



## FASANI CHECK VALVES

### BOLTED BONNET CONFIGURATION

The bolted bonnet type valves are manufactured to guarantee the highest performance in the widest spectrum of oil and gas applications



### FEATURES

- Swing check valves can fit on both horizontal and vertical (up-flow) piping.
- Lift check valves are designed to be installed on horizontal piping or, with the aid of a spring, on vertical piping. They can also offer a quick closing service type.
- Tilting disc check valves are designed to prevent the disc slamming and to ensure, at the same time, a quick closing service.
- Standards for check valves design manufacturing are ASME B16.34 and BS 1868.
- Robust valve body in a wide range of materials (NACE compliance included).
- Threaded seat rings facilitate maintenance and/or replacement. On request, they can also be supplied as tack or seal welded. Above NPS 24 seats are seal welded as standard.
- Connections are offered as flanged, buttweld or special, such as clamp type, to meet any customers' request.

### GENERAL APPLICATION

The high quality valves are installed in a large variety of services in the oil and gas field, chemical and petrochemical industry, in onshore and offshore drilling/refining, and in the power industry.

These valves are successfully installed worldwide on applications requiring flow reversal prevention.

### TECHNICAL DATA

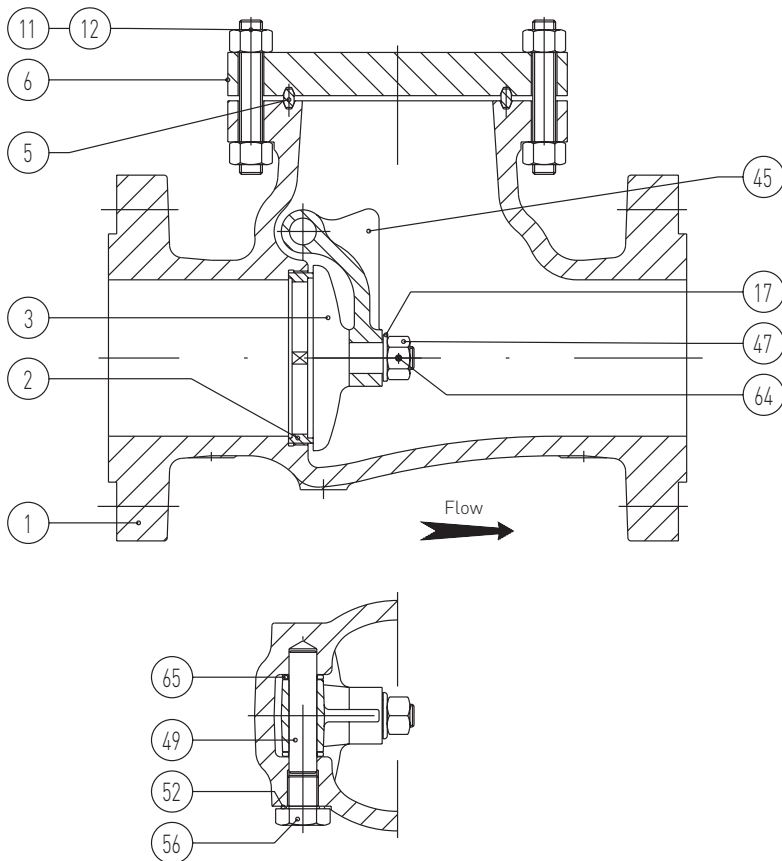
Sizes: DN 50 to 1500 and larger  
Temperature [°C]: -60 to + 650  
Pressure ratings: From ASME 150 to 2500  
Body materials: Carbon, alloy and stainless steels, duplex steels, special alloys

#### Connections standards

Flanges: ASME B16.5 and B16.47, API 605, MSS-SP 44  
Buttweld: ASME B16.25

# FASANI CHECK VALVES

## BOLTED BONNET CONFIGURATION



### MATERIAL SELECTION

Item	Description	Body in WCB	Body in WC6	Body in CF8M
1	Body	A216 WCB	A217 WC6	A351 CF8M
2	Seat ring	A105 + AWS ER 430	A182 F22 + AWS ER 430	A182 F316
3	Disc	A216 WCB + AWS ER 430	A217 WC6 + AWS ER 430	A351 CF8M
5	Gasket	Soft Iron	A182 F5	A182 F316
6	Bonnet	A516 gr. 70	A217 WC6	A351 CF8M
11	Body - bonnet bolt	A193 B7	A193 B16	A193 B8M
12	Body - bonnet nut	A194 2H	A194 4	A194 8
17	Washer	A182 F316	A182 F316	A182 F316
45	Hinge	A216 WCB	A217 WC6	A351 CF8M
47	Nut	A194 2H	A194 4	A194 8
49	Hinge pin	A182 F6a	A182 F6a	A182 F316
52	Pin gasket	Flexible graphite	Flexible graphite	Flexible graphite
56	Hinge pin plug	A193 B7	A193 B16	A193 B8M
64	Split pin	Stainless steel	Stainless steel	Stainless steel
65	Spacer ring	A182 F316	A182 F316	A182 F316

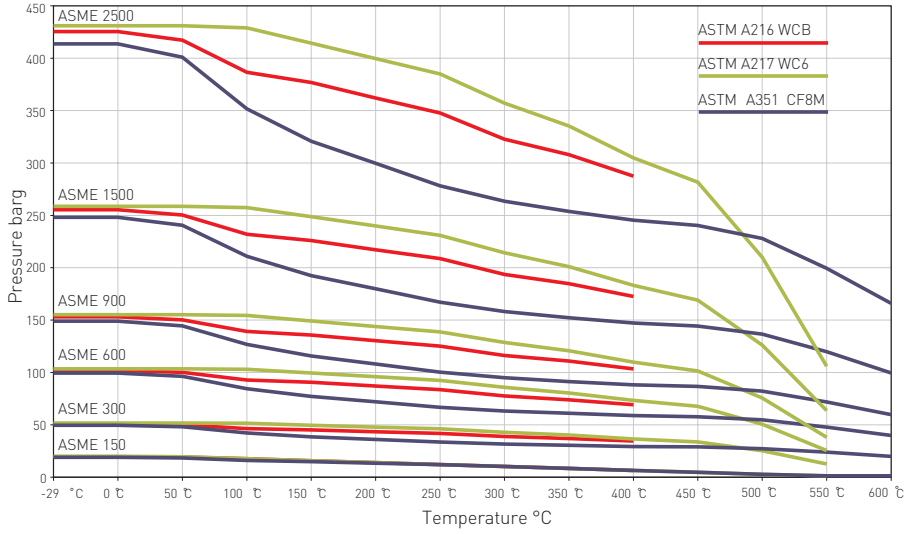
### NOTES

- Other materials are available on request.  
Please consult supplier.
- The item 5 (gasket) is supplied in different versions  
ASME Class 150 and 300: spiral wound gasket in 316/graphite.  
All remaining classes: RTJ in the materials indicated in the material specification.
- The sectional drawing represented here refers to ASME Class 600 and larger.

# FASANI CHECK VALVES

## BOLTED BONNET CONFIGURATION

PRESSURE/TEMPERATURE RATINGS IN BARG/PSIG (ASME B16.34)



**NOTES**

All valves are fully rated in accordance with ASME B16.34. The table represented here indicates the pressure/temperature rating values as per ASME B16.34-1996.

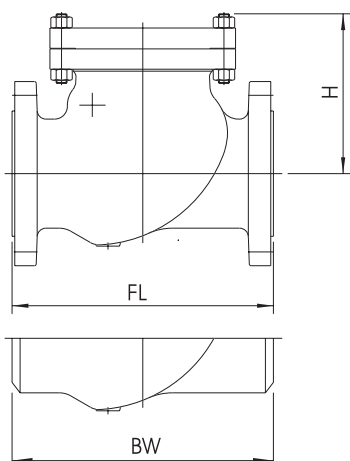
**TRIM**

Trim no.	Nominal trim symbol	Material type					Service
		Seal surfaces	Disc/wedge surfaces	Stem hinge pin	Backseat	Small internal parts	
1	CR13	13% Cr	13% Cr	13% Cr	13% Cr	13% Cr	General erosive or non-corrosive service between -100°C and 400°C
2	18-8	304	304	304	304	304	For moderate pressure in non-erosive, corrosive service between -265°C and 320°C
3	25-20	310	310	310	310	310	For moderate pressure in corrosive or non corrosive service. Between -265°C and 450°C
4	SH	Hard 13% Cr	Hard 13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1 but for medium pressure
5	HF	Co-Cr A	Co-Cr A	13% Cr	13% Cr	13% Cr	High pressure slightly erosive and corrosive service between -265°C and 650°C
5A	HFNi	Ni-Cr	Ni-Cr	13% Cr	13% Cr	13% Cr	As trim no. 5 where Co is not allowed
6	Cr13 Ni-Cu	Ni-Cu	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1
7	CR13 SH	Hard 13% Cr	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1 but for moderate pressure
8	CR13 HF	Co-Cr A	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 5 for moderate pressure
8A	CR13 HFNi	Ni-Cr	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 5A for moderate pressure
9	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Very corrosive fluids. Erosive-corrosive service between -240°C and 480°C
10	18-8SMO	316	316	316	316	316	As trim no. 2
11	Ni-Cu HF	Co-Cr A	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	As trim no. 9 but for medium pressure
12	18-8SMO HF	Co-Cr A	316	316	316	316	As trim no. 10 but for medium pressure
13	Alloy 20	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	Very corrosive service. For moderate pressure between -45°C and 320°C
14	Alloy 20 HF	Co-Cr A	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	As trim no. 13 but for medium pressure

Co-Cr A is equivalent to Stellite® 6

# FASANI CHECK VALVES

## BOLTED BONNET CONFIGURATION



### NOTES

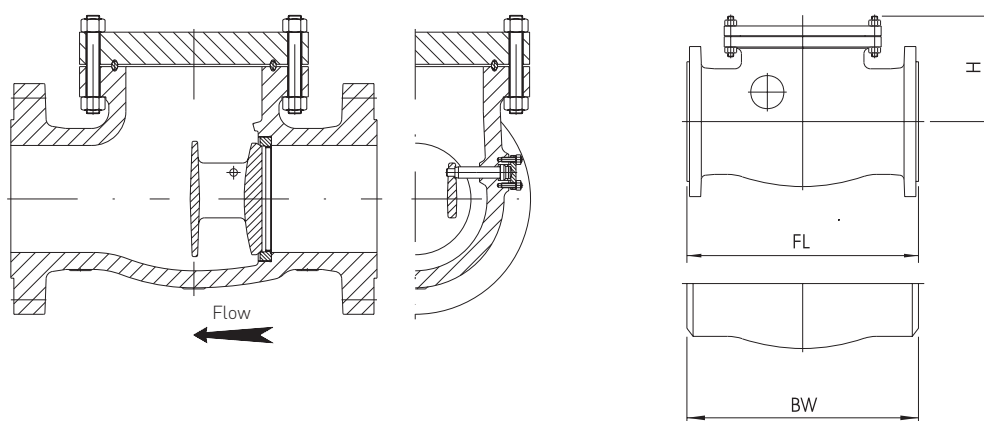
1. All dimensions are in mm.
2. Check valves are also available as both tilting disc and piston type, and as lift check type. Sizes and classes larger than mentioned here are available: please consult supplier for more information.
3. W1 corresponds to weight in kilos for flanged body style.
- \* For sizes larger than NPS 24, weight depends on flange standards.
4. W2 corresponds to weight in kilos for welding body style.

Sizes		ASME class 150 (Fig. VR 150 BB)					ASME class 300 (Fig. VR 300 BB)					ASME class 600 (Fig. VR 600 BB)				
DN	NPS	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2
50	2	203	203	140	15	10	267	267	150	20	15	292	292	200	30	25
65	2½	216	216	160	20	15	292	292	170	30	25	330	330	220	35	30
80	3	242	242	180	25	20	318	318	190	40	30	356	356	240	55	45
100	4	292	292	195	40	30	356	356	220	55	40	432	432	280	90	70
125	5	330	330	215	60	50	400	400	250	85	65	508	508	300	150	110
150	6	356	356	240	70	60	445	445	280	110	85	559	559	325	195	145
200	8	496	496	290	120	100	533	533	345	205	160	660	660	425	385	310
250	10	623	623	360	195	160	623	623	415	320	255	787	787	475	580	505
300	12	699	699	425	290	275	711	711	485	460	370	838	838	505	785	680
350	14	788	788	490	365	320	838	838	560	645	530	889	889	605	990	870
400	16	864	864	520	520	470	864	864	550	675	650	991	991	660	1370	1250
450	18	978	978	545	610	535	978	978	590	975	840	1092	1092	655	1750	1530
500	20	978	978	635	800	730	1016	1016	680	1290	1000	1194	1194	840	2360	2035
550	22	-	1067	680	-	950	-	1118	710	-	1450	-	1295	930	-	2500
600	24	1295	1295	715	1220	1120	1346	1346	760	2080	1900	1397	1397	960	3820	3200
650	26	1295	1295	740	*	1510	1346	1346	800	*	2100	1448	1448	1000	*	4070
700	28	1448	1448	760	*	1750	1499	1499	970	*	3450	1600	1600	1050	*	4950
750	30	1524	1524	840	*	2490	1594	1594	970	*	3580	1651	1651	1080	*	5200
800	32	1676	1676	880	*	2860	1787	1787	1020	*	4200	1787	1787	1180	*	6300
850	34	1829	1829	910	*	3230	1905	1905	1070	*	4830	1905	1905	1280	*	7400
900	36	1956	1956	950	*	3600	2083	2083	1120	*	5450	2083	2083	1380	*	8500
950	38	-	-	-	*	-	-	-	-	*	-	-	-	-	*	-
1000	40	2006	2006	1040	*	4470	2134	2134	1250	*	7580	2318	2318	1460	*	11165
1050	42	2038	2038	1090	*	4900	2159	2159	1290	*	8125	2438	2438	1500	*	12500
1100	44	-	-	-	*	-	-	-	-	*	-	-	-	-	*	-
1150	46	-	-	-	*	-	-	-	-	*	-	-	-	-	*	-
1200	48	2134	2134	1210	*	6200	2235	2235	1380	*	9750	2540	2540	1610	*	16500

Sizes		ASME class 900 (Fig. VR 900 BB)					ASME class 1500 (Fig. VR 1500 BB)					ASME class 2500 (Fig. VR 2500 BB)				
DN	NPS	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2
50	2	-	-	-	-	-	368	368	245	70	55	451	451	280	130	100
65	2½	-	-	-	-	-	419	419	295	105	75	508	508	360	210	150
80	3	381	381	260	90	70	470	470	300	135	85	578	578	360	250	190
100	4	457	457	315	155	125	546	546	345	220	175	673	673	415	370	285
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	610	610	400	300	250	705	705	490	545	430	914	914	605	1050	780
200	8	737	737	485	570	430	832	832	565	890	720	1022	1022	725	1800	1410
250	10	838	838	540	780	635	991	991	660	1510	1080	1270	1270	875	2800	2000
300	12	965	965	610	1150	950	1130	1130	765	2230	1767	1422	1422	925	3950	2900
350	14	1029	1029	690	1560	1350	1257	1257	880	3200	2500	-	-	-	-	-
400	16	1130	1130	660	1750	1500	1384	1384	830	3700	3050	-	-	-	-	-
450	18	1219	1219	670	2300	2000	1537	1537	880	5280	4250	-	-	-	-	-
500	20	1321	1321	700	2540	2150	1664	1664	920	6850	5500	-	-	-	-	-
550	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24	1549	1549	925	5000	4500	1943	1943	1000	10000	8000	-	-	-	-	-

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## BOLTED BONNET CONFIGURATION



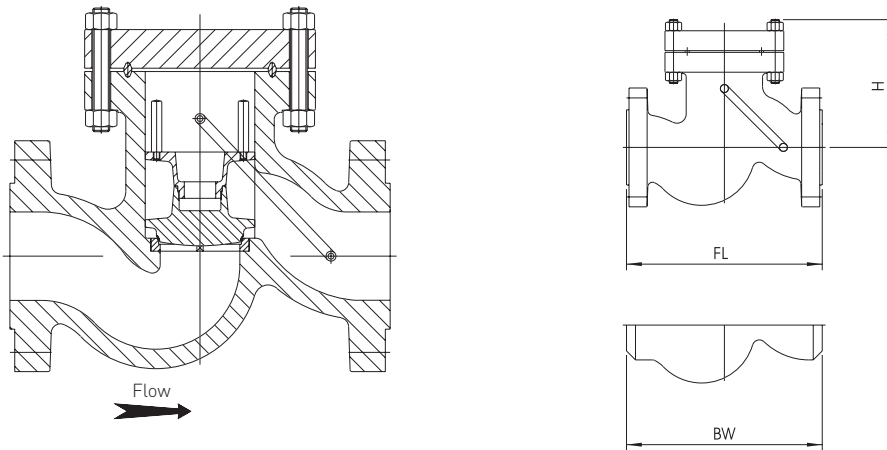
Sizes		ASME CLASS 600 (Fig. TD 600 BB)					ASME CLASS 900 (Fig. TD 900 BB)					ASME CLASS 1500 (Fig. TD 1500 BB)					ASME CLASS 2500 (Fig. TD 2500 BB)				
DN	NPS	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2
80	3	356	254	170	55	45	381	305	225	75	55	470	305	285	100	60	578	368	265	160	80
100	4	432	305	230	100	75	457	356	270	130	95	546	406	315	150	100	673	457	315	240	125
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	559	457	295	195	145	610	508	335	290	190	705	559	380	350	230	914	610	405	700	380
200	8	660	584	335	395	325	737	660	375	480	335	832	711	450	600	440	1022	762	545	1300	860
250	10	787	711	405	605	490	838	787	440	900	730	991	864	510	1600	1160	1270	914	590	2900	2075
300	12	838	813	465	795	645	965	914	490	1140	910	1130	991	615	1900	1300	1422	1041	710	3170	2250
350	14	889	889	550	940	750	1029	991	530	1420	1020	1257	1067	750	2460	1680	-	1118	790	-	2550
400	16	991	991	595	1300	1085	1130	1092	570	1950	1650	1384	1194	870	2650	2080	-	1245	860	-	3750
450	18	1092	1092	580	1720	1460	1219	1143	690	2750	2240	1537	1346	970	3170	2740	-	1397	910	-	4500
500	20	1194	1194	545	1920	1600	1321	1245	740	2850	2250	1664	1473	1015	4870	3600	-	1524	975	-	5600
550	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24	1397	1397	645	2400	1950	1549	1397	980	3530	2540	1943	1752	1002	5300	3800	-	1676	1290	-	6000

### NOTES

1. All dimensions are in mm.
2. Sizes and classes larger than mentioned here are available: please consult supplier for more information.
3. W1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
4. W2 corresponds to weight in kilos for welding body style.

