

ELITE FLOW CONTROL USA LLC

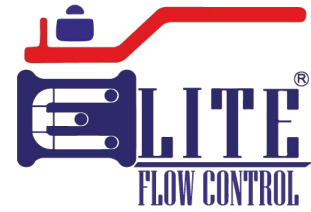


www.eliteflowcontrolusa.com



Table Of Contents

➤ Company Introduction	01
➤ Design Job	02
➤ Quality Control	03
➤ Raw Material Inspection	04
➤ Production	05
➤ Valve Testing	06
➤ Forged Gate Valve (Class 150 - 2500)	07
➤ Forged Globe Valve (Class 150 - 2500)	12
➤ Forged Check Valve (Class 150 - 2500)	17
➤ Casting Gate Valve (Class 150 - 2500)	20
➤ Casting Globe Valve (Class 150 - 2500)	25
➤ Casting Check Valve (Class 150 - 2500)	30
➤ Plug Valve	34
➤ Butterfly Valve	38
➤ Valve Operation/Gear & Actuator Details	39
➤ Painting & Packing.	40
➤ How to Avoid Problems & Warranty	41



Profile:

Elite Flow Control is one of the leading and renowned brand of Valves having its own independent manufacturing facilities and global existence.

Our design and manufacturing range includes Ball Valves, Gate Valves, Globe Valves, Check Valves, Plug Valves, Butterfly Valves, Control Valves, Actuated Valves, and have a dedicated PTFE / PFA lining facility for PTFE / PFA Lined Valves, Pipe Spools, Pipe fittings, and associated equipment for high corrosive/chemical applications.

The material of construction capabilities includes but not limited to Carbon Steel, Stainless Steel, Alloy Steel, Duplex Steel, Super Duplex, Monel, Titanium, Hastelloy and each valve is manufactured in accordance with its applicable manufacturing standard such as ISO, API, PED / CE, BS 1873, BS 1868, MSS SP-67, MSS SP-68, ASME and Fire Safe Design in API 607 / API 6FA.

We have stringent Quality Management and Control System backed by qualification of ISO 9001:2015, PED (Pressure Equipment Directive), API 6D, API 607, API 6FA, SIL (Functional Safety Certificate), and our strong commitment to Environmental Management System, and Occupational Health and Safety Management Systems (OHSMS) is accredited with 14001:2015 and ISO 45001:2018 certification.

Mission:

Elite Flow Control focused to provide the superior quality valves at competitive prices to its customers around the world by utilizing the company's human resources and advanced technology equipment with the strong commitment to R&D, Health, Safety, Environment and company's core values.

Vision:

To make our brand "the first choice of customers".

Core Values:

Quality: It is our primary focus to produce and deliver superior quality products.

Commitment: What we commit, We deliver.

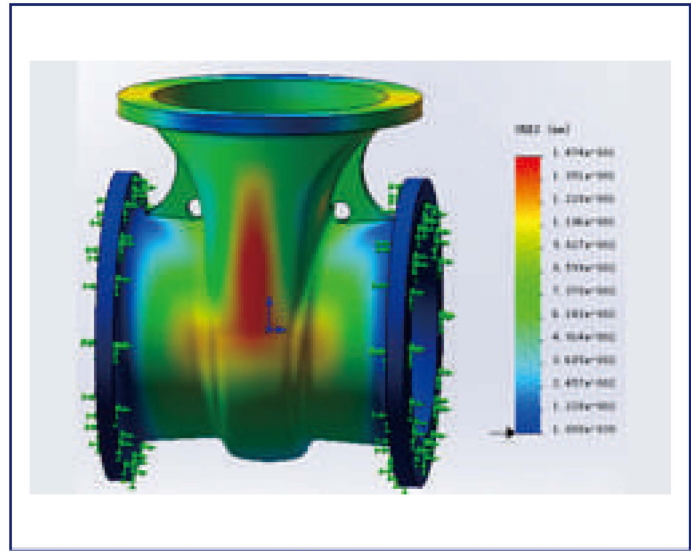
Team Work: We believe on team work which is the most important element to accomplish the set objective.

Customer Satisfaction: To achieve customer satisfaction with our Quality, Commitment and Team Work.

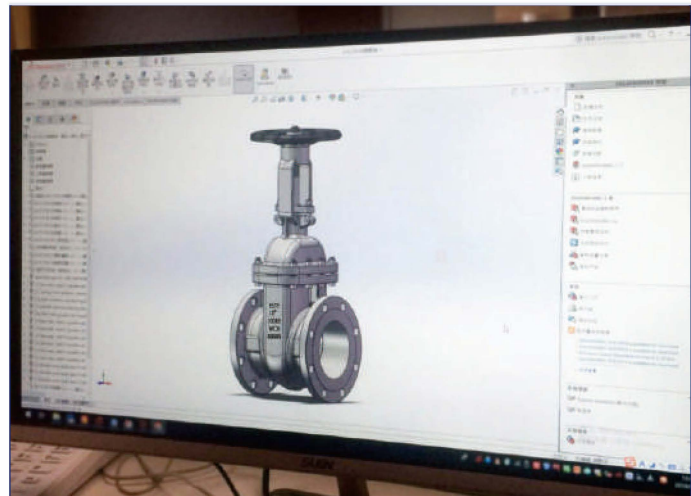


Design Job:

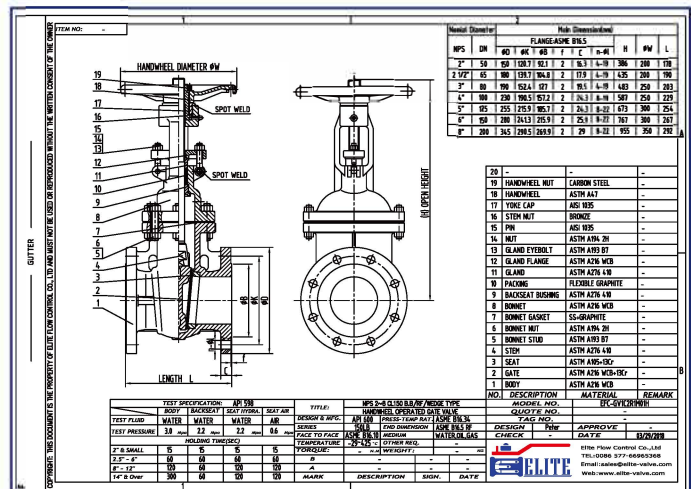
Elite Valves are manufactured as per international standards such as API, ANSI, ASME, ASTM, MSS, NACE. Our engineering team consistently monitors update to these standards and incorporates any applicable changes that affect the design, regulations and performance of our valves. Each steps of valve engineering and manufacturing can be validated using advance software starting from 3D model to finite element analysis of loads, tension and deformations and final stress test.



Finite Element Analysis



3D Model Design



Typical Valve Drawing

Quality Control:

Our Quality Management System (QMS) is very well established under supervision of various teams of qualified and certified Engineers in strict compliance with international recognized quality standards such as ISO 9001, CE, PED, API 6D, API 600 etc.

Elite Flow Control guarantees the performance and reliability of its products through the systematic 100% testing & Inspection.

All the tests are done internally in the dedicated testing area, by means of multiple and specifically designed (and certified) test benches that are used to control the output of the production line.

Quality is the one of Core Value of the Company and it complied but not limited to the following as minimum:

- Design Review
- Continuous Research for new materials either for construction and for sealing
- Material Properties Control (mechanical and chemical)
- Materials Quality (Volumetric Tests, Magnetic Test, Penetrate Test, PMI)
- Traceability of the materials and parts
- Inspection During Production Process in all its phases
- Performances of the Valves
- Accuracy in the final stage before shipment
- Issuing of complete documentation file in full compliance of project requirement
- Respect of the Contractual Delivery





Raw Material Inspection:

Raw material quality is vital for valve quality, Elite Valve source casting and forging from selected vendor. Before machining, we will take 4 steps to guarantee the material quality.

1) Visual Test: Visual test as per MSS SP55, casting with obvious defects will be declined.

2) Valve wall thickness test: Random inspection on valve wall thickness by ultrasonic thickness meter, unqualified ones will be declined.

3) Chemical Component analysis: Random PMI test is performed to ensure qualification.

4) Dimension Check face to face; flange thickness will be check before process.



Forging



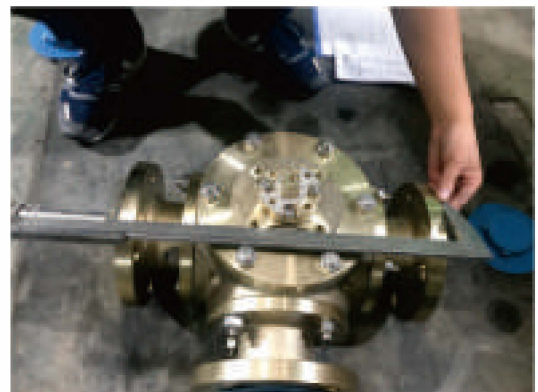
Casting



Forged Stock



PMI Inspection



Dimension Check

Production:

When the designs are approved by the customer, the production process starts. Our highly qualified staff works with high speed machines to produce valves accordingly as per requirement. After rough machining, 20% of valve component is checked dimensionally by Q.C inspectors and 100% after fine machining.



Machine Center



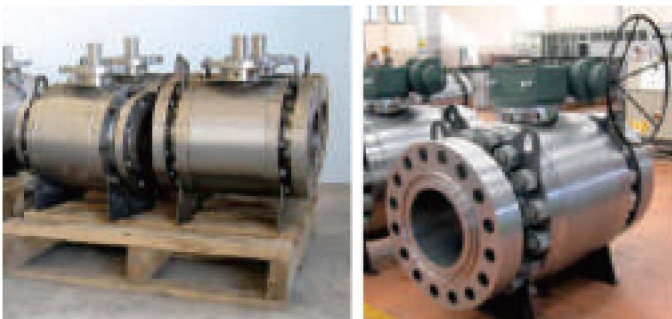
Engine Lathe



CNC Machining



Assembling



End Product



Dimension Check



Valve Testing :

After the production process has finished 100% of valves are tested in-house. Our valves have to ensure a hydro-test on body and seat, followed by a low pressure air-test in excess of API 6D, API 598 requirements, prior to shipping. Additional tests on valves and materials can also be arranged by Elite Valves.

The following standard performance test are performed according to API 6D, API 598 or to customer specific requirements:

- Visual & Dimensional Check
- Hydrostatic Testing
- Low Pressure Gas Seat Testing
- High Pressure Gas Testing
- Cryogenic Gas Testing Down To -196 °C (-320,8 ° F)
- High Temperature Testing Up To 660°C(1220 ° F)
- Fugitive Emission Gas Testing
- Antistatic Testing
- Torque Testing
- Cavity Relief Testing
- Double Block & Bleed (DBB) Testing
- Double Isolation & Bleed (DIB-1,DIB-2) Testing

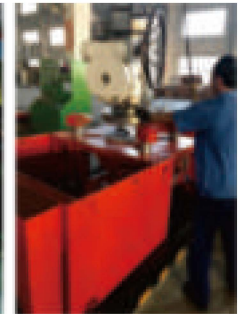
Non –destructive testing (NDT)

The following tests can be performed by 2nd level EN473-SIO9712/SN-TC-1A qualified personal or 3rd party appointed by client.

- VT (Visual testing)
- UT (Ultrasonic testing)
- PT (Penetrant testing)
- MT (Magnetic particle testing)
- LT (Leak testing)
- PMI (Positive Material Identification)
- Hardness test
- Ferrite Test



Cryogenic Testing



Hydrostatic Testing Picture



Pressure Test



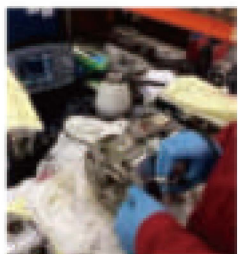
Firesafe Test Hartmann



Fugitive Emission Gas testing



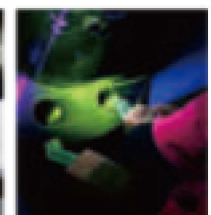
Visual Inspection



Ultrasonic Testing



PMI

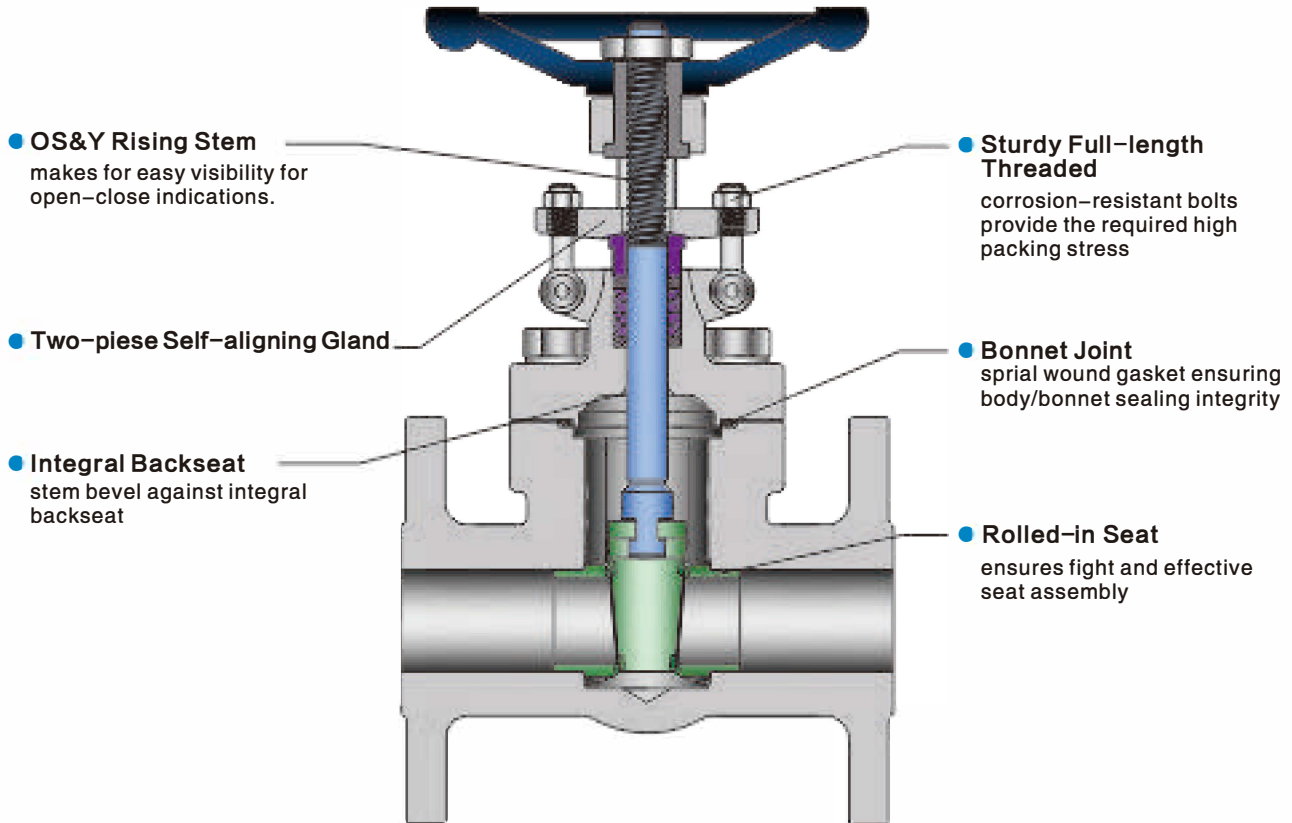


Magnetic Particle Testing

MODEL NO.:EFC-1/2GV1
Size:3/8"~ 2" (DN10 ~ DN50)



API 602 FORGED STEEL GATE VALVE

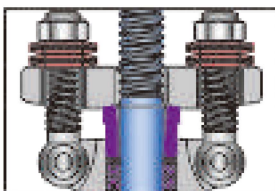


SPECIFICATION

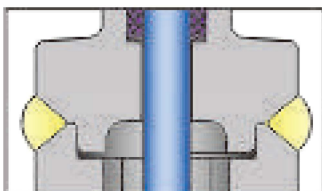
Design & MFG.	API 602	End Threads	ASME B1.20.1
Press-Temp Rat.	ASME B16.34	Socket-Weld	ASME B16.11
End Flange	ASME B16.5	Test	API 598

