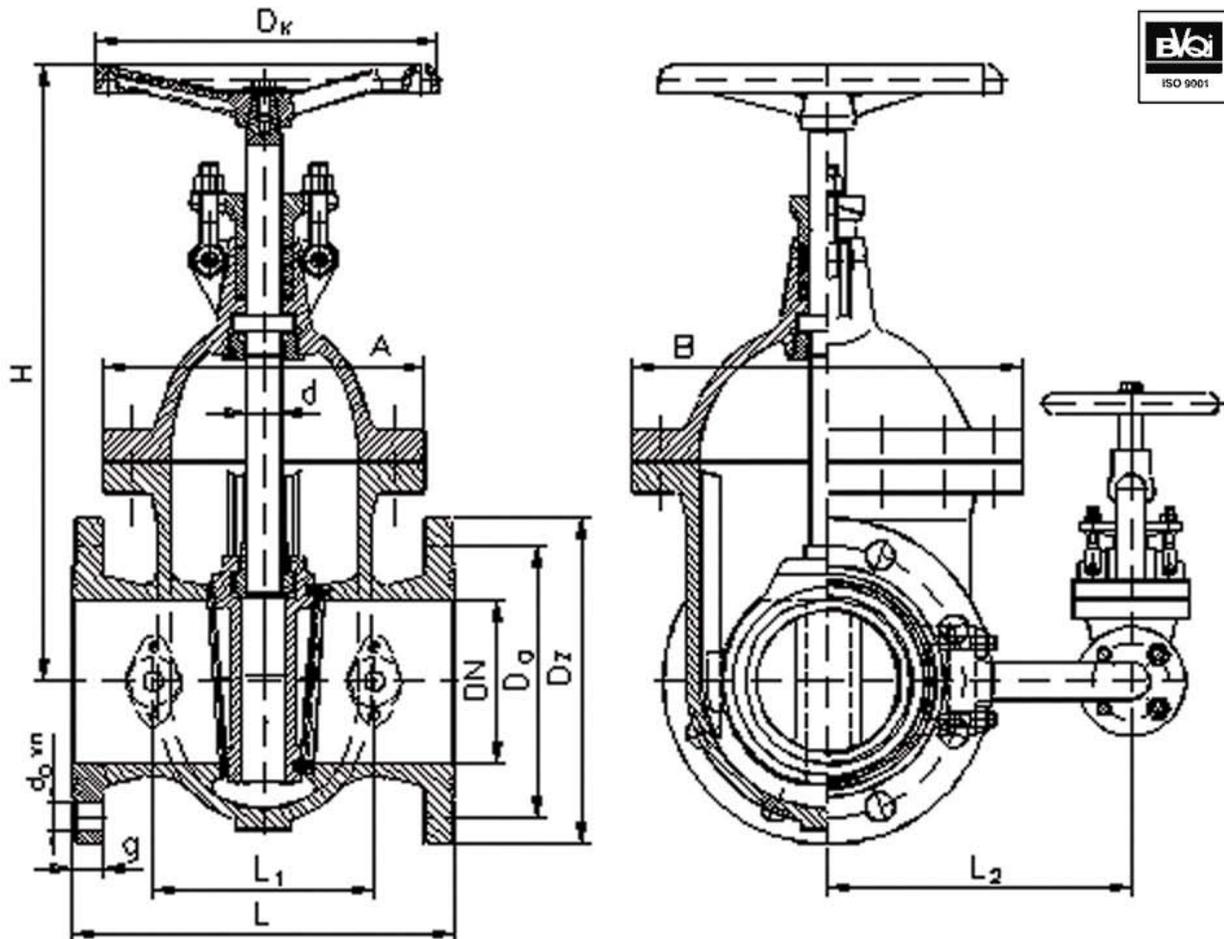
Body, Bonnet, Wedge	- GP240GH acc PN-EN 10213-2
Stem	- X20Cr13 acc DIN-EN 10088
Body/Wedge sealing	- SGX3CrNi13 / SGX8CrTi18 acc DIN 8556
	- for temp.≤ 150°C CuZn39Pb2 acc EN 1652
Stem nut	- CuAl10FeMn2 acc DIN 17665
Packing	- reinforced graphite / elasomer packing for temp.< 150°C/
Gland packing	- expanded graphite

Other materials can be used according to the enclosure No 1

Fig. 043WM/043AWM

PN 1,6 MPa

**FLANGED OVAL WEDGE GATE VALVES WITH NON RISING STEM**  
 MADE OF CAST CARBON STEEL MARINE EXECUTION  
 0043A WITH BYPASS /for DN 400÷DN 700 /

**Application:**

For non-aggressive media.

Nominal pressure: 1,6 MPa

Max. temperature: 250°C

Flanges drilled acc to DIN PN 16 DIN 2501. Other drilling :on request.

F to F dimensions acc DIN 3202 F5

DN 40 ÷400 – gate valves can be installed on the pipelines in the horizontal or vertical position,

DN 500 ÷700 - valves should be installed on horizontal pipelines in the vertical position only.

Standard execution: with handwheel. On request gate valves can be supplied with electric actuators, gear boxes or prepared for the actuators or the remote control systems.

**Materials:**

Body, Bonnet, Wedge	- GP240GH acc PN-EN 10213-2
Stem	- X20Cr13 acc DIN-EN 10088
Body/Wedge sealing	- SGX3CrNi13 / SGX8CrTi18 acc DIN 8556 - for temp. ≤150°C CuZn39Pb2 acc EN 1652
Stem nut	- CuAl10FeMn2 acc DIN 17665
Packing	- reinforced graphite / elasomer packing for temp.< 150°C/
Gland packing	- expanded graphite

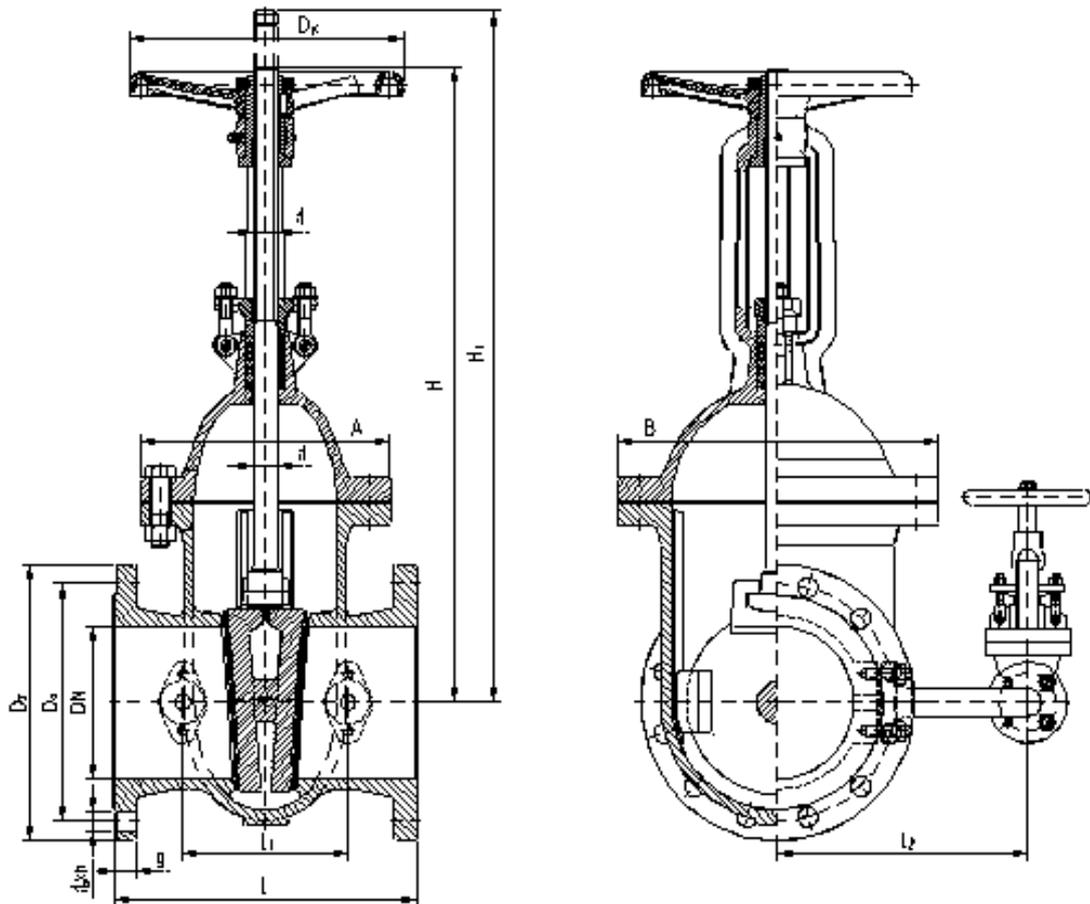
Other materials can be used according to the enclosure No 1

Fig. 055/055A

PN 2,5 2,0 1,6 MPa

## FLANGED OVAL WEDGE GATE VALVES WITH RISING STEM

MADE OF CAST CARBON STEEL  
0055A WITH BYPASS /for DN 200÷DN 600 /



### Application:

For non-aggressive media.

Nominal pressure: 2,5 MPa, 2,0 MPa, 1,6 MPa

Max. temperature: 400°C

Flanges drilled acc to DIN PN 25 DIN 2501. Other drilling :on request.

F to F dimensions acc DIN 3202 F5

DN 40 ÷400 – gate valves can be installed on the pipelines in the horizontal or vertical position, DN 500 ÷600 - valves should be installed on horizontal pipelines in the vertical position only.

Standard execution: with handwheel. On request gate valves can be supplied with electric actuators, gear boxes or prepared for the actuators or the remote control systems.

### Materials:

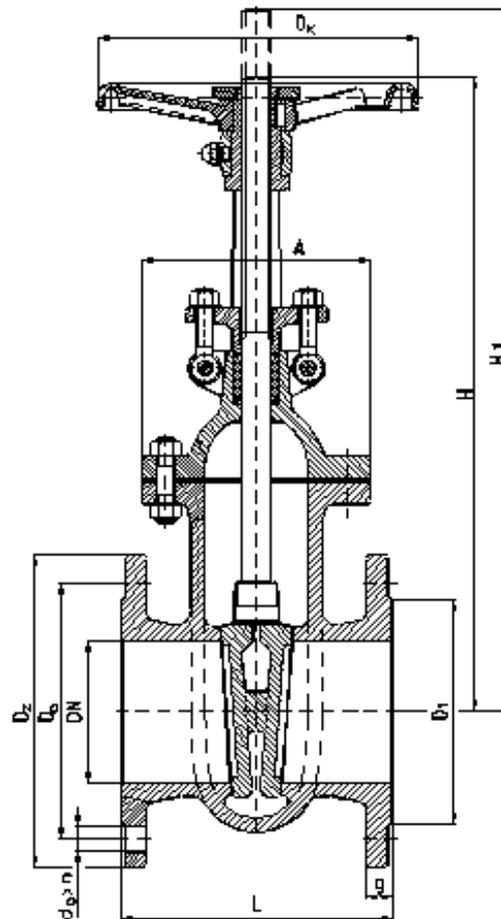
Body, Bonnet, Wedge	- GP240GH acc PN-EN 10213-2
Stem	- X20Cr13 acc DIN-EN 10088
Body/Wedge sealing	- SGX3CrNi13 / SGX8CrTi18 acc DIN 8556
Sleeve	- CuZn38A12Mn2Fe1 acc EN 1652
Packing	- reinforced graphite / elasomer packing for temp.< 150°C/
Gland packing	- expanded graphite

Other materials can be used according to the enclosure No 1

Fig. 122

PN 1,6 1,0 MPa

**FLANGED FLAT WEDGE GATE VALVES WITH RISING STEM  
MADE OF ACID-RESISING STEEL**



**Application:**

Nominal pressure: 1,6 MPa, 1,0 MPa

Max. temperature: 200°C

The gate valves are for aggressive media such as: nitric, boric, phosphoric, butyric, tartaric, citric, oxalic acids as well as lyes and salts solutions depends on the chemical resistance of the materials used.

Flanges drilled acc to DIN PN 10 or PN 16 DIN 2501. Other drilling on request.

F to F dimensions acc DIN 3202 F4

Gate valves can be installed on the pipelines in the horizontal or vertical positions.

Standard execution: with handwheel. On request gate valves can be supplied with electric actuators, gear boxes or prepared for the actuators.

**Materials:**

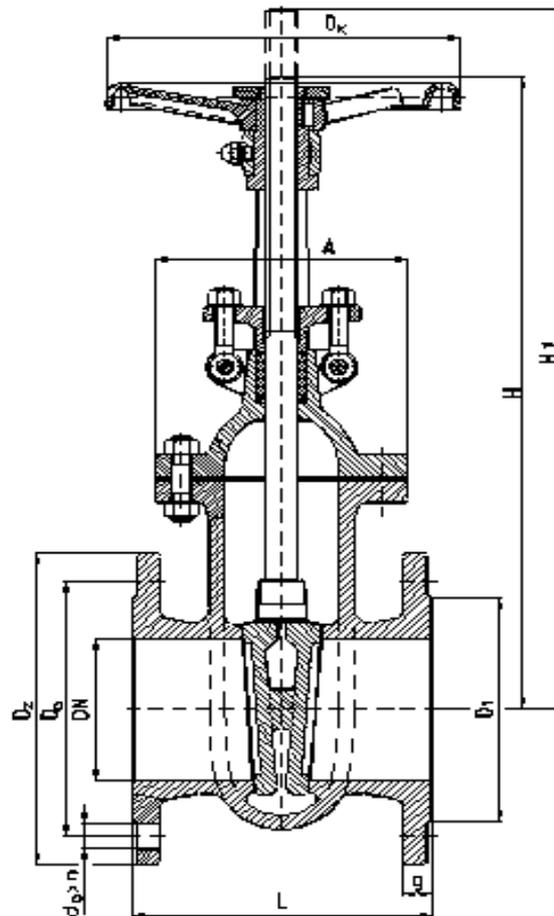
Body, Bonnet, Wedge	- G-X10CrNi18-8 acc DIN 17445
Stem	- X12CrNi18-8 acc DIN-EN 10088
Body/Wedge sealing	- SGX3CrNi13 / SGX8CrTi18 acc DIN 8556
Sleeve	- X20Cr13 acc DIN EN 10088 or GGG50 acc DIN 1693
Packing	- reinforced graphite or PTFE for temp. < 150°C
Gland packing	- expanded graphite or PTFE for temp. < 150°C

Other materials can be used on request.

Fig. 122

PN 1,6 1,0 MPa

**FLANGED FLAT WEDGE GATE VALVES WITH RISING STEM**  
MADE OF CAST CARBON STEEL



**Application:**

Nominal pressure: 1,6 MPa, 1,0 MPa

Max. temperature: 400°C

The gate valves are for non aggressive media.

Flanges drilled acc to DIN PN 10 or PN 16 DIN 2501. Other drilling :on request.

F to F dimensions acc DIN 3202 F4

Gate valves can be installed on the pipelines in the horizontal or vertical positions.

Standard execution: with handwheel. On request gate valves can be supplied with electric actuators, gear boxes or prepared for the actuators.

**Materials:**

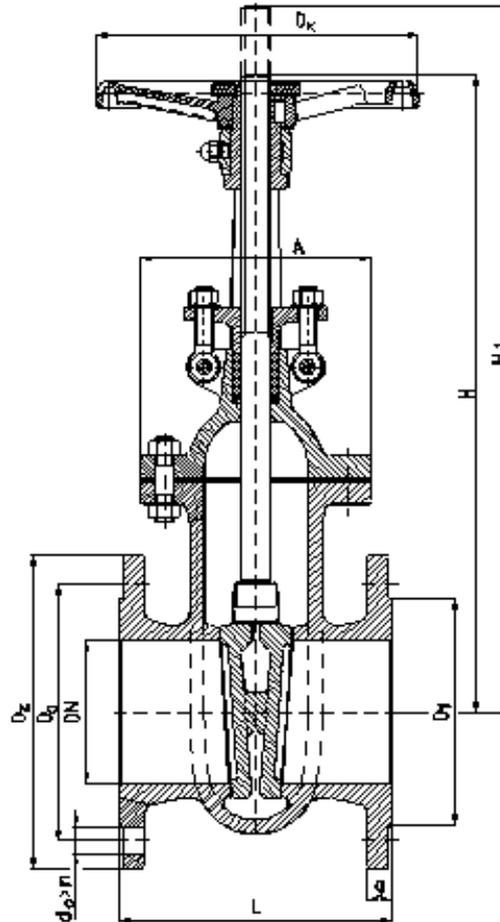
Body, Bonnet, Wedge	- GP240GH acc DIN-EN10213-2
Stem	- X20Cr13 acc DIN-EN 10088
Body/Wedge sealing	- SGX3CrNi13 / SGX8CrTi18 acc DIN 8556
Sleeve	- CuZn38Al2Mn2Fe1 acc EN 1652 or GGG50 acc DIN 1693
Packing	- reinforced graphite or elastomere for temp.< 150°C
Gland packing	- expanded graphite

Other materials can be used on request.

