

FORGED
STEEL
VALVES



RPC Valve

GENERAL TERMS AND CONDITIONS OF SALE OF: RP&C



RP&C Valve

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WARRANTY	All products are warranted to be free from manufacturing defects for a period of one (1) year from date of shipment, and any found to be defective within that period will be replaced without charge, provided (1) that the product was used as recommended and in accordance with approved installation and operating practices, (2) that its failure resulted from a manufacturing defect and not from damage due to corrosive, abrasive, or other wear normally to be expected in the services involved, (3) that the product was not modified or changed (unless written approval was given by RP&C), and (4) that written notice of such defect is delivered to RP&C during such one (1) year period. No labor costs or other expense or liability is assumed. The Uniform Commercial Code shall not apply to the sale, nor the Michigan statutes adopting the Uniform Commercial Code. This express warranty is in lieu of and excludes all other warranties, guarantees, or representations, expressed or implied. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.
EXCLUSIONS	Do not use RP&C products in aircraft or aerospace applications. No warranties, guarantees or representations of any kind are made with respect to such applications. Purchaser assumes all risks of any use in such applications and will indemnify and hold harmless RP&C against and from any claims, costs (including attorney's fees) and liabilities arising out of such use.
PURCHASER'S REMEDIES	The Purchaser's remedies with respect to any product furnished by RP&C hereunder that is found not to be in conformity with the terms and conditions of the contract because of breach of contract, breach of express or implied warranty, or negligence shall be limited exclusively to the right of replacement of such defective product or, at our option, repayment of our sale price of the product. In no event shall RP&C be liable for claims (based upon breach of contract, breach of express or implied warranty, or negligence) for any other damages, whether direct, immediate, foreseeable, consequential, or special or for any expenses incurred by reason of the use or misuse, sale or fabrication of products which do or do not conform to the terms and conditions of the contract.
PRICES	Prices, and other terms of sale and payment, are subject to change without notice. Unless a contrary provision appears in this price schedule, quotation or order acknowledgment, prices may be withdrawn without notice at any time. Stenographic or clerical errors are subject to correction.
ACCEPTANCE OF ORDERS	All orders are subject to RP&C credit department approval prior to acceptance by RP&C. No assignment of the Purchaser's rights may be made without the written consent of RP&C.
REMITTANCES	All accounts are payable in United States funds, free of exchange, collection, or any other charges. If, in the sole discretion of RP&C, the financial condition of the Purchaser at any time so requires, RP&C retains the right to require full or partial payment in advance.
PARTIAL SHIPMENTS AND PAYMENTS	RP&C reserves the right to make partial shipments from time to time, and to render invoices therefore, which shall be due and payable as provided in said invoices and the paragraph entitled "Remittances". If the Purchaser becomes overdue in any such partial payment, RP&C shall be entitled to suspend work and/or avail itself of other legal remedies.
TAXES	Unless otherwise specifically noted, the amount of any sale, use, occupancy, excise tax, or other tax, of any nature, federal, state, or local for which RP&C is legally liable, either initially or through failure of payment by Purchaser, shall be added or be in addition to the price quoted and Purchaser agrees to pay the same to RP&C.
SHORTAGES & DAMAGES IN TRANSIT	Claims for shortages must be made in writing within ten days after receipt of shipment, but loss of or damage to material in transit is the responsibility of the carrier.
DELAYS	All promises of shipment are estimated as closely as possible, and we will use our best efforts to ship within the time promised but do not guarantee to do so, and assume no liability for not doing so. Materials stated to be in stock are subject to prior sale.
CANCELLATION & SUSPENSION	The order or contract is subject to cancellation or instructions to suspend or delay work or delivery only upon receipt of written notification and with our consent, and upon agreement to pay RP&C's adjustment charge. Orders for special products (usually "price on application" items) may be changed and/or cancelled only upon receipt of written instructions with an expressed agreement to make payment for material used and work already performed.
RETURN OF MATERIAL	No product of our manufacture may be returned without written consent. All goods returned are subject to a handling charge plus freight in both directions and charges for any required reconditioning, unless otherwise specified in writing by RP&C.
PATENTS	Purchaser will indemnify and hold harmless RP&C against and from any claims, costs (including attorney's fees) and liabilities arising out of any suit alleging infringement of any patents, by any product supplied by RP&C under the contract and made in accordance with the design and/or specification furnished by the Purchaser to RP&C.
GOVERNING LAW	The contract shall be governed by, construed, and enforced in accordance with the laws of the Commonwealth of Pennsylvania, without regard to conflict of law principles.
NO WAIVER	The failure of RP&C to insist, in any one or more instances upon the performance of any of the terms, covenants, or conditions of the contract or to exercise any right thereunder shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant, or condition or the future exercise of such rights, nor shall it be deemed to be a waiver or relinquishment of any other term, covenant, or condition or the exercise of any other rights under the contract.
DIES, TOOLS AND PATTERNS	Dies, tools and patterns required to produce the article quoted on shall remain the property of RP&C. Preparation charges for dies, tools and patterns represent only a portion of cost. Payment of such charge does not give you any right, title, or interest in such dies, tools, or other products of preparation. We will not be responsible for retention of dies or patterns on which no orders are received for two years or more.
FORCE MAJEURE	Any delays in or failure of performance of RP&C shall not constitute default or give rise to any claims or damages if and to the extent that such delay or failure is caused by occurrences beyond the control of RP&C, including but not limited to acts of God or the public enemy, expropriation or confiscation of facilities, compliance with any order or request of any governmental authority, acts of war, rebellion or sabotage or damage resulting therefrom, embargoes or other export restrictions, fires, floods, explosions, accidents, breakdowns, riots or strikes or other concealed acts of workmen, whether direct or indirect, or any other causes whether or not of the same class or kind as those specifically above named which are not within the control of RP&C and which by the exercise of reasonable diligence, RP&C is unable to prevent or provide against.
PURCHASER'S ACCEPTANCE OF ABOVE CONDITIONS	The contract shall be subject to the terms and conditions contained or referred to in RP&C's price schedule, quotation or order acknowledgment and to no others whatsoever. No waiver, alteration, or modification of the terms and conditions in this price schedule, quotation or order acknowledgment shall be binding unless in writing and signed by an authorized representative of RP&C.

Note: The material in this catalog is for general information. For specific performance data and proper material selection, consult your RP&C representative. Although every attempt has been made to ensure that the information contained in this catalog is correct, RP&C reserves the right to change designs, materials or specifications without notice.

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RP&C products are manufactured and tested in strict accordance to ASTM, ASME, ANSI and API, and other applicable industry codes and specifications. Chemical and mechanical properties of all RP&C products are fully traceable to the original forging, lot, and raw material heat. Our extensive quality control system carefully monitors our manufacturing process to assure a product that performs

one modern facility. Automated production lines and next generation machining systems offer high volume capabilities with uncompromising quality.

Our Mission

To be, today and in the future, the recognized leader in our industry, marketing and manufacturing forged steel valves, cast steel valves, forged fittings, branch connections and other related products to satisfy our customer's expectations.

To be cost effective through Total Quality performance of these operations, and thus provide the resources required to support our commitment to improve our products, processes and customer service.

EXCELLENCE IN QUALITY IS THE STANDARD AT RP&C

to the highest industry standards. Quality assurance procedures include 100% hydrostatic and pneumatic testing of all valves in full conformance to applicable API standards and industry codes.

Production Capabilities that Meet Your Demands

RP&C is an integrated supplier with in-house forging, machining and assembly-test operations. Our forge shop contains a complete line of forging and support equipment, including a forge die shop, all located in



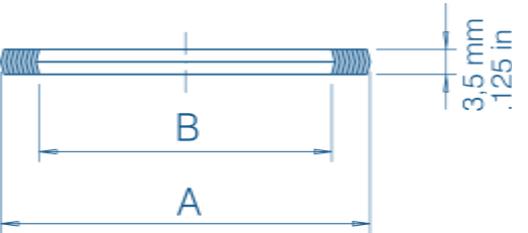
To be a law abiding corporate citizen respecting the rights of individuals, contributing to the needs of the community and conserving the state of the environment.

We're Here for You

This catalog offers a vast amount of product information and specifications. In the event that you need additional information or technical assistance please call our friendly and knowledgeable customer service personnel at 1-888-231-0655 or visit our website at www.rpc-valve.com

RECOMMENDED SPARE PARTS FOR FORGED VALVES

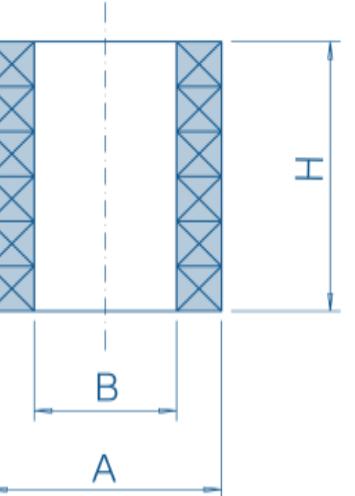
BOLTED BONNET GASKET



GASKET

Type	A mm	A in.	B mm	B in.
G1	36	1.42	27	1.06
G2	40	1.57	31	1.22
G3	48	1.89	39	1.54
G4	54	2.13	44	1.73
G5	62	2.44	52	2.05
G6	66	2.60	54	2.13
G7	74	2.91	60	2.36
G8	85	3.35	73	2.87
G9	95	3.74	78	3.07
G10	87	3.43	76	2.99
G11	70	2.76	60	2.36

STEM PACKING



PACKING

Type	A mm	A in.	B mm	B in.	H mm	H in.
BH2	15,7	.62	9,5	.37	22	.87
BH3	17,2	.68	11,1	.44	22	.87
BH4	17,2	.68	11,1	.44	26	1.02
BH5	19,2	.76	12,7	.50	26	1.02
BH6/A	24,5	.96	14,5	.57	30	1.18
BH8	32,2	1.27	19	.75	36	1.42
BY5/A	26	1.02	16	.63	30	1.18
BY7	28,2	1.11	19	.75	30	1.18
2B3	19,2	.76	12,7	.5	35	1.38
2B4/A	26	1.02	16	.75	35	1.38
2B5	28,2	1.11	19	.63	40	1.57
2B8	35,7	1.41	22,2	.87	52	2.05
25B8	38,5	1.52	25,4	1	52	2.05
4B8	40,5	1.59	28,5	1.12	54	2.13
9B8/A	35,7	1.41	22,2	.87	42	1.65
9B5	40,5	1.59	19	.75	32	1.26



**The Best Value -
Price, Quality, Service
All The Time.**

How To ORDER CLASS 800 & 1500 VALVES

1. Special Design

- E-Refinery Service (API 591)

2. Specify Material

- C – A182 Type F5
- F – A105
- K – A182 Type F22 Cl.3
- S – A182 Type F316/F316L
- LF – A350 Type LF2
- J – A182 Type F91

3. Design Features

- O – Full Port
- WB – Welded Bonnet
- 8 – SE X SW

4. Figure Numbers

GATE VALVES

- Class 800
 - 51 – MSE X FSE, OS&Y
 - 52 – MSW X FSW, OS&Y
 - 53 – MSE X FSW, OS&Y
 - 54 – MSW X FSE, OS&Y
 - 56 – SE, OS&Y
 - 57 – SW, OS&Y
- Class 1500
 - 556 – SE, OS&Y
 - 557 – SW, OS&Y

- Flanged
 - 158 – 150 FLG, BB, OS&Y
 - 308 – 300 FLG, BB, OS&Y
 - 608 – 600 FLG, BB, OS&Y



GLOBE VALVES

- Class 800
 - 80 – SE, OS&Y
 - 81 – SW, OS&Y
- Class 1500
 - 580 – SE, OS&Y
 - 581 – SW, OS&Y

Flanged

- 180 – 150 FLG, BB, OS&Y
- 380 – 300 FLG, BB, OS&Y
- 680 – 600 FLG, BB, OS&Y

CHECK VALVES

- Class 800
 - 90 – SE, PISTON
 - 91 – SW, PISTON
- Class 1500
 - 96 – SE, BALL CHECK
 - 97 – SW BALL CHECK
 - 98 – SE, SWING CHECK
 - 99 – SW, SWING CHECK
- Class 1500
 - 590 – SE, PISTON
 - 591 – SW, PISTON
- Flanged
 - 190 – 150 FLG, PISTON
 - 390 – 300 FLG, PISTON
 - 690 – 600 FLG, PISTON

PRESSURE-TEMPERATURE RATINGS

PSI - °F						MATERIALS: A 182 F22 CL3 (b)					BAR - °C						
LIMITED CLASS																	
Temperature °F	800#LTD	1690#LTD	2500#LTD	2680#LTD	4500#LTD	Temperature °C	800#LTD	1690#LTD	2500#LTD	2680#LTD	4500#LTD	Temperature °C	800#LTD	1690#LTD	2500#LTD	2680#LTD	4500#LTD
-20 to 100	2,000	4,225	6,250	6,700	11,250	-29 to 38	137.9	291.3	431.0	462.1	775.7	93.9	137.9	291.3	431.0	462.1	775.7
200	2,000	4,225	6,250	6,700	11,250	148.9	136.5	287.9	426.1	456.8	766.7	204.4	133.4	281.3	416.1	446.1	749.1
300	1,980	4,175	6,180	6,625	11,120	260.0	132.4	279.6	413.7	443.3	744.7	315.6	132.4	279.6	413.7	443.3	744.7
400	1,935	4,080	6,035	6,470	10,865	343.3	131.3	278.2	411.3	441.0	740.2	371.1	131.0	276.1	408.9	438.2	735.7
500	1,920	4,055	6,000	6,430	10,800	398.9	126.9	267.9	399.2	425.1	713.6	800	1,795	3,790	5,605	6,010	10,095
600	1,920	4,055	6,000	6,430	10,800	426.7	123.8	261.3	386.5	414.4	696.0	850	1,715	3,620	5,355	5,740	9,645
650	1,905	4,035	5,965	6,395	10,735	454.4	118.2	249.6	367.8	395.8	665.0	900	1,600	3,380	5,000	5,360	9,000
700	1,900	4,005	5,930	6,355	10,670	482.2	110.3	233.0	344.7	369.6	620.5	950	1,275	2,720	4,075	4,380	7,555
750	1,840	3,885	5,790	6,165	10,350	510.0	87.9	187.5	281.0	302.0	521.0	1,000	895	1,980	3,040	3,290	6,050
800	1,795	3,790	5,605	6,010	10,095	537.8	61.7	136.5	209.6	226.8	417.1	1,050	600	1,330	2,040	2,205	4,065
850	1,715	3,620	5,355	5,740	9,645	565.6	41.4	91.7	140.6	152.0	280.3	1,100	380	830	1,280	1,385	2,545
900	1,600	3,380	5,000	5,360	9,000	593.3	26.2	57.2	88.2	95.5	175.5	1,150	235	525	800	865	1,590
950	1,275	2,720	4,075	4,380	7,555	621.1	16.2	36.2	55.2	59.6	109.6	1,200	145	310	480	520	955
1200	145	310	480	520	955	648.9	10.0	21.4	33.1	35.8	65.8						