OPTIONAL DESIGN FEATURES

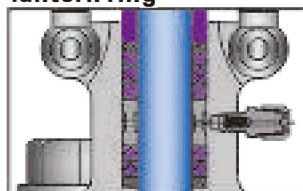
1.Live-Loading



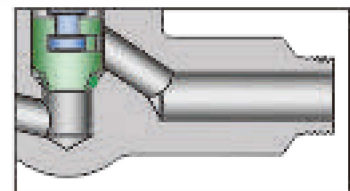
2.Welded Bonnet



3.Grease injector & lantern ring

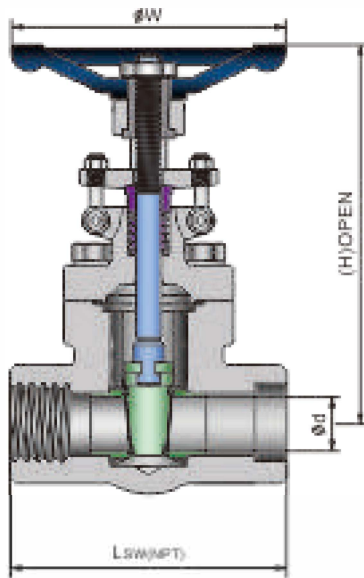


4.Integrally Extended Body

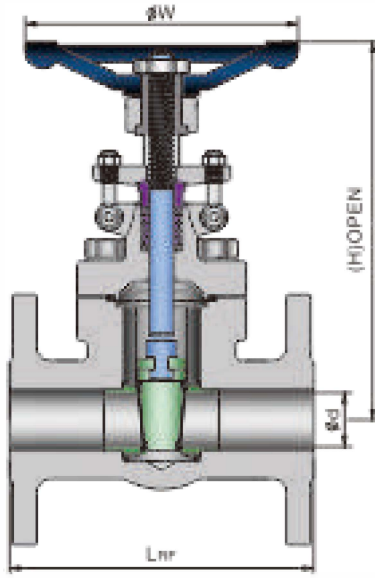


The material is according to ASTM Standard
 Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GV=GATE Valve | 1=150Lb

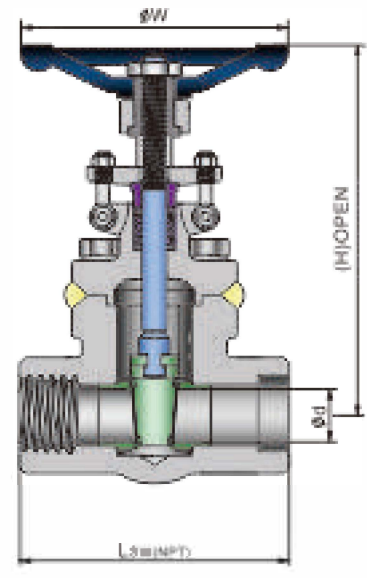
API 602 FORGED STEEL GATE VALVE



SW(NPT)BOLTED BONNET
800,1500LB



FLANGED BOLTED BONNET
150 ~ 1500LB



SW(NPT)WELDED BONNET
800,1500LB

Material List

PART	STANDARD MATERIALS					
BODY	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
SEAT	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F6a
WEDGE	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F6a
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F6a
GASKET	SS+FLEXIBLE GRAPHITE					
BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
PACKING	FLEXIBLE GRAPHITE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304	ASTM A105
EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
STEM NUT	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420
HANDWHEEL	ASTM A197					

The material is according to ASTM Standard
Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GV=GATE Valve | 1=150Lb

MODEL NO.:EFC-1/2GV1
Size:3/8"~2"(DN10~DN50)



API 602 FORGED STEEL GATE VALVE

800LB SW(NPT), Bolted Bonnet or Welded Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	65(2 1/2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
∅d (Flow Passway)		mm	10	13	18	23	28	36	44
LSW(NPT)(Face to Face)		mm	79	92	111	120	120	140	178
H(Open Height)		mm	166	169	193	230	246	283	334
∅W(Handwheel)		mm	100	100	125	160	160	180	220
WEIGHT		kg	2.2	2.5	4.6	5.9	7.9	11.1	14.1

1500LB SW(NPT), Bolted Bonnet or Welded Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)
∅d (Flow Passway)		mm	10	13	18	23	28	36
LSW(NPT)(Face to Face)		mm	92	111	120	120	140	178
H(Open Height)		mm	169	193	230	246	283	334
∅W(Handwheel)		mm	100	125	160	160	180	220
WEIGHT		kg	3.5	4.6	5.9	7.9	11.1	14.1

150~600LB RF, Standard port, Bolted Bonnet or Welded Bonnet

Nominal Diameter		mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
∅d (Flow Passway)		mm	10	13	18	23	28	36
LRF (Face to Face)	150LB	mm	108	117	127	140	165	178
	300LB	mm	140	152	165	178	190	216
	600LB	mm	165	190	216	229	241	292
H(Open Height)	150~600LB	mm	166	169	193	230	246	283
∅W(Handwheel)		mm	100	100	125	160	160	180

900~1500LB RTJ, Standard port, Bolted Bonnet or Welded Bonnet

Nominal Diameter		mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
∅d (Flow Passway)		mm	10	13	18	23	28	36
LRTJ (Face to Face)	900LB	mm	216	229	254	279	305	371
	1500LB	mm	216	229	254	279	305	371
H(Open Height)	900~1500LB	mm	169	193	230	246	283	334
∅W(Handwheel)		mm	100	125	160	160	180	220

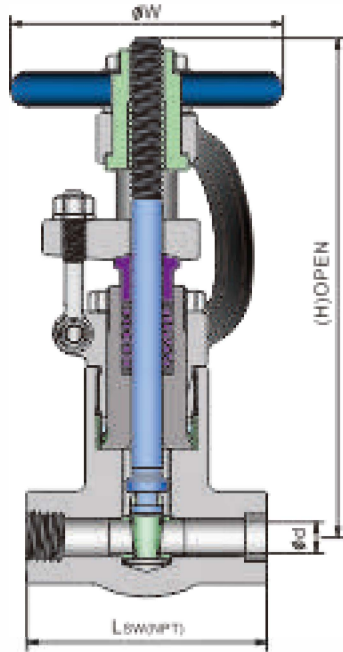
Weight:150~1500LB Flange End, Standard port, Bolted Bonnet

CLASS	SIZE	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	150LB	3.5	4.2	7.6	8.9	11.9	16.3
	300LB	3.9	4.9	8.4	11.1	13.6	18.5
	600LB	4.4	5.5	9.2	11.3	15.6	21.4
	900LB	8.4	11.5	14.3	16.5	22.8	35.8
	1500LB	8.4	11.5	14.3	16.5	22.8	35.8

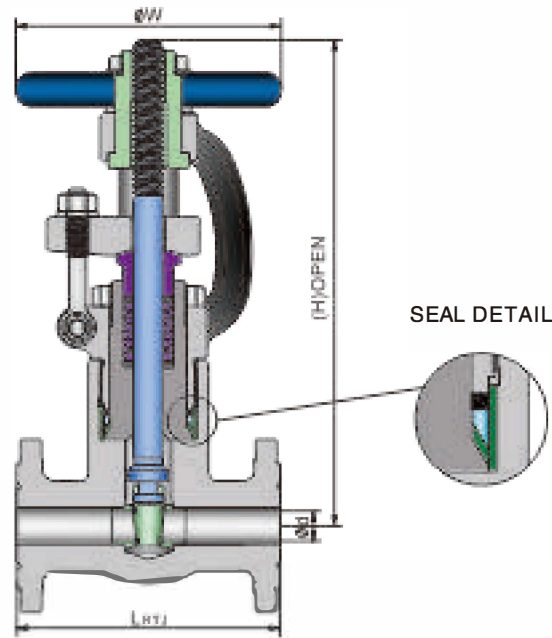
The material is according to ASTM Standard

Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GV=GATE Valve | 1=150Lb

API 602 FORGED STEEL PSB GATE VALVE



SW(NPT) PRESSURE SEAL BONNET
1500,2500LB



RTJ PRESSURE SEAL BONNET
1500,2500LB

Material List

PART	STANDARD MATERIALS					
BODY	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
WEDGE	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304+STL
SEAT	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304+STL
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304
SEAL RING	SS304/SS316					
STUFFING BOX	ASTM A105+STL	ASTM A350 LF2+STL	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304+STL
BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
PACKING	FLEXIBLE GRAPHITE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304	ASTM A105
EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
STEM NUT	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420
HANDWHEEL	ASTM A197					

The material is according to ASTM Standard

Model Denote: EFC=Elite Flow Control | 1/2=Size in inch | GV=GATE Valve | 15=1500Lb

MODEL NO.:EFC-1/2GV15
Size:1/2"~ 2" (DN15 ~ DN50)



API 602 FORGED STEEL PSB GATE VALVE

1500LB SW(NPT)&RTJ,Standard port,Pressure Seal Bonnet

Nominal Diameter		mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
Ød (Flow Passway)		mm	13	13	18	23	28	36
L (Face to Face)	SW(NPT)	mm	140	140	140	178	178	216
	RTJ	mm	216	229	254	279	305	371
H(Open Height)		mm	308	308	308	380	414	502
ØW(Handwheel)		mm	200	200	200	280	280	300
Weight	SW(NPT)	kg	11.5	11.5	10.8	19.6	21.1	55.4
	RTJ	kg	15.6	17.3	19.6	28.5	33.4	79.2

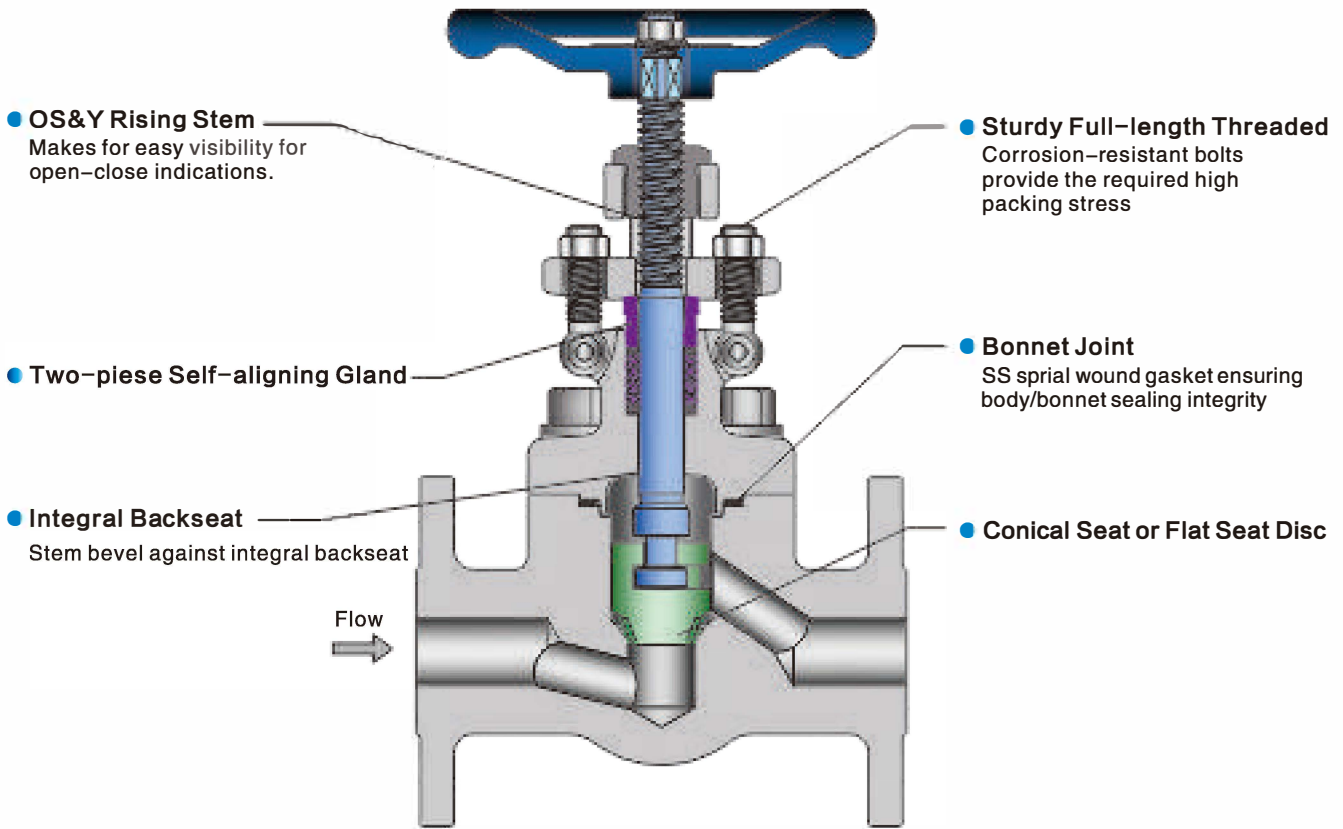
2500LB SW(NPT)&RTJ,Standard port,Pressure Seal Bonnet

Nominal Diameter		mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
Ød (Flow Passway)		mm	11	14	19	25	28	36
L (Face to Face)	SW(NPT)	mm	186	186	186	232	232	272
	RTJ	mm	264	273	308	352	387	454
H(Open Height)		mm	321	321	321	410	420	524
ØW(Handwheel)		mm	160	160	180	200	220	280
Weight	SW(NPT)	kg	12.3	11.8	11.0	24.3	26.1	58.8
	RTJ	kg	19.5	22.3	23.5	42.1	48.6	94.2

The material is according to ASTM Standard

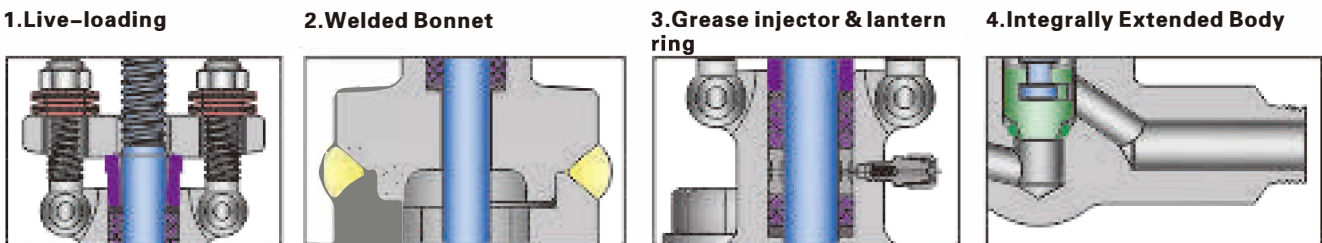
Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GV=GATE Valve | 15=1500Lb

API 602 FORGED STEEL GLOBE VALVE



SPECIFICATION			
Design & MFG.	API 602	End Threads	ASME B1.20.1
Press-Temp Rat.	ASME B16.34	Socket-Weld	ASME B16.11
End Flange	ASME B16.5	Test	API 598

OPTIONAL DESIGN FEATURES

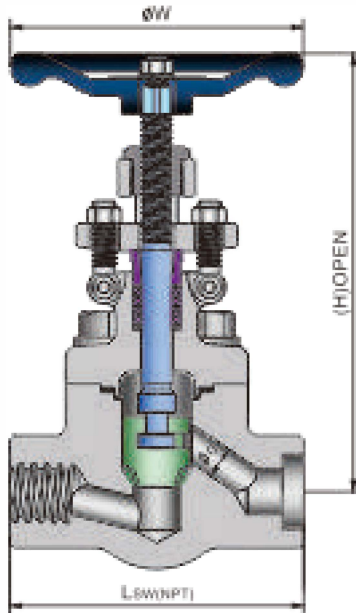


The material is according to ASTM Standard
Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GE=Globe Valve | 1=150Lb

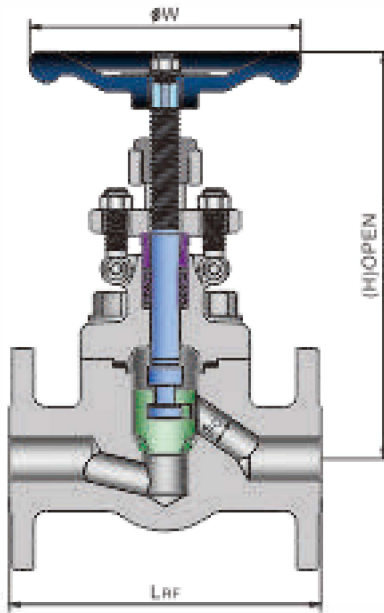
MODEL NO.:EFC-1/2GE1
Size:3/8"~ 2"(DN10~ DN50)



