

# BONETTI® Piston Valves – Cast Iron

## Stop Valves

Flanged Ends to DIN 2533 - PN 16

Rating: DIN 2401 - PN 16

Size DN 10 to DN 150

- 1 Full Bore - BV, BVn  
Reduced Bore - BVR
- 2 Standard Flanges are Raised Face, drilled.
- 3 Face-to-Face Dimension (A) to DIN 3202 - F1.
- 4 Standard Material Schedule: G - PN 16.
- 5 Pressure - Temperature Rating on page 2.

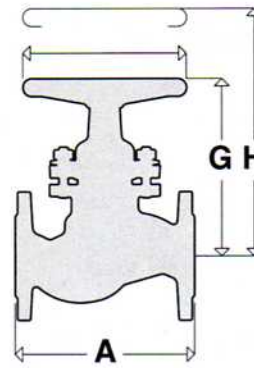


Fig. 1010 - 1075

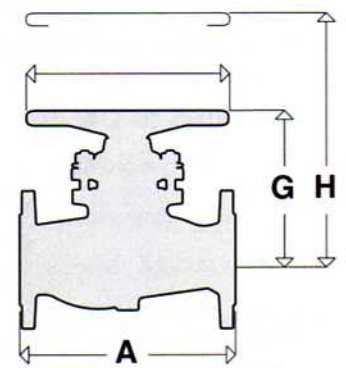


Fig. 1045

Type	DN mm	Fig.	Mater. Sched.	Dimensions				Flange Dimensions					Weight kg	Valve Rings (see page 17)		
				A mm	G mm	H mm	V mm	Outs. Dia. mm	Thick. mm	No. of Holes No.	Dia. of Holes mm	Dia. of Bolt Circle mm		d mm	D mm	h mm
BV	10	1010	G	120	110	140	95	90	14	4	14	60	2,3	15	23,5	9
BV	15	1010	G	130	110	140	95	95	14	4	14	65	2,5	15	23,5	9
BV	20	1010	G	150	135	170	115	105	16	4	14	75	3,8	20	30	10
BV	25	1010	G	160	150	185	125	115	16	4	14	85	5,3	25	38	12
BV	32	1010	G	180	170	215	150	140	18	4	18	100	7,7	30	45	15
BV	40	1010	G	200	195	250	150	150	18	4	18	110	11,3	40	58	16
BV	50	1010	G	230	225	285	200	165	20	4	18	125	15,4	50	70	17
BVn	65	1045	G	290	210	260	300	185	20	4	18	145	21,0	60	82	16
BVn	80	1045	G	310	230	290	300	200	22	8	18	160	28,0	70	94	19
BVn	100	1045	G	350	275	350	300	220	24	8	18	180	41,0	90	112	20
BVn	125	1045	G	400	310	395	400	250	26	8	18	210	65,0	110	135	22
BVn	150	1045	G	480	340	440	400	285	26	8	22	240	92,0	130	155	23
BVR	15	1075	G	130	90	108	75	95	14	4	14	65	2,2	10	18	6
BVR	20	1075	G	150	110	140	95	105	16	4	14	75	3,2	15	23,5	9
BVR	25	1075	G	160	135	170	115	115	16	4	14	85	4,5	20	30	10
BVR	32	1075	G	180	150	185	125	140	18	4	18	100	6,8	25	38	12
BVR	40	1075	G	200	170	215	150	150	18	4	18	110	8,6	30	45	15
BVR	50	1075	G	230	195	250	150	165	20	4	18	125	12,2	40	58	16

