

SERIES 90 ANSI RANGE

Series 90 Gate Valves are linear motion valves devised for stopping the flow of the service fluid when necessary, not being suitable for regulating purpose. They are bolted bonnet, outside screw and yoke, rising stem, bidirectional, with metal sealing and full bore. The atmospheric sealing is achieved by flexible graphite rings. The two slightly sloped seats favor a tight shut off, being largely used in the power, chemical and oil industry sectors. The range is also comprehensive of a wide offer of different versions and options. The standard operation is achieved by handwheel or gear, depending on valve size and working pressure. Valves can also be arranged for automation with different kinds of actuators.

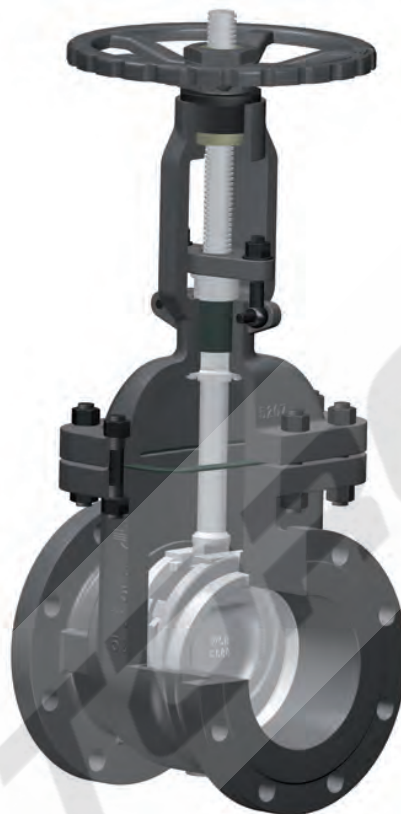
Precise machining of components for optimal performance

Outside screw and yoke, rising stem

Back Seat feature

Seat surface can be hardened to increase wear resistance

Flexible Wedge, favours the closure even at low pressures



Ergonomic non-rising handwheel

Marking for identification and full traceability purpose

Great versatility in end connections, materials and configurations

Sloped valve seats, vertical shut off, flow assists closure

Full bore, minimum pressure drop

Main Features / Reference Standards

Design: API600 or API6D
 Pressure Rating: 150/300/600/900/1500/2500#
 Face to face length: ASME B16.10
 Valve end connections: Flanged RF or RTJ to ASME B16.5
 Welded BW to ASME B16.25
 Marking: MSS SP-25
 Inspections & Tests: API598
 Bidirectional design
 Primer painted for protection during storage and transport (carbon steel body/bonnet)
 Product may be compliant with Pressure Equipment Directive PED, up to category III for European territory

Main Duties / Limits of use

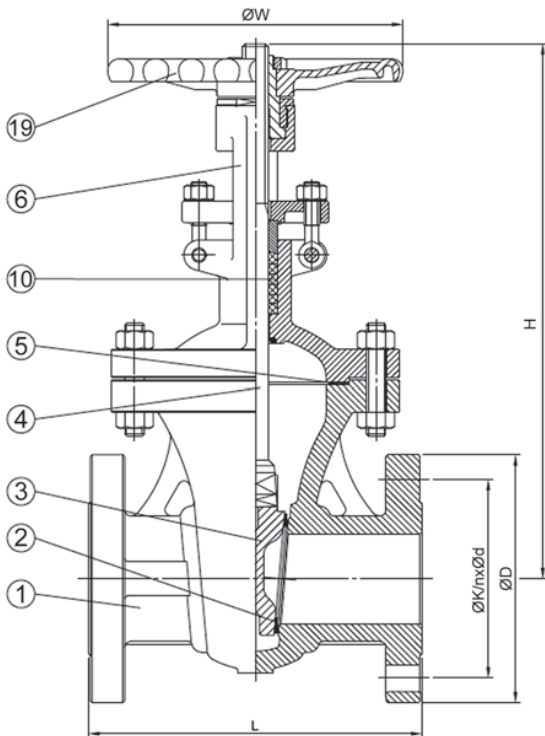
Fluids compatible with materials of construction
 Pressure / Temperature Rating to ASME B16.34. Temperature range: -29 / 425°C
 For PED compliant products, limits also acc. to PED Annex II Tables 6, 7, 8 & 9, gases and liquids of fluid groups 1 & 2, up to category III
 Questions referring to chemical resistance, please consult us
 For installation in horizontal pipelines with stem pointing upwards. For other positions, please consult us.