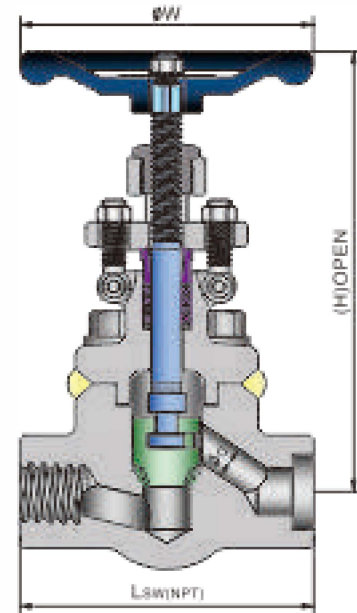
API 602 FORGED STEEL GLOBE VALVE



SW(NPT) BOLTED BONNET
800,1500LB



FLANGED BOLTED BONNET
150~1500LB



SW(NPT)WELDED BONNET
800,1500LB

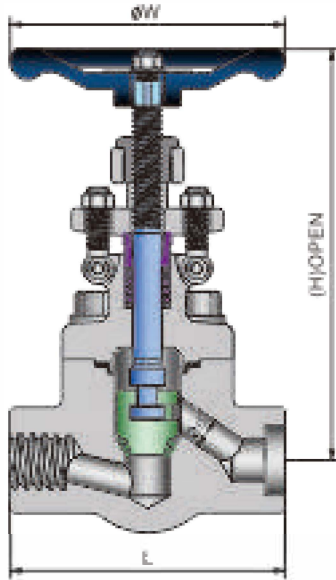
Material List

PART	STANDARD MATERIALS					
BODY	ASTM A105+STL	ASTM A350 LF2+STL	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11+STL
DISC	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F6a
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F6a
GASKET	SS+FLEXIBLE GRAPHITE					
BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11
BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
PACKING	FLEXIBLE GRAPHITE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304	ASTM A105
EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
STEM NUT	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420
HANDWHEEL	ASTM A197					
NAME PLATE	SS304					

The material is according to ASTM Standard

Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GE=Globe Valve | 1=150Lb

API 602 FORGED STEEL GLOBE VALVE

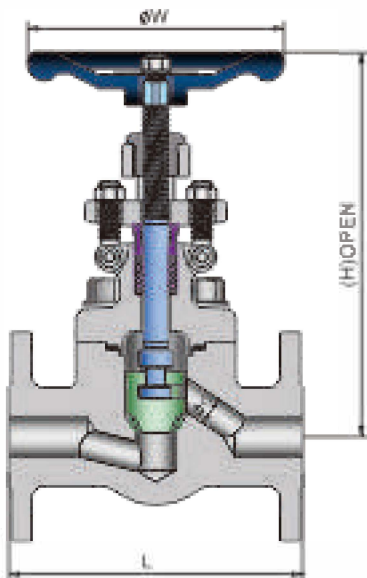


800LB SW(NPT), Bolted Bonnet or Welded Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	65(2 1/2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
ø d (Flow Passway)		mm	10	13	18	23	28	36	44
Lsw(NPT)(Face to Face)		mm	79	92	111	120	152	172	220
H(Open Height)		mm	166	170	206	230	246	283	330
ø W (Handwheel)		mm	100	100	125	160	160	180	220
WEIGHT		kg	1.9	2.1	3.3	5.2	7.5	11.4	14.4

1500LB SW(NPT), Bolted Bonnet or Welded Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)
ø d (Flow Passway)		mm	10	13	18	23	28	33
Lsw(NPT)(Face to Face)		mm	92	111	120	152	172	220
H(Open Height)		mm	170	206	230	246	283	330
ø W (Handwheel)		mm	100	125	160	160	180	220
WEIGHT		kg	2.2	3.8	5.8	8.6	12.7	16.4



150~600LB RF, Standard port, Bolted Bonnet or Welded Bonnet

Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
ø d (Flow Passway)	mm	10	13	18	23	28	36	
L _{RF} (Face to Face)	150LB	mm	108	117	127	140	165	203
	300LB	mm	152	178	203	216	229	267
	600LB	mm	165	190	216	229	241	292
H(Open Height)	150 ~ 600LB	mm	166	170	206	230	246	283
ø W (Handwheel)		mm	100	100	125	160	160	180

900~1500LB RTJ, Standard port, Bolted Bonnet or Welded Bonnet

Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
ø d (Flow Passway)	mm	10	13	18	23	28	33	
L _{RTJ} (Face to Face)	900LB	mm	216	229	254	279	305	371
	1500LB	mm	216	229	254	279	305	371
H(Open Height)	900 ~ 1500LB	mm	170	206	230	246	283	330
ø W (Handwheel)		mm	100	125	160	160	180	220

Weight:150~1500LB Flange End, Standard port, Bolted Bonnet

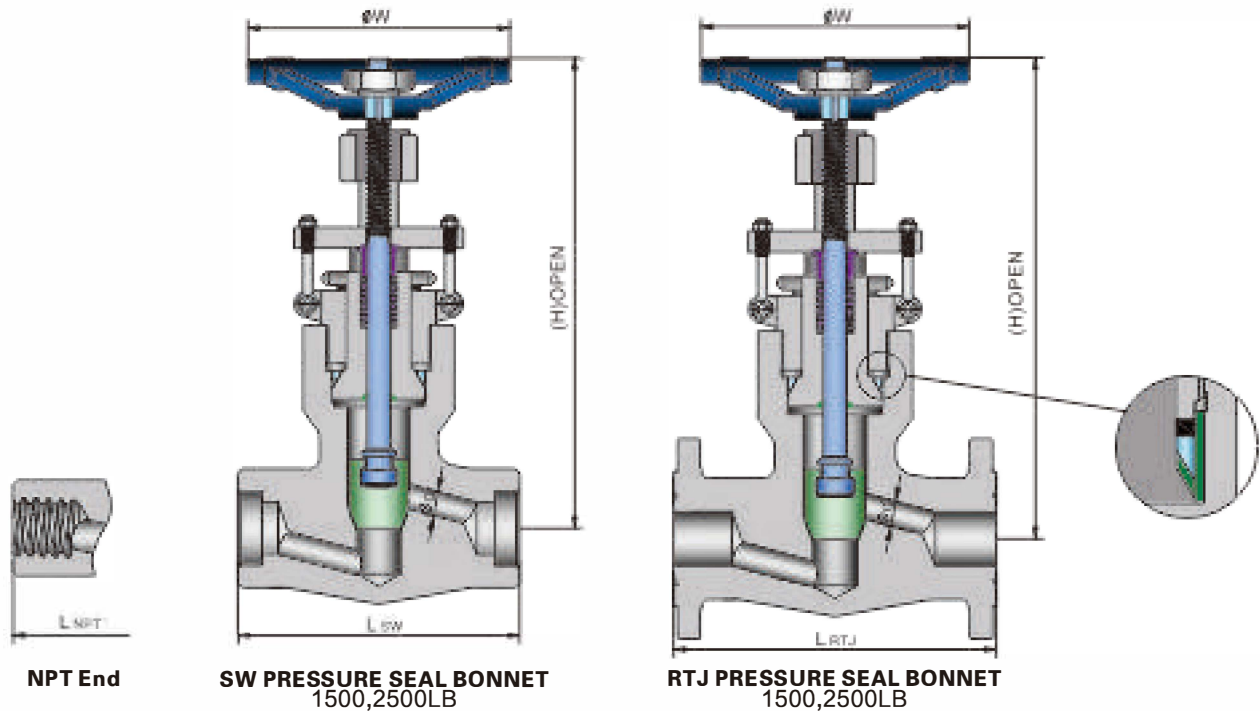
CLASS	SIZE	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	150LB	3.2	3.8	6.3	8.2	11.5	16.7
	300LB	3.6	4.5	7.1	9.3	13.2	18.8
	600LB	4.1	5.1	7.9	10.6	15.2	21.7
	900LB	7.2	9.4	14.2	17.5	24.7	38.1
	1500LB	7.2	9.4	14.2	17.5	24.7	38.1

The material is according to ASTM Standard
 Model Denote: EFC=Elite Flow Control | 1/2=Size in inch | GE=Globe Valve | 1=150Lb

MODEL NO.:EFC-1/2GE15
Size:1/2" ~ 2"(DN15 ~ DN50)



API 602 FORGED STEEL PSB GLOBE VALVE



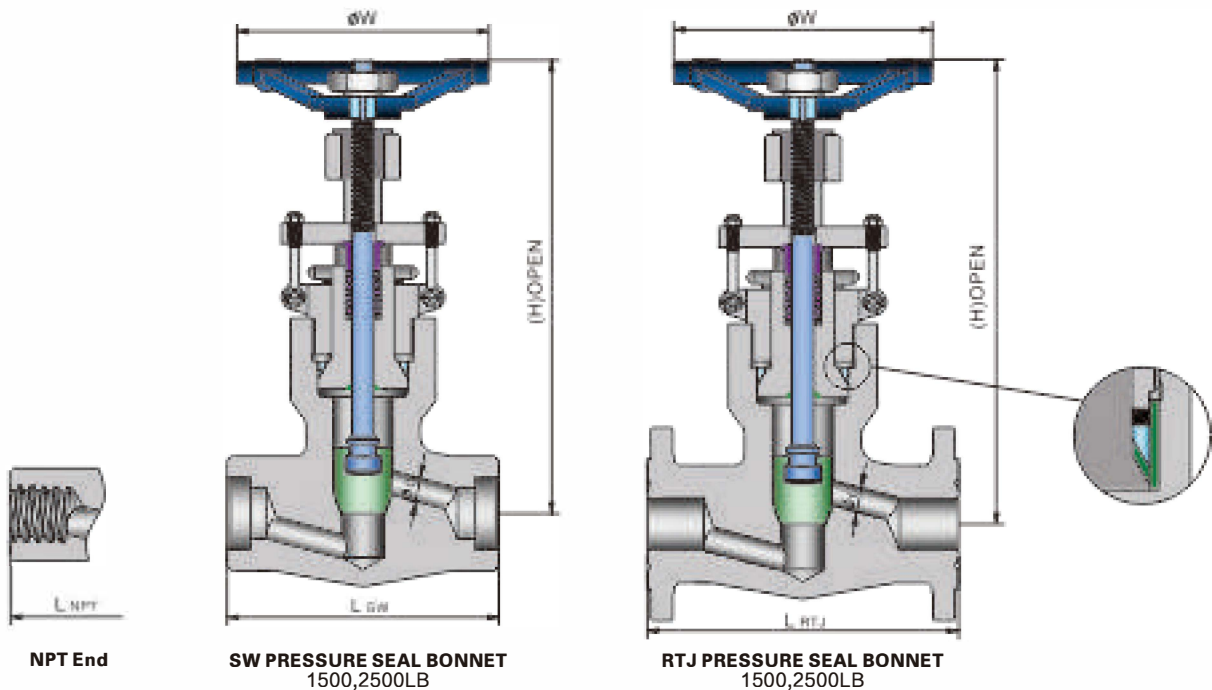
Material List

PART	STANDARD MATERIALS					
BODY	ASTM A105+STL	ASTM A350 LF2+STL	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11+STL
DISC	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304+STL
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304
SEAL RING	SS304/SS316					
STUFFING BOX	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304+STL
BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11
PACKING	FLEXIBLE GRAPHITE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304	ASTM A105
EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 4	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
STEM NUT	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 420
HANDWHEEL	ASTM A197					
NAME PLATE	SS304					

The material is according to ASTM Standard

Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GE=Globe Valve | 15=1500Lb

API 602 FORGED STEEL PSB GLOBE VALVE



1500LB SW(NPT)&RTJ,Standard port,Pressure Seal Bonnet

Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
ø d (Flow Passway)	mm	11	13	18	23	28	33	
L (Face to Face)	SW(NPT)	mm	140	140	140	178	178	216
	RTJ	mm	216	229	254	279	305	371
H(Open Height)	mm	220	220	240	258	290	337	
ø W(Handwheel)	mm	200	200	200	280	280	300	
Weight	SW(NPT)	kg	11.5	10.8	10.5	19.6	21.1	55.4
	RTJ	kg	15.6	17.3	19.6	28.5	33.4	79.2

2500LB SW(NPT)&RTJ,Standard port,Pressure Seal Bonnet

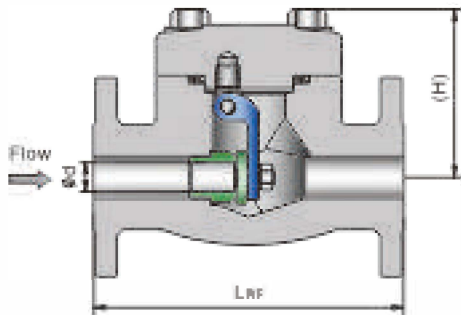
Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
ø d (Flow Passway)	mm	11	14	18	25	28	35	
L (Face to Face)	SW(NPT)	mm	186	186	186	232	232	272
	RTJ	mm	264	273	308	352	387	454
H(Open Height)	mm	333	333	333	410	420	524	
ø W(Handwheel)	mm	200	200	200	280	280	300	
Weight	SW(NPT)	kg	12.3	11.6	10.8	26.0	28.4	60.3
	RTJ	kg	18.9	22.1	23.8	43.5	50.8	96.3

The material is according to ASTM Standard
Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | GE=Globe Valve | 15=1500Lb

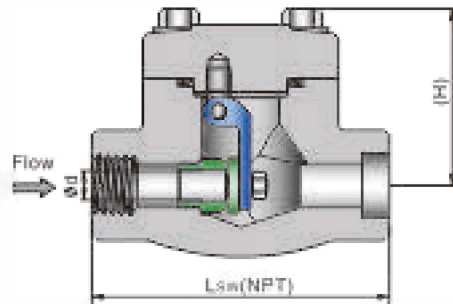
MODEL NO.:EFC-1/2CK1
Size:3/8" ~ 2"(DN10 ~ DN50)



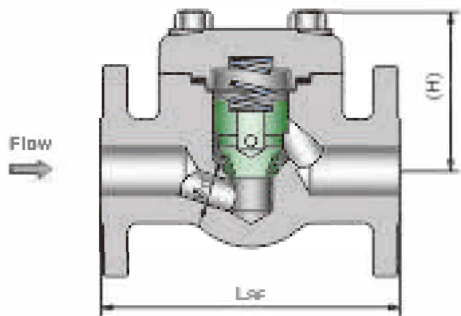
API 602 FORGED STEEL CHECK VALVE



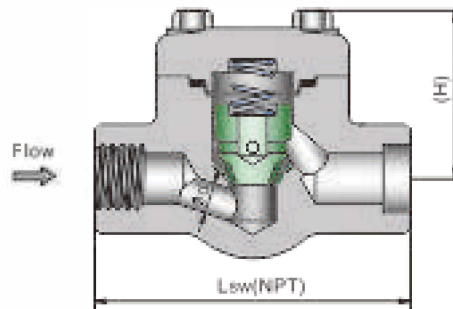
SWING TYPE, FLANGED BOLTED BONNET
150 ~ 1500LB



SWING TYPE, SW(NPT) BOLTED BONNET
800, 1500LB



PISTON TYPE, FLANGED BOLTED BONNET
150 ~ 1500LB



PISTON TYPE, SW(NPT) BOLTED BONNET
800, 1500LB

OPTIONAL DESIGN



BALL TYPE

SPECIFICATION

Design & MFG.	API 602	End Threads	ASME B1.20.1
Press-Temp Rat.	ASME B16.34	Socket-Weld	ASME B16.11
End Flange	ASME B16.5	Test	API 598

Material List

PART	STANDARD MATERIALS					
BOOY	ASTM A105	ASTM A350LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
SEAT	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
DISC	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
GASKET	SS+GRAPHITE					
BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F11/F22
BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B16
SPRING	SS304/SS316/17-7PH/INCONELx750					
HINGE	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51/F53	ASTM A182 F304

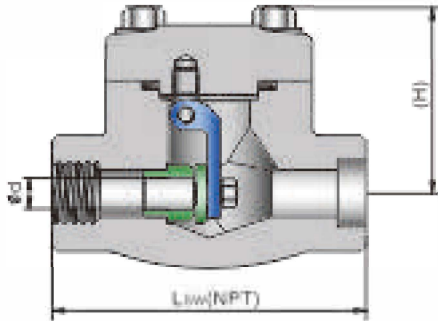
The material is according to ASTM Standard

Model Denote: EFC=Elite Flow Control | 1/2=Size in inch | CK=CHECK Valve | 1=150Lb

API 602 FORGED STEEL CHECK VALVE

SWING TYPE, 800LB SW(NPT), Bolted Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	65(2 1/2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
∅d (Flow Passway)		mm	10	13	18	23	28	36	44
Lsw(NPT)(Face to Face)		mm	79	92	111	120	120	140	178
H(Open Height)		mm	63	63	78	82	102	120	140
WEIGHT		kg	1.3	1.4	2.5	3.4	4.5	7.3	10

