



Hochdruck-Schieber High Pressure Gate valve (GHP)

Standard: API 600 (ISO10434)

DN 50 ÷ DN 300
Class 1500 - 2500

Ausführung

- * Gehäuse + Oberteil geschmiedet oder gegossen
- * Selbstdichtender Deckel
- * steigende nichtdrehende Spindel, außenl. Gewinde
- * Doppelplattenkeil
- * Sitze Stellite 6

Anwendung

- * Kraftwerke, Chemie- und Petrochemie, Raffinerien, Wasserbereich und andere

Medium

- * Wasser, Dampf, Gas, Öl und Ölprodukte und andere nicht aggressive Produkte

Druck+Temperatur

- * Druckbereich Class 1500 - 2500
- * Temperatur bis 600°C

Design

- * Forged or Casted body + bonnet
- * Pressure sealing-bonnet self-sealing
- * Rising stem, outside screw and yoke
- * Split wedge type
- * Seats Stellite 6

Applications

- * Power-, Chemical-, Petro- and Refining plant, Water and other

Media

- * Water, steam, gas, oil and oil derivate and other non aggressive Media

Pressure+Temperature

- * Pressure Class 1500 to 2500
- * Temperature to 600°C

Material (Tafel D.6.1)

- * Stahl, hitzebeständiger und Edelstahl

Vorteile

- * Langlebiger Einsatz
- * Einfache Handhabung und Instandhaltung
- * Stopfbuchspackung austauschbar während des Betriebes

Test

- * Alle Schieber werden getestet nach API 598, oder EN 12266

Zubehör

- * Elektro, hydraulischer oder pneumatischer Antrieb
- * Anzeigevorrichtung, Endlagenschalter
- * Schweißenden nach DIN EN, GOST

Materials (table D.6.1)

- * Carbon, heat resistant and stainless steels

Advantages

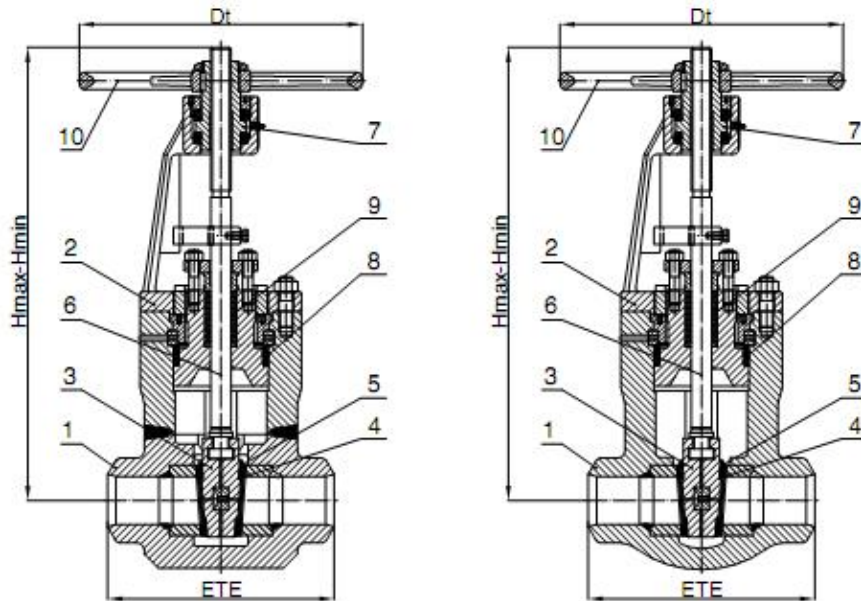
- * Long service life
- * Easy handling and maintenance
- * Stem packing replacement in working conditions

Testing

- * Every gate valve was tested according to API 598 or EN 12266

Options

- * Electric, hydraulic or pneumatic actuator
- * Position indicator, Limit switch
- * Welding ends according: DIN, EN, GOST