Options

Different body materials and trim combinations, different valve connections, extended bonnet, bellow seal, pressure seal, welded bonnet, lantern ring with double packing, live loaded packing, chained hand wheel, manual gear, pneumatic, electric or hydraulic actuation, limit switches, execution for aggressive atmosphere, etc. Please consult us

Main Parts and Materials

SERIES 90 ANSI RANGE



N°	PART	MATERIAL		
		90A0_	90I20	90I00
1	BODY	Cast Steel ASTM A216 WCB	St. Steel ASTM A351 CF8	St. Steel ASTM A351 CF8M
2	SEAT	13Cr or HF	Integral SS304	Integral SS316
3	WEDGE	13Cr or HF	St. Steel ASTM A351 CF8	St. Steel ASTM A351 CF8M
4	STEM	F6A	304	316
5	GASKET	Graphite		
6	BONNET	Cast Steel ASTM A216 WCB	St. Steel ASTM A351 CF8	St. Steel ASTM A351 CF8M
10	PACKING	Graphite		
19	HANDWHEEL	Steel		

Main parts only, rest on request

Fig. 90A0_	Seat Surface	Wedge Surface	Stem
TRIM #1 (90A01)	A105+13Cr	A216 WCB+13Cr	A182 F6a
TRIM #5 (90A05)	A105+HF	A216 WCB+HF	A182 F6a
TRIM #8 (90A08)	A105+HF	A216 WCB+13Cr	A182 F6a

HF = Hard faced

Main Valve Parameters

Size	inch	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	
	DN	50	80	100	150	200	250	300	350	400	450	500	600	
Class 150	RF	L	178	203	229	267	292	330	356	381	406	432	457	508
		ØD	150	190	230	280	345	405	485	535	595	635	700	815
		ØK	120,7	152,4	190,5	241,3	298,5	362	431,8	476,3	539,8	577,9	635	749,3
		n-Ød	4-Ø19	4-Ø19	8-Ø19	8-Ø22	8-Ø22	12-Ø25	12-Ø25	12-Ø29	16-Ø29	16-Ø32	20-Ø32	20-Ø35
	H (open)	396	493	595	750	952	1151	1376	1521	1735	1944	2130	2428	
	ØW	200	250	280	300	350	400	450	500	550	600	700	750	
	Approx. Weight	15	27	43	70	105	163	249	358	450	604	800	1168	
Class 300	RF	L	23	43	67	118	194	300	418	671	900	1194	1670	2300
		ØD	165	210	255	320	380	445	520	585	650	710	775	915
		ØK	127	168,3	200	269,9	330,2	387,4	450,8	514,4	571,5	628,6	685,8	812,8
		n-Ød	8-Ø19	8-Ø22	8-Ø22	12-Ø22	12-Ø25	16-Ø29	16-Ø32	20-Ø32	20-Ø35	24-Ø35	24-Ø35	24-Ø41
	H (open)	419	525	618	796	1033	1230	1403	1607	1865	1964	(1)	(1)	
	ØW	200	250	280	350	400	450	500	550	600	600	(1)	(1)	
	Approx. Weight	23	43	67	118	194	300	418	671	900	1194	1670	2300	
Class 600	RF	L	292	356	432	559	660	787	838	889	991	1092	1194	1397
		ØD	165	210	275	355	420	510	560	605	685	745	815	940
		ØK	127	168,3	215,9	292,1	349,2	431,8	489	527	603,2	654	723,9	838,2
		n-Ød	8-Ø19	8-Ø22	8-Ø25	12-Ø29	12-Ø32	16-Ø35	20-Ø35	20-Ø38	20-Ø31	20-Ø44	24-Ø44	24-Ø51
	H (open)	428	537	641	871	1046	1289	(1)	(1)	(1)	(1)	(1)	(1)	
	ØW	220	280	300	350	450	600	(1)	(1)	(1)	(1)	(1)	(1)	
	Approx. Weight	30	55	98	198	345	630	956	1150	1530	2110	2500	3900	

(1) Valves with gear

Dimensions in mm subject to manufacturing tolerance / Weights in kg
Other dimensions on request

Information / restriction of technical rules need to be observed!
Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve
Product suitability must be verified, contact manufacturer for information