Fig. 190S

PN 1,0 MPa

**FLANGED FLAT WEDGE GATE VALVES WITH RISING STEM  
MADE OF ACID-RESISING STEEL**



**Application:**

Medium: Sulphuric acid - concentration max. 96%  
Nominal pressure: 1,0 MPa for DN 50 ÷ 200 and 0,8 MPa for DN 250 ÷ 400  
Max. temperature: 100°C

Flanges drilled acc to DIN PN 10 DIN 2501. Other drilling :on request.  
F to F dimensions acc DIN 3202 F4  
Gate valves can be installed on the pipelines in the horizontal or vertical positions.  
Standard execution: with handwheel

**Materials:**

Body, Bonnet, Wedge acid resisting steel chemical composition as below:

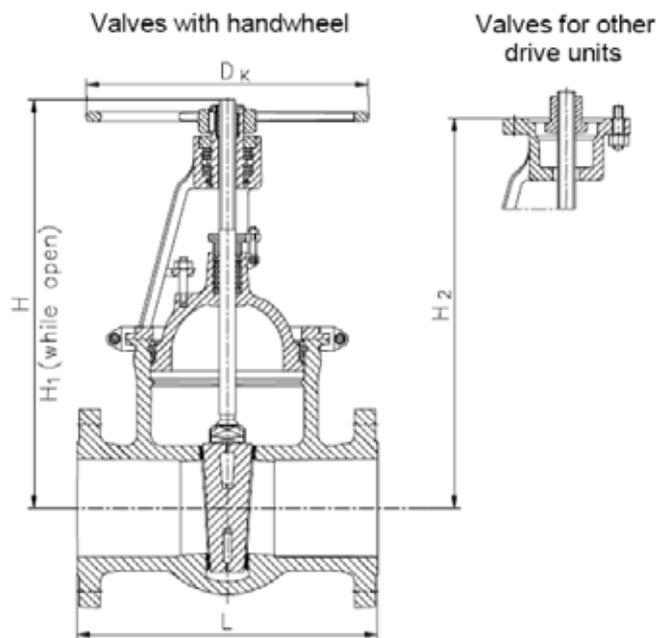
C	Mn	Si	P	S	Cr	Ni	Mo	Ti	Cu
Max	1,0	0,20	max	max	21,0	24,0	3,0	5 x C	1,4
0,15	2,0	1,50	0,035	0,035	24,0	27,0	4,0	max0,8	2,0

- Stem - X6CrNiMoTi17-12-2 acc DIN-EN 10088
- Body/Wedge sealing - SGX3CrNi13 / SGX8CrTi18 acc DIN 8556
- Sleeve - X20Cr13 acc DIN EN 10088 or GGG50 acc DIN 1693
- Packing - PTFE
- Gland packing - PTFE

## MEDIUM PRESSURE GATE VALVES PN 40, PN 100 DN 50 - DN 400

The gate valves are designed for application in pipeline installations conducting non-aggressive and non-toxic media. They are manufactured in following versions:  
 flanged - type **SPK1A** / PN 40 /, **SPK1B** / PN 100 /  
 with butt weld ends - type **SPS1A** / PN 40 /, **SPS1B** / PN 100 /

They are suitable for mounting of drive – electro-mechanical actuator type NWA-1, manual operation gear type NGR or other actuator specified while ordering.



### Operating data:

Material	Nominal pressure	Maximum permissible operating temperature TS, °C																
		200	250	275	300	325	350	375	400	425	430	440	450	475	500	510	520	530
		Maximum permissible operating pressure PS, bar																
GP240GH	PN40	40	36	34	32	30	28	26	25	22	21	19	17					
	PN100	100	90	85	80	75	71	67	64	56	53	48	42					
G17CrMo5-5	PN40	40	39,1	37,7	36,4	35,1	33,8	32,9	32	31,1	30,9	30,6	30,2	29,9	24,4	20,6	16,7	13,9
	PN100	100	97,8	94,4	91,1	87,7	84,4	82,2	80	77,8	77,3	76,5	75,6	74,7	60,9	51,6	41,8	34,7

### Materials:

Body:	carbon cast steel, alloy steel
Bonnet:	carbon cast steel, alloy steel
Wedge:	carbon cast steel, alloy steel
Stem:	stainless steel (min.13%Cr)
Trim:	stainless steel (min.18%Cr)
Packing:	reinforced graphite
Sealing of semi-sealing bonnet:	reinforced graphite

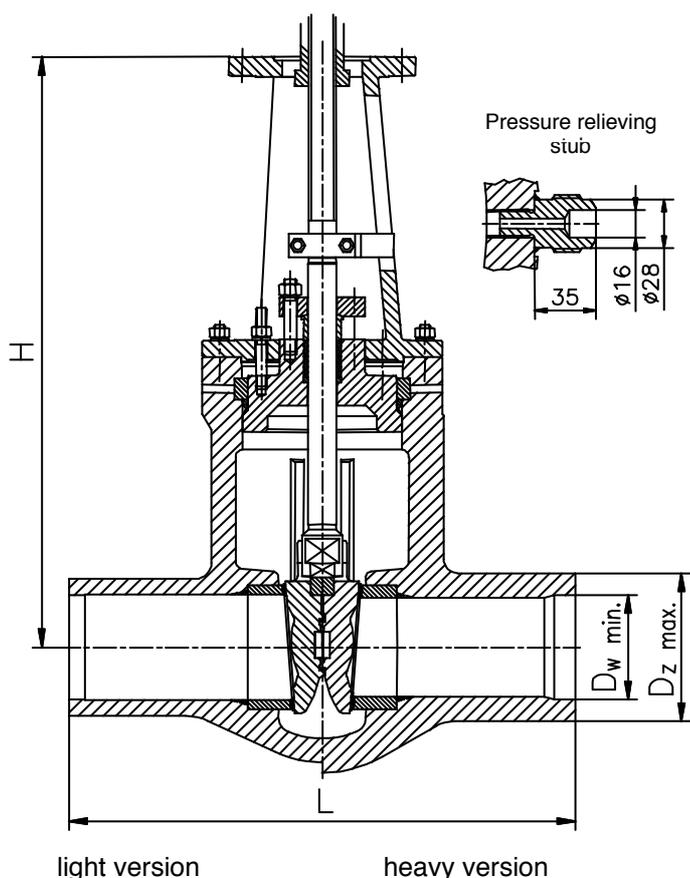
## HIGH PRESSURE GATE VALVES

DN 50 - DN 250

The gate valves are designed for pipeline installations conducting non-aggressive and non-toxic media. They are manufactured in following versions:

- heavy version - type **SLS1A**
- light version - type **SLS1B**

They are suitable for mounting of drive – electro-mechanical actuator type NWA-1, manual operation gear type NGR or another actuator agreed while ordering.



### Materials:

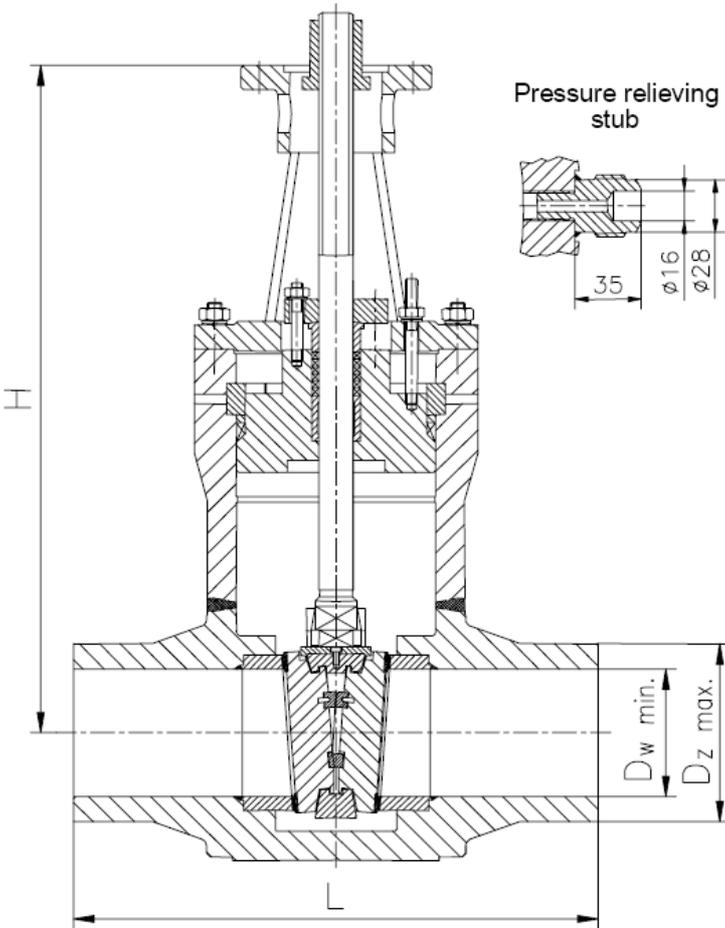
Body:	carbon cast steel / alloy cast steel
Bonnet:	carbon cast steel / alloy cast steel
Wedge:	carbon cast steel
Stem:	stainless steel (min.17%Cr)
Trim	stainless steel (min.18%Cr)
Packing	reinforced graphite
Sealing of semi-sealing bonnet:	reinforced graphite

### Operating data:

Material	Version	Maximum permissible operating temperature, TS [°C]																			
		20	110	200	250	300	350	375	400	425	450	460	470	480	490	500	510	520	530	540	545
		Maximum permissible operating pressure, PS [bar]																			
L17HMF	heavy										260	260	260	260	260	260	243	218	195	172	162
	light										180	180	180	180	180	180	163	146	131	116	110
L18HM	heavy				260	245	240	232	225	216	213	208	179	151	131	112					
	light				174	162	158	154	149	143	142	138	118	100	87	75					
L20	heavy	260	260	260	240	218	203	197	196	177	125										
	light	175	175	175	161	146	136	132	131	119	84										

**FORGED AND WELDED HIGH PRESSURE GATE VALVES**  
DN 200 - DN 400

The gate valves are designed for pipeline installations conducting non-aggressive and non-toxic media. They are manufactured as type **SKS1A**. They are suitable for mounting of drive – electro-mechanical actuator type NWA-1, manual operation gear type NGR or another actuator agreed while ordering.



**Materials:**

Body:	carbon steel / alloy steel
Bonnet:	carbon steel / alloy steel
Wedge:	alloy steel
Stem:	stainless steel (min.17%Cr)
Trim	stellite
Packing	reinforced graphite
Sealing of bonnet:	reinforced graphite

**Operating data:**

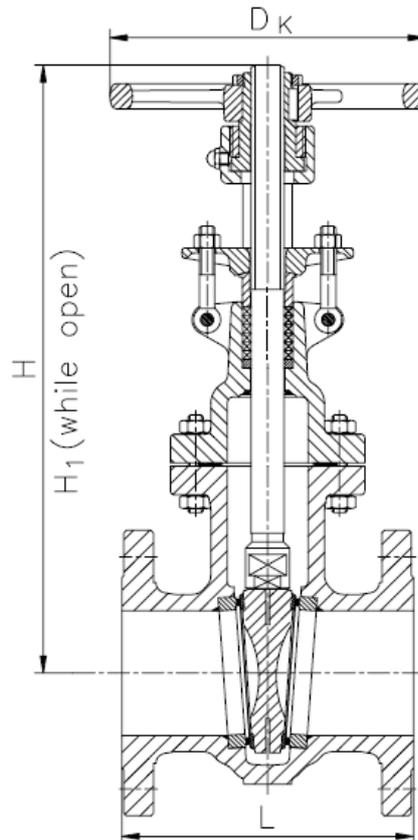
**DN200, DN 250**

Material	Maximum permissible operating temperature, TS [°C]																			
	20	20	250	300	350	400	425	550	475	50	540	550	50	550	555	550	555	560	570	580
	Maximum permissible operating pressure, PS [bar]																			
<b>C22.8</b>	260	205	192	178	164	152	137	125												
<b>15HM</b>				260	235	213	200	188	178	132	112									
<b>10H2M</b>										260	227	198	173	147	133					
<b>13HMF</b>										260	240	216	194	173	162					
<b>H9AMFNb</b>												250	240	230	224	20	213	210	200	190

**GATE VALVES CLASS 150 acc. to API 600**  
 DN50 – DN300 / 2” – 12” / WITH HANDWHEEL

The gate valves are designed for pipeline installations conducting petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK1A** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
       stellite/18Cr-8Ni  
       18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: reinforced graphite

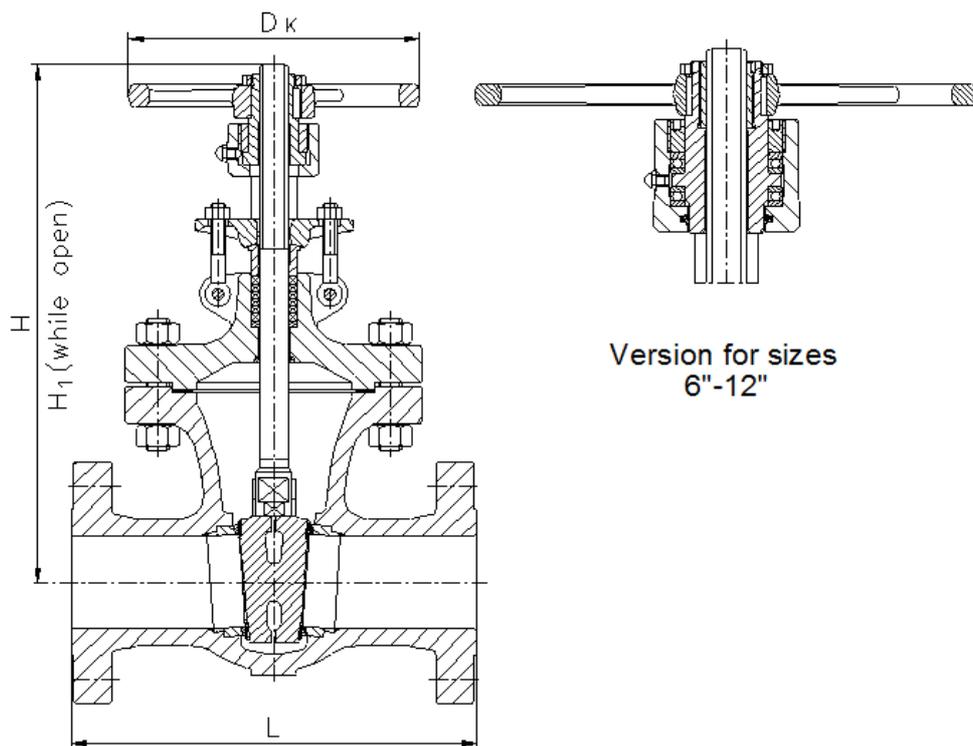
**Operating data:**

Pressure rating PN	Maximum permissible operating temperature TS ° [C]									
	-20 do 38	100	150	200	250	300	350	375	400	425
	Maximum permissible operating pressure PS [bar]									
ASME/ANSI	20	17,7	15,8	14	12,1	10,2	8,4	7,4	6,5	5,6
PN16	16	14,9	13,9	12,4	11,4	10,2	8,4	7,4	6,5	5,6
PN10	10	9,3	8,7	7,8	7,1	6,4	6	5,9	5,8	4,5

**GATE VALVES CLASS 300 acc. to API 600**  
DN50 – DN300 / 2" – 12" / WITH HANDWHEEL

The gate valves are designed for pipeline installations conducting petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK1B** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
 stellite/18Cr-8Ni  
 18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: soft stainless steel

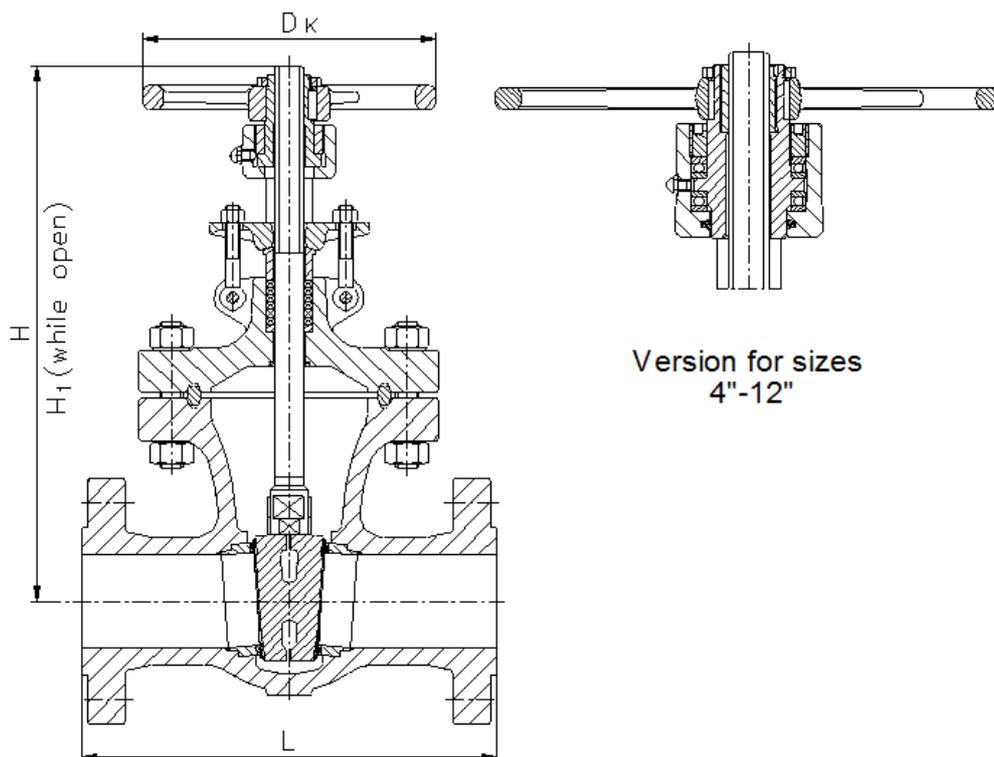
**Operating data:**

Pressure rating PN	Maximum permissible operating temperature TS [°C]									
	-20 do 38	100	150	200	250	300	350	375	400	425
	Maximum permissible operating pressure PS [bar]									
ASME/ANSI	52	47	46	44,5	42,5	39,5	37,5	37	35	28,5
PN 25	25	23,3	21,7	19,4	17,5	16,1	15	14,7	14,4	13,3
PN 40	40	37,3	34,7	30,2	28,4	25,8	24	23,5	23,1	21,4

**GATE VALVES CLASS 600 acc. to API 600**  
DN50 – DN300 / 2" – 12" / WITH HANDWHEEL

The gate valves are designed for pipeline installations conducting petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK1C** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
       stellite/18Cr-8Ni  
       18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: soft stainless steel