# FASANI CHECK VALVES

## BOLTED BONNET CONFIGURATION



Sizes		ASME class 150 (Fig. PC 150 BB)					ASME class 300 (Fig. PC 300 BB)					ASME class 600 (Fig. PC 600 BB)				
DN	NPS	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2
50	2	203	203	130	12	10	267	267	140	25	20	292	292	165	30	25
65	2½	216	216	150	20	15	292	292	170	30	25	330	330	190	40	30
80	3	242	242	150	25	20	318	318	180	45	35	356	356	220	50	40
100	4	292	292	180	40	30	356	356	220	70	55	432	432	265	105	90
125	5	356	356	230	60	50	400	400	250	95	85	508	508	280	160	130
150	6	407	407	235	75	70	445	445	260	110	90	559	559	290	185	140
200	8	496	496	260	130	110	559	559	310	235	210	660	660	360	380	305
250	10	623	623	310	245	210	623	623	370	345	310	787	787	510	585	480
300	12	699	699	370	340	270	711	711	400	480	445	838	838	510	840	690
350	14	788	788	425	520	415	825	825	430	695	655	-	-	-	-	-
400	16	915	915	460	665	625	953	953	460	920	865	-	-	-	-	-
450	18	940	940	475	830	775	978	978	480	1025	945	-	-	-	-	-
500	20	978	978	495	1000	935	1016	1016	500	1160	1015	-	-	-	-	-
550	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24	1296	1296	540	1360	1265	-	-	-	-	-	-	-	-	-	-

Sizes		ASME class 900 (Fig. PC 900 BB)					ASME class 1500 (Fig. PC 1500 BB)					ASME class 2500 (Fig. PC 2500 BB)				
DN	NPS	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2
50	2	-	-	-	-	-	368	368	235	75	60	451	451	355	150	145
65	2½	-	-	-	-	-	419	419	280	110	90	508	508	330	280	235
80	3	381	381	260	105	90	470	470	290	145	120	578	578	410	335	290
100	4	457	457	290	160	130	546	546	320	205	180	673	673	440	465	400
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	610	610	400	365	320	705	705	345	470	375	914	914	515	960	710
200	8	737	737	490	720	545	832	832	545	935	760	1022	1022	600	1425	930
250	10	838	838	550	1120	910	991	991	630	1400	1175	1270	1270	680	2000	1280
300	12	965	965	610	1720	1520	1130	1130	710	2080	1840	1422	1422	760	2610	1455
350	14	1029	1029	670	2120	1705	-	-	-	-	-	-	-	-	-	-
400	16	1130	1130	730	2640	1960	-	-	-	-	-	-	-	-	-	-
450	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
550	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### NOTES

1. All dimensions are in mm.
2. Sizes and classes larger than mentioned here are available: please consult supplier for more information.
3. W1 corresponds to weight in kilos for flanged body style.
4. W2 corresponds to weight in kilos for welding body style.

# FASANI CHECK VALVES

## CRYOGENIC CONFIGURATION

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### FEATURES

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The Fasani cryogenic valves face the harsh conditions of services involving temperatures down to  $-254^{\circ}\text{C}$ .

- Body in a range of materials suitable for extremely low temperatures, such as CF8M, CF8 and other very low temperature steels.
- Connections are offered as flanged or special.
- All cryogenic valves are designed in full compliance with ASME B16.34 and BS 6364.
- The cryogenic tests are performed in the fully equipped in-house Fasani facilities, according to BS 6364 and all major oil and gas cryogenic test procedures.
- Seats are welded in.

### TECHNICAL DATA

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Sizes: DN 50 to 600 and larger  
Temperature ( $^{\circ}\text{C}$ ): As low as  $-254$   
Pressure ratings: From ASME Class 150 to 900  
Body materials: CF8M, CF8 and other low temperature steels

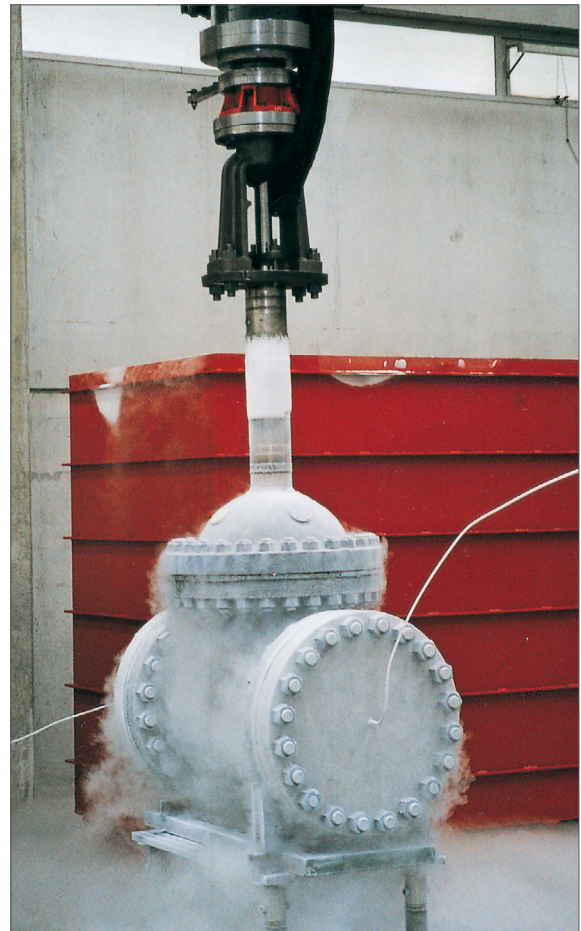
#### Connections standards

Flanges: ASME B16.5  
Buttweld: ASME B16.25

### GENERAL APPLICATION

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The cryogenic valves are widely installed on applications involving media at extremely low temperatures, such as the production, storage and transportation of liquefied natural gas, hydrogen, oxygen, etc.

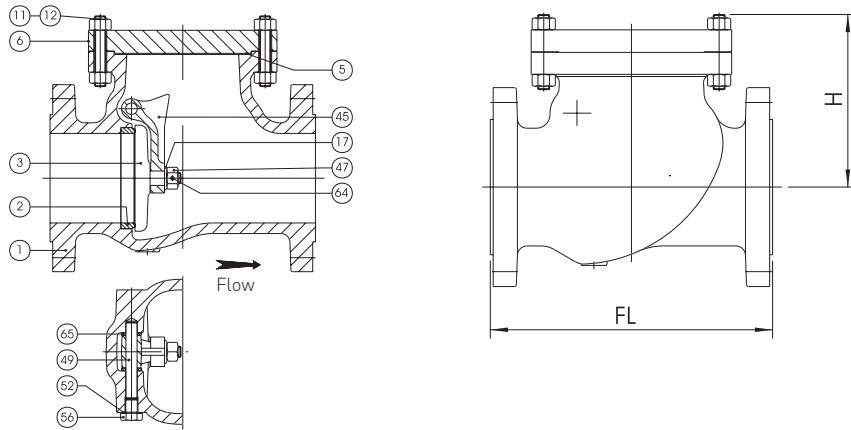


# FASANI CHECK VALVES

## CRYOGENIC CONFIGURATION

### MATERIAL SELECTION

Item	Description	Body in CF8	Body in CF8M
1	Body	A351 CF8	A351 CF8M
2	Seat ring	A182 F316	A182 F316
3	Disc	A351 CF8	A351 CF8M
5	Gasket	Spiral wound 316/Graphite	Spiral wound 316/Graphite
6	Bonnet	A351 CF8	A351 CF8M
11	Body - bonnet bolt	A320 B8	A320 B8M
12	Body - bonnet nut	A194 8	A194 8
17	Washer	A182 F316	A182 F316
45	Hinge	A351 CF8	A351 CF8M
47	Nut	A194 8	A194 8
49	Hinge pin	A182 F304	A182 F316
52	Pin gasket	Flexible graphite	Flexible graphite
56	Hinge pin plug	A320 B8	A320 B8M
64	Split pin	Stainless steel	Stainless steel
65	Spacer ring	A182 F316	A182 F316



### NOTES

1. All dimensions are in mm.
2. Swing check valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
3. "W" corresponds to weight in kilos (flanged body style).

Sizes		ASME class 150 (Fig. VRC 150 BB)			ASME class 300 (Fig. VRC 300 BB)			ASME class 600 (Fig. VRC 600 BB)			ASME class 900 (Fig. VRC 900 BB)		
DN	NPS	FL	H	W	FL	H	W	FL	H	W	FL	H	W
50	2	203	140	15	267	150	20	292	200	30	-	-	-
65	2½	216	160	20	292	170	30	330	220	35	-	-	-
80	3	242	180	25	318	190	40	356	240	55	381	260	90
100	4	292	195	40	356	220	55	432	280	90	457	315	155
125	5	330	215	60	400	250	85	508	300	150	-	-	-
150	6	356	240	70	445	280	110	559	325	195	610	400	300
200	8	496	290	120	559	345	205	660	425	385	737	485	570
250	10	623	360	195	623	415	320	787	475	580	838	540	780
300	12	699	425	290	711	485	460	838	505	785	965	610	1150
350	14	788	490	365	838	560	645	889	605	990	1029	690	1560
400	16	864	520	520	864	550	675	991	660	1370	1130	660	1750
450	18	978	545	610	978	590	975	1092	655	1750	1219	670	2300
500	20	978	635	800	1016	680	1290	1194	840	2360	1321	700	2540
550	22	-	680	-	-	710	-	-	930	-	-	-	-
600	24	1295	715	1220	1346	760	2080	1397	960	3820	1549	925	5000

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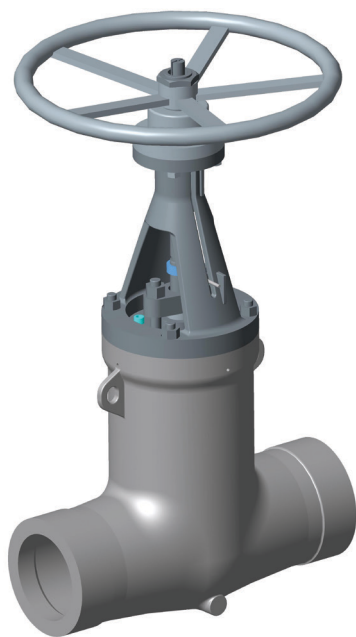
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## SEMPPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A WEDGE GATE AND PARALLEL SLIDE

A series of robust gate valves specifically designed for applications in the power industry



### FEATURES

- A range of compact pressure seal gate valves designed according to ASME B16.34.
- All range is offered in four standard cast materials: WCB (generally used on feed water lines), WC6 and WC9 (both used on steam lines), C12A (proposed for high temp. applications).
- End to end dimensions as per ASME B16.10 short pattern.
- Available in wedge gate and parallel slide configurations.
- Seats are welded in.
- Position indicator is offered as standard.
- Stellite® gr. 6 overlay on seat and wedge or disc; Stellite® gr. 21 overlay on backseat.
- Pressure seal gasket has trapezoidal shape for a low load on bolting, and is supplied in graphite with integral stainless steel anti-extrusion protection.
- Standard ISO top mounting for easy assembly of any type of actuator or bevel gear.
- Available options: wedge vent hole or overpressure pipe, by-pass, limit switch in open or closed position.
- Valves are offered as standard with manual operators (Hand wheel or bevel gear depending on size). Actuated options such as electric, pneumatic or hydraulic are available.

### GENERAL APPLICATION

Our pressure seal - Style A gate valves are recommended for several applications in the power industry, in particular in feed water lines, steam lines, and in services which involve high temperatures media.

### TECHNICAL DATA

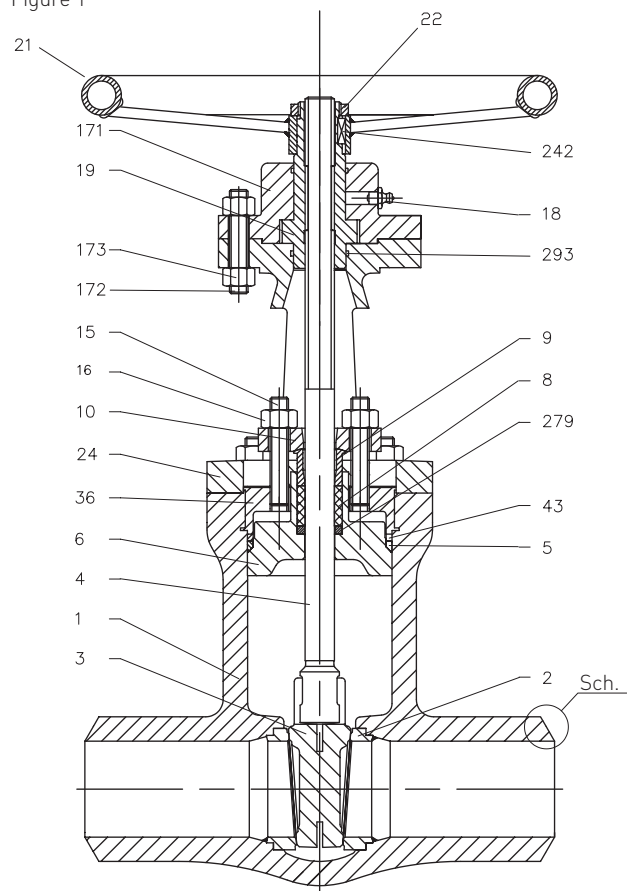
Sizes:	DN 50-600 (NPS 2-24)
Temperature [°C]:	-46 to +650
Pressure ratings:	ASME Class 900, 1500 and 2500
Body materials:	A216 WCB, A217 WC6, A217 WC9, A217 C12A
Connections standards:	Butt Welded according to ASME B16.25 Flanged Ends available upon request

# SEPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A

## WEDGE GATE AND PARALLEL SLIDE

### WEDGE GATE CONFIGURATION

Figure 1



### PARALLEL SLIDE CONFIGURATION

Figure 2

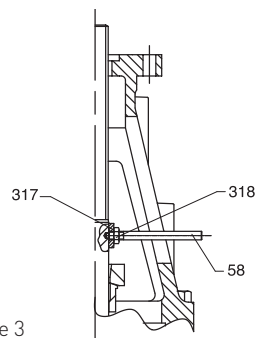
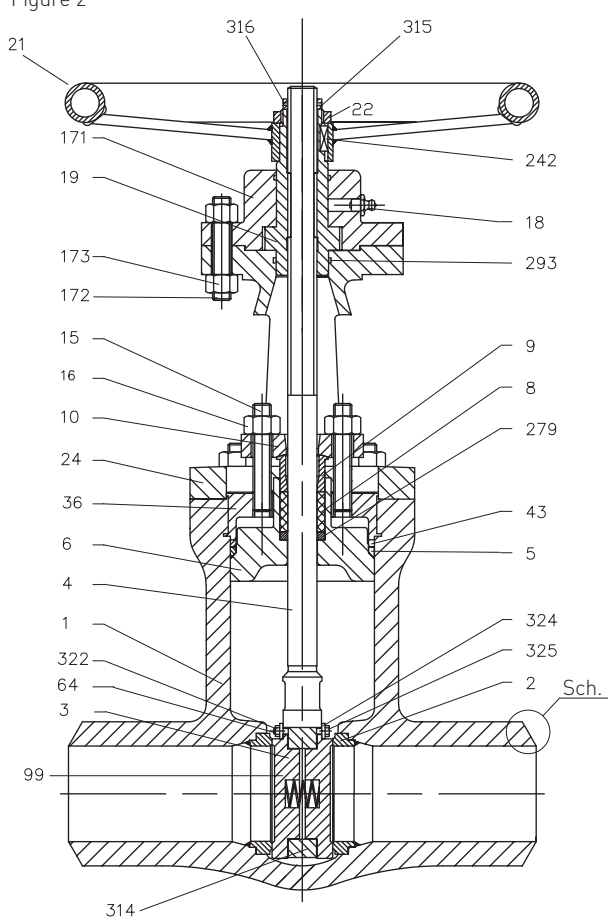


Figure 3

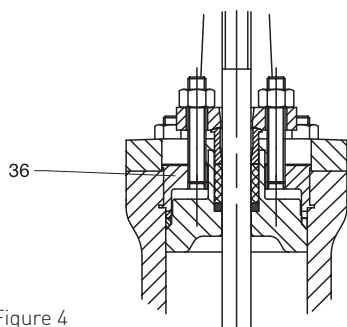


Figure 4

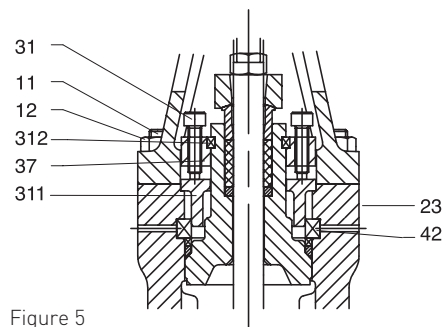


Figure 5

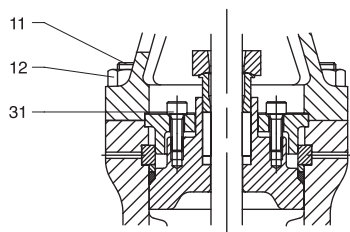


Figure 6

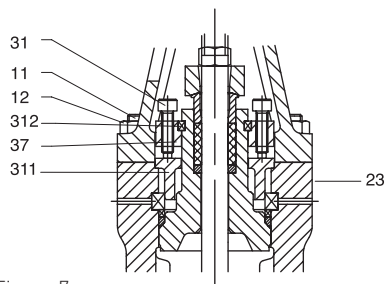


Figure 7

### NOTES

1. Fig. 4 is applicable for NPS 2 and 2½ only.
2. Fig. 5 is applicable for NPS 3 only.
3. Fig. 6 is applicable for NPS 4 to 24 (ASME cl. 900 and 1500) and for NPS 12 to 24 (ASME cl. 2500).
4. Fig. 7 is applicable for NPS 4 to 10 (ASME cl. 2500).

# SEPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A

## WEDGE GATE AND PARALLEL SLIDE

### MATERIAL SPECIFICATION

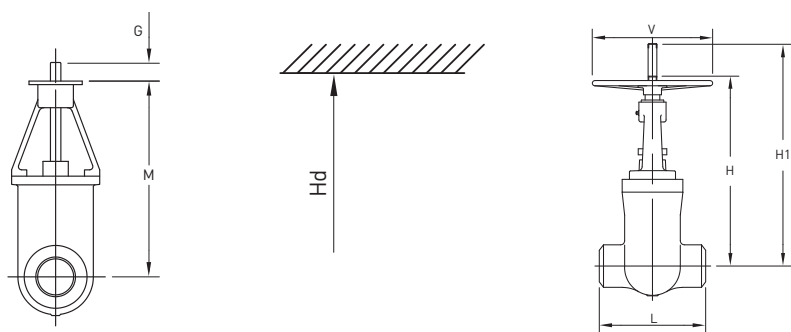
Item	Description	Body mat.: WCB	Body mat.: WC6	Body mat.: WC9	Body mat. C12A
1	Body	A 216 WCB	A 217 WC6	A 217 WC9	A217 C12A
2	Seat <sup>[1]</sup>	A 105 + Stellite gr. 6	A 182 F22 + Stellite gr. 6	A 182 F22 + Stellite gr. 6	A182 F91/St 12
3	Wedge <sup>[2]</sup> (for wedge gate conf.)	A 216 WCB + Stellite gr. 6	A 217 WC9 + Stellite gr. 6	A 217 WC9 + Stellite gr. 6	A217 C12A/St 6
3	Disc <sup>[2]</sup> (for parallel slide conf.)	A 105 + Stellite gr. 6	A 182 F22 + Stellite gr. 6	A 182 F22 + Stellite gr. 6	A182 F91/St 6
4	Stem	A 182 F6a Cl 2	A 565 gr 616HT	A 565 gr 616HT	A565 Gr 616HT
5	Gasket	316 reinforced graphite	316 reinforced graphite	316 reinforced graphite	Graphite/316
6	Bonnet	A 105 + Stellite gr. 21	A 182 F22 + Stellite gr. 21	A 182 F22 + Stellite gr. 21	A182 F91/St 21
8	Packing	Graphite	Graphite	Graphite	Graphite/Carbographite
9	Gland	A 182 F6a Cl 2	A 182 F6a Cl 2	A 182 F6a Cl 2	A182 F6a Cl2
10	Gland flange	A 516 gr 70	A 516 gr 70	A 516 gr 70	A240 Tp 316-316L
11	Body-yoke bolts	A 193 B7	A 193 B7	A 193 B16	A193 B16
12	Body-yoke nuts	A 194 2H	A 194 2H	A 194 4	A194 Gr 4
15	Gland bolts	A 193 B7	A 193 B7	A 193 B16	A193 B16
16	Gland nuts	A 194 2H	A 194 2H	A 194 4	A194 Gr 4
18	Lubricator	Carbon steel	Carbon steel	Carbon steel	Carbon steel
19	Yoke sleeve	A 763 Gr A	A 763 Gr A	A 763 Gr A	A763 Gr.A
21	Handwheel	Carbon steel	Carbon steel	Carbon steel	Carbon steel
22	Handwheel nut	A 105	A 105	A 105	A105
23	Name plate	Stainless steel	Stainless steel	Stainless steel	Stainless steel
24	Yoke	A 216 WCB	A 216 WCB	A 216 WCB	A216 WCB
31	Bonnet screw	A 193 B7	A 193 B16	A 193 B16	A193 B16
36	Bonnet retaining ring <sup>[3]</sup>	A 105	A 182 F22	A 182 F22	A182 F22
37	Gland bolts flange <sup>[4]</sup>	A 105	A 105	A 105	A105
42	Segment ring <sup>[5]</sup>	A 182 F22	A 182 F22	A 182 F22	A182 F91
43	Intermedia thrust ring	A 182 F22	A 182 F22	A 182 F22	A182 F6a Cl2
58	Position indicator	A 105	A 105	A 105	A182 F6a Cl2
64	Split pin	Stainless steel	Stainless steel	Stainless steel	Stainless steel
99	Spring	Inconel 718	Inconel 718	Inconel 718	UNS N07718
171	Bearings housing	A 105	A 105	A 105	A105
172	Coupling bolts	A 193 B7	A 193 B7	A 193 B7	A193 Gr.B7
173	Coupling nuts	A 194 2H	A 194 2H	A 194 2H	A194 Gr.2H
242	Key	Key steel	Key steel	Key steel	Key steel
279	Bottom ring	A 182 F6a Cl 2	A 182 F6a Cl 2	A 182 F6a Cl 2	A182 F6a Cl2
293	O-ring	FKM 70 sh	FKM 70 sh	FKM 70 sh	FKM70 sh
311	Retaining ring <sup>[6]</sup>	A 105	A 105	A 105	A105
312	Two half ring <sup>[7]</sup>	A 182 F6a Cl 2	A 182 F6a Cl 2	A 182 F6a Cl 2	A182 F6a Cl2
314	Anchor	A 216 WCB	A 217 WC9	A 217 WC9	A217 C12A
315	Stop ring	A 182 F6a Cl 2	A 182 F6a Cl 2	A 182 F6a Cl 2	A182 F6a Cl2
316	Pin	Stainless steel	Stainless steel	Stainless steel	A182 F316-F316L
317	Ring	A 105	A 105	A 105	A182 F6a Cl2
318	Nut	A 194 2H	A 194 2H	A 194 2H	A194 Gr 8
322	Nut	A 194 8	A 194 8	A 194 8	A194 Gr 8
324	Bushing	A 182 F6a Cl 2	A 182 F6a Cl 2	A 182 F6a Cl 2	A182 F6a Cl2
325	Screw	A 193 B8	A 193 B8	A 193 B8	A193 B8

### NOTES

1. Seats are welded in.
2. Flexible.
3. Applicable for NPS 2 and 2½ only (ASME class 900-1500-2500).
4. Applicable for NPS 3 only (ASME class 900 and 1500); from NPS 2 to 10 (ASME class 2500).
6. Applicable for NPS 3 to 24 (ASME class 900 and 1500).
7. Applicable for NPS 3 (ASME class 900 and 1500); from NPS 2 to 10 (ASME class 2500).

# SEPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A

## WEDGE GATE AND PARALLEL SLIDE



### DIMENSIONS AND WEIGHTS ASME CLASS 900

Size NPS	G	M	L	Hd	H	H1	V	V1	Z	K	X	Top flange	Travel		Weight (bare shaft)
													(n° turns ± 1)	Travel (mm)	
2	140	395	216	760	535	600	200	-	-	-	-	F10	15	63	38
2½	140	395	254	760	535	600	200	-	-	-	-	F10	15	63	50
3	140	480	305	890	620	695	250	-	-	-	-	F10	18	76	55
4	150	520	356	960	665	765	300	-	-	-	-	F10	19	97	70
6	170	750	508	1335	-	-	-	600	350	840	1175	F14	22.5	142	175
8	180	870	660	1510	-	-	-	800	350	960	1295	F14	29.5	186	295
10	205	975	787	1725	-	-	-	800	430	1075	1435	F16	36.5	230	485
12	215	1130	914	1985	-	-	-	800	430	1230	1690	F25	43	273	795
14	230	1315	991	2260	-	-	-	800	550	1430	2000	F30	37	311	940
16	250	1465	1092	2515	-	-	-	800	550	1605	2150	F30	41	345	1240
18	250	1600	1143	2725	-	-	-	800	550	1745	2285	F35	46.5	391	1640
20	300	1740	1245	3005	-	-	-	800	430	2110	2495	F35	52	438	2150
24	305	2060	1397	3510	-	-	-	800	465	2480	2955	F40	41	517	2800

### DIMENSIONS AND WEIGHTS ASME CLASS 1500

Size NPS	G	M	L	Hd	H	H1	V	V1	Z	K	X	Top flange	Travel		Weight (bare shaft)
													(n° turns ± 1)	Travel (mm)	
2	140	395	216	760	535	600	200	-	-	-	-	F10	15	63	38
2½	140	395	254	760	535	600	200	-	-	-	-	F10	15	63	50
3	140	480	305	890	620	695	250	-	-	-	-	F10	18	76	55
4	150	515	406	955	665	765	350	-	-	-	-	F14	19	95	95
6	175	745	559	1325	-	-	-	800	350	835	1170	F14	22	137	210
8	210	915	711	1630	-	-	-	800	430	1015	1375	F16	28.5	179	425
10	240	1030	864	1870	-	-	-	800	550	1150	1690	F25	26	220	735
12	245	1155	991	2085	-	-	-	800	550	1300	1840	F30	31	260	1160
14	245	1340	1067	2340	-	-	-	800	570	1485	2010	F35	34.5	291	1300
16	255	1465	1194	2540	-	-	-	800	430	1835	2120	F35	38.5	324	1750
18	255	1670	1346	2860	-	-	-	800	430	2040	2325	F35	30	376	2510
20	300	1840	1473	3165	-	-	-	800	465	2260	2635	F40	33	418	3350
24	300	2105	1943	3610	-	-	-	800	510	2530	3010	F48	39	490	4500

### DIMENSIONS AND WEIGHTS ASME CLASS 2500

Size NPS	G	M	L	Hd	H	H1	V	V1	Z	K	X	Top flange	Travel		Weight (bare shaft)
													(n° turns ± 1)	Travel (mm)	
2	140	385	279	780	530	585	200	-	-	-	-	F10	13	55	40
2½	140	385	330	820	530	585	200	-	-	-	-	F10	13	55	50
3	155	455	368	880	610	675	250	-	-	-	-	F10	15	63	60
4	155	500	457	930	-	-	-	600	350	590	830	F14	15	75	110
6	175	755	610	1300	-	-	-	800	350	845	1180	F16	18.5	117	285
8	205	915	762	1700	-	-	-	800	430	1015	1375	F16	24	152	515
10	245	1110	914	2300	-	-	-	800	550	1250	1795	F30	23	191	1065
12	260	1205	1041	2300	-	-	-	800	570	1350	1890	F35	27	225	1655
14	255	1300	1118	2480	-	-	-	800	430	1670	1860	F35	29	245	1790
16	300	1515	1245	2840	-	-	-	800	465	1940	2210	F40	23	285	2550
18	300	1620	1397	3040	-	-	-	800	465	2040	2315	F40	25.5	319	3450
20	300	1770	1524	3270	-	-	-	800	510	2200	2670	F48	28	351	4650
24	390	2040	1676	3870	-	-	-	800	605	2550	3025	F60	33	420	6300

# SEMPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A

## WEDGE GATE AND PARALLEL SLIDE

Standard ISO top mounting for easy assembly of any type of actuator or bevel gear

Pressure seal gasket developed with trapezoidal shape in graphite with integral stainless steel anti extrusion protection, for a low load on bolting

Backseats, for easy maintenance without interrupting production time

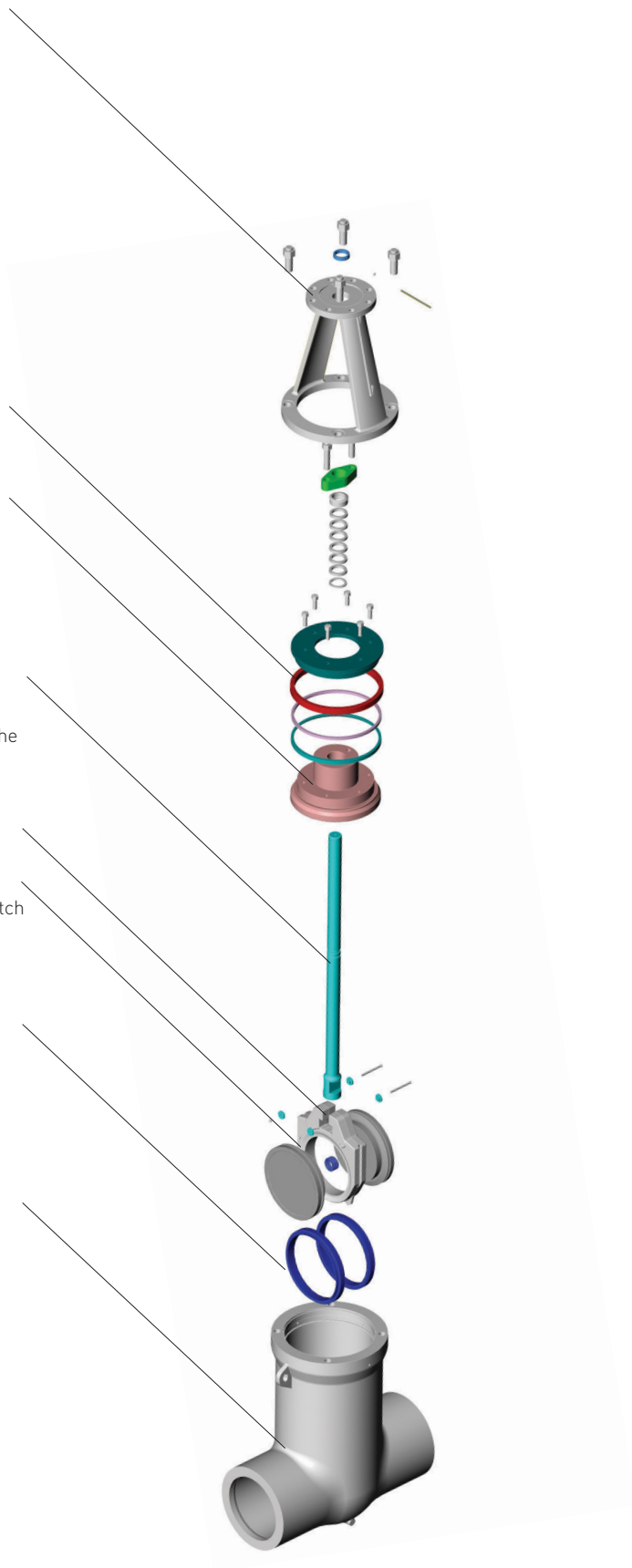
Rising stem - provides unrestricted flow with the disc completely outside the flow path

Integral T-head stem connection to the wedge - provides positive connection between stem and disc during all operating conditions.

Wedge guiding in the body for all the valve stroke - to ensure alignment of the disc with the seats, avoiding scratch or incorrect positioning

Renewable seats - for a simplified seats replacement

Bi-directional, except for the one equipped with by-pass and/or over pressure pipe



# SEPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A

## WEDGE GATE AND PARALLEL SLIDE

### 900 RATING CLASS (ASME B16.34)

ASTM body material cast	ASME code B16.34	Pressure in bar at temperature °C																				
		-29°																				
		to 38°	50	100	150	200	250	300	325	350	375	400	425	450	475	500	538	550	575	600	625	650
WCB ***	Std.*	153.2	150.4	139.8	135.2	131.4	125.8	119.5	116.1	112.7	109.1	104.2	86.3	69.0	52.3	35.3	17.7	-	-	-	-	-
WCB ***	Spec.**	155.1	155.1	154.9	153.1	151.7	151.6	151.6	150.3	146.7	141.3	130.2	107.9	86.3	65.4	44.1	22.2	-	-	-	-	-
WC6 ****	Std.*	155.1	155.1	154.4	149.2	143.9	139.0	128.6	124.0	120.7	116.5	109.8	105.1	101.4	95.1	77.2	44.7	38.1	26.4	18.3	12.8	8.5
WC6 ****	Spec.**	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	154.3	151.5	150.6	148.9	141.4	128.2	96.5	55.8	47.7	33.0	22.9	16.0	10.6
WC9 *****	Std.*	155.1	155.1	154.6	150.6	145.8	139.0	128.6	124.0	120.7	116.5	109.8	105.1	101.4	95.1	84.7	55.3	46.9	31.6	20.7	13.4	8.5
WC9 *****	Spec.**	155.1	155.1	154.9	152.9	150.7	149.9	149.3	148.8	147.6	146.3	146.3	141.4	128.2	107.1	69.1	58.6	39.5	25.8	16.7	10.6	10.6
C12A	Std.*	155.1	155.1	154.6	150.6	145.8	139.0	128.6	124.0	120.7	116.5	109.8	105.1	101.4	95.1	84.7	75.2	74.8	71.8	58.5	43.8	29.8
C12A	Spec.**	155.1	155.1	155.1	155.1	155.1	155.1	155.1	155.1	154.3	151.5	150.6	148.9	141.4	128.2	107.1	86.9	86.9	85.7	73.1	54.8	37.2

### 1500 RATING CLASS (ASME B16.34)

ASTM body material cast	ASME code B16.34	Pressure in bar at temperature °C																				
		-29°																				
		to 38°	50	100	150	200	250	300	325	350	375	400	425	450	475	500	538	550	575	600	625	650
WCB ***	Std.*	255.3	250.6	233.0	225.4	219.0	209.7	199.1	193.6	187.8	181.8	173.6	143.8	115.0	87.2	58.8	29.5	-	-	-	-	-
WCB ***	Spec.**	258.6	258.6	258.2	255.2	252.9	252.6	252.6	250.6	244.6	235.5	217.0	179.8	143.8	109.0	73.5	36.9	-	-	-	-	-
WC6 ****	Std.*	258.6	259.0	257.4	248.7	239.8	231.8	214.4	206.6	201.1	194.1	183.1	175.1	169.0	158.2	128.6	74.5	63.5	44.0	30.5	21.3	14.2
WC6 ****	Spec.**	258.6	258.6	258.6	258.6	258.6	258.6	258.6	258.6	257.1	252.5	251.2	248.2	235.8	213.7	160.8	93.1	79.4	55.0	38.2	26.6	17.7
WC9 *****	Std.*	258.6	258.6	257.6	250.8	243.4	231.8	214.4	206.6	201.1	194.1	183.1	175.1	169.0	158.2	140.9	92.2	78.2	52.6	34.4	22.3	14.2
WC9 *****	Spec.**	258.6	258.6	258.1	254.8	251.1	249.9	248.9	248.0	246.0	243.8	243.8	243.8	235.8	213.7	178.6	115.2	97.7	65.8	43.0	27.9	17.7
C12A	Std.*	258.6	258.6	257.6	250.8	243.4	231.8	214.4	206.6	201.1	194.1	183.1	175.1	169.0	158.2	140.9	125.5	124.9	119.7	97.5	73.0	49.6
C12A	Spec.**	258.6	258.6	258.6	258.6	258.6	258.6	258.6	258.6	257.1	252.5	251.2	248.2	235.8	213.7	178.6	145.1	145.1	143.0	121.9	91.3	62.1

### 2500 RATING CLASS (ASME B16.34)

ASTM body material cast	ASME code B16.34	Pressure in bar at temperature °C																				
		-29°																				
		to 38°	50	100	150	200	250	300	325	350	375	400	425	450	475	500	538	550	575	600	625	650
WCB ***	Std.*	425.5	417.7	388.3	375.6	365.0	349.5	331.8	322.6	313.0	303.1	289.3	239.7	191.7	145.3	97.9	49.2	-	-	-	-	-
WCB ***	Spec.**	430.9	430.9	430.3	425.3	421.4	421.1	421.1	417.6	407.6	392.5	361.7	299.6	239.6	181.6	122.4	61.6	-	-	-	-	-
WC6 ****	Std.*	430.9	430.9	429.0	414.5	399.6	386.2	357.1	344.3	335.3	323.2	304.9	291.6	281.8	263.9	214.4	124.1	105.9	73.4	50.9	35.5	23.6
WC6 ****	Spec.**	430.9	430.9	430.9	430.9	430.9	430.9	430.9	430.9	428.6	420.9	418.3	413.7	393.1	356.3	268.0	155.1	132.4	91.7	63.6	44.4	29.5
WC9 *****	Std.*	430.9	430.9	429.4	418.2	405.4	386.2	357.1	344.3	335.3	323.2	304.9	291.6	281.8	263.9	235.0	153.7	130.3	87.7	57.4	37.2	23.6
WC9 *****	Spec.**	430.9	430.9	430.2	424.6	418.5	416.5	414.8	413.3	410.0	406.3	406.3	406.3	393.1	356.3	297.5	192.1	162.8	109.7	71.7	46.5	29.5
C12A	Std.*	430.9	430.9	429.4	418.2	405.4	386.2	357.1	344.3	335.3	323.2	304.9	291.6	281.8	263.9	235.0	208.9	208.0	199.5	162.5	121.7	82.7
C12A	Spec.**	430.9	430.9	430.9	430.9	430.9	430.9	430.9	430.9	428.6	420.9	418.3	413.7	393.1	356.3	297.5	241.7	241.7	238.3	203.1	152.1	103.4

#### NOTE:

\* Standard Class according to ASME B16.34

\*\* Special Class according to ASME B16.34

\*\*\* WCB Upon exposure to temperatures above 425 °C, the carbide phase of steel may be converted to graphite. Permissible but not recommended for prolonged usage above 425 °C.

