SCV VALVE
Innovative Valve Solutions®

Geothermal Valves

THRU CONDUIT EXPANDING & SLAB GATE VALVES • WEDGE GATE VALVES



Keepin' it clean!

HARNESS EARTH'S ENERGY

SCV VALVE





SCV VALVE manufactures some of the most dependable cast steel API 6D Thru Conduit Slab and Expanding Gate Valves and API 600 Wedge Gates in the Geothermal industry. The Thru Conduit Slab & Expanding Gate and Wedge Gate are manufactured and tested in accordance with API standards all designs minimizes pressure drop and turbulence. The mechanical characteristics of the Thru Conduit Slab Gate, Expanding Gate and Wedge Gate valves are ideal for bi-directional "total flow system open/shut-off" applications to reduce silica scaling.

The SCV design offers many features and material options beneficial for geothermal applications, such as Inconel overlay, making it the most demanded Thru Conduit Gate on the market.

SCV is an API 6A, API 6D monogrammed facility located in Santa Fe, TX operating under the ISO 9001, SCV HSE & Q1 Quality Programs.

SCV Valve's product lines include commodity valves as well as specialty valves in all sizes, pressure classes & metallurgy; including carbon steel, stainless steel & exotic alloys. The valve types include:

- Thru Conduit Gates - Slab & Expanding Gate Designs
- 3-Piece Trunnion Mounted Balls
- Floating Balls
- Rising Stem Ball Valves
- Wedge Gates
- Full Port Swing Checks
- Piston Checks
- Lubricated Plugs

SCV Valve's high quality standards demand 100% pressure testing of every valve to insure its reliability and full customer satisfaction. We pride ourselves with high quality products, timely deliveries, and competitive prices.

Company History

SCV Valve was established in 2005. Since that time, SCV has continued to expand our product offerings to cover a broad range of applications and industries. Some of the markets we serve include power, petrochemical, crude oil, natural gas, and geothermal.
SCV Valve takes the utmost pride in our ability to manufacture both commodity and specialty valves that meet and exceed the needs of our customers. SCV carries a large inventory. All sizes, pressure classes, and metallurgical compositions are managed in house; utilizing the strictest quality control measures
to ensure the customer's total satisfaction.
With years of dedication, commitment to quality, design, and service, SCV Valve has become one of the premier valve manufacturers in the industry.



Mission Statement

SCV Valve is committed to consistently providing products that meet or exceed customer and regulatory specifications. SCV Valve is dedicated to enhancing customer satisfaction through implementating the highest levels of quality standards while assuring full conformity to those requirements.

Complete Product Line

Call SCV Valve today @ (281) 482-4728 for all your valve needs or visit us on the web @ www.scvvalve.com.

GEOTHERMAL THRU CONDUIT GATES - SLAB & EXPANDING

Design: API 6D
Sizes: 4" - 24"
Class: 150 - 900

GEOTHERMAL WEDGE GATES

Design: API 600
Sizes: 2" - 30"
Class: 150 - 900
Standard stock.



THRU CONDUIT GATES - SLAB & EXPANDING

Design: API 6D
Sizes: 2" - 42"
Class: 150 - 1500

Design: API 6A
Sizes: 9", 11" & 13-5/8"
Pressure: 2000, 3000, 5000



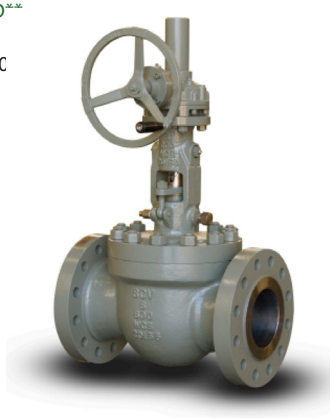
PISTON CHECKS

Design: API 6D*
Sizes: 2" - 24"
Class: 150 - 2500



Rising Stem Ball Valves

Design: API 6D**
Sizes: 2" - 18"
Class: 150 - 250



3-PIECE TRUNNION BALLS

Design: API 6D
Sizes: 2" - 42"
Class: 150 - 2500

BoreCoating:Scotchkote™134

Design: API 6A
Sizes: 2-1/16" - 7-1/6""
Pressure: 2000, 3000, 5000



FULL PORT SWING CHECKS

Design: API 6D
Sizes: 2" - 36"
Class: 150 - 2500



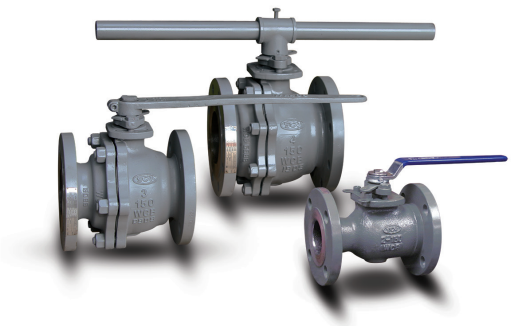
WEDGE GATES

Design: API 600
Sizes: 2" - 48"
Class: 150 - 2500



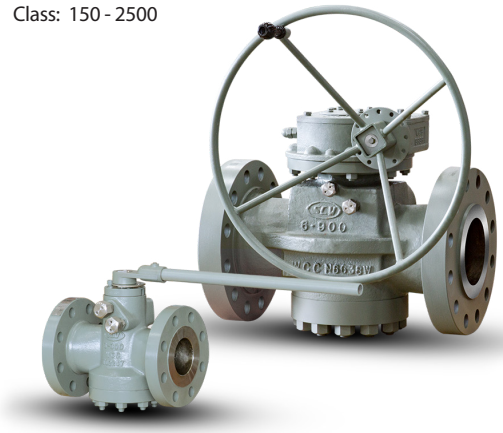
FLOATING BALL VALVES

Design: B16.34
Sizes: 1/2" - 12"
Class: 150 - 1500



PRESSURE BALANCED LUBRICATED PLUGS

Design: API 6D
Sizes: 2" - 36"
Class: 150 - 2500



*6D Non-standard end-to-end

**Certain class 150 & 300 to manfuacture standard end to end.

Certifications & Registrations

American Petroleum Institute (API)

API 6A Certification



Certificate of Authority to use the Official API Monogram

License Number: 6A-1190 ORIGINAL

The American Petroleum Institute hereby grants to

SCV VALVE
3521 FM 646 Road North
Santa Fe, TX
United States

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6A and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6A-1190

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Gate, Ball, Plug Valves at PSL 1, PSL 2

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: DECEMBER 6, 2025
Expiration Date: DECEMBER 6, 2028

To verify the authenticity of this license, go to www.api.org/compositelist.

Senior Vice President of Global Industry Services

American Petroleum Institute

2019-151 | Digital

Note: Extension letter available on our website.

API 6D Certification



Certificate of Authority to use the Official API Monogram

License Number: 6D-1099 ORIGINAL

The American Petroleum Institute hereby grants to

SCV VALVE
3521 FM 646 Road North
Santa Fe, TX
United States

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6D and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6D-1099

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Check Valves, Ball Valves, Plug Valves, Gate Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: DECEMBER 6, 2025
Expiration Date: DECEMBER 6, 2028

To verify the authenticity of this license, go to www.api.org/compositelist.

Senior Vice President of Global Industry Services

American Petroleum Institute

2019-151 | Digital

Note: Extension letter available on our website.

ISO 9001:2015 Certificate



ABS Quality Evaluations
An ABS Group Company

ABS Quality Evaluations Certification

Certificate Of Conformance

This is to certify that the Quality Management System of:

SCV Valve, LLC
3521 FM 646 Road North
Santa Fe TX
77510
United States

has been assessed by ABS Quality Evaluations, Inc. and found to be in conformance with the requirements set forth by:

ISO 9001:2015

The Quality Management System is applicable to:

Engineering, Manufacturing, Sales, and Service of High Performance Valve Products. Product Range includes all Severe Service & High Pressure Applications

Certificate No: 44703
Certification Date: 16 JUN 2010
Effective Date: 01 MAY 2025
Expiration Date 15 JUN 2028
Revision Date: 01 MAY 2025

Dominic Townsend, President

Copyright as of the Effective Date, ABS Quality Evaluations, Inc. All rights reserved. Rev1

Page 1 of 1

CE PED Certificate



Certificate of Quality System Approval

This is to certify that the product listed below conforms to the requirements of the
Pressure Equipment Directive 2014/68/EU
Annex III Module H

Certificate Number HPiVS-iP1012-055-Q-01-00
Date of Issue 24-Oct-2024 Date of Expiry 24-Oct-2027
Manufacturer SCV Valve, LCC
3521 FM 646 Rd. North Santa Fe, Texas 77510

Description of Pressure Equipment: Ball Valves, Check Valves, Gate Valves and Plug Valves
Class 150 - 2500.
Group 1 fluids

Equipment Identification: CE Nameplate on each cat.I, II, III valve

Type of material: see certificate schedule
Other Certification: ISO 9001:2015 certificate no. 44703 issued by ABS Quality Evaluation
Standards Applied: see certificate schedule

Report Reference: HPiVS-iP1012-055-1

This Certificate is valid in any European Economic Area Member State.
This Report has been issued by HPi Verification Services (Ireland) Ltd. which is a body notified to the European Commission according to the provisions of the Pressure Equipment Directive (Notified Body number 2810).
This Report is issued following the assessment of the documentation and implementation of the Quality System in accordance with the provisions of the quoted Conformity Assessment Module of the above directive. The CE Mark must be affixed to the Pressure Equipment within the scope of approval as described above once the EU 'declaration of conformity' has been signed by the responsible person. The number '2810', being HPi Verification Services (Ireland) Ltd. Notified Body number must also be placed on the equipment dataplate.
This certificate is subject to annual surveillance audits. If the surveillance audits are not held, this certificate may be suspended or withdrawn. The current status of the certificate can be checked by scanning the QR code.

Check this certificate is genuine

Quality Director

Technical Director

An INAB accredited Certification Body Reg. No. 5018.

CE

EU Notified Body No. 2810
Company registered in Ireland #577786

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Email enquiries@hpivs.ie
www.hpivs.ie

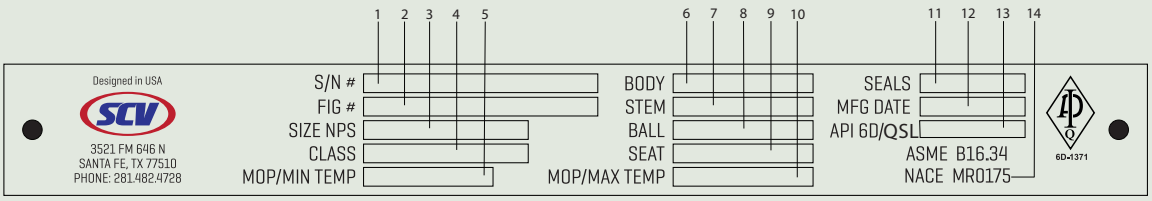
HPi Verification Services (Ireland) Ltd.
Clonross
Dunshaughlin, Co.Meath
A85 XN98, Ireland

Canadian Registration Number

- Alberta - 0C07063.2
- New Brunswick - 0C07063.27
- Northwest Territory - 0C07063.25
- Nunavut - 0C07063.2N
- Ontario - 0C07063.25
- Yukon - 0C07063.2
- British Columbia - 0C07063.21
- NewFoundland&Laborador - 0C07063.20
- Novascotia - 0C07063.27
- Manitoba - 0C07063.24
- Prince Edward island - 0C07063.29

Valve ID Tag & Valve Markings Identification

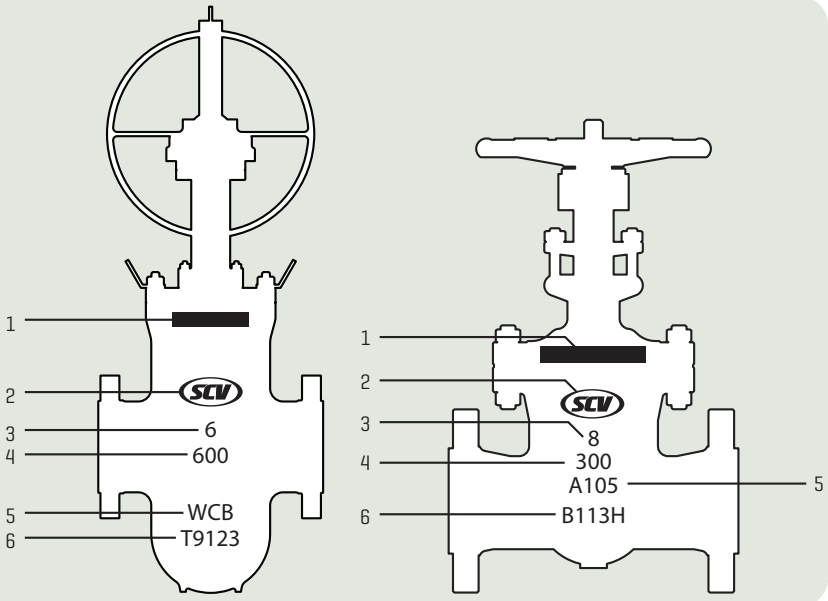
Valve ID Tag



No.	Figure Number Code	Description
1	Serial Number	Identifies certified manufacturers serial number
2	Figure Number	Identifies the detailed valve configuration (valve type, bore size, pressure class, materials, etc.)
3	Size	Identifies bore size
4	Pressure Class	Identifies pressure classifications per API requirements
5	MOP/Max. Temp.	Identifies the maximum operating pressure in PSI and maximum operating temperature in Fahrenheit
6	Body Material	Identifies body metal material composition (A105, WCB, F51, CF8M, etc.)
7	Stem Material	Identifies stem material composition (A105, 410SS, 17-4pH, etc.)
8	Ball/Disc Material	Identifies ball/disc material composition (A105, 316SS, ENP, etc.)
9	Seat Material	Identifies seat material composition (PEEK, Teflon, Nylon, etc.)
10	MOP/Min. Temp.	Identifies the maximum operating pressure in PSI and minimum operating temperature in Fahrenheit
11	O Ring	Identifies the O Ring material composition (Viton, Viton GLT, etc.)
12	Manufacturing Date	Identifies the date the valve manufacturing completion date
13	API Conformance	Identifies API conformance (600, 6D, 6A, etc.)
14	NACE MR 01 75	Identifies corrosion resistance

Valve Markings

No.	Valve ID Components
1	Tag
2	Brand
3	Size
4	Pressure Class
5	Body Material
6	Heat Number



Note: SCV reserves the right to modify our products for improvement without prior notice.

SCV Figure Number Chart

Note: SCV Figure Chart is subject to change without notice.

1	2	3	4	5	6	7	8
Valve Type	BoreSize	Class	Body/BonnetConf.	Body Material	Obturator Material	Ends	Operator
BAL = Trunnion Ball Valve	50 = 1/2"	01 = 150	B = Bolted	02 = A352 LCC	01 = A352 LLC + 410	A = RF x WE	/ = N/A
CEG=CompactExpandingGateValve	75 = 3/4"	03 = 300	L = Lug Style	06 = A351 CF8M	02 = A352 LCC + ENP	B=RTJ x WE	B = Bare Stem
DCK = Dual Plate Check Valve	01 = 1"	04 = 400	P = Pressure Seal	08 = A216 WCC	06 = A216 WCC + ENP	D = RF x RTJ	D = Dual Acting Actuator
EPG = Expanding Gate Valve	15 = 1-1/2"	06 = 600	S = Seal Weld	10 = A216 WCB	09 = A351 CF8M	E = RTJ x RF	E = Electric Actuator
FBV = Floating Ball Valve	02 = 2"	09 = 900	T = Top Entry	11 = A352 LCB	10 = A216 + CR13	J = RTJ	G = Gear
FCK=Full Port Swing Check Valve	21 = 2-1/16"	15 = 1500	U = Union	12 = A350 LF2	11 = CR13 HF	K = WE x RF	H = Handwheel
GAT = Wedge Gate Valve	25 = 2-1/2"	20 = 2000		13 = A105	12 = A105 + CR13	L=WE x RTJ	I = Linear Actuator
GLB = Globe Valve	27 = 2-9/16"	25 = 2500		16 = A217 WC6	13 = A105 + ENP	R = RF	L = Lever
PCK = Piston Check Valve	03 = 3"	30 = 3000		30 = A29 4130	14 = A694 Gr. F60 + ENP	W = WE	
PLG = Lubricated Plug Valve	31 = 3-1/8"	50 = 5000		36 = A182 316	15 = A350 LF2 + ENP		
PSG = Parallel Slide Gate Valve	37 = 3-9/16"	10 = 10000		51 = A182 F51 Duplex	16 = A216 WCC + 316		
RSB = Rising Stem Ball Valve	04 = 4"			55 = A182 F55 Duplex	17 = 17-4 PH		
SCK=Conv.PortSwingCheckValve	41 = 4-1/16"			60=A216WCC+Inconel625	20 = A216 WCB + Ni65		
TCG = Slab Gate Valve	05 = 5"			87 = A487 4C	23 = A182 316L + Stellite 21		
	51 = 5-1/8"			88 = A890-4A	34 = A182 304		
	06 = 6"				35 = A182 316 HF		
	71 = 7-1/16"				36 = A182 316		
	08 = 8"				41 = A182 F6A Class 2		
	09 = 9"				42 = A182 F6A + Nitride		
	10 = 10"				51 = A182 F51 Duplex		
	23 = 10-3/8"				52 = A351 CF8M + Stellite 6		
	11 = 11"				54 = A182 F51 Duplex + CoCr-A		
	12 = 12"				59 = A352 LCC + Stellite 6		
	19 = 12-3/8"				60 = A105 + HF		
	13 = 13-5/8"				61 = A105 + Nitride + Stellite 6		
	14 = 14"				62 = A105 + Inconel 625		
	16 = 16"				69=A350LF2+TungstenCarbide		
	17 = 16-3/4"				73=A182410+TungstenCarbide		
	18 = 18"				81 - A350 LF2 + Nitride + HF		
	20 = 20"				85 = A743 CA15 + Nitride		
	22 = 22"				88 = A890-4A		
	24 = 24"				96 = A216 WCB + CR13		
	26 = 26"						
	28 = 28"						
	30 = 30"						
	32 = 32"						
	34 = 34"						
	36 = 36"						
	38 = 38"						
	40 = 40"						
	42 = 42"						
	48 = 48"						
	52 = 52"						
	56 = 56"						
	60 = 60"						