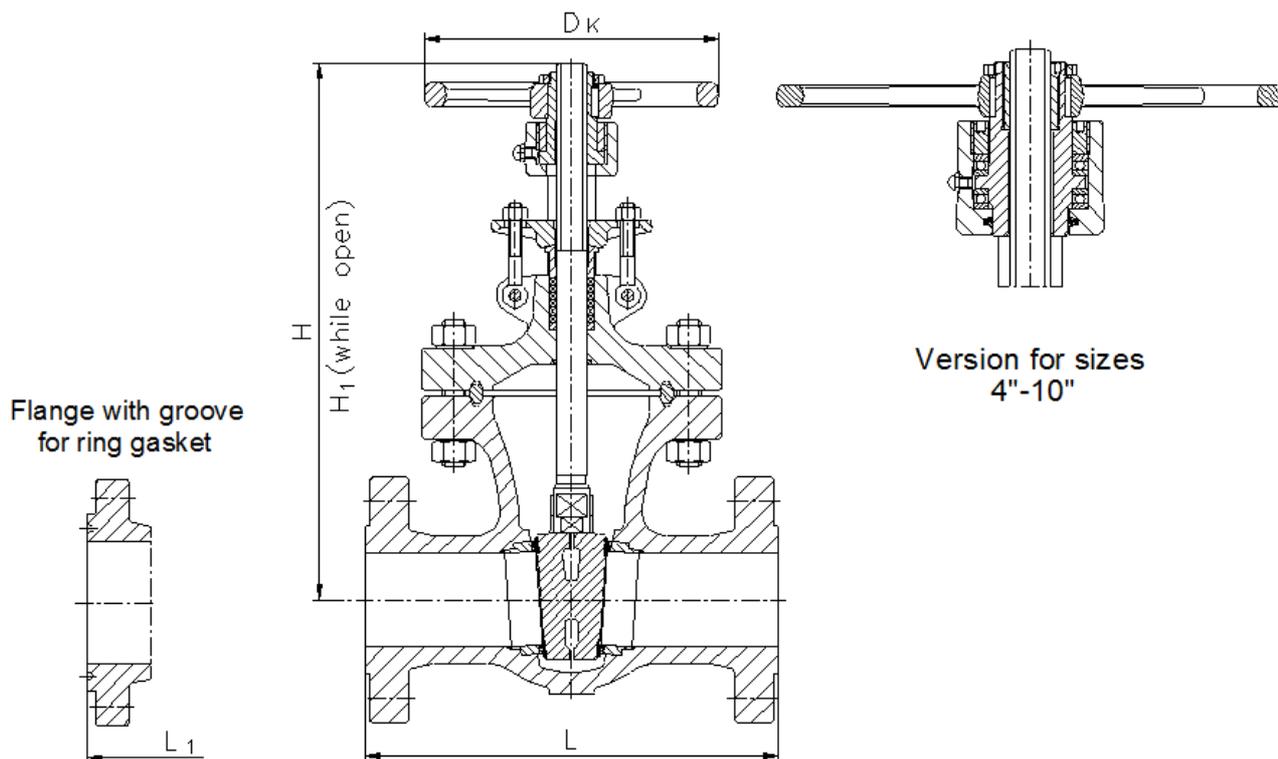
**Operating data:**

Pressure Rating PN	Maximum permissible operating temperature, TS [°C]										
	-20 do 38	100	150	200	250	300	350	375	400	425	
	Maximum permissible operating pressure, PS [bar]										
ASME/ANSI	102	93	90,5	87,5	83,5	77,5	74	73	69	57,5	
PN 63	63	58,8	54,6	47,6	44,8	40,6	37,1	36,7	36,4	33,7	
PN 100	100	93,3	86,7	75,6	71,1	64,4	58,9	58,3	57,8	53,5	

**GATE VALVES CLASS 900 acc. to API 600**  
DN50 – DN250 / 2" – 10" /WITH HANDWHEEL

The gate valves are designed for pipeline installations conducting petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK1D** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
 stellite/18Cr-8Ni  
 18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: soft stainless steel

**Operating data:**

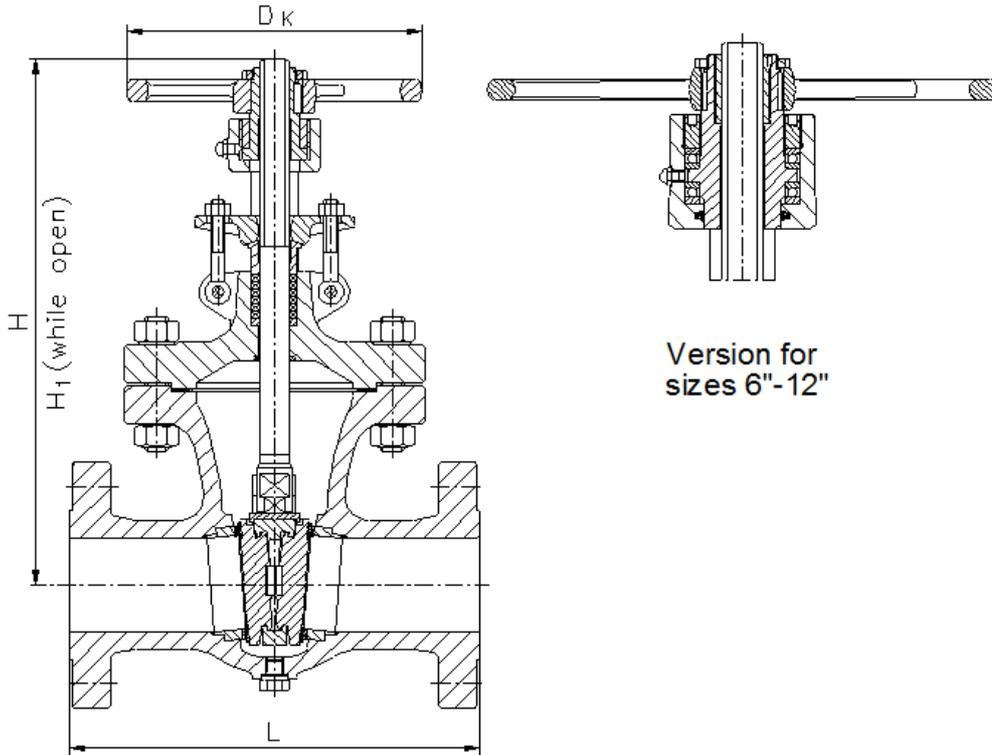
Pressure rating PN	Maximum permissible operating temperature, TS [°C]									
	-20 do 38	100	150	200	250	300	350	375	400	425
	Maximum permissible operating pressure, PS [bar]									
ASME/ANSI	153	139	136	132	125	116	111	109,5	103,5	86

**GATE VALVES FOR NATURAL GAS CLASS 300**  
ACC. TO API 600 DN50 – DN300 / 2" – 12" / WITH HAND WHEEL

The gate valves are designed for pipeline installations conducting natural gas, petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK3B** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.

They are approved by the Institute of Petroleum Mining and Gas Engineering.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
 stellite/18Cr-8Ni  
 18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: soft stainless steel

**Operating data:**

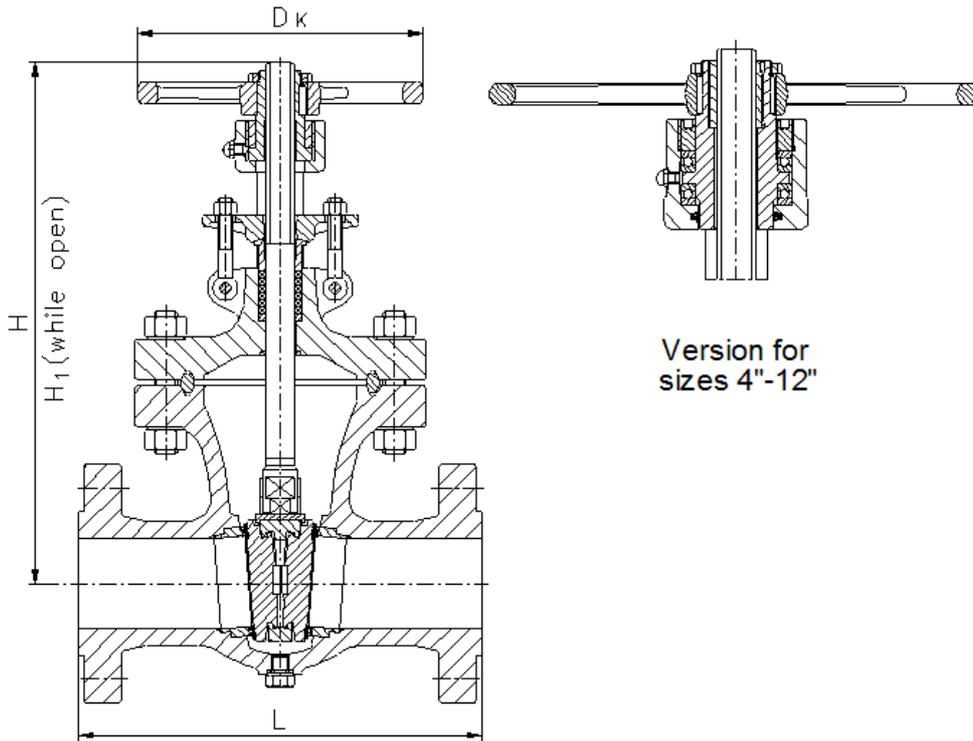
Pressure rating PN	Maximum permissible operating temperature, TS [°C]									
	-20 do 38	100	150	200	250	300	350	375	400	425
	Maximum permissible operating pressure, PS bar									
ASME/ANSI	52	47	46	44,5	42,5	39,5	37,5	37	35	28,5
PN 25	25	23,3	21,7	19,4	17,5	16,1	15	14,7	14,4	13,3
PN 40	40	37,3	34,7	30,2	28,4	25,8	24	23,5	23,1	21,4

**GATE VALVES FOR NATURAL GAS CLASS 600**  
ACC. TO API 600 DN50 – DN300 / 2" – 12" / WITH HAND WHEEL

The gate valves are designed for application in pipeline installations conducting natural gas, petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK3C** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.

They are approved by the Institute of Petroleum Mining and Gas Engineering.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
 stellite/18Cr-8Ni  
 18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: soft stainless steel

**Operating data:**

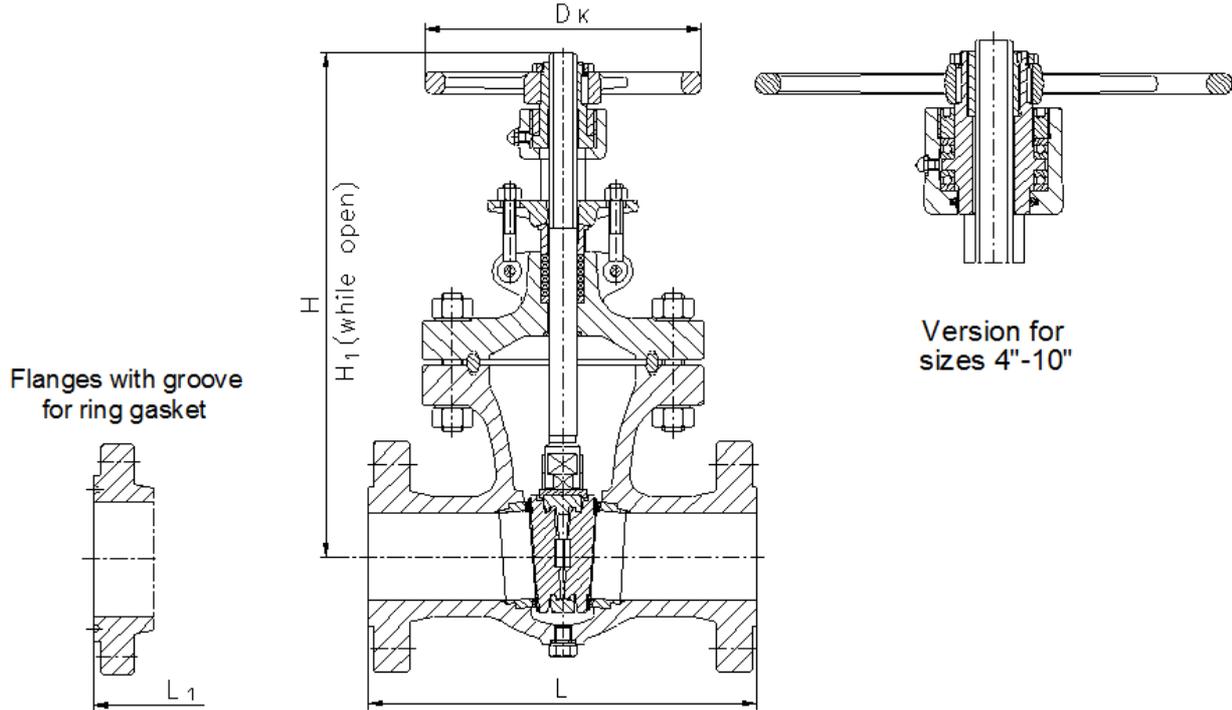
Pressure rating PN	Maximum permissible operating temperature, TS [°C]									
	-20 do 38	100	150	200	250	300	350	375	400	425
	Maximum permissible operating pressure, PS [bar]									
ASME/ANSI	102	93	90,5	87,5	83,5	77,5	74	73	69	57,5
PN 63	63	58,8	54,6	47,6	44,8	40,6	37,1	36,7	36,4	33,7
PN 100	100	93,3	86,7	75,6	71,1	64,4	58,9	58,3	57,8	53,5

**GATE VALVES FOR NATURAL GAS CLASS 900**  
ACC. TO API 600 DN50 – DN250 / 2" – 10" / WITH HAND WHEEL

The gate valves are designed for application in pipeline installations conducting natural gas, petroleum products, steam, water and other liquid and gaseous inactive media.

Gate valves type **SAK3D** are suitable for two-way flow of medium and can be installed on horizontal or vertical pipelines.

They are approved by the Institute of Petroleum Mining and Gas Engineering.



**Materials:**

Body: carbon cast steel  
 Bonnet: carbon cast steel  
 Wedge: carbon cast steel  
 Stem: steel 13% Cr  
 Trim: stellite/stellite  
       stellite/18Cr-8Ni  
       18Cr-8Ni/18Cr-8Ni  
 Packing: reinforced graphite  
 Bonnet sealing: soft stainless steel

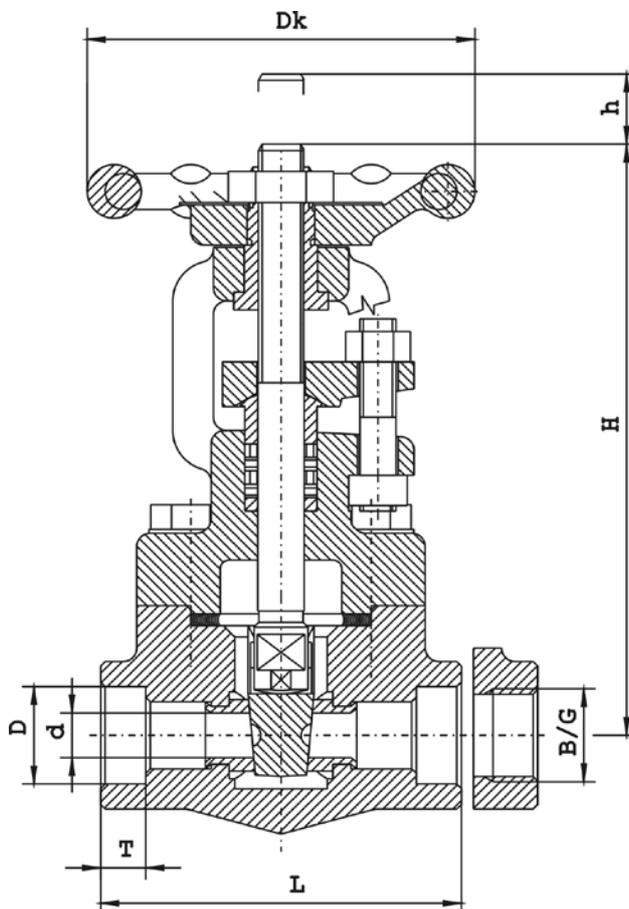
**Operating data:**

Pressure rating PN	Maximum permissible operating temperature, TS [°C]									
	-20 do 38	100	150	200	250	300	350	375	400	425
	Maximum permissible operating pressure, PS [bar]									
ASME/ANSI	153	139	136	132	125	116	111	109,5	103,5	86

**GATE VALVE /CLASS 800/**

**Cat. no. ZK800**

ND  $1/2" \div 2"$  / 800 lbs / T<sub>max</sub> = 425°C



**Dimensions:**

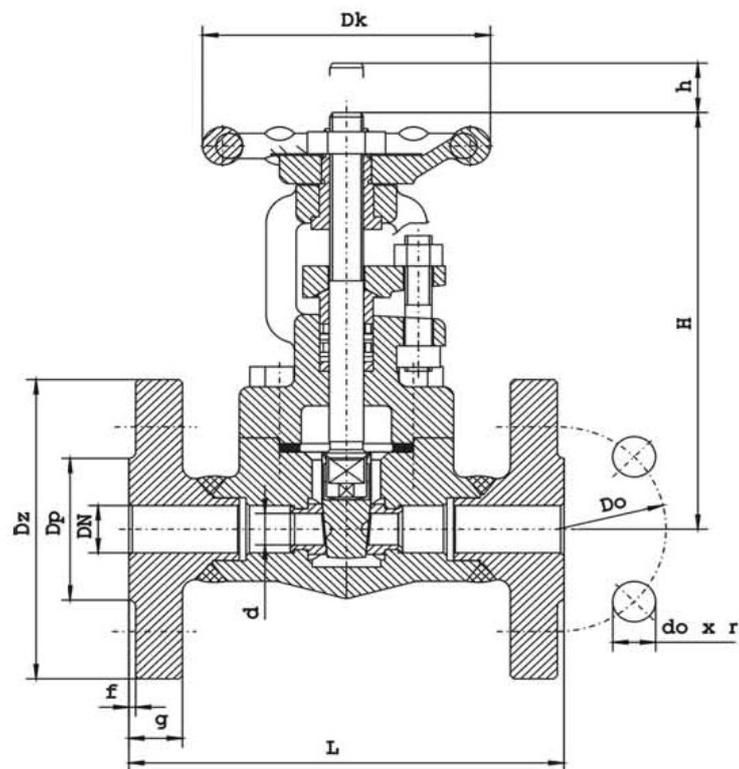
ND	B	G	d	D	L	T	H	h	D <sub>K</sub>	Weight
mm										kg
1/4	-	-	10	14,1	80	10	132	15	80	1,8
3/8	NPT 3/8	3/8	10	17,6	80	10	132	15	80	1,8
1/2	NPT 1/2	1/2	10	21,9	80	10	132	15	80	1,8
3/4	NPT 3/4	3/4	14	27,4	90	13	134	18	80	2,1
1	NPT 1	1	18	34,2	110	13	171	22	100	3,7
1 1/2	NPT 1 1/2	1 1/2	27	48,6	134	19	231	34	180	9,6
2	NPT 2	2	34	61,1	134	22	242	43	180	10,6

**Materials:**

Description	Material
Body	A105
Body seat	X17CrNi16-2
Bonnet	A105
Stem	X17CrNi16-2
Wedge	X30Cr13
Packing	Graphite

