

CAST STEEL WEDGE GATE VALVES WITH RISING STEM

DN 200 (8")...1200 (48") mm,

PN 1,6 (16)...8,0 (80) MPa (bar)

APPLICATION

Used as stop valves for pipelines transporting:

- water, vapor and other nonflammable, non-explosive and non-toxic media (Water);
- oil, petrochemical products, synthetic oil and other explosive flammable liquids (Oil);
- natural gas and other gaseous, explosive, volatile flammable and toxic media (Gas).

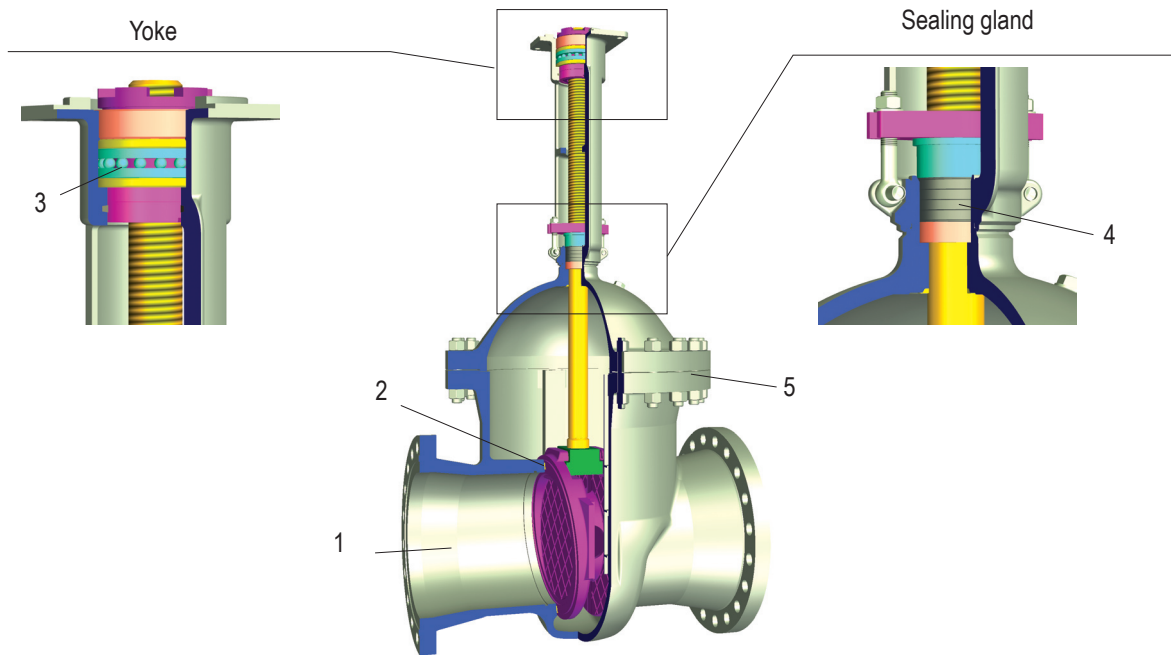


PT11055-500

CONSTRUCTIONS RANGE TABLE

PN, MPa (bar)	DN, mm (inch)	Designation	Operating medium, temperature, °C	Connection to the pipeline	Type of operating		
1,6 (16)	200(8)	PT11055	Water ≤ 300 Oil, Gas ≤ 425	Flanged	Hand wheel Electric drive		
	250(10)						
	300(12)						
	350 (14)						
	400(16)						
	500(20)	PT11015			Flanged Welded	Gear Electric drive	
	600(24)						
	700(28)						
	800(32)						
1000(40)	PT11001						
1200(48)							
2,5 (25)	200(8)	PT11015	Water ≤ 300 Oil, Gas ≤ 425	Flanged	Hand wheel Electric drive		
	250(10)						
	300(12)						
	400(16)						
	500(20)						
	600(24)				Water ≤ 300 Oil, Gas ≤ 425	Flanged Welded	Gear Electric drive
	700(28)						
	800(32)						
	1000(40)						
1200(48)			Welded				
4,0 (40)	200(8)	PT11083	Water ≤ 300 Oil, Gas ≤ 425	Flanged	Hand wheel Electric drive		
	250(10)						
	300(12)						
	400(16)				Water ≤ 300 Oil, Gas ≤ 425	Flanged Welded	Gear Electric drive
	500(20)						
	700(28)						
6,4 (64)	200(8)	PT11085	Water ≤ 300 Oil, Gas ≤ 300	Flanged	Hand wheel Electric drive		
	250(10)	PT11009-400M	Water ≤ 300 Oil, Gas ≤ 425	Flanged Welded	Gear Electric drive		
	400(16)						
	400(16)						
1200(48)	PT11009	Oil, Gas ≤ 90	Welded	Electric drive			
8,0 (80)	400(16)	PT11009	Oil ≤ 90	Flanged Welded	Gear Electric drive		
	500(20)						
	700(28)						
	800(32)						
	1000(40)						
			Welded	Electric drive			

