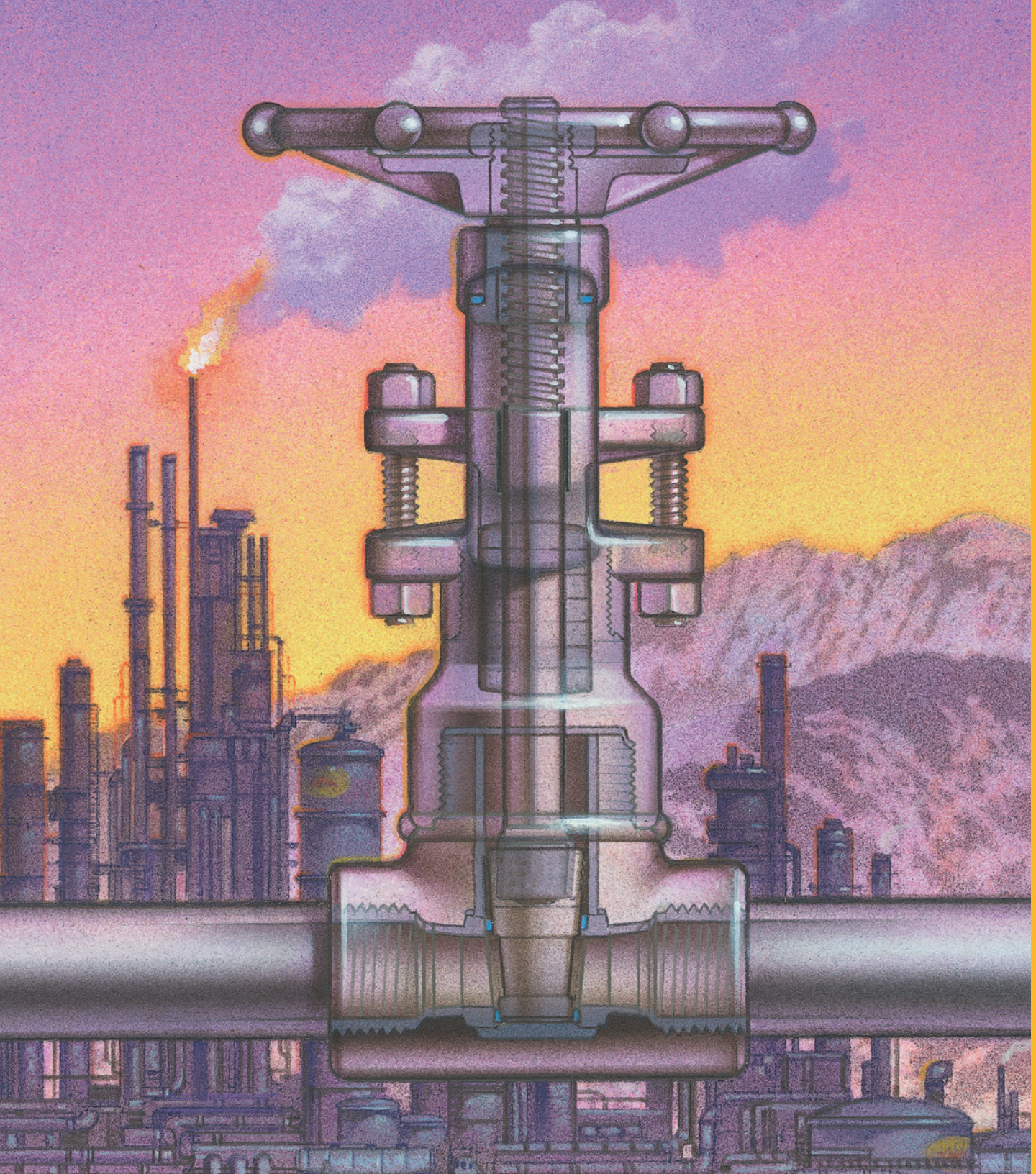

FLOWSERVE

Vogt Valves

Catalog and Application Manual

Vogt Valves

VVACT0000-01
(Replaces VV200)

Forged Steel Valves and Fittings

Gate Valve Index

Press. Class	Material	Bonnet Joint	End Connection	Bonnet Type	SERIES
150	A105	Bolted	Flanged	OS&Y	353
			Butt Weld	OS&Y	BW353
			THd/SW	OS&Y	See Class 800
	A182 F316/F316 L	Bolted	Flanged	OS&Y	358
	A350 LF2	Bolted	Flanged	OS&Y	32353
300	A105	Bolted	Flanged	OS&Y	363
			Butt Weld	OS&Y	BW363
			Thd/SW	OS&Y	See Class 800
	A182 F316/F316 L	Bolted	Flanged	OS&Y	368
	A350 LF2	Bolted	Flanged	OS&Y	32363
600	A105	Bolted	Flanged	OS&Y	373, 13373, 11403
			Butt Weld	OS&Y	BW373
			Thd/SW	OS&Y	See Class 800
	A182 F316/F316 L	Bolted	Flanged	OS&Y	378
	A350 LF2	Bolted	Flanged	OS&Y	32373
800	A105	Bolted	Threaded	OS&Y	12111, 13111, 11103
				ISS	12161
			Socket Weld	OS&Y	SW12111, SW13111, SW11103
				ISS	SW12161
			Male Thd x Fem Thd	OS&Y	TT12111
			Male Soc x Fem Thd	OS&Y	ST 12111
			Male Cpt x Fem Thd	OS&Y	CT12111
		Weld	Threaded	OS&Y	2801, 2801B
				ISS	2811
			Socket Weld	OS&Y	SW2801, SW2801B
				ISS	SW2811
			Male Thd x Fem Thd	OS&Y	TT2801
				ISS	TT2811
			Male Soc x Fem Thd	OS&Y	ST2801
			Male Cpt x Fem Thd	OS&Y	CT 2801, CT 2901
		Union	Threaded	ISS	59851
			Socket Weld	ISS	SW59851
	A350 LF2	Bolted	Threaded	OS&Y	32111
			Socket Weld	OS&Y	SW32111
	A182 F3/F316L	Bolted	Threaded	OS&Y	12401, 13401
			Socket Weld	OS&Y	SW12401, SW13401
		Weld	Threaded	OS&Y	2831
			Socket Weld	OS&Y	SW2831
			Male Thd x Fem Thd	OS&Y	TT2831
			Male Soc x Fem Thd	OS&Y	ST2831
			Male Cpt x Fem Thd	OS&Y	CT2831
		Union	Threaded	ISS	59951
			Socket Weld	ISS	SW59951
	A182 F316H	Bolted	Threaded	OS&Y	82401
			Socket Weld	OS&Y	SW82401
	A182 F5	Bolted	Threaded	OS&Y	12421
			Socket Weld	OS&Y	SW12421
	A182 F9	Bolted	Threaded	OS&Y	12921
			Socket Weld	OS&Y	SW12921

Gate Valve Index *(cont.)*

Press. Class	Material	Bonnet Joint	End Connection	Bonnet Type	SERIES
800 (cont.)	A182 F11, CL2	Bolted	Threaded	OS&Y	12321
			Socket Weld	OS&Y	SW12321
	A182 F22 CL 3	Bolted	Threaded	OS&Y	12521
			Socket Weld	OS&Y	SW12521
	A105	Bolted	Threaded	OS&Y	15111, 16111, 1033, 1043
			Socket Weld	OS&Y	SW15111, SW16111, SW1043, SW1033
			Flanged	OS&Y	15373, 11603, 11683
		Weld	Threaded	OS&Y	15801
			Socket Weld	OS&Y	SW15801
			Male Cpt x Fem Thd	OS&Y	ST15801
1500	A350 LF2	Bolted	Threaded	OS&Y	35111
			Socket Weld	OS&Y	SW35111
	A182 F316/F316L	Bolted	Threaded	OS&Y	15401
			Socket Weld	OS&Y	SW15401
		Weld	Threaded	OS&Y	15831
			Socket Weld	OS&Y	SW15831
	A182 F11, CL.2	Bolted	Threaded	OS&Y	15321
			Socket Weld	OS&Y	SW15321
	A105	Welded	Threaded	OS&Y	66703
			Socket Weld	OS&Y	SW66703
2500	A182 F11, CL2	Welded	Threaded	OS&Y	66713
			Socket Weld	OS&Y	SW66713
	A182 F22, CL.3	Welded	Socket Weld	OS&Y	SW66773

Globe Valve Index

Press. Class	Material	Bonnet Joint	End Connection	Bonnet Type	SERIES
150	A105	Bolted	Flanged	OS&Y	473, 473B
		Bolted	THd/SW	OS&Y	See Class 800
	A350 LF2	Bolted	Flanged	OS&Y	32473
300	A105	Bolted	Flanged	OS&Y	483, 483B, 22483CL
		Bolted	Thd/SW	OS&Y	See Class 800
	A350 LF2	Bolted	Flanged	OS&Y	32483
600	A105	Bolted	Flanged	OS&Y	493, 493B, 22493CL, 22493MT, 10403
		Bolted	Thd/SW	OS&Y	See Class 800
	A350 LF2	Bolted	Flanged	OS&Y	32493
800	A105	Bolted	Threaded	OS&Y	12141, 12141B, 13141, 22141 12443, 22461, 10103, 1971
				ISS	12181
			Socket Weld	OS&Y	SW12141, 12141B, SW13141 SW22141, SW12443, SW22461 SW10103, SW1971
				ISS	SW12181
			Male Thd x Fem Thd	OS&Y	TT12141
			Male Soc x Fem Thd	OS&Y	ST 12141
			Male Cpt x Fem Thd	OS&Y	CT12141
		Weld	Threaded	OS&Y	2821, 810
			Socket Weld	OS&Y	SW2821, SW810

Globe Valve Index *(cont.)*

Press. Class	Material	Bonnet Joint	End Connection	Bonnet Type	SERIES
800 (cont.)		Union	Threaded	OS&Y	801
				ISS	851
			Socket Weld	OS&Y	SW801
				ISS	SW851
	A182 F316/F316L	Bolted	Threaded	OS&Y	12501
			Socket Weld	OS&Y	SW12501
	A182 F316H	Bolted	Threaded	OS&Y	82501
			Socket Weld	OS&Y	SW82501
	A182 F11, CL. 2	Bolted	Socket Weld	OS&Y	SW12351
		Weld	Threaded	OS&Y	811
			Socket Weld	OS&Y	SW811
	A182 F22, CL. 3	Bolted	Socket Weld	OS&Y	12551
		Weld	Threaded	OS&Y	822
			Socket Weld	OS&Y	SW822
	A350 LF2	Bolted	Threaded	OS&Y	32141
			Socket Weld	OS&Y	SW32141
1500	A105	Bolted	Threaded	OS&Y	15141, 15443, 1003, 1023
			Socket Weld	OS&Y	SW15141, SW15443, SW1003, SW1023
			Flanged	OS&Y	15493, 10603, 10683
		Weld	Threaded	OS&Y	15821
			Socket Weld	OS&Y	SW15821
	A182 F316/F316L	Bolted	Threaded	OS&Y	15501
			Socket Weld	OS&Y	SW15501
	A182 F11, CL2	Bolted	Threaded	OS&Y	15351
			Socket Weld	OS&Y	SW15351
1690	A105	Weld	Threaded	OS&Y	1510
			Socket Weld	OS&Y	SW1510
	A182 F11, CL2	Weld	Threaded	OS&Y	1511
			Socket Weld	OS&Y	SW1511,
	A182 F22, CL. 3	Weld	Threaded	OS&Y	1522
			Socket Weld	OS&Y	SW1522
2500	A105	Weld	Threaded	OS&Y	66723
			Socket Weld	OS&Y	SW66723
	A182 F11, CL2	Weld	Threaded	OS&Y	66733
			Socket Weld	OS&Y	SW66733
	A182 F22, CL. 3	Weld	Threaded	OS&Y	66793
			Socket Weld	OS&Y	SW66793
2680	A105	Weld	Threaded	OS&Y	2510
			Socket Weld	OS&Y	SW2510
	A182 F11, CL2	Weld	Threaded	OS&Y	2511
			Socket Weld	OS&Y	SW2511
	A182 F22, CL. 3	Weld	Threaded	OS&Y	2522
			Socket Weld	OS&Y	SW2522

Check Valve Index

Press. Class	Material	Bonnet Joint	End Connection	Type	SERIES
150	A105	Bolted	Flanged	Piston	573
		Bolted	Thd/SW	Piston	See Class 800
		Bolted	Flanged	Swing	S 673
	A350 LF2	Bolted	Flanged	Piston	32573
300	A105	Bolted	Flanged	Piston	583
		Bolted	Thd/Sw	Piston	See Class 800
		Bolted	Flanged	Swing	S 683
	A350 LF2	Bolted	Flanged	Piston	32583
600	A105	Bolted	Flanged	Piston	593
		Bolted	Thd/SW	Piston	See Class 800
		Bolted	Flanged	Swing	S 693
	A350 LF2	Bolted	Flanged	Piston	32593
800	A105		Threaded	Piston	701,701ZL,710,13701
				Ball	B701,B710
				Swing	4835, S701
			Socket Weld	Piston	SW701,SW710,SW13701
				Ball	SWB701, SWB710
				Swing	SW4835, SWS701
		No	Threaded	Swing	S74
			Socket Weld	Swing	SWS74
		Union	Threaded	Piston	9091
				Ball	B9091, 54853
			Socket Weld	Piston	SW9091
				Ball	SWB9091, SW5483
	A182 F316/F316L	Bolted	Threaded	Piston	718
			Socket Weld	Piston	SW718
			Threaded	Swing	S718
			Socket Weld	Swing	SWS718
			Threaded	Ball	B718
			Socket Weld	Ball	SWB718
		Union	Threaded	Ball	54863
	A182 F316H	Bolted	Threaded	piston	82718
			Socket Weld	Piston	SW82718
	A350 LF2	Bolted	Threaded	Piston	32701
			Socket Weld	Piston	SW32701
1500	A105	Bolted	Threaded	Piston	15701
				Ball	B15701
			Socket Weld	Piston	SW15701
				Ball	SWB15701
			Flanged	Piston	15593
1690	A105	Weld	Threaded	Piston	1610
			Socket Weld	Piston	SW1610
	A182 F22, CL. 3	Weld	Threaded	Piston	1622
			Socket Weld	Piston	SW1622
2680	A105	Weld	Threaded	Piston	2610
			Socket Weld	Piston	SW2610
	A182 F11, CL. 2	Weld	Threaded	Piston	2611
			Socket Weld	Piston	SW2611
	A182 F22, CL. 3	Weld	Threaded	Piston	2622
			Socket Weld	Piston	SW2622

Meter Globe Valve Index

Press. Class	Material	Bonnet Joint	End Connection	Bonnet Type	SERIES
3000	A105	Screw	Threaded	ISS	1331T, 1881T, 2891T
			Socket Weld	ISS	SW1871T, SW1331T, SW2891T
4000	A105	Union	Threaded	ISS	54831T
			Socket Weld	ISS	SW54381T
5000	A105	Screw	Threaded	ISS	9871T, 9841T
			Socket Weld	ISS	SW9871T, SW9841T
	A182 F316/F316L	Screw	Threaded	ISS	98717T, 9841T
			Socket Weld	ISS	SW9871T, SW9841T
	A182 F316/F316L	Screw	Threaded	ISS	9871T, 9841T
			Socket Weld	ISS	SW9871T, SW9841T
	A182 F316/F316L	Screw	Threaded	ISS	9821T
			Socket Weld	ISS	SW9821T
6000	A105	Screw	Threaded	ISS	3991T
			Socket Weld	ISS	SW3991T

Hydraulic Check Valve Index

Press. Class	Material	Bonnet Joint	End Connection	Bonnet Type	SERIES
3000	A105	Screw	Threaded	Piston	1551, 2191
			Socket Weld	Piston	SW1551, SW2191
			Threaded	Ball	B1551
			Socket Weld	Ball	SWB1551
6000	A105	Screw	Threaded	Piston	4881
			Socket Weld	Piston	SW4881

Vogt Valves – A History in the Making

Vogt Valves, Sulphur Springs, TX

In the late 1890s, Vogt pioneered the early development of ammonia absorption refrigeration systems that made artificial ice. This business, plus Vogt's fledgling boiler business created an internal need for quality valves that initiated Vogt's early entry into the valve manufacturing business. The early reputation of Vogt's quality valves and the rapidly growing petroleum processing industry created an outside demand that would firmly establish Vogt in the mass production of high quality forged steel valves.