\*\*\*\* WC6 Not to be used above 595 °C.

\*\*\*\*\* WC9 Permissible but not recommended for prolonged usage above 595 °C.

### FLOW COEFFICIENT Cv FOR WEDGE GATE VALVES

NPS	DN	ASME Class		
		900	1500	2500
2	50	170	170	110
2½	65	250	250	170
3	80	395	365	250
4	100	740	640	400
6	150	1670	1445	945
8	200	2860	2480	1685
10	250	4490	3930	2700
12	300	6405	5560	3810
14	350	7805	6690	4710
16	400	10230	8830	6210
18	450	13050	11210	7920
20	500	16145	14080	9615
22	550	19580	17130	11720
24	600	23435	20410	14040

### FLOW COEFFICIENT Cv FOR PARALLEL SEAT GATE VALVES

NPS	DN	ASME Class		
		900	1500	2500
2	50	145	145	95
2½	65	215	215	145
3	80	345	320	215
4	100	645	560	350
6	150	1465	1270	830
8	200	2515	2180	1480
10	250	3960	3465	2375
12	300	5660	4910	3365
14	350	6905	5920	4170
16	400	9065	7820	5505
18	450	11585	9945	7030
20	500	14350	12505	8545
22	550	17425	15230	10435
24	600	20870	18160	12510

# SEPELL FASANI PRESSURE SEAL CAST GATE VALVES - STYLE A

## WEDGE GATE AND PARALLEL SLIDE

Valve type	Old code	New uniqueness code
Flexible wedge	VS900PSA	1S0E*****
	VS1500PSA	1S0F*****
	VS2500PSA	1S0G*****
Parallel slide	VS900SPPSA	1P0E*****
	VS1500SPPSA	1P0F*****
	VS2500SPPSA	1P0G*****

### CODING GUIDE

Example:	1S	0	E	06	30	0	B3	H	A
<b>Valve type</b>									
1S	Gate - Flexible wedge								
1P	Gate - Parallel slide								
<b>Valve configuration</b>									
0	Basic								
<b>Valve rating</b>									
E	ASME 900								
F	ASME 1500								
G	ASME 2500								
<b>Nominal valve size</b>									
02	2"								
25	2½"								
03	3"								
KB	3"x2"x3"								
04	4"								
KC	4"x3"x4"								
06	6"								
K4	6"x4"x6"								
08	8"								
KF	8"x6"x8"								
10	10"								
AH	10"x8"x10"								
12	12"								
AL	12"x10"x12"								
14	14"								
AB	14"x12"x14"								
16	16"								
AD	16"x14"x16"								
18	18"								
AF	18"x16"x18"								
20	20"								
BH	20"x18"x20"								
22	22"								
BL	22"x20"x22"								
24	24"								
BB	24"x22"x24"								
<b>Body material</b>									
30	ASTM A216 WCB								
31	ASTM A216 WCC								
38	ASTM A217 C12A								
44	ASTM A217 WC6								
45	ASTM A217 WC9								
<b>Cladding</b>									
0	No cladding								
2	Sealing gasket area F316								
<b>Trim</b>									
B3	13% Cr. + 3 Stellite								
<b>Pipe connection</b>									
A	Flanged per ASME B16.5								
H	Weld end ASME B16.25								
J	Weld end EN 12267								
K	Weld end ISO 9692								
<b>Standard valve operation</b>									
A	Handwheel								
B	Bevel gear								
C	Bare shaft (Coupling type A)								
E	Bare shaft for linear actuator								

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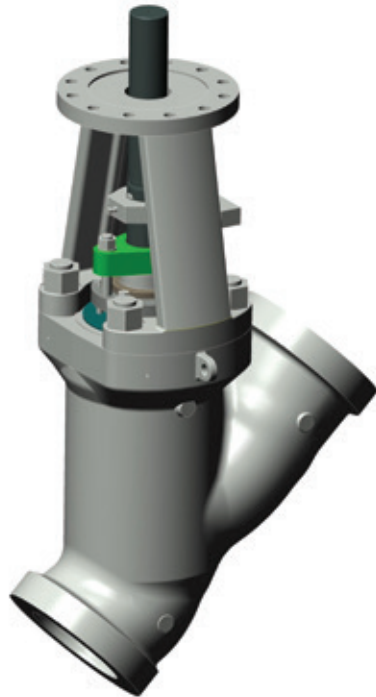
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**FASANI PRESSURE SEAL CAST GLOBE VALVES - STYLE B**  
Y AND T PATTERN

A wide range of globe valves specifically designed for high pressure and high temperature applications, where low pressure loss is required.



**FEATURES**

- A range of compact pressure seal globe valves designed according to ASME B16.34 with wall thickness according to API 600.
- All range is offered in all the material stated in the ASTM specifications (NACE compliance included), and designed to always guarantee the maximum safety and flow efficiency.
- Face to face dimensions as per ASME B16.10
- Available in Y and T pattern design (both also in Stop-Check configuration)
- Seat is welded-in
- Position indicator is offered as standard
- Stellite<sup>®</sup> gr.6 overlay on seat and disc; Stellite gr.21 overlay on bonnet.
- Standard ISO top mounting for easy assembly of any type of actuator or bevel gear
- Available options: parabolic disc, low emission packing, equalizing and overpressure pipe, limit switch in open or close position.
- Valves are offered as standard with manual operators (Hand wheel or bevel gear depending on size). Actuated options such as electric, pneumatic or hydraulic are available.

**GENERAL APPLICATION**

Our pressure seal globe valves are recommended for a wide range of very high pressures and temperature applications: steam, oil and gas processing, chemical and petrochemical industry and in the power industry.  
These valves are ideally suited in applications requiring tight shutoff.

**TECHNICAL DATA**

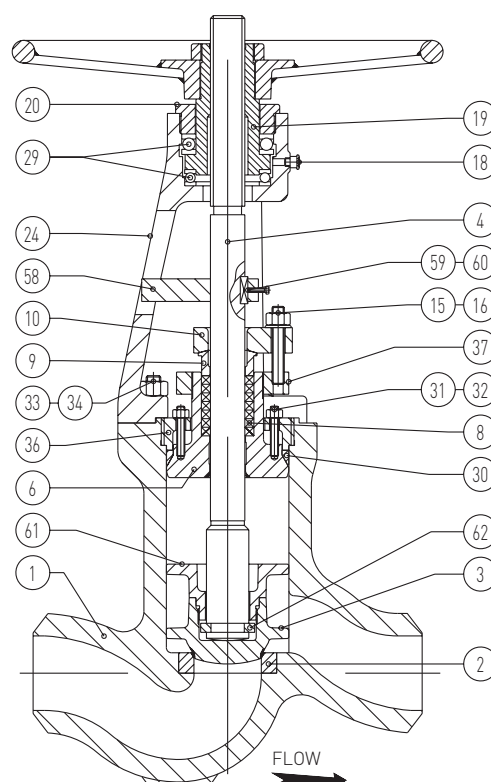
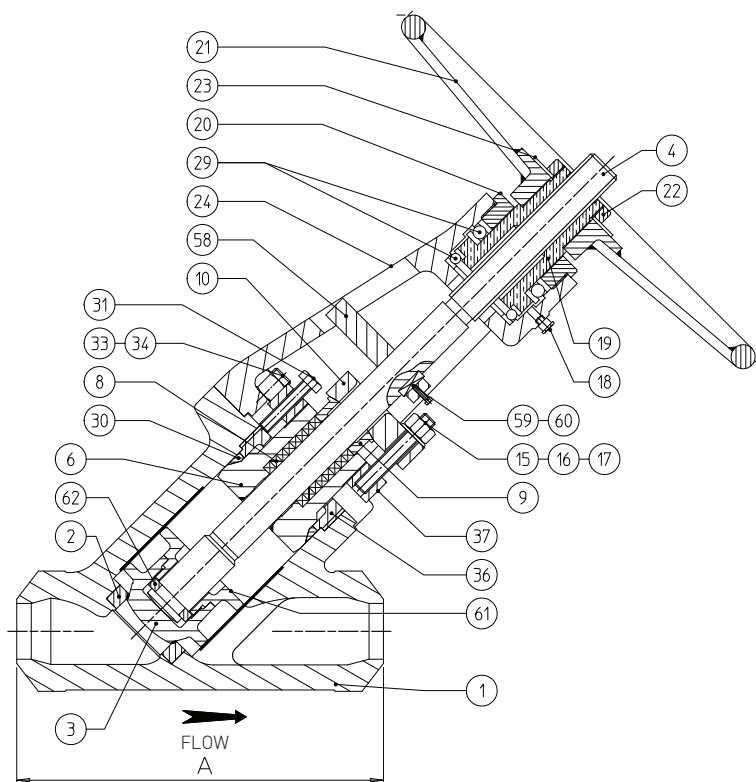
Sizes: DN 50 to 600 and larger (NPS 2-24)  
 Temperature (°C): -46 to + 650  
 Pressure ratings: ASME Class 1500 and 2500 for Y type  
 ASME Class 600, 900, 1500 and 2500 for T type  
 Body materials: All the cast materials stated in the ASTM spec.

**Connections standards**

Butt Weld according to ASME B16.25.  
 Flanged Ends available for T type only, according to ASME B16.5

# FASANI PRESSURE SEAL CAST GLOBE VALVES - STYLE B

## Y AND T PATTERN



### MATERIAL SELECTION

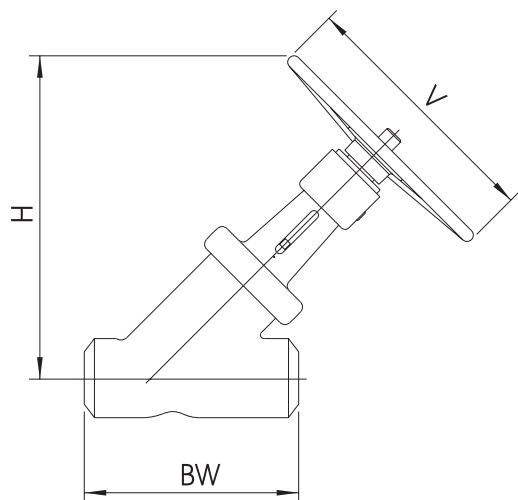
Item	Description	Body in WCB	Body in WC6	Body in CF8M
1	Body	A216 WCB	A217 WC6	A351 CF8M
2	Seat ring	A105 + Stellite	A182 F22 + Stellite	A182 F316 + Stellite
3	Disc	A216 WCB + Stellite	A182 F11 + Stellite	A182 F316 + Stellite
4	Stem	A565 gr. 616 HT	A565 gr. 616 HT	A182 F316 or Nitronic® 50 <sup>[2]</sup>
6	Bonnet	A105 + Stellite	A182 F11 + Stellite	A182 F316 + Stellite
8	Packing	Flexible graphite inner rings and suitable anti-extrusion rings		
9	Gland	A182 F6a	A182 F6a	A182 F316
10	Gland flange	A105 or A516 gr. 70	A105 or A516 gr. 70	A182 F316 or A240 Tp. 316
15	Gland bolt	A193 B7	A193 B7	A193 B8
16	Gland nut	A194 2H	A194 2H	A194 8
18	Lubricator	Steel	Steel	Steel
19	Yoke sleeve	A763 gr.A	A763 gr.A	A763 gr.A
20	Yoke nut bushing	A105	A105	A105
24	Yoke	A216 WCB	A216 WCB	A216 WCB
29	Bearings	Steel	Steel	Steel
30	P.S. gasket	Soft iron silver plated	Soft iron silver plated	A182 F316
31	Bolt	A193 B7	A193 B16	A193 B8
32	Nut	A194 2H	A194 4	A194 8
33	Body - yoke bolt	A193 B7	A193 B7	A193 B7
34	Body - Yoke nut	A194 2H	A194 2H	A194 2H
36	Bonnet retaining ring	A105	A182 F11	A182 F316
37	Gland retaining ring	A516 gr. 70	A516 gr. 70	A516 gr. 70
58	Position indicator	A516 gr. 70	A516 gr. 70	A516 gr. 70
59	Screw	A193 B7	A193 B7	A193 B7
60	Key	Steel	Steel	Steel
61	Disc guide	A105	A182 F11	A182 F316
62	Stem segmental rings	A182 F6a	A182 F6a	A182 F316

### NOTES

- Other materials are available on request.  
Please consult supplier.
- Depending on size.

# FASANI CAST HIGH PRESSURE GLOBE VALVES - STYLE B

PRESSURE SEAL CONFIGURATION  
"Y" pattern



Size		ASME class 1500 (Fig. VY 1500 PS)				Size		ASME class 2500 (Fig. VY 2500 PS)			
DN	NPS	BW	H	V	W2	DN	NPS	BW	H	V	W2
50	2	-	-	-	-	50	2	-	-	-	-
65	2½	-	-	-	-	65	2½	-	-	-	-
80	3	381	670	500	100	80	3	368	770	650	180
100	4	406	910	575	200	100	4	457	960	750	230
125	5	-	-	BGO	-	125	5	-	-	BGO	-
150	6	559	980	BGO	450	150	6	610	1000	BGO	560
200	8	711	1130	BGO	700	200	8	762	1150	BGO	825
250	10	864	1445	BGO	1150	250	10	914	1390	BGO	1370
300	12	991	1880	BGO	1690	300	12	1041	1520	BGO	1870
350	14	1067	2060	BGO	2170	350	14	1130	1600	BGO	2650
400	16	1194	2120	BGO	3320	400	16	1245	2000	BGO	3870
450	18	1473	2230	BGO	3720	450	18	1397	2000	BGO	4200
500	20	1676	2340	BGO	5370	500	20	1524	2260	BGO	5970
550	22	-	-	BGO	-	550	22	-	-	BGO	-
600	24	1727	2450	BGO	7200	600	24	1829	2800	BGO	8000

## NOTES

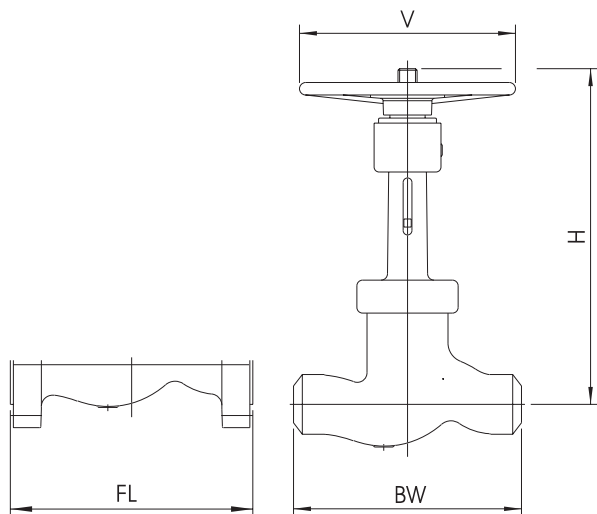
- All dimensions are in mm.
- Globe valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
- Dim. H corresponds to the height of valve in open position.
- BGO stands for "Bevel Gear Operator".
- W1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
- W2 corresponds to weight in kilos for welding body style.

# FASANI PRESSURE SEAL CAST GLOBE VALVES - STYLE B

## Y AND T PATTERN

### PRESSURE SEAL CONFIGURATION

"T" pattern



Size	DN	NPS	ASME class 900 (Fig. VD 900 PS)				ASME class 1500 (Fig. VD 1500 PS)				ASME class 2500 (Fig. VD 2500 PS)								
			FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2	FL	BW	H	V	W1
50	2	-	-	-	-	-	-	368	368	580	400	80	60	451	451	750	500	130	120
65	2½	-	-	-	-	-	-	419	419	690	500	120	95	508	508	770	575	200	150
80	3	381	381	605	500	95	80	470	470	710	500	145	120	578	578	805	650	275	190
100	4	457	457	820	575	180	140	546	546	785	575	230	175	673	673	965	750	510	325
125	5	-	-	-	-	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-
150	6	610	610	1050	750	375	315	705	705	1030	BGO	470	435	914	914	1020	BGO	950	665
200	8	737	737	1310	BGO	640	495	832	832	1250	BGO	1090	930	1022	1022	1125	BGO	1400	910
250	10	838	838	1465	BGO	1100	885	991	991	1400	BGO	1480	1200	1270	1270	1380	BGO	1950	1250
300	12	965	965	1640	BGO	1680	1395	1130	1130	1570	BGO	2200	1670	1422	1041	1590	BGO	2560	1430

### NOTES

1. All dimensions are in mm.
2. Globe valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
3. Dim. H corresponds to the height of valve in open position.
4. BGO stands for "Bevel Gear Operator".
5. W1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
6. W2 corresponds to weight in kilos for welding body style.