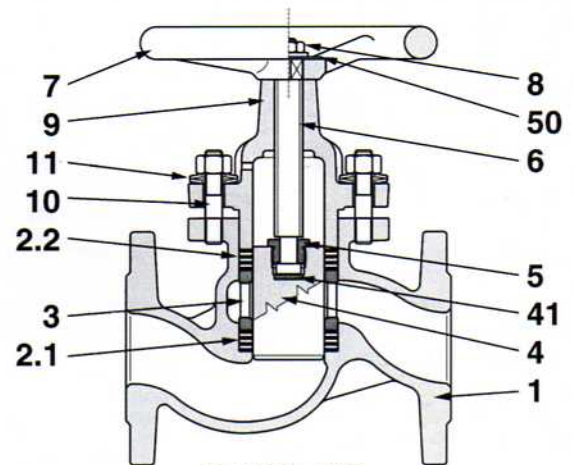


Fig. 1010 - 1075

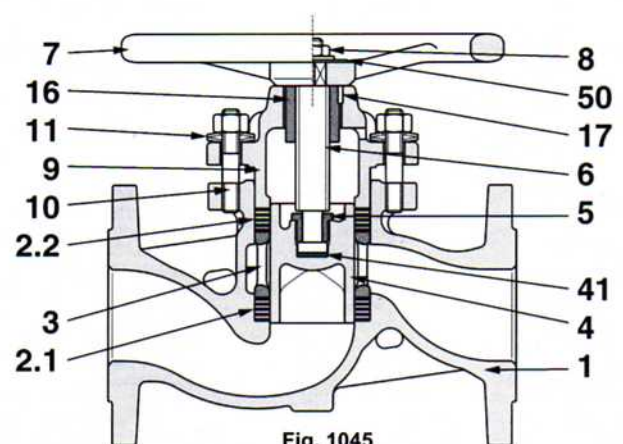


Fig. 1045

Part	Part Material for Material Schedule G
1 Body	GG 25 DIN 1691
2.1 Lower Valve Ring	Graphite T1
2.2 Upper Valve Ring	Graphite T4 / Graphite T1 ▲
3 Lantern Bush	Carbon Steel / GG 25 DIN 1691 ★
4 Piston	ASTM A582 - XM 34 ★ G-X 70 Cr Mo 29 2 ★
5 Split Nut	● Fe37 + H.T.
6 Spindle	C30
7 Handwheel	Cast iron
8 Handwheel Nut	5-2
9 Bonnet	GG 25 DIN 1691
10 Stud Bolt and Nut	5,6 - 5-2
11 Belleville Washer	50 Cr V4
16 Threaded Bush	▲ OT 58
17 Pin	▲ Carbon Steel
41 Thrust Plate	■ AISI 420 H.T.
50 Name Plate	Aluminium

● not existing for DN 10, 15, 20 mm      ★ depending upon Size  
▲ for Size 65 and larger only      ■ for Size 32 and larger, only

# BONETTI® Piston Valves - Cast Iron, Nodular Iron

**Stop Valves – Type BVe**  
**Flanged Ends to DIN 2533 - PN 16**  
**Rating: DIN 2401 - PN 16**  
**Size DN 65 to DN 200**

- 1 Standard Flanges are Raised Face, drilled.
- 2 Face-to-Face Dimension (A) to DIN 3202 - F1.
- 3 Standard Material Schedule: G - PN 16, GS - PN 16.
- 4 Pressure - Temperature Rating on page 2.  
 These DN 200 valves are designed and suitable for PN 16.  
 Some Countries accept DN 200 and larger sized valves of cast iron for lower PN, only. We suggest to examine carefully the relevant standards in force.