## GATE VALVE WITH RISING STEM

CAT. NO. ZKK40; ZKK100  
ND 15-50 / NP 4,0; 10,0 MPa / T<sub>max</sub>=425°C



### Application range:

Nominal pressure PN [bar]	Maximum operating pressure at medium temperature [°C]							
	-29 to 100 °C	150 °C	200 °C	250 °C	300 °C	350 °C	400 °C	425 °C
40	40	35,7	31,4	29,4	25,9	22,8	18	14,3
100	100	89	78	74	65	57	45	36

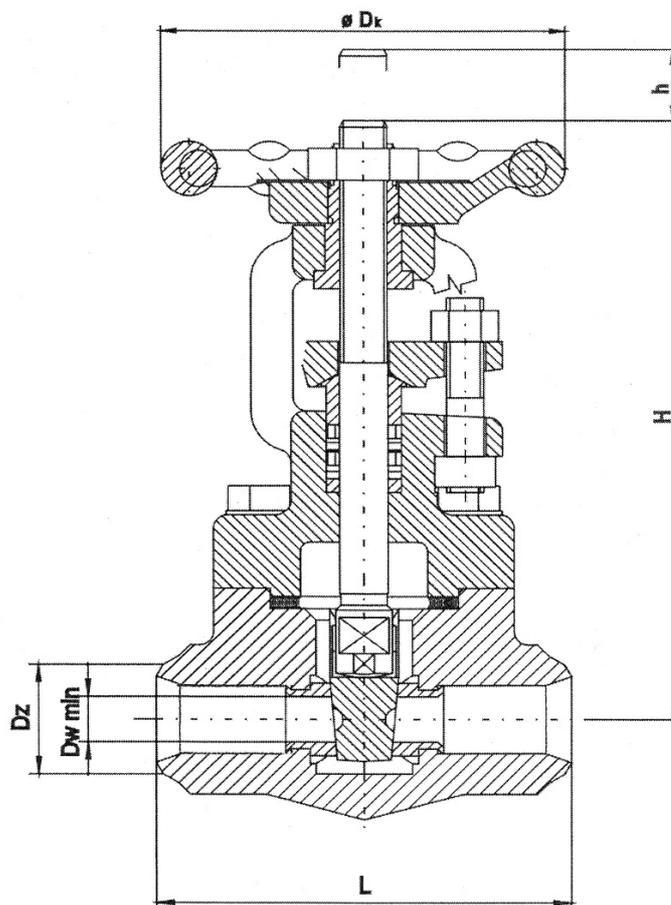
### Materials:

Description	standard	version for stainless steel ZKK40A
Body	A105	A182/F316
Body seat	X17CrNi16-2	A479/316L
Bonnet	A105	A182/F316
Stem	X17CrNi16-2	A479/316L
Wedge	X30Cr13	A479/316L
Packing	Graphite	Graphite

## GATE VALVE WITH BUTT WELDING ENDS

Cat. no. ZK100S

ND 15-50 / NP 4,0; 10,0 MPA / TMAX=425°C



### Application range:

Nominal pressure	Maximum operating pressure at medium temperature [°C]						
	PN [bar]	- 29 to 38 °C	100 °C	200 °C	300 °C	350 °C	400 °C
100	100	100	78	65	57	45	36

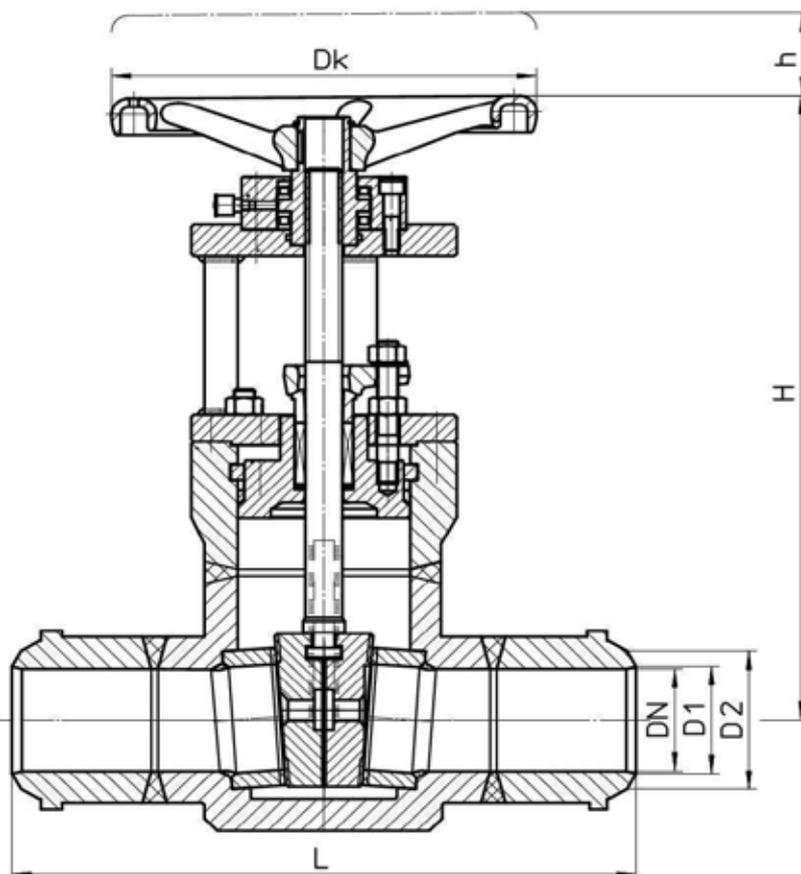
### Materials:

Description	Material
Body	A105
Bonnet	A105
Wedge	14Cr
Seat	X17CrNi16-2
Packing	Graphite

## GATE VALVE WITH RISING STEM WITH BUTT-WELDING ENDS

Cat. no. ZK250

ND 50-100 / PN 25,0 MPA / TMAX=580°C



### Application range:

Material	PN [MPa]	Maximum operating pressure at medium temperature [°C]										
		100°C	300°C	400°C	450°C	500°C	510°C	520°C	530°C	550°C	580°C	
P250GH	25,0	25,0	25,0	21,6	13,2	-	-	-	-	-	-	-
13CrMo4-5	25,0	25,0	25,0	25,0	25,0	19,3	22,3	11,5	11,0	6,9	-	-
11CrMo9-10	25,0	25,0	25,0	25,0	25,0	19,0	13,2	12,9	12,7	9,6	6,2	-

### Materials:

Description	Standard -Tmax.450°C	VERSION „A”-Tmax.550°C	VERSION „B”-tmax.580°C
	Material	Material	Material
Body	P250GH (1.0460)	X30Cr13Mo4-5 (13CrMo4-5)	11CrMo9-10 (1.7383)
Body seat	X17CrNi16-2Ni 16-2	Stellit	Stellit
Bonnet	P265GH	X30Cr13Mo4-5 (13CrMo4-5)	11CrMo9-10
Stem	X20Cr13	X39CrMo17-1 (1.4122)	X39CrMo17-1 (1.4122)
Wedge	X30Cr13	Stellit	Stellit
Packing	Graphite	Graphite	Graphite

## GATE VALVE TYPE GKA63

### CHARACTERISTIC:

Diameter	-	50 -350 mm;
Pressure	-	63 bar;
Temperature	-	up to 250°C for acids, bases and other aggressive media;
	-	up to 550°C for non-toxic media;
Medium	-	acids, liquors, water, steam and other non-toxic and non aggressive media, engine fuel and sea water

### VERSIONS:

**type body material / drive type / others**

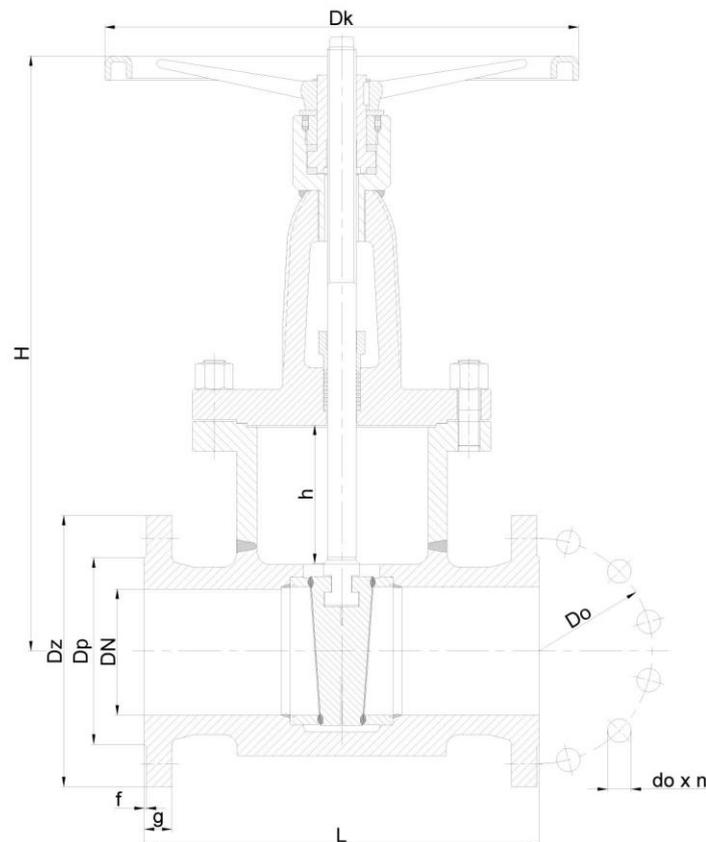
**Example: GKA63 / --- / --- / ---**

**Example: GKB63 / NA / ---**

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10 (1.4541)		<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10 (1.4301)			AUMA drive	<b>NA</b>		
		<b>GKB</b>	NWA drive	<b>NW</b>		
X2CrNiMo17-12-2 (1.4404)			MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions Parts	GKA63	GKB63
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dp	Do	do	n	L	g.	f	H	h	Dk	Weight
50	180	102	135	22	4	250	26	3	365	65	200	39,00
65	205	122	160	22	8	290	26	3	435	78	250	56,00
80	215	138	170	22	8	310	28	3	460	93	250	62,00
100	250	162	200	26	8	350	30	3	535	112	315	97,00
125	295	188	240	30	8	400	34	3	630	146	315	164,00
150	345	218	280	33	12	450	36	3	800	174	315	265,00
200	415	285	345	36	12	550	42	3	860	233	400	335,00
250	470	345	400	36	16	650	46	3	1055	260	500	498,00
300	530	410	460	36	16	750	52	4	1179	310	500	677,00
350	600	465	525	39	16	850	56	4	1395	355	630	914,00
400	670	535	585	42	16	950	60	4	1520	410	GNR	-
450	-	-	-	-	-	1025	-	-	1790	460	GNR	-
500	800	615	705	48	20	1150	-	-	1910	510	GNR	-

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	63	63,0	62,4	58,8	55,8	53,1	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		63	63,0	59,7	54,3	50,1	47,1	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	63	63,0	62,4	58,8	55,8	53,1	50,1	48,3	46,8	45,7	45,2	44,7	44,1	43,8	43,3	42,8	42,6
X2CrNiMo17-12-2 (1.4404)		63	63,0	59,7	54,3	50,1	47,1	43,5	41,7	40,5	39,4	38,9	38,4	38,4	38,4	38,2	38,2	38,2
X5CrNi18-10 (1.4301)		63	63,0	63,0	63,0	58,9	54,4	50,6	48,4	46,9	45,9	45,5	45,0	41,5	38,0	34,5	31,1	27,6

**MOUNTING AND OPERATING:**

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE ZST400

### CHARACTERISTIC:

Diameter	-	50 -500 mm;
Pressure	-	400 bar;
Temperature	-	up to 600°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

**type / body material / drive type / others**

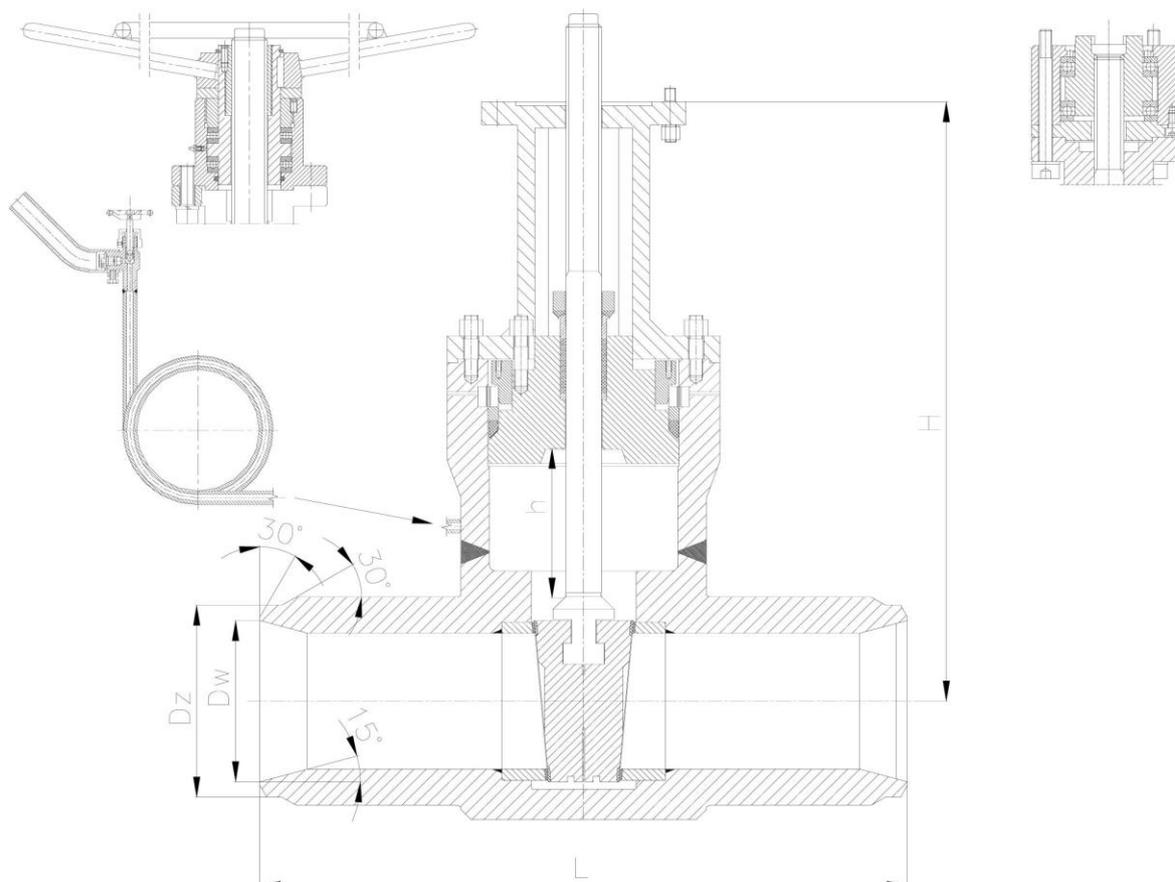
Example: ZST400 / --- / --- / ---

Example: ZST400 / A / NA / ---

Body material	Sign	Drive type	Sign	Others	Sign
(P250GH) C 22.8	---	Hand wheel	---	-----	---
16Mo3	<b>U</b>	AUMA drive	<b>NA</b>		
13CrMo4-5	<b>A</b>	NWA drive	<b>NW</b>		
10CrMo9-10	<b>B</b>	MODACT drive	<b>NM</b>		
14MoV6-3	<b>C</b>	Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions	Standard	U	A	B	C
Parts	T <sub>MAX</sub> 450°C	T <sub>MAX</sub> 530°C	T <sub>MAX</sub> 560°C	T <sub>MAX</sub> 600°C	T <sub>MAX</sub> 570°C
Body, bonnet, wedge	(P250GH) C22.8 (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	10CrMo9-10 (1.7380)	14MoV6-3 (1.7715)
Stem	BT9				
Seat ring	Stellit				
Wedge ring	Stellit				
Packing rings	Grafit				
Wheel	Steel				

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dw	L	H	h	Dk	Weight
50	77	49,5	350	400	65	350	49,50
65	91	62	425	400	78	350	77,00
80	117	81	470	435	93	350	134,20
100	144	102	550	435	112	400	187,00
125	172	126,5	650	535	146	500	269,50
150	201	146,5	750	708	174	800	319,00
175	-	-	850	910	185	900	528,00
200	278	205,5	950	1107	233	1000	737,00
250	329	248,5	1150	1245	260	1000	1210,00
300	413	312	1350	1512	310	1000	1980,00
350	464	344	1500	1780	355	1000	2090,00

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	PN	Maximal working pressure at working temperature																
		20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	520°C	530°C	540°C	560°C	570°C	600°C
(P250GH)C 22.8 (1.0460)	400	400,00	371,38	352,38	333,25	304,75	276,13	257,13	238,00	131,38	-	-	-	-	-	-	-	-
16Mo3 (1.5415)	400	400,00	400,00	400,00	400,00	390,38	342,75	323,75	304,75	295,13	224,38	177,13	112,38	89,50	-	-	-	-
13CrMo4-5 (1.7335)	400	400,00	400,00	400,00	400,00	400,00	398,00	380,88	361,88	342,75	293,63	260,88	179,00	148,50	116,13	76,13	62,70	-
14MoV6-3 (1.7715)	400	400,00	400,00	400,00	400,00	400,00	400,00	400,00	398,10	386,70	383,80	367,60	283,80	249,50	215,20	163,80	139,00	-
10CrMo9-10 (1.7380)	400	400,00	400,00	400,00	400,00	400,00	400,00	390,38	371,38	352,38	295,13	257,13	196,13	171,38	148,50	110,38	97,13	64,8