DESIGN FEATURES



1. Full bore body design enables maintenance and diagnostic equipment to pass through.
2. Corrosion-resistant overlay of the trim and resilient seal made of polyurethane in the seats increase reliability and extend service life of the valve.
3. Roller bearings in the yoke decrease the effort of the actuator.
4. Thermo expanded graphite for sealing gland and backup fluoroplastic sealing decrease friction wear-out and increase sealing gland durability.
5. "Body-to-cover" sealing gland includes heat-expanded graphite that increases its operating life and decreases the effort on the connection covering.

ACTUATION

Hand wheel, reduction gear or electric drive. When desired by Customer the gate valves may be completed with electric drives of Russian or international manufacturers (AUMA, ROTORK, LIMITORQUE, FESTO, etc).

TIGHTNESS

The closure sealing is metal-to-metal type.

Complete tightness (zero leakage).

CLIMATIC SERVICE CONDITIONS

Ambient temperature range: – 60 °C to + 50 °C.

MINIMUM SERVICE LIFE – 30 years.

MOUNTING IN THE PIPELINE

Line medium flow – bidirectional.

Mounting in the pipeline– recommended position – vertical with actuator upwards. When installed obliquely (with angle of slope exceeding 15°) it is recommended that supports under the yoke should be used in order not to exceed the bending moment capacity limit of the pipeline.

Connection to the pipeline – flanged (according to GOST 12815-20, ANSI B16.34) or welded (see table of modifications). When required by Customer, flanged valves may be supplied complete with connection accessories (flanges, gaskets, fasteners).

MATERIALS

Cadmium or zinc coating is available for tropical versions.

Part name	Material	
	DIN	ASTM
Body	GS-C25; GS-C25N, GS-16Mn5,GS-20Mn5	A216 Gr WCB, A216 Gr WCC
Wedge	GS-C25; GS-C25N, GS-16Mn5,GS-20Mn5	A216 Gr WCB, A216 Gr WCC
Spindle	X20Cr13	A473, A580, AISI 420
Gasket	Thermal Expanded Graphite (Combined, with advanced reliability for PN 80, 100 bar)	
Cover	GS-C25; GS-C25N, GS-16Mn5,GS-20Mn5	A216 Gr WCB, A216 Gr WCC
Nut	C35, 41CrS4	A915, AISI 1035, A331, AISI 5140
Pin	C35, 41CrS4	A915, AISI 1035, A331, AISI 5140
Gland	Thermal Expanded Graphite (Combined, with advanced reliability for PN 80, 100 bar)	
Bushing	Bronze	
Flange	C22, 13Mn6	A556, AISI 1020, A350LF2
Thread bushing	Bronze	
Hand wheel	C22, 13Mn6	A556, AISI 1020, A350LF2
Body ring overlay	Corrosion-resistant over welding	
Wedge overlay	Corrosion-resistant over welding	

