Stahlguß-Schieber
Gate valves (GEN)
Doppelplattenkeil oder Flexikeil

Standard: EN 1984

DN 50 ÷ DN 600
PN 16 ÷ PN 160

Ausführung

* Stahlgehäuse + Deckel
* verschraubter Deckel
* steigende nichtdrehende Spindel, außenl.Gewinde
* Flexibler Keil oder Doppelplattenkeil
* Sitze integral oder aufgeschweißt

Design

* Casted body + bonnet
* bolted bonnet (BB)
* Rising stem, outside screw and yoke
* Wedge may be flexible or split wedge type
* Seats are integral or welded on

Anwendung

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

Applications

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

Medium

* Wasser, Dampf, Gas, Öl und Olprodukte und andere nicht aggressive Produkte

Media

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

Druck+Temperatur

* Druckbereich bis 100 bar
* Temperatur bis 600°C

Pressure+Temrature

* Pressure to 100 bar
* Temperature to 600°C

Material (Tafel D.2.1)

* Stahl, hitzebeständiger und Edelstahl

Materials (table D.2.1)

* Carbon, heat resistant and stainless steels

Vorteile

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

Advantages

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

Test

* Alle Schieber werden getestet nach API 598, (ISO 5208)

Testing

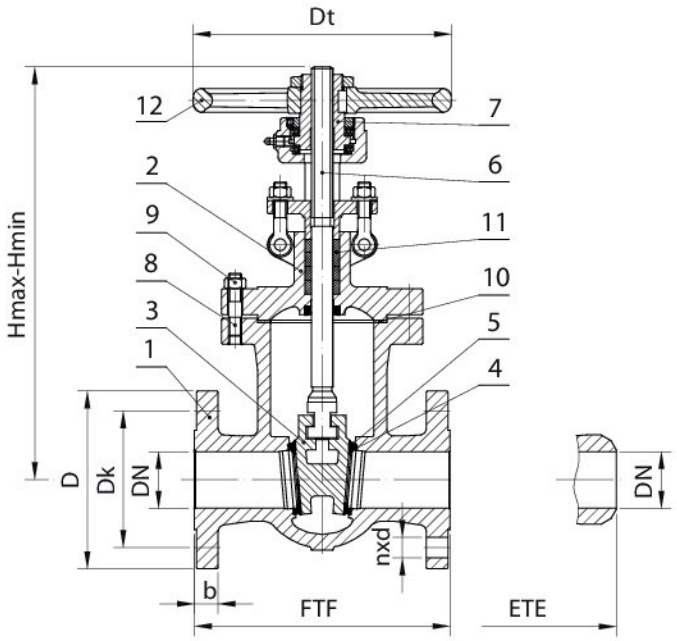
* Every gate valve was tested according to API 598, (ISO 5208)

Zubehör

* Elektro, hydraulicher oder pneumatischer Antrieb
* Anzeigevorrichtung, Endlagenschalter
* Flansch oder Schweißenden nach: DIN, ANSI, GOST

Options

* Electric, hyraulic or pneumatik actuator
* Position indicator, Limit switch
* Flange or welded ends according: DIN, ANSI GOST



Drawing D.1.1 Parts and dimensions

List of materials **Table D.1.1**

Item	Part		Groups of materials according to EN 12516-1					
			3E0	4E0	5E0	6E0	11E0	14E0
			Application					
			up to 400°C	up to 500°C	up to 550°C	up to 575°C	-196°C÷500°C	-196°C÷600°C
			Material Code					
			11	21	23	25	41	43
1	Body		1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
2	Bonnet		1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
3	Wedge		1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
4	Trim	Body Seats	13Cr	17Cr (up to 450°C) or Stellite			Basic material or Stellite	
5		Disc Seats	13Cr	17Cr (up to 450°C) or Stellite			Basic material or Stellite	
6		Stem	1.4021 / 1.4122				1.4301	1.4401
7	Stem Nut		nodular cast iron				Cu alloy	
8	Stud Bolts		1.7225	1.7709			1.4301	1.4401
9	Nuts		1.1191	1.7709			1.4301	1.4401
10	Bonnet Gasket		reinforced pure graphite					
11	Stem Packing		braided graphite with corrosion inhibitor					
12	Handwheel		cast steel					

Standards **Table D.1.2**

Gate Valves according to EN 1984	PN 16 / PN 25	PN 40 / PN 160
Face-to-face dimensions according to	EN 558-1, Serie 15	EN 558-1, Serie 26 and Manufacturer standard
Flanged ends according to	EN 1092-1, Type B1	
End-to-end dimensions according to	EN 12982, Serie 15	EN 12982, Serie 26 and Manufacturer standard
Welding ends according to	EN 12627	