**MOUNTING AND OPERATING:**

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE ZS400

### CHARACTERISTIC:

Diameter	-	50 -500 mm;
Pressure	-	400 bar;
Temperature	-	up to 670°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

type / body material / drive type / others

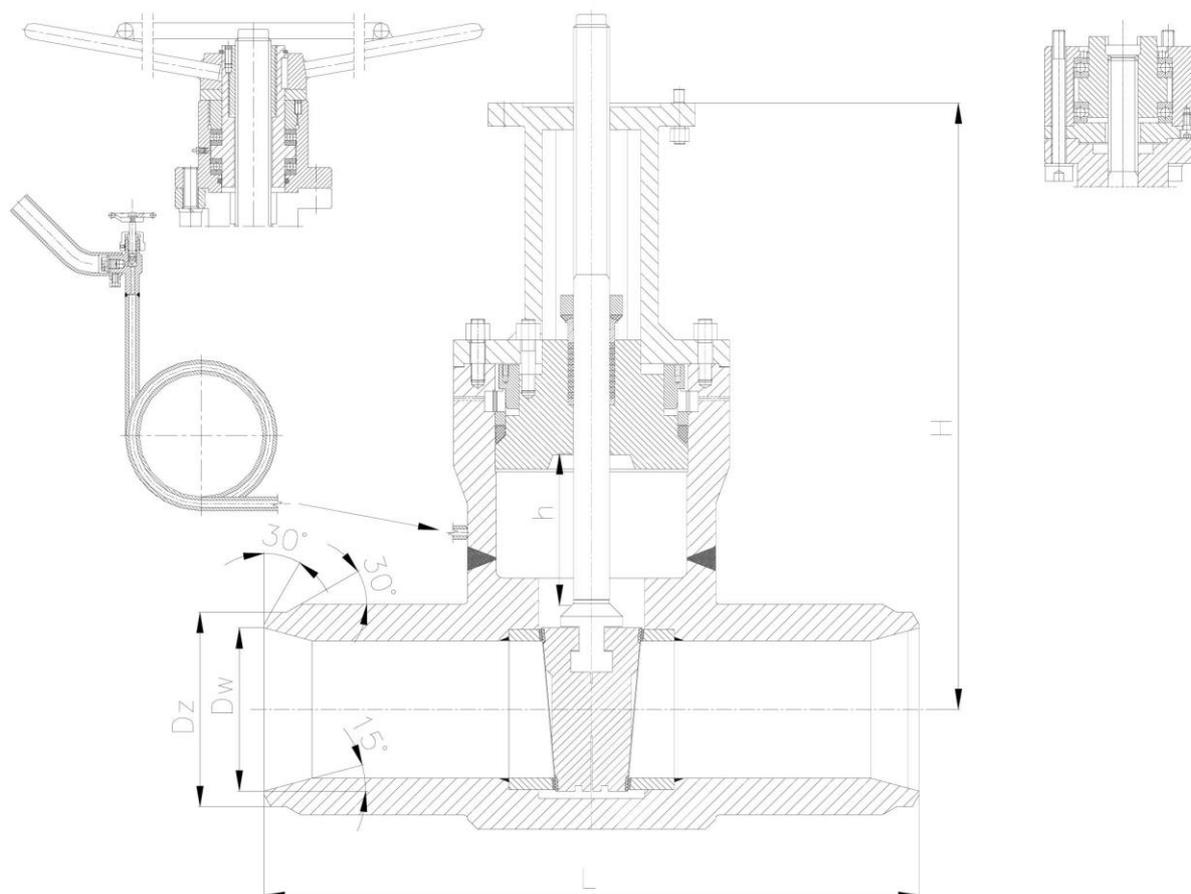
Example: ZS400 / --- / --- / ---

Example: ZS400 / U / NA / ---

Body material	Sign	Drive type	Sign	Others	Sign
(P250GH) C 22.8	---	Hand wheel	---	-----	---
16Mo3	U	AUMA drive	NA		
13CrMo4-5	A	NWA drive	NW		
10CrMo9-10	B	MODACT drive	NM		
14MoV6-3	C				
X10CrMoVNb9-1	E	Pneumatic drive	NP		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



### MATERIALS:

Versions	Standard	U	A	B	C	E
Parts	T <sub>MAX</sub> 450°C	T <sub>MAX</sub> 530°C	T <sub>MAX</sub> 560°C	T <sub>MAX</sub> 600°C	T <sub>MAX</sub> 570°C	T <sub>MAX</sub> 670°C
Body, bonnet, wedge	(P250GH) C22.8 (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	10CrMo9-10 (1.7380)	14MoV6-3 (1.7715)	X10CrMoVNb9-1 (1.4903)
Stem	X39CrMo17-1 (1.4122)					
Seat ring	Stellit					
Wedge ring	Stellit					
Packing rings	Grafit					
Wheel	Steel					

Special materials on request; modifications reserved.

### DIMENSIONS:

DN	Dz	Dw	L	H	h	Dk	Weight
50	77	49,5	350	400	65	350	49,50
65	91	62	425	400	78	350	77,00
80	117	81	470	435	93	350	134,20
100	144	102	550	435	112	400	187,00
125	172	126,5	650	535	146	500	269,50
150	201	146,5	750	708	174	800	319,00
175	-	-	850	910	185	900	528,00
200	278	205,5	950	1107	233	1000	737,00
250	329	248,5	1150	1245	260	1000	1210,00
300	413	312	1350	1512	310	1000	1980,00
350	464	344	1500	1780	355	1000	2090,00

Dimensions in mm; modifications reserved.

### TECHNICAL DATA:

Body material	PN	Maximal working pressure at working temperature																
		20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	520°C	530°C	540°C	560°C	570°C	600°C
(P250GH)C 22.8 (1.0460)	400	400,00	371,38	352,38	333,25	304,75	276,13	257,13	238,00	131,38	-	-	-	-	-	-	-	-
16Mo3 (1.5415)	400	400,00	400,00	400,00	400,00	390,38	342,75	323,75	304,75	295,13	224,38	177,13	112,38	89,50	-	-	-	-
13CrMo4-5 (1.7335)	400	400,00	400,00	400,00	400,00	400,00	398,00	380,88	361,88	342,75	293,63	260,88	179,00	148,50	116,13	76,13	62,70	-
14MoV6-3 (1.7715)	400	400,00	400,00	400,00	400,00	400,00	400,00	400,00	398,10	386,70	383,80	367,60	283,80	249,50	215,20	163,80	139,00	-
10CrMo9-10 (1.7380)	400	400,00	400,00	400,00	400,00	400,00	400,00	390,38	371,38	352,38	295,13	257,13	196,13	171,38	148,50	110,38	97,13	64,8
Body material	PN	Maximal working pressure at working temperature																
		20°C	530°C	540°C	550°C	560°C	570°C	580°C	590°C	600°C	610°C	620°C	630°C	640°C	650°C	660°C	670°C	
X10CrMoVNb9-1 (1.4903)	400	400,0	400,0	367,1	316,1	285,6	255,1	228,5	201,9	179,0	158,1	139,0	123,8	106,7	93,3	80,0	68,6	

### MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE ZS320 ZK320

### CHARACTERISTIC:

Diameter	-	50 -500 mm;
Pressure	-	320 bar;
Temperature	-	up to 670°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

**type / body material / drive type / others**

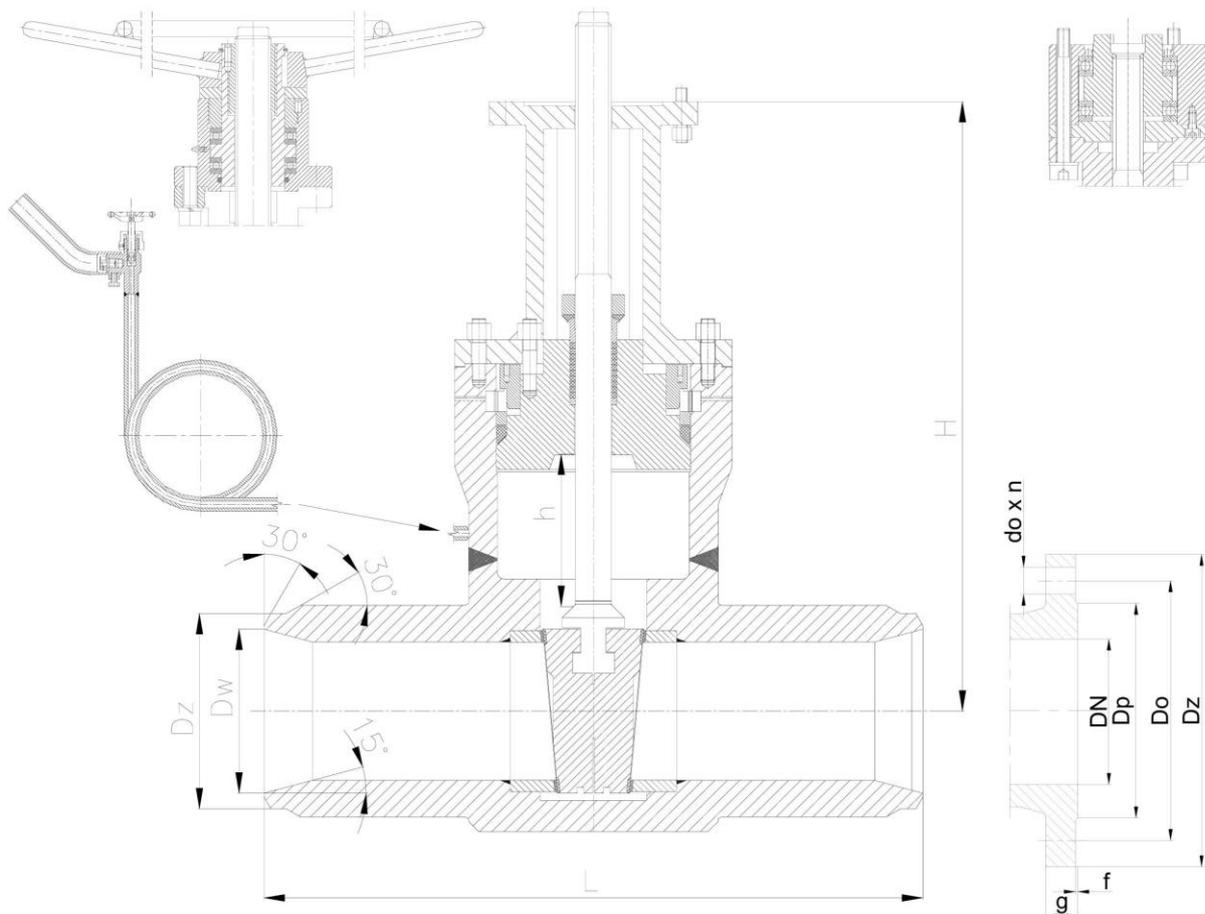
**Example:** ZS320 / --- / --- / ---

**Example:** ZS320 / U / NW / ---

Body material	Sign	Drive type	Sign	Others	Sign
(P250GH) C 22.8	---	Hand wheel	---	-----	---
16Mo3	<b>U</b>	AUMA drive	<b>NA</b>		
13CrMo4-5	<b>A</b>	NWA drive	<b>NW</b>		
10CrMo9-10	<b>B</b>	MODACT drive	<b>NM</b>		
14MoV6-3	<b>C</b>				
X10CrMoVNB9-1	<b>E</b>	Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions	Standard	U	A	B	C	E
Parts	T <sub>MAX</sub> 450°C	T <sub>MAX</sub> 530°C	T <sub>MAX</sub> 560°C	T <sub>MAX</sub> 600°C	T <sub>MAX</sub> 570°C	T <sub>MAX</sub> 570°C
Body, bonnet, wedge	(P250GH) C22.8 (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	10CrMo9-10 (1.7380)	14MoV6-3 (1.7715)	X10CrMoVNb9-1 (1.4903)
Stem	X39CrMo17-1 (1.4122)					
Seat ring	Stellit					
Wedge ring	Stellit					
Packing rings	Grafit					
Wheel	Steel					

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dw	L	H	h	Dk	Weight	Flanged								
								Dz	Dp	Do	do	n	L	g.	f	Weight
50	65	47	350	490	61	400	45,00	210	102	160	26	8	350	42	3	65,00
	77	59,5														
65	91	68	425	545	77	700	70,00	255	122	200	30	8	425	51	3	77,00
80	117	87,5	470	624	92	700	122,00	275	138	220	30	8	470	55	3	134,00
100	144	109,5	550	690	115	700	170,00	335	162	265	36	8	550	65	3	187,00
125	172	130,5	650	760	140	700	245,00	380	188	310	36	12	650	75	3	270,00
150	201	151,5	750	1040	160	1100	290,00	425	218	350	39	12	750	84	3	319,00
175	-	-	-	-	-	-	-	By customers acceptance								
200	252	191,5	950	1280	225	1100	670,00	525	285	440	42	16	950	103	3	737,00
250	329	255,5	1150	1150	270	-	1100,0	640	345	540	52	16	1150	125	3	1210,00
300	362	287	1350	1380	335	-	1800,0	By customers acceptance								
350	413	321	1500	1780	355	-	1920,0	By customers acceptance								
400	By customers acceptance							By customers acceptance								
450	By customers acceptance							By customers acceptance								
500	By customers acceptance							By customers acceptance								

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	PN	Maximal working pressure at working temperature																
		20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	520°C	530°C	540°C	560°C	570°C	600°C
(P250GH)C 22.8 (1.0460)	320	320,00	297,10	281,90	266,60	243,80	220,90	205,70	190,40	105,10								-
16Mo3 (1.5415)	320	320,00	320,00	320,00	320,00	312,30	274,20	259,00	243,80	236,10	179,50	141,70	89,90	71,60				-
13CrMo4-5 (1.7335)	320	320,00	320,00	320,00	320,00	320,00	318,40	304,70	289,50	274,20	234,90	208,70	143,20	118,80	92,90	60,90	50,20	-
14MoV6-3 (1.7715)	320	320,00	320,00	320,00	320,00	320,00	320,00	320,00	318,50	309,30	307,00	294,10	227,00	199,60	172,20	131,00	111,20	-
10CrMo9-10 (1.7380)	320	320,00	320,00	320,00	320,00	320,00	320,00	312,30	297,10	281,90	236,10	205,70	156,90	137,10	118,80	88,30	77,70	51,8
Body material	PN	Maximal working pressure at working temperature																
		20°C	530°C	540°C	550°C	560°C	570°C	580°C	590°C	600°C	610°C	620°C	630°C	640°C	650°C	660°C	670°C	
X10CrMoVNb9-1 (1.4903)	320	320,0	320,0	293,7	252,9	228,5	204,1	182,8	161,5	143,2	126,5	111,2	99,0	85,3	74,7	64,0	54,9	

**MOUNTING AND OPERATING:**

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GSA160 ; GKA160

### CHARACTERISTIC:

- Diameter - 50 -350 mm;
- Pressure - 160 bar;
- Temperature - up to 250°C for acids, bases and other aggressive media;
- up to 550°C for non-toxic media;
- Medium - acids, liquors, water, steam and other non-toxic and non aggressive media, engine fuel and sea water

### VERSIONS:

**type body material / drive type / others**

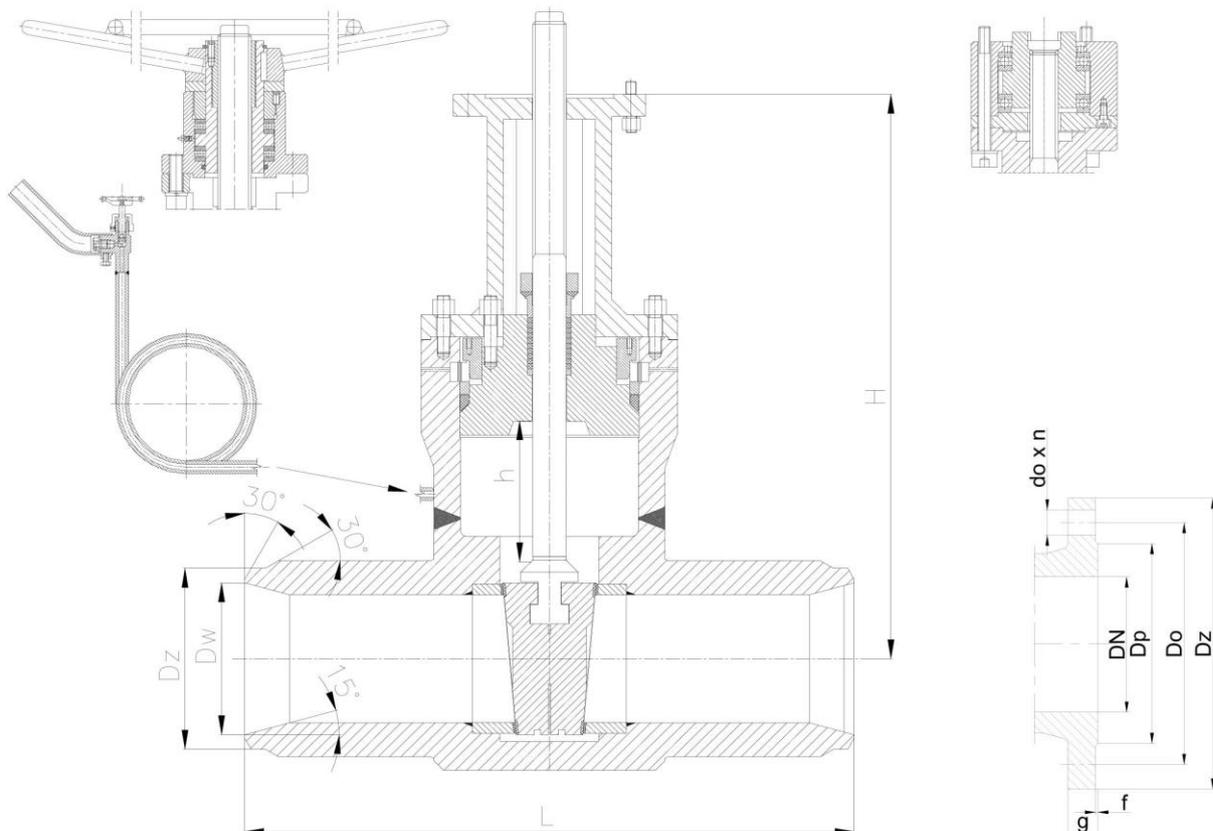
Example: GKA160 / --- / --- / ---

Example: GKB160 / NA / ---

Type Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10 (1.4541)	<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10 (1.4301)	<b>GKA</b>	AUMA drive	<b>NA</b>		
X2CrNiMo17-12-2 (1.4404)	<b>GKB</b>	NWA drive	<b>NW</b>		
X6CrNiMoTi17-12-2 (1.4571)	<b>GKB</b>	MODACT drive	<b>NM</b>		
		Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions Parts	GSA/GKA160	GSB/GKB160
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dw	L	H	h	Dk	Weight	"GK"								
								Dz	Dp	Do	do	n	L	g.	f	Weight
50	62	52,5	300	490	61	400	37,80	195	102	145	30	4	300	30	3	51,80
65	77	65	360	534	77	400	58,50	220	122	170	26	8	360	34	3	78,50
80	91	76,5	390	613	92	500	103,50	230	138	180	26	8	390	36	3	127,50
100	117	98,5	450	690	115	700	144,00	265	162	210	30	8	450	40	3	179,00
125	144	120,5	525	760	140	700	207,00	315	188	250	33	8	525	44	3	261,10
150	172	144,5	600	970	160	850	244,80	355	218	290	33	12	600	50	3	355,80
175	by customers acceptance							by customers acceptance								
200	223	189	750	1240	225	1100	566,10	430	285	360	36	12	750	60	3	703,10
250	278	242,5	900	1450	270	1100	930,60	515	345	430	42	12	900	68	3	1152,6
300	329	285,5	1050	1300*	335	-	1522,80	585	410	500	42	16	1050	78	4	1852,80
350	by customers acceptance							by customers acceptance								
400	by customers acceptance							by customers acceptance								
450	by customers acceptance							by customers acceptance								
500	by customers acceptance							by customers acceptance								