PSI - °F						MATERIALS: A 182 F316 (c) - ASTM A182 F316H					BAR - °C						
LIMITED CLASS																	
Temperature °F	800#LTD	1690#LTD	2500#LTD	2680#LTD	4500#LTD	Temperature °C	800#LTD	1690#LTD	2500#LTD	2680#LTD	4500#LTD	Temperature °C	800#LTD	1690#LTD	2500#LTD	2680#LTD	4500#LTD
-20 to 100	2,000	4,225	6,250	6,700	11,250	-29 to 38	137.9	291.3	430.9	462.0	775.7	93.3	126.9	267.9	396.5	425.1	713.6
200	1,840	3,885	5,750	6,165	10,350	148.9	114.8	242.3	358.5	384.4	645.4	300	1,665	3,515	5,200	5,575	9,360
300	1,665	3,515	5,200	5,575	9,360	204.4	104.8	221.3	327.5	350.9	589.5	400	1,520	3,210	4,750	5,090	8,550
400	1,520	3,210	4,750	5,090	8,550	260.0	97.9	206.2	305.4	327.5	549.5	500	1,420	2,990	4,430	4,750	7,970
500	1,420	2,990	4,430	4,750	7,970	315.6	92.4	195.8	289.3	310.3	520.9	600	1,340	2,840	4,195	4,500	7,555
600	1,340	2,840	4,195	4,500	7,555	343.3	90.7	191.3	283.0	303.4	509.9	650	1,220	2,580	3,815	4,090	6,870
650	1,315	2,775	4,105	4,400	7,395	371.1	89.3	187.9	273.4	298.2	500.9	700	1,295	2,725	4,035	4,325	7,265
700	1,295	2,725	4,035	4,325	7,265	398.9	87.2	184.8	273.4	293.0	491.9	750	1,265	2,680	3,965	4,250	7,135
800	1,260	2,655	3,930	4,215	7,070	426.7											

PRESSURE-TEMPERATURE RATINGS

PSI - °F					
MATERIALS: A105 N (a)					
LIMITED CLASS					
Temperature °F	800# LTD	1690# LTD	2500# LTD	2680# LTD	4500# LTD
-20 to 100	2,000	4,225	6,250	6,700	11,250
200	2,000	4,225	6,250	6,700	11,250
300	2,000	4,225	6,250	6,700	11,250
400	2,000	4,225	6,250	6,700	11,250
500	2,000	4,225	6,250	6,700	11,250
600	1,900	4,015	5,940	6,370	10,690
650	1,885	3,940	5,825	6,245	10,485
700	1,850	3,910	5,780	6,195	10,405
750	1,680	3,550	5,250	5,630	9,450
800	1,375	2,895	4,285	4,595	7,715
850	895	1,880	2,785	2,985	5,015
900	575	1,205	1,785	1,915	3,215
950	350	745	1,110	1,195	2,060
1000	180	390	600	650	1,195

PSI - °F					
MATERIALS: A105 N (a)					
LIMITED CLASS					
Temperature °C	800# LTD	1690# LTD	2500# LTD	2680# LTD	4500# LTD
-29 to 38	137,9	291,3	431,0	462,0	775,7
93,3	137,9	291,3	431,0	462,0	775,7
148,9	137,9	291,3	431,0	462,0	775,7
204,4	137,9	291,3	431,0	462,0	775,7
260,0	137,9	291,3	431,0	462,0	775,7
315,6	131,0	276,8	409,6	439,2	737,1
343,3	128,6	271,7	408,5	430,6	722,9
371,1	127,5	269,6	398,5	427,1	717,4
398,9	115,8	244,8	362,0	388,2	651,6
426,7	94,8	199,6	295,4	316,8	531,9
454,4	61,7	129,6	192,0	205,8	345,8
482,2	83,1	83,1	123,1	132,0	221,7
510,0	24,1	51,4	76,5	82,4	142,0
537,8	12,4	26,9	41,4	44,8	82,4

PSI - °F					
MATERIALS: A 182 F5 - ASTM A182 F5a					
LIMITED CLASS					
Temperature °F	800# LTD	1690# LTD	2500# LTD	2680# LTD	4500# LTD
-20 to 100	2,000	4,225	6,250	6,700	11,250
200	2,000	4,225	6,250	6,700	11,250
300	1,940	4,105	6,070	6,505	10,930
400	1,920	4,055	6,000	6,430	10,800
500	1,920	4,055	6,000	6,430	10,800
600	1,885	3,985	5,895	6,320	10,605
650	1,860	3,935	5,820	6,240	10,480
700	1,825	3,865	5,715	6,125	10,285
750	1,760	3,720	5,500	5,895	9,900
800	1,700	3,600	5,320	5,705	9,580
850	1,615	3,405	5,035	5,400	9,065
900	1,235	2,610	3,855	4,135	6,945
950	925	1,960	2,925	3,185	5,500
1000	685	1,510	2,230	2,505	4,620
1050	495	1,095	1,615	1,815	3,345
1100	345	755	1,115	1,255	2,310
1150	210	470	695	780	1,430
1200	120	260	385	430	800

PSI - °F					
MATERIALS: A 182 F91					
LIMITED CLASS					
Temperature °C	800# LTD	1690# LTD	2500# LTD	2680# LTD	4500# LTD
-29 to 38	137,9	291,3	431,0	462,0	775,7
93,3	137,9	291,3	431,0	462,0	775,7
148,9	133,8	283,0	418,5	448,5	753,6
204,4	132,4	279,6	413,7	443,3	744,7
260,0	132,4	279,6	413,7	443,3	744,7
315,6	130,0	274,8	406,5	435,8	731,2
343,3	128,2	271,3	401,3	430,2	722,6
371,1	125,8	266,5	394,0	422,3	709,1
398,9	121,3	256,5	379,2	406,5	682,6
426,7	117,2	248,2	366,8	393,3	660,5
454,4	111,3	234,8	347,2	372,3	625,0
482,2	85,1	180,0	265,8	285,1	479,0
510,0	63,8	135,1	201,7	219,6	379,2
537,8	47,2	104,1	153,7	172,7	318,5
565,6	34,1	75,5	111,3	125,1	230,6
593,3	23,8	52,1	76,9	86,5	159,3
621,1	14,5	32,4	47,9	53,8	98,6
648,9	8,3	17,9	26,6	29,6	55,2

How To ORDER CLASS 800 & 1500 VALVES (CONTINUED)

5. Specify Trim

A – 316 Trim\HF (Standard on 316 Valves)

D – 13 Cr Trim\HF (Standard)

E – Full Stellite Trim (Standard on #1500)

H – Hastelloy Trim

M – Monel Trim

6. Specify Options

B – B7M Bolting/NACE

C – Chain Operated

G – Garlock EVSP pkg.

H – Hastelloy Trim

I – Monel/T.F.E. Gasket

J – Ring Joint Flange

K – Live Loaded Packing

L – Locking Bracket

N – Hastelloy C Stem

O – Oxygen Cleaned

P – 125 RMS Flange

Q – L7M Bolting

S – B8 Bolting

T – TFE Packing, 316/TFE Gasket

U – 316/TFE Gasket Only

V – Vacuum Service (TFE Packing)

Z – TFE Packing Only

UH – L7 Bolts



Key

BB – Bolted Bonnet

FLG – Flanged

WB – Welded Bonnet

MSE – Male Screwed End

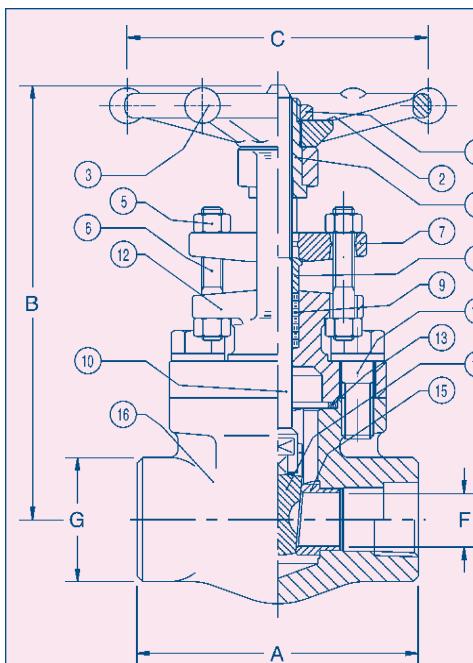
SE – Screwed End

EF56D NPT ENDS



EF57D SOCKET WELD ENDS

- SIZES 1/2" THRU 2"
 - FORGED STEEL
 - ASTM A105N
- Design construction:**
API 602 - ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Name Plate	Aluminum
3	Hand Wheel	Carbon Steel
4	Yoke Sleeve	AISI-416
5	Gland Nut	A194-2H
6	Gland Bolt Studs	AISI-410
7	Gland Flange	A105
8	Packing Gland	AISI-410
9	Packing	Graphite
10	Stem	ASTM 479-TP410
11	Bolts	A193-B7
12	Bonnet	A105N
13	Gasket	F316L + Graphite
14	Wedge	AISI-410
15	Seat	AISI-410 + Stellite
16	Body	A105N

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5 127	5.28 134
B open	inch mm	5.98 152	6.22 158	7.72 196	10.04 225	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.48 36,5
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		5.6	11	25.5	77	97
Weight	lb. kg	4.25 1,9	5 2,3	7.75 3,6	16 7,3	16.75 7,6
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET		G2	G2	G3	G6	G11

PRESSURE-TEMPERATURE RATINGS

PSI - °F MATERIALS: ASTM A182 F304 L (d) - ASTM A182 F316 L									BAR - °C										
STANDARD CLASS										STANDARD CLASS									
Temperature °F	150	300	400	600	800	900	1500	2500	4500	Temperature °C	150	300	400	600	800	900	1500	2500	4500
-20 to 100	230	600	800	1,200	1,600	1,800	3,000	5,000	9,000	-29 +38	15,9	41,4	55,2	82,7	110,3	124,1	206,9	344,8	620,6
200	195	505	675	1,015	1,350	1,520	2,530	4,220	7,595	93,3	13,4	34,8	46,5	70,0	93,1	104,8	174,4	291,0	523,7
300	175	455	605	910	1,210	1,360	2,270	3,780	6,805	148,9	12,1	31,4	41,7	62,7	83,4	93,8	156,5	260,6	469,2
400	160	415	550	825	1,100	1,240	2,065	3,440	6,190	204,4	11,0	28,6	37,9	56,9	75,8	85,5	142,4	237,2	426,8
500	145	380	510	765	1,020	1,145	1,910	3,180	5,725	260,0	10,0	26,2	35,2	52,7	70,3	78,9	131,7	219,3	394,7
600	140	360	480	720	960	1,080	1,800	3,000	5,400	315,6	9,7	24,8	33,1	49,6	66,2	74,5	124,1	206,9	372,3
650	125	350	470	700	935	1,050	1,750	2,920	5,255	343,3	8,6	24,1	32,4	48,3	64,5	72,4	120,7	201,3	362,3
700	110	345	460	685	915	1,030	1,715	2,860	5,150	371,1	7,6	23,8	31,7	47,2	63,1	71,0	118,2	197,2	355,1
750	95	335	450	670	895	1,010	1,680	2,800	5,040	398,9	6,6	23,1	31,0	46,2	61,7	69,6	115,8	193,1	347,5
800	80	330	440	660	875	985	1,645	2,740	4,930	426,7	5,5	22,8	30,3	45,5	60,3	67,9	113,4	188,9	339,9
850	65	320	430	645	860	965	1,610	2,680	4,825	454,4	4,5	22,1	29,6	44,5	59,3	66,5	111,0	184,8	332,7
SPECIAL CLASS										SPECIAL CLASS									
Temperature °F	150	300	400	600	800	900	1500	2500	4500	Temperature °C	150	300	400	600	800	900	1500	2500	4500
-20 to 100	255	670	890	1,340	1,785	2,005	3,345	5,570	10,030	-29 +38	17,6	46,2	61,4	92,4	123,1	138,2	230,6	384,1	691,6
200	215	565	755	1,130	1,505	1,695	2,825	4,710	8,480	93,3	14,8	39,0	52,1	77,9	103,8	116,9	194,8	324,8	584,7
300	195	505	675	1,010	1,350	1,520	2,530	4,215	7,585	148,9	13,4	34,8	46,5	69,6	93,1	104,8	174,4	290,6	523,0
400	175	460	615	920	1,230	1,385	2,305	3,840	6,910	204,4	12,1	31,7	42,4	63,4	84,8	95,5	158,9	264,8	476,4
500	165	425	570	850	1,135	1,280	2,130	3,550	6,390	260,0	11,4	29,3	39,3	58,6	78,2	88,3	146,9	244,8	440,6
600	155	400	535	805	1,070	1,205	2,010	3,350	6,025	315,6	10,7	27,6	36,9	55,5	73,8	83,1	138,6	231,0	415,4
650	150	390	520	780	1,040	1,170	1,950	3,250	5,850	343,3	10,3	26,9	35,9	53,8	71,7	80,7	134,5	224,1	403,4
700	145	380	510	765	1,020	1,145	1,910	3,180	5,720	371,1	10,0	26,2	35,2	52,7	70,3	78,9	131,7	219,3	394,4
750	145	375	500	745	995	1,120	1,865	3,110	5,595	398,9	10,0	25,9	34,5	51,4	68,6	77,2	128,6	214,4	385,8
800	140	365	490	735	980	1,100	1,835	3,060	5,505	426,7	9,7	25,2	33,8	50,7	67,6	75,8	126,5	211,0	379,6
850	140	360	480	720	955														