# FASANI PRESSURE SEAL CAST GLOBE VALVES - STYLE B

## Y AND T PATTERN

Standard ISO top mounting for easy assembly of any type of actuator or bevel gear

The pressure seal gasket between body and bonnet provides a strong sealing force. It is in fact first under bolting pre-load pressure, and then under line pressure

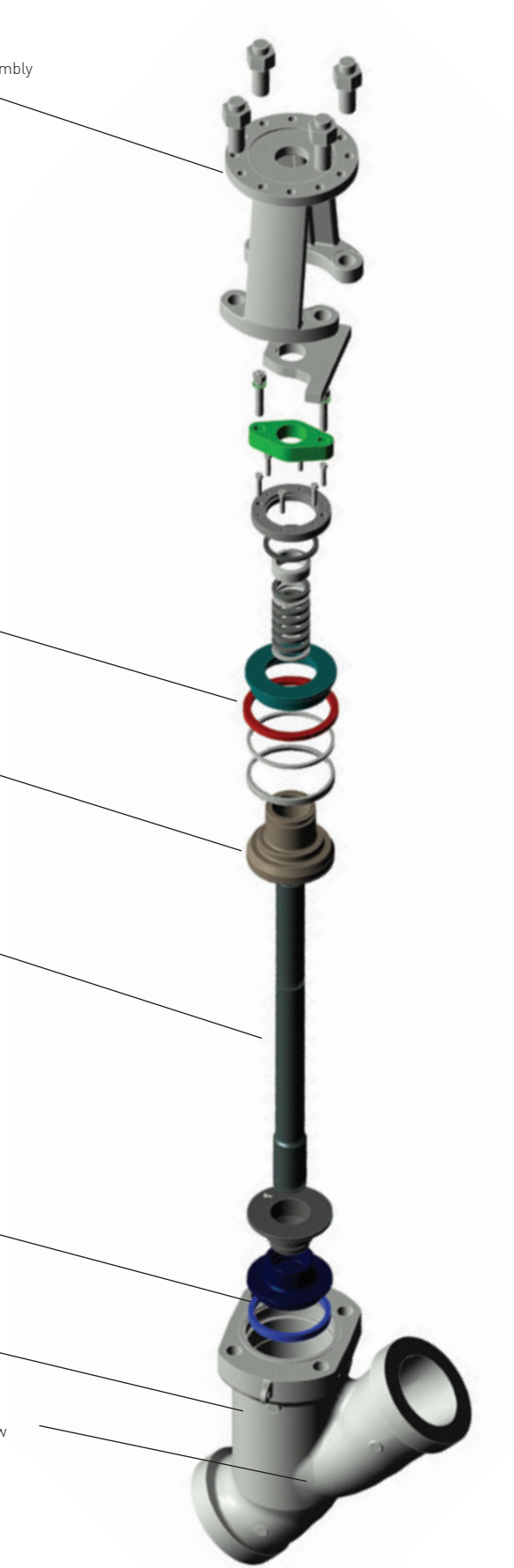
Backseats, for easy maintenance without interrupting production time

Rising stem – provides unrestricted flow with the disc completely outside the flow path

Renewable seats – for a simplified seats replacement

Unidirectional valve

Shape designed to grant a quiet linear flow passage in valve seat area – for a low pressure loss.





# FASANI PRESSURE SEAL CAST GLOBE VALVES - STYLE B

## Y AND T PATTERN

### FLOW COEFFICIENT $C_v$ FOR GLOBE VALVES Y PATTERN

NPS	DN	ASME Class	
		1500	2500
2	50	80	55
2 1/2	65	120	80
3	80	175	120
4	100	310	195
6	150	710	460
8	200	1225	830
10	250	1960	1345
12	300	2795	1910
14	350	3375	2385
16	400	4475	3160
18	450	5710	4050
20	500	7200	4935
22	550	8790	6040
24	600	10510	7260

### FLOW COEFFICIENT $C_v$ FOR GLOBE VALVES T PATTERN

NPS	DN	ASME Class			
		600	900	1500	2500
2	50	45	40	40	25
2 1/2	65	70	60	60	40
3	80	105	95	85	60
4	100	190	175	155	95
6	150	440	405	350	230
8	200	770	700	605	410
10	250	1210	1115	970	665
12	300	1785	1600	1385	945
14	350	2155	1955	1675	1185
16	400	2875	2585	2225	1575
18	450	3645	3315	2840	2015
20	500	4495	4125	3585	2460
22	550	5510	5025	4385	3015
24	600	6640	6045	5245	3630

### ORDERING GUIDE

Example:	4D	0	R	06	30	0	B3	H	A
<b>Valve Type</b>									
<b>4B</b> Globe - T Pattern									
<b>4D</b> Globe - Y Pattern									
<b>Valve Configuration</b>									
<b>0</b> Basic									
<b>1</b> Stop Check Execution									
<b>Valve Rating</b>									
<b>E</b> ASME 900									
<b>L</b> ASME 2500									
<b>F</b> ASME 1500									
<b>S</b> ASME 1900									
<b>R</b> ASME 1200									
<b>U</b> ASME 2850									
<b>Nominal Valve Size</b>									
<b>02</b> 2"									
<b>07</b> 7"									
<b>18</b> 18"									
<b>25</b> 2 1/2"									
<b>08</b> 8"									
<b>20</b> 20"									
<b>03</b> 3"									
<b>10</b> 10"									
<b>22</b> 22"									
<b>04</b> 4"									
<b>12</b> 12"									
<b>24</b> 24"									
<b>05</b> 5"									
<b>14</b> 14"									
<b>06</b> 6"									
<b>16</b> 16"									
<b>Body Material</b>									
<b>30</b> ASTM A216 WCB									
<b>65</b> ASTM A351 CF8M									
<b>38</b> ASTM A217 C12A									
<b>73</b> A352 LCB									
<b>44</b> ASTM A217 WC6									
<b>78</b> ASTM A494 CW-6MC									
<b>45</b> ASTM A217 WC9									
<b>99</b> ASTM A890 Gr 5A									
<b>62</b> ASTM A351 CF8C									
<b>XY*</b> Other material									
<b>Cladding</b>									
<b>0</b> No Cladding									
<b>2</b> Sealing Gasket Area F316									
<b>Trim</b>									
<b>B2</b> 13% Cr. + 2 Stellite									
<b>D2</b> F316 + 2 Stellite									
<b>WZ*</b> Other material									
<b>Pipe Connection</b>									
<b>A</b> Flanged per ASME B16.5									
<b>H</b> Weld End ASME B16.25									
<b>J</b> Weld End EN 12267									
<b>K</b> Weld End ISO 9692									
<b>Standard Valve Operation</b>									
<b>A</b> Handwheel									
<b>B</b> Bevel Gear									
<b>C</b> Bare Shaft (Coupling type A)									
<b>E</b> Bare Shaft for linear actuator									

\* Other material available upon request.







## FASANI PRESSURE SEAL CAST CHECK VALVES - STYLE B

### SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION

A wide range of check valves specifically designed for high pressure and high temperature applications



#### FEATURES

- A range of pressure seal check valves designed according to ASME B16.34 with wall thickness according to API 600.
- All range is offered in all the material stated in the ASTM specifications (NACE compliance included), and designed to always guarantee the maximum safety and flow efficiency.
- Face to face dimensions as per ASME B16.10
- Available in swing check, tilting disc and piston check (Y and T pattern design)
- Swing check valves can fit on both horizontal and vertical (up-flow) piping.
- Tilting disc check valves are designed to prevent the disc slamming and to ensure, at the same time, a quick closing service.
- Lift check valves (Y and T patterns) are designed to be installed on horizontal piping.
- Seat is welded in
- Available options: side mounted counterweight, side mounted hydraulic damper and disc anti-rotation device.

#### GENERAL APPLICATION

Our pressure seal check valves are recommended for a wide range of applications, particularly those requiring very high pressures and temperatures: steam, oil and gas processing, chemical and petrochemical industry and in the power industry. These high quality valves are successfully installed worldwide on applications requiring flow reversal prevention.

#### TECHNICAL DATA

Sizes: DN 50 to 600 and larger (NPS 2-24)  
Temperature (°C): -46 to + 650  
Pressure ratings: ASME Class 900, 1500 and 2500 for Swing Check type  
ASME Class 600, 900, 1500 and 2500 for Tilting Disc type  
ASME Class 600, 900, 1500 and 2500 for Piston Check T pattern  
ASME Class 900, 1500 and 2500 for Piston Check Y pattern  
Body materials: All the cast materials stated in the ASTM spec

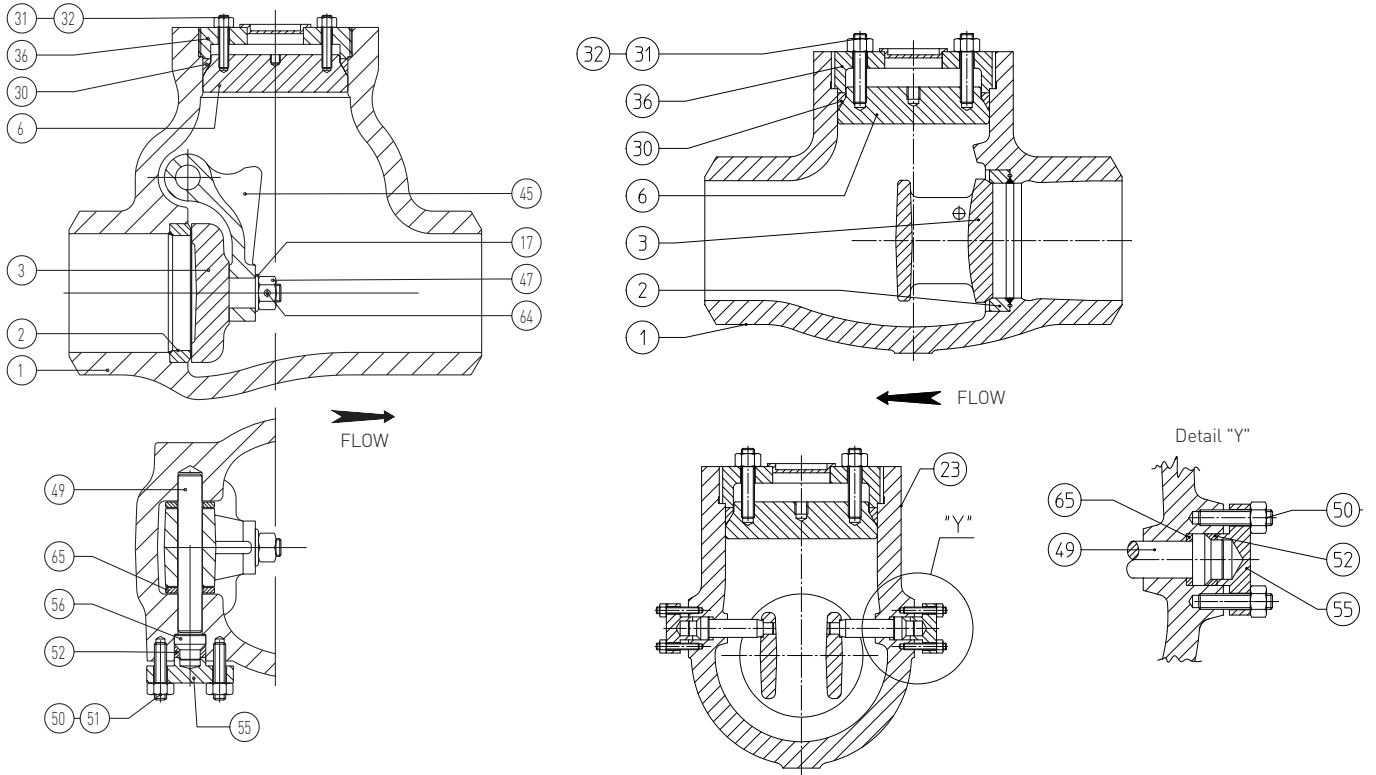
#### Connections standards

Butt Weld according to ASME B16.25.  
Flanged Ends available for Swing Check, Tilting Disc, Piston check T pattern, according to ASME B16.5

# FASANI PRESSURE SEAL CAST CHECK VALVES - STYLE B

## SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION

### SWING CHECK VALVES



### MATERIAL SELECTION

Item	Description	Body in WCB	Body in WC6	Body in CF8M
1	Body	A216 WCB	A217 WC6	A351 CF8M
2	Seat ring	A105 + AWS ER 430	A182 F22 + AWS ER 430	A182 F316
3	Disc	A216 WCB + AWS ER 430	A217 WC6 + AWS ER 430	A351 CF8M
6	Bonnet	A105	A182 F11	A182 F316
17	Washer	A182 F316	A182 F316	A182 F316
30	P.S. gasket	Soft iron silver plated	Soft iron silver plated	A182 F316
31	Bolt	A193 B7	A193 B16	A193 B8
32	Nut	A194 2H	A194 4	A194 8
36	Bonnet retaining ring	A105	A182 F11	A182 F316
45	Hinge	A216 WCB	A217 WC6	A351 CF8M
47	Nut	A194 2H	A194 4	A194 8
49	Hinge pin	A182 F6a	A182 F6a	A182 F316
50	Bolt	A193 B7	A193 B16	A193 B8
51	Nut	A194 2H	A194 4	A194 8
52	Pin gasket	Flexible graphite	Flexible graphite	Flexible graphite
55	Hinge pin cover	A105	A182 F22	A182 F316
56	Hinge pin plug	A182 F6a	A182 F6a	A182 F316
64	Split pin	Steel	Steel	Stainless steel
65	Spacer ring	A182 F6a	A182 F6a	A182 F316

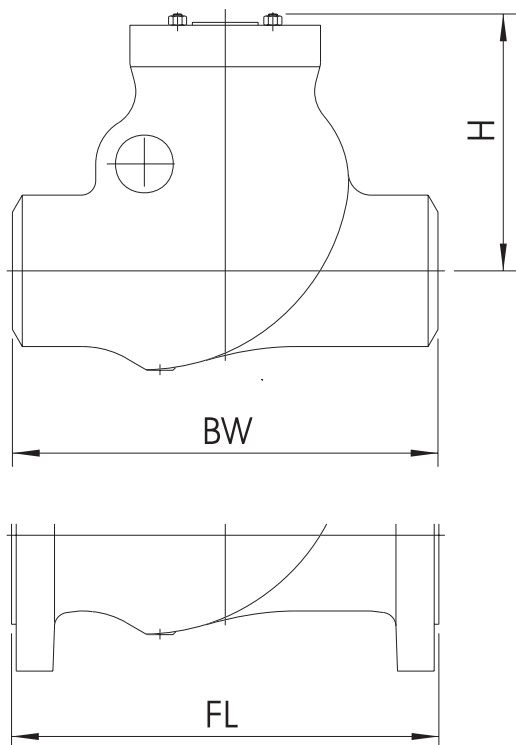
### NOTES

- Other materials are available on request.  
Please consult supplier.

# FASANI PRESSURE SEAL CAST CHECK VALVES - STYLE B

## SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION

### SWING CHECK CONFIGURATION



Size	ASME class 900 (Fig. VR 900 PS)						ASME class 1500 (Fig. VR 1500 PS)					ASME class 2500 (Fig. VR 2500 PS)				
	DN	NPS	FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1
50	2	-	-	-	-	-	368	368	205	45	32	451	451	235	90	48
65	2½	-	-	-	-	-	419	419	220	80	48	508	508	240	140	78
80	3	381	381	235	70	47	470	470	250	95	58	578	578	285	160	98
100	4	457	457	265	135	72	546	546	295	150	100	673	673	310	220	148
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	610	508	370	275	160	705	559	390	370	220	914	610	415	610	305
200	8	737	660	450	470	300	832	711	470	640	425	1022	762	555	1300	655
250	10	838	787	500	625	460	991	864	535	1250	700	1270	914	640	1900	985
300	12	965	914	555	950	690	1130	991	610	1750	1130	1422	1041	665	2850	1410
350	14	1029	991	620	1400	960	1257	1067	700	2400	1455	-	1118	600	-	1800
400	16	1130	1092	680	1650	1290	1384	1194	770	3235	1970	-	1245	700	-	2300
450	18	1219	1143	730	2230	1750	1537	1346	830	3880	2890	-	1397	770	-	2770
500	20	1321	1245	780	2850	2290	1664	1473	850	5510	3800	-	1524	840	-	3340
550	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24	1549	1397	850	4300	3530	1943	1752	980	7400	5000	-	1676	950	-	4660

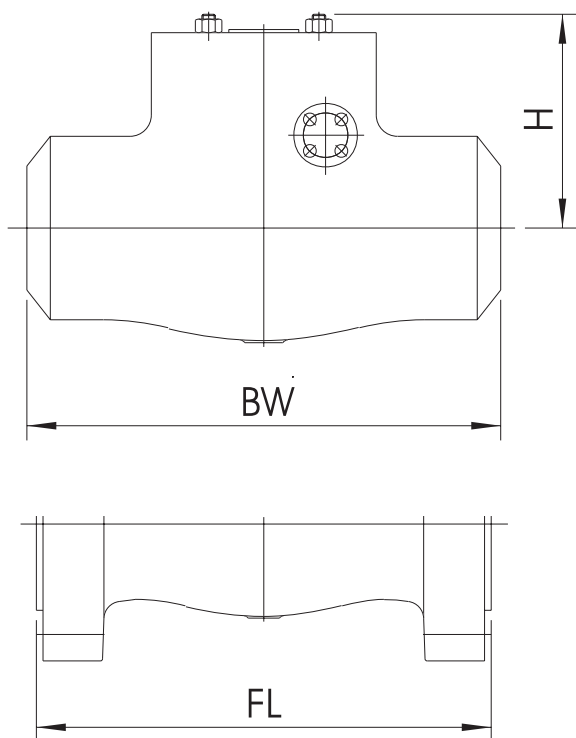
### NOTES

- All dimensions are in mm.
- Sizes and classes larger than mentioned here are available: please consult supplier for more information.
- W1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
- W2 corresponds to weight in kilos for welding body style.

# FASANI PRESSURE SEAL CAST CHECK VALVES - STYLE B

## SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION

### TILTING DISC CONFIGURATION



Size	DN	NPS	ASME class 900 (Fig. TD 900 PS)					ASME class 1500 (Fig. TD 1500 PS)					ASME class 2500 (Fig. TD 2500 PS)				
			FL	BW	H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2
80	3		381	305	170	55	35	470	305	185	77	40	578	368	160	120	40
100	4		457	356	200	100	65	546	406	205	125	75	673	457	190	235	120
125	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6		610	508	250	215	115	705	559	235	275	155	914	610	245	620	300
200	8		737	660	280	345	200	832	711	295	450	290	1022	762	330	990	550
250	10		838	787	330	500	330	991	864	330	940	510	1270	914	330	1725	900
300	12		965	914	365	790	560	1130	991	400	1435	835	1422	1041	430	2400	1300
350	14		1029	991	400	1120	720	1257	1067	490	2010	1230	-	1118	480	-	1900
400	16		1130	1092	430	1500	1200	1384	1194	570	2130	1560	-	1245	520	-	2820
450	18		1219	1143	470	2160	1650	1537	1346	630	2491	2070	-	1397	550	-	3410
500	20		1321	1245	550	2750	2150	1664	1473	660	4000	2740	-	1524	590	-	4330
550	22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24		1549	1397	730	4270	3280	1943	1752	780	6435	4635	-	1676	780	-	6070

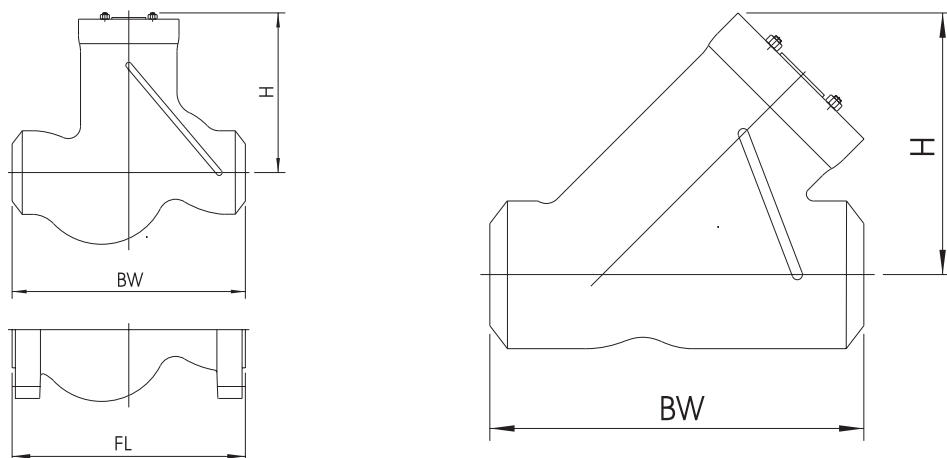
### NOTES

1. All dimensions are in mm.
2. Sizes and classes larger than mentioned here are available; please consult supplier for more information.
3. W1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
4. W2 corresponds to weight in kilos for welding body style.