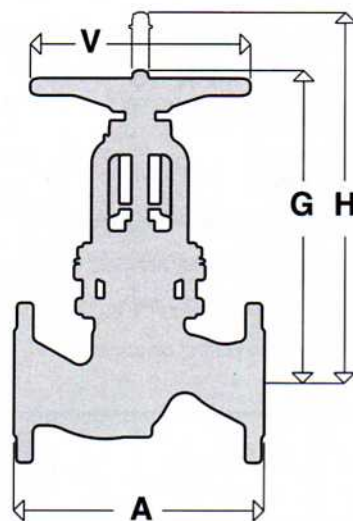


Fig. 1021

Type	DN	Fig.	Mater. Sched.	Dimensions				Flange Dimensions					Weight	Valve Rings (see page 17)			Stuffing-box Rings (see page 17)			
				A	G	H	V	Outs. Dia.	Thick.	No. of Holes	Dia. of Holes	Dia. of Bolt Circle		d	D	h	d	D	h	
	mm			mm	mm	mm	mm	mm	mm	No.	mm	mm	kg	mm	mm	mm	mm	mm	mm	mm
BVe	65	1021	G - GS	290	340	395	250	185	20	4	18	145	23,5	60	82	16	20	30	7	
BVe	80	1021	G - GS	310	370	430	250	200	22	8	18	160	31,0	70	94	19	20	30	7	
BVe	100	1021	G - GS	350	415	490	300	220	24	8	18	180	43,0	90	112	20	20	30	7	
BVe	125	1021	G - GS	400	460	545	350	250	26	8	18	210	65,0	110	135	22	25	38	9	
BVe	150	1021	G - GS	480	495	590	350	285	26	8	22	240	91,0	130	155	23	25	38	9	
BVe	200	1021	G - GS	600	580	695	400	340	30	12	22	295	175,0	170	200	15	25	38	9	

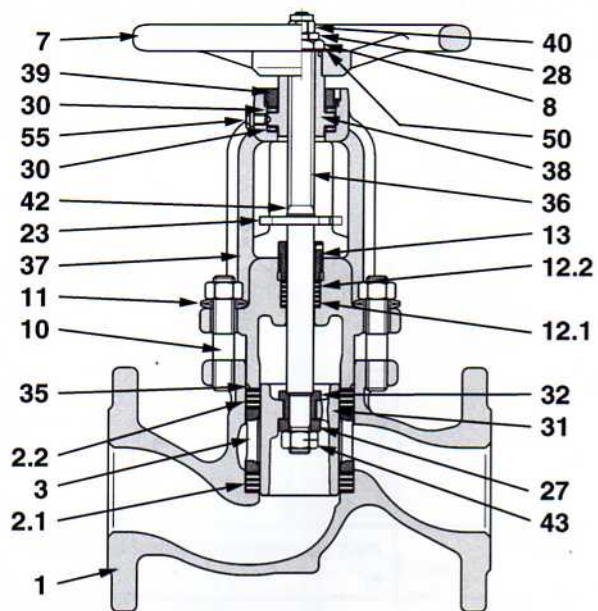


Fig. 1021

Part	Part Material for Material Schedule	
	G	GS
1 Body	GG 25 DIN 1691	GGG-40.3 DIN 1693
2.1 Lower Valve Ring	Graphite T1	Graphite T1
2.2 Upper Valve Ring	Graphite T1	Graphite T1
3 Lantern Bush	GG 25 DIN 1691	GG 25 DIN 1691
7 Handwheel	Cast iron	Cast iron
8 Handwheel Nut	Carbon Steel	Carbon Steel
10 Stud Bolt and Nut	5.6 - 5-2	5.6 - 5-2
11 Belleville Washer	50 Cr V4	50 Cr V4
12.1 Stuff.-box Lower Ring	Graphite T1	Graphite T1
12.2 Stuff.-box Upper Ring	Graphite T1	Graphite T1
13 Gland Nut	Carbon Steel	Carbon Steel
23 Antirotating Device	Carbon Steel	Carbon Steel
Stroke Indicator	Carbon Steel	Carbon Steel
27 Nonrotating Disc	Carbon Steel	Carbon Steel
28 Locking Washer	ASTM A182 F6	ASTM A182 F6
30 Roller Bearing	Alloy Steel	Alloy Steel
31 Balanced Piston	ASTM A582 XM34	ASTM A582 XM34
32 Backseat	ASTM A182 F6	ASTM A182 F6
35 Autoseal Ring	Graphite T3	Graphite T3
36 Stem	ASTM A479 Tp.410 c.3	ASTM A479 Tp.410 c.3
37 Bonnet	GG25 DIN 1691	GGG-40.3 DIN 1693
38 Stem Bush	ASTM A439 D2 / GGG NiCr	ASTM A439 D2 / GGG NiCr
39 Retaining Nut	Carbon Steel	Carbon Steel
40 Nut	Carbon Steel	Carbon Steel
42 Retaining Ring	Stainless Steel	Stainless Steel
43 Notched Nut	Carbon Steel	Carbon Steel
50 Name Plate	Aluminium	Aluminium
55 Lubricator	1/8" BSP	1/8" BSP



# BONETTI® Piston Valves - Steel - Nodular Iron

## Stop Valves

Flanged Ends to DIN 2545 - PN 40

Rating: DIN 2401 - PN 40

Size DN 10 to DN 50

- 1 Full Bore - BV  
Reduced Bore - BVR - Available on request
- 2 Standard Flanges are Raised Face, drilled.
- 3 On request instead of Raised Face flanges can have following finishings:
- 4 - large female to DIN 2513  
- groove to DIN 2512
- 5 Face-to-Face Dimension (A) to DIN 3202 - F1.
- 6 Standard Material Schedules: FS - PN 40, F - PN 40, M/H - PN 40, GS - PN 40.