9	10	11	12	13	14	15
Bore Type	SealMaterial	Seat Material	SeatInsert/OverlayMaterial	Stem Material	Packing Material	Service
F = Full Port	A = Aflas	/ = N/A	B = Nickel Boron	/ = N/A	/ = N/A	A = Stem Extension
R = Reduced Port	B = Buna	08 = A216 WCB	D = Devlon	A = A350 LF2 + ENP	B = Braided Graphoil	C = Cryogenic
C = Conventional	E = EPDM	09 = A351 CF8M	F = PTFE	B = A105 + ENP	G = Graphite	D = *DPE x DPE
T=RegularPattern	F=Fluorosilicone	11 = CR13 HF	G = RTFE - Glass filled	C = A182 F6a Class 2	T = Teflon	E = External Coating
U = Short Pattern	G = Graphite	13 = A105 + ENP	H = Hard Face (Stellite 6)	D = 17-4 PH	V = Viton Duck	F = Dampener
V=VenturiPattern	H = HNBR	14 = A105 + HF	K = PCTFE	F = A182 F316		G = Geothermal
	K = Kalrez	15 = A350 LF2 + ENP	N = Nylon	G=A182 F51 Duplex		H = High Temperature
	L = Lip Seal	16 = A350 LF2 + HF	P = Peek	H=A182 F56 Duplex		I = Internal Coating
	N = Neoprene	17 = 17-4 PH	R = RTFE - Carbon Filled	I = Inconel 625		J = **SPE x DPE
	P=Polyuerethane	30 = A29 4130	T = Tungsten Carbide	J = 17-4 + QPQ		L = Lock Open Device
	R = NBR	32 = A182 316L + HF	V = Viton			P = Pipe Pups
	S = Silicone	35 = A182 316/HF	3 = 316			S = Standard Service
	T = Teflon	36 = A182 316	W = UHMWE			X = Special
	U = Floursint	41 = A182 F6a Class 2				
	V = Viton	42 = A182 F6a Class 2 + HF				
	3 = 304 Ring	51 = F51 Duplex				
	4=304/Graphite	52 = A182 F51 Duplex + HF				
	5 = 316 Ring	54=A182F51Duplex+CoCr-A				
	6=316/Graphite	55 = F55 Duplex				
	7 = Soft Iron Ring	91 = A105/HF				

Sample Figure Numbers & Descriptions

	FigureNo.ChartColumn	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Pressure Classes	Type	Size	Class	BodyConf.	Body	Obturator	End	Oper	BoreType	Seal	Seat.base	Seat/Insert	Stem	Packing	Service
TRUNNION BALL	150, 300, 600	BAL	12	06	B	12	15	R	G	F	H	15	D	A	/	S
	12" 600 Trunnion Ball Valve, Bolted A350 LF2 Body, LF2 + ENP Obturator, RF Ends, Gear Operated, Full Bore, HNBR AED Seals, A350 LF2 + ENP Seat Base Material, Devlon Seat Inserts, A350 LF2 + ENP Stem, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
	900, 1500, 2500	BAL	12	15	B	12	41	J	G	F	H	41	D	C	/	S
	12" 1500 Trunnion Ball Valve, Bolted Configuration, A350 LF2 Body, A182 F6a Class 2 Obturator, RTJ Ends, Gear Operated, Full Bore, HNBR AED Seals, A182 F6a Class 2 Seat Base Material, Devlon Seat Inserts, A182 F6a Class 2 Stem, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
FLOATINGBALL	ALL	FBV	12	01	B	10	36	R	L	F	3	36	R	F	/	S
	12" 150 Floating Ball Valve, Bolted Configuration, A216 WCB Body, A182 F316 Obturator, RF Ends, Lever Operated, Full Bore, A182 F316 Seat Base Material, Devlon Seat Inserts, A182 F316 Stem, Standard Service, API 608 Design, API 598 Test, NACE MR-01-75 Compliant															
DUAL PLATE WAFERCHECK	ALL	DCK	12	06	W	10	09	R	/	C	/	08	H	/	/	S
	12" 600 Dual Plate Check Valve, Wafer Configuration, A216 WCB Body, A351 CF8M Obturator, RF Ends, Conventional Bore, A216 WCB Seat Base Material, Hardface Seat Overlay, Standard Service, API 594 Design, API 598 Test, NACE MR-01-75 Compliant															
SLAB GATE	ALL	TCG	12	06	B	08	13	R	B	F	V	13	R	D	V	S
	12" 600 Thru Conduit Slab Gate Valve, Bolted A216 WCC Body, A105 + ENP Obturator, RF Ends, Bare Stem, Full Bore, Viton AED Seals, A105 + ENP Seat Base Material, RTFE Seat Inserts, 17-4 PH Stem, Viton Duck Packing, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
EXPANDING GATE	ALL	EPG	12	06	B	08	06	R	B	F	V	13	R	D	V	S
	12" 600 Thru Conduit Expanding Gate Valve, Bolted A216 WCC Body, A216 WCC + ENP Obturator, RF Ends, Bare Stem, Full Bore, Viton AED Seals, A105 + ENP Seat Base Material, RTFE Seat Inserts, 17-4 PH Stem, Viton Duck Packing, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
FULL PORT SWINGCHECK	ALL	FCK	12	06	B	08	16	R	/	F	V	11	V	/	/	S
	12" 600 Full Port Swing Check Valve, Bolted A216 WCC Body, A216 WCC + 316 Obturator, RF Ends, Full Bore, Viton AED Seals, CR13 HF Seat Base Material, Viton Seat Inserts, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
PISTONCHECK	150, 300, 600, 900	PCK	12	06	B	08	61	R	/	C	V	14	H	/	/	S
	12" 600 Piston Check Valve, Bolted A216 WCC Body, A105 + Nitride + HF Obturator, RF Ends, Coventional Bore, Viton AED Seals, A105 Seat Base Material, Hardface Seat Overlay, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
	1500, 2500	PCK	12	15	B	08	61	R	/	C	V	41	H	/	/	S
	12" 1500 Piston Check Valve, Bolted A216 WCC Body, A105 + Nitride + HF Obturator, RF Ends, Coventional Bore, Viton AED Seals, A182 F6a Class 2 Seat Base Material, Hardface Seat Overlay, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
LUBRICATED PLUG	ALL	PLG	12	06	B	10	84	R	L	C	V	/	/	/	G	S
	12" 600 Lubricated Plug Valve, Bolted A216 WCB Body, A743 CA15 Obturator, RF Ends, Lever Operated, Coventional Bore, Viton AED Seals, Standard Service, API 6D Design and Test, NACE MR-01-75 Compliant															
WEDGE GATE	ALL	GAT	12	06	B	10	7	R	H	C	4	14	H	C	G	S
	12" 600 Wedge Gate Valve, Bolted A216 WCB Body, A216 WCB + Hardface Obturator, RF Ends, Handwheel Operated, Conventional Bore, 304 + Graphite Gasket, A105 Seat Base Material, Hardface Seat Overlay, A182 F6a Class 2 Stem, Graphite Packing, Standard Service, API 600 Design, API 598 Test, NACE MR-01-75 Compliant															
GLOBE	ALL	GLB	12	06	B	10	60	R	H	C	4	14	H	C	G	S
	12" 600 Globe Valve, Bolted A216 WCB Body, A105+ Hardface Obturator, RF Ends, Handwheel Operated, Conventional Bore, 304 + Graphite Gasket, A105 Seat Base Material, Hardface Seat Overlay, A182 F6a Class 2 Stem, Graphite Packing, Standard Service, API 623 Design, API 598 Test, NACE MR-01-75 Compliant															

Note: Subject to change without notice.

SCV VALVE









Geothermal Thru Conduit Slab & Expanding Gate Valves
Sizes: 2" - 24" / Class: 150 - 900

Design and Manufacturing Standards	
Basic Design	API 6D
Face-to-Face Dimension	ANSI B16.10
Flange End Dimension	ANSI/ASME B16.5 (4" to 24")
Inspection & Testing	API 6D
Fire Safe Design	API 6FA



Geothermal Thru Conduit Slab & Expanding Gate Valves

[Product Preview]

For more information call us @ (281) 482-4728 or visit our website @ www.scvvalve.com

SCV Thru Conduit Slab & Expanding Gate Valves

- Basic Design: API 6D
- Face-to-Face Dimension: ANSI B16.10
- Flange End Dimension: ANSI/ASME B16.5 (4" to 24")
- Inspection & Testing: API 6D
- Fire Safe Design: API 6FA

SCV Thru Conduit Slab Gate (Bi-Directional)

- Pressure assisted seats for high pressure sealing
- Spring loaded seat for low pressure sealing
- Double block and bleed capabilities
- Internal pressure relieving through self relieving seats
- Secondary sealant injection at seats and stems
- Full port thru conduit for passage of pigs
- Open yoke adjustable packing gland available upon request

SCV Thru Conduit Expanding Gate (Bi-Directional) with Preferred Pressure Side

- Expanding mechanical gate forms positive tight sealing
- Seals at low and high pressure
- Double block and bleed capabilities
- Secondary sealant injections at seats and stems
- Optional by-pass system for thermal cavity relief venting
- Full port thru conduit for passage of pigs
- Open yoke adjustable packing gland available upon request

Trim Configuration Options

- Solid Inconel stem
- Solid 316 SS stem
- Solid 17-4 PH stem
- Solid Inconel gate
- Inconel lined bore & seal area
- Solid stainless steel gate w/hardface overlay

Drain Configuration Options

- Threaded Nipple & Valve Assembly
- Welded Nipple & Flange Assembly

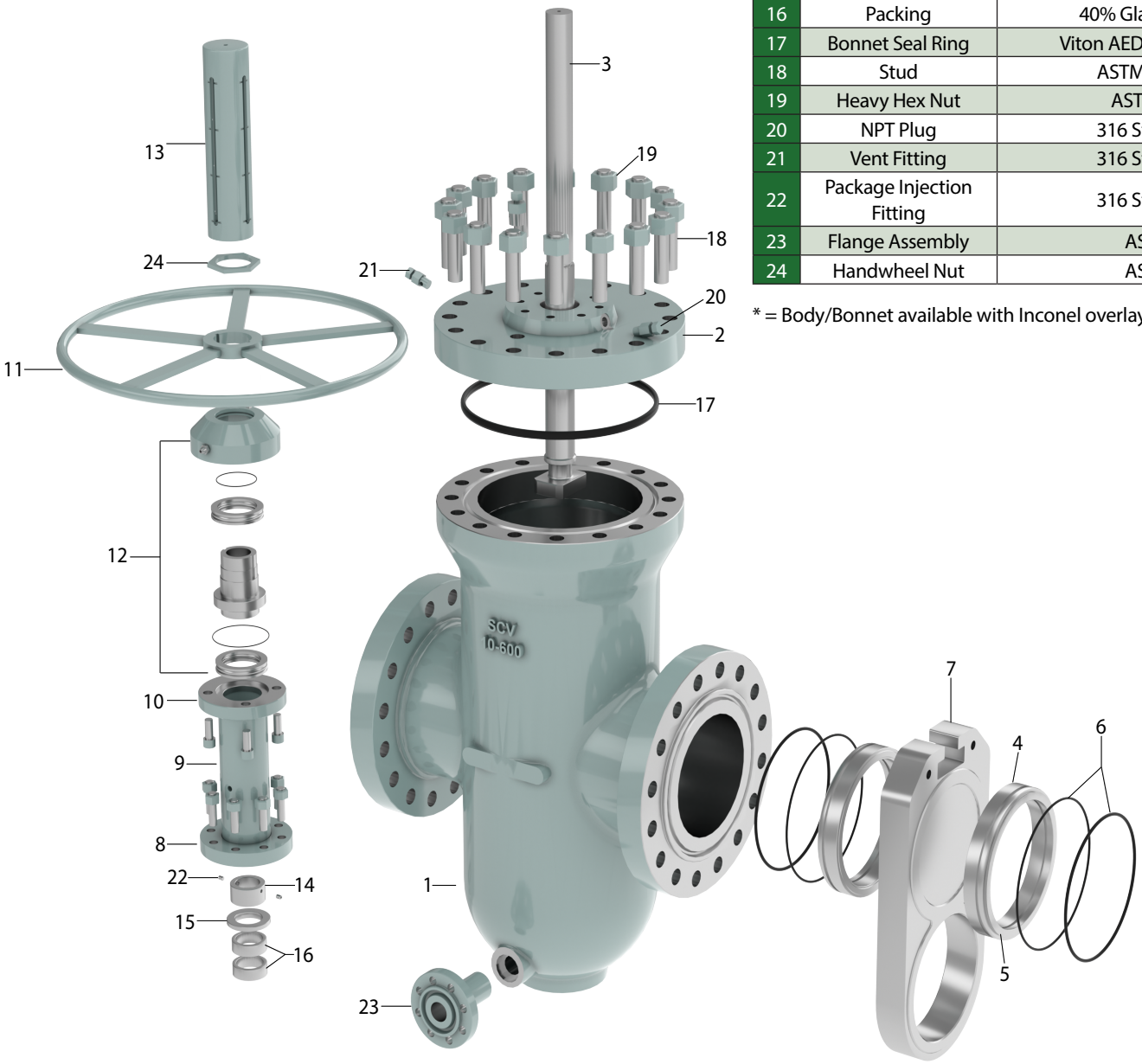
Note: Not recommended for throttling applications.
Note: SCV reserves the right to change any technical design and dimensional data without prior notice. Please contact SCV to confirm all Dimensions and Data offered in this catalog.

Thru Conduit Slab Gate Valve (Bi-Directional)

[Expanded View & Bill of Materials]

No.	Part	Material
1	Body	*ASTM A216 WCC
2	Bonnet	*ASTM A105
3	Stem	ASTM A564 TType 630, 17-4 or Inconel 625
4	Seat	410 or 316L Stellite Hardface
5	Seat Face	Stellite Hardface
6	Seat O-Rings	Viton AED or L'Garde EPDM
7	Gate	ASTM A105 or 316L + Stellite Hardface
8	Yoke Base	ASTM A105
9	Yoke Tube	ASTM A106 Gr. B Pipe
10	Yoke Top	ASTM A105
11	Handwheel	Carbon Steel
12	Handwheel Assembly	Carbon Steel
13	Stem Protector	Metal
14	Internal Stop Nut	ASTM A105
15	Gland	ASTM A105 or Inconel 625
16	Packing	40% Glass Filled Teflon
17	Bonnet Seal Ring	Viton AED or L'Garde EPDM
18	Stud	ASTM A193 B7/2H
19	Heavy Hex Nut	ASTM A194 2H
20	NPT Plug	316 Stainless Steel
21	Vent Fitting	316 Stainless Steel
22	Package Injection Fitting	316 Stainless Steel
23	Flange Assembly	ASTM A106
24	Handwheel Nut	ASTM A105

* = Body/Bonnet available with Inconel overlay in seal areas and bore.