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	160	160,0	158,4	149,3	141,7	134,8	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		160	160,0	151,6	137,9	127,2	119,6	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	160	160,0	158,4	149,3	141,7	134,8	127,2	122,6	118,8	116,1	114,8	113,5	112,0	111,2	110,0	108,8	108,1
X2CrNiMo17-12-2 (1.4404)		160	160,0	151,6	137,9	127,2	119,6	110,4	105,9	102,8	100,1	99,0	97,5	97,5	97,5	97,1	97,1	97,1
X5CrNi18-10 (1.4301)	non aggressive media	160	160,0	160,0	160,0	149,5	138,1	128,6	122,9	119,1	116,7	113,9	114,3	105,4	96,6	87,7	78,9	70,1
X6CrNiMo17-12-2 (1.4571)		160	160,0	160,0	156,2	148,6	146,6	142,9	142,9	142,9	139,8	138,5	137,1	136,6	136,0	135,4	134,8	134,4

**MOUNTING AND OPERATING:**

*The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.*

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GS250

### CARACTERISTIC:

Diameter	-	50 -350 mm;
Pressure	-	250 bar;
Temperature	-	up to 600°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

type / body material / drive type / others

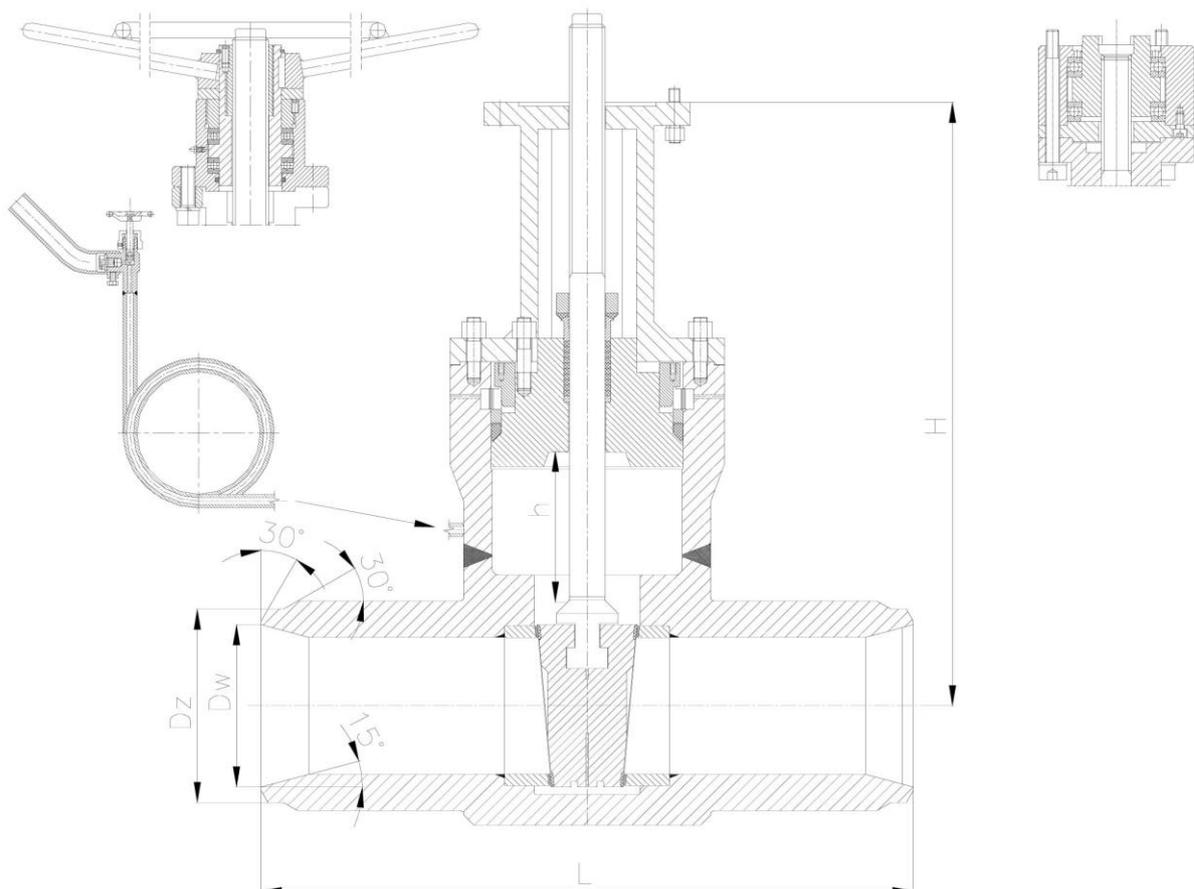
Example: GS250 / --- / --- / ---

Example: GS250 / U / NA / ---

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10	(1.4541)	<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10	(1.4301)	<b>GKA</b>	AUMA drive	<b>NA</b>		
X2CrNiMo17-12-2	(1.4404)	<b>GKB</b>	NWA drive	<b>NW</b>		
			MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



## MATERIALS:

Versions Parts	GSA160	GSB160
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

## DIMENSIONS:

DN	Dz	Dw	L	H	h	Dk	Weight
50	602	45	350	400	65	350	42,00
65	77	57,5	425	400	78	350	65,00
80	91	65,5	470	435	93	350	115,00
100	117	87,5	550	435	112	400	160,00
125	144	106,5	650	535	146	500	230,00
150	172	130,5	750	708	174	800	272,00
175	193,7	149,3	850	910	185	900	451,00
200	223	172	950	1107	233	1000	629,00
250	278	212,5	1150	1245	260	1000	1034,00
300	355,6	287	1350	1512	310	1000	1692,00
350	406,4	339	1500	1780	355	1000	1792,00

Dimensions in mm; modifications reserved.

## TECHNICAL DATA:

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	250	250	248	233	221	211	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		250	250	250	244	232	229	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	250	250	248	233	221	211	199	192	186	182	180	177	177	176	176	175	169
X2CrNiMo17-12-2 (1.4404)		250	250	250	244	232	229	216	207	201	196	193	191	190	190	189	189	188
X5CrNi18-10 (1.4301)		250	250	250	250	234	216	201	192	186	182	180	179	165	151	137	123	109

## MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GKA100

### CHARACTERISTIC:

- Diameter - 50 -500 mm;
- Pressure - 100 bar;
- Temperature - up to 250°C for acids, bases and other aggressive media;
- up to 550°C for non-toxic media;
- Medium - acids, liquors, water, steam and other non-toxic and non aggressive media, engine fuel and sea water

### VERSIONS:

**type body material / drive type / others**

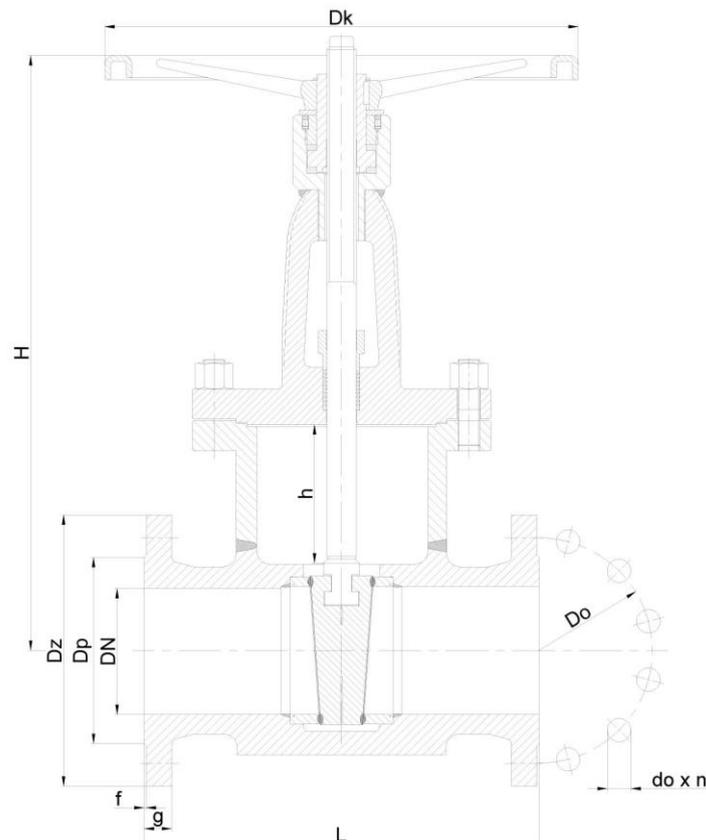
**Example: GKA100 / --- / --- / ---**

**Example: GKB100 / NA / ---**

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10	(1.4541)	<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10	(1.4301)		AUMA drive	<b>NA</b>		
X2CrNiMo17-12-2	(1.4404)	<b>GKB</b>	NWA drive	<b>NW</b>		
			MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



### MATERIALS:

Versions Parts	GKA100	GKB100
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

### DIMENSIONS:

DN	Dz	Dp	Do	do	n	L	g.	f	H	h	Dk	Weight
50	195	102	145	26	4	250	28	3	365	65	200	43,00
65	220	122	170	26	8	290	30	3	435	78	250	61,00
80	230	138	180	26	8	310	32	3	460	93	250	63,00
100	265	162	210	30	8	350	36	3	535	112	315	108,00
125	315	188	250	33	8	400	40	3	630	146	315	166,00
150	355	218	290	33	12	450	44	3	800	174	315	278,00
200	430	285	360	36	12	550	52	3	860	233	400	437,00
250	505	345	430	39	12	650	60	3	1055	260	500	692,00
300	585	410	500	42	16	750	68	4	1179	310	500	1010,00
350	655	465	560	48	16	850	74	4	1395	355	630	1158,00
400	715	535	620	48	16	1050	-	4	1520	410	GNR	-
450	-	-	-	-	-	1350	-	-	1790	460	GNR	-
500	870	615	760	56	4	1550	-	4	1910	510	GNR	-

Dimensions in mm; modifications reserved.

### TECHNICAL DATA:

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	100	100,0	99,0	93,3	88,5	84,2	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		100	100,0	100,0	97,6	92,9	91,6	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	100	100,0	99,0	93,3	88,5	84,2	79,5	76,6	74,2	72,6	71,5	70,9	70,0	69,5	68,7	68,0	67,6
X2CrNiMo17-12-2 (1.4404)		100	100,0	100,0	97,6	92,9	91,6	86,3	82,7	80,4	78,3	77,3	76,2	76,1	75,9	75,8	75,6	75,6
X5CrNi18-10 (1.4301)		100	100,0	100,0	100,0	93,4	86,3	80,4	76,8	74,4	72,9	72,1	71,4	65,9	60,4	54,8	49,3	43,8
GX5CrNiMo19-11-2 (1.4408)	non aggressive media	100	100,0	81,0	73,0	64,0	60,0	55,0	52,0	50,0	49,0	49,0	48,0	48,0	48,0	47,0	47,0	47,0

### MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE ZST400

### CHARACTERISTIC:

Diameter	-	50 -500 mm;
Pressure	-	400 bar;
Temperature	-	up to 600°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

**type / body material / drive type / others**

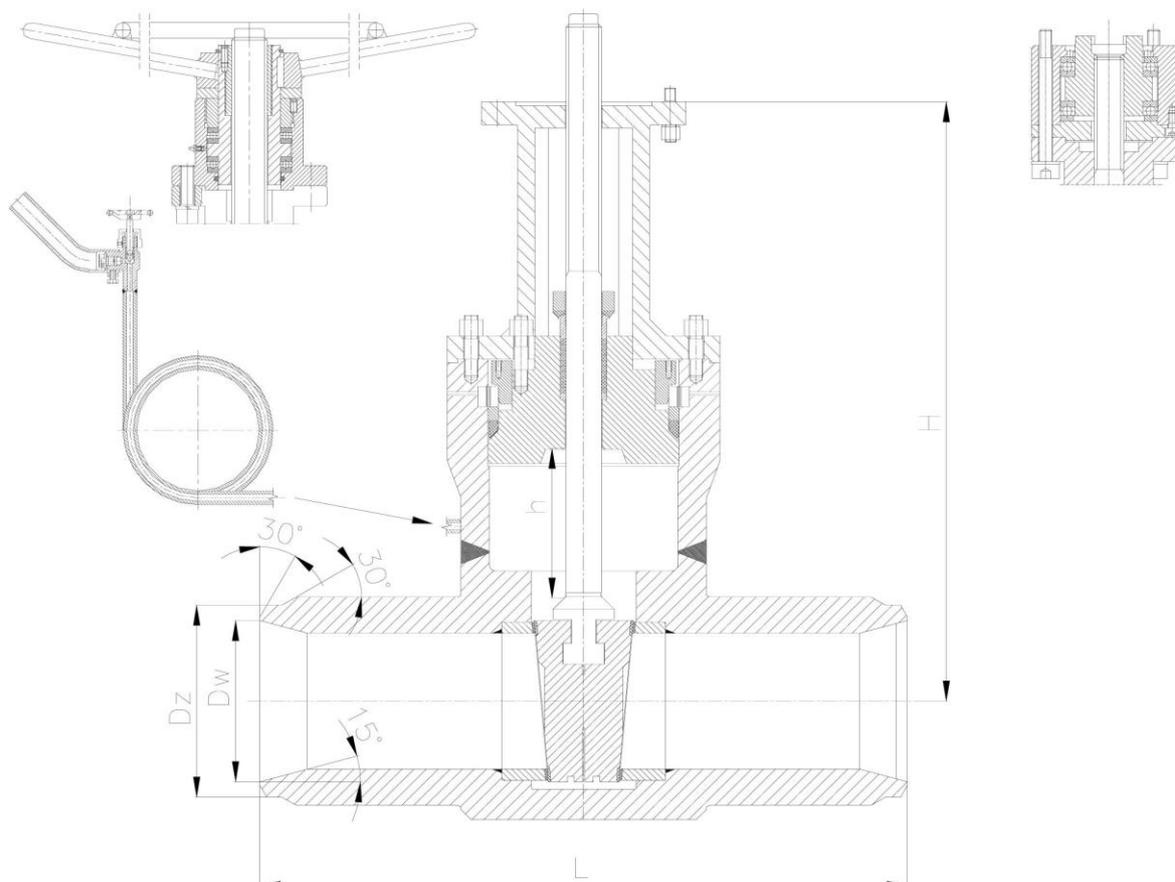
Example: ZST400 / --- / --- / ---

Example: ZST400 / A / NA / ---

Body material	Sign	Drive type	Sign	Others	Sign
(P250GH) C 22.8	---	Hand wheel	---	-----	---
16Mo3	<b>U</b>	AUMA drive	<b>NA</b>		
13CrMo4-5	<b>A</b>	NWA drive	<b>NW</b>		
10CrMo9-10	<b>B</b>	MODACT drive	<b>NM</b>		
14MoV6-3	<b>C</b>	Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



### MATERIALS:

Versions	Standard	U	A	B	C
Parts	T <sub>MAX</sub> 450°C	T <sub>MAX</sub> 530°C	T <sub>MAX</sub> 560°C	T <sub>MAX</sub> 600°C	T <sub>MAX</sub> 570°C
Body, bonnet, wedge	(P250GH) C22.8 (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	10CrMo9-10 (1.7380)	14MoV6-3 (1.7715)
Stem	BT9				
Seat ring	Stellit				
Wedge ring	Stellit				
Packing rings	Grafit				
Wheel	Steel				

Special materials on request; modifications reserved.

### DIMENSIONS:

DN	Dz	Dw	L	H	h	Dk	Weight
50	77	49,5	350	400	65	350	49,50
65	91	62	425	400	78	350	77,00
80	117	81	470	435	93	350	134,20
100	144	102	550	435	112	400	187,00
125	172	126,5	650	535	146	500	269,50
150	201	146,5	750	708	174	800	319,00
175	-	-	850	910	185	900	528,00
200	278	205,5	950	1107	233	1000	737,00
250	329	248,5	1150	1245	260	1000	1210,00
300	413	312	1350	1512	310	1000	1980,00
350	464	344	1500	1780	355	1000	2090,00

Dimensions in mm; modifications reserved.