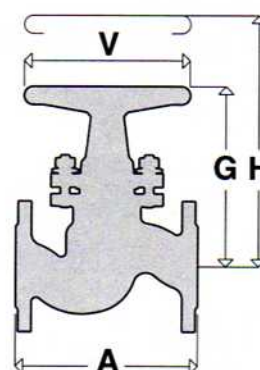


Fig. 1080

Pressure - Temperature Rating on page 2.

Type	DN mm	Fig.	Mater. Sched.	Dimensions				Flange Dimensions					Weight kg	Valve Rings (see page 17)		
				A mm	G mm	H mm	V mm	Outs. Dia. mm	Thick. mm	No. of Holes No.	Dia. of Holes mm	Dia. of Bolt Circle mm		d mm	D mm	h mm
BV	10	1080	FS - M/H - GS	120	110	140	95	90	16	4	14	60	2,6	15	23,5	9
BV	15	1080	FS - M/H - GS	130	110	140	95	95	16	4	14	65	2,9	15	23,5	9
BV	20	1080	FS - M/H - GS	150	135	170	115	105	18	4	14	75	4,4	20	30	10
BV	25	1080	FS - M/H - GS	160	150	185	125	115	18	4	14	85	6,1	25	38	12
BV	32	1080	F - M/H - GS	180	170	215	150	140	18	4	18	100	9,2	30	45	15
BV	40	1080	F - M/H - GS	200	195	250	150	150	18	4	18	110	12,2	40	58	16
BV	50	1080	F - M/H - GS	230	225	285	200	165	20	4	18	125	17,1	50	70	17
BVR*	15	1080	FS - M/H	130	90	108	75	95	16	4	14	65	2,6	10	18	6
BVR*	20	1080	FS - M/H	150	110	140	95	105	18	4	14	75	3,8	15	23,5	9
BVR*	25	1080	F - M/H	160	135	170	115	115	18	4	14	85	5,3	20	30	10
BVR*	32	1080	F - M/H	180	150	185	125	140	18	4	18	100	8,3	25	38	12
BVR*	40	1080	F - M/H	200	170	210	150	150	18	4	18	110	10,2	30	45	15
BVR*	50	1080	F - M/H	230	195	250	150	165	20	4	18	125	14,0	40	58	16