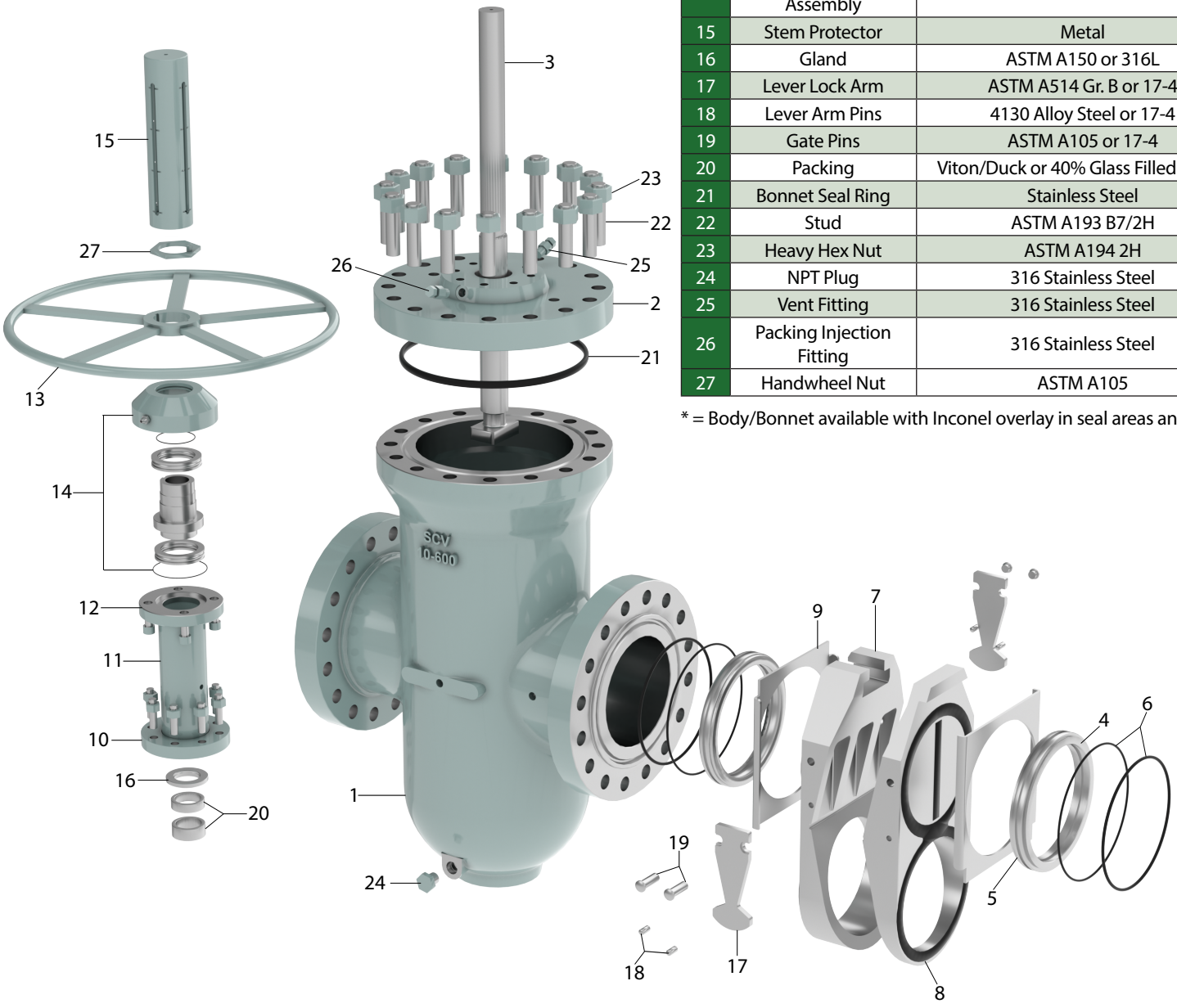


Thru Conduit Expanding Gate Valve (Bi-Directional) with Preferred Pressure Side

[Expanded View & Bill of Materials]

No.	Part	Material
1	Body	*ASTM A216 WCC
2	Bonnet	*ASTM A105
3	Stem	ASTM A564 Type 630, 17-4 or Inconel 625
4	Seat	410 or 316L Stellite Hardface
5	Seat Face	Stellite Hardface
6	Seat O-Rings	Viton AED
7	Gate	ASTM A216 WCC or ASTM A351 CF3M + Stellite Hardface
8	Segment	ASTM A216 WCC + ENP or ASTM A351 CF3M + Stellite Hardface
9	Skirt	ASTM A573 Gr. 50 or 316L
10	Yoke Base	ASTM A105
11	Yoke Tube	ASTM A106 Gr. B Pipe
12	Yoke Top	ASTM A105
13	Handwheel	Carbon Steel
14	Handwheel Assembly	Carbon Steel
15	Stem Protector	Metal
16	Gland	ASTM A150 or 316L
17	Lever Lock Arm	ASTM A514 Gr. B or 17-4
18	Lever Arm Pins	4130 Alloy Steel or 17-4
19	Gate Pins	ASTM A105 or 17-4
20	Packing	Viton/Duck or 40% Glass Filled Teflon
21	Bonnet Seal Ring	Stainless Steel
22	Stud	ASTM A193 B7/2H
23	Heavy Hex Nut	ASTM A194 2H
24	NPT Plug	316 Stainless Steel
25	Vent Fitting	316 Stainless Steel
26	Packing Injection Fitting	316 Stainless Steel
27	Handwheel Nut	ASTM A105

* = Body/Bonnet available with Inconel overlay in seal areas and bore.



Slab Gate Advanced Mechanical Details

Through its simple design and efficient performance, the slab gate's two spring loaded floating seats are pressure energized. This allows for complete sealing, both upstream and downstream.

Figure 1

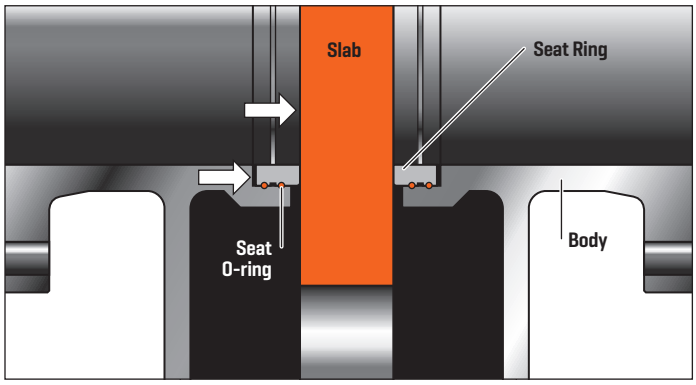


Figure 2

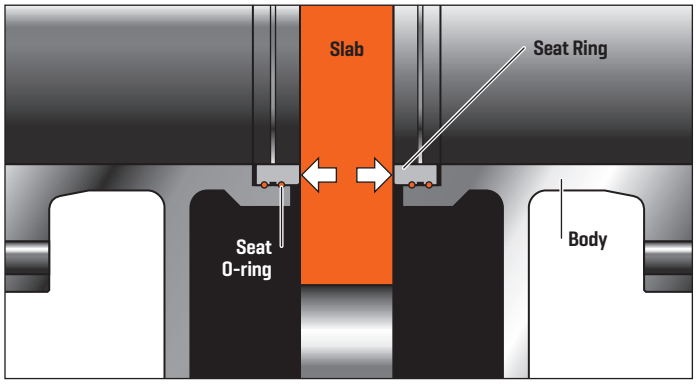
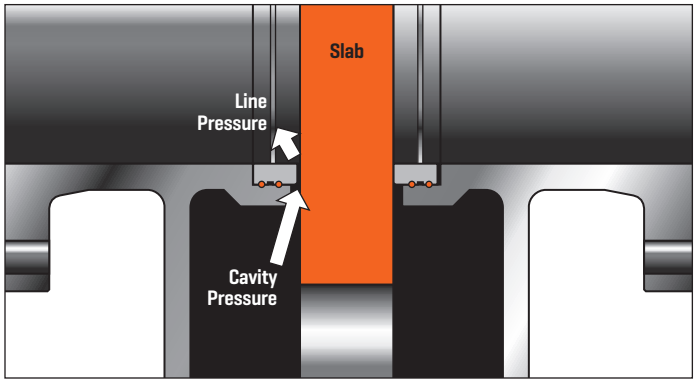


Figure 3



Double Block

When the valve is in the closed position and also has equal or no pressure, both spring loaded seats can shut off line pressure independently of upstream and downstream pressure. This creates a double block scenario. (Figure 1)

When line pressure is applied, the pressure forces the slab gate to float against the downstream seat and form a tight seal. At the same time, the upstream line pressure forces the upstream seat on the slab gate to form an upstream seal. (Figure 2)

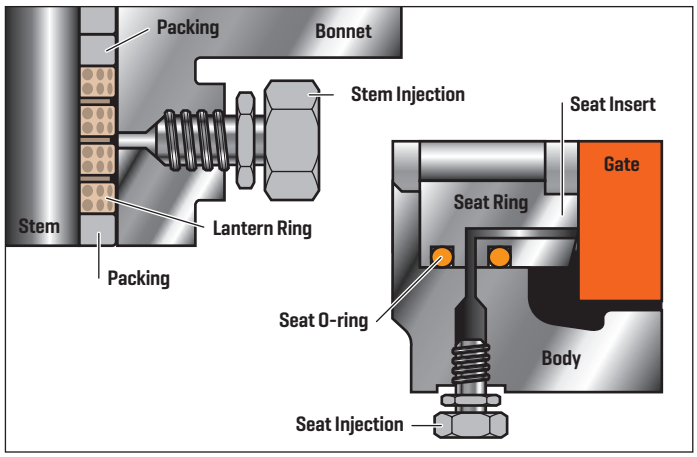
Self Relieving Cavity

The double block and bleed slab gate design, in the closed position, may experience an increase in cavity pressure due to thermal expansion. When the cavity pressure exceeds the line pressure, the seat is forced away from the gate surface allowing the excess cavity pressure to be vented into the line. This allows for a pressure balance between the body cavity and the line. The valve body pressure will relieve to the lower differential side. (Figure 3)

Secondary Sealant and Packing Injection System

All valves will have secondary sealant injection fittings for the stem and seats. (Figure 4)

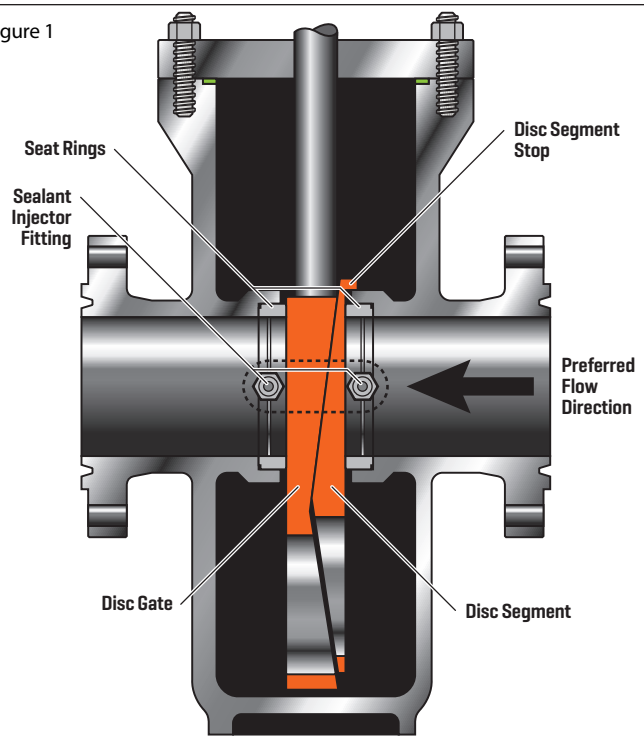
Figure 4



Expanding Gate Advanced Mechanical Details

The SCV Expanding Gate valve design provides a mechanical seal between the seats and the gate in both high and low pressure applications. The expanding gate valve does not require line pressure to seal and is recommended when a tight mechanical seal is required.

Figure 1



Full Expanded Closed

In the full expanded closed position, the segment stop has engaged with the lower body stop and the gate is wedged downward, expanding the gate and segment to form a tight seal against the upstream and downstream seats. Body cavity venting will assist to provide tight shut off. (Figure 1)

Mid Position

When operating towards the open position, the gate travels across the wedge angle of the segment. This retracts the assembly so that is will slide freely between the seat faces. (Figure 2)

Full Expanded Open

In the full expanded open position, the segment stop has engaged the upper body stop and the gate is wedged upward. This expands the segment and the gate into the seats, isolating the flow from the cavity. (Figure 3)

Figure 2

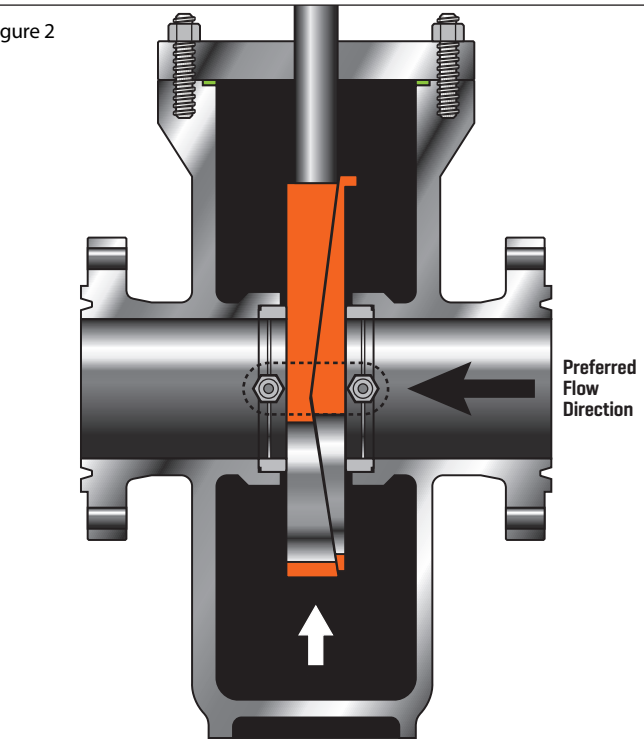
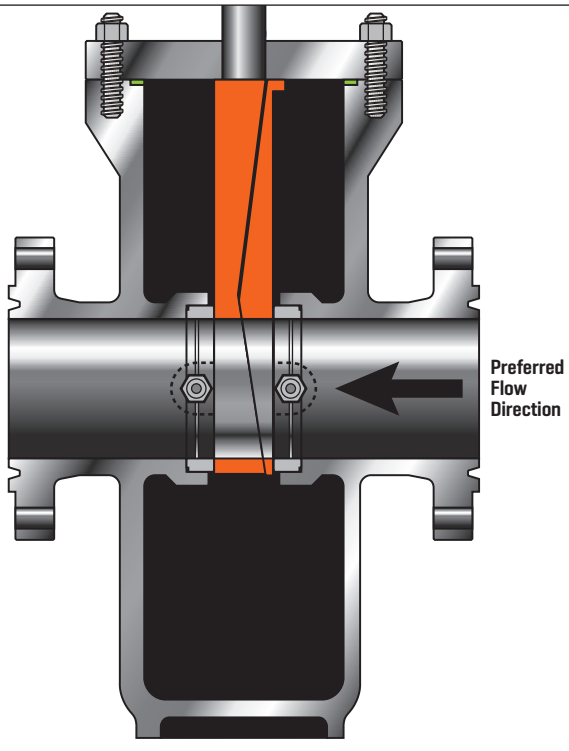


Figure 3



Geothermal Slab & Expanding Gate Advanced Mechanical Details

Through its simple design and efficient performance, the slab gate's two spring loaded floating seats are pressure energized. This allows for complete sealing, both upstream and downstream.