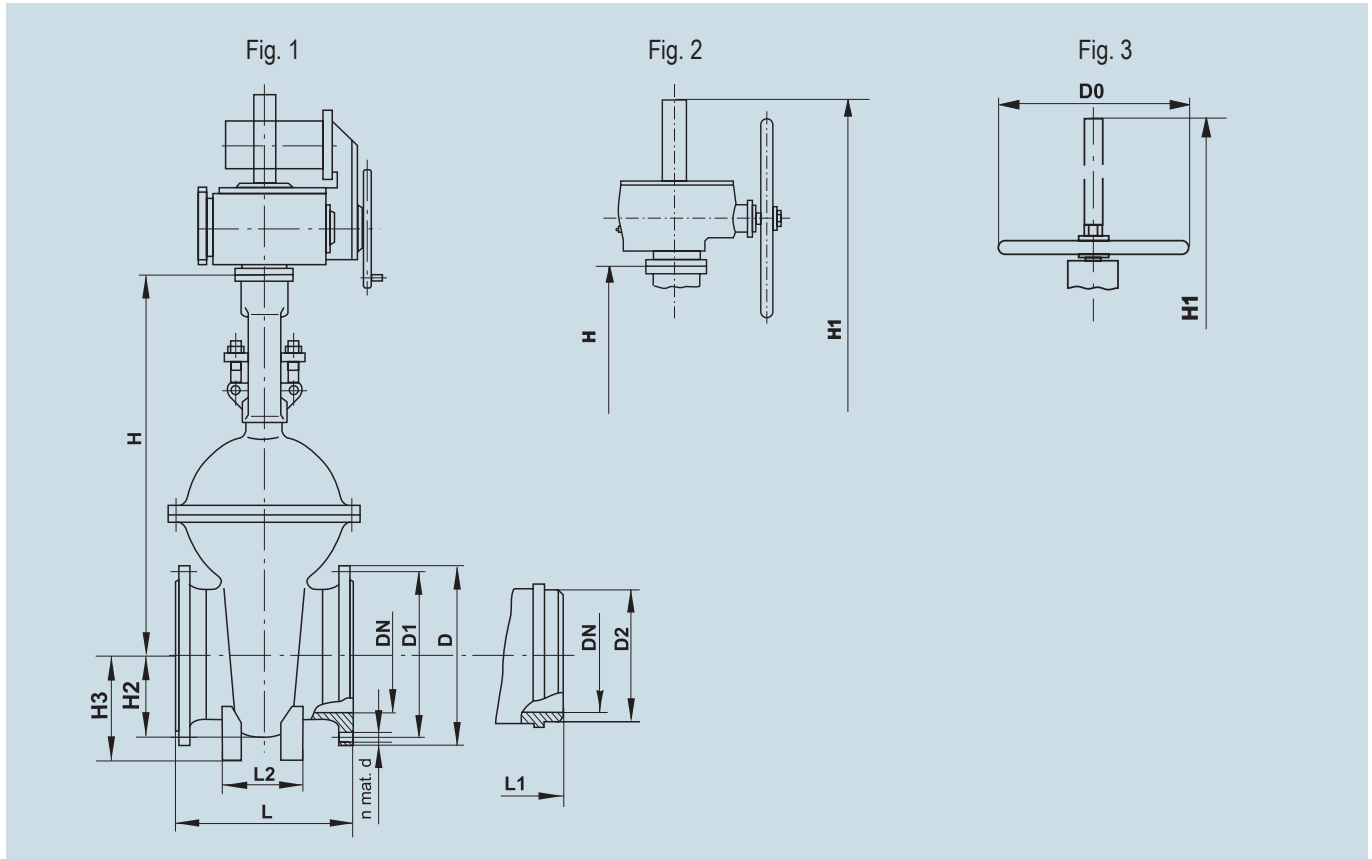
COMPLETE SET OF SUPPLY

Complete set of supply includes: gate valve, handwheel or reduction gear (for manually actuated valves), gate valve certificate, technical manual and service guide. Electric actuator, mating flanges with fasteners and gaskets are supplied when required by Customer. For in-well installation, gate valves DN ≤ 300 may be completed with extended stems placing the actuator at the height specified by Customer.

RATED PRESSURE PN 1,6 (16) MPA (BAR)

INTERNAL DIAMETERS DN 200 (8"), 250 (10"), 300 (12"), 350 (14"), 400 (16"), 500 (20"), 600 (24"), 700 (28"), 800 (32"), 1000 (40"), 1200 (48") MM