### TECHNICAL DATA:

Body material	PN	Maximal working pressure at working temperature																
		20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	520°C	530°C	540°C	560°C	570°C	600°C
(P250GH)C 22.8 (1.0460)	400	400,00	371,38	352,38	333,25	304,75	276,13	257,13	238,00	131,38	-	-	-	-	-	-	-	-
16Mo3 (1.5415)	400	400,00	400,00	400,00	400,00	390,38	342,75	323,75	304,75	295,13	224,38	177,13	112,38	89,50	-	-	-	-
13CrMo4-5 (1.7335)	400	400,00	400,00	400,00	400,00	400,00	398,00	380,88	361,88	342,75	293,63	260,88	179,00	148,50	116,13	76,13	62,70	-
14MoV6-3 (1.7715)	400	400,00	400,00	400,00	400,00	400,00	400,00	400,00	398,10	386,70	383,80	367,60	283,80	249,50	215,20	163,80	139,00	-
10CrMo9-10 (1.7380)	400	400,00	400,00	400,00	400,00	400,00	400,00	390,38	371,38	352,38	295,13	257,13	196,13	171,38	148,50	110,38	97,13	64,8

### MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE ZS400

### CHARACTERISTIC:

Diameter	-	50 -500 mm;
Pressure	-	400 bar;
Temperature	-	up to 670°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

type / body material / drive type / others

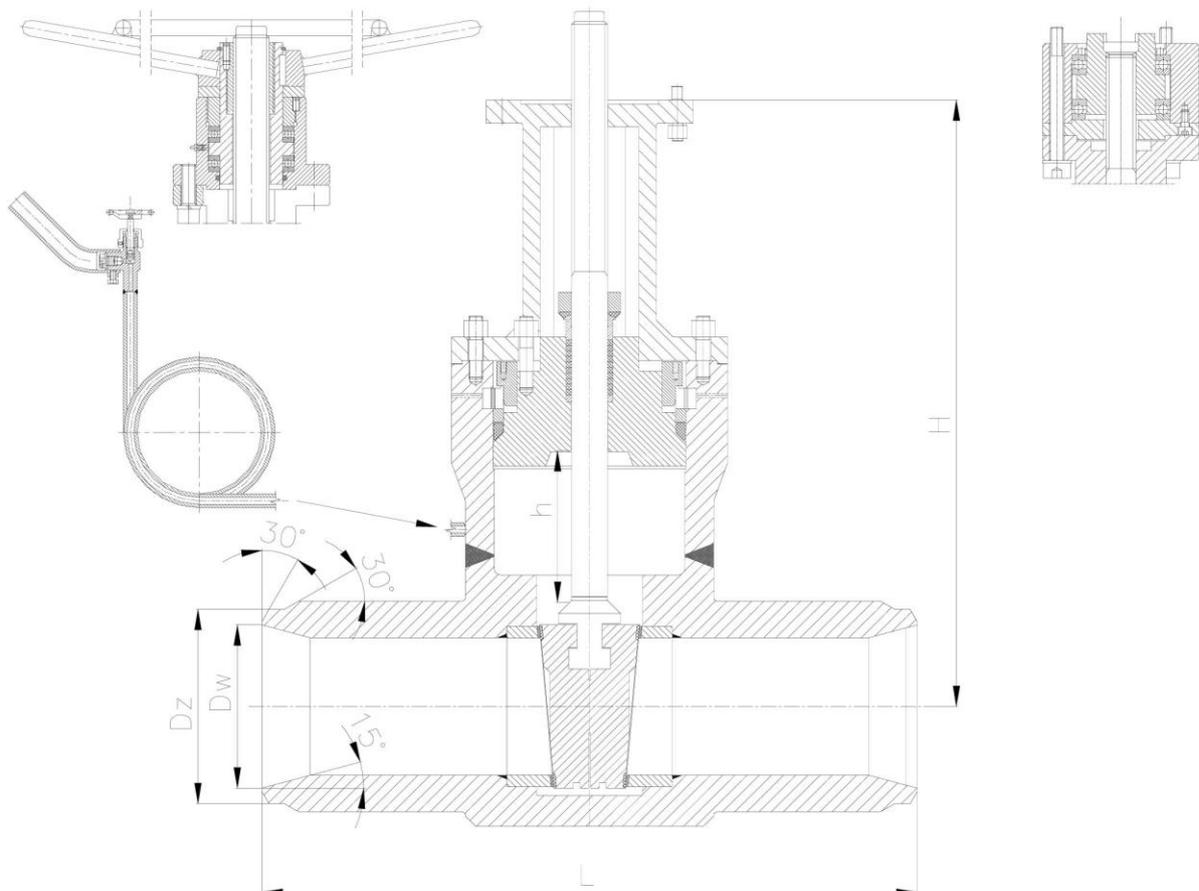
Example: ZS400 / --- / --- / ---

Example: ZS400 / U / NA / ---

Body material	Sign	Drive type	Sign	Others	Sign
(P250GH) C 22.8	---	Hand wheel	---	-----	---
16Mo3	U	AUMA drive	NA		
13CrMo4-5	A	NWA drive	NW		
10CrMo9-10	B	MODACT drive	NM		
14MoV6-3	C				
X10CrMoVNb9-1	E	Pneumatic drive	NP		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



### MATERIALS:

Versions	Standard	U	A	B	C	E
Parts	T <sub>MAX</sub> 450°C	T <sub>MAX</sub> 530°C	T <sub>MAX</sub> 560°C	T <sub>MAX</sub> 600°C	T <sub>MAX</sub> 570°C	T <sub>MAX</sub> 670°C
Body, bonnet, wedge	(P250GH) C22.8 (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	10CrMo9-10 (1.7380)	14MoV6-3 (1.7715)	X10CrMoVNb9-1 (1.4903)
Stem	X39CrMo17-1 (1.4122)					
Seat ring	Stellit					
Wedge ring	Stellit					
Packing rings	Grafit					
Wheel	Steel					

Special materials on request; modifications reserved.

### DIMENSIONS:

DN	Dz	Dw	L	H	h	Dk	Weight
50	77	49,5	350	400	65	350	49,50
65	91	62	425	400	78	350	77,00
80	117	81	470	435	93	350	134,20
100	144	102	550	435	112	400	187,00
125	172	126,5	650	535	146	500	269,50
150	201	146,5	750	708	174	800	319,00
175	-	-	850	910	185	900	528,00
200	278	205,5	950	1107	233	1000	737,00
250	329	248,5	1150	1245	260	1000	1210,00
300	413	312	1350	1512	310	1000	1980,00
350	464	344	1500	1780	355	1000	2090,00

Dimensions in mm; modifications reserved.

### TECHNICAL DATA:

Body material	PN	Maximal working pressure at working temperature															
		20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	520°C	530°C	540°C	560°C	570°C
(P250GH)C 22.8 (1.0460)	400	400,00	371,38	352,38	333,25	304,75	276,13	257,13	238,00	131,38	-	-	-	-	-	-	-
16Mo3 (1.5415)	400	400,00	400,00	400,00	400,00	390,38	342,75	323,75	304,75	295,13	224,38	177,13	112,38	89,50	-	-	-
13CrMo4-5 (1.7335)	400	400,00	400,00	400,00	400,00	400,00	398,00	380,88	361,88	342,75	293,63	260,88	179,00	148,50	116,13	76,13	62,70
14MoV6-3 (1.7715)	400	400,00	400,00	400,00	400,00	400,00	400,00	400,00	398,10	386,70	383,80	367,60	283,80	249,50	215,20	163,80	139,00
10CrMo9-10 (1.7380)	400	400,00	400,00	400,00	400,00	400,00	400,00	390,38	371,38	352,38	295,13	257,13	196,13	171,38	148,50	110,38	97,13
Body material	PN	Maximal working pressure at working temperature															
		20°C	530°C	540°C	550°C	560°C	570°C	580°C	590°C	600°C	610°C	620°C	630°C	640°C	650°C	660°C	670°C
X10CrMoVNb9-1 (1.4903)	400	400,0	400,0	367,1	316,1	285,6	255,1	228,5	201,9	179,0	158,1	139,0	123,8	106,7	93,3	80,0	68,6

### MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE ZS320 ZK320

### CHARACTERISTIC:

Diameter	-	50 -500 mm;
Pressure	-	320 bar;
Temperature	-	up to 670°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

**type / body material / drive type / others**

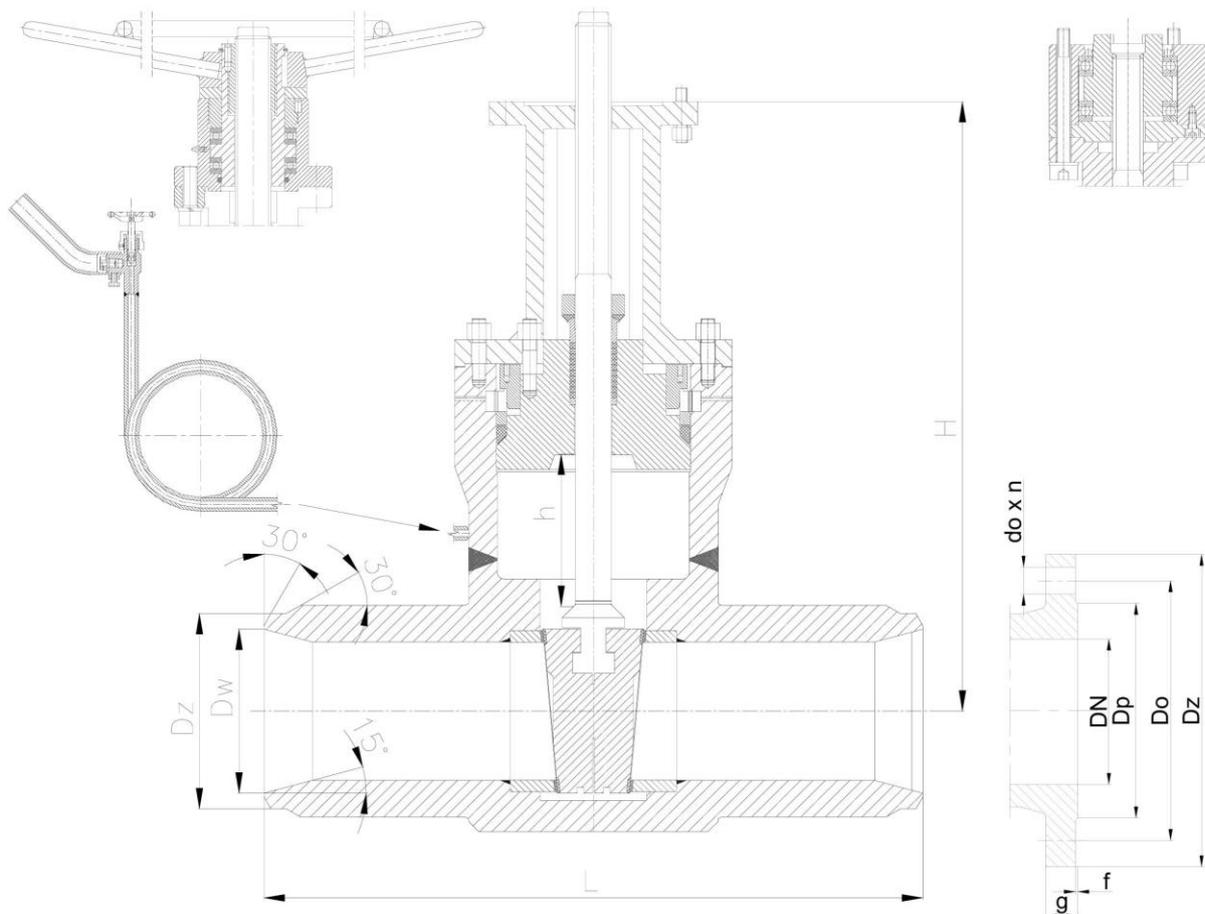
**Example:** ZS320 / --- / --- / ---

**Example:** ZS320 / U / NW / ---

Body material	Sign	Drive type	Sign	Others	Sign
(P250GH) C 22.8	---	Hand wheel	---	-----	---
16Mo3	<b>U</b>	AUMA drive	<b>NA</b>		
13CrMo4-5	<b>A</b>	NWA drive	<b>NW</b>		
10CrMo9-10	<b>B</b>	MODACT drive	<b>NM</b>		
14MoV6-3	<b>C</b>				
X10CrMoVNb9-1	<b>E</b>	Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions	Standard	U	A	B	C	E
Parts	T <sub>MAX</sub> 450°C	T <sub>MAX</sub> 530°C	T <sub>MAX</sub> 560°C	T <sub>MAX</sub> 600°C	T <sub>MAX</sub> 570°C	T <sub>MAX</sub> 570°C
Body, bonnet, wedge	(P250GH) C22.8 (1.0460)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	10CrMo9-10 (1.7380)	14MoV6-3 (1.7715)	X10CrMoVNb9-1 (1.4903)
Stem	X39CrMo17-1 (1.4122)					
Seat ring	Stellit					
Wedge ring	Stellit					
Packing rings	Grafit					
Wheel	Steel					

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dw	L	H	h	Dk	Weight	Flanged								
								Dz	Dp	Do	do	n	L	g.	f	Weight
50	65	47	350	490	61	400	45,00	210	102	160	26	8	350	42	3	65,00
	77	59,5														
65	91	68	425	545	77	700	70,00	255	122	200	30	8	425	51	3	77,00
80	117	87,5	470	624	92	700	122,00	275	138	220	30	8	470	55	3	134,00
100	144	109,5	550	690	115	700	170,00	335	162	265	36	8	550	65	3	187,00
125	172	130,5	650	760	140	700	245,00	380	188	310	36	12	650	75	3	270,00
150	201	151,5	750	1040	160	1100	290,00	425	218	350	39	12	750	84	3	319,00
175	-	-	-	-	-	-	-	By customers acceptance								
200	252	191,5	950	1280	225	1100	670,00	525	285	440	42	16	950	103	3	737,00
250	329	255,5	1150	1150	270	-	1100,0	640	345	540	52	16	1150	125	3	1210,00
300	362	287	1350	1380	335	-	1800,0	By customers acceptance								
350	413	321	1500	1780	355	-	1920,0	By customers acceptance								
400	By customers acceptance							By customers acceptance								
450	By customers acceptance							By customers acceptance								
500	By customers acceptance							By customers acceptance								

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	PN	Maximal working pressure at working temperature																
		20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	520°C	530°C	540°C	560°C	570°C	600°C
(P250GH)C 22.8 (1.0460)	320	320,00	297,10	281,90	266,60	243,80	220,90	205,70	190,40	105,10								-
16Mo3 (1.5415)	320	320,00	320,00	320,00	320,00	312,30	274,20	259,00	243,80	236,10	179,50	141,70	89,90	71,60				-
13CrMo4-5 (1.7335)	320	320,00	320,00	320,00	320,00	320,00	318,40	304,70	289,50	274,20	234,90	208,70	143,20	118,80	92,90	60,90	50,20	-
14MoV6-3 (1.7715)	320	320,00	320,00	320,00	320,00	320,00	320,00	320,00	318,50	309,30	307,00	294,10	227,00	199,60	172,20	131,00	111,20	-
10CrMo9-10 (1.7380)	320	320,00	320,00	320,00	320,00	320,00	320,00	312,30	297,10	281,90	236,10	205,70	156,90	137,10	118,80	88,30	77,70	51,8
Body material	PN	Maximal working pressure at working temperature																
		20°C	530°C	540°C	550°C	560°C	570°C	580°C	590°C	600°C	610°C	620°C	630°C	640°C	650°C	660°C	670°C	
X10CrMoVNb9-1 (1.4903)	320	320,0	320,0	293,7	252,9	228,5	204,1	182,8	161,5	143,2	126,5	111,2	99,0	85,3	74,7	64,0	54,9	

**MOUNTING AND OPERATING:**

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GSA160 ; GKA160

### CHARACTERISTIC:

- Diameter - 50 -350 mm;
- Pressure - 160 bar;
- Temperature - up to 250°C for acids, bases and other aggressive media;
- up to 550°C for non-toxic media;
- Medium - acids, liquors, water, steam and other non-toxic and non aggressive media, engine fuel and sea water

### VERSIONS:

**type body material / drive type / others**

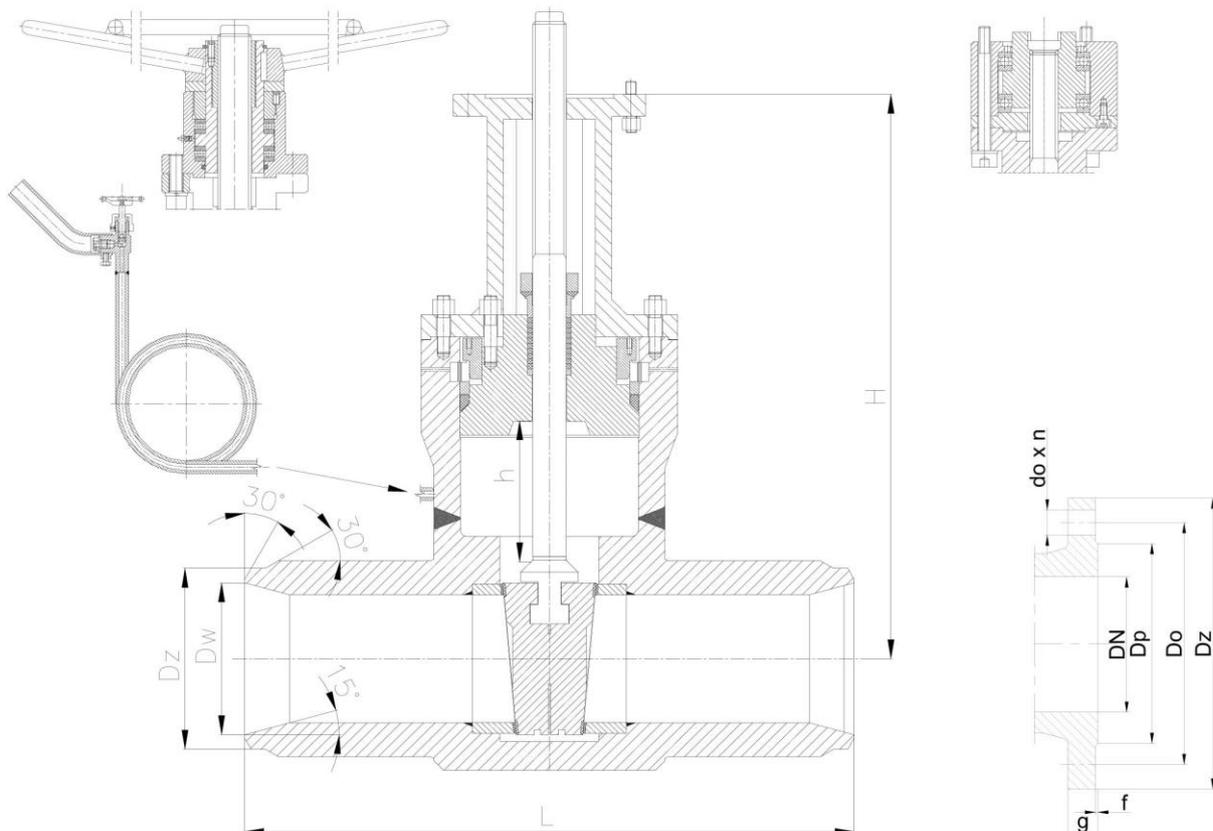
**Example: GKA160 / --- / --- / ---**

**Example: GKB160 / NA / ---**

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10	(1.4541)	<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10	(1.4301)	<b>GKA</b>	AUMA drive	<b>NA</b>		
X2CrNiMo17-12-2	(1.4404)	<b>GKB</b>	NWA drive	<b>NW</b>		
X6CrNiMoTi17-12-2	(1.4571)	<b>GKB</b>	MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions Parts	GSA/GKA160	GSB/GKB160
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dw	L	H	h	Dk	Weight	"GK"								
								Dz	Dp	Do	do	n	L	g.	f	Weight
50	62	52,5	300	490	61	400	37,80	195	102	145	30	4	300	30	3	51,80
65	77	65	360	534	77	400	58,50	220	122	170	26	8	360	34	3	78,50
80	91	76,5	390	613	92	500	103,50	230	138	180	26	8	390	36	3	127,50
100	117	98,5	450	690	115	700	144,00	265	162	210	30	8	450	40	3	179,00
125	144	120,5	525	760	140	700	207,00	315	188	250	33	8	525	44	3	261,10
150	172	144,5	600	970	160	850	244,80	355	218	290	33	12	600	50	3	355,80
175	by customers acceptance							by customers acceptance								
200	223	189	750	1240	225	1100	566,10	430	285	360	36	12	750	60	3	703,10
250	278	242,5	900	1450	270	1100	930,60	515	345	430	42	12	900	68	3	1152,6
300	329	285,5	1050	1300*	335	-	1522,80	585	410	500	42	16	1050	78	4	1852,80
350	by customers acceptance							by customers acceptance								
400	by customers acceptance							by customers acceptance								
450	by customers acceptance							by customers acceptance								
500	by customers acceptance							by customers acceptance								