[Features Overview]

Trim Overlay Options

STELLITE OVERLAY

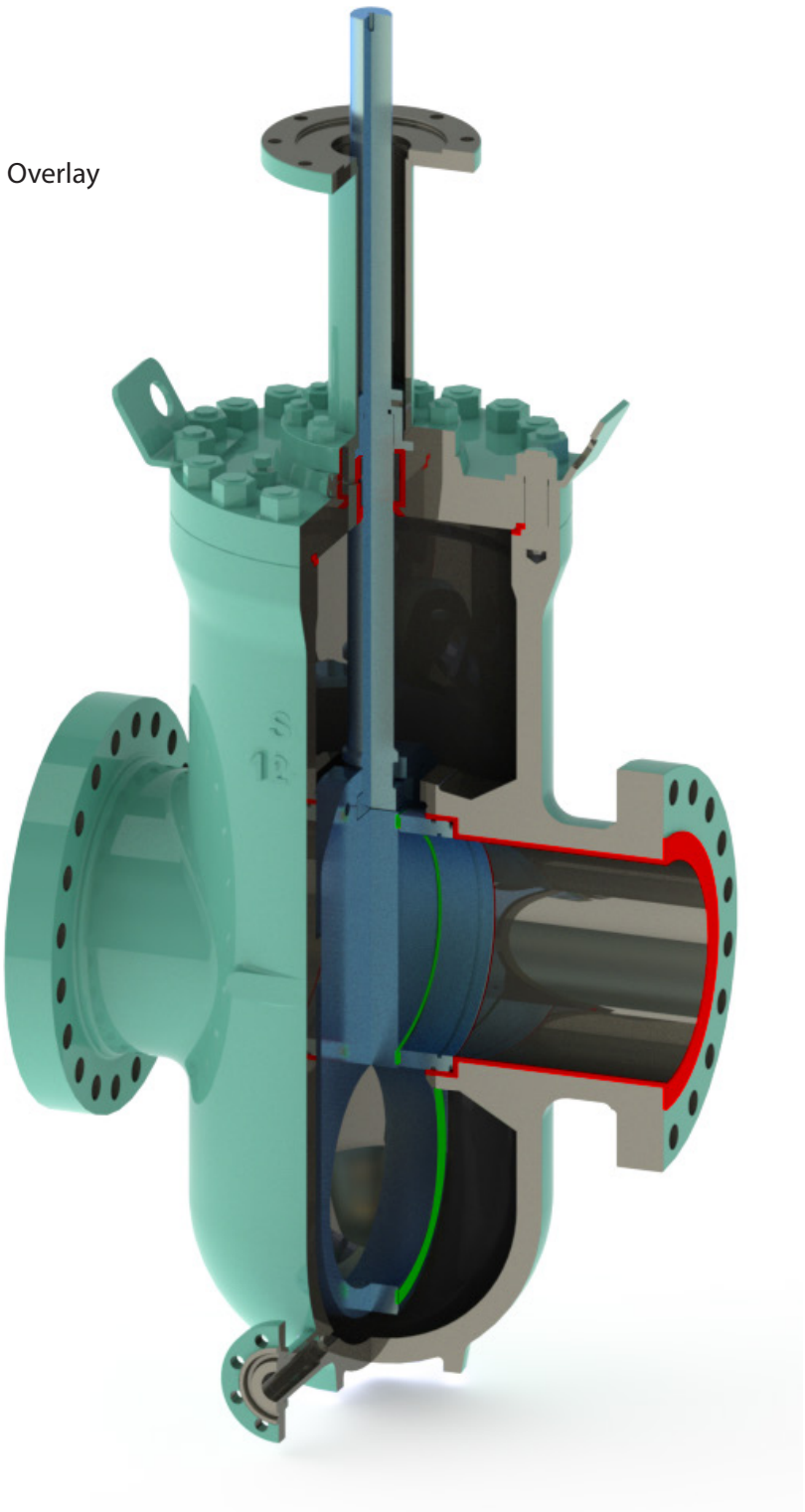
- Gate Seating Surface - Raised .125 Figure 8 Overlay
- Seat Sealing Surface

INCONEL 625 OVERLAY OPTIONS

- Body Bore
- Seat Pockets
- Bonnet Connection
- Packing Box
- Flange Connection
- Yoke Tube Bottom

DRAIN CONFIGURATION OPTIONS

- Threaded Nipple & Valve Assembly
- Welded Nipple & Flange Assembly



Geothermal Slab & Expanding Gate Manufacturing Photos
12" 600 Class



Body/Bonnet Connection - Inconel 625 Overlay



2" Flanged Body Drain Connection

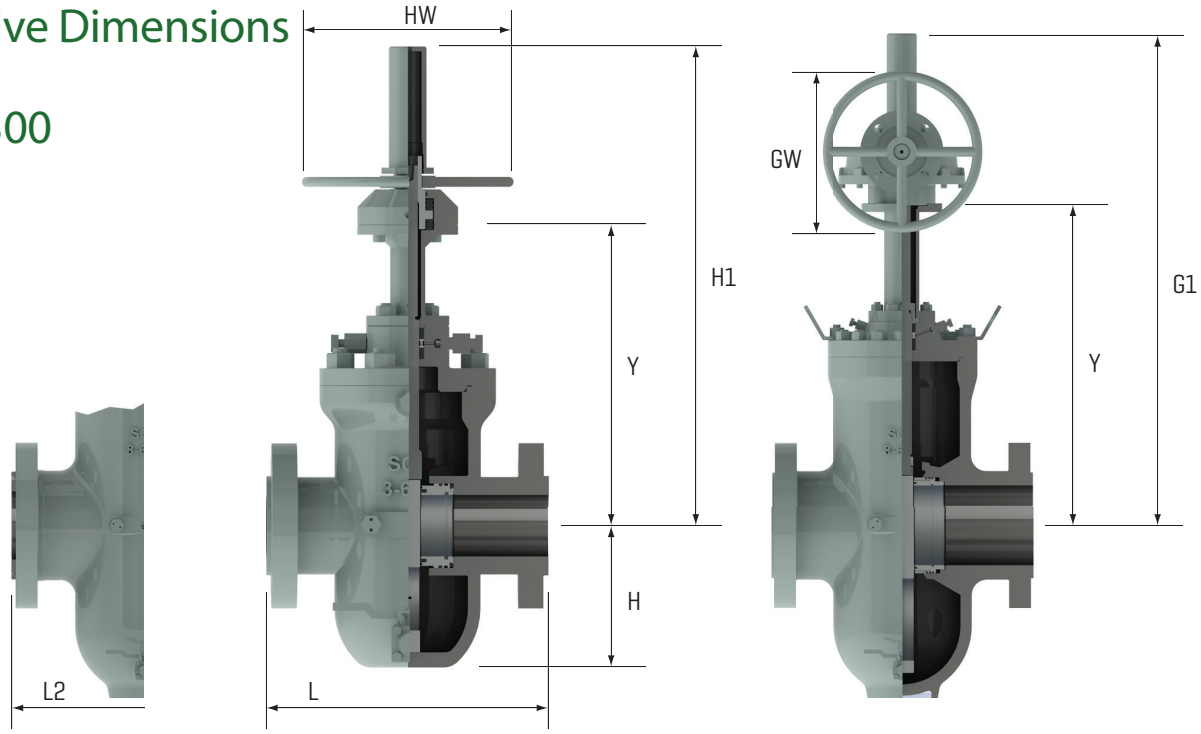


12" 600 Class Geothermal Body



Bore & Flange Sealing Face - Inconel 625 Overlay

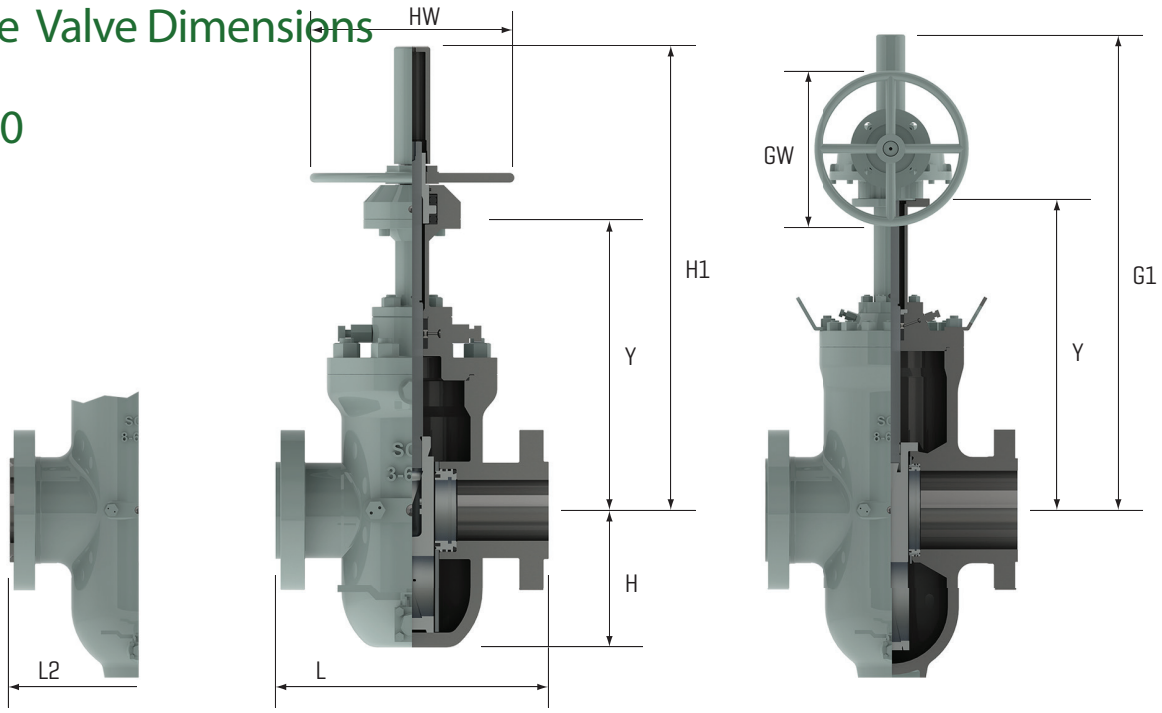
Slab Gate Valve Dimensions
Size: 4" - 24"
Class: 150 & 300



	SIZE		BORE	END-TO-END	CENTER-TO-BOTTOM	CENTER-TO-TOPOFYOKE	HANDWHEEL OPERATED		GEAR OPERATED		WEIGHTS
			F	RTJ - L2	H	Y	H1	HW	G1	GW	LBS/KG
CLASS 150	IN	4	4.06	9.00	9.0	16.9	26.2	10.0	26.2	10.0	150
	MM	100	103	229	229	429	665	254	665	254	68
	IN	6	6.06	10.50	11.5	21.6	33.7	12.0	33.7	12.0	202
	MM	150	154	267	292	549	856	305	856	305	92
	IN	8	8.06	11.50	15.3	27.7	42.1	18.0	42.1	18.0	373
	MM	200	205	292	389	704	1069	457	1069	457	169
	IN	10	10.06	13.00	18.1	33.1	50.7	18.0	50.7	18.0	536
	MM	250	256	330	460	841	1288	457	1288	457	243
	IN	12	12.06	14.00	22.0	38.6	58.4	18.0	58.4	18.0	868
	MM	300	306	356	559	980	1483	457	1483	457	394
	IN	14	13.25	15.00	23.8	41.4	62.4	18.0	62.4	18.0	1125
	MM	350	337	381	605	1052	1585	457	1585	457	510
	IN	16	15.25	16.00	26.5	46.7	70.5	18.0	70.5	18.0	1516
	MM	400	387	406	673	1186	1791	457	1791	457	688
	IN	18	17.25	17.00	29.5	51.3	78.2	18.0	78.2	18.0	1893
	MM	450	438	432	749	1303	1986	457	1986	457	859
	IN	20	19.25	18.00	33.2	57.2	85.1	24.0	85.1	24.0	2561
	MM	500	489	457	843	1453	2162	610	2162	610	1162
	IN	24	23.25	20.00	39.7	68.6	101.2	24.0	101.2	24.0	4245
	MM	600	591	508	1008	1742	2570	610	2570	610	1926
	IN	20	19.19	47.25	36.8	65.7	98.3	30.0	98.3	30.0	8325
	MM	500	487	1200	935	1669	2497	610	2497	610	3776
	IN	22	21.25	/	40.8	72.4	107.3	24.0	107.3	24.0	10292
	MM	550	540	/	1036	1839	2725	610	2725	610	4668
	IN	24	23.25	55.38	44.5	78.3	115.3	24.0	115.3	24.0	12718
	MM	600	591	508	1008	1742	2570	610	2570	610	1926
CLASS 300	IN	4	4.06	12.00	9.0	16.9	26.2	10.0	26.2	10.0	181
	MM	100	103	305	229	429	665	254	665	254	82
	IN	6	6.06	15.88	11.5	21.6	33.7	12.0	33.7	12.0	335
	MM	150	154	403	292	549	856	305	856	305	152
	IN	8	8.06	16.50	15.3	27.7	42.1	18.0	42.1	18.0	609
	MM	200	205	419	389	704	1069	457	1069	457	276
	IN	10	10.06	18.00	18.1	33.1	50.7	18.0	50.7	18.0	1000
	MM	250	256	457	460	841	1288	457	1288	457	454
	IN	12	12.06	19.75	22.0	38.6	58.4	18.0	58.4	18.0	1402
	MM	300	306	502	559	980	1483	457	1483	457	636
	IN	16	15.25	33.00	26.5	46.7	70.5	18.0	70.5	18.0	2764
	MM	400	387	838	673	1186	1791	457	1791	457	1254
	IN	20	19.25	39.00	33.2	57.2	85.1	24.0	85.1	24.0	4429
	MM	500	489	991	843	1453	2162	610	2162	610	2009
	IN	22	21.25	43.00	38.5	66.4	98.5	24.0	98.5	24.0	6488
	MM	550	540	1092	978	1687	2502	610	2502	610	2943
	IN	24	23.25	45.00	39.7	68.6	101.2	24.0	101.2	24.0	7039
	MM	600	591	1143	1008	1742	2570	610	2570	610	3193

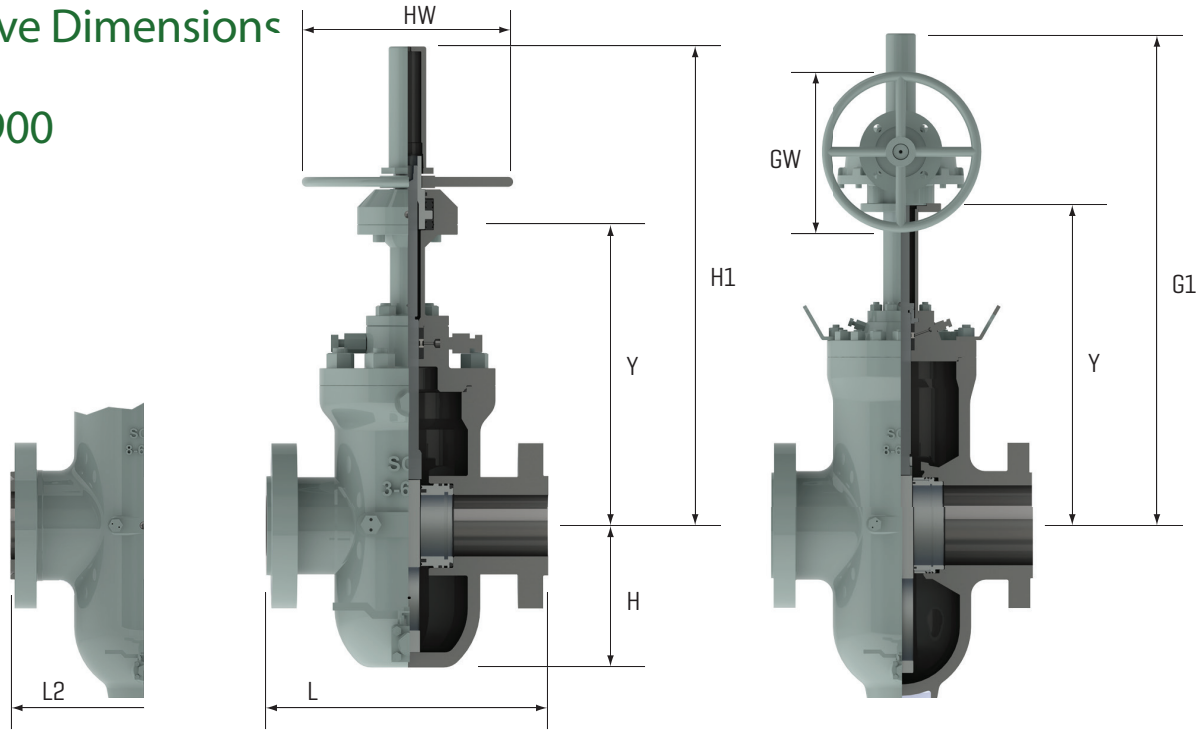
Note: SCV reserves the right to change any technical design and dimensional data without prior notice. Please contact SCV to confirm all Dimensions and Data offered in this catalog. Larger sizes can be engineered if needed.