DIMENSIONS AND DRAWING



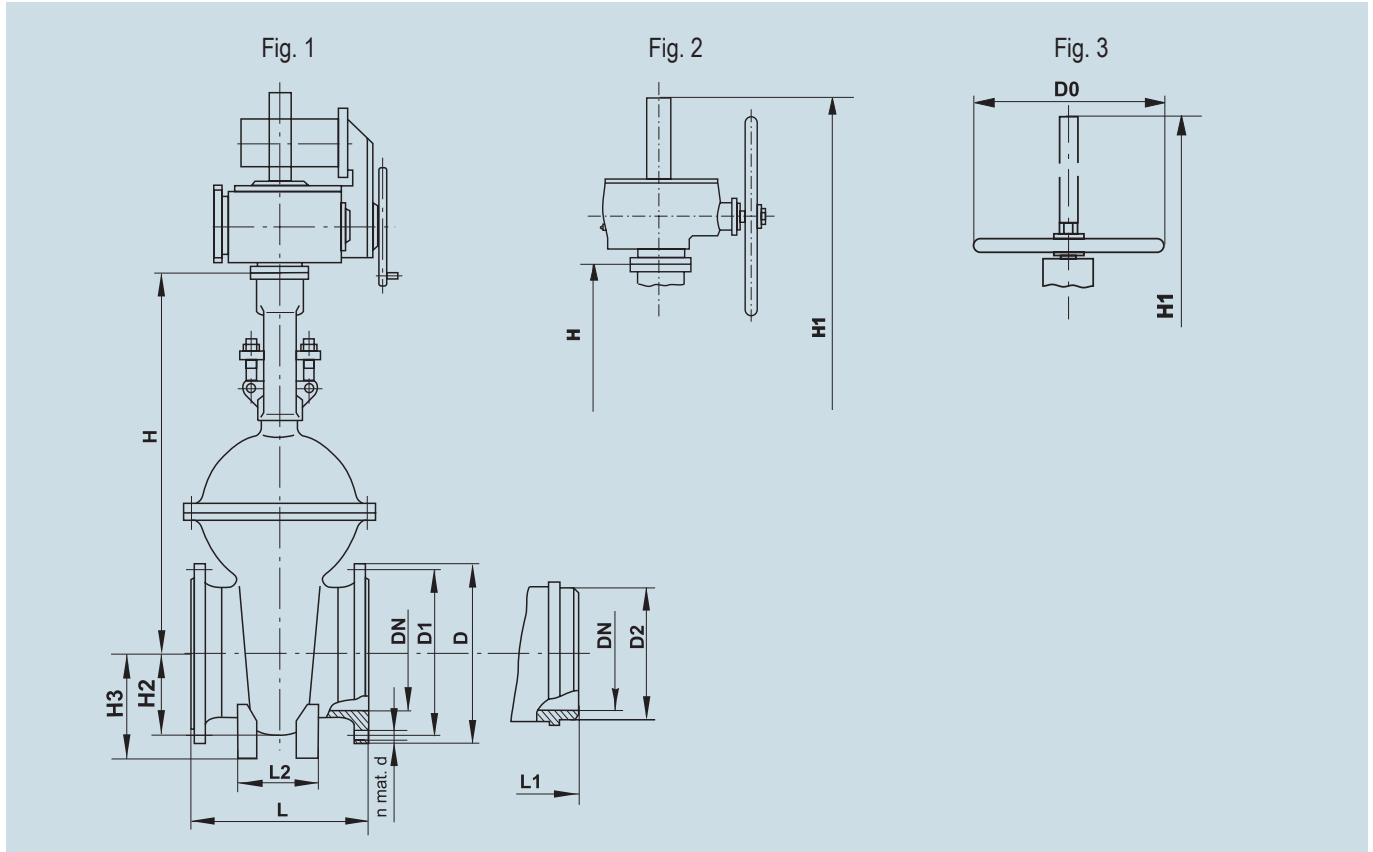
DN, mm (inch)	Designation	Fig.	Dimensions, mm													Weight, kg *			
			D	D1	D2	n	d	D0	L	L1	L2	H	H1	H2	H3	Flanged		Welded	
																Without mating parts	With mating parts		
200 (8)	PT11055-200	1	335	295		12	22	-	400				860	-			215	245	
		3						450						-			1136	210	
250 (10)	PT11055-250	1	450	335		12	26	-	450				960	-			313	359	
		3						640						-			1224	320	
300 (12)	PT11055-300	1	460	410		12	26	-	500				1107	-			417	465	
		3						640						-			1420	416	
350 (14)	PT11055-350	1	520	470		16	26	-	550				1197	-	251		433	515	
		2															1690		
400 (16)	PT11055-400	1	580	525	430	16	30	-	600	600			1435	-			605	717	465
		2															1825		
500 (20)	PT11055-500	1	710	650	535	20	33	-	700	700			1765	-	358		1030	1210	1010
		2															2380		
600 (24)	PT11015-600	1	840	770	635	20	39	-	800	800			2055	-	407		1360	1675	1260
		2															2755		
700 (28)	PT11015-700	1	910	840	726	24	39	-	900	900	600		2353	-		500	2550	2881	2365
		2															3128		
800 (32)	PT11015-800	1	1020	950	826	24	39	-	1000	1000			2594	-	510		3550	4150	3525
		2															3664		
1000 (40)	PT11001-1000	1	1255	1170	1025	28	45	-	1242	1200	790		3120	-		700	5680	6040	5400
		2															4280		
1200 (48)	PT11001-1200	1	1480	1390	1260	32	52	-	1400	1400	800		3730	-		790	7220	7820	6620
		2															5013		

* Note: the table contains weights of gate valves complete without electric drives.