# FASANI PRESSURE SEAL CAST CHECK VALVES -STYLE B

## SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION

### STOP CHECK CONFIGURATION



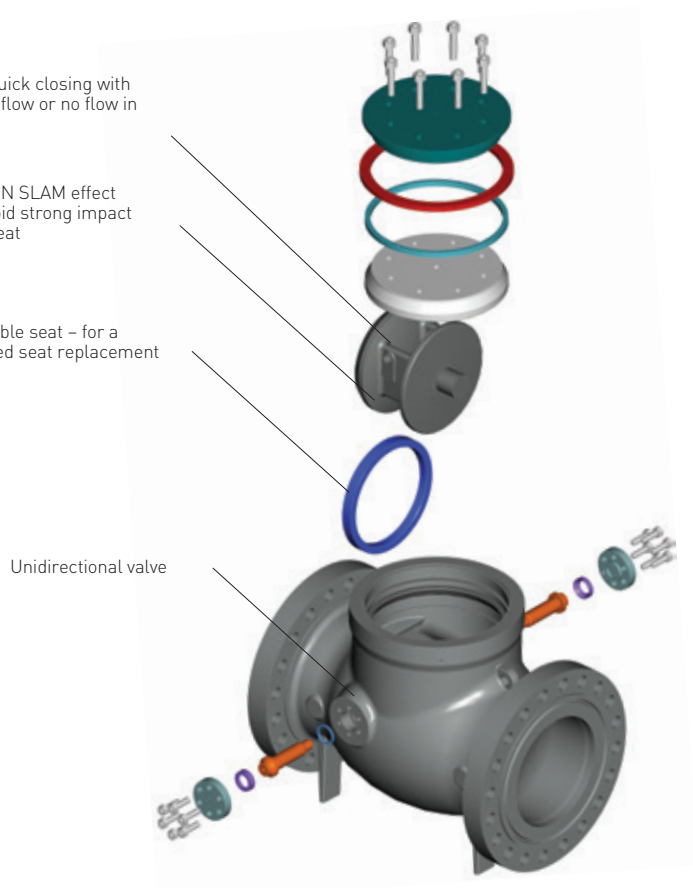
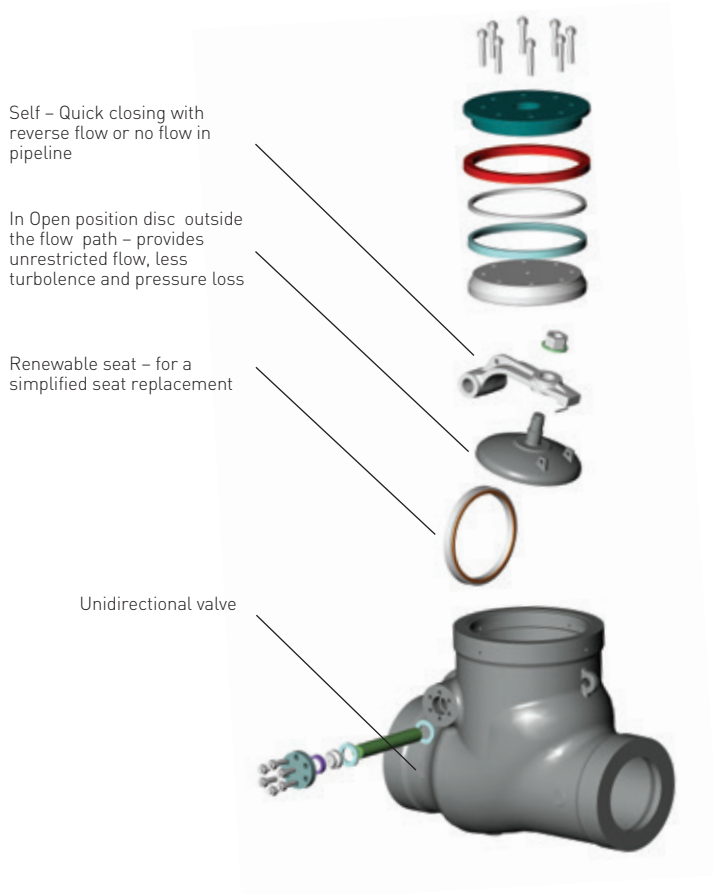
Size	ASME class 900 (Fig. PC 900 PS)						ASME class 1500 (Fig. PC 1500 PS)					ASME class 2500 (Fig. PC 2500 PS)					ASME class 1500 (Fig. PY 1500 PS)			ASME class 2500 (Fig. PY 2500 PS)					
	DN	NPS	T pattern		H	W1	W2	FL	BW	H	W1	W2	FL	BW	H	W1	W2	Y pattern		BW	H	W	BW	H	W
50	2	-	-	-	-	-	368	368	240	60	40	451	451	330	70	60	-	-	-	-	-	-	-	-	-
65	2½	-	-	-	-	-	419	419	275	80	55	508	508	260	115	65	-	-	-	-	-	-	-	-	-
80	3	381	381	270	65	50	470	470	280	100	65	578	578	280	185	100	381	250	50	368	240	85	-	-	-
100	4	457	457	335	135	95	546	546	335	155	100	673	673	330	355	170	406	290	85	457	320	130	-	-	-
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	610	610	400	250	190	705	705	390	280	245	914	914	390	720	435	559	360	215	610	350	330	-	-	-
200	8	737	737	490	445	300	832	832	470	660	500	1022	1022	460	1100	610	711	440	430	762	460	645	-	-	-
250	10	838	838	565	695	480	991	991	580	890	610	1270	1270	580	1540	840	864	590	660	914	610	1025	-	-	-
300	12	965	965	665	1045	760	1130	1130	680	1380	850	1422	1041	640	2090	960	991	640	960	1041	650	1200	-	-	-
350	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1067	700	1000	1130	720	1360	-	-	-
400	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1194	750	1550	1245	800	2150	-	-	-
450	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1473	810	1800	1397	870	2975	-	-	-
500	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1676	890	2490	1524	960	3630	-	-	-
550	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1727	1050	3000	1829	1220	5650	-	-	-

### NOTES

1. All dimensions are in mm.
2. Sizes and classes larger than mentioned here are available: please consult supplier for more information.
3. W1 corresponds to weight in kilos for flanged body style.
4. W2 corresponds to weight in kilos for welding body style.

# FASANI PRESSURE SEAL CAST CHECK VALVES - STYLE B

## SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION





# FASANI PRESSURE SEAL CAST CHECK VALVES - STYLE B

## SWING CHECK, TILTING DISC AND PISTON CHECK CONFIGURATION

### SWING CHECK VALVE ORDERING GUIDE

Example	6C	0	R	06	30	0	B2	H	N
<b>Valve Type</b>									
<b>6C</b>	Swing Check								
<b>Valve Configuration</b>									
<b>0</b>	Basic								
<b>Valve Rating</b>									
<b>E</b>	ASME 900								
<b>F</b>	ASME 1500								
<b>R</b>	ASME 1200								
<b>G</b>	ASME 2500								
<b>S</b>	ASME 1900								
<b>U</b>	ASME 2850								
<b>Nominal Valve Size</b>									
<b>02</b>	2"	<b>10</b>	10"	<b>20</b>	20"				
<b>25</b>	2½"	<b>AH</b>	10"x8"x10"	<b>BH</b>	20"x18"x20"				
<b>03</b>	3"	<b>12</b>	12"	<b>22</b>	22"				
<b>KB</b>	3"x2"x3"	<b>AL</b>	12"x10"x12"	<b>BL</b>	22"x20"x22"				
<b>04</b>	4"	<b>14</b>	14"	<b>24</b>	24"				
<b>KC</b>	4"x3"x4"	<b>AB</b>	14"x12"x14"	<b>BB</b>	24"x22"x24"				
<b>06</b>	6"	<b>16</b>	16"						
<b>K4</b>	6"x4"x6"	<b>AD</b>	16"x14"x16"						
<b>08</b>	8"	<b>18</b>	18"						
<b>KF</b>	8"x6"x8"	<b>AF</b>	18"x16"x18"						
<b>Body Material</b>									
<b>30</b>	ASTM A216 WCB			<b>65</b>	ASTM A351 CF8M				
<b>38</b>	ASTM A217 C12A			<b>73</b>	A352 LCB				
<b>44</b>	ASTM A217 WC6			<b>78</b>	ASTM A494 CW-6MC				
<b>45</b>	ASTM A217 WC9			<b>99</b>	ASTM A890 Gr 5A				
<b>62</b>	ASTM A351 CF8C			<b>XY*</b>	Other material				
<b>Cladding</b>									
<b>0</b>	No Cladding								
<b>2</b>	Sealing Gasket Area F316								
<b>Trim</b>									
<b>B2</b>	13% Cr. + 2 Stellite								
<b>D2</b>	F316 + 2 Stellite								
<b>WZ*</b>	Other material								
<b>Pipe Connection</b>									
<b>A</b>	FLANGED PER ASME B16.5								
<b>H</b>	WELD END ASME B16.25								
<b>J</b>	WELD END EN 12267								
<b>K</b>	WELD END ISO 9692								
<b>Standard Valve Operation</b>									
<b>N</b>	None								

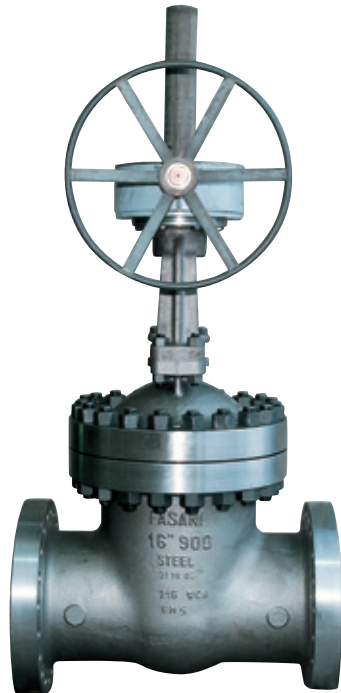
\* Other material available upon request.



## FASANI BOLTED BONNET GATE VALVES

### WEDGE CONFIGURATION

The bolted bonnet type valves are manufactured to guarantee the highest performance in the widest spectrum of oil and gas applications



### FEATURES

- Robust valve body in a wide range of materials (NACE compliance included).
- Threaded seat rings facilitate maintenance and/or replacement. On request, they can also be supplied as tack or seal welded. Above NPS 24, seats are seal welded as standard.
- Yoke sleeve in material suitable to withstand high temperature, wear and corrosion.
- Connections are offered as flanged, buttweld or special, such as clamp type, to meet any customers' request.
- Wedge gate valves designed in full compliance with API 600, ASME B16.34 and BS 1414.

### GENERAL APPLICATION

These high quality valves are installed in a large variety of services in the oil and gas field, chemical and petrochemical industry, in onshore and offshore drilling/refining, and in the power industry.

These valves are successfully installed worldwide on applications requiring tight shutoff.

### TECHNICAL DATA

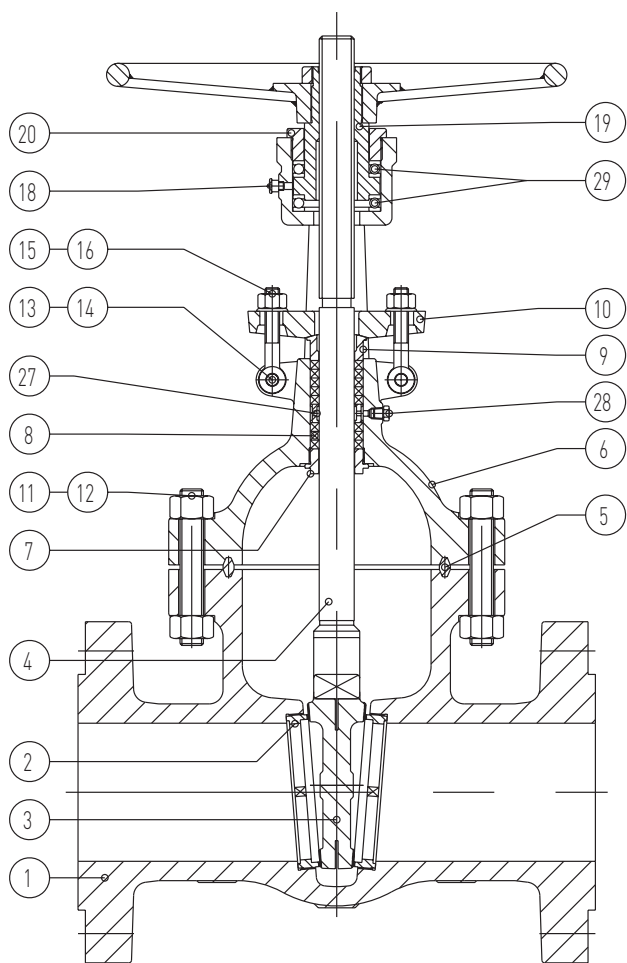
Sizes: DN 50 to 1500 and larger  
 Temperature [°C]: -60 to + 650  
 Pressure ratings: ASME class 150 to 2500  
 Body materials: Carbon, alloy and stainless steels, duplex steels, special alloys

#### Connections standards

Flanges: ASME B16.5 and B16.47, API 605, MSS-SP 44  
 Butt weld: ASME B16.25

# FASANI BOLTED BONNET GATE VALVES

## WEDGE CONFIGURATION



### NOTES

1. Other materials are available on request. Please consult supplier.
2. The item 5 (gasket) is supplied in different versions class 150: flat gasket in reinforced graphite. class 300: spiral wound gasket in 316/graphite. All remaining classes: RTJ in the materials indicated in the material specification.
3. The sectional drawing represented here refers to class 600 and larger.
4. Upon request only.

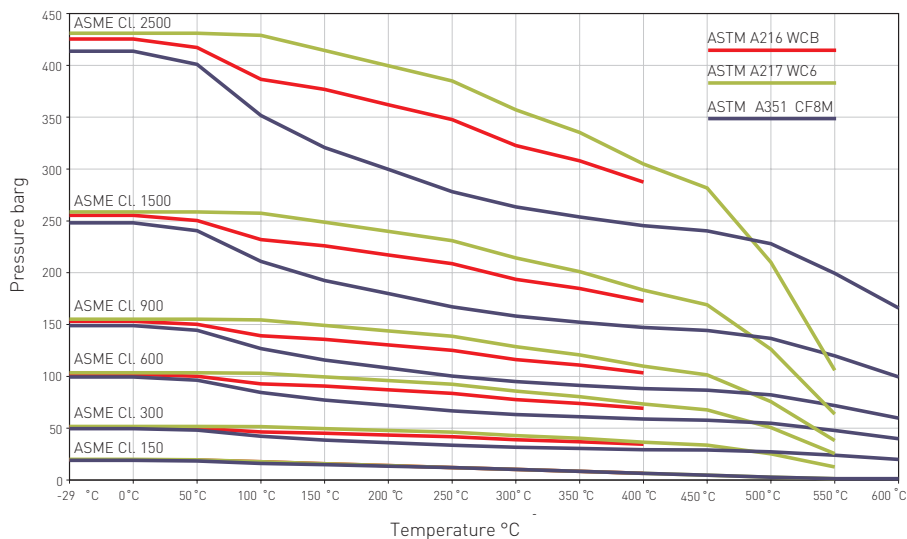
### MATERIAL SELECTION

Item	Description	Body in WCB	Body in WC6	Body in CF8M
1	Body	A216 WCB	A217 WC6	A351 CF8M
2	Seat ring	A105 + AWS ER 430	A182 F22 + AWS ER 430	A182 F316
3	Gate	A216 WCB + AWS ER 430	A217 WC6 + AWS ER 430	A351 CF8M
4	Stem	A182 F6a	A182 F6a	A182 F316
5	Gasket	Soft iron	A182 F5	A182 F316
6	Bonnet	A216 WCB	A217 WC6	A351 CF8M
7	Backseat	A182 F6a	A182 F6a	A182 F316
8	Packing	Flexible graphite inner rings and suitable anti-extrusion rings		
9	Gland	A182 F6a	A182 F6a	A182 F316
10	Gland flange	A105 or A516 gr. 70	A105 or A516 gr. 70	A182 F316 or A240 Tp. 316
11	Body - bonnet bolt	A193 B7	A193 B16	A193 B8M
12	Body - bonnet nut	A194 2H	A194 4	A194 8
13	Lug bolt	A193 B7	A193 B7	A193 B8
14	Lug nut	A194 2H	A194 2H	A194 8
15	Gland bolt	A193 B7	A193 B7	A193 B8
16	Gland nut	A194 2H	A194 2H	A194 8
18	Lubricator	Steel	Steel	Steel
19	Yoke sleeve	A763 gr. A	A763 gr. A	A763 gr. A
20	Yoke nut bushing	A105	A105	A105
27	Lantern <sup>[4]</sup>	A182 F6a	A182 F6a	A182 F316
28	Drain plug <sup>[4]</sup>	Steel	Steel	Stainless steel
29	Bearings	Steel	Steel	Steel

# FASANI BOLTED BONNET GATE VALVES

## WEDGE CONFIGURATION

PRESSURE/TEMPERATURE RATINGS In barg/psig (ASME B16.34)



### NOTES

All valves are fully rated in accordance with ASME B16.34. The table represented here indicates the pressure/temperature rating values as per ASME B16.34-1996.