Expanding Gate Valve Dimensions
Size: 4" - 24"
Class: 150 & 300



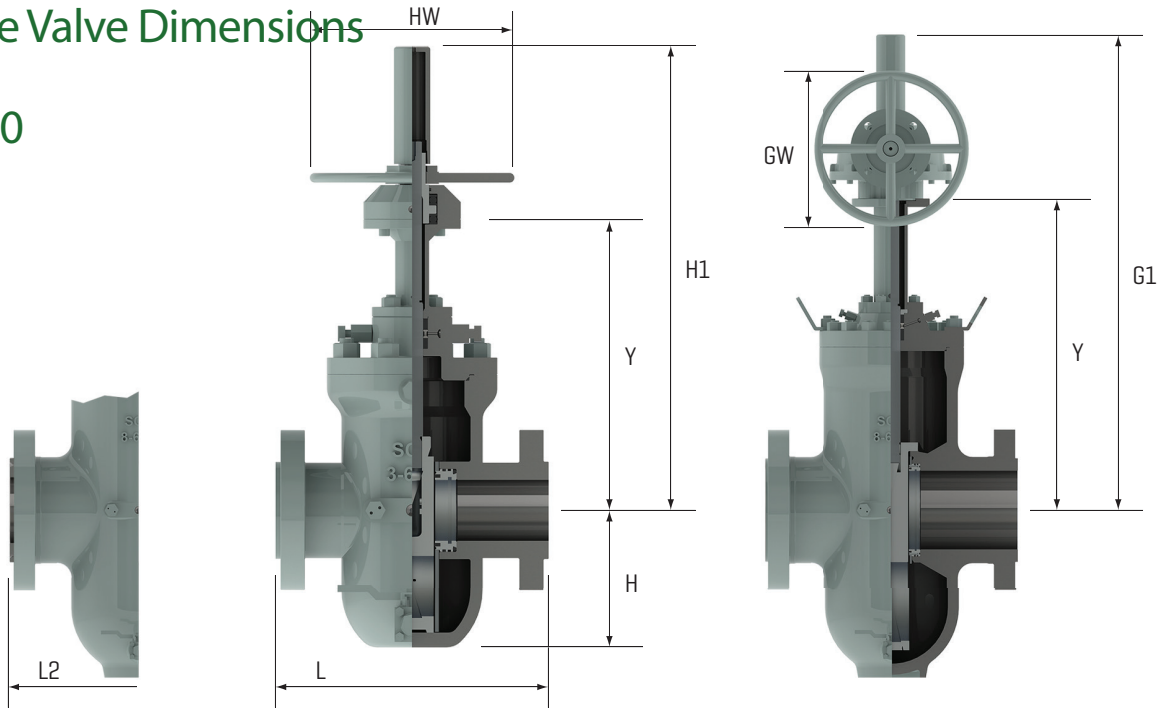
	SIZE		BORE	END-TO-END	CENTER-TO-BOTTOM	CENTER-TO-TOPOFYOKE	HANDWHEEL OPERATED		GEAR OPERATED		WEIGHTS
			F	RF - L	H	Y	H1	HW	G1	GW	LBS/KG
CLASS 150	IN	4	4.06	9.00	9.0	16.9	27.4	10.0	27.4	10.0	150
	MM	100	103	229	229	429	696	254	696	254	68
	IN	6	6.06	10.50	12.1	21.7	34.0	12.0	34.0	12.0	232
	MM	150	154	267	307	551	864	305	864	305	105
	IN	8	8.06	11.50	15.9	27.9	43.1	18.0	43.1	18.0	434
	MM	200	205	292	404	709	1095	457	1095	457	197
	IN	10	10.06	13.00	19.4	33.5	51.6	18.0	51.6	18.0	713
	MM	250	256	330	493	851	1311	457	1311	457	323
	IN	12	12.06	14.00	22.6	39.1	59.2	18.0	59.2	18.0	1053
	MM	300	306	356	574	993	15.4	457	15.4	457	478
	IN	16	15.25	16.00	28.0	47.9	72.0	18.0	72.0	18.0	1922
	MM	400	387	406	711	1217	1829	457	1829	457	872
	IN	18	/	/	/	/	/	/	/	/	/
	MM	450	/	/	/	/	/	/	/	/	/
	IN	20	19.25	18.00	34.5	58.0	86.1	24.0	86.1	24.0	3361
	MM	500	489	457	876	1473	2187	610	2187	610	1525
	IN	22	21.25	19.00	38.8	/	99.3	24.0	99.3	24.0	4495
	MM	550	540	483	986	/	2522	610	2522	610	2039
	IN	24	23.25	20.00	40.8	70.4	103.1	24.0	103.1	24.0	5172
	MM	600	591	508	1036	1788	2619	610	2619	610	2346
	IN	20	19.19	47.25	36.8	65.7	98.3	30.0	98.3	30.0	8325
	MM	500	487	1200	935	1669	2497	610	2497	610	3776
	IN	22	21.25	/	40.8	72.4	107.3	24.0	107.3	24.0	10292
	MM	550	540	/	1036	1839	2725	610	2725	610	4668
	IN	24	23.25	55.38	44.5	78.3	115.3	24.0	115.3	24.0	12718
	MM	600	591	508	1008	1742	2570	610	2570	610	1926
CLASS 300	IN	4	4.06	12.00	9.0	16.9	26.2	10.0	26.2	10.0	181
	MM	100	103	305	229	429	665	254	665	254	82
	IN	6	6.06	15.88	11.5	21.6	33.7	12.0	33.7	12.0	310
	MM	150	154	403	292	549	856	305	856	305	141
	IN	8	8.06	16.50	15.3	27.7	42.1	18.0	42.1	18.0	540
	MM	200	205	419	389	704	1069	457	1069	457	245
	IN	10	10.06	18.00	18.1	33.1	50.7	18.0	50.7	18.0	733
	MM	250	256	457	460	841	1288	457	1288	457	332
	IN	12	12.06	19.75	22.0	38.6	58.4	18.0	58.4	18.0	1300
	MM	300	306	502	559	980	1483	457	1483	457	590
	IN	14	13.25	30.00	23.8	41.4	62.4	18.0	62.4	18.0	1626
	MM	350	337	762	605	1052	1585	457	1585	457	738
	IN	16	15.25	33.00	26.5	46.7	70.5	18.0	70.5	18.0	2420
	MM	400	387	838	673	1186	1791	457	1791	457	1098
	IN	18	17.25	36.00	29.5	51.3	78.2	18.0	78.2	18.0	3197
	MM	450	438	914	749	1303	1986	457	1986	457	1450
	IN	20	19.25	39.00	33.2	57.2	85.1	24.0	85.1	24.0	4000
	MM	500	489	991	843	1453	2162	610	2162	610	1814
	IN	24	23.25	45.00	39.7	68.6	101.2	24.0	101.2	24.0	6391
	MM	600	591	1143	1008	1742	2570	610	2570	610	2899

Slab Gate Valve Dimensions
Size: 4" - 24"
Class: 600 & 900



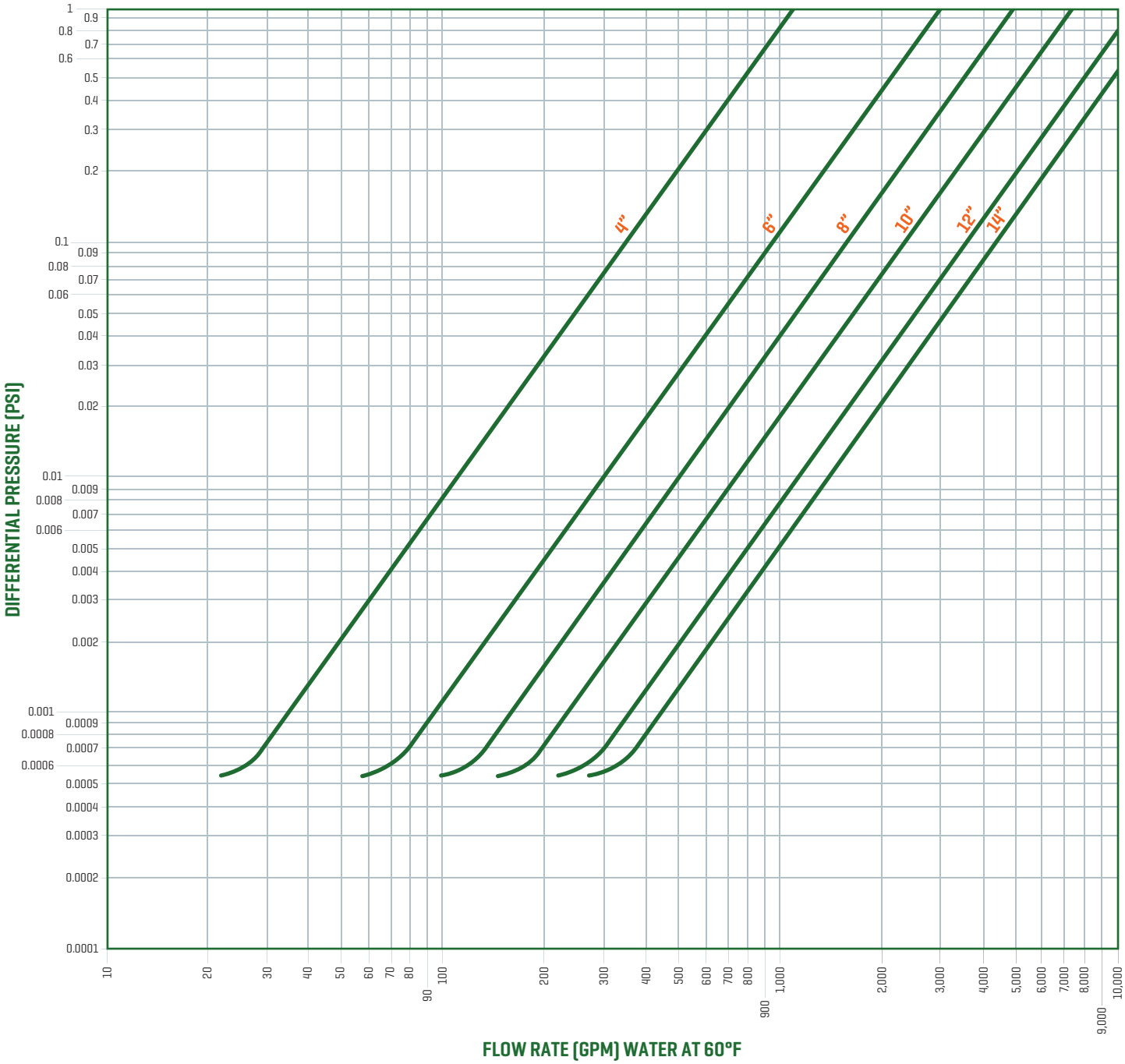
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			F	RF - L	RTJ - L2	H	Y	H1	HW	G1	GW	
CLASS 600	IN	4	4.06	17.00	17.12	10.1	20.5	31.4	12.0	31.4	12.0	350
	MM	100	103	432	435	257	521	798	305	798	305	159
	IN	6	6.06	22.00	22.12	12.8	25.8	39.3	18.0	39.3	18.0	603
	MM	150	154	559	562	325	655	998	457	998	457	274
	IN	8	8.06	26.00	26.12	17.1	31.9	48.5	18.0	48.5	18.0	1069
	MM	200	205	660	663	434	810	1232	457	1232	457	485
	IN	10	10.06	31.00	31.12	21.3	38.0	57.6	18.0	57.6	18.0	1846
	MM	250	256	787	790	541	965	1463	457	1463	457	837
	IN	10.375	10.375	31.00	31.12	21.3	38.0	57.6	18.0	57.6	18.0	1846
	MM	263.5	263.5	787	790	541	965	1463	457	1463	457	837
	IN	12	12.06	33.00	33.12	23.5	43.9	64.9	18.0	64.9	18.0	2442
	MM	300	306	838	841	597	1115	1648	457	1648	457	1108
	IN	12.375	12.375	33.00	33.12	23.5	43.9	64.9	18.0	64.9	18.0	2442
	MM	314.3	314.3	838	841	597	1115	1648	457	1648	457	1108
	IN	14	13.25	35.00	35.12	26.8	47.4	71.4	24.0	71.4	24.0	3237
	MM	350	337	889	892	681	1204	1814	610	1814	610	1468
	IN	16	15.25	39.00	39.12	29.5	52.8	77.6	24.0	77.6	24.0	4204
	MM	400	387	991	994	749	1341	1971	610	1971	610	1907
	IN	18	17.25	43.00	43.12	33.3	58.2	87.8	24.0	87.8	24.0	5880
	MM	450	438	1092	1095	846	1478	2230	610	2230	610	2667
	IN	20	19.19	47.00	47.25	36.8	65.7	98.3	30.0	98.3	30.0	8325
	MM	500	487	1194	1200	935	1669	2497	610	2497	610	3776
	IN	22	21.25	51.00	/	40.8	72.4	107.3	24.0	107.3	24.0	10292
	MM	550	540	1295	/	1036	1839	2725	610	2725	610	4668
	IN	24	23.25	55.00	55.38	44.5	78.3	115.3	24.0	115.3	24.0	12718
	MM	600	591	1397	1407	1130	1989	2929	610	2929	610	5769
CLASS 900	IN	4	4.06	18.00	18.12	10.3	20.5	31.4	12.0	31.4	12.0	403
	MM	100	103	457	460	262	521	798	305	798	305	183
	IN	6	6.06	24.00	24.12	13.1	25.8	39.2	18.0	39.2	18.0	800
	MM	150	154	610	613	333	665	996	457	996	457	363
	IN	8	8.06	29.00	29.12	17.5	31.9	48.5	18.0	48.5	18.0	1346
	MM	200	205	737	740	445	810	1232	457	1232	457	611
	IN	10	10.06	33.00	33.12	21.8	38.0	57.6	18.0	57.6	18.0	2380
	MM	250	256	838	841	554	965	1463	457	1463	457	1080
	IN	12	12.06	38.00	38.12	24.4	43.9	65.6	24.0	65.6	24.0	3258
	MM	300	306	965	968	620	1115	1666	610	1666	610	1478
	IN	14	13.25	40.50	40.88	27.9	47.4	71.4	24.0	71.4	24.0	4208
	MM	350	337	1029	1038	709	1204	1814	610	1814	610	1909

Expanding Gate Valve Dimensions
Size: 4" - 24"
Class: 600 & 900



	SIZE		BORE	END-TO-END		CENTER-TO-BOTTOM	CENTER-TO-TOPOFYOKE	HANDWHEELOPERATED		GEAR OPERATED		WEIGHTS LBS/KG
			F	RF - L	RTJ - L2	H	Y	H1	HW	G1	GW	
CLASS 600	IN	4	4.06	17.00	17.12	10.1	20.5	31.4	12.0	31.4	12.0	349
	MM	100	103	432	435	257	521	798	305	798	305	158
	IN	6	6.06	22.00	22.12	12.8	25.8	39.3	18.0	39.3	18.0	601
	MM	150	154	559	562	325	655	998	457	998	457	273
	IN	8	8.06	26.00	26.12	17.1	31.9	48.5	18.0	48.5	18.0	1075
	MM	200	205	660	663	434	810	1232	457	1232	457	488
	IN	10	10.06	31.00	31.12	21.3	38.0	57.6	18.0	57.6	18.0	1876
	MM	250	256	787	790	541	965	1463	457	1463	457	851
	IN	10.375	10.375	31.00	31.12	21.3	38.0	57.6	18.0	57.6	18.0	1876
	MM	263.5	263.5	787	790	541	965	1463	457	1463	457	851
	IN	12	12.06	33.00	33.12	23.5	43.9	64.9	18.0	64.9	18.0	2494
	MM	300	306	838	841	597	1115	1648	457	1648	457	1131
	IN	12.375	12.375	33.00	33.12	23.5	43.9	64.9	18.0	64.9	18.0	2494
	MM	314.3	314.3	838	841	597	1115	1648	457	1648	457	1131
	IN	14	13.25	35.00	35.12	26.8	47.4	71.4	24.0	71.4	24.0	3327
	MM	350	337	889	892	681	1204	1814	610	1814	610	1059
	IN	16	15.25	39.00	39.12	29.5	52.8	77.6	24.0	77.6	24.0	4367
	MM	400	387	991	994	749	1341	1971	610	1971	610	1981
	IN	18	17.25	43.00	43.12	33.1	58.2	87.8	24.0	87.8	24.0	6047
	MM	450	438	1092	1095	841	1478	2230	610	2230	610	2743
	IN	20	19.19	47.00	47.25	36.8	65.7	98.3	30.0	98.3	30.0	8610
	MM	500	487	1194	1200	935	1669	2497	610	2497	610	3905
	IN	22	21.25	51.00	/	40.8	72.4	107.3	24.0	107.3	24.0	10720
	MM	550	540	1295	/	1036	1839	2725	610	2725	610	4863
	IN	24	23.25	55.00	55.38	44.5	78.3	115.3	24.0	115.3	24.0	13315
	MM	600	591	1397	1407	1130	1989	2929	610	2929	610	6040
CLASS 900	IN	4	4.06	18.00	18.12	10.3	20.5	31.2	12.0	31.2	12.0	410
	MM	100	103	457	460	262	521	792	305	792	305	186
	IN	6	6.06	24.00	24.12	13.1	25.8	38.8	18.0	38.8	18.0	798
	MM	150	154	610	613	333	665	986	457	986	457	362
	IN	8	8.06	29.00	29.12	17.5	31.9	48.3	18.0	48.3	18.0	1351
	MM	200	205	737	740	445	810	1227	457	1227	457	613
	IN	10	10.06	33.00	33.12	21.8	38.0	57.4	18.0	57.4	18.0	2402
	MM	250	256	838	841	554	965	1458	457	1458	457	1090
	IN	12	12.06	38.00	38.12	24.4	43.9	65.2	24.0	65.2	24.0	3307
	MM	300	306	965	968	620	1115	1656	610	1656	610	1500
	IN	14	13.25	40.50	40.88	27.9	47.4	70.6	24.0	70.6	24.0	4295
	MM	350	337	1029	1038	709	1204	1793	610	1793	610	1948
	IN	16	15.25	44.50	44.88	30.0	52.8	77.6	24.0	77.6	24.0	5505
	MM	400	387	1130	1140	762	1341	1971	610	1971	610	2497
	IN	18	17.25	48.00	48.50	33.6	58.2	88.0	24.0	88.0	24.0	7582
	MM	450	438	1219	1232	853	1478	2235	610	2235	610	3439
	IN	20	19.19	52.00	52.50	37.9	66.2	97.9	30.0	97.9	30.0	11666
	MM	500	487	1321	1336	963	1681	2487	610	2487	610	5292
	IN	24	25.00	57.00	/	48.8	83.4	116.6	30.0	116.6	30.0	19298
	MM	600	635	1448	/	1240	2118	2962	610	2962	610	8753

Liquid: Pressure Loss Curves for TCG Valves - 2" thru 14"



The above graph is based on simulations. Results may differ due to uncertainty within the pipeline or flow conditions. The formulas can be used to find the actual flow coefficient for a given condition of flow. The equations are valid only for incompressible flow.