PRESSURE-TEMPERATURE RATINGS

PSI - °F									
STANDARD CLASS									
Temperature °F	150	300	400	600	800	900	1500	2500	4500
-20 to 100	275	720	960	1,440	1,920	2,160	3,600	6,000	10,800
200	235	620	825	1,240	1,655	1,860	3,095	5,160	9,290
300	215	560	745	1,120	1,495	1,680	2,795	4,660	8,390
400	195	515	685	1,025	1,370	1,540	2,570	4,280	7,705
500	170	480	635	955	1,275	1,435	2,390	3,980	7,165
600	140	450	600	900	1,205	1,355	2,255	3,760	6,770
650	125	445	590	890	1,185	1,330	2,220	3,700	6,660
700	110	430	580	870	1,150	1,305	2,170	3,620	6,515
750	95	425	570	855	1,130	1,280	2,135	3,560	6,410
800	80	420	565	845	1,105	1,265	2,110	3,520	6,335
850	65	420	555	835	1,080	1,255	2,090	3,480	6,265
900	50	415	555	830	1,050	1,245	2,075	3,460	6,230
950	35	385	515	775	1,030	1,160	1,930	3,220	5,795
1000	20	350	465	700	970	1,050	1,750	2,915	5,245
1050	20	345	460	685	960	1,030	1,720	2,865	5,155
1100	20	305	405	610	860	915	1,525	2,545	4,575
1150	20	235	315	475	735	710	1,185	1,970	3,550
1200	20	185	245	370	550	555	925	1,545	2,775
1250	20	145	195	295	485	440	735	1,230	2,210
1300	20	115	155	235	365	350	585	970	1,750
1350	20	95	130	190	275	290	480	800	1,440
1400	20	75	100	150	200	225	380	630	1,130
1450	20	60	80	115	155	175	290	485	875
1500	20	40	55	85	110	125	205	345	620

SPECIAL CLASS

Temperature °F	150	300	400	600	800	900	1500	2500	4500
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
200	265	690	920	1,380	1,840	2,070	3,450	5,750	10,350
300	240	625	830	1,250	1,665	1,870	3,120	5,200	9,360
400	220	570	760	1,140	1,520	1,710	2,850	4,750	8,550
500	205	530	710	1,065	1,420	1,595	2,655	4,430	7,970
600	195	505	670	1,005	1,340	1,510	2,520	4,195	7,555
650	190	495	655	985	1,315	1,480	2,465	4,105	7,395
700	185	485	645	970	1,295	1,455	2,420	4,035	7,265
750	180	475	635	950	1,265	1,425	2,380	3,965	7,135
800	180	470	630	945	1,260	1,415	2,355	3,930	7,070
850	180	465	620	930	1,245	1,400	2,330	3,885	6,990
900	175	465	615	925	1,235	1,390	2,315	3,855	6,945
950	175	460	610	915	1,220	1,375	2,290	3,815	6,870
1000	160	420	560	840	1,120	1,260	2,105	3,505	6,310
1050	160	420	560	840	1,120	1,260	2,105	3,505	6,310
1100	145	380	510	765	1,020	1,145	1,905	3,180	5,720
1150	115	295	395	590	785	885	1,480	2,465	4,435
1200	90	230	310	465	620	695	1,155	1,930	3,470
1250	70	185	245	370	495	555	920	1,535	2,765
1300	55	145	195	290	385	435	730	1,215	2,185
1350	45	120	160	240	320	360	600	1,000	1,800
1400	35	95	125	190	255	285	470	785	1,415
1450	30	75	100	145	195	220	365	610	1,095
1500	20	50	70	105	140	155	260	430	770

MATERIALS: ASTM A182 F316 (c) - ASTM A182 F316H

Note: for temperature > 1000°F valves in class 150 lbs are limited to BW Ends only.

BAR - °C

Note: for temperature > 540°C valves in class 150 lbs are limited to BW Ends only.

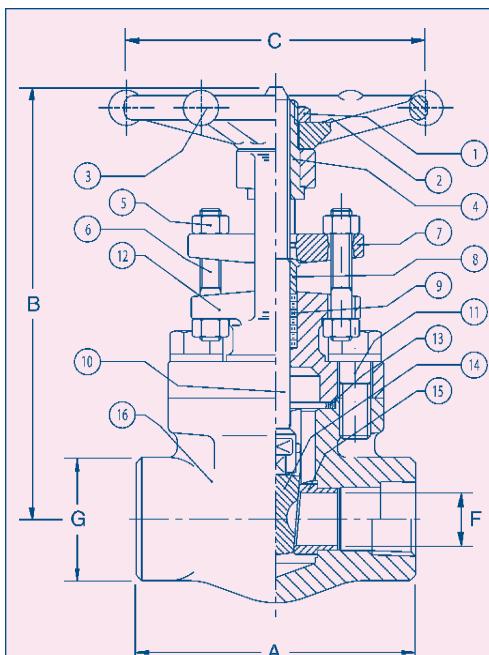
Temperature °C	150	300	400	600	800	900	1500	2500	4500
-29 +38	19,0	49,6	66,2	99,3	132,4	148,9	248,2	413,7	744,7
93,3	16,2	42,7	56,9	85,5	114,1	128,2	213,4	355,8	640,5
148,9	14,8	38,6	51,4	77,2	103,1	115,8	192,7	321,3	578,5
204,4	13,4	35,5	47,2	70,7	94,5	106,2	177,2	295,1	531,3
260,0	11,7	33,1	43,8	65,8	87,9	98,9	164,8	274,4	494,0
315,6	9,7	31,0	41,4	62,1	83,1	93,4	155,5	259,3	466,8
343,3	8,6	30,7	40,7	61,4	81,7	91,7	153,1	255,1	459,2
371,1	7,6	29,6	40,0	60,0	79,3	90,0	149,6	249,6	449,2
398,9	6,6	29,3	39,3	59,0	77,9	88,3	147,2	245,5	442,0
426,7	5,5	29,0	39,0	58,3	76,2	87,2	145,5	242,7	436,8
454,4	4,5	29,0	38,3	57,6	74,5	86,5	144,1	239,9	432,0
482,2	3,4	28,6	38,3	57,2	72,4	85,8	143,1	238,6	429,6
510,0	2,4	26,5	35,5	53,4	71,0	80,0	133,1	222,0	399,6
537,8	1,4	24,1	32,1	48,3	66,9	72,4	120,7	201,0	361,6
565,6	1,4	23,8	31,7	47,2	66,2	71,0	118,6	197,5	355,4
593,3									

EF056D NPT ENDS



EF057D SOCKET WELD ENDS

- SIZES 1/4" THRU 2"
 - FORGED STEEL
 - ASTM A105N
- Design construction:**
API 602 - ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Name Plate	Aluminum
3	Hand Wheel	Carbon Steel
4	Yoke Sleeve	AISI-416
5	Gland Nut	A194-2H
6	Gland Bolt Studs	AISI-410
7	Gland Flange	A105
8	Packing Gland	AISI-410
9	Packing	Graphite
10	Stem	ASTM 479-TP410
11	Bolts	A193-B7
12	Bonnet	A105N
13	Gasket	F316L + Graphite
14	Wedge	AISI-410
15	Seat	AISI-410 + Stellite
16	Body	A105N

SIZE	DIMENSIONAL SPECIFICATIONS								
	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	
A	inch mm	3.15 80	3.15 80	3.54 90	4.33 110	5 127	5 127	5.28 134	6 152
B open	inch mm	5.98 152	5.98 152	6.22 158	7.72 196	8.86 225	10.04 255	11.42 290	14.09 358
C	inch mm	3.46 88	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138	6.77 172
F	inch mm	.31 8	.38 9.6	.55 14	.71 18	.94 24	1.18 30	1.48 36.5	1.83 46.5
G	inch mm	1.26 32	1.26 32	1.50 38	1.89 48	2.20 56	2.52 64	3.07 78	3.35 85
Typical CV Factors		2	5	12	23	43	51	98	197
Weight	lb. kg	4.5 2.1	4.5 2.1	5 2.3	8.25 3.7	13 5.9	16.25 7.4	18.3 8.3	27.5 12.5
PACKING		BH2	BH2	BH2	BH4	BH5	BH6	BY5	BH8
GASKET		G2	G2	G2	G3	G4	G6	G11	G10

PRESSURE-TEMPERATURE RATINGS

PSI - °F									MATERIALS: ASTM A182 F22 CL3 (b)									BAR - °C											
STANDARD CLASS									Note: for temperature > 1000°F valves in class 150 lbs are limited to BW Ends only.									STANDARD CLASS											
Temperature °F	150	300	400	600	800	900	1500	2500	4500	Temperature °C	150	300	400	600	800	900	1500	2500	4500	Temperature °C	150	300	400	600	800	900	1500	2500	4500
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	-29 + 38	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	93,3	17,9	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7
200	260	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	148,9	15,9	50,3	66,9	100,3	133,7	150,7	251,0	418,5	753,3	204,4	13,8	48,6	64,8	97,2	129,6	145,8	243,4	405,4	729,8
300	230	730	970	1,455	1,940	2,185	3,640	6,070	10,925	260,0	11,7	45,9	61,0	91,7	122,4	137,6	229,3	382,0	687,1	315,6	9,7	41,7	55,5	83,4	111,3	125,1	208,6	347,5	625,4
400	200	705	940	1,410	1,880	2,115	3,530	5,880	10,585	343,3	8,6	40,7	54,1	81,0	108,2	121,7	202,7	338,2	608,5	371,1	7,6	39,3	52,1	78,3	104,4	117,6	195,8	326,1	587,1
500	170	665	885	1,330	1,775	1,995	3,325	5,540	9,965	398,9	6,6	36,5	49,0	73,4	97,9	110,0	183,4	305,4	549,5	426,7	5,5	35,2	46,5	70,0	86,5	105,1	175,1	291,7	524,7
600	140	605	805	1,210	1,615	1,815	3,025	5,040	9,070	454,4	4,5	33,4	44,8	67,2	89,6	100,7	167,9	279,9	503,7	482,2	3,4	31,0	41,4	62,1	82,7	93,1	154,8	258,2	464,7
650	125	590	785	1,175	1,570	1,765	2,940	4,905	8,825	510,0	2,4	25,9	34,8	52,1	69,3	77,9	130,0	216,8	390,6	537,8	1,4	17,9	23,8	35,9	48,0	53,8	90,0	149,6	269,6
700	110	570	755	1,135	1,515	1,705	2,840	4,730	8,515	565,6	1,4	12,1	16,2	24,1	32,1	36,2	60,3	100,3	181,0	593,3	1,4	7,6	10,0	15,2	20,3	22,8	37,9	63,1	113,4
750	95	530	710	1,065	1,420	1,595	2,660	4,430	7,970	621,1	1,4	4,8	6,2	9,3	12,4	14,1	23,8	39,3	71,0	648,9	1,4	2,8	3,8	5,5	7,6	8,6	14,1	23,8	42,4
800	80	510	675	1,015	1,355	1,525	2,540	4,230	7,610	93,3	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	148,9	19,7	51,0	68,3	102,4	136,5	153,4	255,5	426,1	766,7
850	65	485	650	975	1,300	1,460	2,435	4,060	7,305	204,4	19,3	50,0	66,5	100,0	133,4	150,0	249,6	416,1	749,1	260,0	19,0	49,6	66,2	99,3	132,4	148,9	248,2	413,7	744,7
900	50	450	600	900	1,200	1,350	2,245	3,745	6,740	315,6	19,0	49,6	66,2	99,3	132,4	148,9	248,2	413,7	744,7	371,1	19,0	49,0	65,8	98,3	131,0	147,2	245,1	408,9	735,7
950	35	375	505	755	1,005	1,130	1,885	3,145	5,665	398,9	18,3	47,6	63,4	95,2	126,9	142,7	237,9	396,5	713,6	426,7	17,9	46,5	61,7	92,7	123,8	139,3	232,0	386,5	696,1
1000	2																												

PRESSURE-TEMPERATURE RATINGS

PSI - °F									
MATERIALS: ASTM A182 F91									
STANDARD CLASS									
Note: for temperature > 1000°F valves in class 150 lbs are limited to BW Ends only.									
Temperature °F	150	300	400	600	800	900	1500	2500	4500
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
200	260	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
300	230	730	970	1,455	1,940	2,185	3,640	6,070	10,925
400	200	705	940	1,410	1,880	2,115	3,530	5,880	10,585
500	170	665	885	1,330	1,775	1,995	3,325	5,540	9,965
600	140	605	805	1,210	1,615	1,815	3,025	5,040	9,070
650	125	590	785	1,175	1,570	1,765	2,940	4,905	8,825
700	110	570	755	1,135	1,515	1,705	2,840	4,730	8,515
750	95	530	710	1,065	1,420	1,595	2,660	4,430	7,970
800	80	510	675	1,015	1,355	1,525	2,540	4,230	7,610
850	65	485	650	975	1,300	1,460	2,435	4,060	7,305
900	50	450	600	900	1,200	1,350	2,245	3,745	6,740
950	35	385	515	775	1,030	1,160	1,930	3,220	5,795
1000	20	365	485	725	970	1,090	1,820	3,030	5,450
1050	20	360	480	720	960	1,080	1,800	3,000	5,400
1100	20	300	400	605	805	905	1,510	2,515	4,525
1150	20	225	295	445	595	670	1,115	1,855	3,345
1200	20	145	190	290	385	430	720	1,200	2,160

SPECIAL CLASS

SPECIAL CLASS									
Note: for temperature > 540°C valves in class 150 lbs are limited to BW Ends only.									
Temperature °F	150	300	400	600	800	900	1500	2500	4500
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
200	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
300	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
400	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
500	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
600	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
650	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250
700	280	735	980	1,465	1,955	2,200	3,665	6,110	10,995
750	280	730	970	1,460	1,945	2,185	3,645	6,070	10,930
800	275	720	960	1,440	1,920	2,160	3,600	6,000	10,800
850	260	680	905	1,355	1,805	2,030	3,385	5,645	10,160
900	230	600	800	1,200	1,600	1,800	3,000	5,000	9,000
950	180	470	630	945	1,260	1,415	2,360	3,930	7,070
1000	160	420	560	840	1,120	1,260	2,105	3,505	6,310
1050	160	420	560	840	1,120	1,260	2,105	3,505	6,310
1100	145	375	505	755	1,005	1,130	1,885	3,145	5,655
1150	105	280	370	555	740	835	1,395	2,320	4,180
1200	70	180	240	360	480	540	900	1,500	2,700

PSI - °F									
MATERIALS: ASTM A182 F91									
STANDARD CLASS									
Note: for temperature > 540°C valves in class 150 lbs are limited to BW Ends only.									
Temperature °C	150	300	400	600	800	900	1500	2500	4500
-29 +38	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7
93,3	17,9	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7
148,9	15,9	50,3	66,9	100,3	133,8	150,7	251,0	418,5	753,3
204,4	13,8	48,6	64,8	97,2	129,6	145,8	243,4	405,4	729,8
260,0	11,7	45,9	61,0	91,7	122,4	137,6	229,3	382,0	687,1
315,6	9,7	41,7	55,5	83,4	111,3	125,1	208,6	347,5	625,4
343,3	8,6	40,7	54,1	81,0	108,2	121,7	202,7	338,2	608,5
371,1	7,6	39,3	52,1	78,3	104,4	117,6	195,8	326,1	587,1
398,9	6,6	36,5	49,0	73,4	97,9	110,0	183,4	305,4	549,5
426,7	5,5	35,2	46,5	70,0	93,4	105,1	175,1	291,7	524,7
454,4	4,5	33,4	44,8	67,2	89,6	100,7	167,9	279,9	503,7
482,2	3,4	31,0	41,4	62,1	82,7	93,1	154,8	258,2	464,7
510,0	2,4	26,6	35,5	53,4	71,0	80,0	133,1	222,0	339,7
537,8	1,4	25,1	33,4	50,0	66,9	75,1	125,5	209,0	375,9
565,6	1,4	24,8	33,1	49,7	66,2	74,5	124,1	206,9	372,4
593,3	1,4	20,7	27,6	41,7	55,5	62,4	104,1	173,4	312,0
621,1	1,4	15,5	20,3	30,7	41,0	46,2	76,9	127,9	230,7
648,9	1,4	10,0	13,1	20,0	26,5	29,7	49,7	82,8	149,0