For more than 100 years, Vogt's leadership has been evident in the production of forged steel fittings, gate, globe, angle and check valves in most popular materials, trims and bonnet configurations.

Today, Vogt Valves supports a worldwide network of distributors with access to the world's largest capability for the manufacturing of forged steel valves and fittings.

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Zero Leakage	100		

* GIobe, Angle and Check Valves can be provided with appropriate trim materials for sour service.
Valve series with MB6, MB8 and MBS suffixes meet NACE. See pages 4 and 45 for explanation.

Index

Description of Series Number System for Vogt Valves

(Order Vogt Valves & Fittings by size—series number)

Prefix:

This maximum 3 alphameric letter beginning the Vogt Valve series number is normally indicative of the valve connection. Historically, a few design features have also been used as part of the prefix including **S**, **B** and **R**. A fully female threaded valve as the traditional Vogt standard does not have a prefix number (see below for prefix descriptions).

Suffix:

This maximum 3 alphameric character ending of the Vogt Valve series number is normally indicative of the valve internal trim package. Historically, packing and a few design features have also been used as part of the suffix number including **T, B** and **ER.** A valve with the traditional Vogt standard trim package and packing is not assigned a suffix number (see below for suffix descriptions).

Series Number (typical)

SW 12111 F8M

Prefix Description:

(Blank) - Female NPT (both ends)
B - Ball Check (female NPT)
BS - Female SW by Male Butt Weld
BT - Female Thd by Male Butt Weld
BW - Butt Weld
CS - Female SW by Male Couplet
CT - Female Thd by Male Couplet
R - In-Line Repair (female NPT)
RJ - Ring Joint Flanges
S - Swing Check (female NPT)
SS - Female SW by Male SW
ST - Female Thd by Male SW
SW - Socket Weld
SWB - Ball Check (SW)
SWR - In-line Repairable (SW)
SWS - Swing Check (SW)
TS - Female SW by Male Thd
TSW - Female Thd by Female SW
TT - Female Thd by Male Thd

Valve Design/Material:

This maximum 5 numeric character uniquely identifies the valve to its design (gate, globe, angle, check, etc.) and pressure boundary material of construction (A105, A182-F5, F11, F316, etc.). The prefix and suffix to this number provide details to the design, end connections and trim option including packing.

Suffix Description:

(Blank) – Standard Trim
B – Bellows Valve
C – Cryogenic Valve
CL – Chlorine Valve Trim – Monel/Hastelloy
ER – Emissions Reduction – Double Packed with Lantern Ring
F8M– 316 Trim
FHF – Full Hard Face (unless standard)
FH8 – Full Hard Faced F8M Trim
FHT – Teflon Packing and Full Hard Face
HF – Hard Faced Disc (F316 Globes and Checks Only)
HF2 – UOP Alkylation
HF4 – UOP Alkylation
HF5 – UOP Alkylation
HF6 – UOP Alkylation
HF7 – UOP Alkylation
L – Locking Device
MB6 – 13% Chrome Trim – NACE
MB8 – 316 Trim Hard Faced Seats and Disc/Wedge – NACE
MBS – Monel Trim – NACE
MM – Monel Trim – Grafoil Packing and Gasket
MMP – Phillips Alkylation
MMT – Monel Trim – Teflon Packing and Gasket
MT – Chlorine Valve Trim – Monel/Teflon Disc/Hastelloy
MTG – Vogt Alkylation
MTP – Phillips Alkylation
R– Reactive Seal
T – Teflon Packing and Gasket
ZLB – Zero Leakage Check Valve – Buna N
ZLE – Zero Leakage Check Valve – Ethylene Propylene
ZLN – Zero Leakage Check Valve – Neoprene
ZLV – Zero Leakage Check Valve – Viton 14

Legend:

The prefixes and suffixes based on design are limited to **S**, **B, R** and **ER** (as listed above) **ONLY**.

Expansion of new valve designs are added as new SERIES NUMBERS.

(See the VV 200 individual pages for standard series available.)

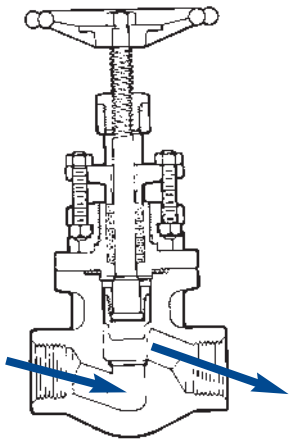
Globe and Angle Valve Section – Pages 46-87

Globe and Angle valves are suitable for throttling as well as shut-off. They are customarily installed so that the media pressure and preferred flow direction is under the disc (as illustrated). Flow above the disc is also acceptable.

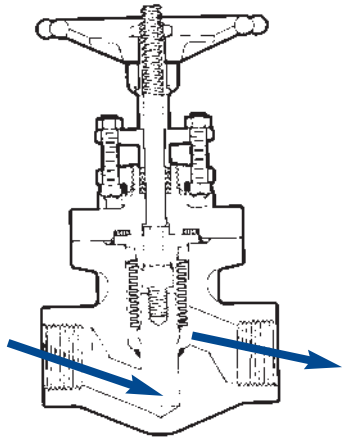
The Vogt Globe and Angle valve lines provide a variety of design variations to fulfill your requirements. Flow characteristics can be determined from the Cv Factors listed on pages 122 and 123.

Bellowseal globe valves are suitable for applications requiring total containment of the flowing media frequently necessary to protect the environment and to eliminate the loss of hazardous and/or costly fluids.

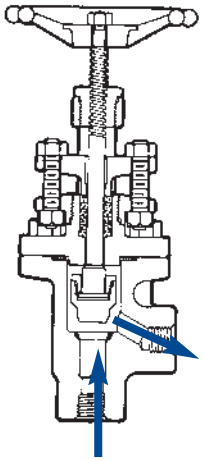
The valve packing and bonnet gasket are totally isolated by the bellows from the flowing media and pressure. The packing and gasket are incorporated in the valve to serve in a “back up” role only.



BOLTED BONNET GLOBE VALVE



BOLTED BONNET BELLOW SEAL GLOBE VALVE



BOLTED BONNET ANGLE VALVE

Dimensions are in inches and millimeters.
Dimensions are subject to change without notice.
Order by Size and Series Number.

Forged Globe Valves

Class 150 (PN 20)

Conventional Port

285 PSI @ 100°F (19.7 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

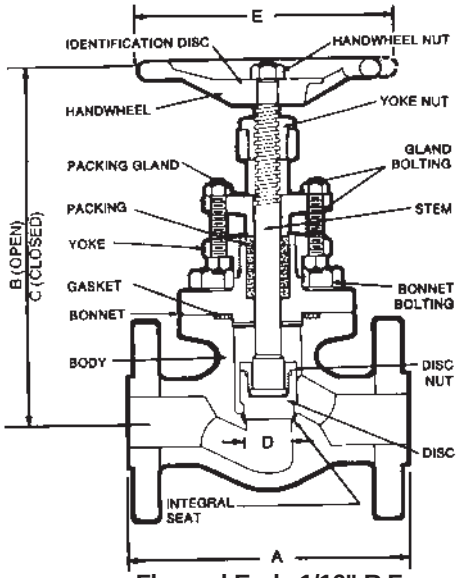
Series Number	
473	Trim: 13% Cr. Seat: HF
473F8M	Trim: 316 Seat: HF
473MM	Trim: Monel Seat: HF
473MB8	Trim: 316 Seat/Disc: HF
473B (Bellows)	Stem: 13% Cr. Disc: 316HF Bellows: 316L Disc/Seat: HF

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE

A1350 LF2 Body/Bonnet

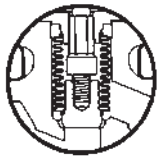
32473	Trim: 13% Cr. Seat: HF

Meets API-602 required wall thicknesses.



Flanged Ends 1/16" R.F.

- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc (Except Bellows Valve)
- Integral Hard Faced Seat
- ASME B16.34



Bellows Globe Valve

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Dimensions

							Bellows Globe Valve				
Size	NPS	1/2	3/4	1	1-1/2	2	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50	15	20	25	40	50
A-End-to-End		4.25	4.62	5.00	6.50	8.00	4.25	4.62	5.00	6.50	8.00
		108	117	127	165	203	108	117	127	165	203
B-Open		6.62	6.62	8.44	10.38	10.88	6.32	6.88	6.88	10.00	10.00
		168	168	214	264	276	161	157	157	254	254
C-Closed		6.19	6.19	7.81	9.47	9.81	6.13	6.62	6.62	9.50	9.50
		157	157	198	241	249	156	168	168	271	271
D-Seat Diameter		.50	.50	.75	1.28	1.53	.50	.75	.75	1.53	1.53
		12.7	12.7	19.1	32.5	38.9	12.7	19.1	19.1	38.9	38.9
E-Handwheel Diameter		4.00	4.00	4.75	5.75	7.00	4.00	4.75	4.75	7.00	7.00
		102	102	121	146	178	102	121	121	178	178
Weight		6.8	8.0	11.9	25.0	38.0	7.0	11.6	11.7	25.3	38.6
		3.1	3.6	5.4	11.4	17.3	3.2	5.3	5.3	11.5	17.5

Valve flanges conform to ASME Standard B16.5 and end-to-end dimensions conform to ASME Standard B16.10.

For Cv factors see page 123, Valve Matrix J.
Refer to pages 116-120 for full materials description

Cv factors for Bellows valve see page 123, Valve Matrix K.

Forged Globe Valves

Class 300 (PN 50)

Conventional Port

740 PSI @ 100°F (51.0 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

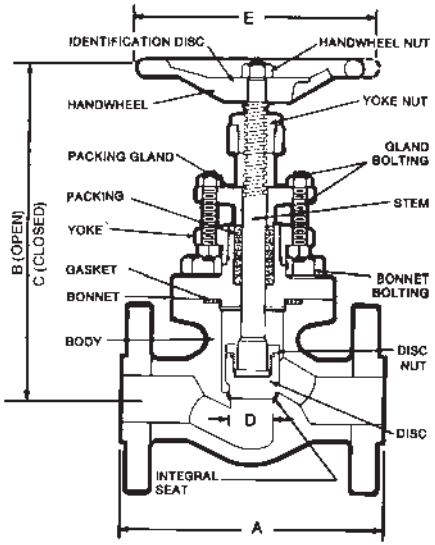
	Series Number
483	Trim: 13% Cr. Seat: HF
483F8M	Trim: 316 Seat: HF
483MM	Trim: Monel Seat: HF
483MB8	Trim: 316 Seat/Disc: HF
483B (Bellows)	Stem: 13% Cr. Disc: 316HF Bellows: 316L Disc/Seat: HF

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE

A350 LF2 Body/Bonnet

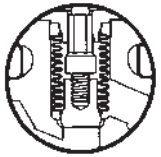
32483	Trim: 13% Cr. Seat: HF

Meets API-602 required wall thicknesses.



Flanged Ends 1/16" R.F.

- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc (Except Bellows Valve)
- Integral Hard Faced Seat
- ASME B16.34



Bellows Globe Valve

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

							Bellows Globe Valve				
Size	NPS	1/2	3/4	1	1-1/2	2	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50	15	20	25	40	50
A-End-to-End		6.00 152	7.00 178	8.00 203	9.00 229	10.50 267	6.00 152	7.00 178	8.00 203	9.00 229	10.50 267
B-Open		6.62 168	6.62 168	8.44 214	10.38 264	10.88 276	6.32 161	6.88 175	6.88 175	10.00 254	10.00 254
C-Closed		6.19 157	6.19 157	7.81 198	9.47 241	9.81 249	6.13 156	6.62 168	6.62 168	9.50 271	9.50 271
D-Seat Diameter		.50 12.7	.50 12.7	.75 19.1	1.28 32.5	1.53 38.9	.50 12.7	.75 19.1	.75 19.1	1.53 38.9	1.53 38.9
E-Handwheel Diameter		4.00 102	4.00 102	4.75 121	5.75 146	7.00 178	4.00 102	4.75 121	4.75 121	7.00 178	7.00 178
Weight		8.5 3.9	11.4 5.2	15.6 7.1	29.9 13.6	44.0 20.0	8.7 3.9	15.1 6.9	15.5 7.0	40.2 18.2	43.8 19.9

Valve flanges conform to ASME Standard B16.5 and end-to-end dimensions conform to ASME Standard B16.10.

For Cv factors see page 123, Valve Matrix J.
Refer to pages 116-120 for full materials description.
Cv factors for Bellows valve see page 123, Valve Matrix K.

Forged Globe Valves

GLOBE
CLASS 600 (PN 110)
493, 493B, 32493

Class 600 (PN 110)

Conventional Port

1480 PSI @ 100°F (102.1 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

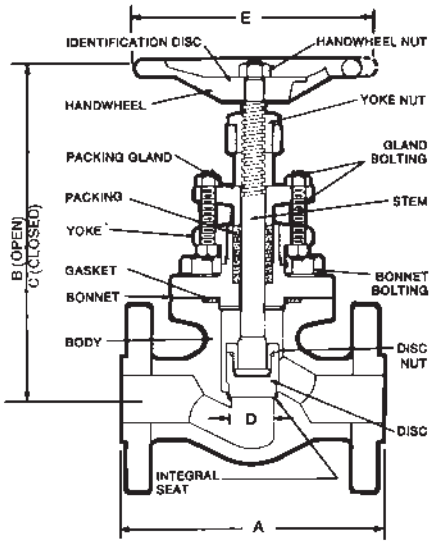
Series Number	
493	Trim: 13% Cr. Seat: HF
493F8M	Trim: 316 Seat: HF
493MM	Trim: Monel Seat: HF
493MB8	Trim: 316 Seat/Disc:HF
493B (Bellows)	Stem: 13% Cr. Disc: 316 HF Bellows: 316L Disc/Seat: HF

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE

A350 LF2 Body/Bonnet

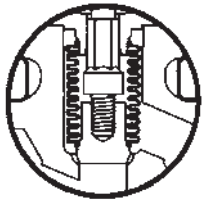
32493	Trim: 13% Cr. Seat: HF

Meets API-602 required wall thicknesses.



Flanged Ends: 1/4" R.F.

- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc (Except Bellows Valve)
- Integral Hard Faced Seat
- ASME B16.34



Bellows Globe Valve

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Dimensions

Size	NPS	1/2	3/4	1	1-1/2	2	Bellows Globe Valve 1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50	15	20	25	40	50
A-End-to-End		6.50 165	7.50 190	8.50 216	9.50 241	11.50 292	6.50 165	7.50 190	8.50 216	9.50 241	11.50 292
B-Open		6.62 168	6.62 168	8.44 214	10.38 264	10.88 276	6.32 160	6.88 175	6.88 175	10.00 254	10.00 254
C-Closed		6.19 157	6.19 157	7.81 198	9.47 240	9.81 249	6.13 156	6.62 168	6.62 168	9.50 241	9.50 241
D-Seat Diameter		.50 12.7	.50 12.7	.75 19.1	1.28 32.5	1.53 38.9	.50 12.7	.75 19.1	.75 19.1	1.53 38.9	1.53 38.9
E-Handwheel Diameter		4.00 102	4.00 102	4.75 121	5.75 146	7.00 178	4.00 102	4.75 121	4.75 121	7.00 178	7.00 178
Weight		8.6 3.9	10.8 4.9	17.0 7.7	33.5 15.2	46.0 20.9	8.8 4.0	14.5 6.6	16.6 7.6	43.8 19.9	49.3 22.4

Valve flanges conform to ASME Standard B16.5 and end-to-end dimensions conform to ASME Standard B16.10.

For Cv factors see page 123, Valve Matrix J.

For Cv factors for Bellows valve see page 123, Valve Matrix K.