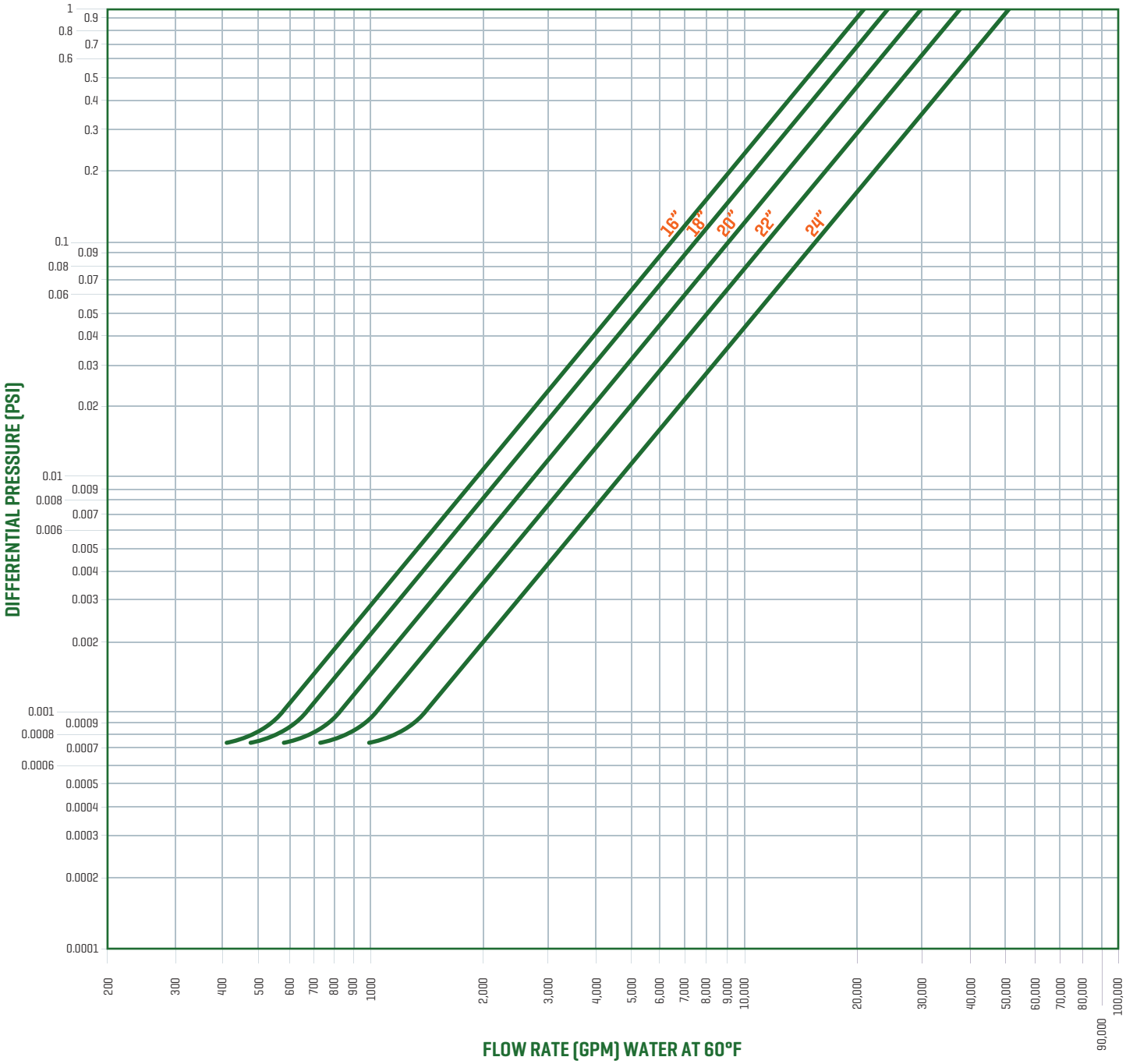
Flow Coefficient for Fully Open Valves	
4	1,108
6	3,000
8	5,000
10	7,560
12	11,547
14	13,416

Glossary of Terms	
Q	Flow Rate, Liquids - GPM
Cv	Flow Coefficient
P_1	Inlet Pressure
P_2	Outlet Pressure
ΔP	Pressure Drop (P_1 - P_2)
G	Specific Gravity (Water = 1)

Liquid (Incompressible Flow)

$$C_v = Q\sqrt{\frac{G}{\Delta P}} \qquad Q = C_v\sqrt{\frac{\Delta P}{G}} \qquad \Delta P = \left[\frac{Q}{C_v}\right]^2 G$$

Liquid: Pressure Loss Curves for TCG Valves - 16" thru 36"



The above graph is based on simulations. Results may differ due to uncertainty within the pipeline or flow conditions. The formulas can be used to find the actual flow coefficient for a given condition of flow. The equations are valid only for incompressible flow.

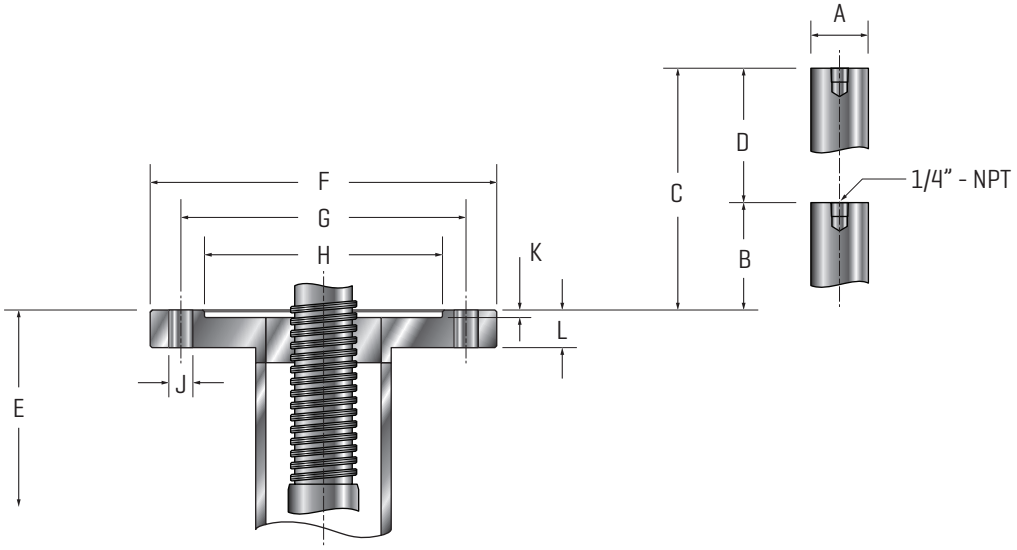
Flow Coefficient for Fully Open Valves	
16	21,213
18	25,000
20	30,237
22	37,187
24	50,709

Glossary of Terms	
Q	Flow Rate, Liquids - GPM
Cv	Flow Coefficient
P_1	Inlet Pressure
P_2	Outlet Pressure
ΔP	Pressure Drop (P_1 - P_2)
G	Specific Gravity (Water = 1)

Liquid (Incompressible Flow)

$$C_v = Q\sqrt{\frac{G}{\Delta P}} \qquad Q = C_v\sqrt{\frac{\Delta P}{G}} \qquad \Delta P = \left[\frac{Q}{C_v}\right]^2 G$$

Expanding Gate Valve Operator Interface



Valve Size	ANSI Class	Stem Thread * Double Lead Thread	Top of Stem Closed	Top of Stem Open	Total Travel	To Ctr. of Valve	Mtg.Plt. O.D.	Bolt Circle	Flg. Pilot Dia.	Mounting Holes	Flg. Pilot Depth	Mtg. Plt Thickness	ISO/MSSMtg. Pattern
		"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"L"	
4	150	1-5TPI-2G-LH	3.90	8.85	4.95	16.90	5.00	4.02	2.79	4 X 0.50	0.15	0.43	FA10
4	300	1-5TPI-2G-LH	3.90	8.50	4.60	16.90	5.00	4.02	2.79	4 X 0.50	0.15	0.43	FA10
4	600	1-1/4-5TPI-2G-LH	4.17	9.05	4.88	20.5	2 7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
4	900	1-1/4-5TPI-2G-LH	4.17	9.05	4.88	20.52	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
6	150	1-5TPI-2G-LH	3.94	10.72	6.78	21.70	5.00	4.02	2.79	4 X 0.50	0.15	0.43	FA10
6	300	1-5TPI-2G-LH	3.94	10.72	6.78	21.70	5.00	4.02	2.79	4 X .50	0.15	0.43	FA10
6	600	1-1/2-4TPI-2G-LH	4.54	11.39	6.85	25.78	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
6	900	1-1/2-4TPI-2G-LH	4.54	11.39	6.85	25.78	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
8	150	1-1/2-4TPI-2G-LH	4.47	13.60	9.13	27.88	6.75	5.50	3.98	4 X 0.69	0.18	0.70	FA14
8	300	1-1/2-4TPI-2G-LH	4.47	13.60	9.13	27.88	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
8	600	1-3/4-4TPI-2G-LH	5.34	14.72	9.38	31.94	8.00	6.50	5.15	4 X 0.81	0.23	1.15	FA16
8	900	1-3/4-4TPI-2G-LH	5.37	14.75	9.38	31.94	8.00	6.50	5.15	4 X 0.81	0.23	1.15	FA16
10	150	1-1/2-4TPI-2G-LH	5.11	16.29	11.19	33.54	6.75	5.50	3.98	4 X 0.69	0.18	0.70	FA14
10	300	1-1/2-4TPI-2G-LH	5.18	16.37	11.19	33.46	6.75	5.50	3.97	4 x 0.69	0.19	0.70	FA14
10	600	2-4TPI-2G-LH	6.08	17.79	11.71	37.99	8.50	6.50	5.15	4 X 0.88	0.25	1.13	FA16
10	900	2-4TPI-2G-LH	6.08	17.79	11.71	37.99	8.50	6.50	5.15	4 X 0.88	0.25	1.13	FA16
12	150	1-1/2-4TPI-2G-LH	5.44	18.55	13.11	39.11	6.75	5.50	3.98	4 X 0.69	0.18	0.70	FA14
12	300	1-1/2-4TPI-2G-LH	5.44	18.55	13.11	39.11	6.75	5.50	3.98	4 X 0.69	1.85	0.70	FA14
12	600	2-1/4-3TPI-2G-LH	6.11	19.72	13.61	43.88	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
12	900	2-1/4-3TPI-2G-LH	6.11	19.72	13.61	43.88	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
14	600	2-1/2-3TPI-2G-LH	6.75	21.89	15.14	47.52	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
14	900	2-1/2-3TPI-2G-LH	6.75	21.89	15.14	47.44	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
16	150	*1.5-0.20P-0.40L-ACME-2G-LH	6.02	22.52	16.50	47.89	6.75	5.50	3.96	4 X 0.69	0.15	0.70	FA14
16	300	*2.0-0.25P-0.50L-ACME-2G-LH	6.01	22.45	16.44	48.38	11.80	10.00	7.89	8 X 0.75	0.20	0.88	FA25
16	600	*2.5-0.40P-0.80L-ACME-2G-LH	6.42	23.07	16.65	52.25	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
16	900	*2.5-0.40P-0.80L-ACME-2G-LH	6.52	23.17	16.65	52.25	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
18	600	*3.0-0.40P-0.80L-ACME-2G-LH	8.71	27.74	19.03	58.55	12.00	10.00	7.90	8 X 0.75	0.25	1.25	AF25
18	900	*3.0-0.40P-0.80L-ACME-2G-LH	8.71	27.74	19.03	58.55	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
20	150	*2.0-0.25P-0.50L-ACME-2G-LH	5.93	26.17	20.24	57.99	8.25	6.50	5.14	4 X 0.81	0.23	0.75	FA16
20	300	*2.0-0.25P-0.50L-ACME-2G-LH	5.87	26.05	20.18	58.11	11.80	10.00	7.89	8 X 0.75	0.20	0.88	FA25
20	600	*3.25-0.40P-0.80L-ACME-2G-LH	9.37	30.33	20.96	65.70	14.00	11.73	9.10	8 X 0.88	0.25	1.39	FA30
20	900	*3.25-0.40P-0.80L-ACME-2G-LH	8.88	29.84	20.96	66.20	16.38	14.02	10.28	8 X 1.25	0.25	1.39	FA35
22	600	*3.25-0.40P-0.80L-ACME-2G-LH	9.43	32.74	23.31	72.41	16.38	14.02	10.28	8 X 1.25	0.25	1.25	FA35
24	150	*2.5-0.40P-0.80L-ACME-2G-LH	7.22	31.80	24.58	70.38	11.80	10.00	7.89	8 X 0.75	0.22	1.00	FA25
24	300	*2.5-0.40P-0.80L-ACME-2G-LH	7.04	31.54	24.50	70.63	13.75	11.73	9.07	8 x 0.88	0.22	1.00	FA30
24	600	*4.0-0.40P-0.80L-ACME-2G-LH	9.64	34.97	25.33	78.35	16.38	14.02	10.28	8 X 1.25	0.25	1.25	FA35
24	900	*4.0-0.40P-0.80L-ACME-2G-LH	9.15	34.47	25.33	78.80	18.50	15.98	11.84	8 X 1.38	0.33	1.25	FA40

Slab Gate Valve Operator Interface

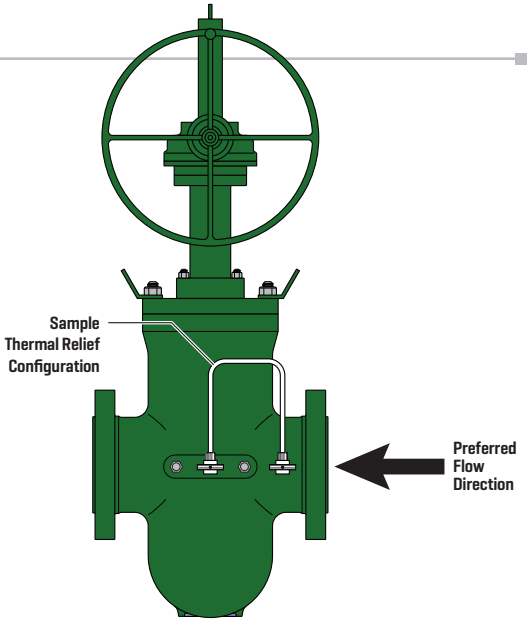
Valve Size	ANSI Class	Stem Thread * Double Lead Thread	Top of Stem Closed	Top of Stem Open	Total Travel	To Ctr. of Valve	Mtg.Plt. O.D.	Bolt Circle	Flg. Pilot Dia.	Mounting Holes	Flg. Pilot Depth	Mtg. Plt Thickness	ISO/MSSMtg. Pattern
		"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"L"	
4	150	1-5TPI-2G-LH	3.80	8.56	4.76	16.63	5.00	4.02	2.79	4 X 0.50	0.15	0.43	FA10
4	300	1-5TPI-2G-LH	3.80	10.50	6.70	16.63	5.00	4.02	2.79	4 X 0.50	0.15	0.46	FA10
4	600	1-1/4-5TPI-2G-LH	4.39	9.29	4.90	20.52	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
4	900	1-1/4-5TPI-2G-LH	4.39	9.29	4.90	20.52	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
6	150	1-5TPI-2G-LH	3.70	10.45	6.75	21.63	5.00	4.02	2.79	4 X 0.50	0.15	0.43	FA10
6	300	1-5TPI-2G-LH	3.70	10.45	6.75	21.63	5.00	4.02	2.79	4 X 0.50	0.15	0.43	FA10
6	600	1-1/2-4TPI-2G-LH	5.01	11.86	6.85	25.78	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
6	900	1-1/2-4TPI-2G-LH	5.01	11.86	6.85	25.78	7.00	5.50	3.98	4 X 0.75	0.18	1.00	FA14
8	150	1-1/2-4TPI-2G-LH	4.30	13.13	8.83	27.69	6.75	5.50	3.98	4 X 0.69	0.18	0.70	FA14
8	300	1-1/2-4TPI-2G-LH	4.30	13.13	8.83	27.69	6.75	5.50	3.98	4 X 0.69	0.18	0.70	FA14
8	600	1-3/4-4TPI-2G-LH	5.50	14.88	9.38	31.94	8.00	6.50	5.15	4 X 0.81	0.23	1.15	FA16
8	900	1-3/4-4TPI-2G-LH	5.50	14.88	9.38	31.94	8.00	6.50	5.15	4 X 0.81	0.23	1.15	FA16
10	150	1-1/2-4TPI-2G-LH	5.10	15.98	10.88	33.14	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
10	300	1-1/2-4TPI-2G-LH	5.10	15.98	10.88	33.14	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
10	600	2-4TPI-2G-LH	6.40	17.90	11.50	37.99	8.50	6.50	5.15	4 X 0.88	0.25	1.13	FA16
10	900	2-4TPI-2G-LH	6.40	17.90	11.50	37.99	8.50	6.50	5.15	4 X 0.88	0.25	1.13	FA16
12	150	1-1/2-4TPI-2G-LH	5.10	18.10	13.00	38.63	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
12	300	1-1/2-4TPI-2G-LH	5.10	18.10	13.00	38.63	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
12	600	2-1/4-3TPI-2G-LH	7.00	20.25	13.25	43.88	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
12	900	2-1/4-3TPI-2G-LH	7.00	20.25	13.25	43.88	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
14	150	*1.5-0.20P-040L-ACME-2G-LH	5.10	19.39	14.29	41.42	6.75	5.50	3.98	4 X 0.69	0.23	0.70	FA14
14	300	*1.5-0.20P-0.40L-ACME-2G LH	5.10	19.39	14.29	41.42	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
14	600	2-1/2-3TPI-2G-LH	7.30	22.30	15.00	47.44	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
14	900	2-1/2-3TPI-2G-LH	7.30	22.30	15.00	47.44	11.50	10.00	7.90	8 X 0.75	0.25	1.25	FA25
16	150	*1.5-0.20P-0.40L-ACME-2G-LH	6.10	22.28	16.18	46.73	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
16	300	*1.5-0.20P-040L-ACME-2G-LH	6.10	22.28	16.18	46.79	6.75	5.50	3.98	4 X 0.69	0.19	0.70	FA14
16	600	*2.5-0.40P-0.80L-ACME-2G-LH	7.20	23.70	16.50	52.25	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
16	900	*2.5-0.40P-0.80L-ACME-2G-LH	7.20	23.70	16.50	52.25	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
18	150	*1.75"-0.25P-0.50L-ACME-2GLH	7.10	25.26	18.16	51.31	8.25	6.50	5.14	4 X 0.81	0.22	0.75	FA16
18	300	*1.75"-0.25P-0.50L-ACME-2GLH	6.60	24.76	18.16	51.79	8.25	6.50	5.14	4 X 0.81	0.22	0.75	FA16
18	600	*3.0-0.40P-0.80L-ACME-2G-LH	9.30	27.96	18.66	58.18	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
18	900	*3.0-0.40P-0.80L-ACME-2G-LH	9.30	27.96	18.66	58.18	12.00	10.00	7.90	8 X 0.75	0.25	1.25	FA25
20	150	*2.0-0.25P-0.50L-ACME-2G-LH	5.80	26.04	20.24	57.21	8.25	6.50	5.15	4 X 0.81	0.25	0.75	FA16
20	300	*2.0-0.25P-0.50L-ACME-2G-LH	5.80	25.93	20.13	57.21	8.25	6.50	5.15	4 X 0.81	0.25	0.75	FA16
20	600	*3.25-0.40P-0.80L-ACME-2G-LH	9.91	31.01	21.10	65.70	14.02	11.73	9.10	8 X 0.88	0.25	1.38	FA30
20	900	*3.25-0.40P-0.80L-ACME-2G-LH	9.90	30.49	20.59	66.20	16.38	14.02	10.28	8 X 1.25	0.25	1.39	FA35
22	600	*3.25-0.40P-0.80L-ACME-2G-LH	10.10	33.41	23.31	70.54	16.38	14.02	10.28	8 X 1.25	0.25	1.25	FA35
24	150	*2.0-0.25P-0.50L-ACME-2G-LH	6.50	30.96	24.46	68.61	8.25	6.50	5.15	4 X 0.81	0.23	0.75	FA16
24	300	*2.0-0.25P-0.50L-ACME-2G-LH	5.90	30.36	24.46	69.24	8.25	6.50	5.15	4 X 0.81	0.23	0.75	FA16
24	600	*4.0-0.40P-0.80L-ACME-2G-LH	10.40	35.73	25.33	78.30	16.38	14.02	10.28	8 X 1.25	0.25	1.25	FA35