RATED PRESSURE PN 2,5 (25) MPA (BAR)

INTERNAL DIAMETERS DN 200 (8"), 250 (10"), 300 (12"), 400 (16"), 500 (20"), 600 (24"), 700 (28"), 800 (32"), 1000 (40"), 1200 (48") MM

DIMENSIONS AND DRAWING

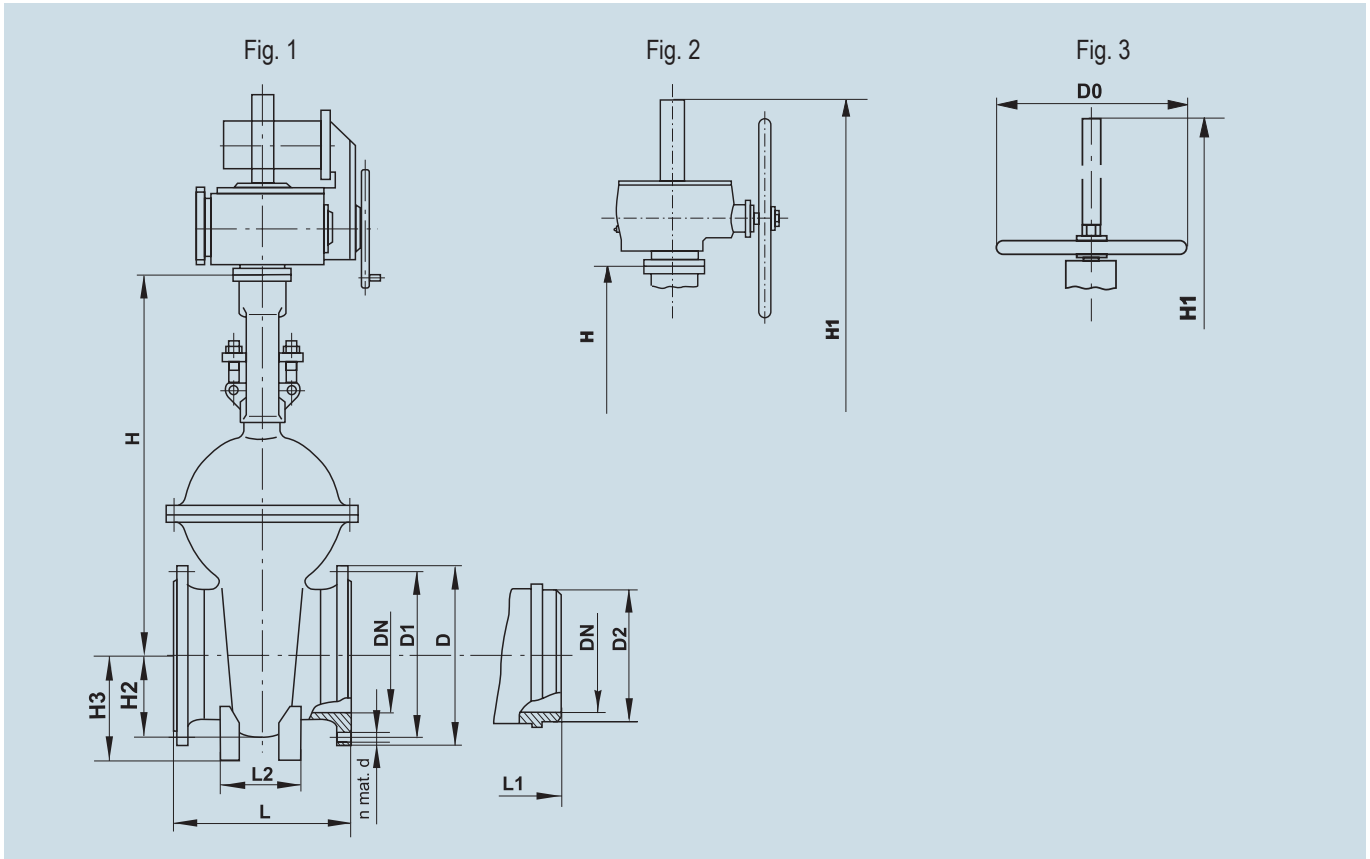


DN, mm (inch)	Designation	Fig.	Dimensions, mm												Weight, kg *				
			D	D1	D2	n	d	D0	L	L1	L2	H	H1	H2	H3	Flanged		Welded	
																Without mating parts	With mating parts		
200 (8)	PT11015-200	1	375	310	-	12	26	-	419	-	-	910	-	-	-	-	280	320	-
		3						640					-				1163	273	
250 (10)	PT11015-250	1	425	370	-	12	30	-	457	-	-	938	-	-	-	-	412	472	-
		3						640					-				1230	395	
300 (12)	PT11015-300	1	485	430	-	16	30	-	500	-	-	1076	-	-	-	-	428	521	-
		2						-					-				1440	-	
400 (16)	PT11015-400	1	610	550	430	16	33	-	600	600	-	1435	-	-	-	-	638	808	551
		2						-					-				1905	-	-