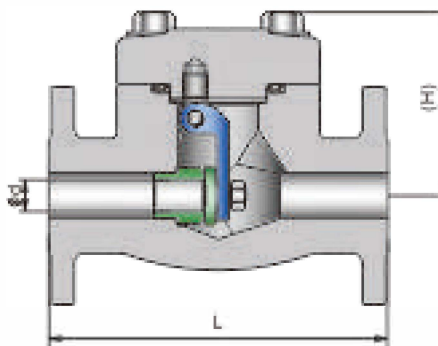


SWING TYPE, 1500LB SW(NPT), Bolted Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)
∅d (Flow Passway)		mm	10	13	18	23	28	36
Lsw(NPT)(Face to Face)		mm	92	111	120	120	140	178
H(Open Height)		mm	63	78	82	102	120	140
WEIGHT		kg	3.0	3.6	4.3	6.1	8.8	12.6

SWING TYPE, 150 ~ 600LB RF, Standard port, Bolted Bonnet

Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
∅d (Flow Passway)	mm	10	13	18	23	28	36	
L _{RF} (Face to Face)	150LB	mm	108	117	127	140	165	203
	300LB	mm	152	178	216	229	241	267
	600LB	mm	165	190	216	229	241	292
H(Open Height)	150 ~ 600LB	mm	63	63	78	82	102	120



SWING TYPE CHECK VALVE

SWING TYPE, 900 ~ 1500LB RTJ, Standard port, Bolted Bonnet

Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
∅d (Flow Passway)	mm	10	13	18	23	28	36	
L _{RTJ} (Face to Face)	900LB	mm	216	229	254	279	305	371
	1500LB	mm	216	229	254	279	305	371
H(Open Height)	900 ~ 1500LB	mm	63	78	82	102	120	140

Weight: 150 ~ 1500LB Flange End, Standard port, Bolted Bonnet

CLASS	SIZE	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	150LB	2.3	2.6	4.5	5.9	7.9	12.8
	300LB	2.5	3.6	5.3	7.3	10.2	13.7
	600LB	3.3	3.9	6.1	8.4	11.4	16.5
	900LB	5.1	9.2	12.2	15.1	21.2	25.4
	1500LB	5.1	9.2	12.2	15.1	21.2	25.4

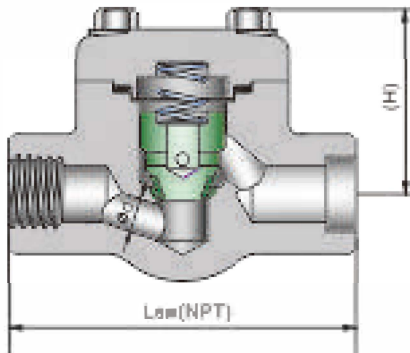
The material is according to ASTM Standard
Model Denote: EFC=Elite Flow Control | 1/2=Size in inch | CK=CHECK Valve | 1=150Lb

MODEL NO.:EFC-1/2CK1
Size:3/8" ~ 2"(DN10 ~ DN50)



API 602 FORGED STEEL CHECK VALVE

PISTON TYPE,800LB SW(NPT),Bolted Bonnet



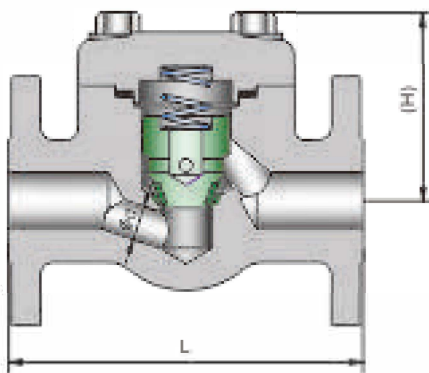
Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	65(2 1/2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
φd (Flow Passway)		mm	10	13	18	23	28	36	44
Lsw(NPT)(Face to Face)		mm	79	92	111	120	152	172	220
H(Open Height)		mm	63	63	78	82	102	120	140
WEIGHT		kg	1.2	1.4	2.6	3.9	5.6	8.9	12.5

PISTON TYPE,1500LB SW(NPT),Bolted Bonnet

Nominal Diameter	Standard Port	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	Full Port	mm(in)	10(3/8)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)
φd (Flow Passway)		mm	10	13	18	23	28	36
Lsw(NPT)(Face to Face)		mm	92	111	120	152	172	220
H(Open Height)		mm	63	78	82	102	120	140
WEIGHT		kg	3.0	3.4	4.8	6.5	10.1	14.6

PISTON TYPE,150 ~ 600LB RF,Standard port,Bolted Bonnet

Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
φd (Flow Passway)	mm	10	13	18	23	28	36	
LRF (Face to Face)	150LB	mm	108	117	127	140	165	203
	300LB	mm	152	178	203	216	229	267
	600LB	mm	165	190	216	229	241	292
H(Open Height)	150 ~ 600LB	mm	63	63	78	82	102	120



PISTON TYPE CHECK VALVE

PISTON TYPE,900 ~ 1500LB RTJ,Standard port,Bolted Bonnet

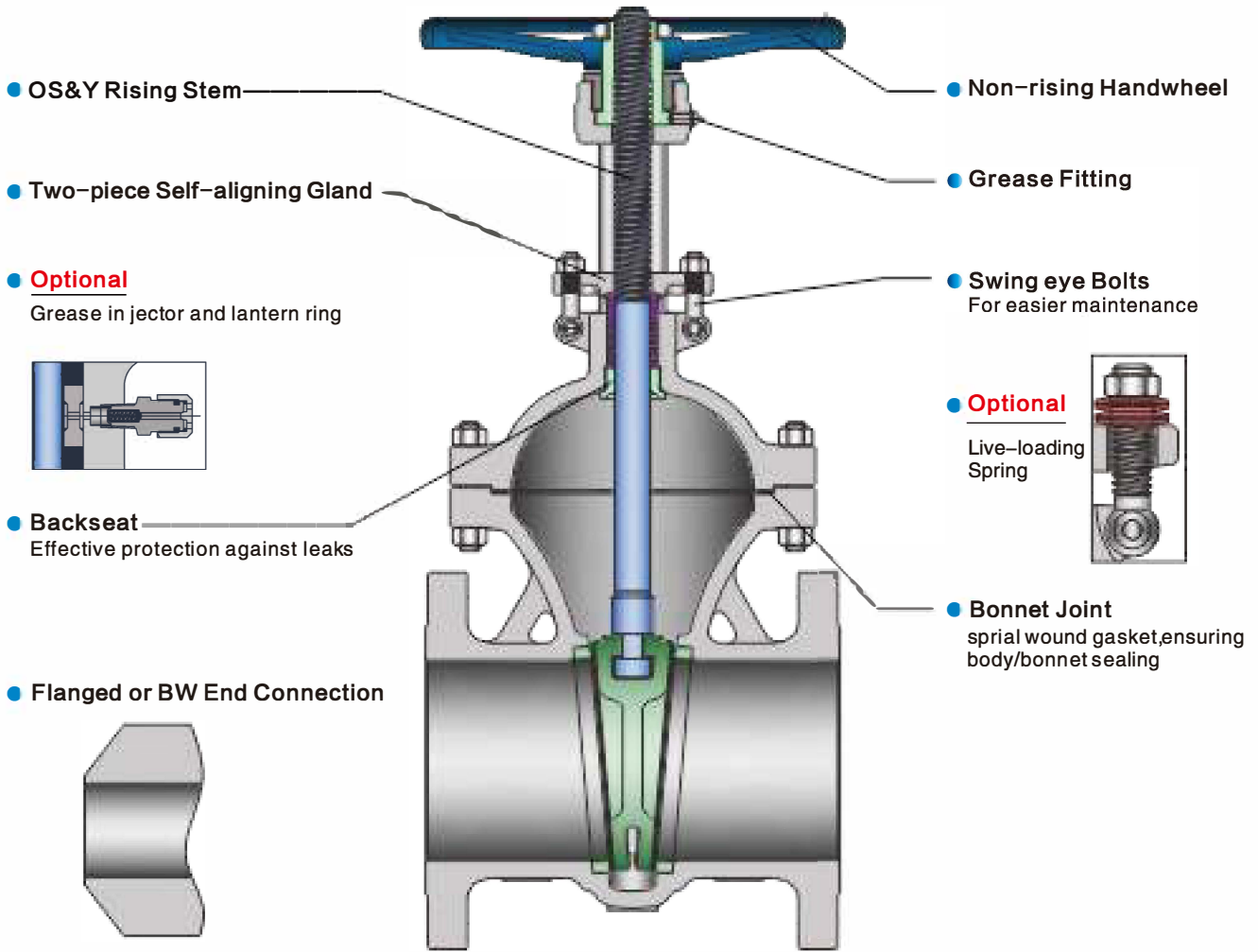
Nominal Diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)	
φd (Flow Passway)	mm	10	13	18	23	28	36	
LRTJ (Face to Face)	900LB	mm	216	229	254	279	305	371
	1500LB	mm	216	229	254	279	305	371
H(Open Height)	900 ~ 1500LB	mm	63	78	82	102	120	140

Weight:150 ~ 1500LB Flange End,Standard port,Bolted Bonnet

CLASS	SIZE	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
	150LB	2.2	2.6	4.9	6.4	9.1	14.3
	300LB	2.4	3.6	5.7	7.9	11.3	15.2
	600LB	3.3	3.9	6.5	8.9	12.5	18.3
	900LB	5.1	8.9	13.1	1.5	22.5	27.5
	1500LB	5.1	8.9	13.1	1.5	22.5	27.5

The material is according to ASTM Standard
Model Denote:EFC=Elite Flow Control | 1/2=Size in inch | CK=CHECK Valve | 1=150Lb

API 600 CASTING GATE VALVE



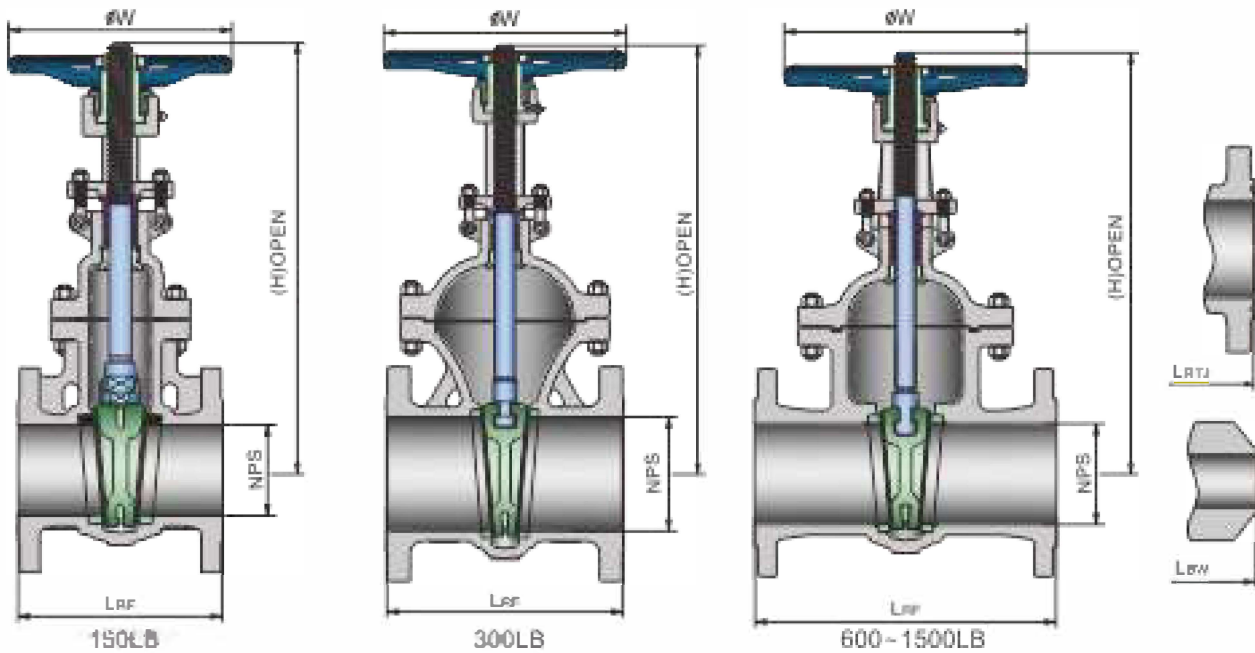
SPECIFICATION			
Design & MFG.	API 600,BS 1414	Press-Temp Rat.	ASME B16.34
Face To Face(Flange &Butt Weld)	ASME B16.10	Flange Design	ASME B16.5
Butt Weld Design	ASME B16.25	Materials	ASTM STANDARD

The material is according to ASTM Standard.
 Model Denote:EFC=Elite Flow Control | 02=Size in inch | GV=GATE Valve | 1=150Lb

MODEL NO.:EFC-02GV1
Size:2" ~ 24"(DN50 ~ DN600)



API 600 CASTING GATE VALVE



Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
GATE	ASTM A216 WCB+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6+STL
SEAT	ASTM A105+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)+STL	ASTM A351 CF8M(CF3M)+STL	ASTM A995 4A+STL	ASTM A217 WC6+STL
STEM	ASTM A276 410	ASTM A276 410	ASTM A276 304(304L)	ASTM A276 316(316L)	ASTM A182 F51	ASTM A276 410
BONNET STUD	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B16
BONNET NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 4
BONNET GASKET	Reinforced Flat Graphite. or SS Spiral Wound W/Graphite or PTFE, or Reinforced PTFE					
BONNET	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
BACKSEAT BUSHING	ASTM A276 410	ASTM A276 410	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A276 410
PACKING	FLEXIBLE GRAPHITE or PTFE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A351 CF8	ASTM A351 CF8	ASTM A216 WCB
GLAND EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 4
STEM NUT	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE
HANDWHEEL	ASTM A47	ASTM A47	ASTM A47	ASTM A47	ASTM A47	ASTM A47

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | GV=GATE Valve | 1=150Lb



MODEL NO.:EFC-02GV1
Size:2"~ 24"(DN50~ DN600)

API 600 CASTING GATE VALVE

ASME CLASS 150 Dimensions

NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14*	16*	18*	20*	24*
mm	51	64	76	102	127	152	203	254	305	337	377	387	438	489	591
L _{RF}	in	7.00	7.50	8.00	9.00	10.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	20.00
	mm	178	190	203	229	254	267	292	330	356	381	406	432	457	508
L _{BW}	in	8.50	9.50	11.12	12.0	15.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	32.00
	mm	216	241	282	305	381	403	419	457	502	572	610	660	711	813
L _{RTJ}	in	7.50	8.00	8.50	9.50	10.50	11.00	12.00	13.50	14.50	15.50	16.50	17.50	18.50	20.50
	mm	191	203	216	242	267	280	305	343	369	394	419	445	470	521
H (Open)	in	15.20	17.3	19.02	23.11	26.50	30.20	37.60	45.12	52.28	59.80	67.76	74.80	83.31	97.64
	mm	386	435	483	587	673	767	955	1146	1328	1519	1721	1900	2116	2480
∅W	in	7.87	7.87	9.84	9.84	11.81	11.81	13.78	15.70	17.70	19.70	21.60	24.80	24.80	24.80
	mm	200	200	250	250	300	300	350	400	450	500	550	630	630	630
WT (Kg)	RF/RTJ	20	30	40	53	71	85	136	220	323	387	553	660	810	1250
	BW	17	26	29	46	66	77	116	202	294	350	506	575	720	1130

ASME CLASS 300 Dimensions

NPS DN	in	2	2 1/2	3	4	5	6	8	10	12*	14*	16*	18*	20*	24*
mm	51	64	76	102	127	152	203	254	305	337	377	387	432	483	584
L (RF-BW)	in	8.50	9.50	11.12	12.00	15.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00
	mm	216	241	282	305	381	403	419	457	502	762	838	914	991	1143
L _{RTJ}	in	9.12	10.12	11.74	12.62	15.62	16.50	17.12	18.62	20.37	30.62	33.62	36.62	39.75	45.88
	mm	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165
H (Open)	in	16.42	18.11	20.71	25.59	27.32	32.44	38.86	46.93	56.34	61.38	69.21	76.46	84.45	104.3
	mm	417	460	526	650	694	824	987	1192	1431	1559	1758	1942	2145	2650
∅W	in	7.87	7.87	9.84	9.84	11.81	13.78	15.75	17.70	19.69	21.60	24.80	24.80	24.80	24.8
	mm	200	200	250	250	300	350	400	450	500	550	630	630	630	630
WT (Kg)	RF/RTJ	30	39	55	83	92	137	240	333	536	699	1010	1205	1720	2662
	BW	26	34	47	68	77	118	195	271	432	595	848	1025	1460	2380