\* Available on request

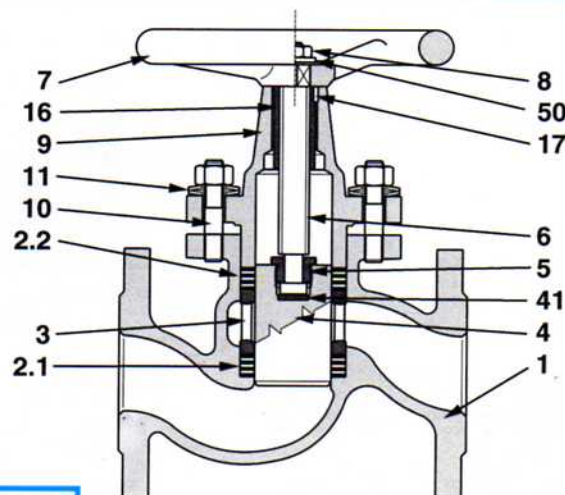


Fig. 1080

Part	Part Material for Material Schedule		
	FS - F	M/H	GS
1 Body	C22.8 ★ GS - C 25 ★	X5 Cr Ni Mo 17 22 2 ★ G - X6 Cr Ni Mo 18 10 ★	GGG-40.3 DIN 1693
2.1 Lower Valve Ring	Graphite T1	Graphite T1	Graphite T1
2.2 Upper Valve Ring	Graphite T1	Graphite T1	Graphite T1
3 Lantern Bush	Carbon Steel. / GG 25 ★	X5 Cr Ni Mo 17 22 2	Carbon Steel. / GG 25 ★
4 Piston	ASTM A582 - XM 34	X5 Cr Ni Mo 17 22 2	ASTM A582 - XM 34
5 Split Nut	Fe37 + H.T.	Fe37 + H.T.	Fe37 + H.T.
6 Spindle	A479 Tp410	A479 Tp410	A479 Tp410
7 Handwheel	Cast iron	Cast iron	Cast iron
8 Handwheel Nut	5-2	5-2	5-2
9 Bonnet	C22.8 / ASTM A105	C22.8 / ASTM A105	GGG-40.3 DIN 1693
10 Stud Bolt and Nut	5.6 - 5-2	5.6 - 5-2	5.6 - 5-2
11 Belleville Washer	50 Cr V4	50 Cr V4	50 Cr V4
16 Threaded Bush	OT 58	ASTM A439 D2	OT 58
17 Pin	Carbon Steel	Carbon Steel	Carbon Steel
41 Thrust Plate	AISI 420 H.T.	AISI 420 H.T.	AISI 420 H.T.
50 Name Plate	Aluminium	Aluminium	Aluminium

● not existing for DN 10, 15, 20 mm  
▲ for Size 32 and larger only

★ depending upon Size  
■ for Size 32 and larger, only



# BONETTI® Piston Valves – Steel, Nodular Iron

**Stop Valves – Type BVe**  
**Flanged Ends to DIN 2545 - PN 40**  
**Rating: DIN 2401 - PN 40**  
**Size DN 65 to DN 200**

- 1 Standard Flanges are Raised Face, drilled.
- 2 On request instead of Raised Face flanges can have following finishings:  
 - large female to DIN 2513  
 - groove to DIN 2512.
- 3 Face-to-Face Dimension (A) to DIN 3202 - F1.
- 4 Standard Material Schedules: F - PN 40, M/H - PN 40, GS - PN 40.
- 5 Pressure - Temperature Rating on page 2.

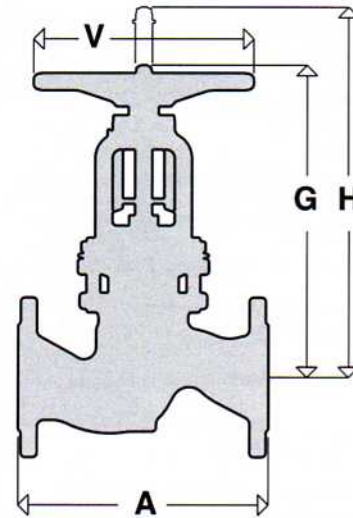


Fig. 1022

Type	DN	Fig.	Mater. Sched.	Dimensions				Flange Dimensions					Weight	Valve Rings (see page 17)			Stuffing-box Rings (see page 17)			
				A	G	H	V	Outs. Dia.	Thick.	No. of Holes	Dia of Holes	Dia of Bolt Circle		d	D	h	d	D	h	
	mm			mm	mm	mm	mm	mm	mm	No.	mm	mm	kg	mm	mm	mm	mm	mm	mm	mm
BVe	65	1022	F - M/H - GS	290	345	400	250	185	22	8	18	145	26	60	82	16	20	30	7	
BVe	80	1022	F - M/H - GS	310	375	435	250	200	24	8	18	160	33	70	94	19	20	30	7	
BVe	100	1022	F - M/H - GS	350	415	490	300	235	24	8	22	190	50	90	112	20	20	30	7	
BVe	125	1022	F - M/H - GS	400	460	545	350	270	26	8	25	220	80	110	135	22	25	38	9	
BVe	150	1022	F - M/H - GS	480	495	590	350	300	28	8	25	250	110	130	155	23	25	38	9	
BVe	200	1022	F - M/H - GS	600	580	695	400	375	34	12	29	320	190	170	200	15	25	38	9	