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	160	160,0	158,4	149,3	141,7	134,8	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		160	160,0	151,6	137,9	127,2	119,6	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	160	160,0	158,4	149,3	141,7	134,8	127,2	122,6	118,8	116,1	114,8	113,5	112,0	111,2	110,0	108,8	108,1
X2CrNiMo17-12-2 (1.4404)		160	160,0	151,6	137,9	127,2	119,6	110,4	105,9	102,8	100,1	99,0	97,5	97,5	97,5	97,1	97,1	97,1
X5CrNi18-10 (1.4301)	non aggressive media	160	160,0	160,0	160,0	149,5	138,1	128,6	122,9	119,1	116,7	113,9	114,3	105,4	96,6	87,7	78,9	70,1
X6CrNiMo17-12-2 (1.4571)		160	160,0	160,0	156,2	148,6	146,6	142,9	142,9	142,9	139,8	138,5	137,1	136,6	136,0	135,4	134,8	134,4

**MOUNTING AND OPERATING:**

*The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.*

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GS250

### CARACTERISTIC:

Diameter	-	50 -350 mm;
Pressure	-	250 bar;
Temperature	-	up to 600°C;
Medium	-	water, steam and other non-toxic, non-aggressive media

### VERSIONS:

type / body material / drive type / others

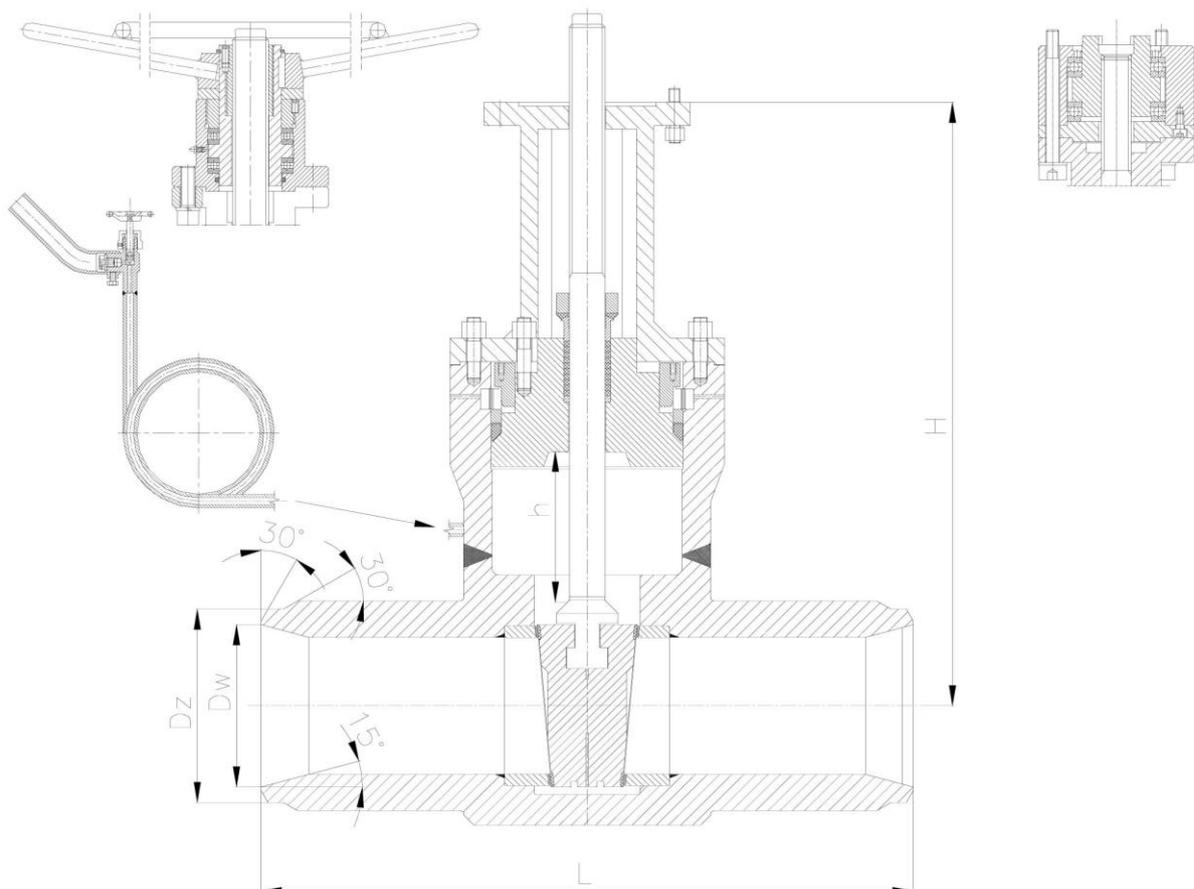
Example: GS250 / --- / --- / ---

Example: GS250 / U / NA / ---

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10	(1.4541)	<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10	(1.4301)	<b>GKA</b>	AUMA drive	<b>NA</b>		
X2CrNiMo17-12-2	(1.4404)	<b>GKB</b>	NWA drive	<b>NW</b>		
			MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



## MATERIALS:

Versions Parts	GSA160	GSB160
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

## DIMENSIONS:

DN	Dz	Dw	L	H	h	Dk	Weight
50	602	45	350	400	65	350	42,00
65	77	57,5	425	400	78	350	65,00
80	91	65,5	470	435	93	350	115,00
100	117	87,5	550	435	112	400	160,00
125	144	106,5	650	535	146	500	230,00
150	172	130,5	750	708	174	800	272,00
175	193,7	149,3	850	910	185	900	451,00
200	223	172	950	1107	233	1000	629,00
250	278	212,5	1150	1245	260	1000	1034,00
300	355,6	287	1350	1512	310	1000	1692,00
350	406,4	339	1500	1780	355	1000	1792,00

Dimensions in mm; modifications reserved.

## TECHNICAL DATA:

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	250	250	248	233	221	211	-	-	-	-	-	-	-	-	-	-	-
X2CrNiMo17-12-2 (1.4404)		250	250	250	244	232	229	-	-	-	-	-	-	-	-	-	-	-
X6CrNiTi18-10 (1.4541)	non aggressive media	250	250	248	233	221	211	199	192	186	182	180	177	177	176	176	175	169
X2CrNiMo17-12-2 (1.4404)		250	250	250	244	232	229	216	207	201	196	193	191	190	190	189	189	188
X5CrNi18-10 (1.4301)		250	250	250	250	234	216	201	192	186	182	180	179	165	151	137	123	109

## MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GKA100

### CHARACTERISTIC:

- Diameter - 50 -500 mm;
- Pressure - 100 bar;
- Temperature - up to 250°C for acids, bases and other aggressive media;
- up to 550°C for non-toxic media;
- Medium - acids, liquors, water, steam and other non-toxic and non aggressive media, engine fuel and sea water

### VERSIONS:

**type body material / drive type / others**

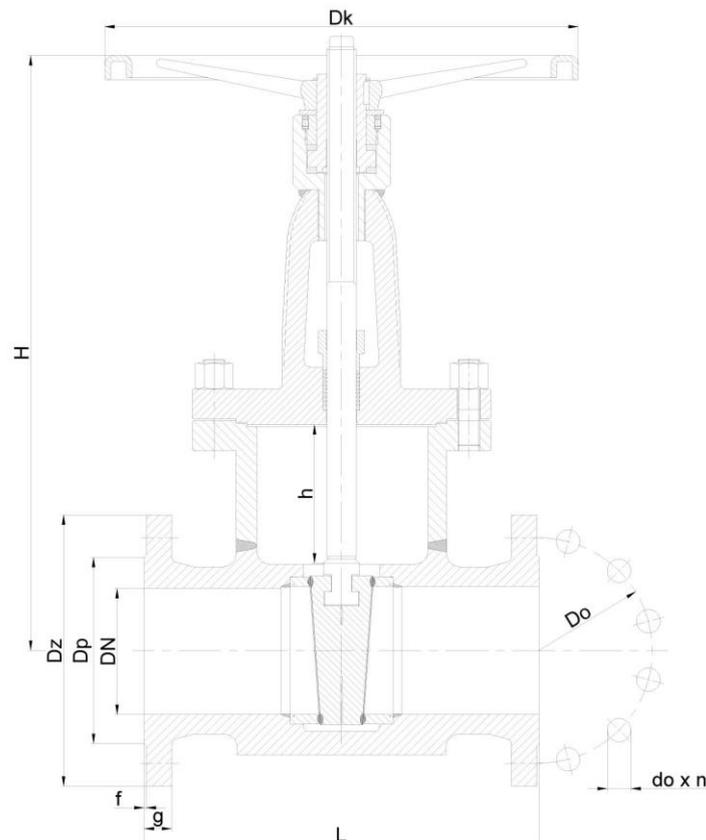
**Example: GKA100 / --- / --- / ---**

**Example: GKB100 / NA / ---**

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10	(1.4541)	<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10	(1.4301)		AUMA drive	<b>NA</b>		
X2CrNiMo17-12-2	(1.4404)	<b>GKB</b>	NWA drive	<b>NW</b>		
			MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



### MATERIALS:

Versions Parts	GKA100	GKB100
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

### DIMENSIONS:

DN	Dz	Dp	Do	do	n	L	g.	f	H	h	Dk	Weight
50	195	102	145	26	4	250	28	3	365	65	200	43,00
65	220	122	170	26	8	290	30	3	435	78	250	61,00
80	230	138	180	26	8	310	32	3	460	93	250	63,00
100	265	162	210	30	8	350	36	3	535	112	315	108,00
125	315	188	250	33	8	400	40	3	630	146	315	166,00
150	355	218	290	33	12	450	44	3	800	174	315	278,00
200	430	285	360	36	12	550	52	3	860	233	400	437,00
250	505	345	430	39	12	650	60	3	1055	260	500	692,00
300	585	410	500	42	16	750	68	4	1179	310	500	1010,00
350	655	465	560	48	16	850	74	4	1395	355	630	1158,00
400	715	535	620	48	16	1050	-	4	1520	410	GNR	-
450	-	-	-	-	-	1350	-	-	1790	460	GNR	-
500	870	615	760	56	4	1550	-	4	1910	510	GNR	-

Dimensions in mm; modifications reserved.

### TECHNICAL DATA:

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	100	100,0	99,0	93,3	88,5	84,2	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		100	100,0	100,0	97,6	92,9	91,6	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	100	100,0	99,0	93,3	88,5	84,2	79,5	76,6	74,2	72,6	71,5	70,9	70,0	69,5	68,7	68,0	67,6
X2CrNiMo17-12-2 (1.4404)		100	100,0	100,0	97,6	92,9	91,6	86,3	82,7	80,4	78,3	77,3	76,2	76,1	75,9	75,8	75,6	75,6
X5CrNi18-10 (1.4301)		100	100,0	100,0	100,0	93,4	86,3	80,4	76,8	74,4	72,9	72,1	71,4	65,9	60,4	54,8	49,3	43,8
GX5CrNiMo19-11-2 (1.4408)	non aggressive media	100	100,0	81,0	73,0	64,0	60,0	55,0	52,0	50,0	49,0	49,0	48,0	48,0	48,0	47,0	47,0	47,0

### MOUNTING AND OPERATING:

The gate can only be mounted and operated by skilled, properly trained and qualified personnel. Incorrect assembly or operation of the gate may have substantial impact on the entire system such as fluid leakage, reduction in system's function etc.

Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

- medium flowing through the gate is supposed to be clean out of any mechanical impurities;
- the valve must be protected from any mechanical damages during its work;
- nominal parameters marked on the valve must be observed.

## GATE VALVE TYPE GKA63

### CHARACTERISTIC:

Diameter	-	50 -350 mm;
Pressure	-	63 bar;
Temperature	-	up to 250°C for acids, bases and other aggressive media;
	-	up to 550°C for non-toxic media;
Medium	-	acids, liquors, water, steam and other non-toxic and non aggressive media, engine fuel and sea water

### VERSIONS:

**type body material / drive type / others**

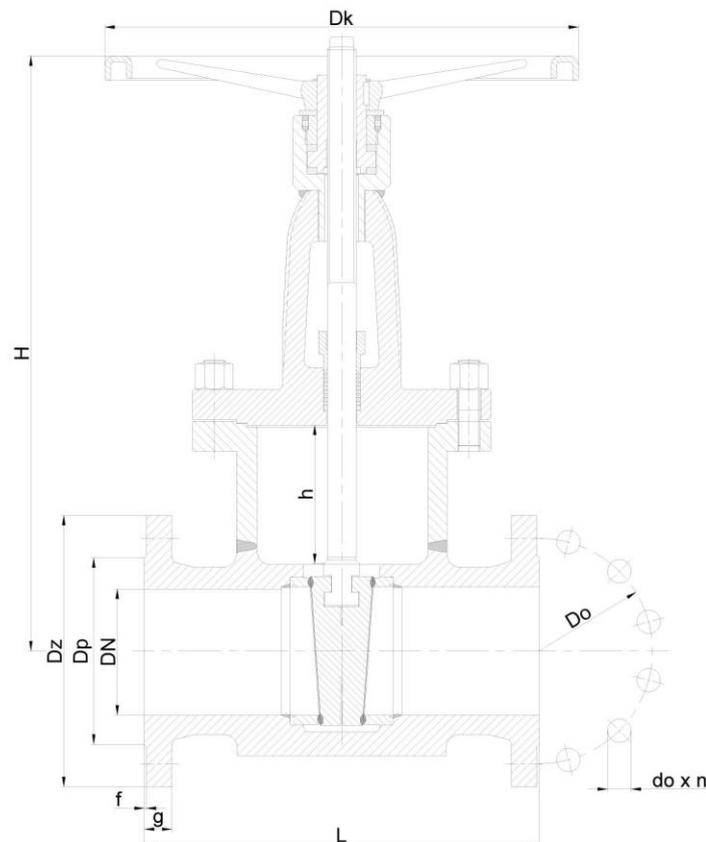
**Example: GKA63 / --- / --- / ---**

**Example: GKB63 / NA / ---**

Type	Body material	Sign	Drive type	Sign	Others	Sign
X6CrNiTi18-10 (1.4541)		<b>GKA</b>	Hand wheel	---	-----	---
X5CrNi18-10 (1.4301)			AUMA drive	<b>NA</b>		
		<b>GKB</b>	NWA drive	<b>NW</b>		
X2CrNiMo17-12-2 (1.4404)			MODACT drive	<b>NM</b>		
			Pneumatic drive	<b>NP</b>		

### APPLICATION:

Gate valve is designed to open and stop the flow. The gate valve can be mounted to a pipeline in any position. It should operate in a close or open position.



**MATERIALS:**

Versions Parts	GKA63	GKB63
Body, bonnet	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Wedge	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Stem	X6CrNiTi18-10 (1.4541)	X2CrNiMo17-12-2 (1.4404)
Packing rings	PTFE , Grafit	
Wheel	Steel	

Special materials on request; modifications reserved.

**DIMENSIONS:**

DN	Dz	Dp	Do	do	n	L	g.	f	H	h	Dk	Weight
50	180	102	135	22	4	250	26	3	365	65	200	39,00
65	205	122	160	22	8	290	26	3	435	78	250	56,00
80	215	138	170	22	8	310	28	3	460	93	250	62,00
100	250	162	200	26	8	350	30	3	535	112	315	97,00
125	295	188	240	30	8	400	34	3	630	146	315	164,00
150	345	218	280	33	12	450	36	3	800	174	315	265,00
200	415	285	345	36	12	550	42	3	860	233	400	335,00
250	470	345	400	36	16	650	46	3	1055	260	500	498,00
300	530	410	460	36	16	750	52	4	1179	310	500	677,00
350	600	465	525	39	16	850	56	4	1395	355	630	914,00
400	670	535	585	42	16	950	60	4	1520	410	GNR	-
450	-	-	-	-	-	1025	-	-	1790	460	GNR	-
500	800	615	705	48	20	1150	-	-	1910	510	GNR	-

Dimensions in mm; modifications reserved.

**TECHNICAL DATA:**

Body material	Medium	PN	Maximal working pressure at working temperature															
			20°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	480°C	500°C	510°C	520°C	530°C	540°C	550°C
X6CrNiTi18-10 (1.4541)	aggressive media	63	63,0	62,4	58,8	55,8	53,1	-	-	-	-	-	-	-	-	-	-	
X2CrNiMo17-12-2 (1.4404)		63	63,0	59,7	54,3	50,1	47,1	-	-	-	-	-	-	-	-	-	-	
X6CrNiTi18-10 (1.4541)	non aggressive media	63	63,0	62,4	58,8	55,8	53,1	50,1	48,3	46,8	45,7	45,2	44,7	44,1	43,8	43,3	42,8	42,6
X2CrNiMo17-12-2 (1.4404)		63	63,0	59,7	54,3	50,1	47,1	43,5	41,7	40,5	39,4	38,9	38,4	38,4	38,4	38,2	38,2	38,2
X5CrNi18-10 (1.4301)		63	63,0	63,0	63,0	58,9	54,4	50,6	48,4	46,9	45,9	45,5	45,0	41,5	38,0	34,5	31,1	27,6

**MOUNTING AND OPERATING:**

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Before a gate is installed the pipeline must be clean from any mechanical impurities. The compatibility of critical parameters of the flow must be checked with the parameters of the gate. Gate can be mounted to a pipe-line in any position. The direction of the flow should only comply with the arrow marked on the body. The valve should be operated strictly with its assign. In order to provide gate's reliability the following suggestions must be observed:

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