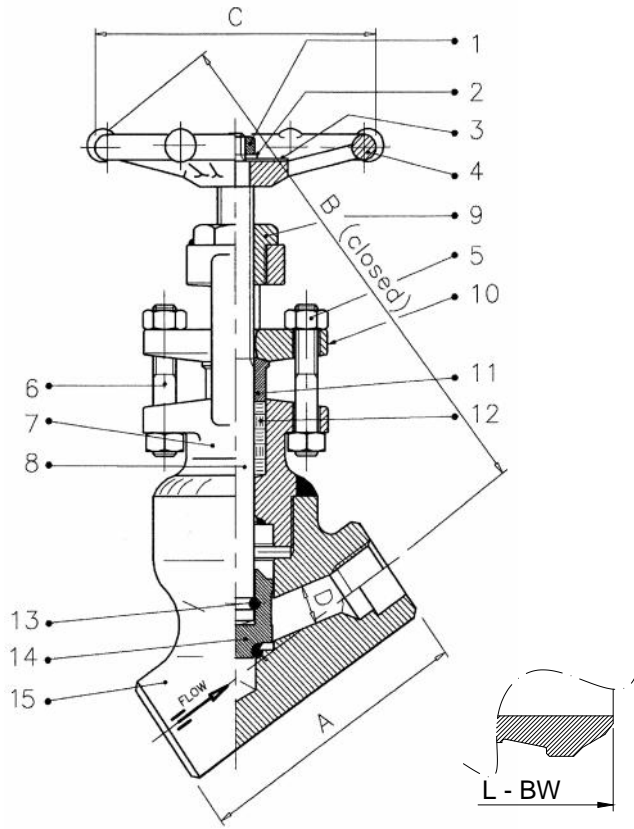


800 – 1500 – 2500 – 4500 Lbs

DT-FV-001



BW Welded-End version

BASIC DESIGN STANDARDS

Basic Design BS5352
Wall Thickness / Pressure / Temperature According to ANSI B16.34
Ends Dimensions SW according to ANSI B16.34 / NPT-F according to ASME B1.20.1 / BW according to ANSI B16.25

TEST PRESSURE TO API 598 bar

Class	Shell (water)	Seat (water)	Seat (air)
800	204	150	6.0
1500	383	281	6.0
2500	638	468	6.0
4500	1149	843	6.0

BILL OF MATERIALS STANDARD ACCORDING TO ASTM

No	Part Name	ENI VD 415 D40 (A105/F6)	F22/HF
01	Handwheel Nut	Carbon Steel	Carbon Steel
02	Washer	Carbon Steel	Carbon Steel
03	Name Plate	Aluminium	Aluminium
04	Handwheel	Carbon Steel	Carbon Steel
05	Gland Nuts	A194 Gr. 2H	A194 Gr. 2H
06	Gland Studs	AISI 410	AISI 410
07	Bonnet	ASTM A105N	ASTM A182 F22
08	Stem	A479 TP410	XM-19
09	Yoke Sleeve	AISI 416	AISI 416
10	Gland Flange	ASTM A105N	ASTM A182 F22
11	Packing Gland	A479 TP410	A479 TP410
12	Packing	Graphoil	Graphoil
13	Wire Joint	ASTM A105N	ASTM A182 F316 HF
14	Disc	A479 TP410	ASTM A182 F316H+ HF
15	Body	ASTM A105N	ASTM A182 F22

* Recommended Spare Parts

800 – 1500 – 2500 – 4500 Lbs

SIZE (Full Bore)		DIMENSION in mm				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	90	170	78	12.5	2.0
3/4"	20	110	200	100	17.5	3.3
1"	25	127	235	120	22.5	5.4
1-1/4"	32	155	270	140	29	7.9
1-1/2"	40	170	290	170	35	10.8
2"	50	210	345	170	45	19

FORGED GLOBE VALVES Y PATTERN CLASS 800

ANSI CLASS 800

PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34

Temperature °C	WORKING PRESSURE (bar.g)	
	ASTM A105N (a)	ASTM A182 F22
-29 to 38	136.2	137.9
93	124.1	137.9
149	120.7	133.8
204	116.5	129.7
260	110.0	122.4
316	100.7	111.4
343	98.6	108.3
371	97.9	104.5
399	92.7	97.9
427	75.8	93.4
454	49.3	89.7
482	31.7	82.8
510	19.0	69.3
538	9.7	47.9
566	0	32.1
893	0	20.3
621	0	12.4
649	0	7.6