500 (20)	PT11004-500	1	730	660	535	20	39	-	700	700	-	1815	-	345	-	-	1233	1490	1178
		2						-					-				2455	-	-
600 (24)	PT11015-600	1	840	770	635	20	39	-	800	800	500	2055	-	407	430	-	1400	1715	1300
		2						-					-				2755	-	-
700 (28)	PT11015-700	1	960	875	726	24	45	-	900	900	600	2353	-	-	500	-	2615	3135	2365
		2						-					-				3290	-	-
800 (32)	PT11015-800	1	1075	990	826	24	45	-	1000	1000	-	2594	-	510	-	-	3605	4206	3525
		2						-					-				3664	-	-
1000 (40)	PT11015-1000	1	1315	1210	1025	28	56	-	1200	1200	490	3120	-	-	700	-	5765	6780	5465
		2						-					-				4340	-	-
1200 (48)	PT11015-1200	1	-	-	1225	-	-	-	-	1400	800	3660	-	-	790	-	-	-	6740
		2						-					-				4943	-	-

* Note: the table contains weights of gate valves complete without electric drives.

RATED PRESSURE PN 4,0 (40) MPA (BAR)
INTERNAL DIAMETERS 200 (8"), 250 (10"), 300 (12"), 400 (16"), 500 (20"), 700 (28") MM