Forged Globe Valves – For Water-Free Chlorine Service

Class 300 (PN 50)
Conventional Port
740 PSI @ 100°F (51.0 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

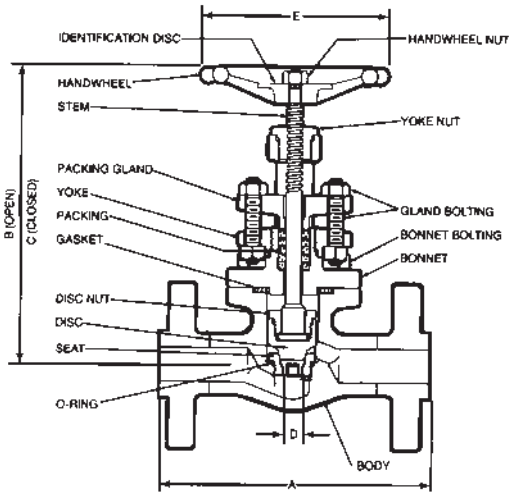
22483CL	**Stem: Hastelloy C** **Trim: Monel**

Class 600 (PN 110)
Conventional Port
1480 PSI @ 100°F (102.1 BAR @ 38°C)

22493CL	**Stem: Hastelloy C** **Trim: Monel**
22493MT	**Stem: Hastelloy C+** **Trim: Monel/Teflon** **Disc: Teflon Insert**

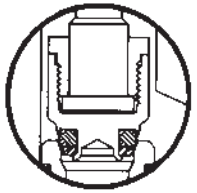
Chlorine Service Temperatures
Not to Exceed 300°F

Meets API-602 required wall thicknesses.



Flanged Ends Class 300: 1/16" R.F.
Flanged Ends Class 600: 1/4" R.F.

- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Disc or *Teflon*-Inserted Disc
- Renewable Seats
- ASME B16.34



Disc with Teflon Insert

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Dimensions

		Series 22483CL					Series 22493CL				
Size	NPS	1/2	3/4	1	1-1/2	2	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50	15	20	25	40	50
A-End-to-End		6.00	7.00	8.00	9.00	10.50	6.50	7.50	8.50	9.50	11.50
		152	178	203	229	267	165	190	216	241	292
B-Open		6.62	6.62	8.44	10.38	10.88	6.62	6.62	8.44	10.38	11.06
		168	168	214	264	276	168	168	214	264	281
C-Closed		6.31	6.31	8.06	9.81	10.19	6.31	6.31	8.06	9.81	10.38
		157	157	205	249	259	160	160	205	249	264
D-Seat Diameter		.39	.39	.66	1.19	1.44	.39	.39	.66	1.19	1.44
		9.9	9.9	16.8	30.2	36.6	9.9	9.9	16.8	30.2	36.6
E-Handwheel Diameter		4.00	4.00	4.75	5.75	7.00	4.00	4.00	4.75	5.75	7.00
		102	102	121	146	178	102	102	121	146	178
Weight		8.0	12.4	15.7	33.6	44.3	8.5	13.1	16.5	35.0	46.2
		3.6	5.6	7.1	15.3	20.1	3.9	5.9	7.5	15.9	21.0

+ Valves contain TEFLON — maximum temperature 500°F.
Valve flanges conform to ASME Standard B16.5 and end-to-end dimensions conform to ASME Standard B16.10.

Refer to pages 116-120 for full materials description.
For Cv factors see page 123, Valve Matrix L.

Forged Globe Valves

Class 600 (PN 110)

1480 PSI @ 100°F (102.1 BAR @ 38°C)

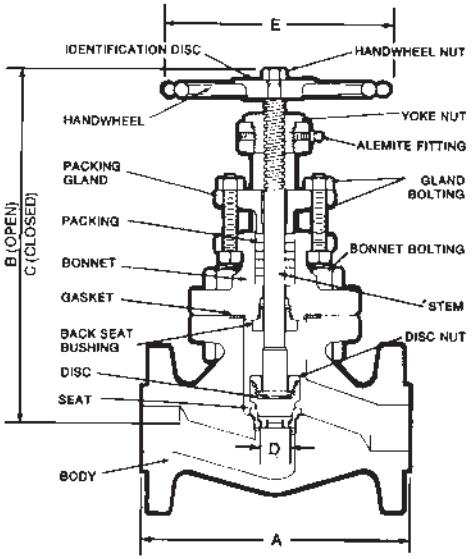
For other ratings see pgs. 112-115

A105 Body/Bonnet

SERIES NUMBER

10403 **Trim: 13% Cr.**

Meets API-600 required wall thicknesses.



Flanged Ends: 1/4" R.F.

- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Renewable Seats
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size / NPS / DN	1/2 15	3/4 20	1 25	1-1/4 32	1-1/2 40	2 50	2-1/2 65	3 80
A-End-to-End	6.50 165	7.50 190	8.50 216	9.00 229	9.50 241	11.50 292	13.00 330	14.00 356
B-Open	10.56 268	11.69 297	12.94 329	14.56 370	16.00 406	18.06 459	20.81 529	22.25 565
C-Closed	10.19 259	11.06 281	11.94 303	13.88 353	15.12 384	17.12 435	19.62 498	21.00 533
D-Seat Diameter	.50 12.7	.72 18.3	.97 24.6	1.19 30.2	1.44 36.6	1.88 47.8	2.22 56.4	2.81 71.4
E-Handwheel Diameter	4.75 121	5.75 146	7.00 178	8.00 203	9.75 248	9.75 248	12.00 305	13.75 349
Weight	19.5 8.9	31.2 14.2	53.1 24.1	57.1 25.9	76.2 34.6	97.7 44.4	170. 77.2	220. 99.9

Valve flanges conform to ASME Standard B16.5 and end-to end dimensions conform to ASME Standard B16.10.

For Cv factors see page 123, Valve Matrix M.
Refer to pages 116-120 for full materials description.

Forged Globe Valves – Bellowseal

Class 800 (PN 130)

Conventional Port

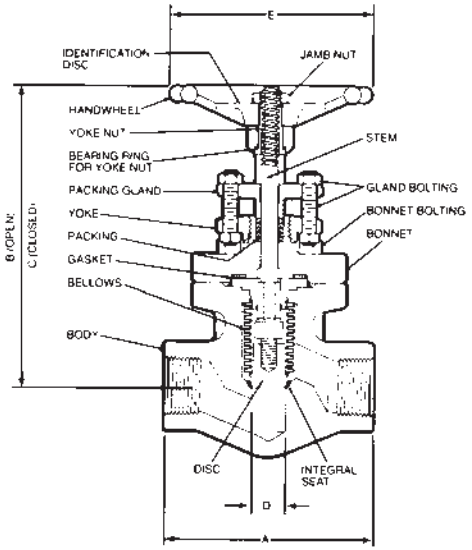
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
12141B	**SW12141B**
	Trim: Stem: 13% Cr.
	Disc: 316 HF
	Bellows: 316L
	Seats: HF



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Multi-Ply Bellows
- Hard Faced Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		3.75	4.62	4.62	7.75	7.75
		95	117	117	196	196
B-Open		6.32	6.88	6.88	10.00	10.00
		160	174	174	254	254
C-Closed		6.13	6.62	6.62	9.50	9.50
		155	168	168	241	241
D-Seat Diameter		.50	.75	.75	1.53	1.53
		12.7	19.0	19.0	38.8	38.8
E-Handwheel Diameter		4.00	4.75	4.75	7.00	7.00
		102	120	120	177	177
Weight		5.0	8.7	8.5	30.5	30.5
		2.2	3.9	3.8	13.7	13.7

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix K.

Forged Globe Valves – For HF Alkylation Service

Class 600 (PN 110)

Full Port

1480 PSI @ 100°F (102.1 BAR @ 38°C)

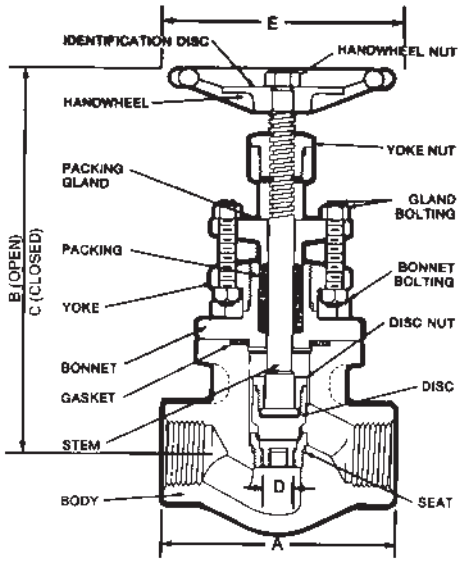
For other ratings see pgs. 112-115

A105 Body/Bonnet

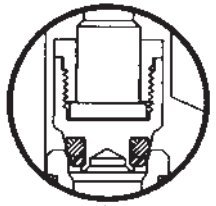
Series Number

Threaded	Socket Weld
43241MMP+	**Trim: Monel**
43241MTP+	**Trim: Monel (3/4 only)** **Disc: Teflon Insert**

Listed in Phillips Petroleum Company's HF Alkylation Process Design Spec. Manual.



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Disc or Loose *Teflon*-Inserted Disc
- Renewable Seat



Disc with Teflon Insert

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	1	3/4
	DN	15	25	20
A-End-to-End		4.00	6.25	4.62
		102	159	117
B-Open		6.62	10.38	8.44
		168	264	214
C-Closed		6.31	9.88	8.06
		160	251	205
D-Seat Diameter		.39	.97	.66
		9.9	24.6	16.8
E-Handwheel Diameter		4.00	5.75	4.75
		102	146	121
Weight		5.1	21.4	9.1
		2.3	9.7	4.1

+ Valves contain TEFLON — maximum temperature 500°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix N.

Forged Globe Valves – For HF Alkylation Service

Class 800 (PN 130)

Conventional Port

1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

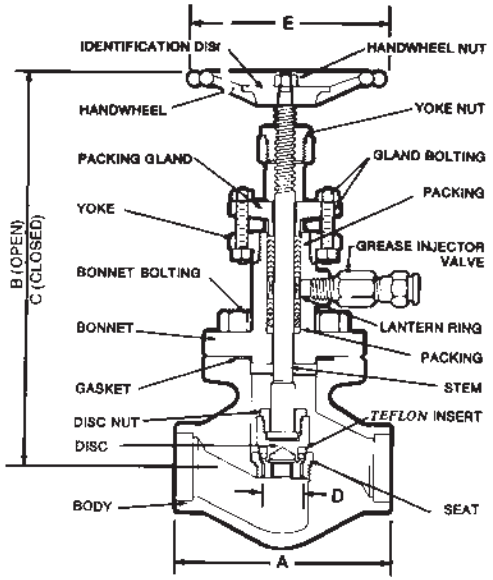
A105 Body/Bonnet

Series Number

Threaded	Socket Weld
42241MTG+	**SW42241MTG+** **Trim: Monel** **Disc: Teflon Insert**

SW42241HF2+ (Sizes 1/2 - 1)
Trim: Monel
Disc: Teflon Insert

HYDROFLUORIC ACID (HF) ALKYLATION VALVES. UOP APPROVED.



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Double Packing
- Lantern Ring
- Grease Injector
- *Teflon*-Inserted Disc
- Renewable Seat

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS DN	1/2 15	3/4 20	1 25	1-1/2 40	2 50
A-End-to-End		**3.75** **95**	**4.00** **102**	**4.62** **117**	**6.25** **159**	**7.75** **197**
B-Open		**8.28** **210**	**8.28** **210**	**10.19** **259**	**11.94** **303**	**13.16** **334**
C-Closed		**8.00** **203**	**8.00** **203**	**9.75** **248**	**11.28** **287**	**12.47** **317**
D-Seat Diameter		**.39** **9.9**	**.39** **9.9**	**.66** **16.8**	**1.19** **30.2**	**1.44** **36.6**
E-Handwheel Diameter		**4.00** **102**	**4.00** **102**	**4.75** **121**	**5.75** **146**	**7.00** **178**
Weight		**5.9** **2.7**	**6.6** **3.0**	**10.2** **4.6**	**21.7** **9.9**	**29.0** **13.2**

+ Valves contain TEFLON — maximum temperature 500°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix L.

Forged Globe Valves

Class 800 (PN 130)

Conventional Port

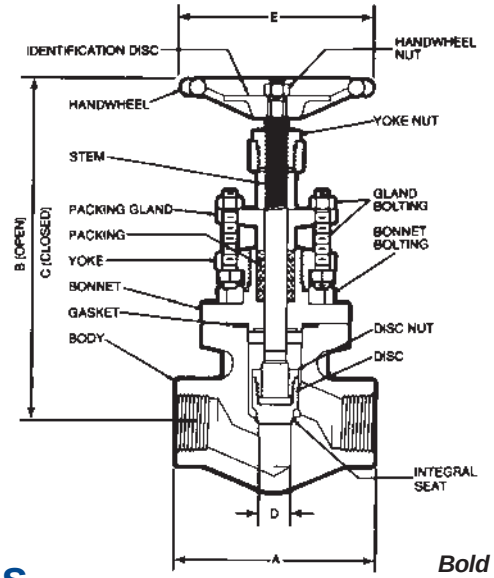
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

Body/Bonnet	Series Number Threaded	Socket Weld
A105	**12141** **12141T+**	**SW12141** **SW12141T+** **Trim: 13% Cr.** **Seat: HF**
	12141FHF	**SW12141FHF** **Trim: 13% Cr.** **Disc/Seat: HF**
	12141HF6 **12141HF7**	**SW12141HF6** **SW12141HF7** **Trim: 13% Cr.** **Seat: HF**
	12141F8M	**SW12141F8M** **Trim: 316** **Seat: HF**
	12141MB8	**SW12141MB8** **Trim: 316** **Disc/Seat: HF**
	12141MM	**SW12141MM** **Trim: Monel** **Seat: HF**
A350 LF2	**32141**	**SW32141** **Trim: 13% Cr.** **Seat: HF**
	32141F8M	**SW32141F8M** **Trim: 316** **Seat: HF**
	32141MB8	**SW32141MB8** **Trim: 316** **Disc/Seat: HF**

HYDROFLURIC ACID (HF) ALKYLATION VALVES. UOP APPROVED.

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50
A-End-to-End		3.75	3.75	3.75	4.00	4.62	6.25	6.25	7.75
		95	95	95	102	117	159	159	197
B-Open		6.62	6.62	6.62	6.62	8.44	10.38	10.38	10.88
		168	168	168	168	214	264	264	276
C-Closed		6.19	6.19	6.19	6.19	7.81	9.47	9.47	9.81
		157	157	157	157	198	241	241	249
D-Seat Diameter		.50	.50	.50	.50	.75	1.28	1.28	1.53
		12.7	12.7	12.7	12.7	19.1	32.5	32.5	38.9
E-Handwheel Diameter		4.00	4.00	4.00	4.00	4.75	5.75	5.75	7.00
		102	102	102	102	121	146	146	178
Weight		4.8	4.8	4.3	5.0	8.7	20.9	20.2	29.9
		2.2	2.2	2.0	2.3	3.9	9.5	9.2	13.6

+Valves contain TEFLON – maximum temperature 500°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix J.