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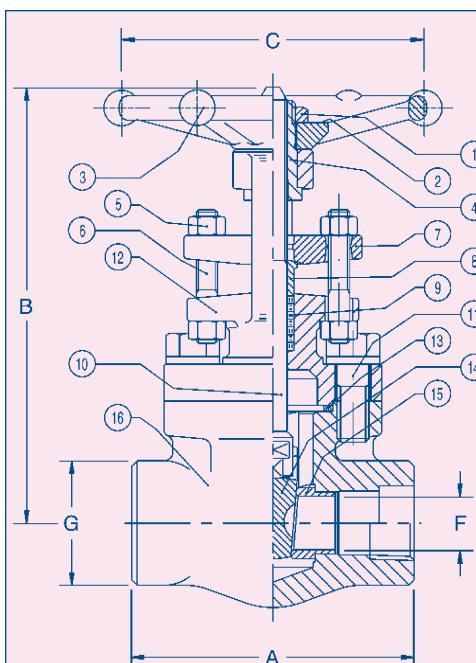
EC56D NPT ENDS

EC57D SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- ASTM A182 Gr. F5

Design construction:
API 602 - ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- alloy steel class 800 2000 psig @ 100°F
137,9 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Name Plate	Aluminum
3	Hand Wheel	Carbon Steel
4	Yoke Sleeve	AISI-416
5	Gland Nut	A194-2H
6	Gland Bolt Studs	AISI-410
7	Gland Flange	A105
8	Packing Gland	AISI-410
9	Packing	Graphite
10	Stem	ASTM 479-TP410
11	Bolts	A193-B16
12	Bonnet	A182 F5
13	Gasket	F316L + Graphite
14	Wedge	AISI-410
15	Seat	AISI-410 + Stellite
16	Body	A182 F5

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5 127	5.28 134
B open	inch mm	5.98 152	6.22 158	7.72 196	10.04 225	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.48 36,5
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		5.6	11	25.5	77	97
Weight	lb. kg	4.25 1,9	5 2,3	7.75 3,6	16 7,3	16.75 7,6
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET		G2	G2	G3	G6	G11

PRESSURE-TEMPERATURE RATINGS

PSI - °F								MATERIALS: ASTM A182 F5 - ASTM A182 F5a											
STANDARD CLASS									STANDARD CLASS										
Note: for temperature > 1000°F valves in class 150 lbs are limited to BW Ends only.									Note: for temperature > 540°C valves in class 150 lbs are limited to BW Ends only.										
Temperature °F	150	300	400	600	800	900	1500	2500	4500	Temperature °C	150	300	400	600	800	900	1500	2500	4500
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	-29 +38	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7
200	260	745	995	1,490	2,000	2,235	3,725	6,205	11,170	93,3	17,9	51,4	68,6	102,7	137,9	154,1	256,8	427,8	770,2
300	230	715	955	1,430	1,940	2,150	3,580	5,965	10,740	148,9	15,9	49,3	65,8	98,6	133,8	148,2	246,8	411,3	740,5
400	200	705	940	1,410	1,880	2,115	3,530	5,880	10,585	204,4	13,8	48,6	64,8	97,2	129,6	145,8	243,4	405,4	729,8
500	170	665	885	1,330	1,775	1,995	3,325	5,540	9,965	260,0	11,7	45,9	61,0	91,7	122,4	137,6	229,3	382,0	687,1
600	140	605	805	1,210	1,615	1,815	3,025	5,040	9,070	315,6	9,7	41,7	55,5	83,4	111,3	125,1	208,6	347,5	625,4
650	125	590	785	1,175	1,570	1,765	2,940	4,905	8,825	343,3	8,6	40,7	54,1	81,0	108,2	121,7	202,7	338,2	608,5
700	110	570	755	1,135	1,515	1,585	2,640	4,400	8,515	371,1	7,6	39,3	52,1	78,3	104,4	117,6	195,8	326,1	587,1
750	95	530	705	1,055	1,420	1,585	2,400	4,230	7,920	398,9	6,6	36,5	48,6	72,7	97,9	109,3	182,0	303,4	546,1
800	80	510	675	1,015	1,325	1,525	2,540	4,230	7,610	426,7	5,5	35,2	46,5	70,0	91,3	105,1	175,1	291,7	524,7
850	65	485	645	965	1,170	1,450	2,415	4,030	7,250	454,4	4,5	33,4	44,5	66,5	80,7	100,0	166,5	277,9	499,9
900	50	370	495	740	940	1,110	1,850	3,085	5,555	482,2	3,4	25,5	34,1	51,0	64,8	76,5	127,6	212,7	383,0
950	35	275	365	550	695	825	1,370	2,285	4,115	510,0	2,4	19,0	25,2	37,9	47,9	56,9	94,5	157,6	283,7
1000	20	200	265	400	510	595	995	1,655	2,985	537,8	1,4	13,8	18,3	27,6	35,2	41,0	68,6	114,1	205,8
1050	20	145	190	290	375	430	720	1,200	2,160	565,6	1,4	10,0	13,1	20,0	25,8	29,6	49,6	82,7	148,9
1100	20	100	135	200	275	300	495	830	1,490	593,3	1,4	6,9	9,3	13,8	19,0	20,7	34,1	57,2	102,7
1150	20	60	80	125	185	185	310	515	925	621,1	1,4	4,1	5,5	8,6	12,7	12,8	21,4	35,5	63,8
1200	15	35	45	70	120	105	170	285	515	648,9	1,0	2,4	3,1	4,8	8,3	7,2	11,7	19,7	35,5
SPECIAL CLASS									SPECIAL CLASS										
Temperature °F	150	300	400	600	800	900	1500	2500	4500	Temperature °C	150	300	400	600	800	900	1500	2500	4500
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	-29 +38	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7
200	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	93,3	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7
300	280	730	970	1,455	1,940	2,185	3,645	6,070	10,930	148,9	19,3	50,							

PRESSURE-TEMPERATURE RATINGS

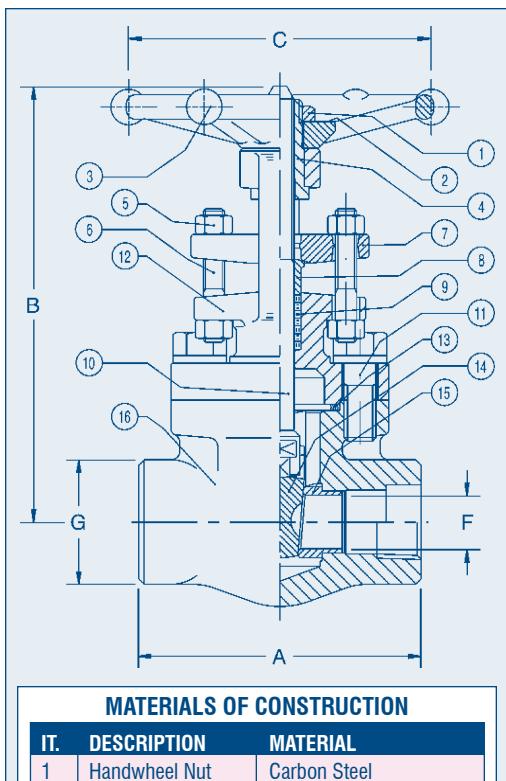
MATERIALS: ASTM A105 N (a) - ASTM A350 LF2 (a)										
STANDARD CLASS										
Temperature °F	150	300	400	600	800	900	1500	2500	4500	
-20 to 100	285	740	990	1,480	1,975	2,220	3,705	6,170	11,110	
200	260	675	900	1,350	1,800	2,025	3,375	5,625	10,120	
300	230	655	875	1,315	1,750	1,970	3,280	5,470	9,845	
400	200	635	845	1,270	1,690	1,900	3,170	5,280	9,505	
500	170	600	800	1,200	1,595	1,795	2,995	4,990	8,980	
600	140	550	730	1,095	1,460	1,640	2,735	4,560	8,210	
650	125	535	715	1,075	1,430	1,610	2,685	4,475	8,055	
700	110	535	710	1,065	1,420	1,600	2,665	4,440	7,990	
750	95	505	670	1,010	1,345	1,510	2,520	4,200	7,560	
800	80	410	550	825	1,100	1,235	2,060	3,430	6,170	
850	65	270	355	535	715	805	1,340	2,230	4,010	
900	50	170	230	345	460	515	860	1,430	2,570	
950	35	105	140	205	275	310	515	860	1,545	
1000	20	50	70	105	140	155	260	430	770	
SPECIAL CLASS										
Temperature °F	150	300	400	600	800	900	1500	2500	4500	
-20 to 100	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	
200	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	
300	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	
400	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	
500	290	750	1,000	1,500	2,000	2,250	3,750	6,250	11,250	
600	275	715	950	1,425	1,900	2,140	3,565	5,940	10,690	
650	270	700	935	1,400	1,865	2,100	3,495	5,825	10,485	
700	265	695	925	1,390	1,850	2,080	3,470	5,780	10,405	
750	240	630	840	1,260	1,680	1,890	3,150	5,250	9,450	
800	200	515	685	1,030	1,375	1,545	2,570	4,285	7,715	
850	130	335	445	670	895	1,005	1,670	2,785	5,015	
900	85	215	285	430	575	645	1,070	1,785	3,215	
950	50	130	170	260	345	385	645	1,070	1,930	
1000	25	65	85	130	175	195	320	535	965	

STANDARD CLASS										
Temperature °C	150	300	400	600	800	900	1500	2500	4500	
-29 +38	19,7	51,0	68,3	102,0	136,2	153,1	255,5	425,4	766,0	
93,3	17,9	46,5	62,1	93,1	124,1	139,6	232,7	387,8	697,8	
148,9	15,9	45,2	60,3	90,7	120,7	135,8	226,2	377,2	678,8	
204,4	13,8	43,8	58,3	87,6	116,5	131,0	218,6	364,1	655,4	
260,0	11,7	41,4	55,2	82,7	110,0	123,8	206,5	344,1	619,2	
315,6	9,7	37,9	50,3	75,5	100,7	113,1	188,6	314,4	566,1	
343,3	8,6	36,9	49,3	74,1	98,6	111,0	185,1	308,6	555,4	
371,1	7,6	36,9	49,0	73,4	97,9	110,3	183,8	306,1	550,9	
398,9	6,6	34,8	46,2	69,6	92,7	104,1	173,8	289,6	521,3	
426,7	5,5	28,3	37,9	56,9	75,8	85,2	142,0	236,5	425,4	
454,4	4,5	18,6	24,5	36,9	49,3	55,5	92,4	153,8	276,5	
482,2	3,4	11,7	15,9	23,8	31,7	35,5	59,3	98,6	177,2	
510,0	2,4	7,2	9,7	14,1	19,0	21,4	35,5	59,3	106,5	
537,8	1,4	3,4	4,8	7,2	9,6	10,7	17,9	29,6	53,1	
SPECIAL CLASS										
Temperature °C	150	300	400	600	800	900	1500	2500	4500	
-29 +38	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	
93,3	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	
148,9	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	
204,4	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	
260,0	20,0	51,7	69,0	103,4	137,9	155,1	258,6	430,9	775,7	
315,6	19,0	49,3	65,5	98,3	131,0	147,6	245,8	409,6	737,1	
343,3	18,6	48,3	64,5	96,5	128,6	144,8	241,0	401,6	722,9	
371,1	18,3	47,9	63,8	95,8	127,5	143,4	239,3	398,5	717,4	
398,9	16,5	43,4	57,9	86,9	115,8	130,3	217,2	362,0	651,6	
426,7	13,8	35,5	47,2	71,0	94,8	106,5	177,2	295,5	531,9	
454,4	9,0	23,1	30,7	46,2	61,7	69,3	115,1	192,0	345,8	
482,2	5,9	14,8	19,7	29,6	39,6	44,5	73,8	123,1	221,7	
510,0	3,4	9,0	11,7	17,9	23,8	26,5	44,5	73,8	133,1	
537,8	1,7	4,5	5,9	9,0	12,1	13,4	22,1	36,9	66,5	

ES56A NPT ENDS



ES57A SOCKET WELD ENDS



MATERIALS OF CONSTRUCTION

IT.