[GEN] Dimensions PN 16 ÷ PN 160

Table D.1.3

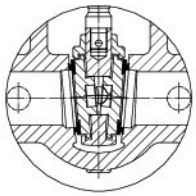
DN	FTF	ETE	D	b	Dk	d	n	H max	H min	Dt	FTF	ETE
	(mm)										(kg)	
PN 16												
50	250	250	165	18	125	18	4	455	385	250	28	25
65	270	270	185	18	145	18	8	515	431	250	37	29
80	280	280	200	20	160	18	8	555	459	250	48	38
100	300	300	220	20	180	18	8	664	544	250	50	43
125	325	325	250	22	210	18	8	757	622	315	79	69
150	350	350	285	22	240	22	8	945	765	400	85	74
200	400	400	340	24	295	22	12	1133	903	400	134	123
250	450	450	405	26	355	26	12	1318	1058	500	245	212
300	500	500	460	28	410	26	12	1560	1250	500	330	381
350	550	550	520	30	470	26	16	1720	1335	500	580	480
400	600	600	580	32	525	30	16	1910	1481	630	590	510
500	700	700	715	44	650	33	20	2325	1797	730	1000	880
600	800	800	840	54	770	36	20	2868	2223	730	1650	1400
PN 25												
50	250	250	165	20	125	18	4	455	385	250	29	22
65	270	270	185	22	145	18	8	515	431	250	37	33
80	280	280	200	24	160	18	8	555	459	250	49	40
100	300	300	235	24	190	22	8	664	544	250	68	57
125	325	325	270	26	220	26	8	757	622	315	84	75
150	350	350	300	28	250	26	8	945	765	400	130	93
200	400	400	360	30	310	26	12	1133	903	400	193	164
250	450	450	425	32	370	30	12	1318	1058	500	300	264
300	500	500	485	34	430	30	16	1560	1250	500	445	381
350	550	550	555	38	490	33	16	1720	1335	500	580	530
400	600	600	620	40	550	36	16	1910	1481	630	670	620
500	700	700	730	48	660	36	20	2325	1797	730	1025	880
600	800	800	845	58	770	39	20	2868	2223	730	1700	1400
PN 40												
50	250	250	165	20	125	18	4	470	395	250	34	32
65	290	290	185	22	145	18	8	520	440	250	53	49
80	310	310	200	24	160	18	8	571	476	250	49	44
100	350	350	235	24	190	22	8	671	551	250	77	66
125	400	400	270	26	220	26	8	775	641	400	146	103
150	450	450	300	28	250	26	8	915	750	400	167	152
200	550	550	375	34	320	30	12	1123	907	500	267	235
250	650	650	450	38	385	33	12	1430	1125	500	410	374
300	750	750	515	42	450	33	16	1624	1292	500	555	490
350	850	850	580	46	510	36	16	1747	1372	630	860	820
400	950	950	660	50	585	39	16	1888	1481	730	1200	1095
500	1150	1150	755	57	670	42	20	2284	1764	730	1820	1486
600	1350	1350	890	72	795	48	20	2738	2123	730	2200	1700
PN 63												
50	250	250	180	26	135	22	4	455	385	250	42	40
65	290	290	205	26	160	22	8	520	440	250	53	49
80	310	310	215	28	170	22	8	557	465	250	68	61
100	350	350	250	30	200	26	8	631	520	315	83	67
125	400	400	295	34	240	30	8	773	630	400	152	120
150	450	450	345	36	280	33	8	889	726	500	197	166
200	550	550	415	42	345	36	12	1102	875	500	319	282
250	650	650	470	46	400	36	12	1459	1146	630	643	563
300	750	750	530	52	460	36	16	1649	1307	630	940	813
400	950	950	670	60	585	42	16	1888	1481	730	1234	1100
PN 100												
50	250	250	195	30	145	26	4	470	395	250	44	40
65	290	290	220	34	170	26	8	520	440	250	55	42
80	310	310	230	36	180	26	8	570	476	250	70	55
100	350	350	265	40	210	30	8	676	556	315	110	92
125	400	400	315	40	250	33	8	775	641	400	164	124
150	450	450	355	44	290	33	12	926	764	500	239	205
200	550	550	430	52	360	36	12	1128	912	500	419	328
250	650	650	505	60	430	39	12	1405	1145	730	675	590
300	750	750	585	68	500	42	16	1638	1307	730	1000	813
PN 160												
50	368	368	195	30	145	26	4	540	466	315	70	51
65	419	419	220	34	170	26	8	653	576	400	117	95
80	390	390	230	36	180	26	8	630	535	400	101	78
100	450	450	265	40	210	30	8	745	626	400	162	131
150	600	600	355	50	290	33	12	976	785	500	335	250
200	750	750	430	60	360	36	12	1164	948	630	596	450
250	838	838	515	68	430	42	12	1448	1168	730	939	716
300	965	965	585	78	500	42	16	1605	1305	930	1405	1100