Forged Globe Valves

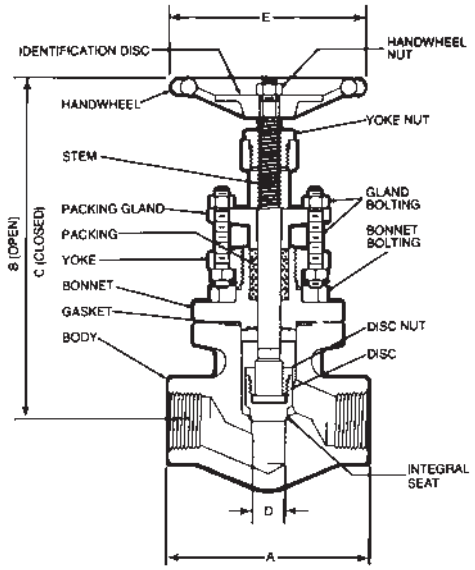
Class 800 (PN 130)

Conventional Port

2000 PSI @ 100°F (137.9 BAR @ 38°C)

For other ratings see pgs. 112-115

	Series Number	
Body/Bonnet	Threaded	Socket Weld
F11, Cl. 2 (1-1/4% Cr.)	**12351**	**SW12351** **Trim: 13% Cr.** **Seat: HF**
F22, Cl. 3 (2-1/4% Cr.)	**12551**	**SW12551** **Trim: 13% Cr.** **Seat: HF**
F316/F316L	**1920 PSI @ 100°F (132.4 BAR @ 38°C)** **12501** **12501T+**	**SW12501** **SW12501T+** **Trim: 316**
F316H	**1920 PSI @ 100°F (132.4 BAR @ 38°C)** **82501**	**SW82501** **Trim: 316H**



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

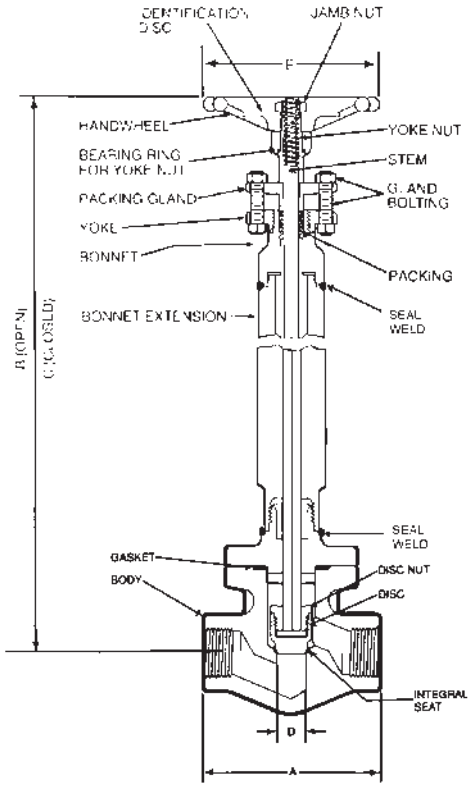
Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50
A-End-to-End		3.75	3.75	3.75	4.00	4.62	6.25	6.25	7.75
		95	95	95	102	117	159	159	197
B-Open		6.62	6.62	6.62	6.62	8.44	10.38	10.38	10.88
		168	168	168	168	214	264	264	276
C-Closed		6.19	6.19	6.19	6.19	7.81	9.47	9.47	9.81
		157	157	157	157	198	241	241	249
D-Seat Diameter		.50	.50	.50	.50	.75	1.28	1.28	1.53
		12.7	12.7	12.7	12.7	19.1	32.5	32.5	38.9
E-Handwheel Diameter		4.00	4.00	4.00	4.00	4.75	5.75	5.75	7.00
		102	102	102	102	121	146	146	178
Weight		4.8	4.8	4.3	5.0	8.7	20.9	20.2	29.9
		2.2	2.2	2.0	2.3	3.9	9.5	9.2	13.6

+Valves contain TEFLON – maximum temperature 500°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix J.

Forged Globe Valves – Cryogenic Service to -325°F (-198°C)



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Seat
- Extended Bonnet
- ASME B16.34

Class 800 (PN 130)

Conventional Port

1920 PSI @ 100°F (132.4 BAR @ 38°C)
1920 PSI @ -325°F (132.4 BAR @ -198°C)

For other ratings see pgs. 112-115

F316/F316L Body/Bonnet

SERIES NUMBER

Threaded	Socket Weld
12501C+	**SW12501C+**
	Trim: 316

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		3.75	4.00	4.62	6.25	7.75
		95	102	117	159	197
B-Open		21.22	21.22	22.75	27.64	28.19
		539	539	578	702	716
C-Closed		20.78	20.78	22.03	26.72	27.12
		528	528	560	679	689
D-Seat Diameter		.50	.50	.75	1.28	1.53
		12.7	12.7	19.1	32.5	38.9
E-Handwheel Diameter		4.00	4.00	4.75	5.75	8.00
		102	102	121	146	203
Weight		6.3	7.0	11.7	23.7	33.9
		2.9	3.2	5.3	10.8	15.4

+Valves contain TEFLON—maximum temperature 500°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix J.

Forged Globe Valves

Class 800 (PN 130)

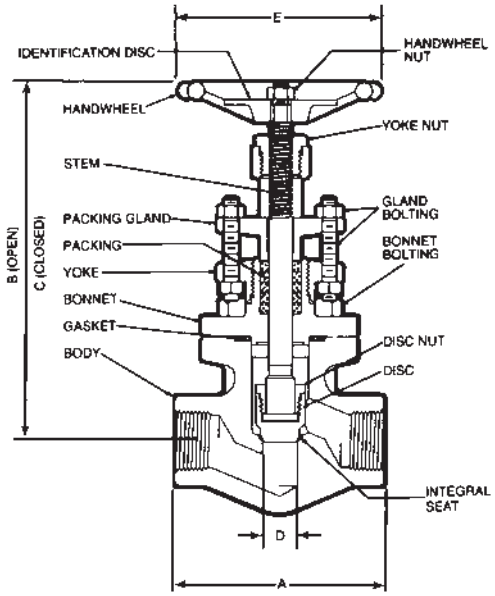
Full Port

1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
13141	**SW13141** **Trim: 13% Cr.** **Seat: HF**
13141FHF	**SW13141FHF** **Trim: 13% Cr.** **Disc/Seat: HF**



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS	1/2	3/4	1	1-1/4	1-1/2	2
DN	15	20	25	32	40	50
A-End-to-End	4.0	4.62	6.25	6.25	7.75	9.00
	102	117	159	159	197	229
B-Open	6.62	8.50	10.38	10.38	10.88	13.06
	168	216	264	264	276	332
C-Closed	6.12	7.78	9.47	9.47	9.81	12.19
	155	198	240	240	249	310
D-Seat Diameter	.50	.75	1.28	1.28	1.53	2.00
	12.7	19.1	32.5	32.5	38.9	50.8
E-Handwheel Diameter	4.00	4.75	5.75	5.75	7.00	8.00
	102	121	146	146	178	203
Weight	5.1	9.1	21.4	20.6	29.9	53.4
	2.3	4.1	9.7	9.4	13.5	24.2

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix P.

Forged Globe Valves – For HF Alkylation Service

Class 800 (PN 130)

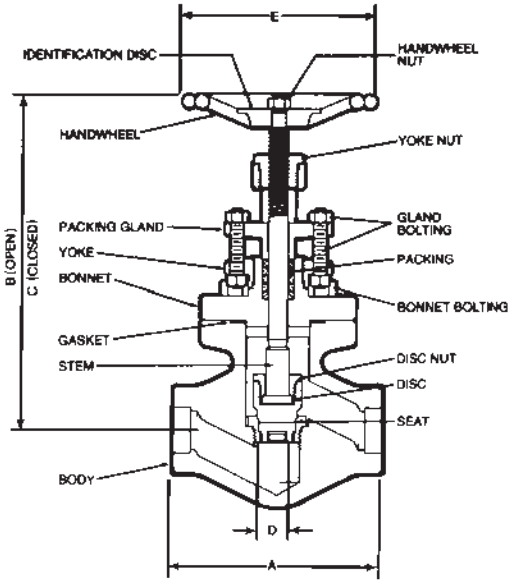
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
–	**SW23141HF4**
–	**SW23141HF5**
	Trim: Monel

HYDROFLUORIC ACID (HF) ALKYLATION VALVES. UOP APPROVED.



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Renewable Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		4.00	4.62	6.25	7.75	9.00
		102	117	159	197	229
B-Open		6.62	8.44	10.38	10.88	13.06
		168	214	264	276	332
C-Closed		6.34	8.06	9.88	10.19	12.19
		161	205	251	259	310
D-Seat Diameter		.39	.66	.97	1.44	1.88
		9.9	16.8	24.6	36.6	47.8
E-Handwheel Diameter		4.00	4.75	5.75	7.00	8.00
		102	121	146	178	203
Weight		5.1	9.1	21.4	20.6	30.0
		2.3	4.1	9.7	9.4	13.6

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix N.

Forged Globe Valves

Class 800 (PN 130)

Conventional Port

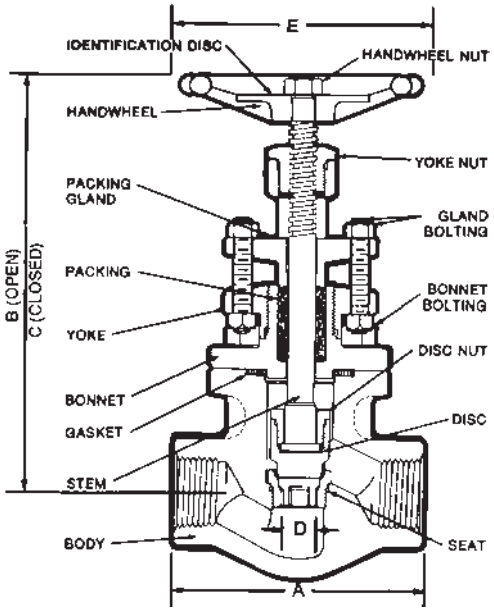
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
22141F8M	**SW22141F8M** **Trim: 316**
22141MM	**SW22141MM** **Trim: Monel**



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Renewable Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS / DN	1/4 8	3/8 10	1/2 15	3/4 20	1 25	1-1/4 32	1-1/2 40	2 50
A-End-to-End	**3.75** **95**	**3.75** **95**	**3.75** **95**	**4.00** **102**	**4.62** **102**	**6.25** **121**	**6.25** **121**	**7.75** **197**
B-Open	**6.62** **168**	**6.62** **168**	**6.62** **168**	**6.62** **168**	**8.44** **214**	**10.38** **264**	**10.38** **264**	**10.88** **276**
C-Closed	**6.31** **160**	**6.31** **160**	**6.31** **160**	**6.31** **160**	**8.06** **205**	**9.78** **248**	**9.78** **248**	**10.19** **259**
D-Seat Diameter	**.39** **9.9**	**.39** **9.9**	**.39** **9.9**	**.39** **9.9**	**.66** **16.8**	**1.19** **30.2**	**1.19** **30.2**	**1.44** **36.6**
E-Handwheel Diameter	**3.25** **83**	**3.25** **83**	**4.00** **102**	**4.00** **102**	**4.75** **121**	**5.75** **146**	**5.75** **146**	**7.00** **178**
Weight	**4.8** **2.2**	**4.9** **2.2**	**4.8** **2.2**	**5.0** **2.3**	**8.9** **4.0**	**20.8** **9.4**	**20.1** **9.1**	**29.1** **13.2**

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix L.

Forged Globe Valves – For Water-Free Chlorine Service

Class 800 (PN 130)

Conventional Port

1975 PSI @ 100°F (136.2 BAR @ 38°C)

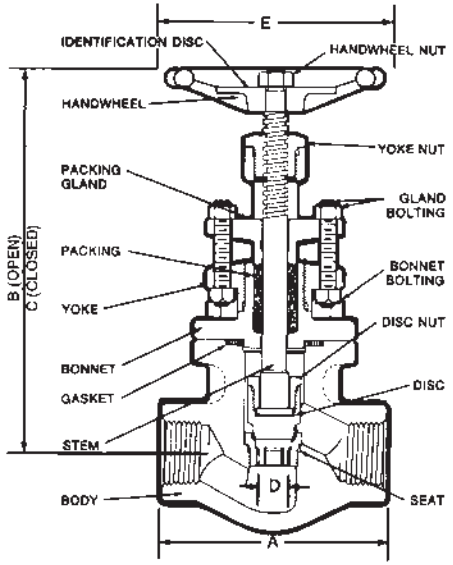
For other ratings see pgs. 112-115

A105 Body/Bonnet

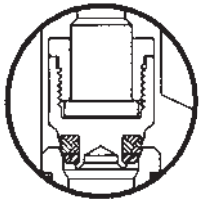
Series Number

Threaded	Socket Weld
22141CL	**SW22141CL** **Stem: Hastelloy C** **Trim: Monel**
22141MT+	**SW22141MT+** **Stem: Hastelloy C** **Trim: Monel** **Disc: Teflon Insert**

Chlorine Service Temperatures
Not to Exceed 300°F



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Disc or *Teflon*-Inserted Disc
- Renewable Seats
- ASME B16.34



Disc with Teflon Insert

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50
A-End-to-End		3.75	3.75	3.75	4.00	4.62	6.25	6.25	7.75
		95	95	95	102	117	159	159	197
B-Open		6.62	6.62	6.62	6.62	8.44	10.38	10.38	10.88
		168	168	168	168	214	264	264	276
C-Closed		6.34	6.34	6.34	6.34	8.06	9.78	9.78	10.19
		161	161	161	161	205	248	248	259
D-Seat Diameter		.39	.39	.39	.39	.66	1.19	1.19	1.44
		9.9	9.9	9.9	9.9	16.8	36.0	36.0	36.6
E-Handwheel Diameter		3.25	3.25	4.00	4.00	4.75	5.75	5.75	7.00
		83	83	102	102	121	146	146	178
Weight		4.8	4.9	4.8	5.0	8.9	20.8	20.1	29.1
		2.2	2.2	2.2	2.3	4.0	9.4	9.1	13.2

+Valves contain TEFLON—maximum temperature 500°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix L.

Forged Globe Valves – Extended Body

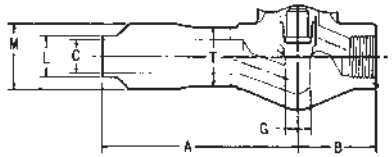
Class 800 (PN 130)

1975 PSI @ 100°F (136.2 BAR @ 38°C)

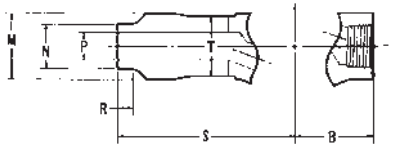
For other ratings see pgs. 112-115

A105 Body/Bonnet

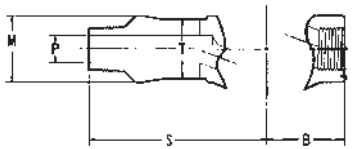
Series Number		*Type Ends*
CT 12141	**Trim: 13% Cr. Seat: HF**	**Integrally Reinforced Male Couplet Female Threaded**

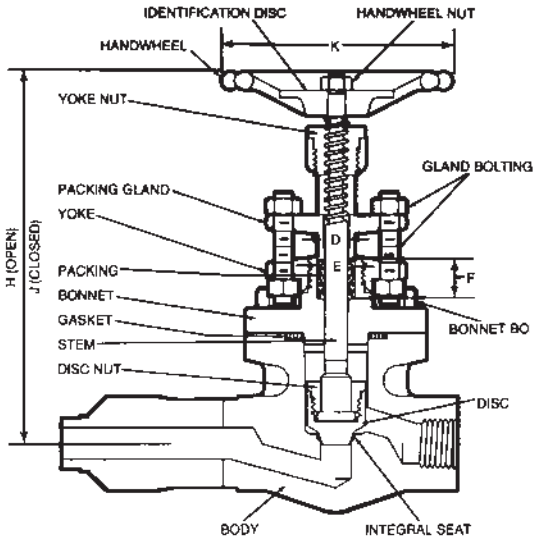


ST 12141	**Trim: 13% Cr. Seat: HF**	**Male Socket Weld Female Threaded**



TT 12141	**Trim: 13% Cr. Seat: HF**	**Male Threaded Female Threaded**





- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Size	NPS / DN	1/2 / 15	3/4 / 20	1 / 25	1-1/2 / 40	2 / 50
A		7.00 / 178	7.00 / 178	5.75 / 146	6.50 / 165	6.50 / 165
B		2.00 / 51	2.00 / 51	2.31 / 59	3.12 / 79	3.88 / 99
C		.75 / 19	.75 / 19	1.00 / 25	1.47 / 37	2.00 / 51
G		.50 / 13	.50 / 13	.75 / 19	1.28 / 33	1.53 / 39
H		6.62 / 168	6.62 / 168	8.44 / 214	10.38 / 264	11.06 / 281
J		6.19 / 157	6.19 / 157	7.81 / 198	9.47 / 249	10.00 / 254
K		4.00 / 102	4.00 / 102	4.75 / 121	5.75 / 146	8.00 / 203
L		.97 / 25	.97 / 25	1.22 / 31	1.72 / 44	2.22 / 56
M		1.56 / 40	1.56 / 40	1.94 / 49	2.56 / 65	3.12 / 79
N		.84 / 21.3	1.05 / 26.7	1.32 / 33.5	1.90 / 48.3	2.38 / 60
P		.52 / 13	.65 / 17	.81 / 21	1.47 / 37	1.81 / 46
R		.31 / 8	.44 / 11	.44 / 11	.44 / 11	.56 / 14
S		4.50 / 114	4.50 / 114	5.25 / 133	6.00 / 152	6.00 / 152
T		1.44 / 37	1.44 / 37	1.75 / 44	2.38 / 60	2.94 / 75

Refer to Pages 116-120 for full materials description. For Cv factors see Page 123 Valve Matrix Q.