Drawing D.6.1 Parts and dimensions

List of materials

Table D.6.1

Item	Part	Groups of materials according to ASME B16.34					
		1.1	1.3 1.5	1.9	1.10	1.15	
		Application					
		up to 425 °C	up to 470 °C	up to 595 °C	up to 595 °C	up to 600 °C	
		Material Code					
		12 and 13	20 and 21	22 and 23	24 and 25	28 and 29	
1	Body	Forged	A105	A182 F1	A182 F11	A182 F22	A182 F91
	Cast	A216 WCB	A217 WC1	A217 WC6	A217 WC9	A217 C12A	
2	Bonnet		A216 WCB	A217 WC1	A217 WC6	A217 WC9	A217 C12A
3	Wedge	Forged	A105	A182 F1	A182 F11	A182 F22	A182 F91
	Cast	A216 WCB	A217 WC1	A217 WC6	A217 WC9	A217 C12A	
4		Body Seats	HF (Stellite 6)				
5	Trim	Wedge seats	HF (Stellite 6)				
6		Stem	1.4122				
7	Stem Nut	Cu alloy					
8	Bonnet Gasket	braided graphite with corrosion inhibitor					
9	Stem Packing	braided graphite with corrosion inhibitor					
10	Handwheel	cast carbon steel					

Standards

Table D.6.2

High Pressure Gate Valves	Class 1500 + Class 2500
End-to-end dimensions according to	ASME/ANSI B16.10 and manufacturer standard
Welding ends according to	ASME/ANSI B16.25

[GHP] Dimensions (mm) Class 1500 (PN 250) - Cast body

Table D.6.3

DN	50	65	80	100	125	150	200	250	300
ETE	368	419	470	546	673	705	832	991	1130
H max	540	700	835	920	1170	1515	1720	2355	2650
H min	480	622	735	805	1030	1340	1500	2080	2300
Dt	315	315	400	500	500	500	630	630	630
⚖️ (kg)	60	70	85	148	245	350	645	1150	1620

[GHP] Dimensions (mm) Class 2500 (PN 420) - Cast body

Table D.6.4

DN	50	65	80	100	125	150	200	250	300
ETE	451	508	578	673	794	914	1022	1270	1422
H max	540	700	835	920	1170	1515	1720	2355	2650
H min	480	622	735	805	1030	1340	1500	2080	2300
Dt	315	400	500	500	500	630	630	630	730
⚖️ (kg)	88	105	125	310	340	430	850	1420	1950

[GHP] Dimensions (mm) Class 1500 and Class 2500 - Forged body

Table D.6.5

DN	50	65	80	100	125	150	200	250	300
ETE*	250	300	350	400	450	500	600	700	800
H max	540	700	835	920	1170	1515	1720	2355	2650
H min	480	622	735	805	1030	1340	1500	2080	2300
Dt	315	400	500	500	500	630	630	630	730
⚖️ (kg)	95	165	190	350	420	580	1150	1750	2320

ETE* - according to manufacturer standard

Range of application

Table D.6.6

Material Group (Code)	Materials	Class	Pressure (bar) / temperature (°C) ratings according to ANSI B16.34																		
			-29 +38	50	100	150	200	250	300	325	350	375	400	425	450	475	500	538	550	575	600
1.1 (12 and 13)	A 105 ^{a)} A216 WCB ^{a)}	1500	259	259	258	255	253	253	253	251	245	236	217	180	144	109	76	37			
		2500	431	431	430	425	421	421	421	418	408	393	362	300	240	182	122	62			
1.3 (21)	A217 WC1 ^{b)}	1500	240	240	240	240	240	240	240	240	237	225	204	171	135	98	69	37			
		2500	400	400	400	400	400	400	400	400	394	375	340	284	225	163	115	62			
1.5 (20)	A182 F1 ^{b)}	1500	240	240	240	240	240	240	240	240	240	240	240	240	236	214	150	71			
		2500	400	400	400	400	400	400	400	400	400	400	400	400	393	356	251	118			
1.9 (22 and 23)	A182 F11 cl.2 ^{c)} A217 WC6 ^{c)}	1500	259	259	259	259	259	259	259	259	257	253	251	248	236	214	161	93	79	55	38
		2500	431	431	431	431	431	431	431	431	429	421	418	414	393	356	268	155	132	92	64
1.10 (24 and 25)	A182 F22 cl.3 ^{d)} A217 WC9 ^{d)}	1500	259	259	258	255	251	250	249	248	246	244	244	244	236	214	179	115	98	66	43
		2500	431	431	430	425	419	417	415	413	410	406	406	406	393	356	298	192	163	110	72
1.15 (28 and 29)	A182 F91 A217 C12A	1500	259	259	259	259	259	259	259	259	257	253	251	248	236	214	179	145	145	143	122
		2500	431	431	431	431	431	431	431	431	429	421	418	414	393	356	298	242	242	238	203

a) Not recommended for prolonged usage above 425 °C

b) Not recommended for prolonged usage above 470 °C

c) Not recommended for prolonged usage above 595 °C

d) Not recommended for prolonged usage above 595 °C