ASME CLASS 600 Dimensions

NPS DN	in	2	2 1/2	3	4	6	8	10	12*	14*	16*	18*	20*	24*
mm	51	64	76	102	127	152	200	248	298	327	375	419	464	559
L (RF-BW)	in	11.50	13.00	14.00	17.00	22.0	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L _{RTJ}	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38
	mm	295	333	359	435	562	663	790	841	892	994	1095	1200	1407
H (Open)	in	16.81	18.62	21.18	25.87	34.33	43.35	50.35	58.50	64.69	70.79	82.72	88.94	111.61
	mm	427	473	538	657	872	1101	1279	1486	1643	1798	2101	2259	2835
∅W	in	7.87	9.84	11.81	13.78	17.70	19.70	21.60	24.80	24.80	24.80	24.80	24.80	24.80
	mm	200	250	300	350	450	500	550	630	630	630	630	630	630
WT (Kg)	RF/RTJ	41	58	88	131	253	413	623	784	1288	1820	2150	2540	3820
	BW	35	50	68	104	208	328	496	637	1120	1448	1828	2201	3218

ASME CLASS 900 Dimensions

NPS DN	in	2	2 1/2	3	4	6	8*	10*	12*	14*	16*	18*	20*	24*
mm	47	57	73	98	146	190	238	282	311	356	400	445	534	
L (RF-BW)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.00
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L _{RTJ}	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.5	52.5	61.75
	mm	371	422	384	460	613	740	841	968	1039	1140	1232	1334	1568
H (Open)	in	21.54	27.56	25.51	28.70	40.98	49.61	62.60	70.67	79.72	85.43	93.89	104.65	117.32
	mm	547	700	648	729	1041	1260	1590	1795	2025	2170	2385	2658	2980
∅W	in	9.84	11.81	11.81	13.78	19.70	24.80	24.80	24.80	24.80	24.80	24.80	24.80	24.80
	mm	250	300	300	350	500	630	630	630	630	630	630	630	630
WT (Kg)	RF/RTJ	90	110	123	148	420	650	1160	1700	2300	2750	4050	5120	6350
	BW	82	93	108	122	359	566	980	1450	2000	2390	3490	4320	5120

ASME CLASS 1500 Dimensions

NPS DN	in	2	2 1/2	3	4	6*	8*	10*	12*	14*	16*	18*	20*	24*
mm	47	57	70	92	136	178	222	263	289	330	371	416	498	
L (RF-BW)	in	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	60.5	65.5	76.5
	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L _{RTJ}	in	14.62	16.62	18.62	21.62	30.00	33.13	39.38	45.12	50.25	55.38	61.38	66.38	77.62
	mm	371	422	473	549	711	842	1001	1146	1276	1407	1559	1686	1971
H (Open)	in	22.60	27.56	31.73	34.92	42.48	53.94	59.84	65.00	76.57	88.58	124.10	137.20	157.08
	mm	574	700	806	887	1079	1370	1520	1651	1945	2250	3152	3485	3990
∅W	in	11.81	11.81	13.78	15.75	21.60	24.80	24.80	24.80	24.80	24.80	24.80	24.80	24.80
	mm	300	300	350	400	550	630	630	630	630	630	630	630	630
WT (Kg)	RF/RTJ	117	175	240	337	680	1228	3260	4100	4100	6200	8500	11750	13980
	BW	93	144	185	285	584	978	2850	3320	3320	5300	7450	10800	12900

*Manual gear operator is recommended.

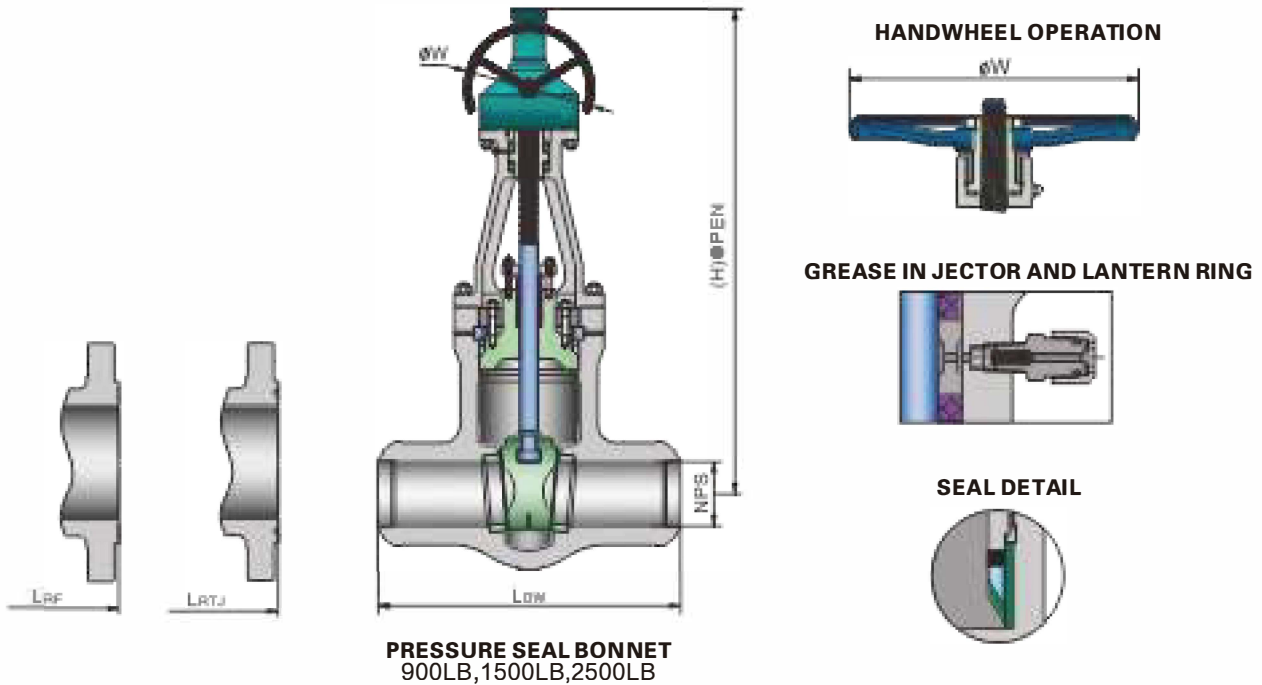
The material is according to ASTM Standard.

Model Denote: EFC=Elite Flow Control | 02=Size in inch | GV=GATE Valve | 1=150Lb

MODEL NO.:EFC-2GV9
Size:2" ~ 24"(DN50 ~ DN600)



CASTING STEEL PSB GATE VALVE



Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
WEDGE	ASTM A216 WCB+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)+STL	ASTM A351 CF8M(CF3M)+STL	ASTM A995 4A+STL	ASTM A217 WC6+STL
SEAT	ASTM A105+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)+STL	ASTM A351 CF8M(CF3M)+STL	ASTM A995 4A+STL	ASTM A217 WC6+STL
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F304
SEAL RING	SS+GRAPHITE/SS304/SS316					
STUFFING BOX	ASTM A105+STL	ASTM A350 LF2+STL	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F304
BONNET	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
PACKING	FLEXIBLE GRAPHITE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A105	ASTM A105	ASTM A182 F304	ASTM A182 F304	ASTM A182 F316	ASTM A105
EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
STEM NUT	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 2=Size in inch | GV=GATE Valve | 9=900Lb



MODEL NO.:EFC-2GV9
Size:2"~24"(DN50~DN600)

CASTING STEEL PSB GATE VALVE

Pressure Seal Bonnet ASME CLASS 900 Dimensions

NPS DN	in	2	2½	3	4	6	8*	10*	12*	14*	16*	18*	20*	24*
	mm	47	57	73	98	146	190	238	282	311	356	400	445	534
L _{RF}	in	8.5	10.0	12.0	14.0	20.0	26.0	31.0	36.0	39.0	43.0	48.0	52.0	61.0
	mm	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549
L _{BW}	in	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L _{RTJ}	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.5	52.5	61.75
	mm	371	422	384	460	613	740	841	968	1039	1140	1232	1334	1568
H (Open)	in	23	30	30	34	40	50	61	74	84	93	106	118	138
	mm	594	756	756	864	1013	1276	1543	1850	2126	2361	2650	2950	3442
øW	in	10	10	12	14	20	24	24	24	24	24	24	24	24
	mm	250	250	300	350	500	600	600	600	600	600	600	600	600
WT (Kg)	RF/RTJ	63	99	107	165	303	732	1105	1562	1895	2665	3510	4650	6955
	BW	42	67	70	115	213	577	854	1254	1584	2184	2865	3876	5660

Pressure Seal Bonnet ASME CLASS 1500 Dimensions

NPS DN	in	2	2½	3	4	6	8*	10*	12*	14*	16*	18*	20*	24*
	mm	47	57	70	92	136	178	222	263	289	330	371	416	498
L _{RF}	in	8.5	10.0	12.0	16.0	22.0	28.0	34.0	34.0	42.0	47.0	53.0	58.0	76.5
	mm	216	254	305	406	559	711	864	864	1067	1194	1346	1473	1943
L _{BW}	in	14.5	16.5	18.5	21.5	27.75	32.75	39	39	49.5	54.5	60.5	65.5	76.5
	mm	368	419	470	546	705	838	991	991	1257	1384	1537	1664	1943
L _{RTJ}	in	14.62	16.62	18.62	21.62	28	33.13	39.38	39.38	50.25	55.38	61.38	66.38	77.62
	mm	371	422	473	549	711	842	1001	1001	1276	1406	1559	1686	1971
H (Open)	in	23	30	30	34	43	57	60.3	60.3	91	96	121	130	156
	mm	594	756	756	864	1044	1400	1530	1530	2316	2431	3023	3302	3966
øW	in	10	12	14	20	24	24	24	24	24	24	24	24	24
	mm	250	300	350	500	600	600	600	600	600	600	600	600	600
WT (Kg)	RF/RTJ	63	99	126	218	504	1012	1552	1552	2912	3950	6150	7550	10950
	BW	42	67	87	150	367	755	1132	1132	2015	3000	4810	5950	8535

Pressure Seal Bonnet ASME CLASS 2500 Dimensions

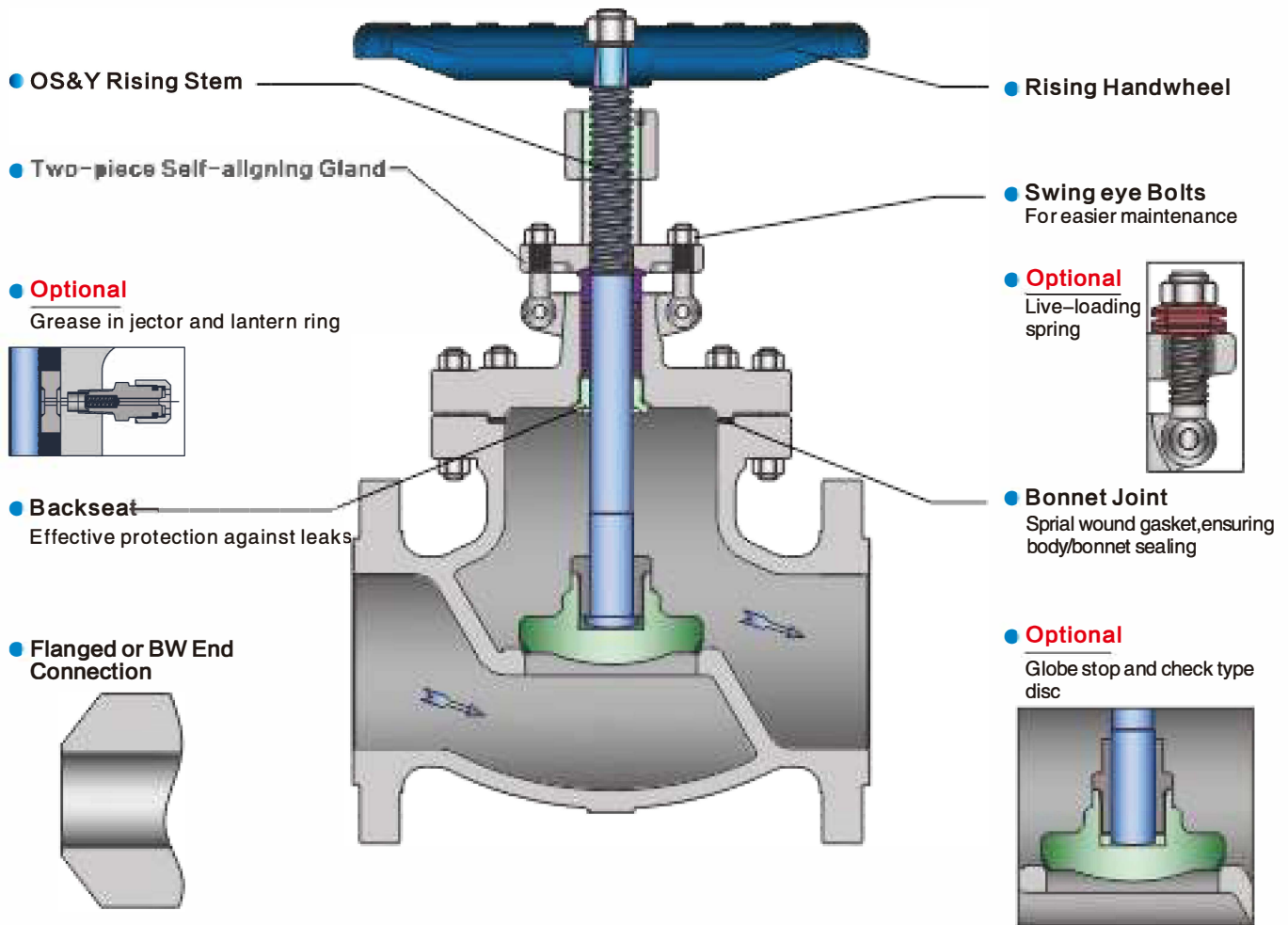
NPS DN	in	2	2½	3	4	6	8*	10*	12*
	mm	38	47	57	73	111	146	184	219
L _{RF}	in	11.0	13.0	14.5	18.0	24.0	30.0	36.0	41.0
	mm	279	330	368	457	610	762	914	1041
L _{BW}	in	17.75	20	22.75	26.5	36	40.25	50	56
	mm	451	508	578	673	914	1022	1270	1422
L _{RTJ}	in	17.87	20.25	23	26.88	36.5	40.87	50.88	56.88
	mm	454	514	584	683	927	1038	1292	1444
H (Open)	in	23	30	30	34	46	59	74	79
	mm	594	756	756	870	1179	1489	1848	1973
øW	in	14	18	18	20	24	24	24	24
	mm	350	450	450	500	600	600	600	600
WT (Kg)	RF/RTJ	89	142	173	362	882	1452	2685	3312
	BW	53	95	100	210	501	890	1850	2550

*Manual gear operator is recommended.
 The material is according to ASTM Standard.
 Model Denote: EFC=Elite Flow Control | 2=Size in inch | GV=GATE Valve | 9=900Lb

MODEL NO.:EFC-02GE1
 Size:2" ~ 16"(DN50 ~ DN400)



CASTING GLOBE VALVE

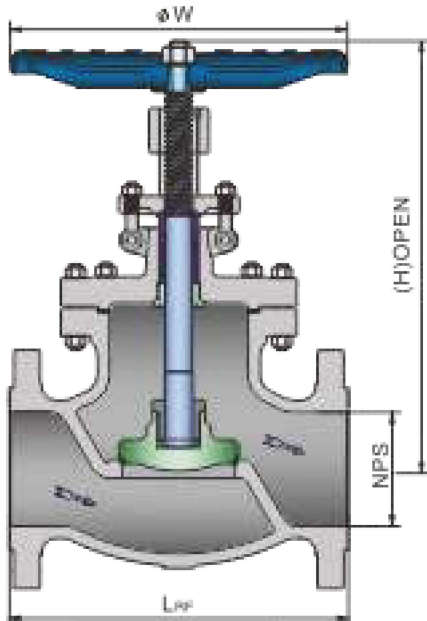


SPECIFICATION

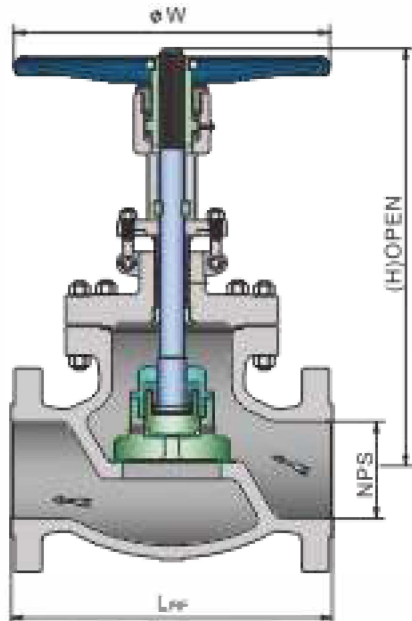
Design & MFG.	API 623,BS 1873	Press-Temp Rat.	ASME B16.34
Face To Face(Flange &Butt Weld)	ASME B16.10	Flange Design	ASME B16.5
Butt Weld Design	ASME B16.25	Materials	ASTM STANDARD