Expanding Gate ThermalReliefSystem

With the expanding gate design, it is possible for Thermal Expansion to occur within the body cavity while the valve is in the closed position. A Thermal Relief system allows the body cavity to relieve into the upstream side of the valve.



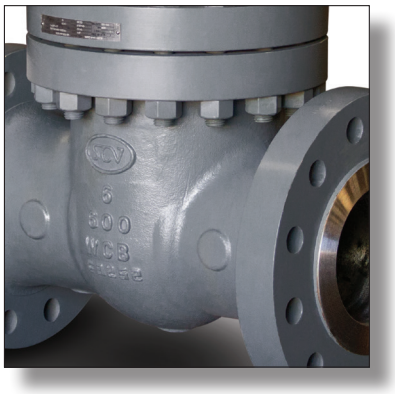
SCV Valve installed Thermal Relief system on 16" Class 600 Thru Conduit Expanding Gate Valve.

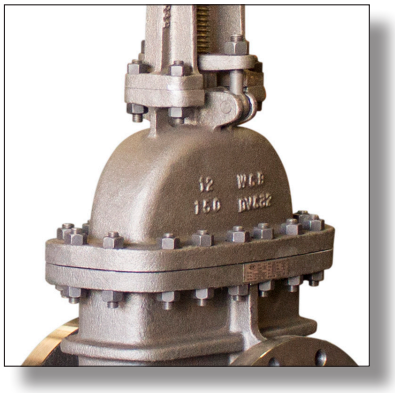


SCV VALVE









Bolted Bonnet OS&Y Wedge Gate Valves - API 600 Class: 150 - 900/Sizes: 2″ - 30″

Design and Manufacturing Standards	
Basic Design	API 600 & ANSI/ASME B 16.34
Wall Thickness	ANSI/ASME B16.34
Face-to-Face Dimension	ANSI/ASME B16.10
Flange End Dimension	ANSI/ASME B16.5 (2″ to 12″)
Pressure/Temperature Rating I/A/W	ANSI/ASME B16.34
Inspection & Testing	API 598



Geothermal Bolted Bonnet OS&Y Wedge Gate Valves

[Product Preview]

For more information call us @ (281) 482-4728 or visit our website @ www.scvvalve.com

Bolted Bonnet OS&Y Wedge Gate Valves - API 600

- Basic Design: API 600 & ANSI/ASME B 16.34
- Wall Thickness: ASME B 16.34
- Face-to-Face Dimensions: ANSI/ASME B16.10
- Flange End Dimensions: ANSI/ASME B16.5 (2" to 24")
- Pressure/Temperature Rating I/A/W: ANSI/ASME B16.34
- Inspection & Testing: API 598

Trim Configuration Options

- Solid Inconel stem
- Solid 316 SS stem
- Solid 17-4 PH stem
- Solid Inconel gate
- Inconel lined bore & seal area
- Solid stainless steel gate w/hardface overlay

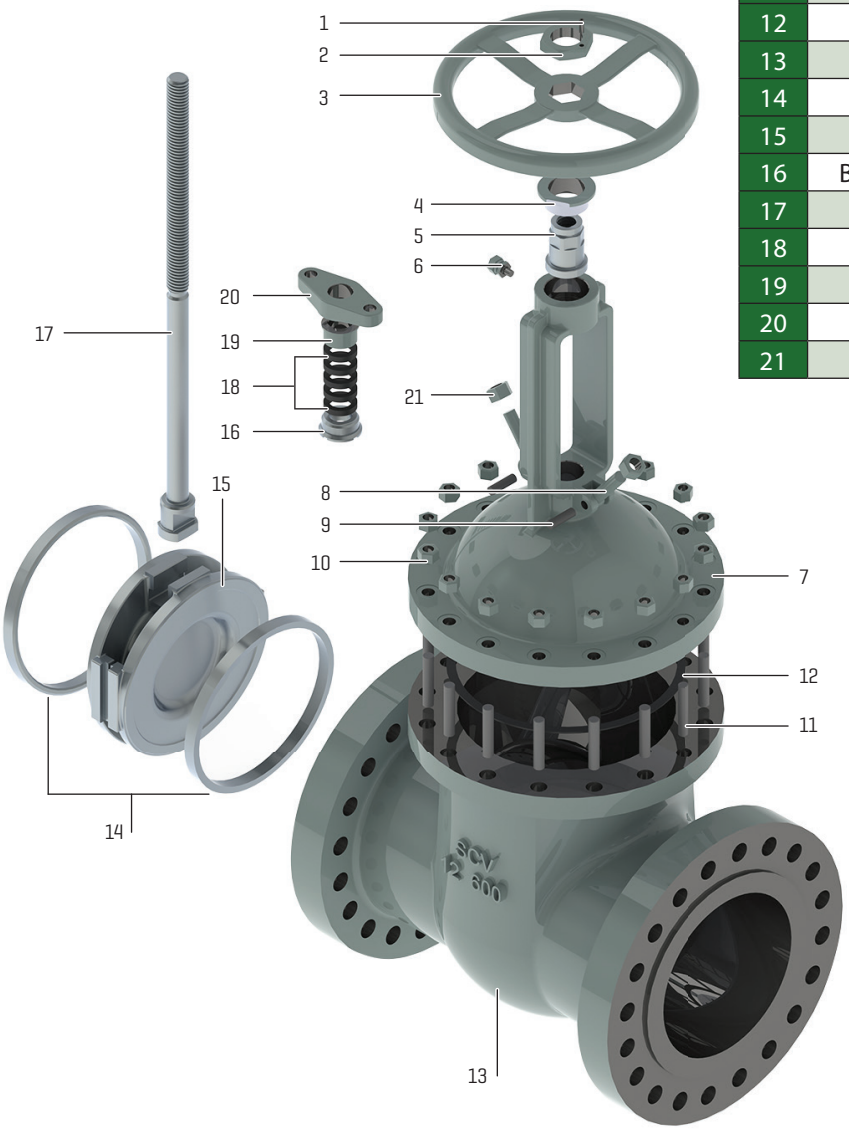


Note: Not recommended for throttling applications.

Note: SCV reserves the right to change any technical design and dimensional data without prior notice. Please contact SCV to confirm all Dimensions and Data offered in this catalog.

Bolted Bonnet OS&Y Wedge Gate Valves - API 600

[Expanded View]

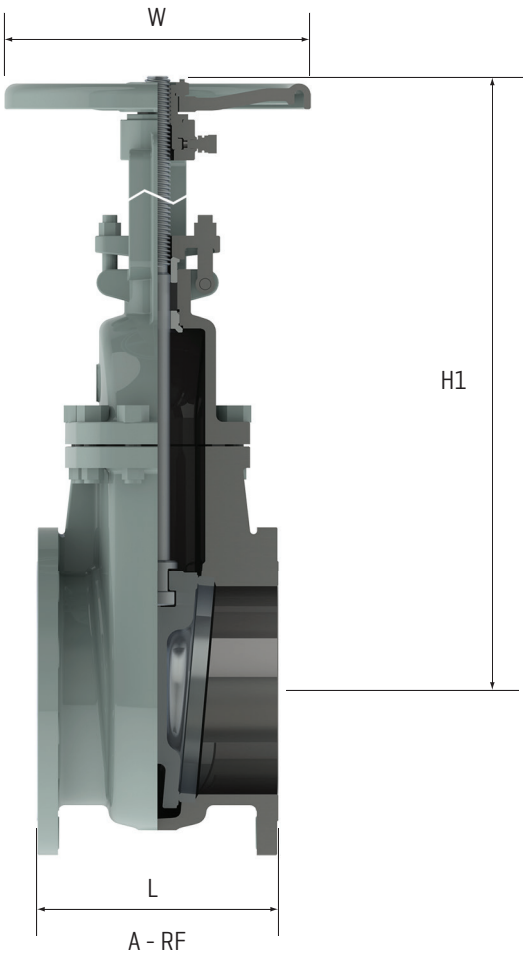


No	Part	Material
1	Set Screw	Cast Steel
2	Handwheel Nut	Cast Steel
3	Handwheel	Malleable Iron
4	StemBushingLockNut	Cast Steel
5	Yoke Sleeve	A439 D-2
6	Grease Nipple	Cast Steel
7	Bonnet	A216 WCB
8	Gland Bolt Nut	A194 2H
9	Gland Bolt Pin	Cast Steel
10	Bonnet Bolt Nut	A194 2H
11	Bonnet Bolt	A193 B7
12	Gasket	304 Spiral Wound GR
13	Body	A216 WCB
14	Seat Ring	A105 + Stellite Hardface
15	Wedge	410 + Stellite Hardface
16	Backseat Bushing	A276 Type 410
17	Stem	410
18	Packing	BraidedGR/DieFormedGR
19	Gland	A276 Type 410
20	Gland Flange	A216 WCB
21	Gland Bolt	A193 B7

Bolted Bonnet OS&Y Wedge Gate Valves
Size: 2" - 12"
Class: 150 -900

Additional dimensional information available upon request.





	Size	NPS	2	2.5	3	4	6	8	10	12
CLASS 150		DN	50	65	80	100	150	200	250	300
	L (RF)	IN	7.0	7.5	8.0	9.0	10.5	11.5	13.0	14.0
		MM	178	191	203	229	267	292	330	356
	H1	IN	15.4	16.7	18.1	22.8	30.6	38.4	46.4	54.6
		MM	390	425	461	580	776	976	1178	1387
	W	IN	7.9	7.9	7.9	9.8	11.8	14.0	17.7	17.7
		MM	200	200	200	250	300	355	450	450
	WGT (RF)	IB	49	55	66	99	187	295.5	445	639
		KG	22	25	30	45	85	134	202	290
	WGT (BW)	IB	44	46	62	92.6	161	244	399	584
		KG	20	21	28	42	73	111	181	265
CLASS 300	L (RF)	IN	8.5	9.5	11.12	12.0	15.9	16.5	18.0	19.75
		MM	216	241	282	305	404	419	457	502
	H1	IN	16.2	17.7	19.0	23.7	32.0	40.2	48.8	56.8
		MM	412	450	483	601	813	1020	1239	1443
	W	IN	7.9	7.9	S.8	9.8	14.0	15.7	17.7	19.7
		MM	200	200	224	250	355	400	450	500
	WGT (RF)	IB	64	88	106	163	313	485	721	1094
		KG	29	40	48	74	142	220	327	496
	WGT (BW)	IB	52.9	77	82	141	269	379	512	862
		KG	24	35	37	64	122	172	232	391

	Size	NPS	2	2.5	3	4	6	8	10	12
CLASS 600		DN	50	65	80	100	150	200	250	300
	L (RF)	IN	11.5	13.0	14.0	17.0	22.0	26.0	31.0	33.0
		MM	292	330	356	432	559	660	787	838
	L2 (RTJ)	IN	11.5	13.0	14.0	17.0	22.0	26.0	31.0	33.0
		MM	292	330	356	432	559	660	787	838
	H1	IN	18.5	19.5	22.1	26.7	37.2	43.7	52.1	65.9
		MM	471	495	561	677	944	1110	1323	1675
	W	IN	8.8	8.8	9.8	11.8	17.7	19.7	24.8	22.0
		MM	224	224	250	300	450	500	630	560
	WGT (RF)	IB	95	132	154	296	628	988	1499	2355
		KG	43	60	70	134	285	448	680	1068
	WGT (BW)	IB	62	99	132	229	452	690	1180	2145
		KG	28	45	60	104	205	313	535	973
CLASS 900	L (RF)	IN	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0
		MM	368	419	381	457	610	737	838	965
	L2 (RTJ)	IN	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0
		MM	368	419	381	457	610	737	838	965
	H1	IN	21.2	26.4	26.4	30.8	42.4	55.5	67.7	77.4
		MM	539	670	672	782	1076	1411	1720	1965
	W	IN	11.8	11.8	14.0	15.7	22.0	17.7	22.0	22.0
		MM	300	300	355	400	560	450	560	560
	WGT (RF)	IB	181	342	364	384	999	1720	2752	3400
		KG	82	155	165	174	453	780	1248	1542
	WGT (BW)	IB	130	375	287	295	789	1378	2267	2844
		KG	59	170	130	134	358	625	1028	1290

Auxiliary Bypass/Drain Boss Locations

By-Passes

- Utilized in steam service to warm a flow system prior to opening the main valve.
- Utilized to balance line pressure on both sides of a main valve to reduce the torque demands.
- Cast steel valves can be fitted with all welded by-passes.
- The standard by-pass configuration consists of a single OS&Y globe valve by-pass attached to the side of the main valve with the stems of both valves parallel.
- The piping and OS&Y globe by-pass valve have a pressure-temperature rating and corrosion resistance equal to or exceeding that of the main valve.
- A comprehensive arrangement drawing must be submitted by the customer for other by-pass configurations.