R&C Valve GATE VALVES - CLASS 800

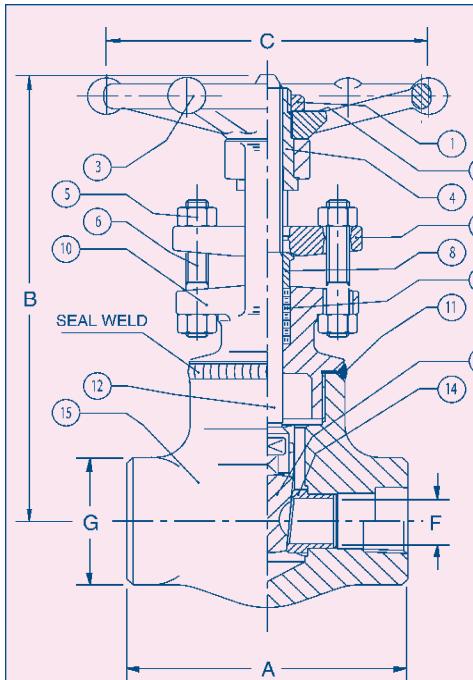
ESWB56A NPT ENDS



ESWB57A SOCKET WELD ENDS

- SIZES 1/2" THRU 2"
- STAINLESS STEEL
- ASTM A182 Gr. F316/F316L

Design construction:
API 602 - ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- stainless steel class 800 1920 psig @ 100°F
132,4 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Name Plate	Aluminum
3	Hand Wheel	Carbon Steel
4	Yoke Sleeve	AISI-416
5	Gland Nut	A194-GR.8
6	Gland Bolt Studs	A194-GR.8
7	Gland Flange	A182 F316
8	Packing Gland	A182 F316L
9	Packing	Graphite
10	Bonnet	A182 F316/F316L
11	Weld	ASME IX
12	Stem	A182 F316
13	Wedge	A182 F316
14	Seat	F316 + Stellite
15	Body	A182 F316/F316L

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5 127	5 127
B open	inch mm	5.98 152	6.22 158	7.72 196	10.04 225	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		5.6	11	25.5	77	97
Weight	lb. kg	3.5 1,6	3.75 1,8	6.25 2,9	13.25 6,1	18 8,2
PACKING		BH2	BH2	BH4	BH6	BY5

R&C Valve

EXTENDED BODY GATE VALVES - CLASS 800

EFWB48D LIP END X FEMALE NPT

EFWB49D LIP END X FEMALE SOCKET WELD



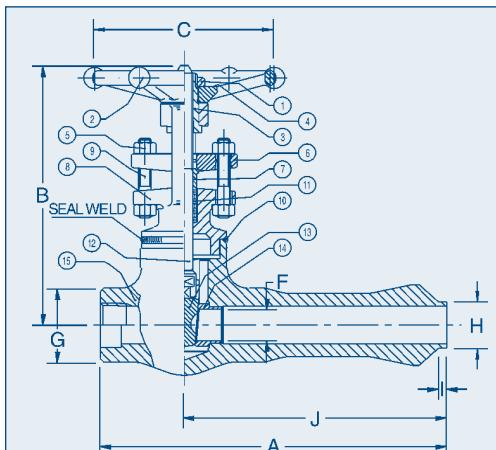
- INTEGRALLY REINFORCED MALE END
- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:

API 602 - ASME B16.34
Testing according to API 598
Marking MSS SP25
Integral extended body
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral wound gasket
Body-bonnet weld to ASME IX
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Ratings:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	8.15 207	8.60 218,5	9.62 244,5	10.37 263,5	10.53 267,5
B open	inch mm	5.98 152	6.22 158	7.72 196	10.04 255	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
H	inch mm	.69 17,5	.87 22	1.12 28,5	1.61 41	1.81 46
I	inch mm	.16 4	.19 4,8	.19 4,8	.25 6,3	.31 8
J	inch mm	6.57 167	6.81 173	7.48 190	7.87 200	8.03 204
Weight	lb. kg	5 2,3	6.25 2,9	9.5 4,3	19.5 8,8	25.75 11,7
PACKING		BH2	BH2	BH4	BH6	BY5



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Hand Wheel	Carbon Steel
3	Yoke Sleeve	AISI 416
4	Name Plate	Aluminum
5	Gland Nuts	A194-2H
6	Gland Flange	A105
7	Packing Gland	AISI 410
8	Bonnet	A105N
9	Gland Studs	AISI 410
10	Weld	ASME IX
11	Packing	Graphite
12	Stem	AISI 410
13	Wedge	AISI 410
14	Seat Rings	AISI 410 + Stellite
15	Body	A105N

RP&C Valve EXTENDED BODY GATE VALVES - CLASS 800

EFWB51D MALE X FEMALE NPT ENDS

EFWB52D MALE X FEMALE SOCKET WELD ENDS

EFWB53D MALE NPT X FEMALE SOCKET WELD ENDS

EFWB54D MALE SOCKET WELD X FEMALE NPT ENDS

- SIZES 1/2" THRU 2"
- NOTE: 1/2" MALE THREADS ARE NOT COVERED

BY API 602

- FORGED STEEL
- ASTM A105N

Design construction:

API 602 - ASME B16.34

Testing according to API 598

Marking MSS SP25

Integral extended body

Outside Screw and Yoke (OS&Y)

Self aligning two piece packing gland

Spiral wound gasket

Integral backseat

Socket Weld Ends to ASME B16.11

Screwed Ends (NPT) to ASME B1.20.1

Ratings:

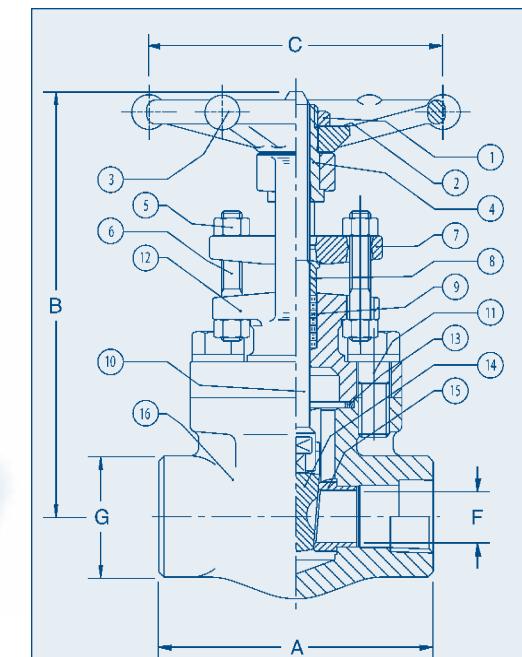
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C



RP&C Valve GATE VALVES - CLASS 1500

EF556E NPT ENDS

EF557E SOCKET WELD ENDS



- SIZES 1/2" THRU 2"

- FORGED STEEL
- ASTM A105N

Design construction:

API 602 - ASME B16.34 - BS 5352

Testing according to API 598

Marking MSS SP25

Outside Screw and Yoke (OS&Y)

Self aligning two piece packing gland

Spiral-wound gasket

Integral backseat

Socket Weld Ends to ASME B16.11

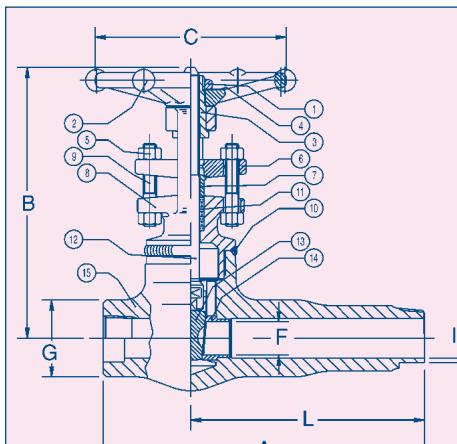
Screwed Ends (NPT) to ASME B1.20.1

Rating:

- carbon steel class 1500 3705 psig @ 100°F
255,5 bar + 38°C

MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Hand Wheel	Carbon Steel
3	Yoke Sleeve	AISI 416
4	Name Plate	Aluminum
5	Gland Nuts	A194-2H
6	Gland Flange	A105
7	Packing Gland	AISI 410
8	Bonnet	A105N
9	Gland Studs	AISI 410
10	Weld	ASME IX
11	Packing	Graphite
12	Stem	AISI 410
13	Wedge	AISI 410
14	Seat Rings	AISI 410 + Stellite
15	Body	AISI 410 + Stellite
16		A105N



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Hand Wheel	Carbon Steel
3	Yoke Sleeve	AISI 416
4	Name Plate	Aluminum
5	Gland Nuts	A194-2H
6	Gland Flange	A105
7	Packing Gland	AISI 410
8	Bonnet	A105N
9	Gland Studs	AISI 410
10	Weld	ASME IX
11	Packing	Graphite
12	Stem	AISI 410
13	Wedge	AISI 410
14	Seat Rings	AISI 410 + Stellite
15	Body	AISI 410 + Stellite

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	5.57 141,5	5.77 146,5	6.53 166	7.50 190,5	8.50 216
B open	inch mm	5.98 152	6.14 156	7.72 196	10.08 256	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
H	inch mm	.84 21,3	1.05 26,7	1.31 33,4	1.90 48,3	2.37 60,3
I	inch mm	.51 13	.63 16	.83 21	1.34 34	1.65 42
L	inch mm	4.01 102	4.01 102	4.37 111	5 127	6.02 153
Weight	lb. kg	3.75 1,7	4.5 2,1	7 3,2	15.75 7,2	22.75 10,3
PACKING		BH2	BH2	BH4	BH6	BY5
DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.54 90	4.33 110	5 127	5 127	8.27 210
B open	inch mm	5.98 152	7.48 190	8.66 220	11.10 282	13.58 345
C	inch mm	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.48 36,5
G	inch mm	1.50 38	1.89 48	2.20 56	3.07 78	3.35 85
Typical CV Factors		5.3	11	21.5	77	97
Weight	lb. kg	5.25 2,4	8.5 3,9	13.25 6,1	23.75 10,8	45.25 20,5
PACKING		BH3	BH5	BH6	2B5	BH8
GASKET		G1	G2	G3	G5	G7

R&C Valve GATE VALVES - CLASS 1500

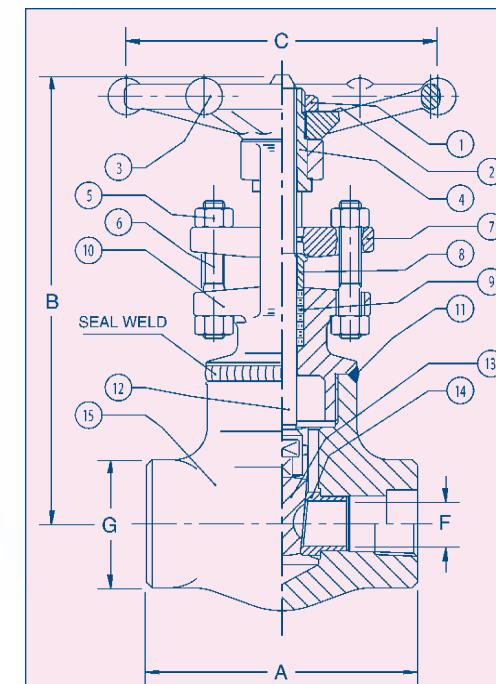
EFWB556E NPT ENDS

EFWB557E SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:
API 602 - ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 1500 3705 psig @ 100°F
255,5 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Name Plate	Aluminum
3	Hand Wheel	Carbon Steel
4	Yoke Sleeve	AISI-416
5	Gland Nut	A194-2H
6	Gland Bolt Studs	AISI-410
7	Gland Flange	A105
8	Packing Gland	AISI-410
9	Packing	Graphite
10	Bonnet	A105N
11	Weld	ASME IX
12	Stem	AISI-410
13	Wedge	AISI-410 + Stellite
14	Seat	AISI-410 + Stellite
15	Body	A105N

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.54 90	4.33 110	5 127	5 127	8.27 210
B open	inch mm	6.02 153	7.48 190	8.66 220	11.10 282	13.58 345
C	inch mm	3.46 88	3.82 97	5.43 138	5.43 138	5.43 138
F	inch mm	.38 9.6	.55 14	.71 18	1.18 30	1.44 36.6
G	inch mm	1.50 38	1.89 48	2.20 56	3.07 78	3.35 85
Typical CV Factors		5.3	11	21.5	77	97
Weight	lb. kg	4.25 2	7.25 3.3	11.5 5.3	21.5 9.8	40.25 18.3
PACKING		BH3	BH5	BH6	2B5	BH8

R&C Valve

EXTENDED BODY GATE VALVES - CLASS 800

EF51D MALE X FEMALE NPT ENDS

EF52D MALE X FEMALE SOCKET WELD ENDS

EF53D MALE NPT X FEMALE SOCKET WELD ENDS

EF54D MALE SOCKET WELD X FEMALE NPT ENDS



- SIZES 1/2" THRU 2"
- NOTE: MALE THREADED ENDS IN NPS 1/2" IN CLASS 800 LB. NOT PERMITTED BY API 602

- FORGED STEEL
- ASTM A105N

Design construction:

API 602 - ASME B16.34

Testing according to API 598

Marking MSS SP25
Integral extended body
Outside Screw and Yoke (OS&Y)

Self aligning two piece packing gland
Spiral wound gasket
Integral backseat
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1

Ratings:

- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	5.57 141,5	5.77 146,5	6.53 166	7.50 190,5	8.50 216
B open	inch mm	5.98 152	6.14 156	7.72 196	10.08 256	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
H	inch mm	.84 21,3	1.05 26,7	1.31 33,4	1.90 48,3	2.37 60,3
I	inch mm	.51 13	.63 16	.83 21	1.34 34	1.65 42
L	inch mm	4.01 102	4.01 102	4.37 111	5 127	6.02 153
Weight	lb. kg	5.25 2,4	5.75 2,6	9.25 4,2	17.75 8,1	26 11,8
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET		G2	G2	G3	G6	G7

MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Name Plate	Aluminum
3	Hand Wheel	Carbon Steel
4	Yoke Sleeve	AISI 416
5	Gland Nuts	A194-2H
6	Gland Bolt Studs	AISI 410
7	Gland Flange	A105
8	Packing Gland	AISI 410
9	Packing	Graphite
10	Bonnet	A105N
11	Bolts	A193 B7
12	Stem	AISI 410
13	Wedge	AISI 410
14	Gasket	F316L + Graphite
15	Seat	AISI 410 + Stellite
16	Body	A105N

RP&C Valve PISTON INTEGRAL FLANGED CHECK VALVES

F190D CLASS 150

F390D CLASS 300

F690D CLASS 600



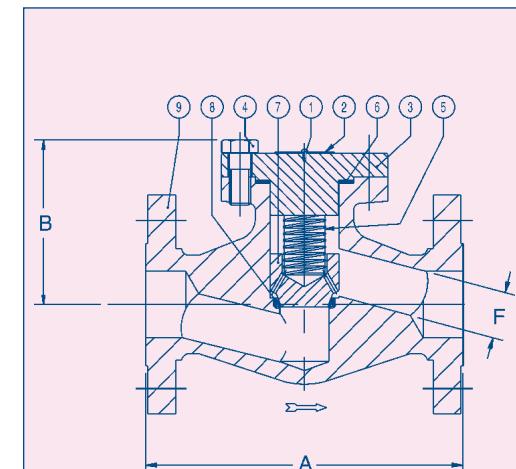
DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	4.25 108	4.62 117,5	5 127	6.5 165	8 203
B	inch mm	2.95 75	2.95 75	3.35 85	4.33 110	4.92 125
F	inch mm	.35 9	.51 13	.68 17,5	1.16 29,5	1.38 35
Weight	lb. kg	5 2,3	6.75 3,1	9.75 4,5	18.5 8,4	30.75 14
Typical CV Factors		1	2.8	5.5	13.2	16
Gasket		G2	G2	G3	G5	G8

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	6 152,5	7 178	8* 203*	9.02* 229*	10.51 267
B	inch mm	2.95 75	3.15 80	3.46 88	4.53 115	5.12 130
F	inch mm	.35 9	.51 13	.68 17,5	1.16 29,5	1.38 35
Weight	lb. kg	7.5 3,4	11.5 5,3	16.5 7,5	30.75 14	41.75 19
Typical CV Factors		1	2.8	5.5	13.2	16
Gasket		G2	G2	G3	G6	G7