The material is according to ASTM Standard.
 Model Denote:EFC=Elite Flow Control | 02=Size in inch | GE=GLOBE Valve | 1=150Lb

CASTING GLOBE VALVE

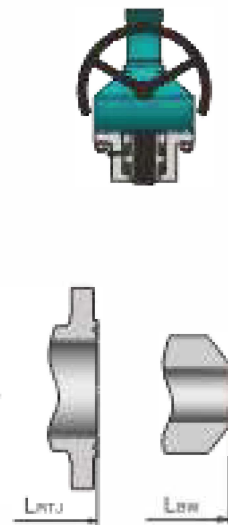


Single Disc
Low inlet to high outlet
 150~1500LB



Double Disc
High inlet to low outlet
 150~1500LB

Bevel Gear Operation

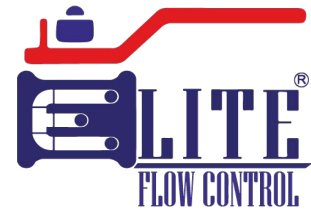


Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
DISC	ASTM A105+STL	ASTM A352 LF2+STL	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F6a+STL
STEM	ASTM A276 410	ASTM A276 410	ASTM A276 304(304L)	ASTM A276 316(316L)	ASTM A182 F51	ASTM A276 410
BONNET STUD	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B16
BONNET NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 4
BONNET GASKET	Reinforced Flat Graphite. or SS Spiral Wound W/Graphite or PTFE, or Reinforced PTFE					
BONNET	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
BACKSEAT BUSHING	ASTM A276 410	ASTM A276 410	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A276 410
PACKING	FLEXIBLE GRAPHITE or PTFE					
GLAND	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A351 CF8	ASTM A351 CF8	ASTM A216 WCB
GLAND EYE BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 4	ASTM A194 8	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 4
STEM NUT	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE
HANDWHEEL	ASTM A47	ASTM A47	ASTM A47	ASTM A47	ASTM A47	ASTM A47

The material is according to ASTM Standard.
 Model Denote:EFC=Elite Flow Control | 02=Size in inch | GE=GLOBE Valve | 1=150Lb

MODEL NO.:EFC-02GE1
Size:2" ~ 16"(DN50 ~ DN400)



CASTING GLOBE VALVE

ASME CLASS 150 Dimensions

NPS DN	in mm	2 51	2 1/2 64	3 76	4 102	5 127	6 152	8 203	10* 254	12* 305	14* 337	16* 387
L (RF-BW)	in	8.00	8.50	9.50	11.50	14.00	16.00	19.50	24.50	27.50	31.00	36.00
	mm	203	216	241	292	356	406	495	622	698	787	914
LRTJ	in	8.50	9.00	10.00	12.00	14.50	16.50	20.00	25.00	28.20	31.50	36.50
	mm	216	229	254	305	369	419	508	635	711	800	927
H (Open)	in	13.43	14.45	14.76	19.02	21.15	22.72	23.23	29.69	37.05	42.72	45.90
	mm	341	367	375	483	537	577	590	754	941	1085	1166
øW	in	7.87	9.84	9.84	11.81	11.81	13.78	15.75	17.72	24	24	24
	mm	200	250	250	300	300	350	400	450	600	600	600
WT(Kg)	RF/RTJ	22	29	42	77	77	105	154	288	507	617	810
	BW	19	25	34	65	65	82	131	249	430	580	763

ASME CLASS 300 Dimensions

NPS DN	in mm	2 51	2 1/2 64	3 76	4 102	5 127	6 152	8 203	10* 254	12* 305	14* 337	16* 387
L (RF-BW)	in	10.50	11.50	12.50	14.00	15.75	17.50	22.00	24.50	28.00	33.00	34.00
	mm	267	292	318	356	400	444	559	622	711	838	864
LRTJ	in	11.12	12.12	13.12	14.62	16.37	18.12	22.62	25.12	28.62	33.62	34.62
	mm	283	308	334	372	416	460	575	638	727	854	880
H (Open)	in	13.74	14.80	16.93	19.13	22.05	24.33	36.89	38.54	43.17	48.42	58.66
	mm	349	376	430	486	560	618	937	979	1095	1230	1490
øW	in	7.87	9.84	9.84	13.78	15.75	17.72	21.6	24	24	24	24
	mm	200	250	250	350	400	450	550	600	600	600	600
WT(Kg)	RF/RTJ	31	43	57	86	130	168	280	385	724	1250	1840
	BW	26	38	44	68	110	138	228	329	618	1035	1535

ASME CLASS 600 Dimensions

NPS DN	in mm	2 51	2 1/2 64	3 76	4 102	6* 152	8* 200	10* 248	12* 298	14* 327	16* 375
L (RF-BW)	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.0	39.0
	mm	292	330	356	432	559	660	787	838	889	991
LRTJ	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12
	mm	295	333	359	435	562	663	790	841	892	994
H (Open)	in	16.73	19.76	20.51	24.41	34.88	36.69	40.94	50.39	62.59	71.26
	mm	425	502	521	620	886	932	1040	1280	1590	1810
øW	in	9.84	11.81	13.78	17.72	21.6	25.20	24	24	24	24
	mm	250	300	350	450	550	640	600	600	600	600
WT(Kg)	RF/RTJ	39	58	73	150	327	563	1006	1450	1800	2370
	BW	33	48	61	135	261	480	730	1150	1510	1980

ASME CLASS 900 Dimensions

NPS DN	in mm	2 47	2 1/2 57	3 73	4* 98	6* 146	8* 190	10* 238	12* 282	14* 311	16* 356
L (RF-BW)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.5	44.5
	mm	368	419	381	457	610	737	838	965	1029	1130
LRTJ	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
	mm	371	422	384	460	613	740	841	968	1039	1140
H (Open)	in	18.82	19.76	24.17	31.06	36.69	47.64	63.78	75.19	84.64	98.42
	mm	478	502	614	789	932	1210	1620	1910	2150	2500
øW	in	13.78	15.75	17.72	21.06	24	24	24	24	24	24
	mm	350	400	450	550	600	600	600	600	600	600
WT(Kg)	RF/RTJ	100	118	131	218	530	750	1120	2180	2920	3850
	BW	75	94	105	185	450	630	970	1810	2510	3350

ASME CLASS 1500 Dimensions

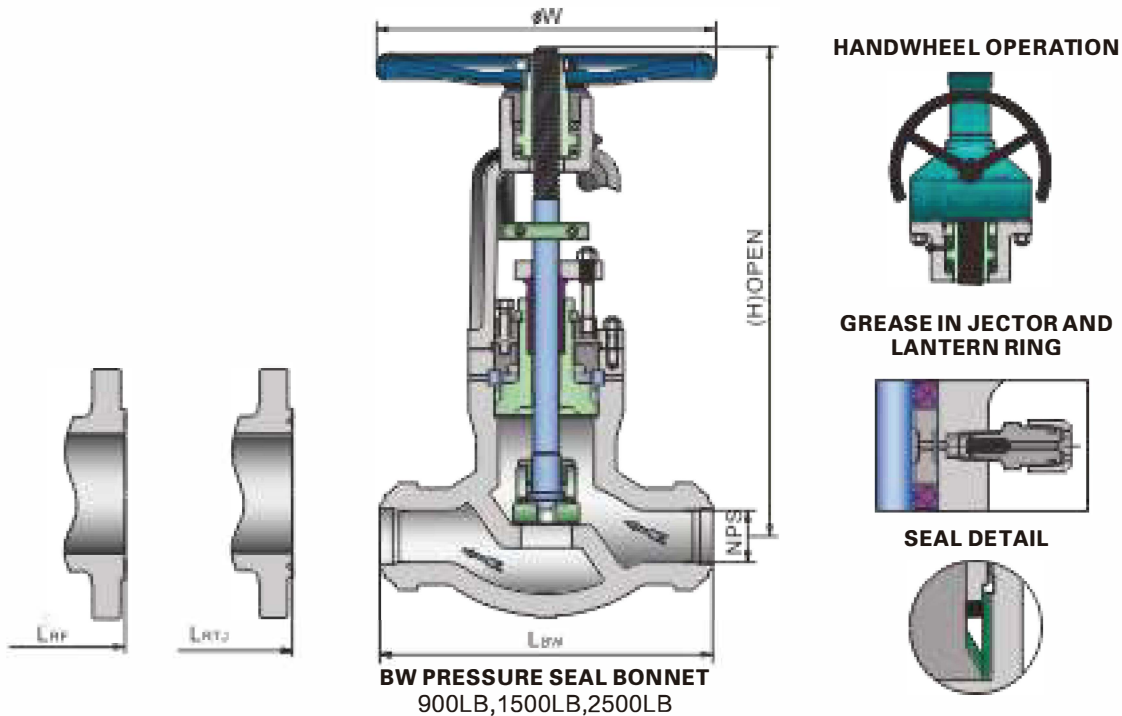
NPS DN	in mm	2 47	2 1/2 57	3 70	4* 92	6* 136	8* 178	10* 222	12* 263
L (RF-BW)	in	14.50	16.50	18.50	21.50	27.75	32.75	39.0	44.5
	mm	368	419	470	546	705	832	991	1130
LRTJ	in	14.62	16.62	18.62	21.62	28.00	33.13	39.38	45.12
	mm	371	422	473	549	711	842	1001	1146
H (Open)	in	23.31	25.98	27.24	35.71	51.77	84.44	102.75	120.08
	mm	592	660	692	907	1315	2145	2610	3050
øW	in	13.78	15.75	17.72	21.6	24	24	24	24
	mm	350	400	450	550	600	600	600	600
WT(Kg)	RF/RTJ	112	141	228	336	822	1060	1660	2720
	BW	84	115	183	277	715	890	1410	2410

*Manual gear operator is recommended.

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | GE=GLOBE Valve | 1=150Lb

CASTING STEEL PSB GLOBE VALVE

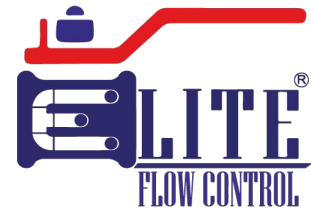


Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB+STL	ASTM A352 LCB+STL	ASTMA351 (CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
DISC	ASTM A105+STL	ASTM A182 F6a+STL	ASTM A182 F304(L)+STL	ASTM A182 F316(L)+STL	ASTM A182 F51+STL	ASTM A182 F304+STL
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTMA182F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F304
SEAL RING	SS+GRAPHITE/SS304/SS316					
STUFFING BOX	ASTM A105+STL	ASTM A350 LF2+STL	ASTMA182 F304(L)	ASTMA182 F316(L)	ASTM A182 F51	ASTM A182 F304
BONNET	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
PACKING	FLEXIBLE GRAPHITE					
GLAND	ASTM A276 410	ASTM A276 410	ASTMA276 304	ASTMA276 316	ASTM A276 316	ASTM A276 410
GLAND FLANGE	ASTM A105	ASTM A105	ASTM A182 F304	ASTM A182 F304	ASTM A182 F316	ASTM A105
EYEBOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTMA194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
STEM NUT	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE	BRONZE

The material is according to ASTM Standard.
 Model Denote:EFC=Elite Flow Control | 2=Size in inch | GE=GLOBE Valve | 9=900Lb

MODEL NO.:EFC-2GE9
Size:2"~16"(DN50~DN400)



CASTING STEEL PSB GLOBE VALVE

Pressure Seal Bonnet ASME CLASS 900 Dimensions

NPS DN	in	2	2 ^{1/2}	3	4	6*	8*	10*	12*	14*	16*
	mm	47	57	73	98	146	190	238	282	311	356
L _{RF}	in	8.5	10	12	14	20	26	31	36	39	43
	mm	216	254	305	356	508	660	787	914	991	1092
L _{BW}	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5
	mm	368	419	381	457	610	737	838	965	1029	1130
L _{RTJ}	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
	mm	371	422	384	460	613	740	841	968	1039	1140
H (Open)	in	24.4	25.2	28.4	33.5	48.2	53.1	63	70.88	82.75	95
	mm	619	641	721	850	1225	1350	1600	1800	2100	2410
øW	in	14	14	18	20	24	24	24	24	24	24
	mm	350	350	450	500	600	600	600	600	600	600
WT (Kg)	RF/RTJ	84	110	116	179	441	1070	1820	2450	3550	4200
	BW	58	74	84	137	378	955	1610	2250	3250	3800

Pressure Seal Bonnet ASME CLASS 1500 Dimensions

NPS DN	in	2	2 ^{1/2}	3	4	6*	8*	10*	12*	14*
	mm	47	57	70	92	136	178	222	263	289
L _{RF}	in	8.5	10	12	16	22	28	34	39	42
	mm	216	254	305	406	559	711	864	991	1067
L _{BW}	in	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5
	mm	368	419	470	546	705	832	991	1130	1257
L _{RTJ}	in	14.62	16.62	18.62	21.62	28	33.13	39.38	45.12	50.25
	mm	371	422	473	549	711	842	1001	1146	1276
H (Open)	in	24.4	25.2	32.9	33.7	48.4	70.9	82.78	95	112
	mm	619	641	835	857	1230	1800	2100	2411	2842
øW	in	14	14	20	22	24	24	24	24	24
	mm	350	350	500	550	600	600	600	600	600
WT (Kg)	RF/RTJ	84	116	145	236	918	1864	2820	3600	4500
	BW	58	62	125	168	781	1602	2410	2970	3800

Pressure Seal Bonnet ASME CLASS 2500 Dimensions

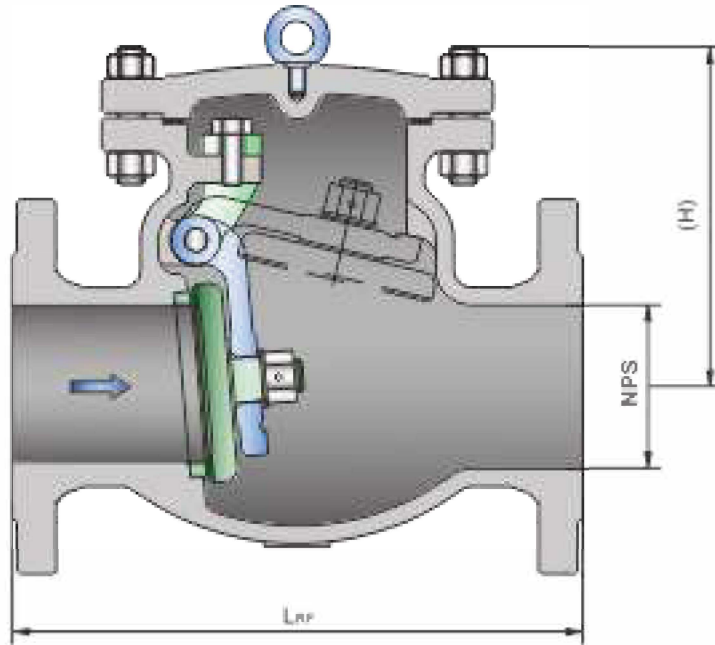
NPS DN	in	2	2 ^{1/2}	3	4*	6*	8*	10*	12*
	mm	38	47	57	73	111	146	184	219
L _{RF}	in	11	13	14.5	18	24	30	36	41
	mm	279	330	368	457	610	762	914	1041
L _{BW}	in	17.75	20	22.75	26.5	36	40.25	50	56
	mm	451	508	578	673	914	1022	1270	1422
L _{RTJ}	in	17.87	20.25	23	26.88	36.5	40.87	50.88	56.88
	mm	454	514	584	683	927	1038	1292	1444
H (Open)	in	24.3	30.7	31.5	51.2	57.9	89	106	112
	mm	616	781	800	1300	1470	2260	2690	2842
øW	in	16	20	22	24	24	24	24	24
	mm	400	500	550	600	600	600	600	600
WT (Kg)	RF/RTJ	105	160	221	525	1413	2710	3480	4400
	BW	74	112	147	368	1053	2350	2800	3500

*Manual gear operator is recommended.

The material is according to ASTM Standard.