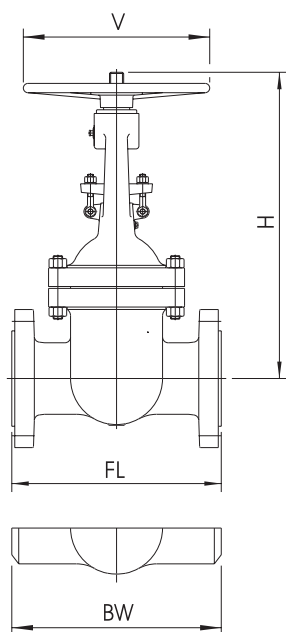
### TRIM

No.	Nominal trim symbol	Material type					Service
		Seal surfaces	Disc/wedge surfaces	Stem hinge pin	Backseat	Small internal parts	
1	CR13	13% Cr	13% Cr	13% Cr	13% Cr	13% Cr	General erosive or non-corrosive service between -100°C and 400°C
2	18-8	304	304	304	304	304	For moderate pressure in non-erosive, corrosive service between -265°C and 320°C
3	25-20	310	310	310	310	310	For moderate pressure in corrosive or non corrosive service. Between -265°C and 450°C
4	SH	Hard 13% Cr	Hard 13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1 but for medium pressure
5	HF	Co-Cr A	Co-Cr A	13% Cr	13% Cr	13% Cr	High pressure slightly erosive and corrosive service between -265°C and 650°C
5A	HFNi	Ni-Cr	Ni-Cr	13% Cr	13% Cr	13% Cr	As trim no. 5 where Co is not allowed
6	Cr13 Ni-Cu	Ni-Cu	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1
7	CR13 SH	Hard 13% Cr	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1 but for moderate pressure
8	CR13 HF	Co-Cr A	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 5 for moderate pressure
8A	CR13 HFNi	Ni-Cr	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 5A for moderate pressure
9	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Very corrosive fluids. Erosive-corrosive service between -240°C and 480°C
10	18-8SMO	316	316	316	316	316	As trim no. 2
11	Ni-Cu HF	Co-Cr A	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	As trim no. 9 but for medium pressure
12	18-8SMO HF	Co-Cr A	316	316	316	316	As trim no. 10 but for medium pressure
13	Alloy 20	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	Very corrosive service. For moderate pressure between -45°C and 320°C
14	Alloy 20 HF	Co-Cr A	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	As trim no. 13 but for medium pressure

Co-Cr A is equivalent to Stellite® 6

# FASANI BOLTED BONNET GATE VALVES

## WEDGE CONFIGURATION



Sizes		ASME class 150 (Fig. VS 150 BB)						ASME class 300 (Fig. VS 300 BB)						ASME class 600 (Fig. VS 600 BB)					
DN	NPS	FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2
50	2	178	216	395	200	18	15	216	216	415	200	25	20	292	292	455	250	33	25
65	2½	191	242	475	250	25	23	242	242	490	250	33	28	330	330	570	250	55	45
80	3	203	283	520	250	35	30	283	283	540	250	50	40	356	356	610	300	60	55
100	4	229	305	650	250	50	40	305	305	675	300	80	60	432	432	715	350	115	90
125	5	254	381	740	300	70	60	381	381	830	400	120	105	508	508	870	450	155	120
150	6	267	403	830	300	80	70	403	403	920	400	140	115	559	559	995	500	245	180
200	8	292	419	1065	400	135	120	419	419	1140	450	230	170	660	660	1215	575	420	355
250	10	330	457	1260	450	185	165	457	457	1320	575	315	260	788	788	1510	750	725	590
300	12	356	502	1475	500	280	255	502	502	1580	•	505	425	838	838	1720	750	945	820
350	14	381	572	1640	575	395	350	762	762	1920	•	765	650	889	889	1970	•	1210	1150
400	16	407	610	1960	•	530	500	838	838	2085	•	1005	870	991	991	2040	•	1765	1550
450	18	432	660	2130	•	670	650	914	914	2460	•	1205	1090	1092	1092	2120	•	1970	1750
500	20	457	711	2460	•	775	750	991	991	2635	•	1685	1545	1194	1194	2185	•	2420	2075
550	22	-	762	2600	•	-	950	-	1093	2760	•	-	1740	-	1296	2570	•	-	2835
600	24	508	813	2755	•	1150	1010	1143	1143	2895	•	2400	2085	1397	1397	2715	•	3720	3400
650	26	559	559	2935	•	*	1400	1245	1245	3100	•	*	2540	1448	1448	2960	•	*	4200
700	28	610	610	3135	•	*	1500	1346	1346	3290	•	*	2980	1549	1549	3260	•	*	5000
750	30	610	610	3400	•	*	1770	1397	1397	3520	•	*	3675	1651	1651	3550	•	*	5800
800	32	660	660	3480	•	*	2050	1524	1524	3700	•	*	4100	1778	1778	3700	•	*	6770
850	34	711	711	3950	•	*	2410	1626	1626	3950	•	*	5440	1930	1930	3845	•	*	7740
900	36	711	711	4055	•	*	2940	1727	1727	4205	•	*	6320	2083	2083	3990	•	*	8700
950	38	-	-	-	•	*	-	-	-	-	•	*	-	-	-	-	•	*	-
1000	40	762	762	4355	•	*	3710	1930	1930	4530	•	*	8400	2286	2286	4490	•	*	11750
1050	42	813	813	4700	•	*	4200	1981	1981	4685	•	*	9450	2438	2438	4735	•	*	13250
1100	44	-	-	-	•	*	-	-	-	-	•	*	-	-	-	-	•	*	-
1150	46	-	-	-	•	*	-	-	-	-	•	*	-	-	-	-	•	*	-
1200	48	914	914	5090	•	*	5600	2235	2235	5195	•	*	12150	2540	2540	4900	•	*	17400

• BGO

### NOTES

- All dimensions are in mm.
- Gate valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
- Dim. H corresponds to the height of valve in open position.
- BGO stands for "Bevel Gear Operator".
- W1 corresponds to weight in kilos for flanged body style.
- \* For sizes larger than NPS 24, weight depends on flange standards.
- W2 corresponds to weight in kilos for welding body style.

# FASANI BOLTED BONNET GATE VALVES

## WEDGE CONFIGURATION

Sizes		ASME class 900 (Fig. VS 900 BB)						ASME class 1500 (Fig. VS 1500 BB)						ASME class 2500 (Fig. VS 2500 BB)					
DN	NPS	FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2
50	2	-	-	-	-	-	-	368	368	570	350	70	60	451	451	590	400	150	115
65	2½	-	-	-	-	-	-	419	419	665	350	135	110	508	508	685	400	230	170
80	3	381	381	650	400	130	110	470	470	740	500	160	125	578	578	720	500	260	200
100	4	458	458	780	500	210	180	546	546	790	575	265	215	673	673	865	575	400	330
125	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	6	610	610	1055	575	380	295	705	705	1170	650	560	500	914	914	1140	750	930	680
200	8	737	737	1295	750	635	515	832	832	1380	750	1040	820	1022	1022	1270	900	1505	1150
250	10	838	838	1520	750	1035	870	991	991	1510	900	1650	1370	1270	1270	1560	•	2800	2100
300	12	965	965	1740	•	1395	1180	1130	1130	1820	•	2485	2050	1422	1422	1660	•	3480	2600
350	14	1029	1029	1910	•	1780	1565	1257	1257	1980	•	3100	2650	-	-	-	•	-	-
400	16	1130	1130	1950	•	2165	1915	1384	1384	2100	•	3705	3050	-	-	-	•	-	-
450	18	1219	1219	2150	•	3200	2340	1537	1537	2300	•	5085	4150	-	-	-	•	-	-
500	20	1321	1321	2345	•	3540	2740	1664	1664	2580	•	6400	5100	-	-	-	•	-	-
550	22	-	-	-	•	-	-	-	-	-	•	-	-	-	-	-	•	-	-
600	24	1550	1550	2880	•	5760	4810	1943	1943	2850	•	10300	8670	-	-	-	-	-	-

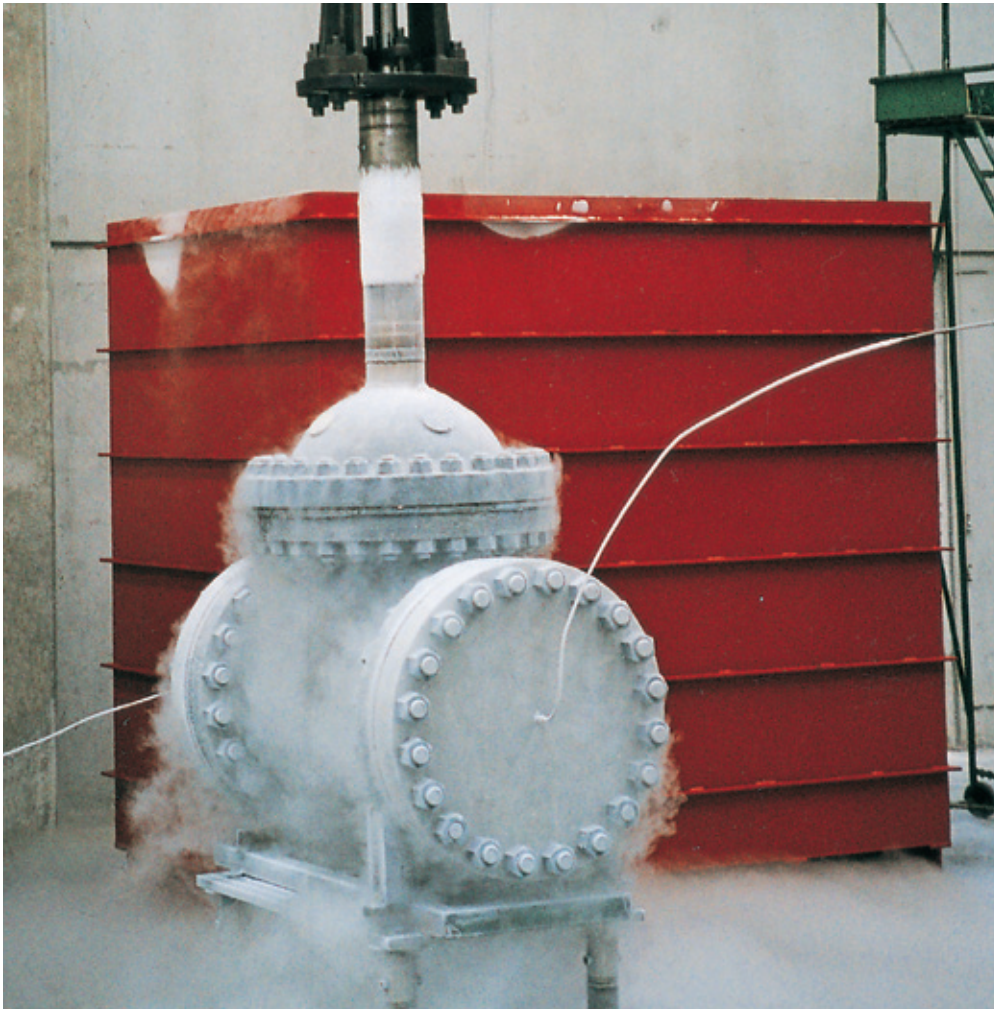
• BGO

### NOTES

- All dimensions are in mm.
- Gate valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
- Dim. H corresponds to the height of valve in open position.
- BGO stands for "Bevel Gear Operator".
- W1 corresponds to weight in kilos for flanged body style.
- \* For sizes larger than NPS 24, weight depends on flange standards.
- W2 corresponds to weight in kilos for welding body style.

# FASANI BOLTED BONNET GATE VALVES

## WEDGE CONFIGURATION



### GENERAL APPLICATION

The cryogenic valves are widely installed on applications involving media at extremely low temperatures, such as the production, storage and transportation of liquefied natural gas, hydrogen, oxygen, etc.

### TECHNICAL DATA

Sizes: DN 50 to 600 and larger  
Temperature [°C]: Down to -254  
Pressure ratings: From ASME 150 to 900  
Body materials: CF8M, CF8, and other low temperature steels

### Connections standards

Flanges: ASME B16.5  
Buttweld: ASME B16.25

### FEATURES

The cryogenic valves face the harsh conditions of services involving temperatures down to -254°C.

- Body in a range of materials suitable for extremely low temperatures, such as CF8M, CF8 and other very low temperature steels.
- The extended bonnet of gate valves completely eliminates any chance of frosting in the packing area.
- The presence of a bleed hole in the gate valve wedge helps equalize the body cavity pressure with the up-stream pressure.
- Connections are offered as flanged or special.
- All cryogenic valves are designed in full compliance with ASME B16.34 and BS 6364.
- The cryogenic tests are performed in the fully equipped in-house facilities, according to BS 6364 and all major oil and gas cryogenic test procedures.
- Seats are welded in.

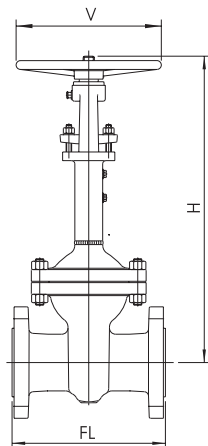
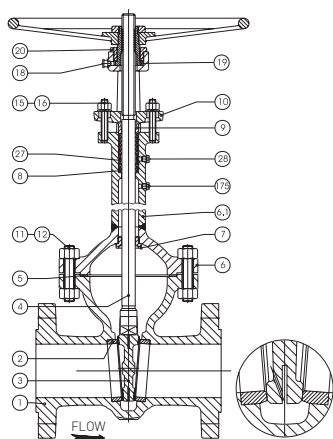
# FASANI BOLTED BONNET GATE VALVES

## WEDGE CONFIGURATION

### MATERIAL SELECTION

Item	Description	Body in CF8	Body in CF8M
1	Body	A351 CF8	A351 CF8M
2	Seat ring	A182 F316 + Stellite®	A182 F316 + Stellite®
3	Gate	A351 CF8 + Stellite®	A351 CF8M + Stellite®
4	Stem	A182 F304	A182 F316
5	Gasket	Spiral wound 316/Graphite	Spiral wound 316/Graphite
6	Bonnet	A351 CF8	A351 CF8M
6.1	Extension bonnet	A182 F304	A182 F316
7	Backseat	A182 F304	A182 F316
8	Packing	Flexible graphite inner rings and suitable anti-extrusion rings	
9	Gland	A182 F304	A182 F316
10	Gland flange	A182 F316 or A240 Tp. 316	A182 F316 or A240 Tp. 316
11	Body - bonnet bolt	A320 B8	A320 B8M
12	Body - bonnet nut	A194 8	A194 8
15	Gland bolt	A193 B8	A193 B8
16	Gland nut	A194 8	A194 8
18	Lubricator	Steel	Steel
19	Yoke sleeve	A763 gr. A	A763 gr. A
20	Yoke nut bushing	A105	A105
27	Lantern*	A182 F304	A182 F316
28	Drain plug*	Stainless steel	Stainless steel
175	Relief plug	Stainless steel	Stainless steel

\* upon request only



### NOTES

1. All dimensions are in mm.
2. Gate Cryogenic valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
3. Dim. H corresponds to the height of valve in open position.
4. BGO stands for "Bevel Gear Operator".
5. "W" corresponds to weight in kilos (flanged body style).

Sizes	DN	NPS	ASME class 150 (Fig. VSC 150 BB)				ASME class 300 (Fig. VSC 300 BB)				ASME class 600 (Fig. VSC 600 BB)				ASME class 900 (Fig. VSC 900 BB)			
			FL	H	V	W	FL	H	V	W	FL	H	V	W	FL	H	V	W
	50	2	178	895	400	22	216	915	400	28	292	955	500	42	-	-	-	-
	65	2½	191	925	400	33	242	940	400	40	-	-	-	-	-	-	-	-
	80	3	203	1020	400	40	283	1040	500	55	356	1110	600	70	381	700	700	140
	100	4	229	1150	500	60	305	1175	600	85	432	1215	700	130	458	820	800	225
	125	5	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•	-
	150	6	267	1280	600	90	403	1370	700	150	559	1445	•	270	610	1545	•	405
	200	8	292	1565	700	145	419	1640	800	240	660	1765	•	480	737	1795	•	685
	250	10	330	1760	800	205	457	1820	•	335	788	2150	•	790	838	2020	•	1100
	300	12	356	1975	•	305	502	2130	•	525	838	2345	•	1025	965	2240	•	1475
	350	14	381	2375	•	445	762	2470	•	790	889	2565	•	1290	1029	2510	•	1860
	400	16	407	2510	•	560	838	2635	•	1035	991	2820	•	1850	1130	2550	•	2250
	450	18	432	2730	•	705	914	3010	•	1240	1092	2840	•	2080	1219	2850	•	3310
	500	20	457	3060	•	805	991	3185	•	1720	1194	3115	•	2590	1321	3045	•	3710
	550	22	-	-	•	-	-	-	•	-	-	-	•	-	-	-	•	-
	600	24	508	3355	•	1185	1143	3495	•	2440	1397	3575	•	3865	1550	3630	•	5900

• BGO

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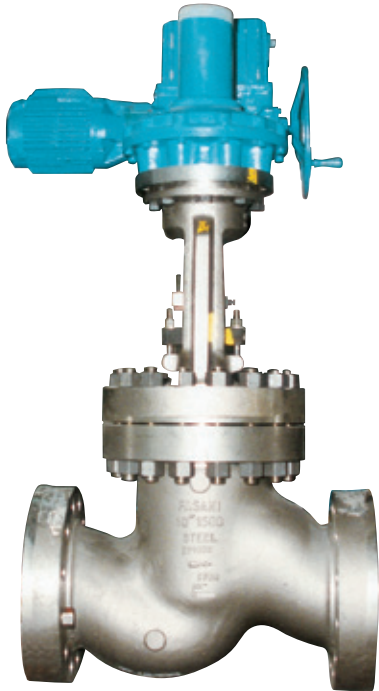
[Emerson.com/FinalControl](http://Emerson.com/FinalControl)





## FASANI GLOBE VALVES BOLTED BONNET CONFIGURATION

The bolted bonnet type valves are manufactured to guarantee the highest performance in the widest spectrum of oil and gas applications



### FEATURES

- Robust valve body in a wide range of materials (NACE compliance included).
- Threaded seat rings facilitate maintenance and/or replacement. On request, they can also be supplied as tack or seal welded. Above NPS 12 the seats are seal welded as standard.
- Connections are offered as flanged or special, such as clamp type, to meet any customers' request.
- Manufactured according to the requirements of ASME B16.34 and BS1873.
- Seats are welded in.

### GENERAL APPLICATION

These high quality valves are installed in a large variety of services in the oil and gas field, chemical and petrochemical industry, in onshore and offshore drilling/refining, and in the power industry.

These valves are successfully installed worldwide on applications requiring tight shutoff.