(a) Permissible, but not recommended for prolonged usage above 427 °C
 (b) Permissible, but not recommended for prolonged usage above 594 °C
 (c) For welding end valves only: Flanged end ratings terminate at 538°C

800 – 1500 – 2500 – 4500 Lbs

SIZE (Full Bore)		DIMENSION in mm				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	100	185	100	13	3
3/4"	20	110	230	140	17.5	4
1"	25	125	240	140	22.5	5
1-1/4"	32	150	305	170	28	9.5
1-1/2"	40	160	340	200	35	11
2"	50	190	400	260	44	17

ANSI CLASS 1500

PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34

Temperature °C	WORKING PRESSURE (bar.g)	
	ASTM A105N (a)	ASTM A182 F22
-29 to 38	255.5	258.6
93	232.8	258.6
149	226.2	251.0
204	218.6	243.4
260	206.6	229.3
316	188.6	208.6
343	185.2	202.8
371	183.8	195.9
399	173.8	183.4
427	142.1	175.2
454	92.4	167.9
482	59.3	154.8
510	35.5	130.0
538	17.9	90.0
566		60.3
593		37.9
621		23.8
649		14.1

(a) Permissible, but not recommended for prolonged usage above 427 °C
 (b) Permissible, but not recommended for prolonged usage above 594 °C
 (c) For welding end valves only: Flanged end ratings terminate at 538°C

FORGED GLOBE VALVES Y PATTERN CLASS 1500

800 – 1500 – 2500 – 4500 Lbs

SIZE (Full Bore)		DIMENSION in mm				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	110	230	120	12	4
3/4"	20	125	240	140	15	5
1"	25	160	305	170	20	9.5
1-1/4"	32	160	305	170	25	10.5
1-1/2"	40	190	345	200	31	17
2"	50	210	400	260	38	23

ANSI CLASS 2500

PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34

Temperature °C	WORKING PRESSURE (bar.g)	
	ASTM A105N (a)	ASTM A182 F22
-29 to 38	425.5	431.0
93	387.9	431.0
149	377.2	418.6
204	364.1	405.5
260	344.1	382.1
316	314.5	347.6
343	308.6	338.3
371	306.2	326.2
399	289.7	305.5
427	236.6	291.7
454	153.8	280.0
482	98.6	258.3
510	59.3	216.9
538	29.7	149.7
56		100.3
593		63.1
621		39.3
649		23.8

(a) Permissible, but not recommended for prolonged usage above 427 °C
 (b) Permissible, but not recommended for prolonged usage above 594 °C
 (c) For welding end valves only: Flanged end ratings terminate at 538°C

FORGED GLOBE VALVES Y PATTERN CLASS 2500

800 – 1500 – 2500 – 4500 Lbs

SIZE (Full Bore)		DIMENSION in mm				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/4"	8	110	235	120	7	5
3/8"	10	125	235	140	7	5.5
1/2"	15	125	240	140	8	5.5
3/4"	20	160	285	170	11	10
1"	25	190	320	200	15	17
1-1/4"	32	190	230	200	18	17
1-1/2"	40	210	360	260	20	19
2	50	280	450	370	25	24
2-1/2"	65	280	500	370	28	45
3"	80	360	700	-	35	60
4" BW only	100	360	700	-	40	60

FORGED GLOBE VALVES Y PATTERN CLASS 4500

ANSI CLASS 4500

PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34

Temperature °C	WORKING PRESSURE (bar.g)	
	ASTM A105N (a)	ASTM A182 F22
-29 to 38	766.2	775.9
93	697.9	775.9
149	679.0	753.4
204	655.5	730.0
260	619.3	687.2
316	566.2	625.5
343	555.5	608.6
371	551.0	587.2
399	521.4	549.7
427	425.5	524.8
454	276.6	503.8
482	177.2	464.8
510	106.6	390.7
538	53.1	269.7
566		181.0
593		113.4
621		71.0
649		42.4

(a) Permissible, but not recommended for prolonged usage above 427 °C
(d) Permissible, but not recommended for prolonged usage above 594 °C
(e) For welding end valves only: Flanged end ratings terminate at 538°C