DIMENSIONS AND DRAWING



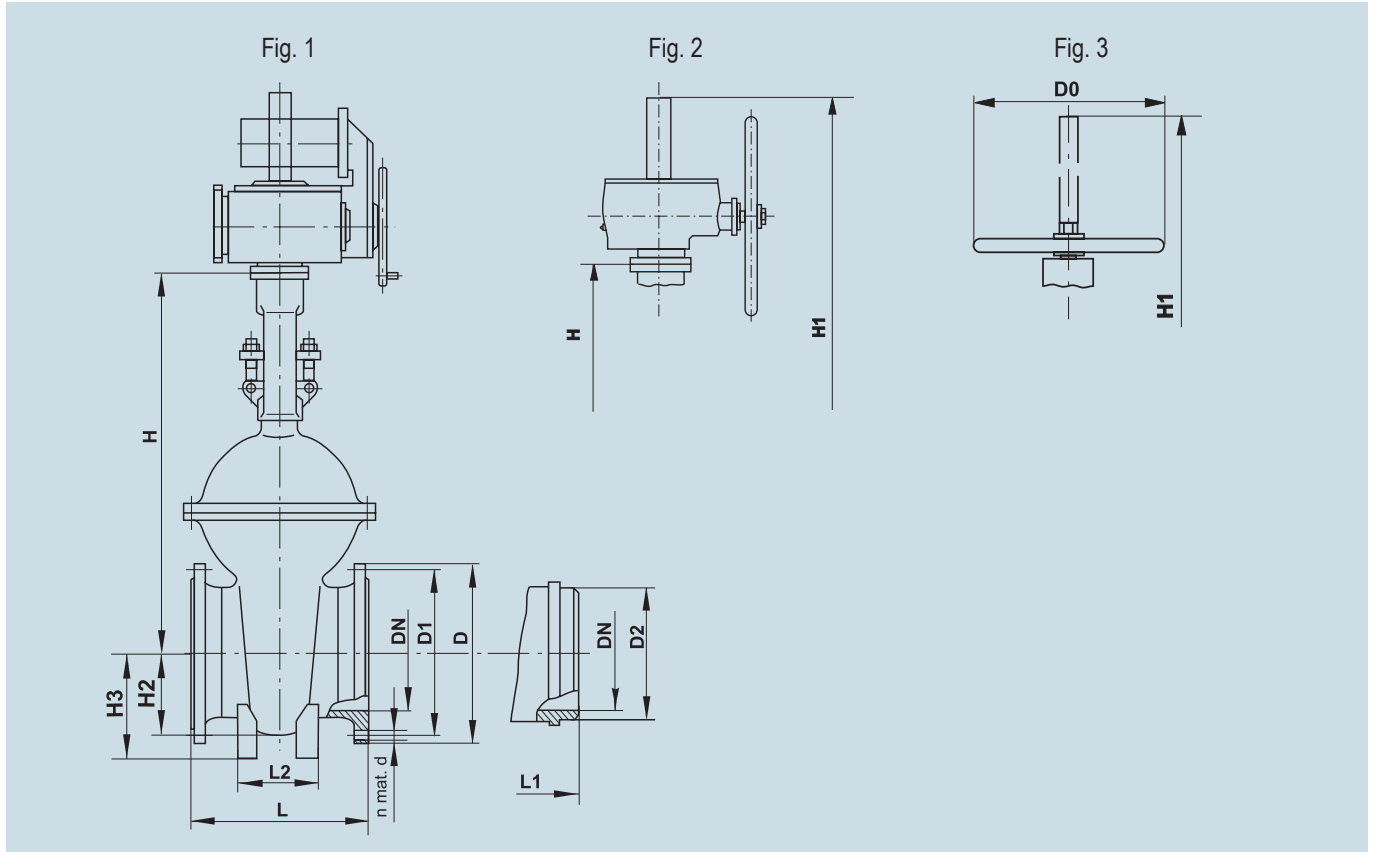
DN, mm (inch)	Designation	Fig.	Dimensions, mm													Weight, kg *					
			D	D1	D2	n	d	D0	L	L1	L2	H	H1	H2	H3	Flanged		Welded			
																Without mating parts	With mating parts				
200 (8)	PT11083-200M1	1	375	320		12	30	-	419				910	-					280	350	
		3						640						-					1163	273	
250 (10)	PT11083-250	1	445	385		12	33	-	457				948	-					412	522	
		3						640						-					1230	405	
300 (12)	PT11083-300	1	510	450		16	39	-	502				1190	-					434	587	
2	-	1485						-						-							
400 (16)	PT11083-400	1	655	585	430	16	39	-	991	950			1610	-	315				1478	1769	1318
2	-	2370						-						-							
500 (20)	PT11083-500	1	755	670	532	20	45	-	1150	1150			1815	-	366				1615	2020	1445
2	-	2575						-						-							
700 (28)	PT11083-700	1	995	900	726	24	52	-	1400	1400	980		2525	-		522			3705	4470	3340
		2						-						3280					-	-	

* Note: the table contains weights of gate valves complete without electric drives.

RATED PRESSURE PN 6,4 (64)MPA (BAR)