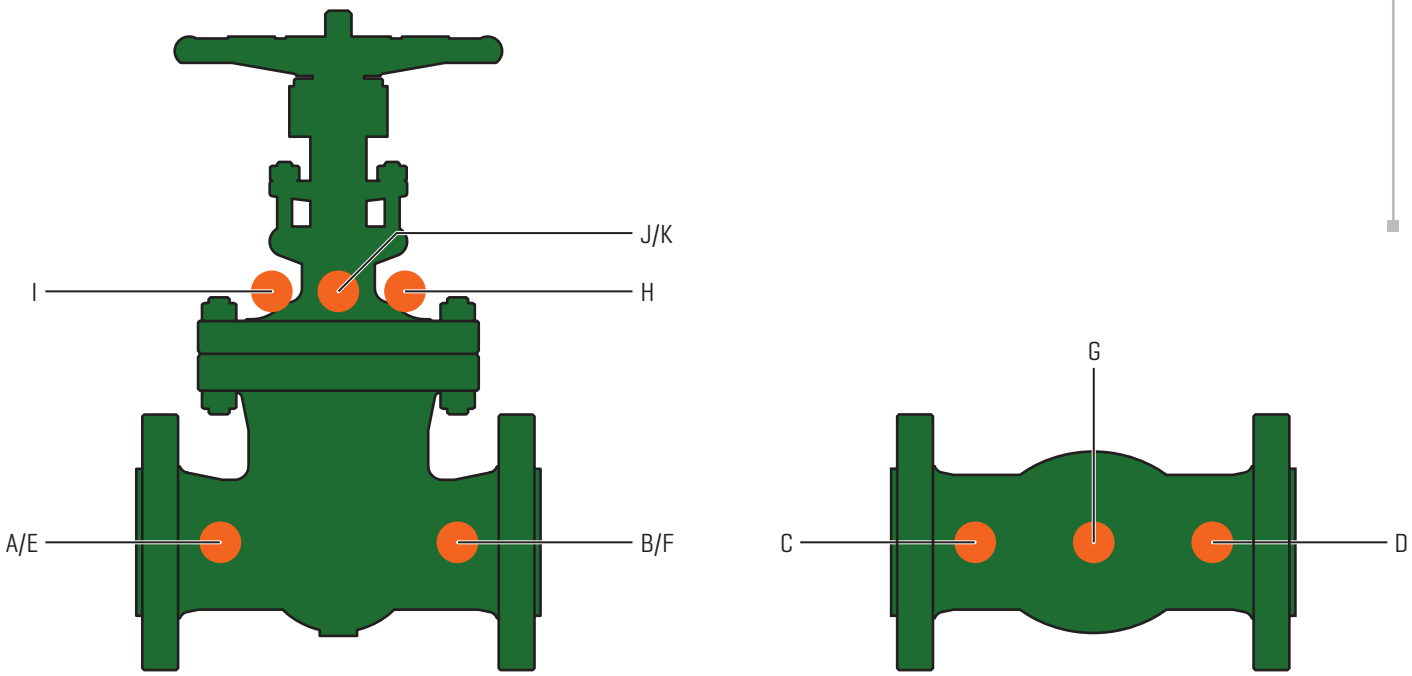
Drains

- Cast steel valves can be fitted with drains at any of the locations shown.
- Standard drain connections consist of a drilled, tapped, and plugged hole at the specified location(s) by the customer.
- Other types of drains include welded or threaded nipples with/without shut-off valves, are available at the customer's request.

Auxiliary Bypass/Drain Boss Locations

- Please refer to ASME B16.34 for exact auxiliary connection locations, sizes, and threading information.
- Each letter identifies a possible hole location for auxiliary connection(s) and are for reference only.
- Standard auxiliary connection hole sizes shall be drilled and tapped as follows, (unless specified otherwise by the customer):
  - 2" thru 4" utilizes a .50" hole
  - 5" thru 8" utilizes a .75" hole
  - 10" and larger utilizes a 1" hole

Note: *Locations E, F, & K are on opposite side of valve.*



Pressure Temperature Ratings - ASME B16.34

Note: Pressures in PSI

	Temp. F	A105	WCB	WCC	WC6	C5	C12	C12A	316	CF8M	F51	F53
150	-20 to 100	285	285	290	290	290	290	290	275	275	290	290
	200	260	260	260	260	260	260	260	235	235	260	260
	300	230	230	230	230	230	230	230	215	215	230	230
	400	200	200	200	200	200	200	200	195	195	200	200
	500	170	170	170	170	170	170	170	170	170	170	170
	600	140	140	140	140	140	140	140	140	140	140	140
	650	125	125	125	125	125	125	125	125	125	125	125
	700	110	110	110	110	110	110	110	110	110	110	110
	750	95	95	95	95	95	95	95	95	95	95	95
	800	80	80	80	80	80	80	80	80	80	/	/
	850	65	65	65	65	65	65	65	65	65	/	/
	900	50	50	50	50	50	50	50	50	50	/	/
	950	35	35	35	35	35	35	35	35	35	/	/
	1000	20	20	20	20	20	20	20	20	20	/	/
	1050	/	/	/	20	20	20	20	20	20	/	/
	1100	/	/	/	20	20	20	20	20	20	/	/
	1150	/	/	/	20	20	20	20	20	20	/	/
	1200	/	/	/	15	15	20	20	20	20	/	/
	1250	/	/	/	/	/	/	/	20	20	/	/
	1300	/	/	/	/	/	/	/	20	20	/	/
	1350	/	/	/	/	/	/	/	20	20	/	/
	1400	/	/	/	/	/	/	/	20	20	/	/
	1450	/	/	/	/	/	/	/	20	20	/	/
	1500	/	/	/	/	/	/	/	15	15	/	/
	Temp. F	A105	WCB	WCC	WC6	C5	C12	C12A	316	CF8M	F51	F53
300	-20 to 100	740	740	750	750	750	750	750	720	720	750	750
	200	680	680	750	750	750	750	750	620	620	745	745
	300	655	655	730	720	730	730	730	560	560	665	665
	400	635	635	705	695	705	705	705	515	515	615	615
	500	605	605	665	665	665	665	665	480	480	580	580
	600	570	570	605	605	605	605	605	450	450	555	555
	650	550	550	590	590	590	590	590	440	440	545	545
	700	530	530	555	570	570	570	570	435	435	540	540
	750	505	505	505	530	530	530	530	425	425	530	530
	800	410	410	410	510	510	510	510	420	420	/	/
	850	320	320	320	485	485	485	485	420	420	/	/
	900	230	230	225	450	375	450	450	415	415	/	/
	950	135	135	135	320	275	375	385	385	385	/	/
	1000	85	85	85	215	200	255	365	365	365	/	/
	1050	/	/	/	145	145	170	360	160	160	/	/
	1100	/	/	/	95	100	115	300	305	305	/	/
	1150	/	/	/	65	60	75	225	235	235	/	/
	1200	/	/	/	40	35	50	145	185	185	/	/
	1250	/	/	/	/	/	/	/	145	145	/	/
	1300	/	/	/	/	/	/	/	115	115	/	/
	1350	/	/	/	/	/	/	/	95	95	/	/
	1400	/	/	/	/	/	/	/	75	75	/	/
	1450	/	/	/	/	/	/	/	60	60	/	/
	1500	/	/	/	/	/	/	/	40	40	/	/

Pressure Temperature Ratings - ASME B16.34

Note: Pressures in PSI

	Temp. F	A105	WCB	WCC	WC6	C5	C12	C12A	316	CF8M	F51	F53
600	-20 to 100	1480	1480	1500	1500	1500	1500	1500	1440	1440	1500	1500
	200	1360	1360	1500	1500	1500	1500	1500	1240	1240	1490	1490
	300	1310	1310	1455	1445	1455	1455	1455	1120	1120	1335	1335
	400	1265	1265	1405	1385	1410	1410	1410	1025	1025	1230	1230
	500	1205	1205	1330	1330	1330	1330	1330	995	995	1160	1160
	600	1135	1135	1210	1210	1210	1210	1210	900	900	1115	1115
	650	1100	1100	1175	1175	1175	1175	1175	885	885	1095	1095
	700	1060	1060	1110	1135	1135	1135	1135	870	870	1085	1085
	750	1015	1015	1015	1065	1065	1065	1065	855	855	1065	1065
	800	825	825	825	1015	1015	1015	1015	845	845	/	/
	850	640	640	640	975	975	975	975	835	835	/	/
	900	460	460	445	900	745	900	900	830	830	/	/
	950	275	275	275	640	550	755	775	775	775	/	/
	1000	170	170	170	430	400	505	725	725	725	/	/
	1050	/	/	/	290	290	345	720	720	720	/	/
	1100	/	/	/	190	200	225	605	610	610	/	/
	1150	/	/	/	130	125	150	445	475	475	/	/
	1200	/	/	/	80	70	105	290	370	370	/	/
	1250	/	/	/	/	/	/	/	295	295	/	/
	1300	/	/	/	/	/	/	/	235	235	/	/
	1350	/	/	/	/	/	/	/	190	190	/	/
	1400	/	/	/	/	/	/	/	150	150	/	/
	1450	/	/	/	/	/	/	/	115	115	/	/
	1500	/	/	/	/	/	/	/	85	85	/	/
900	Temp. F	A105	WCB	WCC	WC6	C5	C12	C12A	316	CF8M	F51	F53
	-20 to 100	2220	2220	2250	2250	2250	2250	2250	2160	2160	2250	2250
	200	2035	2035	2250	2250	2250	2250	2250	1860	1860	2230	2230
	300	1965	1965	2185	2165	2185	2185	2185	1680	1680	2000	2000
	400	1900	1900	2110	2080	2115	2115	2115	1540	1540	1845	1845
	500	1810	1810	1995	1995	1995	1995	1995	1435	1435	1740	1740
	600	1705	1705	1815	1815	1815	1815	1815	1355	1355	1670	1670
	650	1650	1650	1765	1765	1765	1765	1765	1325	1325	1640	1640
	700	1590	1590	1665	1705	1705	1705	1705	1305	1305	1625	1625
	750	1520	1520	1520	1595	1595	1595	1595	1280	1280	1595	1595
	800	1235	1235	1235	1525	1525	1525	1525	1265	1265	/	/
	850	955	955	955	1460	1460	1460	1460	1255	1255	/	/
	900	690	690	670	1350	1120	1350	1350	1245	1245	/	/
	950	410	410	410	955	825	1130	1160	1160	1160	/	/
	1000	255	255	255	650	595	760	1090	1090	1090	/	/
	1050	/	/	/	430	430	515	1080	1080	1080	/	/
	1100	/	/	/	290	300	340	905	915	915	/	/
	1150	/	/	/	195	185	225	670	710	710	/	/
	1200	/	/	/	125	105	155	430	555	555	/	/
	1250	/	/	/	/	/	/	/	440	440	/	/
	1300	/	/	/	/	/	/	/	350	350	/	/
	1350	/	/	/	/	/	/	/	290	290	/	/
	1400	/	/	/	/	/	/	/	225	225	/	/
	1450	/	/	/	/	/	/	/	175	175	/	/
	1500	/	/	/	/	/	/	/	125	125	/	/

Terms & Conditions

Quotation Validity

This quotation is valid for 30 days from the date quotation is sent. Validity on special metals, including Stainless Steel, is 14 days from the date the quotation is sent. All products offered from stock are subject to prior sale.

Shipments

All items quoted are EXW our Dock - (Ex Works - SCV Valve Facility Sante Fe, Texas 77510) - unless otherwise noted and agreed to in writing. Shipment may be billed either third party billing to the buyer or freight collect. Shipment dates offered above are forecasted delivery lead times and are estimated from the date payment terms (acceptable to seller) are established, clarification is received on all technical information, and resolution of customer's written approval of drawings is received (when required). The equipment quoted shall be packed in accordance with seller's standard packing procedure unless otherwise noted and agreed to in writing by the seller.

Force Majeure

If in the case of an act of God, war, riot, fire, explosion, flood, or any other circumstances of whatsoever nature which are beyond the control of the seller and which in any way affect the ability of the seller to fulfill its delivery obligations, the delivery is hindered, impeded, or delayed the seller shall be exonerated from all responsibilities and reserves the right to postpone the delivery beyond the original schedule.

Payment terms

All terms are to be negotiated. Credit cards accepted (Master Card, Visa, American Express).

Purchase Orders

All buyer's purchase orders supplied to the seller are to be written in the English language.

Prices

All prices quoted are in USD as per the preceding pricing schedule. The minimum order value is $5,000.00 (five thousand dollars), unless otherwise agreed to by seller. If for some reason any items are changed or additions to the order required, seller reserves the right to adjust prices accordingly. All sales are subject to approval of seller's credit department. If buyer fails to meet the agreed upon and established commercial terms of the contract, the seller may with-hold all subsequent deliveries until such time that the original commercial terms of the contract have been met by the buyer (or subsequent commercial terms have been agreed upon by the seller with the buyer).

Intellectual Property

All specifications, illustrations, drawings, certificates, and other particulars supplied by seller remain the intellectual property of the seller and should not be disclosed to any third party without the prior written consent of seller.

Governing Law; Arbitration; Jurisdiction

The terms and conditions of this quotation and any subsequent purchase order shall be construed, interpreted, and performed exclusively according to the laws of the State of Texas, USA. The courts of such state shall have exclusive jurisdiction out of all controversies arising out of or in connection with this agreement. The parties consent that process may be served upon them in any such action by registered mail at the address stated for Buyer on its purchase order, and upon SCV Valve at the address noted above in Santa Fe, Texas, or personally within or without the State of Texas. Any legal action with respect to any agreement must be commenced within one year after the cause of action has accrued. The provisions of the Uniform Commercial Code as adopted by the State of Texas, and not under the United Nations Convention on Contracts for the International Sale of Goods, shall apply.

Warranty

All seller's products are guaranteed against defects in workmanship for a period of twelve (12) months after being placed in service, but not exceeding eighteen (18) months after shipment, when products are properly installed per seller specifications and used within the service and pressure range for which they were manufactured. Full risk of loss shall pass to the buyer upon delivery at FOB point, or destination port in case of CIF. This guarantee is limited to the replacement of any valve parts/components found to be defective either in material or workmanship. This guarantee does not extend to costs of labor, freight, or any other consequential charges. The unauthorized use of third party components and workmanship in seller's products voids this warranty.

Limitation of Liability

The liability of the seller under this agreement or with respect to any products supplied or services performed pursuant to this agreement, whether in contract, in tort, in strict liability or otherwise, shall not exceed the purchase price paid by the buyer with respect thereto. In no event will the seller be liable in contract, in tort, in strict liability or otherwise for any special, indirect, incidental, or consequential damages. This is including but not limited to loss of anticipated profits or revenues, loss of use, non-operation or increased expense of operation of equipment, cost of capital, or claims from customer or buyer for failure or delay in achieving anticipated profits or products.

Cancellation

No contract may be canceled by the buyer except upon written notice to seller and upon payment to seller of all costs incurred by the contract arising out of, or in connection with, the contract. Export of goods covered hereby is subject to United States Customs Control. Standard stocking items will be subject to a twenty-five percent (25%) restocking and/or cancellation charge. Non-standard stocking items will be subject to a one-hundred percent (100%) restocking and/or cancellation charge.

Cancellation Charge

The following indicates the rates of cancellation charge of contract value for project manufactured items and/or special engineered items at various stages of production:

- Time of cancellation: Order Acknowledgement and prior to Engineering engagement. Cancellation Charge: 10%
- Time of cancellation: After start of engineering but prior to release to production. Cancellation Charge: 30%
- Time of cancellation: After release to production but prior to completion of fabrication. Cancellation Charge: 80%
- Time of cancellation: After completion of fabrication. Cancellation Charge: 100%

Return of Goods

No product shall be returned to seller without written authorization and shipping instructions having been obtained from seller. Products authorized for returns are to be shipped freight pre-paid to the SCV Valve Facility identified in writing, unless otherwise notified, and are subject to seller's standard re-stocking fees.

Documentation

MTR's are available at no charge upon request. The seller's standard document package is per ISO 10474 3.1B requirements. Additional requested documentation is subject to charge.

Inspection

The customer or his authorized representative may, with four (4) weeks prior notice given to seller, visually inspect products manufactured by seller. Such seller approved inspections will be carried out in accordance with seller's standard or seller approved customer inspection procedures. If any inspection or documentation requested by the customer is over and beyond the scope and criteria initially agreed to by the seller, any costs incurred by conducting such inspection or preparation of special documents shall be paid by the buyer prior to release of the items for shipment.

Witness Hydro-testing

Witness hydro-testing is available at a cost. A scope of buyers inspection request is to be provided to seller at order placement. Late notice of such requested inspection is subject to additional costs. The cost associated with such witness hydro request is to be agreed on prior to any such testing taking place. Payment of this type of testing to be negotiated. Additionally, any costs associated with a third party inspector will not be at the sellers expense.

Keepin' it clean!

Harness Earth's Energy

As the demand for green energy skyrockets, sources for renewable energy plants increase daily. Geothermal Power Plants satisfy this demand very well with a minimal footprint and little impact on the environment. Geothermal energy is constantly produced within the earth and is a very clean, natural, reliable, and renewable energy source. The controlled capture and processing of this high-heat, pressurized release of thermal energy requires precision engineering and equipment.

Of the three types of Geothermal plants (Dry Steam, Flash Steam and Binary Cycle) high-quality, high-performance valves are critical components for successful geothermal energy conversion and delivery. All three geothermal power plants utilize heat in the form of steam, brine and/or heat transfer fluids to activate steam turbines which in turn produce electricity.

SCV manufactures a complete line of low-maintenance, dependable Thru Conduit Gate and Wedge Gate Geothermal Valves designed for this specific application and are made of materials that resist the inherent impurities contained in the process fluids and gasses, silica scaling (which can cause build-up, valve leakage or complete valve failure) and high pressures and high tempuratures.

The SCV Geothermal Valve Line has been proven to operate efficiently at temperatures well above the required specifications (700°F/371°C) while offering minimal pressure loss.



Since 2005, the SCV brand has been committed to providing quality flow control products to the power, paper & pulp, oil & gas, and petro chemical industries.

As one of the largest valve manufacturers, SCV Valve's reputation is unparalleled for producing high quality commodity and specialty valves. Products range in sizes 1/2" - 48", in pressure classes from 150# - 2500# and are backed by timely deliveries and competitive prices.

Call SCV today at (281)482-4728 for all your valve needs
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SCV VALVE

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