Part	Part Material for Material Schedule		
	F	M/H	GS
1 Body	GS - C 25 / ASTM A216 WCB	G - X6 Cr Ni Mo 18 10 / ASTM A351 CF8M	GGG-40.3 DIN 1693
2.1 Lower Valve Ring	Graphite T1	Graphite T1	Graphite T1
2.2 Upper Valve Ring	Graphite T1	Graphite T1	Graphite T1
3 Lantern Bush	GG 25 DIN 1691	X5 Cr Ni Mo 18 10 / ASTM A182 F316	GG 25 DIN 1691
7 Handwheel	Cast iron	Cast iron	Cast iron
8 Handwheel Nut	Carbon Steel	Carbon Steel	Carbon Steel
10 Stud Bolt and Nut	5.6 - 5-2	5.6 - 5-2	5.6 - 5-2
11 Belleville Washer	50 Cr V4	50 Cr V4	50 Cr V4
12.1 Stuff.-box Lower Ring	Graphite T1	Graphite T1	Graphite T1 Graphite T1
12.2 Stuff.-box Upper Ring	Graphite T1	Graphite T1	Graphite T1 Graphite T1
13 Gland Nut	Carbon Steel	Stainless Steel	Carbon Steel
23 Antirotating Device	Carbon Steel	Stainless Steel	Carbon Steel
Stroke Indicator			
27 Nonrotating Disc	Carbon Steel	ASTM A182 F316	Carbon Steel
28 Locking Washer	ASTM A182 F6	ASTM A182 F6	ASTM A182 F6
30 Roller Bearing	Alloy Steel	Alloy Steel	Alloy Steel
31 Balanced Piston	ASTM A582 - XM 34	X5 Cr Ni Mo 17 12 2 / ASTM A479 Tp.316	ASTM A582 - XM 34
32 Backseat	ASTM A182 F6	ASTM A182 F316	ASTM A182 F6
35 Autoseal Ring	Graphite T3	Graphite T3	Graphite T3
36 Stem	ASTM A479 Tp.410 c.3	ASTM A564 T.630 / X5 Cr Ni Cu Nb 17 4	ASTM A479 Tp.410 c.3
37 Bonnet	GS - C 25 / ASTM A216 WCB	G - X6 Cr Ni Mo 18 10 / ASTM A351 CF8M	GGG-40.3 DIN 1693
38 Stem Bush	ASTM A439 D2 / GGG NiCr	ASTM A439 D2 / GGG NiCr	ASTM A439 D2 / GGG NiCr
39 Retaining Nut	Carbon Steel	Carbon Steel	Carbon Steel
40 Nut	Carbon Steel	Carbon Steel	Carbon Steel
42 Retaining Ring	Stainless Steel	Stainless Steel	Stainless Steel
43 Notched Nut	Carbon Steel	Stainless Steel T.316	Carbon Steel
50 Name Plate	Aluminium	Aluminium	Aluminium
55 Lubricator	1/8" BSP	1/8" BSP	1/8" BSP

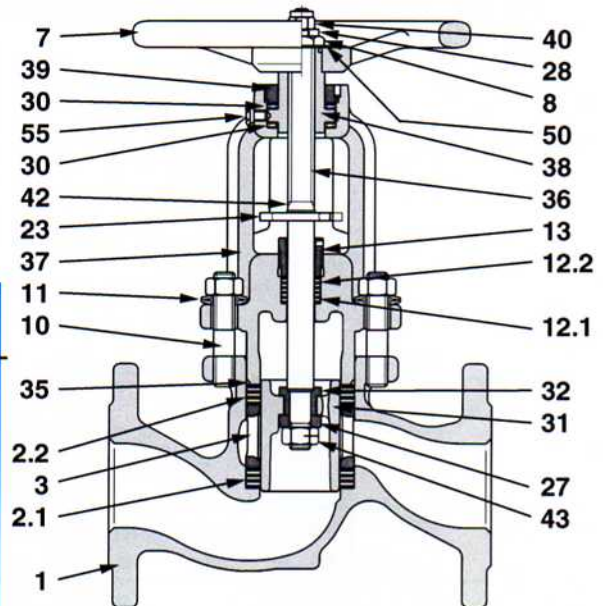


Fig. 1022