Range of application for valves with flanged ends

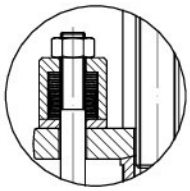
Table D.1.4

Group Material (Code)	Materials	PN	Pressure (bar)/temperature (°C) ratings according to EN 12516-1																		
			RT	50	100	450	200	250	300	350	375	400	425	450	475	500	510	520	530	550	575	600
3E0 (11)	1.0619	16	16	15	14	13	11	10	9	9	9	8										
		25	24	23	21	20	18	16	15	14	14	13										
		40	39	37	34	32	28	26	24	22	22	21										
		63	61	59	54	50	45	41	37	35	34	33										
		100	97	93	85	79	71	65	59	55	54	53										
		160	156	149	136	127	114	104	94	88	86	84										
4E0 (21)	1.5419	16	16	16	16	15	14	13	11	10	10	10	10	9	9	7						
		25	26	26	25	24	22	20	17	16	16	15	15	15	15	11						
		40	41	41	40	38	35	32	28	26	25	24	24	24	23	18						
		63	64	64	63	60	55	51	43	41	40	38	38	37	37	29						
		100	102	102	100	95	87	81	69	65	63	61	60	59	58	46						
		160	163	163	160	151	140	130	110	104	101	97	96	94	93	73						
5E0 (23)	1.7357	16	16	16	16	16	15	14	13	12	12	12	11	11	10	9	8	7	6	4		
		25	26	26	25	25	23	22	21	19	19	18	17	17	16	14	13	11	9	6		
		40	41	41	41	40	37	36	33	31	30	29	28	27	25	22	21	17	14	9		
		63	64	64	64	62	59	56	52	49	47	45	44	42	39	35	33	27	22	14		
		100	102	102	102	99	93	89	83	77	75	72	69	67	62	56	52	42	35	22		
		160	163	163	163	158	149	143	133	123	120	115	111	107	100	89	84	68	56	35		
6E0 (25)	1.7379	16	16	16	16	16	15	15	14	13	12	12	11	11	10	9	8	7	6	5	3	
		25	26	26	25	25	24	23	21	20	19	18	17	17	16	14	13	12	10	8	5	
		40	41	41	41	40	39	37	34	32	31	29	28	27	25	22	21	19	16	12	9	
		63	64	64	64	62	61	58	53	50	48	45	44	42	39	35	33	29	26	19	14	
		100	102	102	102	99	96	91	85	79	77	72	69	67	62	56	53	46	41	31	21	
		160	163	163	163	158	154	146	135	127	123	115	111	107	100	89	84	74	65	49	34	
11E0 (41)	1.4308	16	15	13	12	11	10	9	8	8	8	7	7	7	7	7						
		25	24	21	18	17	15	14	13	12	12	12	11	11	11	11						
		40	38	33	29	27	24	22	21	20	19	19	18	18	18	17						
		63	60	52	46	42	38	35	33	31	30	29	29	28	28	27						
		100	95	83	73	66	60	56	52	49	48	46	46	45	45	44						
		160	152	133	117	106	96	89	83	79	77	74	74	72	71	720						
14E0 (43)	1.4408	16	16	15	13	12	11	10	10	9	9	9	9	9	8	8	8	7	7	7	7	6
		25	24	23	21	19	17	16	15	14	14	14	14	13	13	13	12	11	11	11	11	10
		40	39	37	33	30	27	26	24	23	22	22	22	21	21	21	20	18	17	17	17	16
		63	61	58	52	47	43	40	38	36	35	34	34	34	33	33	31	29	27	27	26	26
		100	97	92	83	75	69	64	60	57	56	54	54	54	53	52	49	45	44	43	42	41
		160	155	148	133	120	110	102	96	91	89	87	86	86	85	83	78	73	70	68	67	65

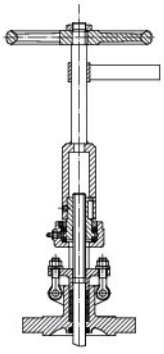
Optional execution



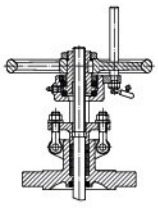
Split wedge



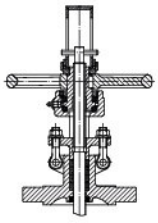
Cup spring stem tightening



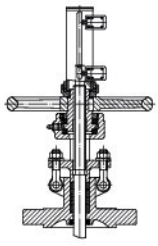
Extended stem



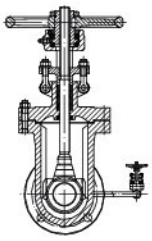
Locking device



Position indicator

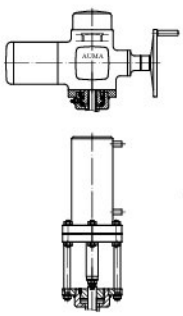


Limit switchers



By - pass

Operated with chain



Control by electric, hydraulic actuator or by gear