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	6.5 165	7.51 191	8.5 216	9.5 241	11.5 292
B	inch mm	2.83 72	3.15 80	3.35 85	4.53 115	5.12 130
F	inch mm	.35 9	.51 13	.68 17,5	1.16 29,5	1.38 35
Weight	lb. kg	7.5 3,5	12.5 5,7	17.5 8	31.75 14,5	43 19,5
Typical CV Factors		1	2.8	5.5	13.2	16
Gasket		G2	G2	G3	G6	G7

* Spring will be available upon request

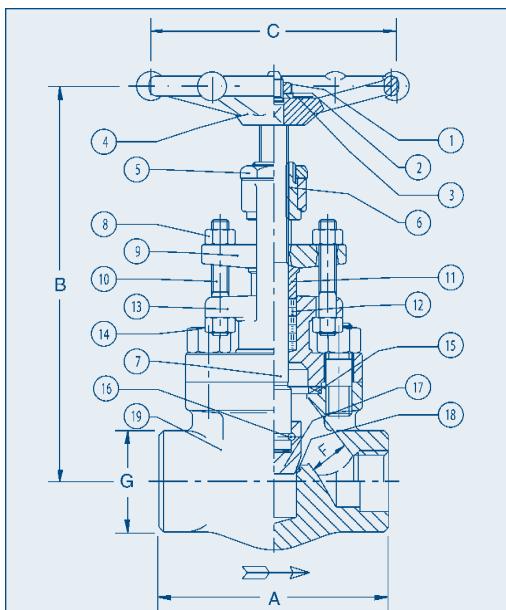
MATERIALS OF CONSTRUCTION		
IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Name Plate	Aluminum
3	Bonnet	A105N
4	B/B Bolts	A193 B7
5	Spring	* 316
6	B/B Gasket	F316L + Graphite
7	Disc	AISI 410
8	Integral Seat	Stellite
9	Body	A105N



RP&C Valve GLOBE VALVES - CLASS 800

F80D NPT ENDS

F81D SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- PISTON CHECK VALVES
- ASTM A105N

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spiral-wound gasket
Integral body flanges
Face to face according to ASME B16.10
125-250 AARH serrated spiral finish
Flanges according to ASME B16.5
Ratings:
- carbon steel class 150 285 psig @ 100°F
20 bar + 38°C
- carbon steel class 300 740 psig @ 100°F
51 bar + 38°C
- carbon steel class 600 1480 psig @ 100°F
102 bar + 38°C

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	6 150	7.09 180
B open	inch mm	6.54 166	6.73 171	8.39 213	10.16 258	11.81 300
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.69 17,5	1.16 29,5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.5	3.9	6.5	16.5	23.5
Weight	lb. kg	4.5 2,1	5 2,3	8 3,7	16.25 7,4	26.25 11,9
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G6	G7

R&C Valve GLOBE VALVES - CLASS 800

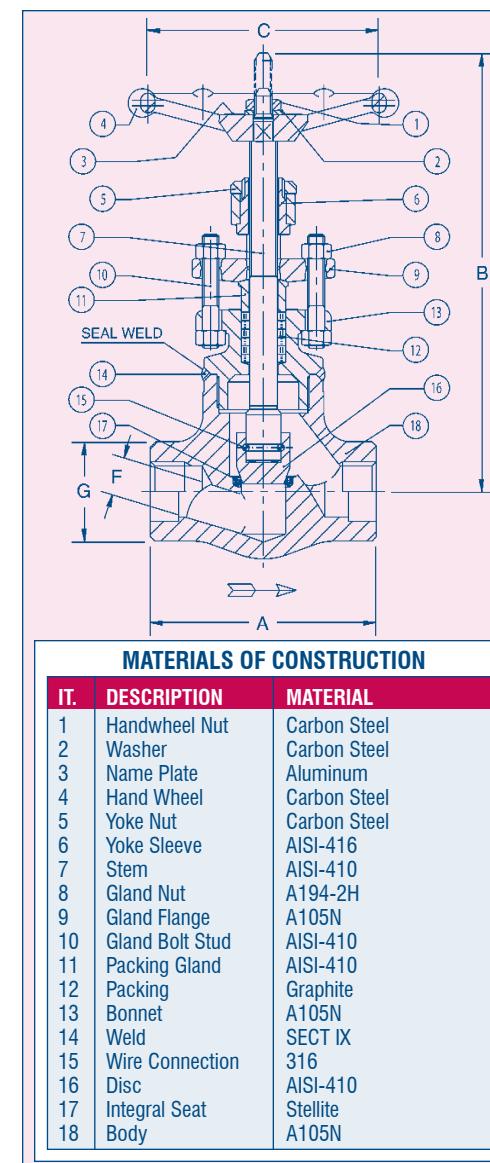
FWB80D NPT ENDS



FWB81D SOCKET WELD ENDS

- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C



DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	6 150	7.09 180
B open	inch mm	6.54 166	6.73 171	8.39 213	10.12 258	11.81 300
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.5	3.9	6.5	16.5	23.5
Weight	lb. kg	3.75 1,7	4.25 2	6.5 3	14.5 6,6	22.75 10,4
PACKING		BH3	BH3	BH5	BY5	BY7

R&C Valve

INTEGRAL FLANGED GLOBE VALVES

F180D CLASS 150

F380D CLASS 300

F680D CLASS 600



- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Loose disc stem assembly
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
125-250 AARR serrated spiral finish
Flanges according to ASME B16.5

Ratings:
- carbon steel class 150 285 psig @ 100°F
20 bar + 38°C
- carbon steel class 300 740 psig @ 100°F
51 bar + 38°C
- carbon steel class 600 1480 psig @ 100°F
102 bar + 38°C

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	4.25 108	4.62 117,5	5 127	6.5 165	8 203
B open	inch mm	7.72 196	7.72 196	8.9 226	10.75 273	11.81 300
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.68 17.5	1.16 29.5	1.38 35
Typical CV Factors		1.3	3.9	7.1	17.5	21.4
Weight	lb. kg	6.5 3	8.25 3.8	12 5,5	22.5 10,3	34.75 15,8
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G5	G8

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	6 152,5	7 178	8 203	9.02 229	10.51 321
B open	inch mm	7.72 196	7.95 202	8.9 226	10.63 270	12.64 321
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.68 17.5	1.16 29.5	1.38 35
Typical CV Factors		1.3	3.9	7.1	17.5	21.4
Weight	lb. kg	9 4,1	13 6	18.25 8,3	36.25 15,5	47.25 21,5
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G6	G7

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	6.50 165	7.51 191	8.50 216	9.50 241	11.50 292
B open	inch mm	7.72 196	7.95 202	9.21 234	10.63 270	12.64 321
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.67 17.5	1.16 29.5	1.38 35
Typical CV Factors		1.3	3.9	7.1	17.5	21.4
Weight	lb. kg	9.5 4,4	13.5 6,2	19 8,7	36.25 16,5	52 23,6
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G6	G7

MATERIALS OF CONSTRUCTION						
IT.	DESCRIPTION	MATERIAL				
1	Handwheel Nut	Carbon Steel				
2	Handwheel	Carbon Steel				
3	Yoke Sleeve	AISI 416				
4	Name Plate	Aluminum				
5	Gland Nuts	A194-2H				
6	Gland Flange	A105				
7	Packing Gland	AISI 410				
8	Bonnet	A105N				
9	Gland Studs	AISI 410				
10	B/B Bolts	A193 B7				
11	Packing	Graphite				
12	Stem	AISI 410				
13	B/B Gasket	F316L + Graphite				
14	Disc	AISI 410				
15	Integral Seat	Stellite				
16	Body	A105N				
17	Washer	Carbon Steel				
18	Connection Wire	316				
19	Yoke Nut	Carbon Steel				

R&C Valve INTEGRAL FLANGED GATE VALVES



EF158D CLASS 150

EF308D CLASS 300

EF608D CLASS 600

DIMENSIONAL SPECIFICATIONS							
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50	
A	inch mm	4.25 108	4.62 117,5	5 127	6.50 165	7 178	8 203
B open	inch mm	6.88 175	7.16 182	8.35 212	10.04 255	11.41 290	13.58 345
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172
F	inch mm	.38 9,6	.55 18	.71 30	1.18 36,6	1.44 48	1.89
Typical CV Factors		6.3	10	25.6	67.5	-	97
Weight	lb. kg	6.25 2.9	8 3,7	11.25 5,2	21 9,6	29 13,2	46.75 21,2
PACKING		BH2	BH2	BH4	BH6	BY5	BH8
GASKET		G2	G2	G3	G5	G7	G8

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	5.51 140	6 152,5	6.50 165	7.51 191	8.5 216
B open	inch mm	6.89 175	7.17 182	8.35 212	9.84 250	11.42 290
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
Typical CV Factors		6.3	10	25.6	67.5	97
Weight	lb. kg	7.75 3,6	11.25 5,2	14.75 6,7	28.5 13	33.5 15,3
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET		G2	G2	G3	G5	G7

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	6.50 165	7.51 191	8.50 216	9.50 241	11.50 292
B open	inch mm	6.65 169	7.28 185	8.46 215	10.04 255	12.01 305
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138
F	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
Typical CV Factors		6.3	10	25.6	67.5	97
Weight	lb. kg	9.25 4,3	15.25 7	22 10	39.5 18	63.5 28
PACKING		BH2	BH2	BH4	BH6	BY5
GASKET		G2	G2	G3	G6	G7

- SIZES 1/2" THRU 3" (EF158D)
- SIZES 1/2" THRU 2" (EF308D, EF608D)
- FORGED STEEL
- ASTM A105N

Design construction:

API 602 - ASME B16.34 - BS 5352

Testing according to API 598

Marking MSS SP25

Outside Screw and Yoke (OS&Y)

Self aligning two piece packing gland

Spiral-wound gasket

Integral backseat

Integral body flanges

Face to face according to ASME B16.10

125-250 AARH serrated spiral finish

Flanges according to ASME B16.5

Ratings:

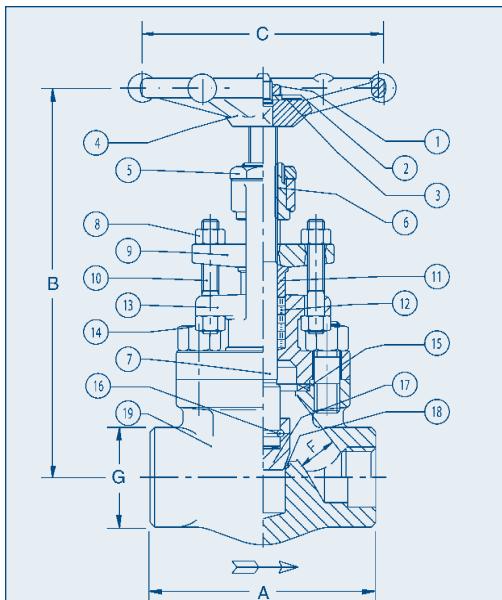
- carbon steel class 150 285 psig @ 100°F
20 bar + 38°C

- carbon steel class 300 740 psig @ 100°F
51 bar + 38°C

- carbon steel class 600 1480 psig @ 100°F
102 bar + 38°C

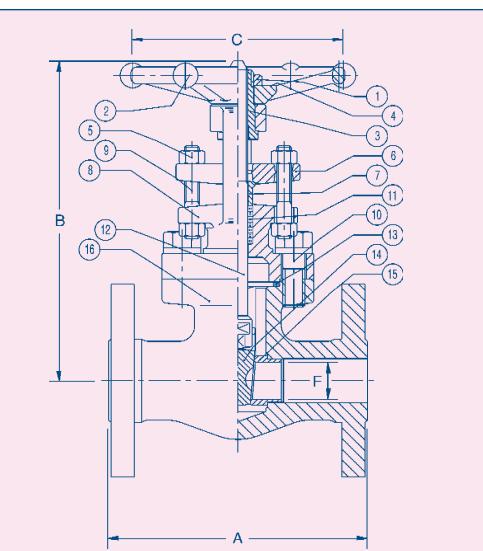
LF80A NPT ENDS

LF81A SOCKET WELD ENDS



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Stem	A182 F316
8	Gland Nut	A194-2H
9	Gland Flange	A105
10	Gland Bolt Stud	AISI-410
11	Packing Gland	316L
12	Packing	Graphite
13	Bonnet	A350 LF2
14	Bolts	A320-L7
15	Gasket	F316L + Graphite
16	Wire Connection	316
17	Disc	A182 F316
18	Integral Seat	Stellite
19	Body	A350 LF2



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Handwheel	Carbon Steel
3	Yoke Sleeve	AISI 416
4	Name Plate	Aluminum
5	Gland Nuts	A194-2H
6	Gland Flange	A105
7	Packing Gland	AISI 410
8	Bonnet	A105N
9	Gland Studs	AISI 410
10	B/B Bolts	A193 B7
11	Packing	Graphite
12	Stem	AISI 410
13	B/B Gasket	F316L + Graphite
14	Wedge	AISI 410
15	Seat Rings	AISI 410 + Stellite
16	Body	A105N

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	6 150	7.09 180
B open	inch mm	6.54 166	6.73 171	8.39 213	10.16 258	11.81 300
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.69 17,5	1.16 29,5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.5	3.9	6.5	16.5	23.5
Weight	lb. kg	4.5 2,1	5 2,3	8 3,7	16.25 7,4	26.25 11,9
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G6	G7

R&C Valve GLOBE VALVES - CLASS 800

C80D NPT ENDS

C81D SOCKET WELD ENDS

K80D NPT ENDS

K81D SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A182 Gr. F5 (C80D & C81D)
- ASTM A182 Gr. F22 Cl. 3 (K80D & K81D)

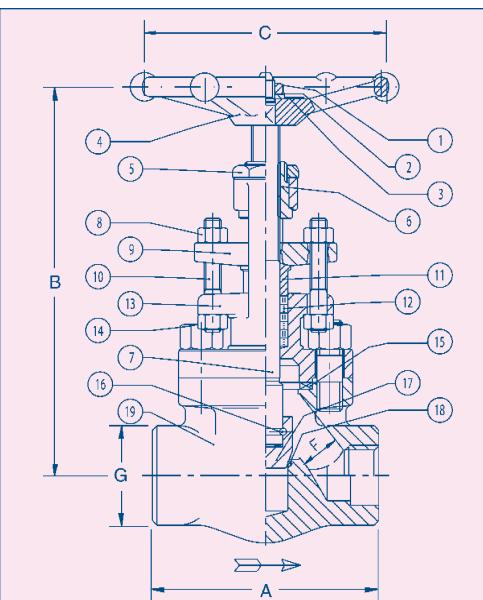
Design construction:
ASME B16.34 - BS 5352
Testing according to API 598

Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland

Spiral-wound gasket
Integral backseat
Loose solid disc

Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1

Rating:
- alloy steel class 800 2000 psig @ 100°F
137,9 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Stem	A479 410
8	Gland Flange	A194-2H
9	Gland Nut	A105
10	Gland Bolt Stud	AISI-410
11	Packing Gland	AISI-410
12	Packing	Graphite
13	Bonnet	A182 F5 or A182 F22
14	Bolts	A193-B16
15	Gasket	F316L + Graphite
16	Wire Connection	316
17	Disc	A479 410
18	Integral Seat	+ Stellite
19	Body	A182 F5 or A182 F22

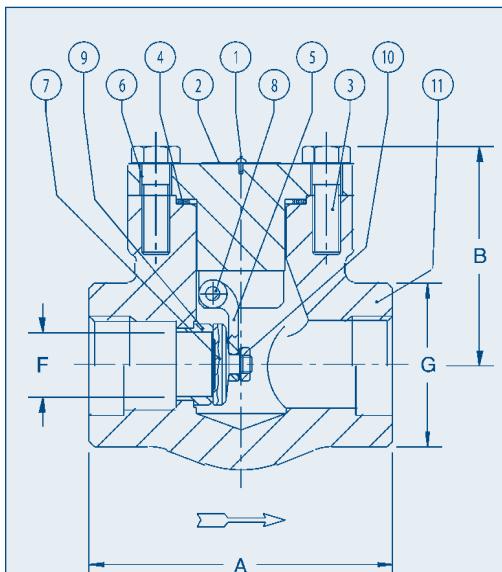
S98A NPT ENDS

S99A SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- STAINLESS STEEL
- SWING CHECK VALVE
- ASTM A182 Gr. F316/F316L

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring on request only
Spiral-wound gasket
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- stainless steel class 800 1920 psig @ 100°F
132,4 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Name Plate	Aluminum
3	B/B Bolts	A193 B8
4	B/B Gasket	F316L + Graphite
5	Hinge	A182 F316
6	Bonnet	A182 F316/F316L
7	Disc	A182 F316
8	Hinge Pin	F316
9	Seat	A182 F316 + Stellite
10	Disc Nut	A194 GR.8
11	Body	A182 F316/F316L

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	6 150	7.09 180
B open	inch mm	6.54 166	6.73 171	8.39 213	10.16 258	11.81 300
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.5	3.9	6.5	16.5	23.5
Weight	lb. kg	4.5 2,1	5 2,3	8 3,7	16.25 7,4	26.25 11,9
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G6	G7

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108
F Swing	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		2.7	7.5	12.5	34	58
Weight	lb. kg	2.75 1,3	3.5 1,6	6.25 2,8	12.25 5,6	19.75 9,0
GASKET		G2	G2	G3	G6	G7

RP&C Valve SWING CHECK VALVES - CLASS 800

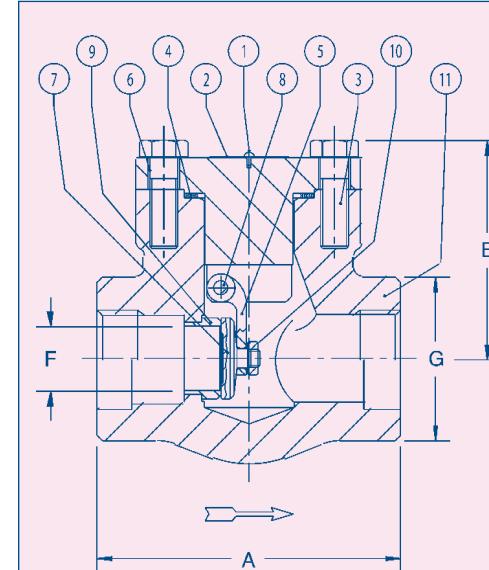
F98D NPT ENDS

F99D SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- SWING CHECK VALVE
- ASTM A105N

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring on request only
Spiral-wound gasket
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Name Plate	Aluminum
3	B/B Bolts	A193 B7
4	B/B Gasket	F316 + Graphite
5	Hinge	AI5I - 410
6	Bonnet	A105N
7	Disc	AI5I - 410
8	Hinge Pin	A479 TP316
9	Seat	AI5I - 410 + Stellite
10	Disc Nut	AI5I - 410
11	Body	A105N

RP&C Valve GLOBE VALVES - CLASS 800

S80A NPT ENDS

S81A SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A182 Gr. F316/F316L

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- stainless steel class 800 1920 psig @ 100°F
132,4 bar + 38°C

MATERIALS OF CONSTRUCTION		
IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AI5I-416
7	Stem	A182 F316
8	Gland Nut	A194-GR.8
9	Gland Flange	A182 F316
10	Gland Bolt Stud	A193 B8
11	Packing Gland	316
12	Packing	Graphite
13	Bonnet	A182 F316/F316L
14	Bolts	A193 B8
15	Gasket	F316L + Graphite
16	Wire Connection	316
17	Disc	A182 F316
18	Integral Seat	Stellite
19	Body	A182 F316/F316L

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108
F Swing	inch mm	.38 9,6	.55 14	.71 18	1.18 30	1.44 36,6
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		2.7	7.5	12.5	34	58
Weight	lb. kg	2.75 1,3	3.5 1,6	6.25 2,8	12.25 5,6	19.75 9,0
GASKET		G2	G2	G3	G6	G7

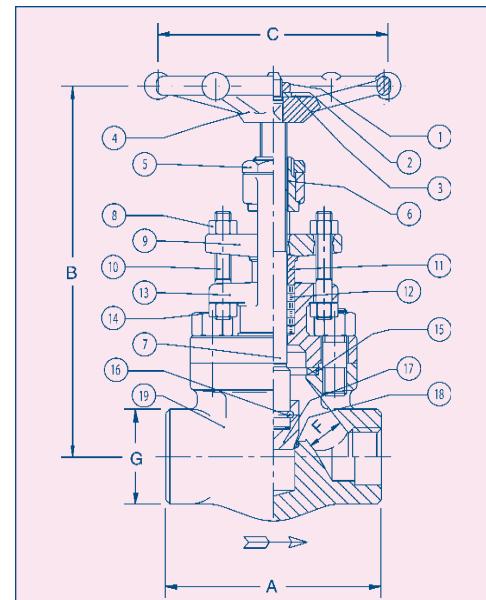
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	6 150	7.09 180
B open	inch mm	6.54 166	6.73 171	8.39 213	10.16 258	11.81 300
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	6.77 172
F	inch mm	.35 9	.51 13	.69 17,5	1.16 29,5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.5	3.9	6.5	16.5	23.5
Weight	lb. kg	4.5 2,1	5 2,3	8 3,7	16.25 7,4	26.25 11,9
PACKING		BH3	BH3	BH5	BY5	BY7
GASKET		G2	G2	G3	G6	G7

RPC Valve GLOBE VALVES - CLASS 1500

F580E NPT ENDS



F581E SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
 - FORGED STEEL
 - ASTM A105N
- Design construction:**
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 1500 3705 psig @ 100°F
255,5 bar + 38°C

MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Stem	AISI-410
8	Gland Flange	A105
9	Gland Bolt Stud	AISI-410
10	Packing Gland	AISI-410
11	Packing	Graphite
12	Bonnet	A105N
13	Bolts	A193-B7
14	Gasket	F316L + Graphite
15	Wire Connection	316
16	Disc	AISI-410 + Stellite
17	Integral Seat	Stellite
18	Body	A105N
19		

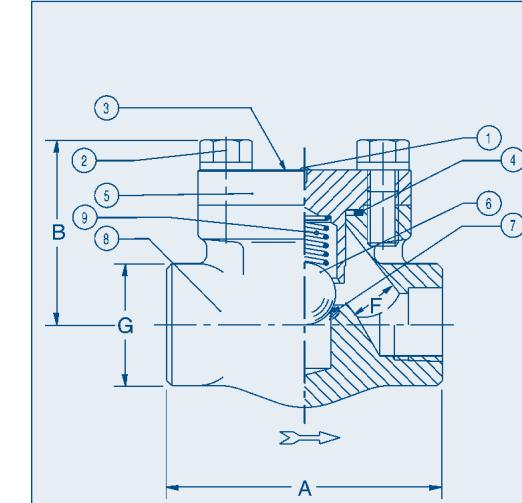
RPC Valve

BALL CHECK VALVES - CLASS 800

F96D NPT ENDS



F97D SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- BALL CHECK VALVE
- ASTM A105N

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring on request only
Spiral-wound gasket
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C

MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Bolts	A193 B7
3	Nameplate	Aluminum
4	Gasket	F316L + Graphite
5	Bonnet	A105N
6	Ball	AISI 410
7	Integral Seat	Stellite
8	Body	A105N
9	Spring	*

* The Spring will be supplied upon request.

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.54 90	4.33 110	5 127	7.09 180	8.27 210
B open	inch mm	6.54 166	8.27 210	9.84 250	11.81 300	14.76 375
C	inch mm	3.46 88	3.82 97	5.43 138	6.77 172	6.77 172
F	inch mm	.35 9	.47 12	.59 15	1.06 27	1.26 32
G	inch mm	1.50 38	1.89 48	2.20 56	3.07 78	3.35 85
Typical CV Factors		1.4	3.1	5.5	14.5	20
Weight	lb. kg	5.25 2,4	8.75 4	14.25 6,5	28.5 13	48.5 22
PACKING		BH3	BH5	2B4	2B5	BH8
GASKET		G1	G2	G3	G5	G7

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108
F Ball	inch mm	.35 9	.51 13	.69 17,5	1.16 29,5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.1	2.6	4.2	11	14.5
Weight	lb. kg	2.75 1,3	3.5 1,6	6.25 2,8	12.25 5,6	19.75 9,0
GASKET		G2	G2	G3	G6	G7

RP&C Valve PISTON CHECK VALVES - CLASS 800

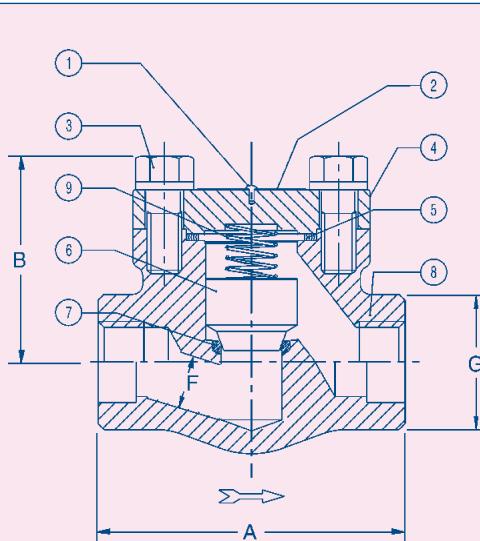
S90A NPT ENDS

S91A SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- STAINLESS STEEL
- PISTON CHECK VALVE
- ASTM A182 F316 / F316L

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring on request only
Spiral-wound gasket
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- stainless steel class 800 1920 psig @ 100°F
132,4 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Name Plate	Aluminum
3	Bolts	A193 B8
4	Bonnet	A182 F316L
5	Gasket	316L + Graphite
6	Piston	A182 F316/F316
7	Integral Seat	Stellite
8	Body	A182 F316/F316L
9	Spring	*

* The Spring will be supplied upon request.

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108
F Piston	inch mm	.35 9	.51 13	.69 17,5	1.16 29,5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.2	2.8	5	12.5	17.5
Weight	lb. kg	2.75 1,3	3.5 1,6	6.25 2,8	12.25 5,6	19.75 9,0
GASKET		G2	G2	G3	G6	G7

RP&C Valve GLOBE VALVES - CLASS 1500

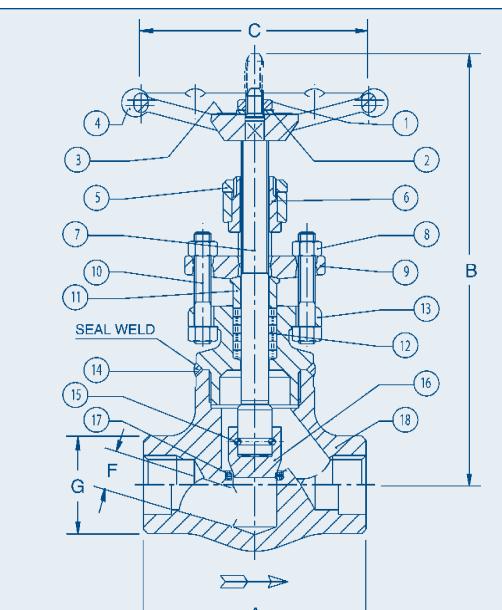
FWB580E NPT ENDS

FWB581E SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 1500 3705 psig @ 100°F
255,5 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Stem	AISI-410
8	Gland Nut	A194-2H
9	Gland Flange	A105
10	Gland Bolt Stud	AISI-410
11	Packing Gland	AISI-410
12	Packing	Graphite
13	Bonnet	A105N
14	Weld	SECT IX
15	Wire Connection	316
16	Disc	AISI-410 + Stellite
17	Integral Seat	Stellite
18	Body	A105N

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.54 90	4.33 110	5 127	7.09 180	8.27 210
B open	inch mm	6.54 166	8.27 210	9.72 247	11.81 300	14.76 375
C	inch mm	3.46 88	3.82 97	5.43 138	6.77 172	6.77 172
F	inch mm	.35 9	.47 12	.59 15	1.06 27	1.26 32
G	inch mm	1.50 38	1.89 48	2.20 56	3.07 78	3.35 85
Typical CV Factors		1.4	3.1	5.5	14.5	20
Weight	lb. kg	4.25 2	7.75 3,5	12 5,5	26.25 12	41.75 19
PACKING		BH3	BH5	2B4	2B5	BH8

F1200E NPT ENDS

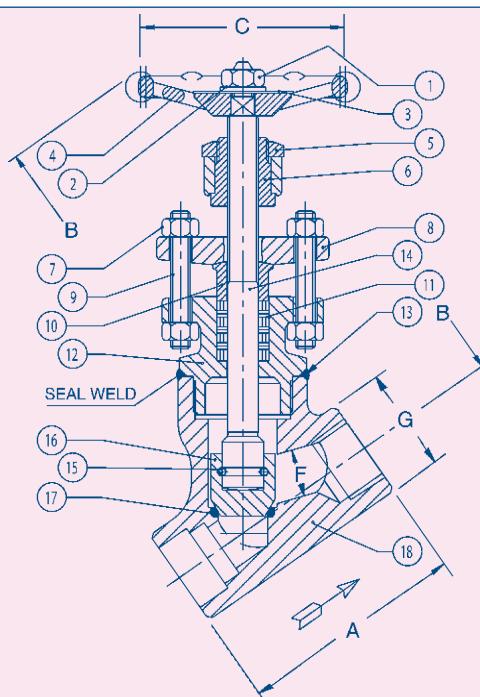
F1210E SOCKET WELD ENDS



- SIZES 1/4" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:
ASME B16.34 Limited Class
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Integral backseat
Body bonnet weld to ASME IX
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1