Forged Globe Valves – For Flow Control Service

Class 800 (PN 130)

Conventional Port

1975 PSI @ 100°F (136.2 BAR @ 38°C)

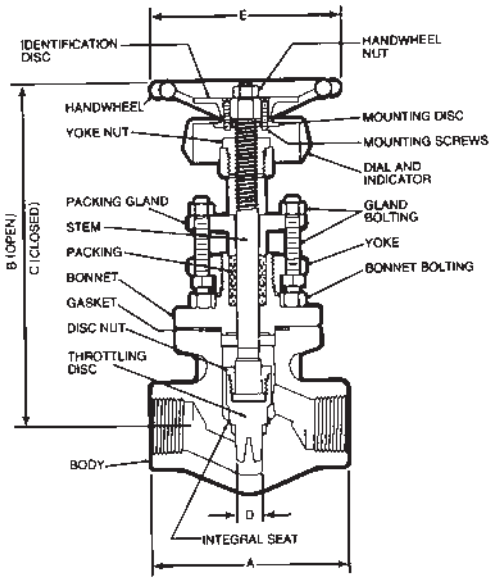
For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
12443	**SW12443**
	Trim: 13% Cr.
	Seat: HF

Size	Cv Factor	(Approx.) No. of Turns
1/2	1.46	3
3/4	2.38	4-1/2
1	4.54	5
1-1/2	9.65	6-1/2
2	14.60	8



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose V-Port Disc
- Integral Hard Faced Seat
- Dial & Indicator
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size NPS / DN	1/2 15	3/4 20	1 25	1-1/2 40	2 50
A-End-to-End	**3.75** 95	**4.00** 102	**4.62** 117	**6.25** 159	**7.75** 197
B-Open	**6.81** 173	**6.81** 173	**8.44** 214	**10.38** 264	**10.88** 276
C-Closed	**6.53** 166	**6.44** 164	**7.91** 201	**9.78** 248	**9.81** 249
D-Seat Diameter	**.38** 3.7	**.44** 11.2	**.62** 15.7	**.94** 23.9	**1.19** 30.2
E-Handwheel Diameter	**4.00** 102	**4.00** 102	**4.75** 121	**5.75** 146	**7.00** 178
Weight	**5.1** 2.3	**5.4** 2.5	**9.6** 4.4	**19.0** 8.6	**31.4** 14.3

Refer to pages 116-120 for full materials description.

Forged Globe Valves – For Flow Control Service

Class 800 (PN 130)
Needle Point Stem/Seat

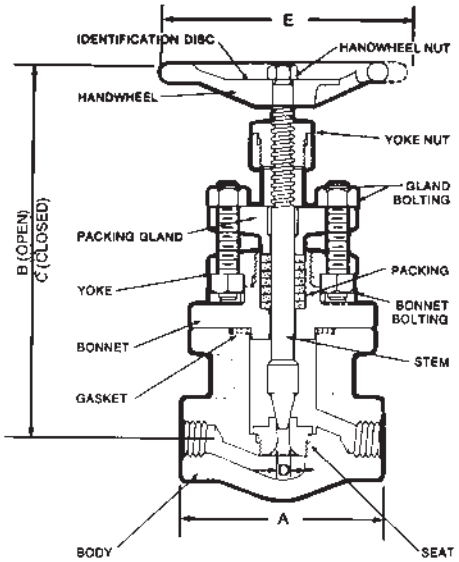
1975 PSI @ 100°F (136.2 BAR @ 38°C)
For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
22461	**SW22461** **Trim: 13% Cr.**
22461FHF	**SW22461FHF** **Trim: 13% Cr.** **Stem/Seat: HF**

Size	Cv Factor	(Approx.) No. of Turns
1/4	.56	3-1/2
3/8	.55	3-1/2
1/2	.68	3-1/2
3/4	.99	3-1/2
1	1.50	5-1/2



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Needle Point Flow Control
- Renewable Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS	1/4	3/8	1/2	3/4	1
DN	8	10	15	20	25
A-End-to-End	3.75	3.75	3.75	4.00	4.62
	95	95	95	102	117
B-Open	6.69	6.69	6.69	6.69	8.62
	170	170	170	170	219
C-Closed	6.38	6.38	6.38	6.38	8.06
	162	162	162	162	205
D-Seat Diameter	.19	.19	.19	.19	.25
	4.8	4.8	4.8	4.8	6.4
E-Handwheel Diameter	3.25	3.25	4.00	4.00	4.75
	83	83	102	102	121
Weight	4.8	4.6	5.0	4.9	8.6
	2.2	2.1	2.3	2.2	3.9

Refer to pages 116-120 for full materials description.

Forged Angle Valves

Class 800 (PN 130)

Conventional Port

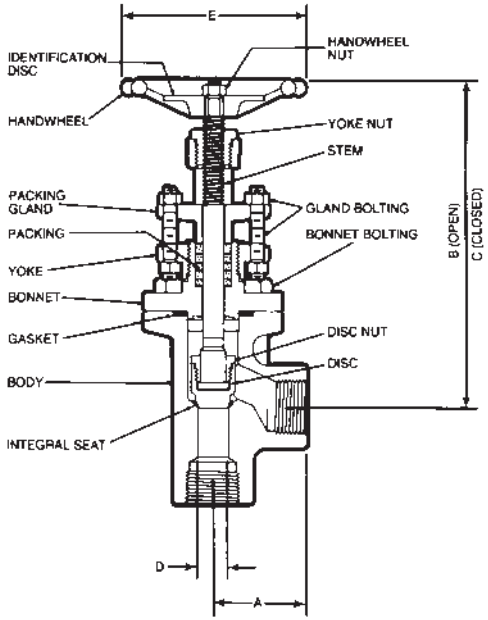
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

SERIES NUMBER

Threaded	Socket Weld
1971	**SW1971**
	Trim: 13% Cr.
	Seat: HF



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
DN	8	10	15	20	25	32	40	50
A-End-to-End	1.62	1.62	1.62	1.75	2..31	3.12	3.12	3.62
	41	41	41	44	59	79	79	92
B-Open	6.62	6.62	6.62	6.62	8.44	10.38	10.38	13.25
	168	168	168	168	214	264	264	337
C-Closed	6.19	6.19	6.19	6.19	7.81	9.53	9.53	12.19
	157	157	157	157	198	242	242	310
D-Seat Diameter	.50	.50	.50	.50	.75	1.28	1.28	1.53
	12.7	12.7	12.7	12.7	19.1	32.5	32.5	38.9
E-Handwheel Diameter	4.00	4.00	4.00	4.00	4.75	5.75	5.75	8.00
	102	102	102	102	121	146	146	203
Weight	5.0	5.0	4.8	5.2	8.7	18.8	18.7	33.8
	2.3	2.3	2.2	2.4	3.9	8.5	8.5	15.3

Refer to pages 116-120 for full materials description.

For Cv factors see Page 123, Valve Matrix S.

Forged Globe Valves

Class 800 (PN 130)
Conventional Port

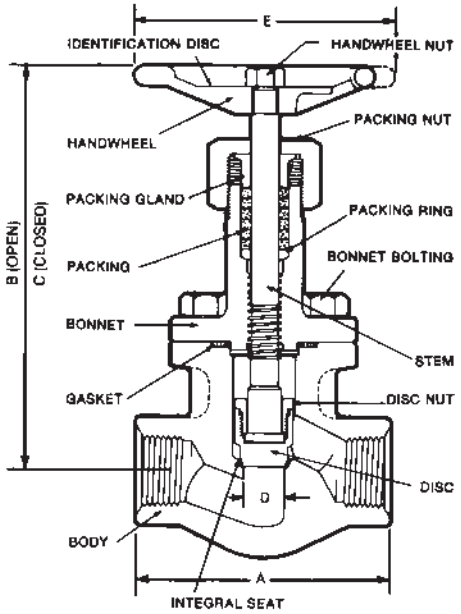
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
12181	**SW12181**
	Trim: 13% Cr.
	Seat: HF



- Round Bolted Bonnet
- Spiral Wound Gasket
- Inside Screw Stem
- Screw Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50
A-End-to-End		3.75	3.75	3.75	4.00	4.62	6.25	6.25	7.75
		95	95	95	102	117	159	159	197
B-Open		6.31	6.31	6.31	6.31	8.00	10.22	10.22	11.44
		160	160	160	160	203	260	260	291
C-Closed		5.88	5.88	5.88	5.88	7.31	9.34	9.34	10.38
		149	149	149	149	186	237	237	264
D-Seat Diameter		.50	.50	.50	.50	.75	1.28	1.28	1.53
		12.7	12.7	12.7	12.7	19.1	32.5	32.5	38.9
E-Handwheel Diameter		4.00	4.00	4.00	4.00	4.75	5.75	5.75	7.00
		102	102	102	102	121	146	146	178
Weight		4.9	4.8	4.6	4.8	8.5	20.9	19.3	30.2
		2.2	2.2	2.1	2.2	3.9	9.5	8.8	13.7

Refer to pages 116-120 for full materials description.

For Cv factors see Page 123, Valve Matrix J.

Forged Globe Valves

Class 800 (PN 130)
Conventional Port

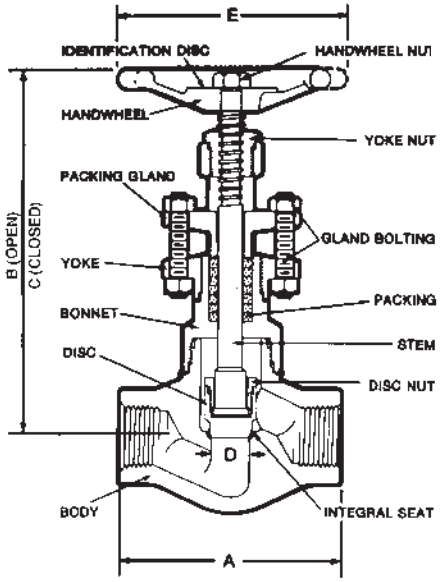
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
2821	**SW2821** **Trim: 13% Cr.** **Seat: HF**
2821FHF	**SW2821FHF** **Trim: 13% Cr.** **Disc/Seat: HF**
2821F8M	**SW2821F8M** **Trim: 316** **Seat: HF**



- Welded Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50
A-End-to-End		3.25	3.25	3.25	3.50	4.62	6.25	6.25	7.75
		83	83	83	89	117	159	159	197
B-Open		6.62	6.62	6.62	6.62	8.44	10.38	10.38	10.88
		168	168	168	168	214	264	264	276
C-Closed		6.19	6.19	6.19	6.19	7.81	9.53	9.53	9.81
		157	157	157	157	198	242	242	249
D-Seat Diameter		.50	.50	.50	.50	.75	1.28	1.28	1.53
		12.7	12.7	12.7	12.7	19.1	32.5	32.5	38.9
E-Handwheel Diameter		4.00	4.00	4.00	4.00	4.75	5.75	5.75	7.00
		102	102	102	102	121	146	146	178
Weight		3.6	3.6	3.6	4.0	7.6	15.3	15.1	23.8
		1.6	1.6	1.6	1.8	3.4	6.9	6.9	10.8

Refer to pages 116-120 for full materials description.

For Cv factors see Page 123, Valve Matrix J.

Forged "Y" Pattern Globe Valves

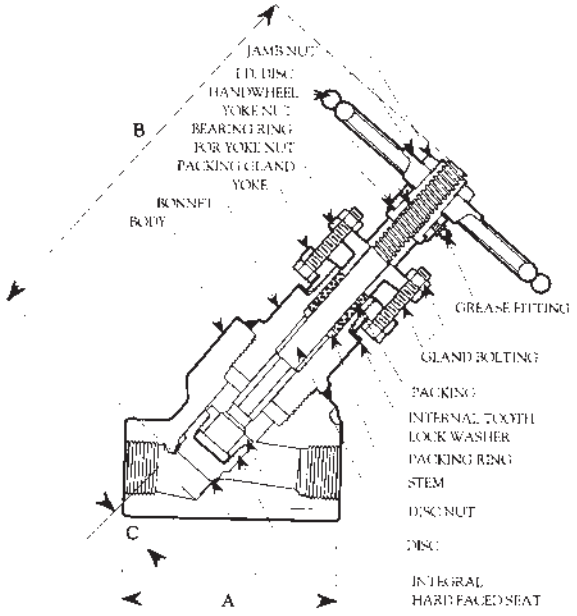
Class 800 (PN 130)

Full Port

2000 PSI @ 100°F (137.9 BAR @ 38°C)

For other ratings see pgs. 112-115

Series Number		
Body/Bonnet	Threaded	Socket Weld
A105	**810**	**SW810** **Trim: 13% Cr.** **Disc/Seat: HF**
F11 Cl. 2 **(1-1/4% Cr.)**	**811**	**SW811** **Trim: 13% Cr.** **Disc/Seat: HF**
F22 Cl. 3 **(2-1/4% Cr.)**	**822**	**SW822** **Trim: 13% Cr.** **Disc/Seat: HF**



Class 800 Y Pattern Globe Valve

- Seal Welded Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Removable Yoke/Operating Mechanism
- Gate Valve Operating Mechanism
- Repackable with Endless Packing Rings
- Loose Hard Faced Disc
- Integral Hard Faced Seat
- ASME B16.34 LTD Pressure Class

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		4.00	4.00	5.12	7.50	7.50
		102	102	130	190	190
B-Center-to-Top		9.12	9.12	10.44	14.27	14.27
		232	232	265	362	362
C-Seat Diameter		.75	.75	1.12	2.00	2.00
		217	217	28	51	51
E-Handwheel Diameter		5.75	5.75	7.00	12.00	12.00
		146	146	178	305	305
Weight		8.0	8.0	12.0	33.0	32.0
		3.6	3.6	5.4	15.0	14.5

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix TT.

Forged Globe Valves

Class 800 (PN 130)

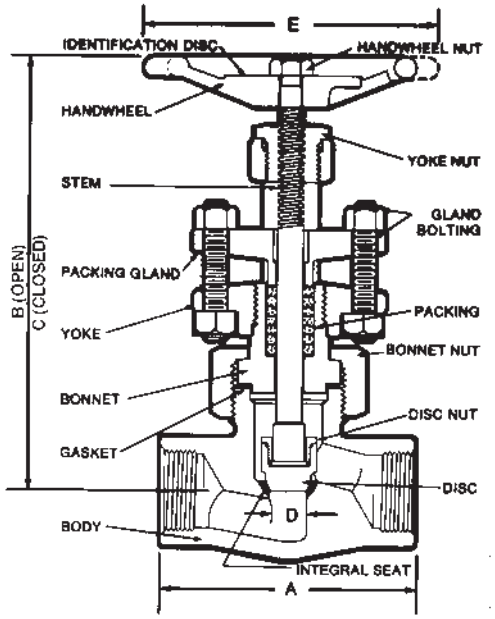
Conventional Port

1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
801	**SW801**
	Trim: 13% Cr.
	Seat: HF



- Union Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size / NPS / DN	1/4 8	3/8 10	1/2 15	3/4 20	1 25	1-1/4 32	1-1/2 40	2 50
A-End-to-End	3.25 83	3.25 83	3.25 83	3.50 89	4.62 117	6.25 159	6.25 159	7.75 197
B-Open	6.62 168	6.62 168	6.62 168	6.62 168	8.50 216	10.44 265	10.44 265	10.88 276
C-Closed	6.19 157	6.19 157	6.19 157	6.19 157	7.78 198	9.56 243	9.56 243	9.88 251
D-Seat Diameter	.50 12.7	.50 12.7	.50 12.7	.50 12.7	.75 19.1	1.28 32.5	1.28 32.5	1.53 38.9
E-Handwheel Diameter	4.00 102	4.00 102	4.00 102	4.00 102	4.75 121	5.75 146	5.75 146	7.00 178
Weight	4.1 1.9	4.1 1.9	4.1 1.9	4.3 2.0	8.4 3.8	18.3 8.3	17.7 8.0	28.3 12.8

Refer to pages 116-120 for full materials description.