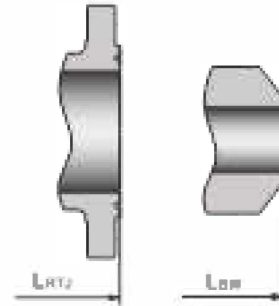
Model Denote:EFC=Elite Flow Control | 2=Size in inch | GE=GLOBE Valve | 9=900Lb

CASTING CHECK VALVE



Design Features

- Bolt Bonnet: to apply uniform load to the gasket
- Swing Type
- Non-Penetrating Disc Shaft Valve Disc Fully Open
- Horizontal or Vertical Service
- Seat Surface Can Be Hardened
- To Increase Wear Resistance
- Flanged or Butt Weld End



SPECIFICATION

Design & MFG.	API 6D, BS 1868	Press-Temp Rat.	ASME B16.34
Face To Face(Flange & Butt Weld)	ASME B16.10	Flange Design	ASME B16.5
Butt Weld Design	ASME B16.25	Materials	ASTM STANDARD

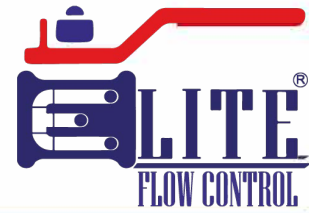
Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
SEAT	ASTM A105+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6+STL
DISC	ASTM A216 WCB+13Cr	ASTM A352 LCB+13Cr	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6+STL
HINGE	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
FORK	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
GASKET	Reinforced Flat Graphite. or SS Spiral Wound W/Graphite or PTFE, or Reinforced PTFE					
BONNET	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 4

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | CK=CHECK Valve | 1=150Lb

MODEL NO.:EFC-02CK1
Size:2" ~ 24"(DN50 ~ DN600)



CASTING CHECK VALVE

ASME CLASS 150 Dimensions

NPS DN	in mm	2 51	2 1/2 64	3 76	4 102	5 127	6 152	8 203	10 254	12 305	14 337	16 387	18 438	20 489	24 591
L (RF-BW)	in	8.00	8.50	9.50	11.50	13.00	14.00	19.50	24.50	27.50	31.00	34.00	38.50	38.50	51.00
	mm	203	216	241	292	330	356	495	622	698	787	864	978	978	1295
L _{RTJ}	in	8.50	9.00	10.00	12.00	13.50	14.50	20.00	25.00	28.00	31.50	34.50	39.00	39.00	51.50
	mm	216	229	254	305	343	369	508	635	711	800	877	991	991	1308
H	in	5.31	6.10	6.61	9.37	9.80	10.91	13.35	15.67	20.67	21.77	22.99	26.30	28.03	29.13
	mm	135	155	168	235	249	277	339	398	525	553	584	688	712	740
WT (Kg)	RF/RTJ	17	21	29	42	69	74	108	177	282	372	570	665	900	1359
	BW	13	17	24	36	57	62	96	158	238	324	483	548	782	1150

ASME CLASS 300 Dimensions

NPS DN	in mm	2 51	2 1/2 64	3 76	4 102	5 127	6 152	8 203	10 254	12 305	14 337	16 337	18 432	20 483	24 584
L (RF-BW)	in	10.50	11.50	12.50	14.00	15.75	17.50	21.00	24.50	28.00	33.00	34.00	38.50	40.00	53.00
	mm	267	292	318	356	400	444	533	622	711	838	864	978	1016	1346
L _{RTJ}	in	11.12	12.12	13.12	14.62	16.37	18.12	21.62	25.12	28.62	33.62	34.62	39.12	40.75	53.88
	mm	283	308	333	372	416	460	549	638	727	854	880	994	1035	1368
H	in	6.22	6.57	7.40	10.20	11.06	12.56	15.79	19.02	21.85	23.03	24.13	25.31	26.81	27.95
	mm	158	167	188	259	281	319	401	483	555	585	613	643	681	710
WT (Kg)	RF/RTJ	21	32	43	61	84	131	213	384	449	680	680	1025	1320	1960
	BW	16	24	35	44	61	105	167	272	375	560	560	828	1070	1586

ASME CLASS 600 Dimensions

NPS DN	in mm	2 51	2 1/2 64	3 76	4 102	6 152	8 200	10 248	12 298	14 327	16 375	18 419	20 464	24 559
L (RF-BW)	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L _{RTJ}	in	11.62	13.12	14.12	17.12	22.12	26.13	31.12	33.12	35.12	39.12	43.12	47.25	55.38
	mm	295	333	356	435	562	663	790	841	892	994	1095	1200	1407
H	in	7.76	8.15	9.09	11.06	14.25	17.20	19.39	20.79	22.52	25.98	28.35	29.37	37.80
	mm	197	207	231	281	362	437	490	528	572	660	720	746	960
WT (Kg)	RF/RTJ	36	49	68	111	230	416	673	875	944	1220	1620	2120	3100
	BW	28	40	57	83	191	361	543	770	773	1015	1350	1750	2520

ASME CLASS 900 Dimensions

NPS DN	in mm	2 47	2 1/2 57	3 73	4 98	6 146	8 190	10 238	12 282	14 311	16 356	18 400	20 445	24 534
L (RF-BW)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.0
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L _{RTJ}	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.5	52.5	61.75
	mm	371	422	384	460	613	740	841	968	1039	1140	1232	1334	1568
H	in	8.45	10.24	10.24	12.60	15.04	20.87	22.05	23.23	24.80	27.56	33.00	36.70	39.56
	mm	240	260	260	320	382	530	560	590	630	700	838	932	1005
WT (Kg)	RF/RTJ	69	93	91	145	259	565	900	1200	1500	2130	3150	4260	5530
	BW	52	74	70	112	218	448	733	975	1240	1760	2810	3730	4940

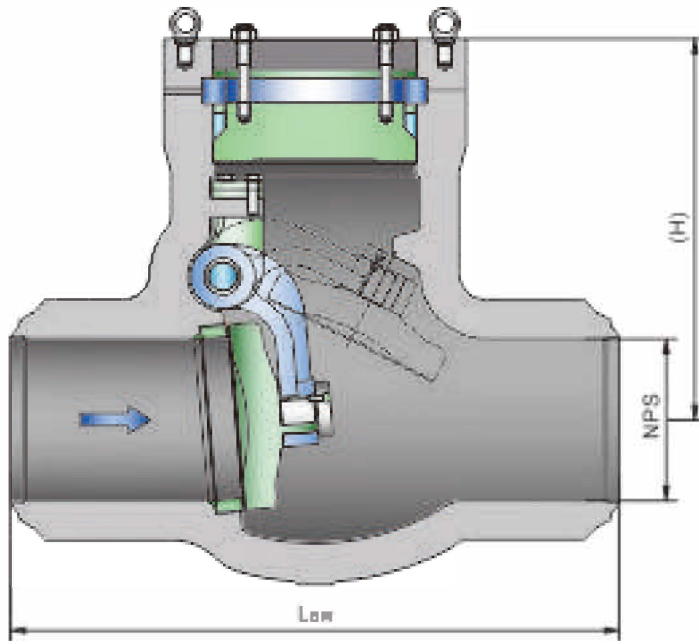
ASME CLASS 1500 Dimensions

NPS DN	in mm	2 47	2 1/2 57	3 70	4 92	6 136	8 178	10 222	12 263	14 289	16 330	18 371	20 416	24 498
L (RF-BW)	in	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.5	54.5	60.5	65.5	76.5
	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L _{RTJ}	in	14.62	16.62	18.62	21.62	28.00	33.13	39.38	45.12	50.25	55.38	61.38	66.38	77.62
	mm	371	422	473	549	711	842	1001	1146	1276	1406	1559	1686	1971
H	in	12.20	12.20	12.99	13.98	15.75	20.87	22.05	25.59	37.4	40.1	45.2	50.6	60.6
	mm	310	310	330	355	400	530	560	650	950	1020	1147	1284	1539
WT (Kg)	RF/RTJ	69	93	140	232	490	990	1490	1970	3060	4500	6200	8150	9800
	BW	49	74	111	185	375	803	1250	1625	2290	3550	5350	7660	8650

The material is according to ASTM Standard.

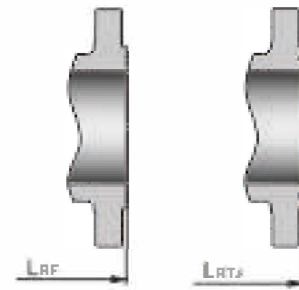
Model Denote:EFC=Elite Flow Control | 02=Size in inch | CK=CHECK Valve | 1=150Lb

CASTING PSB CHECK VALVE



Design Features

- Pressure Seal Bonnet
- Swing Type
- Non-Penetrating Disc Shaft
- Horizontal or Vertical Service
- Seat Surface Can be Hardened to Increase Wear Resistance
- Flanged or Butt Weld End



Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
SEAT	ASTM A105+STL	ASTM A352 LCB+STL	ASTM A351 CF8M(CF3M)+STL	ASTM A351 CF8M(CF3M)+STL	ASTM A995 4A+STL	ASTM A217 WC6+STL
DISC	ASTM A216 WCB+STL	ASTM A352 LCB+STL	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6+STL
HINGE	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
FORK	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
GASKET	SS+GRAPHITE/SS304/SS316					
STUFFING BOX	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F11
COVER	ASTM A105	ASTM A350 LF2	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F11
BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4

The material is according to ASTM Standard.

Model Denote: EFC=Elite Flow Control | 02=Size in inch | CK=CHECK Valve | 9=900Lb

MODL NO.:EFC-02CK9
Size:2" ~ 24"(DN50 ~ DN600)



CASTING PSB CHECK VALVE

Pressure Seal Bonnet ASME CLASS 900 Dimensions

NPS DN	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	47	57	73	98	146	190	238	282	311	356	400	445	534
LBW	in	8.5	10.0	12.0	14.0	20.0	26.0	31.0	36.0	39.0	43.0	48.0	52.0	61.0
	mm	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549
LRF	in	14.5	16.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
LRTJ	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.5	52.5	61.75
	mm	371	422	384	460	613	740	841	968	1039	1140	1232	1334	1568
H	in	9.5	10.4	10.6	12.5	15.7	23.1	24.9	27.4	31.9	29.9	35.3	36.7	40
	mm	241	264	270	318	400	587	632	695	812	760	895	932	1016
WT (Kg)	RF/RTJ	42	55	58	110	262	652	923	1551	1725	1895	2500	3250	4350
	BW	21	32	35	70	177	501	765	1187	1410	1570	2010	2610	3120

Pressure Seal Bonnet ASME CLASS 1500 Dimensions

NPS DN	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	47	57	70	92	136	178	222	263	289	330	371	416	498
LBW	in	8.5	10.0	12.0	16.0	22.0	28.0	34.0	39.0	42.0	47.0	60.5	65.5	76.5
	mm	216	254	305	406	559	711	864	991	1067	1194	1537	1664	1943
LRF	in	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5	60.5	65.5	76.5
	mm	368	419	470	546	705	838	991	1130	1257	1384	1537	1664	1943
LRTJ	in	14.62	16.62	18.62	21.62	28	33.13	39.38	45.12	50.25	55.38	61.38	66.38	77.62
	mm	371	422	473	549	711	842	1001	1146	1276	1406	1559	1686	1971
H	in	9.5	10.4	10.8	12.5	16.6	18.9	25.1	24.8	29.5	32.7	36.2	38.7	46.7
	mm	241	264	274	318	422	479	637	681	750	830	920	982	1185
WT (Kg)	RF/RTJ	42	58	110	152	380	682	1250	1758	2400	2910	3550	4650	6320
	BW	21	34	45	78	251	535	865	1238	1620	1882	2350	2854	3810

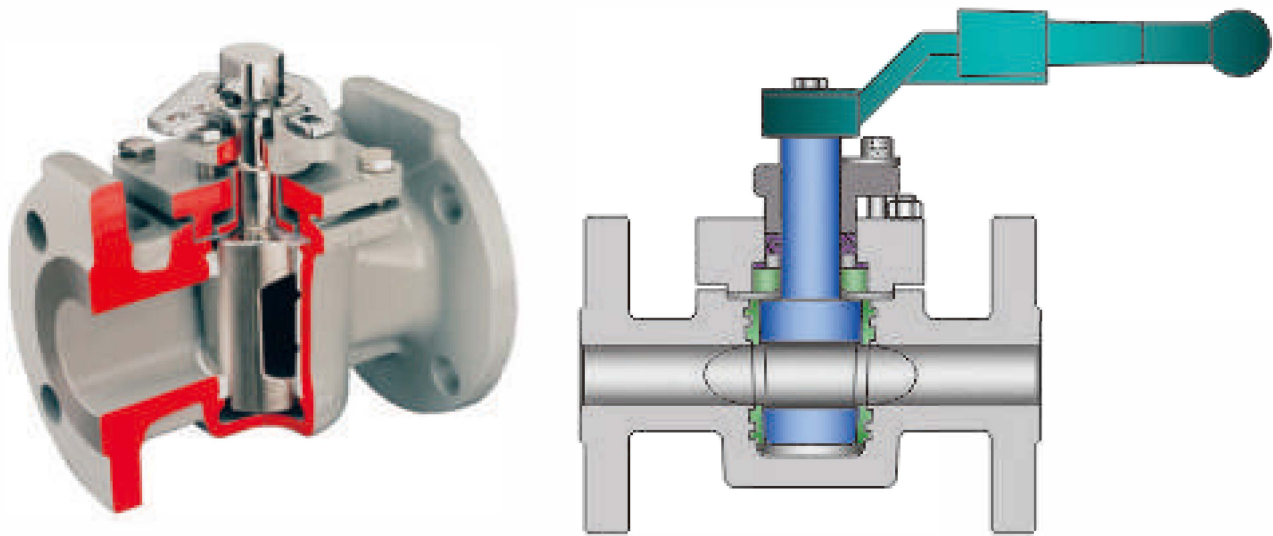
Pressure Seal Bonnet ASME CLASS 2500 Dimensions

NPS DN	in	2	2 1/2	3	4	6	8	10	12
	mm	38	47	57	73	111	146	184	219
LBW	in	11.0	13.0	14.5	18.0	24.0	30.0	36.0	41.0
	mm	279	330	368	457	610	762	914	1041
LRF	in	17.75	20	22.75	26.5	36	40.25	50	56
	mm	451	508	578	673	914	1022	1270	1422
LRTJ	in	17.87	20.25	23	26.88	36.5	40.87	50.88	56.88
	mm	454	514	584	683	927	1038	1292	1444
H	in	9.6	10.4	11.4	13.8	19.2	23.2	24.9	27.1
	mm	245	264	290	352	488	591	632	687
WT (Kg)	RF/RTJ	89	134	182	352	623	1210	1852	2955
	BW	53	78	98	183	290	712	921	1835

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | CK=CHECK Valve | 9=900Lb

SLEEVE TYPE SOFT SEALING PLUG VALVE



SPECIFICATION

Design & MFG.	API 599, API 6D	Flange Design	ASME B16.5
Face To Face (Flange & Butt Weld)	ASME B16.10	Materials	ASTM STANDARD
Press-Temp Rat.	ASME B16.34	Butt Weld Design	ASME B16.25

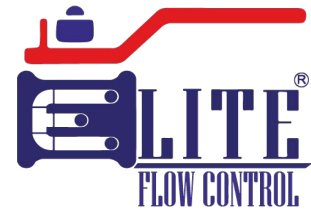
Material List

PART	STANDARD MATERIALS					
BODY	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8(CF3M)	ASTM A995 4A	ASTM A217 WC6
PLUG	ASTM A217 CA15	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8(CF3M)	ASTM A995 4A	ASTM A351 CF8
SEAT	PTFE or Reinforced PTFE					
GASKET	SS Spiral Wound W/Graphite or PTFE, or Reinforced PTFE					
ADJUSTING SHIM	SS304 or SS316					
BONNET	ASME A216 WCB	ASME A352 LCB	ASME A351 CF8(CF3)	ASME A351 CF8(CF3M)	ASME A995 4A	ASME A217 WC6
PACKING	FLEXIBLE GRAPHITE or PTFE					
BOLT	ASME A193 B7	ASME A320 L7	ASME A193 B8(M)	ASME A193 B8(M)	ASME A193 B8M	ASME A193 B16
NUT	ASME A194 2H	ASME A194 7	ASME A194 8(M)	ASME A194 8(M)	ASME A194 8M	ASME A194 4
GLAND	ASME A216 WCB	ASME A216 WCB	ASME A351 CF8	ASME A351 CF8M	ASME A351 CF8M	ASME A216 WCB
HANDHOLD	CARBON STEEL					

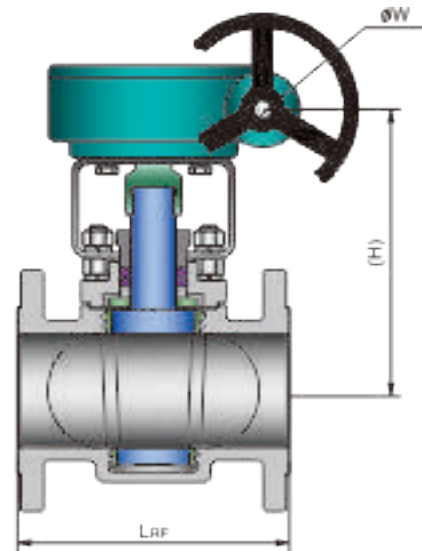
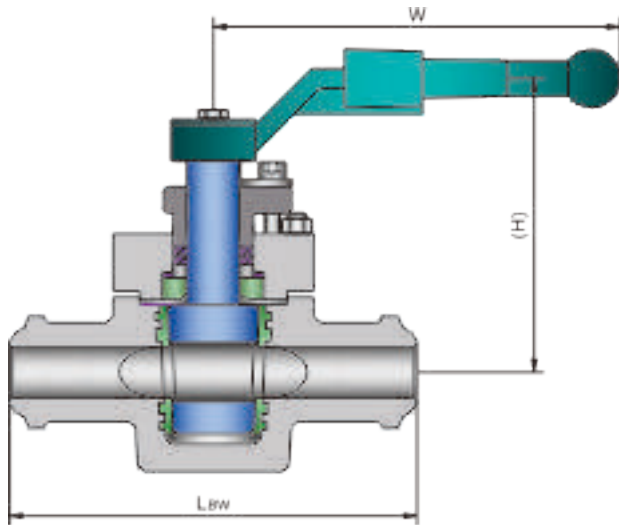
The material is according to ASTM Standard.