Rating:
- carbon steel class 1690 4225 psig @ 100°F
291 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Gland Nut	A194-2H
8	Gland Flange	A105
9	Gland Bolt Studs	AISI-410
10	Packing Gland	AISI-410
11	Packing	Graphite
12	Bonnet	A105N
13	Weld	SECT IX
14	Stem	AISI-410
15	Wire	316
16	Disc	AISI-410 + Stellite
17	Integral Seat	Stellite
18	Body	A105N

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50
A	inch mm	3.35 85	3.35 85	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190	8.66 220
B open	inch mm	6.89 175	6.89 175	8.46 215	10.04 255	11.02 280	12.40 315	14.96 380	17.72 450
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172	6.77 172	9.21 234
F	inch mm	.28 7	.35 9	.47 12	.59 15	.79 20	1.06 27	1.26 32	1.57 40
G	inch mm	1.5 38	1.5 38	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85	3.74 95
Typical CV Factors	-	-	3.7	8.7	12.6	-	42	73.8	
Weight	lb. kg	4.25 2	4.25 2	7.75 3.5	11.5 5.3	24.25 11	24.25 11	36.25 16.5	57.25 26
PACKING		BH3	BH3	BH5	2B4	2B4	BY7	BH8	2B8

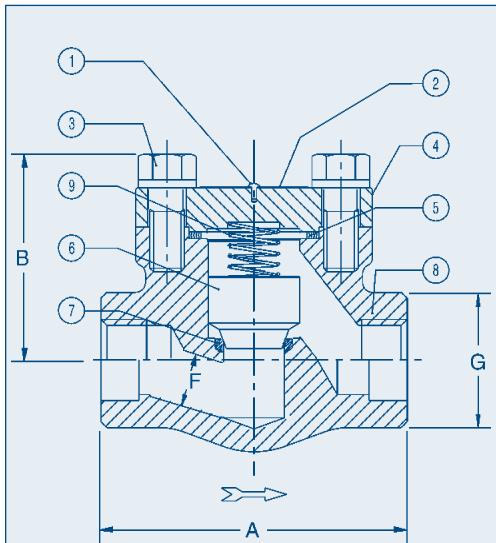
C90D NPT ENDS

C91D SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- PISTON CHECK VALVE
- ASTM A182 Gr. F5

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring on request only
Spiral-wound gasket
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- alloy steel class 800 2000 psig @ 100°F
137,9 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Name Plate	Aluminum
3	Bolts	A193 B16
4	Bonnet	A182 F5
5	Gasket	316L + Graphite
6	Piston	AISI-410
7	Integral Seat	Stellite
8	Body	A182 F5
9	Spring	*

* The Spring will be supplied upon request.

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108
F Piston	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors	-	1.2	2.8	5	12.5	17.5
Weight	lb. kg	2.75 1.3	3.5 1.6	6.25 2.8	12.25 5.6	19.75 9.0
GASKET		G2	G2	G3	G6	G7

F90D NPT ENDS

F91D SOCKET WELD ENDS

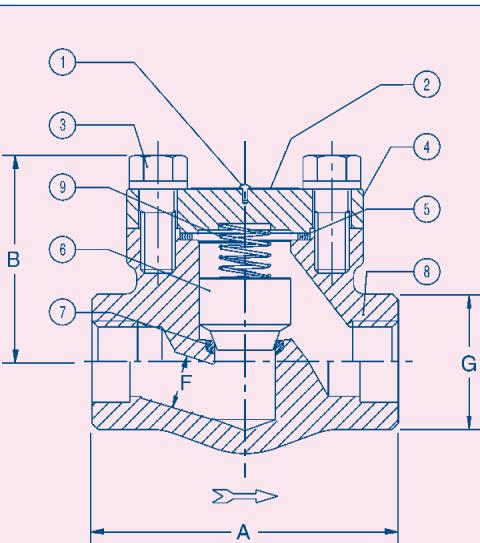
LF90A NPT ENDS

LF91A SOCKET WELD ENDS



- SIZES 1/2" THRU 2"
- FORGED STEEL
- PISTON CHECK VALVE
- ASTM A105N (F90D, F91D)
- ASTM A350 Gr. LF2 (LF90A, LF91A)

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring on request only
Spiral-wound gasket
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- carbon steel class 800 1975 psig @ 100°F
136,2 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Rivet	Carbon Steel
2	Name Plate	Aluminum
3	Bolts	A193 B7 / A320 L7
4	Bonnet	A105N or A350 LF2
5	Gasket	316L + Graphite
6	Piston	AISI-410 or 316
7	Integral Seat	Stellite
8	Body	A105N or A350 LF2
9	Spring	*

* The Spring will be supplied upon request.

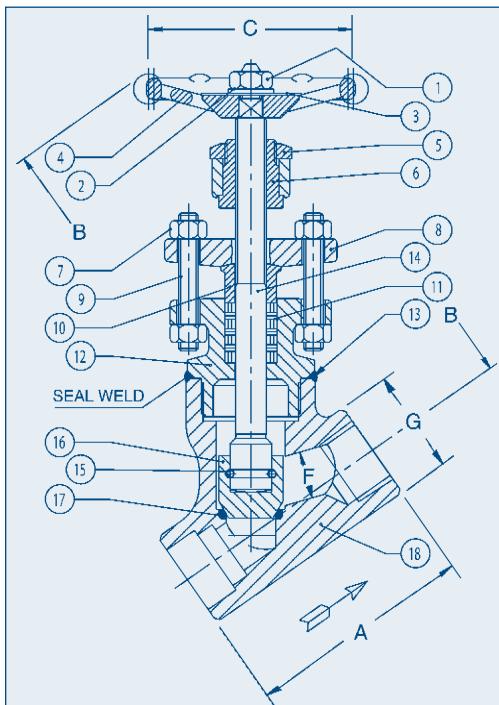
K1200E NPT ENDS

K1210E SOCKET WELD ENDS



- SIZES 1/4" THRU 2"
- FORGED STEEL
- ASTM A182 Gr. F22 Cl. 3

Design construction:
ASME B16.34 Limited Class
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Integral backseat
Body bonnet weld to ASME IX
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- alloy steel class 1690 4225 psig @ 100°F
291 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Gland Nut	A194-2H
8	Gland Flange	A105
9	Gland Bolt Studs	AISI-410
10	Packing Gland	AISI-410
11	Packing	Graphite
12	Bonnet	A182 F22
13	Weld	SECT IX
14	Stem	AISI-410
15	Wire	316
16	Disc	AISI-410 + Stellite
17	Integral Seat	Stellite
18	Body	A182 F22

DIMENSIONAL SPECIFICATIONS						
SIZE	inch mm	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	3.15 80	3.54 90	4.33 110	5.91 150	7.09 180
B	inch mm	2.17 55	2.36 60	3.07 78	3.62 92	4.25 108
F Piston	inch mm	.35 9	.51 13	.69 17.5	1.16 29.5	1.38 35
G	inch mm	1.26 32	1.50 38	1.89 48	2.52 64	3.07 78
Typical CV Factors		1.2	2.8	5	12.5	17.5
Weight	lb. kg	2.75 1.3	3.5 1.6	6.25 2.8	12.25 5.6	19.75 9.0
GASKET		G2	G2	G3	G6	G7

DIMENSIONAL SPECIFICATIONS

SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/4 32	1 1/2 40	2 50
A	inch mm	3.35 85	3.35 85	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190	8.66 220
B open	inch mm	6.89 175	6.89 175	8.46 215	10.04 255	11.02 280	12.40 315	14.96 380	17.72 450
C	inch mm	3.46 88	3.46 88	3.82 97	5.43 138	5.43 138	6.77 172	6.77 172	9.21 234
F	inch mm	.28 7	.35 9	.47 12	.59 15	.79 20	1.06 27	1.26 32	1.57 40
G	inch mm	1.5 38	1.5 38	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85	3.74 95
Typical CV Factors		-	-	3.7	8.7	12.6	-	42	73.8
Weight	lb. kg	4.25 2	4.25 2	7.75 3.5	11.5 5.3	24.25 11	24.25 11	36.25 16.5	57.25 26
PACKING		BH3	BH3	BH5	2B4	2B4	BY7	BH8	2B 8

F1280E NPT ENDS (CLASS 2500)*

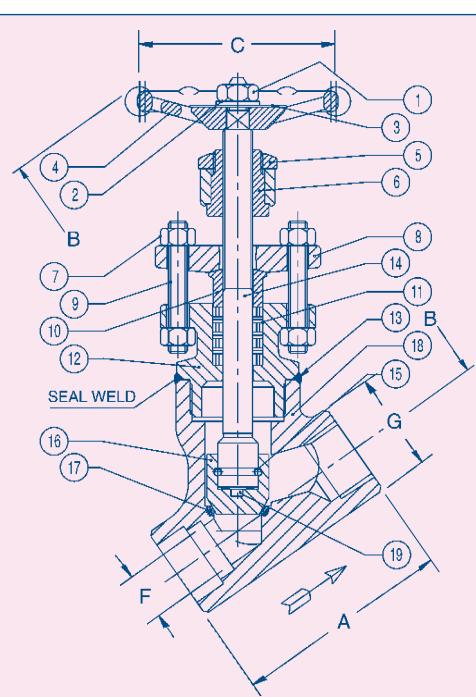
F1290E SOCKET WELD ENDS



- SIZES 1/4" THRU 2"
- FORGED STEEL
- ASTM A105N

Design construction:
ASME B16.34 Limited Class
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Integral backseat
Body bonnet weld to ASME IX
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1

Rating:
- carbon steel class 2680 6700 psig @ 100°F
462 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Gland Nuts	A194-2H
8	Gland Flange	A105
9	Gland Bolt Studs	AISI-410
10	Packing Gland	316
11	Packing	Graphite
12	Bonnet	A105N
13	Weld	ASME IX
14	Stem	AISI-410
15	Wire	F316
16	Disc	AISI-410 + Stellite
17	Integral Seat	Stellite
18	Body	A105N
19	Thrust Bearing	A519-9840

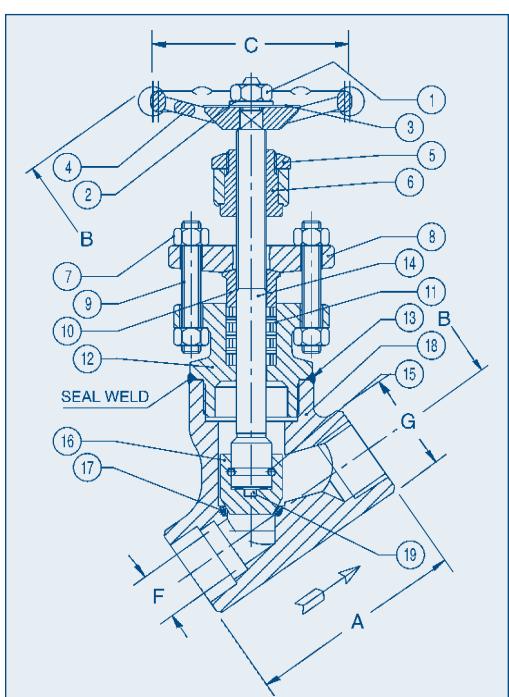
K1280E NPT ENDS (CLASS 2500)*

K1290E SOCKET WELD ENDS



- SIZES 1/4" THRU 2"
- FORGED STEEL
- ASTM A182 Gr. F22 Cl. 3

Design construction:
ASME B16.34 Limited Class
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Integral backseat
Body bonnet weld to ASME IX
Loose solid disc
Socket Weld Ends to ASME B16.11
Screwed Ends (NPT) to ASME B1.20.1
Rating:
- alloy steel class 2680 6700 psig @ 100°F
462 bar + 38°C



MATERIALS OF CONSTRUCTION

IT.	DESCRIPTION	MATERIAL
1	Handwheel Nut	Carbon Steel
2	Washer	Carbon Steel
3	Name Plate	Aluminum
4	Hand Wheel	Carbon Steel
5	Yoke Nut	Carbon Steel
6	Yoke Sleeve	AISI-416
7	Gland Nuts	A194-2H
8	Gland Flange	A105
9	Gland Bolt Studs	AISI-410
10	Packing Gland	316
11	Packing	Graphite
12	Bonnet	A182 F22
13	Weld	ASME IX
14	Stem	AISI-410
15	Wire	F316L
16	Disc	AISI-410 + Stellite
17	Integral Seat	Stellite
18	Body	A182 F22
19	Thrust Bearing	A519-9840

DIMENSIONAL SPECIFICATIONS								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	4.13 105	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190	8.66 220
B open	inch mm	8.66 220	8.66 220	9.45 240	10.83 275	12.20 310	14.17 360	17.32 440
C	inch mm	3.46 88	3.46 88	5.43 138	5.43 138	5.43 138	6.77 172	9.21 234
F	inch mm	.28 7	.35 9	.43 11	.57 14.5	.75 19	1.10 28	1.38 35
G	inch mm	1.89 48	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85	3.74 95
Typical CV Factors		-	-	3.7	8.7	12.6	42	73.8
Weight	lb. kg	7.75 3.5	7.75 3.5	11 5	25.25 11.5	27.5 12.5	37.25 17	57.25 26
PACKING		BH4	BH4	2B3	2B4	2B5	2B5	2B8

* Note: Thread End Valves are limited to ASME B16.34, 2500 Pressure Class.

DIMENSIONAL SPECIFICATIONS								
SIZE	inch mm	1/4 6	3/8 10	1/2 15	3/4 20	1 25	1 1/2 40	2 50
A	inch mm	4.13 105	4.13 105	4.72 120	6.5 165	6.5 165	7.48 190	8.66 220
B open	inch mm	8.66 220	8.66 220	9.45 240	10.83 275	12.20 310	14.17 360	17.32 440
C	inch mm	3.46 88	3.46 88	5.43 138	5.43 138	5.43 138	6.77 172	9.21 234
F	inch mm	.28 7	.35 9	.43 11	.57 14.5	.75 19	1.10 28	1.38 35
G	inch mm	1.89 48	1.89 48	2.20 56	3.07 78	3.07 78	3.35 85	3.74 95
Typical CV Factors		-	-	3.7	8.7	12.6	42	73.8
Weight	lb. kg	7.75 3.5	7.75 3.5	11 5	25.25 11.5	27.5 12.5	37.25 17	57.25 26
PACKING		BH4	BH4	2B3	2B4	2B5	2B5	2B8

* Note: Thread End Valves are limited to ASME B16.34, 2500 Pressure Class.