For Cv factors see Page 123, Valve Matrix J.

Forged Globe Valves

Class 800 (PN 130)

Conventional Port

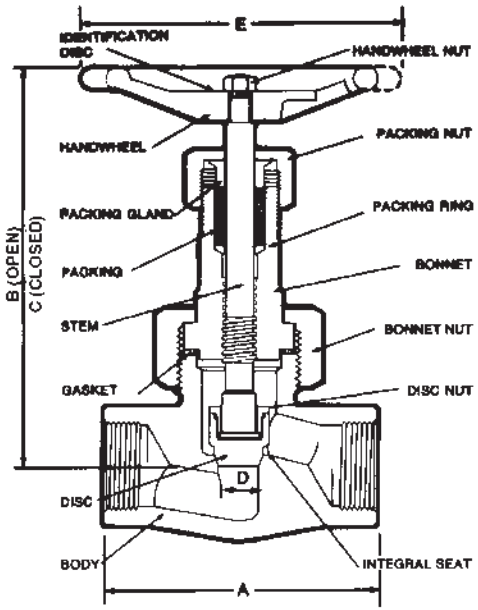
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
851	**SW851**
	Trim: 13% Cr.
	Seat: HF



- Union Bonnet
- Spiral Wound Gasket
- Inside Screw Stem
- Screw Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50
A-End-to-End		3.25	3.25	3.25	3.50	4.62	6.25	6.25	7.75
		83	83	83	89	117	159	159	197
B-Open		6.31	6.31	6.31	6.31	7.93	10.25	10.25	11.41
		160	160	160	160	201	260	260	290
C-Closed		5.88	5.88	5.88	5.88	7.28	9.38	9.38	10.44
		149	149	149	149	185	238	238	265
D-Seat Diameter		.50	.50	.50	.50	.75	1.28	1.28	1.53
		12.7	12.7	12.7	12.7	19.1	32.5	32.5	38.9
E-Handwheel Diameter		4.00	4.00	4.00	4.00	4.75	5.75	5.75	7.00
		102	102	102	102	121	146	146	178
Weight		3.9	3.9	3.9	4.1	8.0	17.7	17.1	29.7
		1.8	1.8	1.8	1.9	3.6	8.0	7.8	13.5

Refer to pages 116-120 for full materials description.

For Cv factors see Page 123, Valve Matrix J.

Forged Globe Valves

Class 800 (PN 130)

Conventional Port

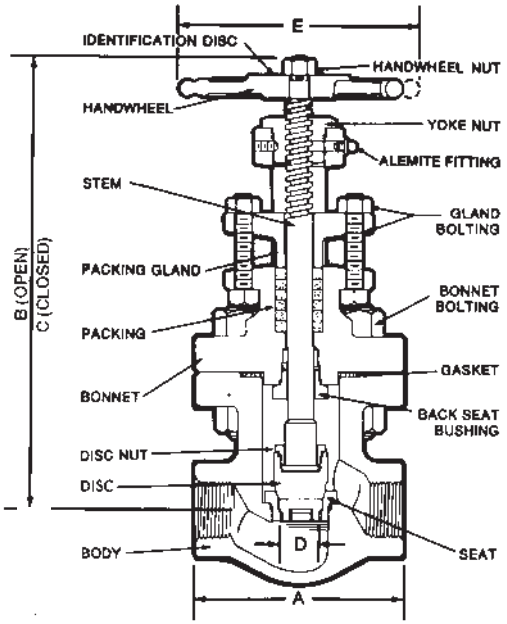
1975 PSI @ 100°F (136.2 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
10103	**SW10103**
	Trim: 13% Cr.

Meets API-600 required wall thicknesses.



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Renewable Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size / NPS / DN	1/2 15	3/4 20	1 25	1-1/4 32	1-1/2 40	2 50	2-1/2 65	3 80
A-End-to-End	3.62 92	4.50 114	5.00 127	6.50 165	7.25 184	9.00 229	10.25 260	13.00 330
B-Open	9.62 244	10.81 275	11.75 298	14.06 357	16.00 406	18.06 458	20.81 529	22.25 565
C-Closed	9.25 235	10.31 262	11.19 284	13.50 343	15.06 383	17.12 435	19.62 498	21.00 533
D-Seat Diameter	.50 12.7	.72 18.3	.97 24.6	1.19 30.2	1.44 36.6	1.88 47.8	2.22 56.4	2.81 71.4
E-Handwheel Diameter	4.75 121	5.75 146	7.00 178	8.00 203	9.75 248	9.75 248	12.00 305	13.75 349
Weight	12.6 5.7	19.3 8.8	28.8 13.1	40.0 18.2	57.1 25.9	85.9 39.0	128. 58.1	188. 85.4

Refer to pages 116-120 for full materials description.

For Cv factors see Page 123, Valve Matrix M.

Forged Globe Valves

Class 1500 (PN 260)

Full Port

3705 PSI @ 100°F (255.5 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

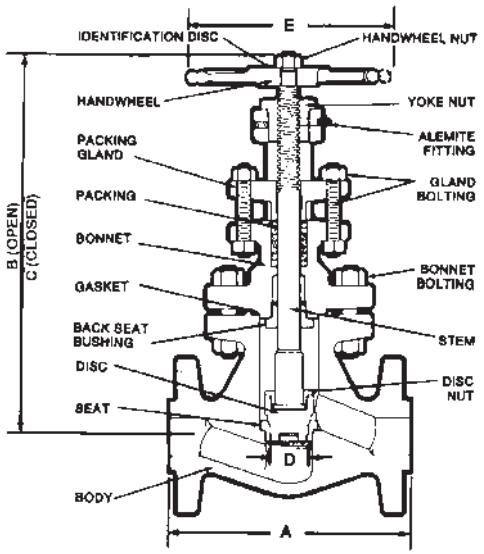
Series Number

10603 **Trim: 13% Cr.**

RING JOINT FACES

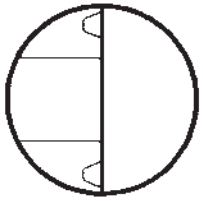
10683 **Trim: 13% Cr.**

Meets API-600 required wall thicknesses.



Flanged Ends 1/4" R.F.

- Round Bolted Bonnet
- Flat Gasket Joint & Ring Gasket Joint
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Renewable Seat
- ASME B16.34



Ring Joint Faces

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/4	1-1/2	2
	DN	15	20	25	32	40	50
A-End-to-End		8.50	9.00	10.00	11.00	12.00	14.50
		216	229	254	279	305	368
B-Open		13.12	15.00	16.12	17.31	19.75	23.00
		333	381	409	440	502	584
C-Closed		12.12	14.38	15.31	16.69	18.75	22.12
		308	365	389	424	476	562
D-Seat Diameter		.50	.72	.97	1.19	1.50	1.88
		12.7	18.3	24.6	30.2	38.1	47.8
E-Handwheel Diameter		7.00	7.00	8.00	9.75	12.00	13.75
		178	178	203	248	305	349
Weight		48.2	60.2	78.0	93.5	119.3	230
		21.9	27.3	35.4	42.4	54.2	104.4

Valve flanges conform to ASME Standard B16.5 and end-to-end dimensions conform to ASME Standard B16.10.

For Cv factors see page 123, Valve Matrix V.
Refer to pages 116-120 for full materials description.

Forged Globe Valves

Class 1500 (PN 260)

Full Port

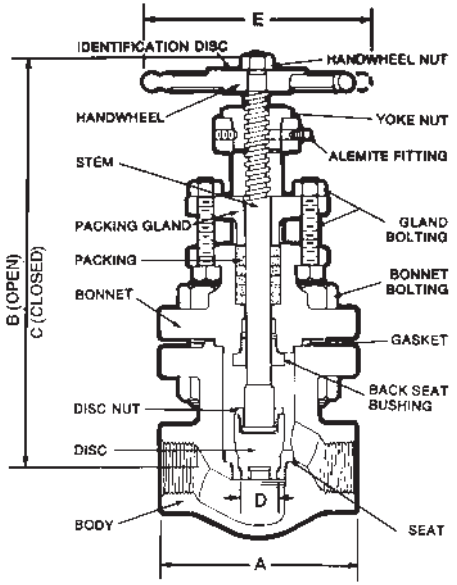
3705 PSI @ 100°F (255.5 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
1023	**SW1023** **Trim: 13% Cr.**
1003	**SW1003** Ring Joint Gasket Bonnet (Not illustrated) **Trim: 13% Cr.**

Meets API-600 required wall thicknesses.



- Round Bolted Bonnet
- Flat Gasket Joint & Ring Gasket Joint
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Renewable Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS DN	1/2 15	3/4 20	1 25	1-1/4 32	1-1/2 40	2 50
A-End-to-End		4.50 114	5.00 127	6.50 165	7.25 184	9.00 229	9.50 241
B-Open		11.62 295	12.19 328	14.56 370	15.89 404	18.12 460	20.19 513
C-Closed		10.91 277	11.38 289	13.50 343	15.09 383	17.25 438	19.19 487
D-Seat Diameter		.50 12.7	.72 18.3	.97 24.6	1.19 30.2	1.44 36.6	1.88 478
E-Handwheel Diameter		5.75 146	7.00 178	8.00 203	9.75 248	9.75 248	12.00 305
Weight		21.6 9.8	29.6 13.4	44.6 20.2	62.8 28.5	98.3 44.6	114.7 52.1

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix V.

Forged Globe Valves

Class 1500 (PN 260)

Conventional Port

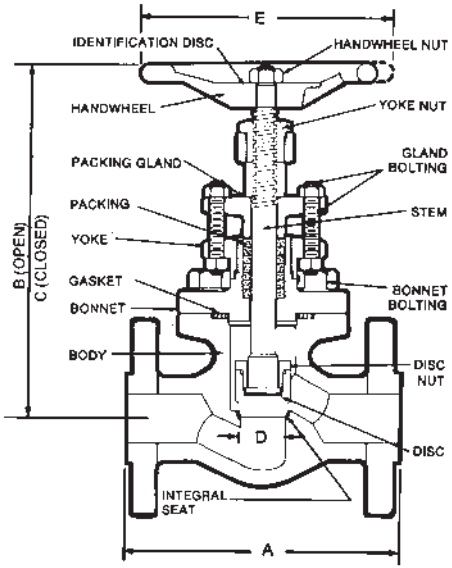
3705 PSI @ 100°F (255.5 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
15493	**Trim: 13% Cr.** **Seat: HF**
15493F8M	**Trim: 316** **Seat: HF**
15493MM	**Trim: Monel** **Seat: HF**
15493FHF	**Trim: 13% Cr.** **Disc/Seat: HF**
15493MB8	**Trim: 316** **Disc/Seat: HF**
15493MBS	**Trim: Monel** **Seat: HF**
15493MB6	**Trim: 13% Cr.** **Disc/Seat: HF**

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE



Flanged Ends 1/4" R.F.

- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS DN	1/2 15	3/4 20	1 25	1-1/2 40	2 50
A-End-to-End		8.50 216	9.00 229	10.00 254	12.00 305	14.50 368
B-Open		7.88 200	7.88 200	10.12 257	10.97 279	13.31 338
C-Closed		7.41 188	7.41 188	9.50 241	10.41 264	12.50 318
D-Seat Diameter		.50 12.7	.50 12.7	.75 19.1	1.12 28.4	1.38 35.1
E-Handwheel Diameter		4.75 121	4.75 121	7.00 178	8.00 203	9.75 248
Weight		18.6 8.4	18.9 8.6	37.2 16.9	55.0 25.0	111.8 50.8

Valve flanges conform to ASME Standard B16.5 and end-to-end dimensions conform to ASME Standard B16.10.

For Cv factors see page 123, Valve Matrix U.
Refer to pages 116-120 for full materials description.

Forged Globe Valves

Class 1500 (PN 260)

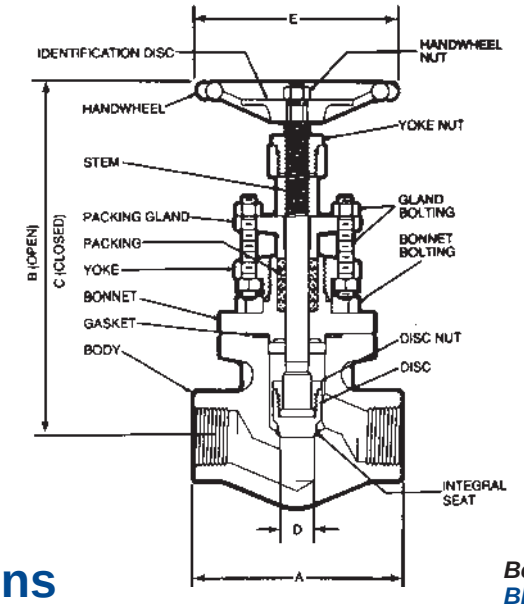
Conventional Port

3705 PSI @ 100°F (255.5 BAR @ 38°C)

For other ratings see pgs. 112-115

	Series Number	
Body/Bonnet		
A105	**15141**	**SW15141** **Trim: 13% Cr.** **Seat: HF**
	15141FHF	**SW15141FHF** **Trim: 13% Cr.** **Disc/Seat: HF**
	15141F8M	**SW15141F8M** **Trim: 316** **Seat: HF**
	15141MB8	**SW15141MB8** **Trim: 316** **Disc/Seat: HF**
	15141MBS	**SW15141MBS** **Trim: Monel** **Seat: HF**
	15141MB6	**SW15141MB6** **Trim: 13% Cr.** **Disc/Seat: HF**
	15141MM	**SW15141MM** **Trim: Monel** **Seat: HF**
F316/F316L	**3600 PSI @ 100°F (248.3 BAR @ 38°C)**	
	15501	**SW15501** **Trim: 316**
	15501FHF	**SW15501FHF** **Trim: 316** **Disc/Seat: HF**
F11, Cl. 2 **(1 1/4 Cr.)**	**3750 PSI @ 100°F (258.6 BAR @ 38°C)**	
	15351	**SW15351** **Trim: 13% Cr.** **Disc/Seat: HF**

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS DN	1/2 15	3/4 20	1 25	1-1/4 32	1-1/2 40	2 50
A-End-to-End		4.50 114	4.50 114	6.25 159	7.75 197	7.75 197	9.00 229
B-Open		7.88 200	7.88 200	10.12 257	10.97 279	10.97 279	13.31 338
C-Closed		7.41 188	7.41 188	9.50 241	10.41 264	10.41 264	12.50 318
D-Seat Diameter		.50 12.7	.50 12.7	.75 19.1	1.12 28.4	1.12 28.4	1.38 35.1
E-Handwheel Diameter		4.75 121	4.75 121	7.00 178	8.00 203	8.00 203	9.75 248
Weight		9.8 4.4	9.4 4.3	20.5 9.3	35.2 16.0	34.5 15.7	61.8 28.1

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix U.