INTERNAL DIAMETERS 200 (8"), 250 (10"), 400 (16"), 500 (20"), 1200 (48") MM

DIMENSIONS AND DRAWING



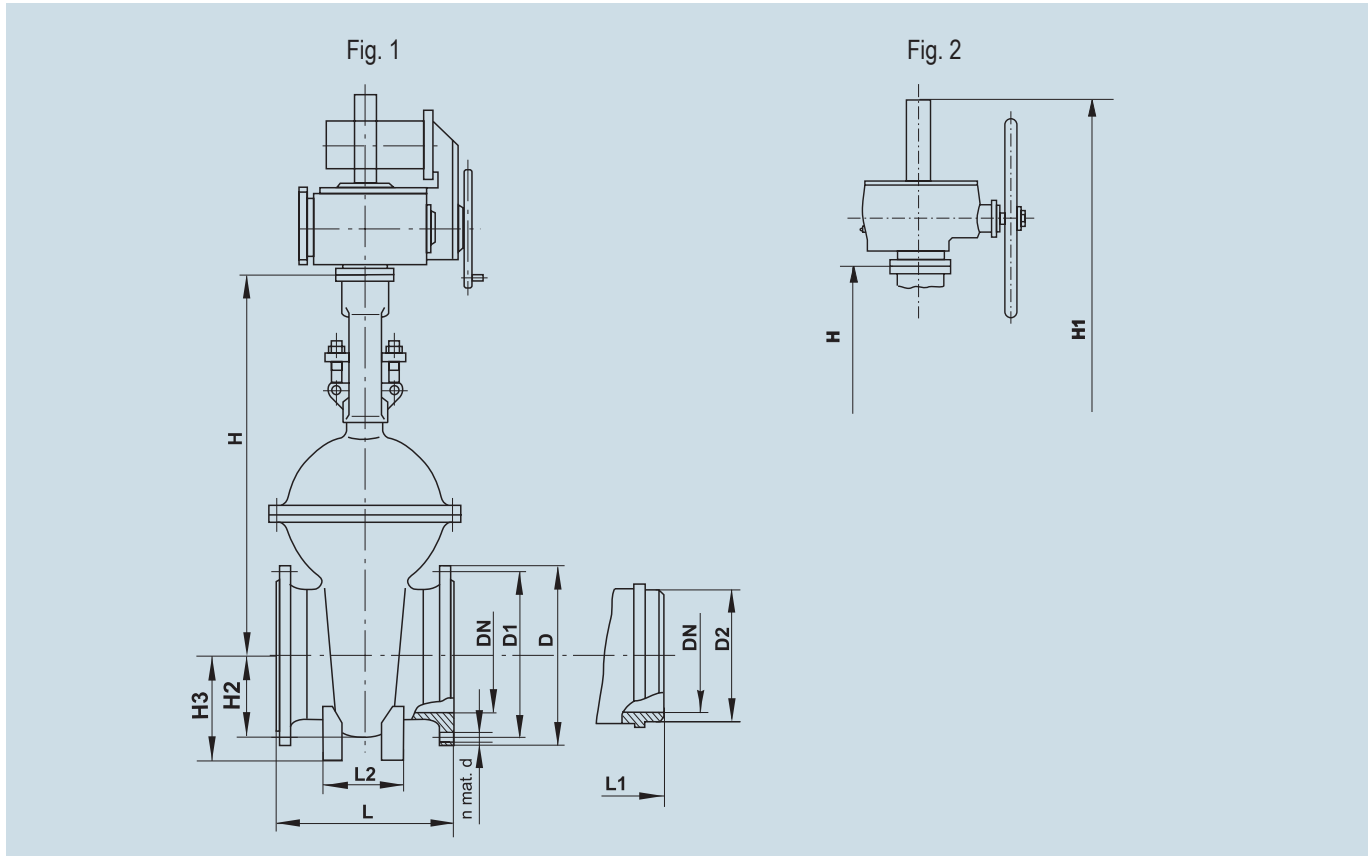
DN,mm (inch)	Designation	Fig.	Dimensions, mm												Weight, kg *		
			D	D1	D2	n	d	D0	L	L1	L2	H	H1	H2	Flanged		Welded
															Without mating parts	With mating parts	
200 (8)	PT11085-200	1	405	345	-	12	-	640	550	-	-	970	-	-	316	431	-
		3													-	1100	
250 (10)	PT11085-250	1	470	400	-	-	39	-	622	-	-	1005	-	-	407	577	-
		2													-	1310	
400 (16)	PT11009-400	1	670	585	430	16	45	-	991	950	-	1610	-	-	1558	1967	1328
		2													-	2160	-
500 (20)	PT11009-500M	1	800	705	540	20	52	-	1150	1150	-	1870	-	-	2103	2731	1673
		2													-	2475	-
1200 (48)	PT11009-1200M	1	-	-	1228	-	-	-	-	1910	870	3670	-	800	-	-	12650

* Note: the table contains weights of gate valves complete without electric drives.

RATED PRESSURE PN 8,0 (80); MPA (BAR)

INTERNAL DIAMETERS DN 400 (16"), 500 (20"), 700 (28"), 800 (32"), 1000 (40") MM

DIMENSIONS AND DRAWING



DN, mm (inch)	PN, MPa (bar)	Designation	Fig.	Dimensions, mm											Weight, kg *						
				D	D1	D2	n	d	L	L1	L2	H	H1	H2	H3	Flanged	Welded				
400 (16)	8,0 (80)	PT11009-400	1	715	620	430	16	52	991	950	-	1610	-	315	-	1648	1318				
			2									2160									
500 (20)	8,0 (80)	PT11009-500M1	1	-	-	540	-	-	-	1150	-	1980	3530	392	-	-	1721				
700 (28)		PT11009-700M				726						1400	720	2480				3550	-	530	4144
800 (32)		PT11009-800M				826						1500	750	2722				3950		600	
1000 (40)		PT11009-1000M				1028						1800	800	3352				4510	760	10036	

* Note: the table contains weights of gate valves complete without electric drives.