Model Denote: EFC=Elite Flow Control | 02=Size in inch | PV=PLUG Valve | 1=150Lb

MODEL NO.:EFC-02PV1
Size:1/2" ~ 14"(DN15 ~ DN350)



SLEEVE TYPE SOFT SEALING PLUG VALVE



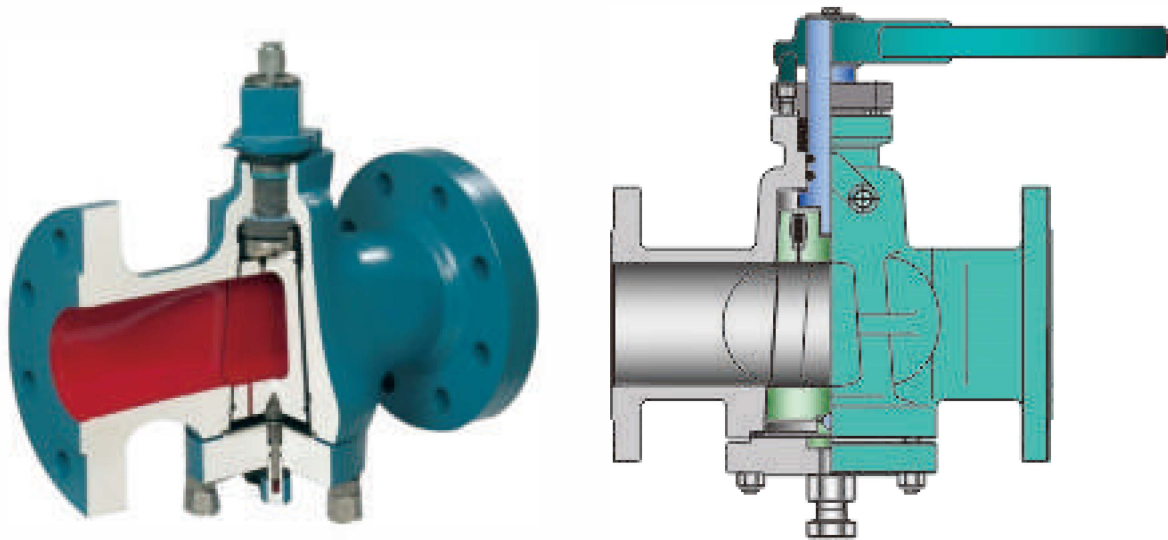
Dimensions

Model		AX43-150LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		108	117	127	140	165	178	190	203	229	254	267	292	330	356	381
H		110	115	115	135	140	150	165	180	380	460	520	580	620	680	760
øW		175	175	175	220	280	305	350	405	300	300	320	320	350	380	450
Weight (kg)		8.5	9.5	10.5	12	14	18	22	26	40	60	70	130	219	381	570
Model		AX43-300LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		108	152	165	178	190	216	241	283	305	381	403	419	457	502	762
H		110	115	115	135	140	150	165	180	380	460	502	580	620	680	760
øW		175	175	175	220	280	305	350	405	300	300	320	320	350	380	450
Weight (kg)		8.5	10.5	12	14	16	20	24	29	53	75	85	185	230	390	550
Model		AX43-600LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		108	190	216	229	241	292	330	356	432	508	559	660	787	838	889
H		110	115	115	135	140	150	165	180	380	460	520	580	620	680	760
øW		175	175	175	220	280	305	350	405	300	300	320	320	350	380	450
Weight (kg)		8.5	13	17	20	23	27	31	36	72	98	141	245	330	515	710
Model		AX43-900LB														
Size	mm	15	20	25	32	40	50	65	80	100						
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4						
L		108	229	254	279	305	368	419	381	457						
H		110	115	115	135	140	150	165	180	380						
øW		175	175	175	220	280	305	350	405	300						
Weight (kg)		8.5	16	21	24	28	32	40	47	91						

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | PV=PLUG Valve | 1=150Lb

INVERTED PRESSURE LUBRICATED PLUG VALVE



SPECIFICATION

Design & MFG.	API 599,API 6D	Flange Design	ASME B16.5
Face To Face(Flange &Butt Weld)	ASME B16.10	Materials	ASTM ST AND ARD
Press-Temp Rat.	ASME B16.34	Butt Weld Design	ASME B16.25

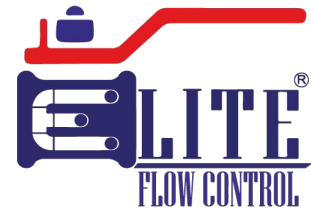
Material List

PART	STANDARD MATERIALS					
COVER	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
BOLT	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8(M)	ASTM A193 B8(M)	ASTM A193 B8M	ASTM A193 B16
NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8(M)	ASTM A194 8(M)	ASTM A194 8M	ASTM A194 4
BODY	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8(CF3)	ASTM A351 CF8M(CF3M)	ASTM A995 4A	ASTM A217 WC6
PLUG	A217 CA15+Nitriding	A351 CF8+STL	A351 CF8(CF3)+STL	A351 CF8M(CF3M)+STL	A955 4A+STL	A351 CF8+STL
STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304(L)	ASTM A182 F316(L)	ASTM A182 F51	ASTM A182 F6a
GASKET	SS Spiral Wound W/Graphite or PTFE,or Reinforced PTFE					
ADJUSTING SHIM	SS304 or SS316					
CHECK VALVE	UCA					
PACKING	FLEXIBLE GRAPHITE or PTFE					
GLAND	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A351 CF8(M)	ASTM A351 CF8M	ASTM A216 WCB
HANDHOLD	CARBON STEEL					

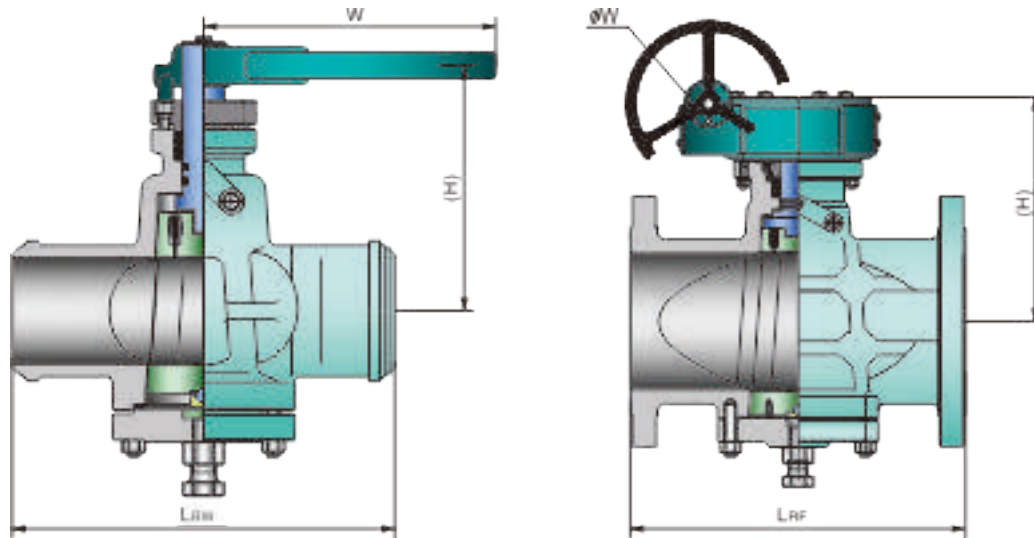
The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | PV=PLUG Valve | 1=150Lb

MODEL NO.:EFC-02PV1
Size:1/2" ~ 14"(DN15 ~ DN350)



INVERTED PRESSURE LUBRICATED PLUG VALVE



Dimensions

Model		AX47-150LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		108	117	127	140	165	178	190	203	229	254	267	292	330	356	381
H		180	180	185	200	214	215	250	270	300	340	365	400	450	510	590
ØW		400	400	500	500	600	600	820	820	300	300	320	320	350	380	380
Weight (kg)		12	12	14	17	19	21	29	33	48	75	98	98	171	230	370
Model		AX47-300LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		165	190	216	229	241	292	330	356	432	508	559	660	787	838	889
H		180	180	185	200	210	215	250	270	300	340	365	400	450	510	590
ØW		400	400	500	500	600	600	820	820	300	300	320	320	350	380	380
Weight (kg)		14	16	18	20	24	29	35	47	91	129	210	320	660	920	1250
Model		AX47-600LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		165	190	216	229	241	292	330	356	432	508	559	660	787	838	889
H		180	180	185	200	210	215	250	270	300	340	365	400	450	510	590
ØW		400	400	500	500	600	600	820	820	300	300	320	320	350	380	380
Weight (kg)		14	16	18	20	24	29	35	47	91	129	210	320	660	920	1250
Model		AX47-900LB														
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		229	229	254	279	305	368	419	381	457	559	610	737	838	965	1029
H		180	180	185	200	210	210	250	270	300	340	365	400	450	510	590
ØW		400	400	500	600	600	820	1000	1000	300	300	320	320	350	380	380
Weight (kg)		17	29	21	24	30	37	44	65	110	180	266	380	810	1050	1460

The material is according to ASTM Standard.

Model Denote:EFC=Elite Flow Control | 02=Size in inch | PV=PLUG Valve | 1=150Lb

BUTTERFLY VALVE



SPECIFICATION			
Design & MFG.	API 609	Flange Design	ASME B16.5&B16.47
Face To Face	ASME B16.10	Materials	ASTM STANDARD
Press-Temp Rat.	ASME B16.34	Butt Weld Design	ASME B16.25

CAST STEEL BUTTERFLY VALVES MANUFACTURING PROGRAM

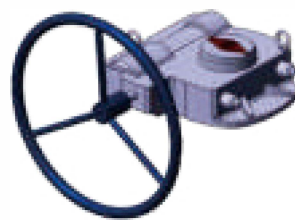
Valve Type	Class	Size(in,mm)																					
		2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	28 700	32 800	36 900	400 1000	48 1200			
Category A: Concentric Seat		150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Category B: Offset Seat	Lug & Wafer	150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Double Flange Long Pattern	150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Double Flange Short Pattern	150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

VALVE OPERATION/GEAR & ACTUATOR DETAILS

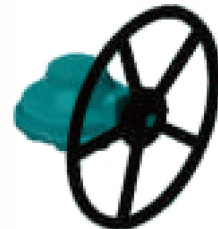
We Elite Flow Control offered Handheld, Gear Box & Actuators as per client request and project requirements.

Gear Box Operated Valves

- It could be operated faster while the number of turns will increase. Where the torque needed would decrease through usage of reduction gear.



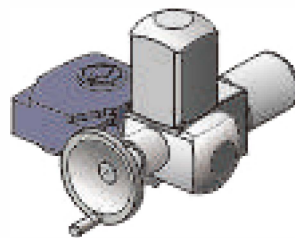
For Quarter-turn Valve



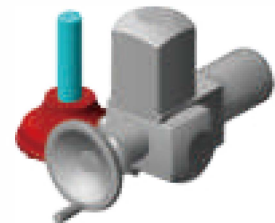
For Multi-turn valve

Combination of Electric Actuators & Gear Box Operated Valves

- It can be operated electrically, more labor-saving. Besides, it would be more economical than Electric Actuators but the operational time would increase.



For Quarter-turn Valve



For Multi-turn valve

Electric Actuators For Valves

- The alternatives are to be used with electric actuation at various differential pressures.
- The remote & local control, lock hand control options are available.
- Ex-proof types are used at plants of Natural Gas, Crude Oil or Fuel.
- All actuators are protected as per IP67 or higher class.



Pneumatic Actuators For Valves

- Pneumatic control valve actuator converts energy (typically in the form of compressed air) into mechanical motion. The motion can be rotary or linear, depending on the type of actuator.
- Limit switches, Solenoid Valve and regulating filter accessories are delivered when required.
- Remote/Local controls, lockable and hand control options are available.



PAINTING & PACKING



Painting



Painting



Painting



Packing Box



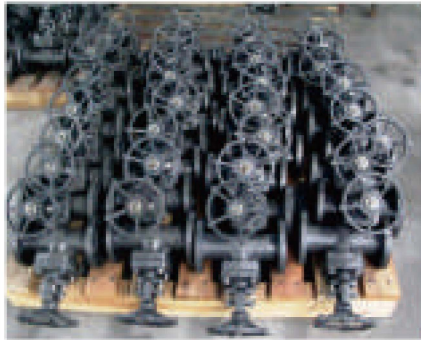
Packing



Packing



Packing



Packing



Packing



Packing Inspection



Final Packing



Final Packing Box



HOW TO AVOID PROBLEMS

How to Avoid Problems:

- Ball valves shall be transported and stored with the ball in the fully open position.
- Flanged ends and welded ends shall be protected.
- End protection shall be removed only when the valve is installed in the line.
- Valves shall be handled using the proper lifting lugs.
- Valves shall be stored according to Elite storage procedures. Long term storage shall be avoided.
- For welded-end valves, advise Elite if there will be a post weld heat treatment (transition pups may be necessary to avoid damages to seals).
- Flush and clean the line before operating the valve.
- Make sure no line-testing fluid is left in the line and/or the valve body.
- Avoid leaving the valve body filled with salt water to prevent internal corrosion.
- During line-testing, valves shall be left in the partially open position for the minimum possible amount of time.
- Standard ball valves shall be used for on-off service only. Throttling service (use of the valve with the ball partially open) can damage the seats.
- Make sure to take into consideration the actual service conditions when selecting materials for O-rings and seat inserts.
- Always specify anti-explosive decompression material for valves to be used in high pressure gas service.
- Make sure the selected actuator has been properly sized (an oversized actuator can be as dangerous as an undersized one).
- Advise Elite of cycle frequency to ensure proper sizing of actuator.
- Do not use the actuator to lift the valve

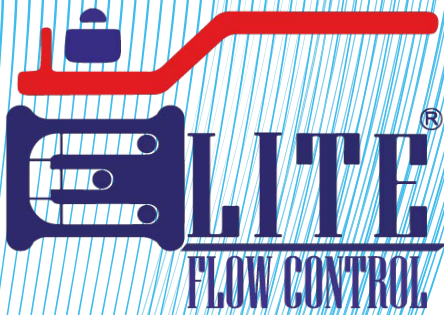
Warranty Clause:

Elite Flow Control products are delivered with a standard guarantee of good performance for the period of 18 months after the delivery date or 12 months of operation after commissioning.

WARNING: The scope of Warranty is covered for manufacturing defects only. In case the valve failure is due to the wrong operations by the customer the warranty is not applicable.

In order to claim the warranty due to the manufacturing defects, the customer needs to prepare the detailed rejection report including the inspection procedure, operational report, pictures of valves, if this report proves that the fault is due to the manufacturing defect, Elite will provide the appropriate solution.

"WE CONTROL THE FLOW"



CHECK
VALVES

GLOBE
VALVES

PLUG
VALVES

GATE
VALVES



BUTTERFLY
VALVES

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