Forged Globe Valves – For Flow Control Service

Class 1500 (PN 260)

Conventional Port

3705 PSI @ 100°F (255.5 BAR @ 38°C)

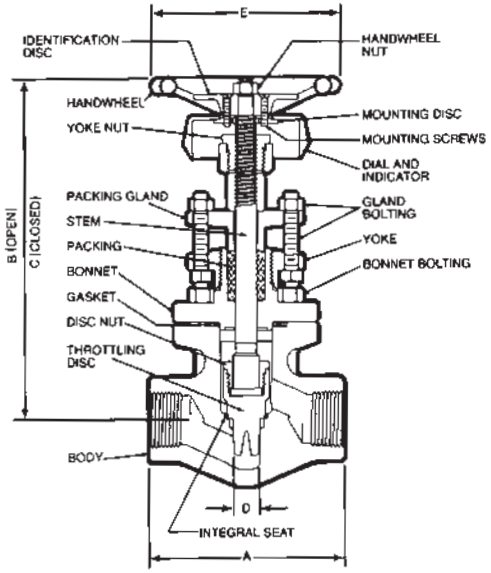
For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
15443	**SW15443** **Trim: 13% Cr.** **Seat: HF**

Size	Cv Factor	(Approx.) No. of Turns
1/2	1.46	3
3/4	2.38	4-1/2
1	4.54	5
1-1/2	11.50	5-1/4
2	13.00	6-1/2



- Round Bolted Bonnet
- Spiral Wound Gasket
- Outside Screw & Yoke
- Bolted Gland
- Loose V-Port Disc
- Integral Hard Faced Seat
- Dial & Indicator
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		4.50 114	4.50 114	6.25 159	7.75 197	9.00 229
B-Open		7.88 200	7.88 200	10.12 257	11.00 279	13.31 338
C-Closed		7.47 190	7.47 190	9.62 244	10.34 263	12.50 318
D-Seat Diameter		.44 11.2	.44 11.2	.62 15.7	.94 23.9	1.03 26.2
E-Handwheel Diameter		4.75 121	4.75 121	7.00 178	8.00 203	9.75 248
Weight		10.8 4.9	10.4 4.7	21.5 9.8	35.5 16.1	62.8 28.5

Refer to pages 116-120 for full materials description.

Forged Globe Valves

Class 1500 (PN 260)

Conventional Port

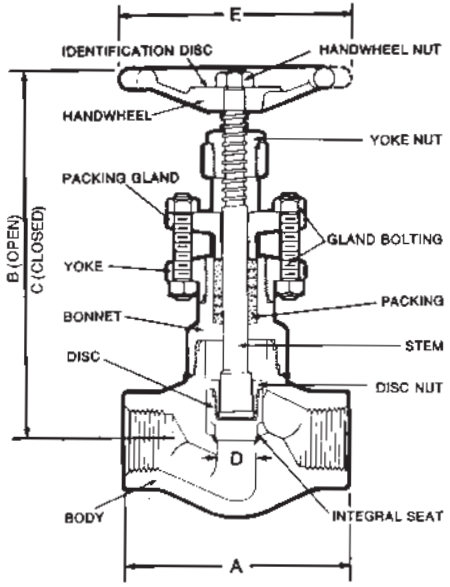
3705 PSI @ 100°F (255.5 BAR @ 38°C)

For other ratings see pgs. 112-115

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
15821	**SW15821** **Trim: 13% Cr.** **Seat: HF**
15821F8M	**SW15821F8M** **Trim: 316** **Seat: HF**
15821FHF	**SW15821FHF** **Trim: 13% Cr.** **Disc/Seat: HF**
15821MM	**SW15821MM** **Trim: Monel** **Seat: HF**
15821MB8	**SW15821MB8** **Trim: 316** **Disc/Seat: HF**
15821MBS	**SW15821MBS** **Trim: Monel** **Seat: HF**
15821MB6	**SW15821MB6** **Trim: 13CR** **Disc/Seat: HF**

MATERIALS MEET REQUIREMENTS OF NACE STANDARD MR-01-75 FOR SOUR SERVICE



- Welded Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Disc
- Integral Hard Faced Seat
- ASME B16.34

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/4	1-1/2	2
	DN	15	20	25	32	40	50
A-End-to-End		4.50	4.50	6.25	7.75	7.75	9.00
		114	114	159	197	197	229
B-Open		7.88	7.88	10.12	11.12	11.12	13.31
		200	200	257	282	282	338
C-Closed		7.41	7.41	9.50	10.41	10.41	12.50
		188	188	241	264	264	318
D-Seat Diameter		.50	.50	.75	1.12	1.12	1.38
		12.7	12.7	19.1	28.4	28.4	35.1
E-Handwheel Diameter		4.75	4.75	7.00	8.00	8.00	9.75
		121	121	178	203	203	248
Weight		8.8	8.4	18.0	26.7	26.0	49.0
		4.0	3.8	8.2	12.1	11.8	22.2

Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix U.

Forged "Y" Pattern Globe Valves

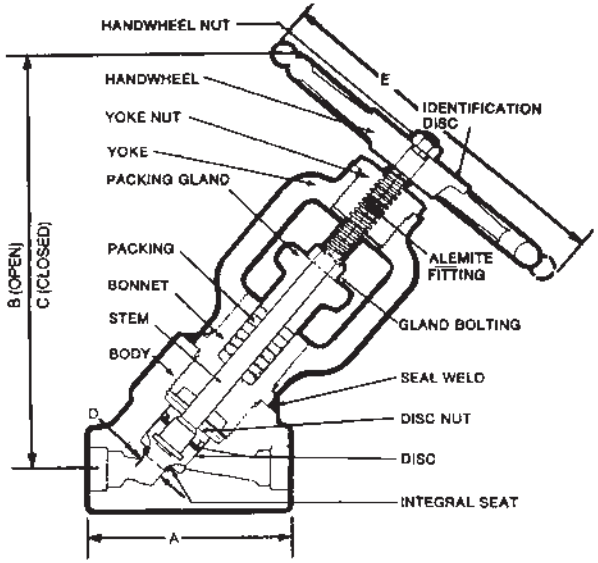
Class 1690 (PN 290)

Conventional Port

4225 PSI @ 100°F (291.4 BAR @ 38°C)

For other ratings see pgs. 112-115

Body/Bonnet	Series Number: Threaded	Socket Weld
A105	**1510**	**SW1510** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F11 Cl. 2 (1-1/4% Cr.)	**1511**	**SW1511** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F22 Cl. 3 (2-1/4% Cr.)	**1522**	**SW1522** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**



- Welded Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Stellite Disc
- Integral Hard Faced Seat
- ASME B16.34 LTD Pressure Class

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS / DN	1/2 15	3/4 20	1 25	1-1/2 40	2 50
A-End-to-End		**4.00** **102**	**4.00** **102**	**5.12** **130**	**7.50** 190	**7.50** **190**
B-Open		**9.06** **230**	**9.06** **230**	**11.00** **279**	**16.38** 416	**16.38** **416**
C-Closed		**8.56** **217**	**8.56** **217**	**10.28** **261**	**14.88** 378	**14.88** **378**
D-Seat Diameter		**.50** **12.7**	**.50** **12.7**	**.75** **19.1**	**1.53** 38.9	**1.53** **38.9**
E-Handwheel Diameter		**7.00** **178**	**7.00** **178**	**9.75** **248**	**12.00*** 305	**12.00*** **305**
Weight		**9.1** **4.1**	**9.0** **4.1**	**18.1** **8.2**	**42.0** 19.1	**40.8** **18.5**

*1-1/2" & 2" sizes have impactor handwheels.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix X.

Forged Globe Valves

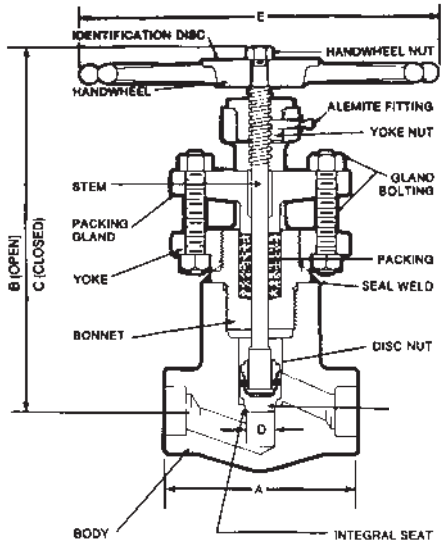
Class 2500 (PN 420)

Full Port

6250 PSI @ 100°F (431.0 BAR @ 38°C)

For other ratings see pgs. 112-115

	Series Number	
Body/Bonnet	Threaded	Socket Weld
A105	**66723**	**SW66723** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F11 Cl. 2 (1-1/4% Cr.)	**66733**	**SW66733** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F22 Cl. 3 (2-1/4% Cr.)	**66793**	**SW66793** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**



- Welded Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Stellite Disc
- Integral Hard Faced Seat
- ASME B16.34 LTD Pressure Class

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		4.00	5.12	5.12	8.50	8.50
		102	130	130	216	216
B-Open		9.06	10.94	10.94	16.50	16.50
		230	278	278	419	419
C-Closed		8.56	10.25	10.25	15.50	15.50
		217	261	261	394	394
D-Seat Diameter		.50	.75	.75	1.53	1.53
		12.7	19.1	19.1	38.9	38.9
E-Handwheel Diameter		7.00	9.75	9.75	12.00*	12.00*
		178	248	248	305	305
Weight		9.0	22.6	22.2	68.7	68.8
		4.1	10.3	10.1	31.2	31.2

*1-1/2" & 2" sizes have impactor handwheels.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix Y.

Forged "Y" Pattern Repairable Globe Valves

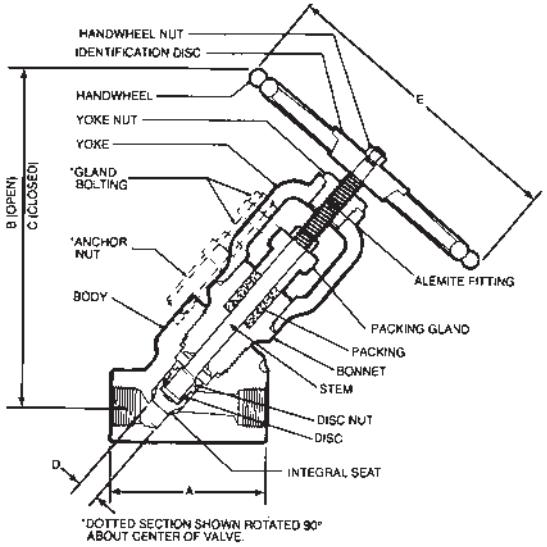
Class 1690 (PN 290)

Conventional Port

SW: 4225PSI @ 100°F (291.4 BAR @ 38°C)

For other ratings see pgs. 112-115

	Series Number	
Body/Bonnet	Threaded*	Socket Weld*
A105	**R 1510**	**SWR 1510** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F11 Cl. 2 (1-1/4% Cr.)	**R 1511**	**SWR 1511** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F22 Cl. 3 (2-1/4% Cr.)	**R 1522**	**SWR 1522** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**



- Inline Repairable
- Screw Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Stellite Disc
- Integral Hard Faced Seat
- ASME B16.34 LTD Pressure Class

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS DN	1/2 15	3/4 20	1 25	1-1/2 40	2 50
A-End-to-End		**5.12** **130**	**5.12** **130**	**5.12** **130**	**7.50** **190**	**7.50** **190**
B-Open		**11.60** **295**	**11.60** **295**	**11.60** **295**	**17.75** **451**	**17.75** **451**
C-Closed		**10.97** **279**	**10.97** **279**	**10.97** **279**	**16.50** **419**	**16.50** **419**
D-Seat Diameter		**.75** **19.1**	**.75** **19.1**	**.75** **19.1**	**1.53** **38.9**	**1.53** **38.9**
E-Handwheel Diameter		**9.75** **248**	**9.75** **248**	**9.75** **248**	**12.00*** **305**	**12.00*** **305**
Weight		**19.6** **8.9**	**19.5** **8.9**	**19.5** **8.9**	**42.0** **19.1**	**40.8** **18.5**

*1-1/2" & 2" sizes have impactor handwheels.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix Z-R.

Forged "Y" Pattern Globe Valves

Class 2680 (PN 460)

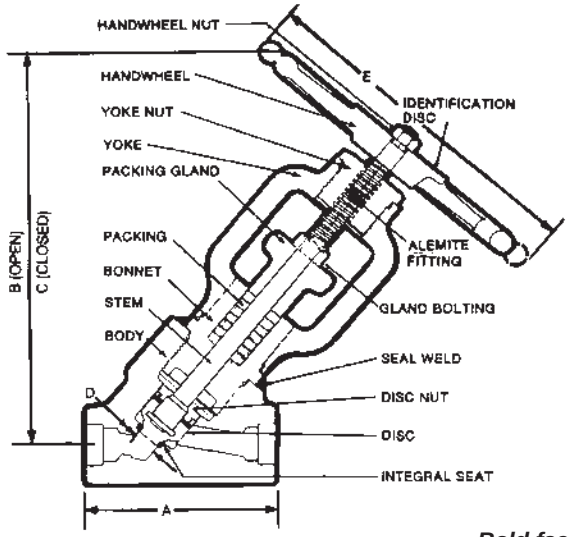
Full Port

SW: 6700 PSI @ 100°F (462.1 BAR @ 38°C)
THD: 6250 PSI @ 100°F (431.0 BAR @ 38°C)*

For other ratings see pgs. 112-115

	Series Number	
Body/Bonnet	Threaded*	Socket Weld
A105	**2510**	**SW2510** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F11 Cl. 2 **(1-1/4% Cr.)**	**2511**	**SW2511** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F22 Cl. 3 **(2-1/4% Cr.)**	**2522**	**SW2522** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**

Threaded valves limited to Class 2500 Applications under ASME B16.34. See 2500 LTD Class Press/Temp tables, pages 112-115.



- Welded Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Stellite Disc
- Integral Hard Faced Seat
- ASME B16.34 LTD Pressure Class

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/2	3/4	1	1-1/2	2
	DN	15	20	25	40	50
A-End-to-End		4.00 102	5.12 130	5.12 130	8.25 210	8.25 210
B-Open		9.06 230	11.00 279	11.00 279	16.94 430	16.94 430
C-Closed		8.56 217	10.28 261	10.28 261	15.56 395	15.56 395
D-Seat Diameter		.50 12.7	.75 19.1	.75 19.1	1.53 38.9	1.53 38.9
E-Handwheel Diameter		7.00 178	9.75 248	9.75 248	12.00* 305	12.00* 305
Weight		9.1 4.1	19.0 8.6	19.0 8.6	65.1 29.6	62.0 28.1

*1-1/2" & 2" sizes have impactor handwheels.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix Z.

Forged "Y" Pattern Repairable Globe Valves

Class 2680 (PN 460)

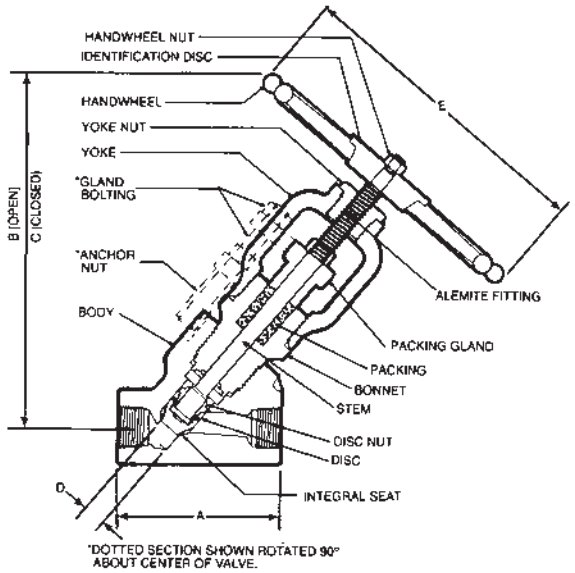
Full Port

SW: 6700 PSI @ 100°F (462.1 BAR @ 38°C)
THD: 6250 PSI @ 100°F (431.0 BAR @ 38°C)

For other ratings see pgs. 112-115

	Series Number	
Body/Bonnet	Threaded*	Socket Weld*
A105	**R 2510**	**SWR 2510** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F11, Cl. 2 (1-1/4% Cr.)	**R 2511**	**SWR 2511** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**
F22, Cl. 3 (2-1/4% Cr.)	**R 2522**	**SWR 2522** **Trim: 13% Cr.** **Disc/Seat: HF (Solid Stellite Disc)**

Threaded valves limited to Class 2500 Applications under ASME B16.34. See 2500 LTD Class Press/Temp tables, pages 112 -115.



- Inline Repairable
- Screw Bonnet
- Outside Screw & Yoke
- Bolted Gland
- Loose Solid Stellite Disc
- Integral Hard Faced Seat
- ASME B16.34 LTD Pressure Class

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS	1/2	3/4	1	1-1/2	2
DN	15	20	25	40	50
A-End-to-End	5.12 130	5.12 130	5.12 130	8.25 208	8.25 208
B-Open	11.60 295	11.60 295	11.60 295	17.88 454	17.88 454
C-Closed	10.97 279	10.97 279	10.97 279	16.50 419	16.50 419
D-Seat Diameter	.75 19.1	.75 19.1	.75 19.1	1.53 38.9	1.53 38.9
E-Handwheel Diameter	9.75 248	9.75 248	9.75 248	12.00* 305	12.00* 305
Weight	19.6 8.9	19.5 8.9	19.5 8.9	62.6 28.4	62.5 28.4

*1-1/2" & 2" sizes have impactor handwheels.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix Z-R.

Forged Globe Valves – For Air, Water & Oil Service

Type 3000

Conventional Port

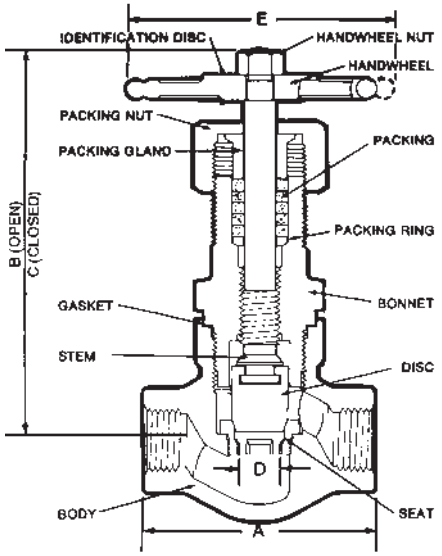
3000 PSI @ 100°F (206.9 BAR @ 38°C)

NON-SHOCK PRESSURE
TEMPERATURE NOT TO EXCEED 450°F

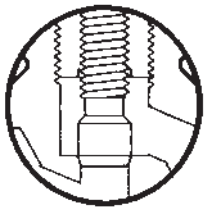
A105 Body/Bonnet

Series Number

Threaded	Socket Weld
1871T+	**SW1871T+**
Plug Type Disc	**Trim: 13% Cr.**
Not recommended for steam service.	
1331T✯+	**SW1331T✯+**
	Trim: A105
Not recommended for steam or dry gas service.	



- Screw Bonnet
- Flat Gasket
- Inside Screw Stem
- Loose Plug Type Disc or Plug Stem✯
- Renewable Seat or Integral Seat✯



Plug Stem✯

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	Series 1871T								Series 1331T							
		1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
	DN	8	10	15	20	25	32	40	50	8	10	15	20	25	32	40	50
A-End-to-End		3.12	3.12	3.38	4.00	5.00	6.25	6.75	8.25	3.12	3.12	3.38	4.00	5.00	6.25	6.75	8.25
		79	79	86	102	127	159	171	210	79	79	86	102	127	159	171	210
B-Open		6.25	6.25	6.81	8.06	9.12	10.06	10.38	12.25	6.06	6.06	6.88	7.50	8.44	9.06	10.75	11.12
		159	159	173	205	232	256	264	311	154	154	175	190	214	230	273	282
C-Closed		5.88	5.88	6.50	7.56	8.69	9.44	9.81	11.50	5.50	5.50	6.38	7.00	7.75	8.50	9.69	10.12
		149	149	165	192	221	240	249	292	140	140	162	178	197	216	246	257
D-Seat Diameter		.39	.39	.39	.50	.72	.97	1.19	1.44	.50	.50	.56	.56	.81	1.06	1.28	1.53
		9.9	9.9	9.9	12.7	18.3	24.6	30.2	36.6	12.7	12.7	14.2	14.2	20.6	26.9	32.5	38.9
E-Handwheel Diameter		3.25	3.25	4.00	4.75	5.75	7.00	8.00	9.75	3.25	3.25	4.00	4.75	5.75	7.00	8.00	9.75
		83	83	102	121	146	178	203	248	83	83	102	121	146	178	203	248
Weight		3.2	3.2	5.0	8.8	13.0	20.7	28.8	44.3	3.2	3.2	5.1	8.4	12.4	19.0	23.8	42.9
		1.5	1.5	2.3	4.0	5.9	9.4	13.1	20.1	1.5	1.5	2.3	3.8	5.6	8.6	10.8	19.5

+ Valves contain TEFLON—maximum temperature 450°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix AA.

Forged Angle Valves – For Air, Water & Oil Service

Type 3000

Conventional Port

3000 PSI @ 100°F (206.9 BAR @ 38°C)

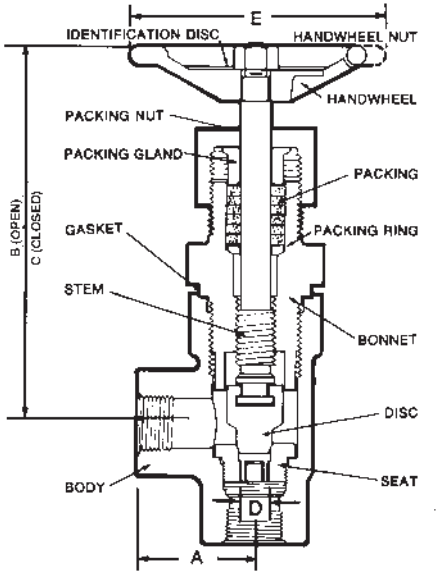
NON-SHOCK PRESSURE
TEMPERATURE NOT TO EXCEED 450°F

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
2891T+	**SW2891T+**
	Trim: 13% Cr.

Not recommended for steam service.



- Screw Bonnet
- Flat Gasket Joint
- Inside Screw Stem
- Screw Gland
- Loose Plug Type Disc
- Renewable Seat

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS	1/2	3/4	1	1-1/4	1-1/2	2
DN	15	20	25	32	40	50
A-End-to-End	1.88	2.19	2.50	3.00	3.38	4.12
	48	56	64	76	86	105
B-Open	6.22	7.56	8.50	9.22	10.12	10.50
	158	192	216	234	257	267
C-Closed	5.88	7.06	7.97	8.53	9.44	9.75
	149	179	202	217	240	248
D-Seat Diameter	.50	.50	.72	.97	1.19	1.44
	12.7	12.7	18.3	24.6	30.2	36.6
E-Handwheel Diameter	4.00	4.75	5.75	7.00	8.00	9.75
	102	121	146	178	203	248
Weight	4.7	8.0	11.4	16.5	25.0	35.2
	2.1	3.6	5.2	7.5	11.4	16.0

+Valves contain TEFLON—maximum temperature 450°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix BB.

Forged Globe Valves – For Meter & Gauge Line Service

Type 4000

Conventional Port

4000 PSI @ 100°F (275.9 BAR @ 38°C)

NON-SHOCK PRESSURE

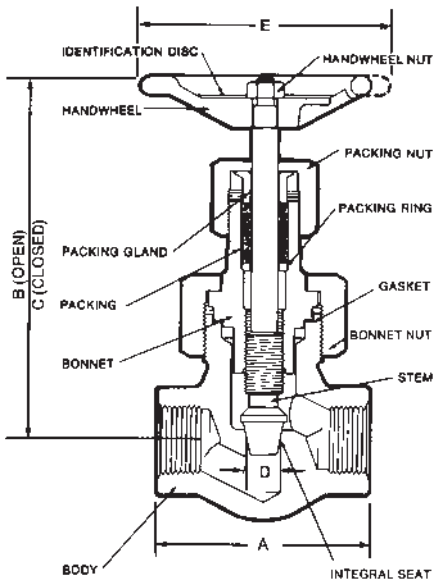
TEMPERATURE NOT TO EXCEED 450°F

A105 Body/Bonnet

Series Number

Threaded	Socket Weld
58431T+	**SW58431T+**
	Trim: 13% Cr.

Not recommended for steam or dry gas service.



- Union Bonnet
- Flat Gasket Joint
- Inside Screw Stem
- Screw Gland
- Needle Point Control
- MSS-SP-99

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size	NPS	1/4	3/8	1/2	3/4	1
	DN	8	10	15	20	25
A-End-to-End		2.75	2.75	2.75	3.38	4.00
		70	70	70	86	102
B-Open		5.34	5.34	5.38	6.88	7.75
		136	136	137	175	197
C-Closed		4.97	4.97	5.00	6.25	7.00
		124	124	127	159	178
D-Seat Diameter		.31	.31	.38	.50	.62
		7.9	7.9	9.7	12.7	15.7
E-Handwheel Diameter		3.25	3.25	3.25	4.00	4.75
		83	83	83	102	121
Weight		2.0	1.8	2.9	5.9	8.8
		.90	.80	1.3	2.7	4.0

+Valves contain TEFLON—maximum temperature 450°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix CC.

Forged Globe & Angle Valves – For Meter & Gauge Line Service

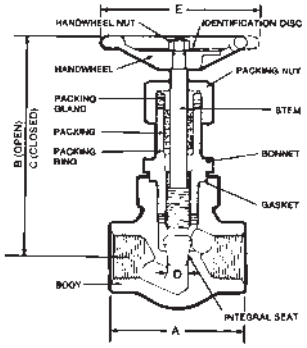
Type 5000

Conventional Port

5000 PSI @ 100°F (344.8 BAR @ 38°C)
Temperature not to exceed 450°F

Series Number		
Body/Bonnet	Threaded	Socket Weld
A105	**9871T+**	**SW9871T+**
		Trim: 13% Cr.
F316/F316L	**9821T+**	**SW9821T+**
		(Sizes 1/4 - 1)
		Trim: 13% Cr.

Not recommended for steam or dry gas service.



- Screw Bonnet
- Flat Gasket Joint
- Inside Screw Stem
- Screw Gland
- Needle Point Control
- MSS-SP-99*

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size NPS / DN	1/4 8	3/8 10	1/2 15	3/4 20	1 25	1-1/4 40	1-1/2 40	2 50
A-End-to-End	2.75 70	2.75 70	2.75 70	3.38 86	4.00 102	4.75 121	6.25 159	7.75 197
B-Open	5.31 135	5.31 135	5.25 134	6.75 171	7.75 197	9.00 229	9.81 249	11.12 282
C-Closed	4.97 126	4.97 126	5.00 127	6.25 159	7.00 178	8.19 208	8.94 227	10.06 256
D-Seat Diameter	.31 7.9	.31 7.9	.38 9.7	.50 12.7	.62 15.7	.75 19.0	1.00 25.4	1.25 31.8
E-Handwheel Diameter	3.25 83	3.25 83	3.25 83	4.00 102	4.75 121	5.75 146	7.00 178	8.00 203
Weight	1.8 .82	1.6 .72	2.6 1.9	5.0 2.2	7.3 3.4	13.2 6.0	19.0 8.6	28.6 13

*MSS-SP-99 not applicable for Sizes 1-1/4, 1-1/2 and 2.

For Cv factors see Page 123, Valve Matrix CC.

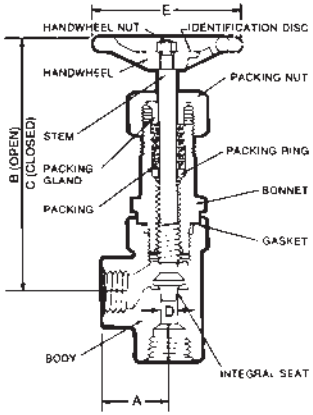
Angle Valve

Needle Point Port

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
9841T+	**SW9841T+**
	Trim: 13% Cr.

Not recommended for steam or dry gas service.



- Screw Bonnet
- Flat Gasket Joint
- Inside Screw Stem
- Screw Gland
- Needle Point Control
- MSS-SP-99

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size NPS / DN	1/4 8	3/8 10	1/2 15	3/4 20	1 25
A-End-to-End	1.38 35	1.38 35	1.38 35	1.69 43	2.00 51
B-Open	5.31 135	5.31 135	5.25 134	6.75 172	7.75 197
C-Closed	4.97 126	4.97 126	5.00 127	6.25 159	7.00 178
D-Seat Diameter	.31 7.9	.31 7.9	.38 9.6	.50 12.7	.62 15.9
E-Handwheel Diameter	3.25 83	3.25 83	3.25 83	4.00 102	4.75 121
Weight	1.8 .82	1.6 .72	2.5 1.1	4.7 2.1	6.8 3.1

+Valves contain TEFLON—maximum temperature 450°F.
Refer to pages 116-120 for full materials description.
For Cv factors see Page 123, Valve Matrix BB.

Forged Globe Valves – For Air, Water & Oil Service

Type 6000

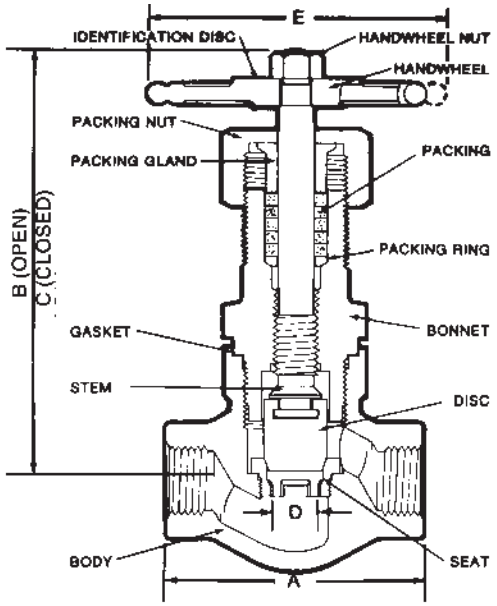
Full Port

6000 PSI @ 100°F (413.8 BAR @ 38°C)
NON-SHOCK PRESSURE
TEMPERATURE NOT TO EXCEED 450°F

A105 Body/Bonnet

Series Number	
Threaded	Socket Weld
3991T+	**SW3991T+**
	Trim: 13% Cr.

Not recommended for steam service.



- Screw Bonnet
- Flat Gasket Joint
- Inside Screw Stem
- Screw Gland
- Loose Plug Type Disc
- Renewable Seat

Dimensions

Bold face numerals are in inches and pounds.
Blue numerals are in millimeters and kilograms.

Size — NPS	1/2	3/4	1	1-1/4	1-1/2	2
DN	15	20	25	32	40	50
A-End-to-End	4.00	5.00	6.25	6.75	8.25	8.50
	102	127	159	171	210	216
B-Open	8.00	8.69	9.88	11.00	12.81	12.94
	203	221	251	279	325	329
C-Closed	7.62	8.25	9.31	10.44	12.00	12.19
	194	210	236	265	305	310
D-Seat Diameter	.39	.50	.72	.97	1.19	1.44
	9.9	12.7	18.3	24.6	30.2	36.6
E-Handwheel Diameter	4.75	5.75	7.00	8.00	9.75	12.00
	121	146	178	203	248	305
Weight	9.0	12.6	21.2	31.1	47.9	65.7
	1.9	5.7	9.6	14.1	21.7	29.8

+ Valves contain TEFLON—maximum temperature 450°F.
Refer to pages 116-120 for full materials description.

For Cv factors see page 123, Valve Matrix AA.

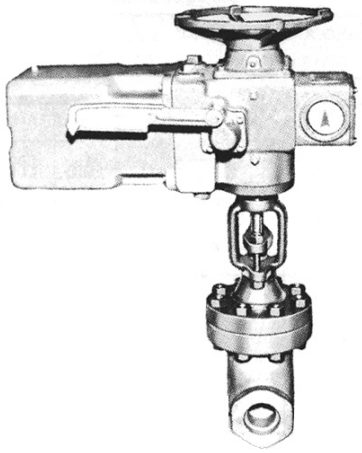
Auxiliary Operators

The superstructures of Vogt valves are FORGED RUGGED and lend themselves to the adaptation of Auxiliary Operators.

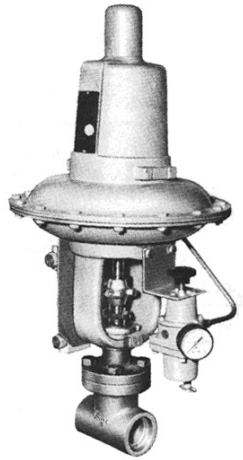
Any of the three types illustrated can generally be furnished and requests for quotations are invited.

Auxiliary Operators for Vogt valves are normally custom mounted in our plant where limit and torque switches, as applicable, can be set and valves tested to users specifications.

BEVEL GEAR OPERATED VALVE



MOTOR OPERATED VALVE



DIAPHRAGM OPERATED VALVE