### TECHNICAL DATA

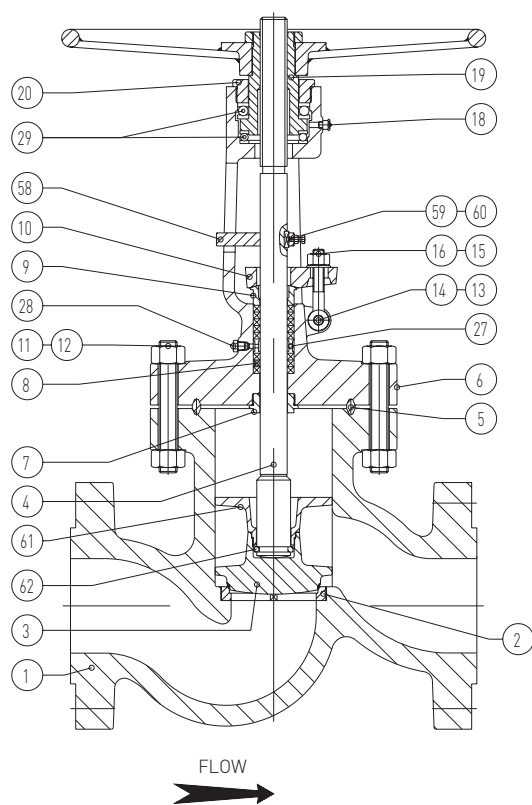
Sizes:	DN 50 to 600 for class 150-300-600 DN 50 to 300 for class 900 and above
Temperature [°C]:	-60 to + 650
Pressure ratings:	From ASME 150 to 2500
Body materials:	Carbon, alloy and stainless steels, duplex steels, special alloys

#### Connections standards

Flanges:	ASME B16.5
Buttweld:	ASME B16.25

# FASANI GLOBE VALVES

## BOLTED BONNET CONFIGURATION



### NOTES

1. Other materials are available on request. Please consult supplier.
2. The item 5 (gasket) is supplied in different versions class 150 and 300: spiral wound gasket in 316/graphite.  
All remaining classes: RTJ in the materials indicated in the material specification.
3. The sectional drawing represented here refers to class 600 and larger.
4. Upon request only.

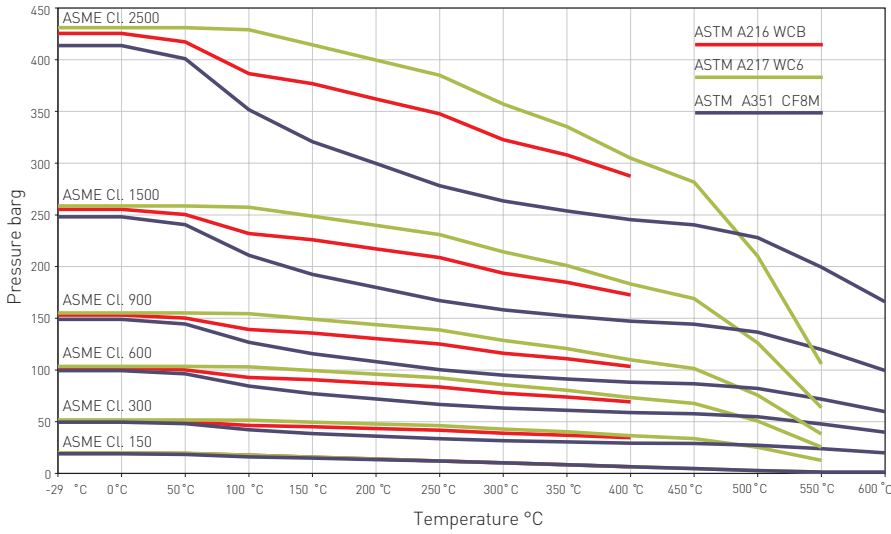
### MATERIAL SELECTION

Item	Description	Body in WCB	Body in WC6	Body in CF8M
1	Body	A216 WCB	A217 WC6	A351 CF8M
2	Seat ring	A105 + AWS ER 430	A182 F22 + AWS ER 430	A182 F316
3	Disc	A105 + AWS ER 430	A182 F22 + AWS ER 430	A182 F316
4	Stem	A182 F6a	A182 F6a	A182 F316
5	Gasket	Soft Iron	A182 F5	A182 F316
6	Bonnet	A216 WCB	A217 WC6	A351 CF8M
7	Backseat	A182 F6a	A182 F6a	A182 F316
8	Packing	Flexible graphite inner rings and suitable anti-extrusion rings		
9	Gland	A182 F6a	A182 F6a	A182 F316
10	Gland flange	A105 or A516 gr. 70	A105 or A516 gr. 70	A182 F316 or A240 Tp. 316
11	Body - bonnet bolt	A193 B7	A193 B16	A193 B8M
12	Body - bonnet nut	A194 2H	A194 4	A194 8
13	Lug bolt	A193 B7	A193 B7	A193 B8
14	Lug nut	A194 2H	A194 2H	A194 8
15	Gland bolt	A193 B7	A193 B7	A193 B8
16	Gland nut	A194 2H	A194 2H	A194 8
18	Lubricator	Steel	Steel	Steel
19	Yoke sleeve	A763 gr. A	A763 gr. A	A763 gr. A
20	Yoke nut bushing	A105	A105	A105
27	Lantern (4)	A182 F6a	A182 F6a	A182 F316
28	Drain plug (4)	Steel	Steel	Stainless steel
29	Bearings	Steel	Steel	Steel
58	Position indicator	A516 gr. 70	A516 gr. 70	A516 gr. 70
59	Screw	A193 B7	A193 B7	A193 B7
60	Key	Steel	Steel	Steel
61	Disc guide	A105	A182 F11	A182 F316
62	Stem segmental rings	A182 F6a	A182 F6a	A182 F316

# FASANI GLOBE VALVES

## BOLTED BONNET CONFIGURATION

PRESSURE/TEMPERATURE RATINGS in barg/psig (ASME B16.34)



**NOTES**

All valves are fully rated in accordance with ASME B16.34. The table represented here indicates the pressure/temperature rating values as per ASME B16.34-1996.

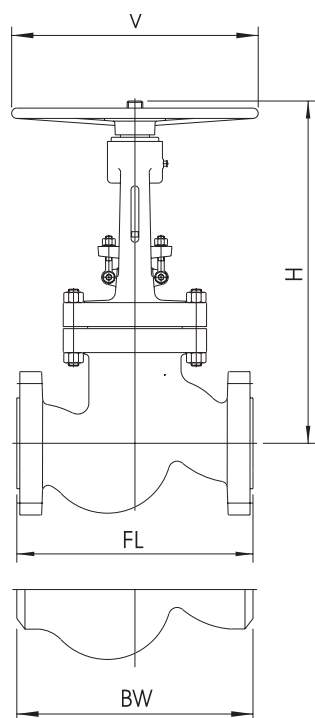
**TRIM**

Trim no.	Nominal trim symbol	Material type					Service
		Seal surfaces	Disc/wedge surfaces	Stem hinge pin	Backseat	Small internal parts	
1	CR13	13% Cr	13% Cr	13% Cr	13% Cr	13% Cr	General erosive or non-corrosive service between -100°C and 400°C
2	18-8	304	304	304	304	304	For moderate pressure in non-erosive, corrosive service between -265°C and 320°C
3	25-20	310	310	310	310	310	For moderate pressure in corrosive or non corrosive service. Between -265°C and 450°C
4	SH	Hard 13% Cr	Hard 13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1 but for medium pressure
5	HF	Co-Cr A	Co-Cr A	13% Cr	13% Cr	13% Cr	High pressure slightly erosive and corrosive service between -265°C and 650°C
5A	HFNi	Ni-Cr	Ni-Cr	13% Cr	13% Cr	13% Cr	As trim no. 5 where Co is not allowed
6	Cr13 Ni-Cu	Ni-Cu	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1
7	CR13 SH	Hard 13% Cr	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 1 but for moderate pressure
8	CR13 HF	Co-Cr A	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 5 for moderate pressure
8A	CR13 HFNi	Ni-Cr	13% Cr	13% Cr	13% Cr	13% Cr	As trim no. 5A for moderate pressure
9	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	Very corrosive fluids. Erosive-corrosive service between -240°C and 480°C
10	18-8SMO	316	316	316	316	316	As trim no. 2
11	Ni-Cu HF	Co-Cr A	Ni-Cu	Ni-Cu	Ni-Cu	Ni-Cu	As trim no. 9 but for medium pressure
12	18-8SMO HF	Co-Cr A	316	316	316	316	As trim no. 10 but for medium pressure
13	Alloy 20	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	Very corrosive service. For moderate pressure between -45°C and 320°C
14	Alloy 20 HF	Co-Cr A	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni	As trim no. 13 but for medium pressure

Co-Cr A is equivalent to Stellite® 6

# FASANI GLOBE VALVES

## BOLTED BONNET CONFIGURATION



### NOTES

1. All dimensions are in mm.
2. Globe valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
3. Dim. H corresponds to the height of valve in open position.
4. BGO stands for "Bevel Gear Operator".
5. W1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
6. W2 corresponds to weight in kilos for welding body style.

Size	DN	NPS	ASME class 150 (Fig. VD 150 BB)						ASME class 300 (Fig. VD 300 BB)						ASME class 600 (Fig. VD 600 BB)					
			FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2
50	2	203	203	335	200	15	13	267	267	410	250	30	25	292	292	445	250	35	30	
65	2½	216	216	355	200	25	20	292	292	440	250	40	35	330	330	495	300	50	40	
80	3	242	242	375	250	30	25	318	318	465	250	55	45	356	356	540	300	65	50	
100	4	292	292	415	300	50	40	356	356	560	300	85	70	432	432	580	400	130	110	
125	5	356	356	480	400	75	65	400	400	615	400	120	105	508	508	650	550	200	160	
150	6	407	407	500	400	95	85	445	445	650	400	135	115	559	559	805	550	230	175	
200	8	496	496	635	575	165	140	559	559	920	BGO	295	260	660	660	1085	BGO	475	380	
250	10	623	623	895	BGO	305	265	623	623	1140	BGO	430	385	787	787	1430	BGO	730	600	
300	12	699	699	1215	BGO	425	335	711	711	1200	BGO	600	555	838	838	1700	BGO	1050	860	
350	14	788	788	1290	BGO	650	515	825	825	1400	BGO	870	820	-	-	-	BGO	-	-	
400	16	915	915	1460	BGO	830	780	953	953	1460	BGO	1150	1080	-	-	-	BGO	-	-	
450	18	940	940	1550	BGO	1040	970	978	978	1550	BGO	1280	1180	-	-	-	BGO	-	-	
500	20	978	978	1670	BGO	1260	1170	1016	1016	1820	BGO	1450	1270	-	-	-	BGO	-	-	
550	22	-	-	-	BGO	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
600	24	1296	1296	1770	BGO	1700	1580	1346	1346	1930	BGO	2750	2430	-	-	-	BGO	-	-	

Size	DN	NPS	ASME class 900 (Fig. VD 900 BB)						ASME class 1500 (Fig. VD 1500 BB)						ASME class 2500 (Fig. VD 2500 BB)					
			FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2	FL	BW	H	V	W1	W2
50	2	-	-	-	-	-	-	368	368	580	300	95	75	451	451	770	500	190	180	
65	2½	-	-	-	-	-	-	419	419	680	400	135	115	508	508	835	575	350	295	
80	3	381	381	575	400	130	110	470	470	720	400	180	150	578	578	895	650	420	360	
100	4	457	457	760	550	200	160	546	546	720	550	255	225	673	673	950	750	580	500	
125	5	-	-	-	-	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
150	6	610	610	1055	650	455	400	705	705	1230	BGO	590	470	914	914	1510	BGO	1200	890	
200	8	737	737	1460	BGO	900	680	832	832	1655	BGO	1170	950	1022	1022	1680	BGO	1780	1160	
250	10	838	838	1650	BGO	1400	1135	991	991	1705	BGO	1750	1470	1270	1270	2030	BGO	2500	1600	
300	12	965	965	1750	BGO	2150	1900	1130	1130	1950	BGO	2600	2300	1422	1422	2250	BGO	3260	1820	
350	14	1029	1029	1900	BGO	2650	2130	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
400	16	1130	1130	2010	BGO	3300	2450	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
450	18	-	-	-	BGO	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
500	20	-	-	-	BGO	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
550	22	-	-	-	BGO	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
600	24	-	-	-	BGO	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	

# FASANI GLOBE VALVES

## CRYOGENIC CONFIGURATION

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### GENERAL APPLICATION

The cryogenic valves are widely installed on applications involving media at extremely low temperatures, such as the production, storage and transportation of liquefied natural gas, hydrogen, oxygen, etc.

### TECHNICAL DATA

Sizes:	DN 50 to 300 and larger
Temperature (°C):	Down to -254
Pressure ratings:	From ASME 150 to 900
Body materials:	CF8M, CF8, and other low temperature steels

### Connections standards

Flanges:	ASME B16.5
Buttweld:	ASME B16.25

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### FEATURES

The cryogenic valves face the harsh conditions of services involving temperatures down to -254°C.

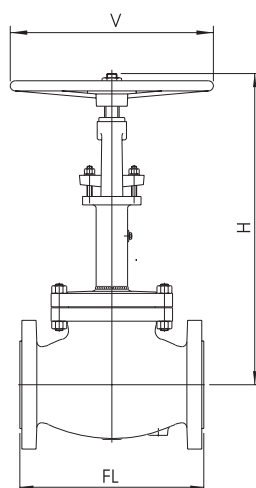
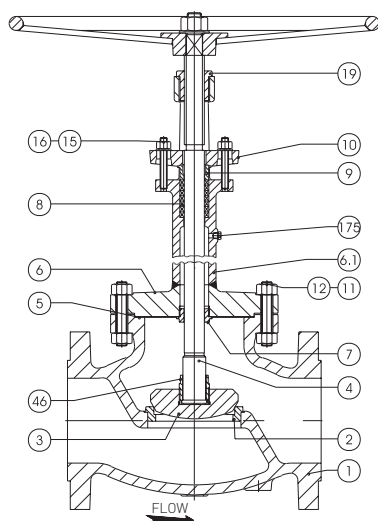
- Body in a range of materials suitable for extremely low temperatures, such as CF8M, CF8 and other very low temperature steels.
- The extended bonnet of globe valves completely eliminates any chance of frosting in the packing area.
- Connections are offered as flanged or special.
- All cryogenic valves are designed in full compliance with ASME B16.34 and BS 6364.
- The cryogenic tests are performed in the fully equipped in-house Fasani facilities, according to BS 6364 and all major oil and gas cryogenic test procedures.
- Seats are welded in.

# FASANI GLOBE VALVES

## CRYOGENIC CONFIGURATION

### MATERIAL SELECTION

Item	Description	Body in CF8	Body in CF8M
1	Body	A351 CF8	A351 CF8M
2	Seat ring	A182 F316 + Stellite	A182 F316 + Stellite
3	Disc	A182 F316 + Stellite	A182 F316 + Stellite
4	Stem	A182 F304	A182 F316
5	Gasket	Spiral wound 316/Graphite	Spiral wound 316/Graphite
6	Bonnet	A351 CF8	A351 CF8M
6.1	Extension bonnet	A182 F304	A182 F316
7	Backseat	A182 F304	A182 F316
8	Packing	Flexible graphite inner rings and suitable anti-extrusion rings	
9	Gland	A182 F304	A182 F316
10	Gland flange	A182 F316 or A240 Tp. 316	A182 F316 or A240 Tp. 316
11	Body - bonnet bolt	A320 B8	A320 B8M
12	Body - bonnet nut	A194 8	A194 8
15	Gland bolt	A193 B8	A193 B8
16	Gland nut	A194 8	A194 8
19	Yoke sleeve	A763 gr. A	A763 gr. A
46	Disc retaining nut	A182 F304	A182 F316
175	Relief plug	Stainless steel	Stainless steel



### NOTES

1. All dimensions are in mm.
2. Globe Cryogenic valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
3. Dim. H corresponds to the height of valve in open position.
4. BGO stands for "Bevel Gear Operator".
5. "W" corresponds to weight in kilos (flanged body style).

Size	ASME class 150 (Fig. VDC 150 BB)					ASME class 300 (Fig. VDC 300 BB)				ASME class 600 (Fig. VDC 600 BB)				ASME class 900 (Fig. VDC 900 BB)				
	DN	NPS	FL	H	V	W	FL	H	V	W	FL	H	V	W	FL	H	V	W
50	2		203	935	400	21	267	1010	500	38	292	1045	500	45	-	-	-	-
65	2½		216	955	400	30	292	1040	500	50	330	1095	500	60	-	-	-	-
80	3		242	975	500	45	318	1065	500	65	356	1140	600	80	381	1125	800	145
100	4		292	1215	600	85	356	1360	600	125	432	1380	BGO	175	458	1260	BGO	245
125	5		-	-	BGO	-	-	-	BGO	-	-	-	BGO	-	-	-	BGO	-
150	6		407	1280	BGO	130	445	1380	BGO	180	559	1560	BGO	315	610	1555	BGO	540
200	8		496	1430	BGO	205	559	1520	BGO	340	660	1635	BGO	525	737	2010	BGO	950
250	10		623	1500	BGO	330	623	1740	BGO	480	787	1990	BGO	790	838	2250	BGO	1460
300	12		699	1815	BGO	450	711	1800	BGO	650	838	2200	BGO	1110	965	2350	BGO	2210

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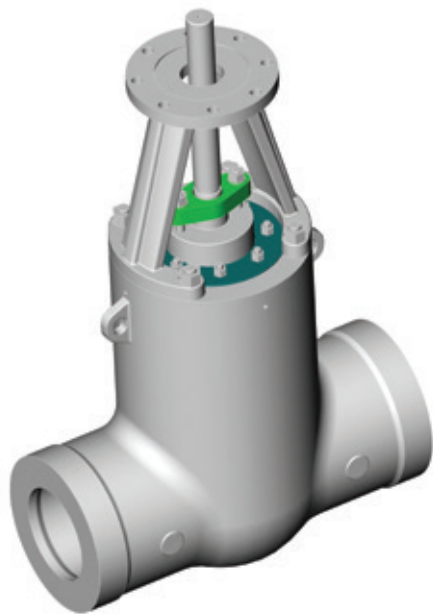
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## FASANI PRESSURE SEAL CAST GATE VALVES - STYLE B WEDGE GATE

A wide range of gate valves specifically designed for high pressure and high temperature applications.



### FEATURES

- A range of compact pressure seal gate valves designed according to ASME B16.34 and wall thickness according to API 600.
- All range is offered in all the material stated in the ASTM specifications (NACE compliance included), and designed to always guarantee the maximum safety and flow efficiency.
- End to end dimensions as per ASME B16.10 (Long pattern for flanged valves, short pattern for Butt welded ends).
- Seats are welded in.
- Position indicator is offered as standard.
- Stellite® gr. 6 overlay on seat and wedge; Stellite® gr. 21 overlay on backseat.
- Pressure seal gasket has trapezoidal shape for a low load on bolting, and is supplied in integral metal type.
- Standard ISO top mounting for easy assembly of any type of actuator or bevel gear.
- Available options: wedge vent hole or overpressure pipe, by-pass, limit switch in open or closed position.
- Valves are offered as standard with manual operators (Hand wheel or bevel gear depending on size). Actuated options such as electric, pneumatic or hydraulic are available.

### GENERAL APPLICATION

Our pressure seal gate valves are recommended for a large variety of applications, particularly in those requiring suitability to very high pressures and temperatures: steam, oil and gas processing, chemical and petrochemical industry and in the power industry.

These high quality valves are successfully installed worldwide on applications requiring tight shutoff.

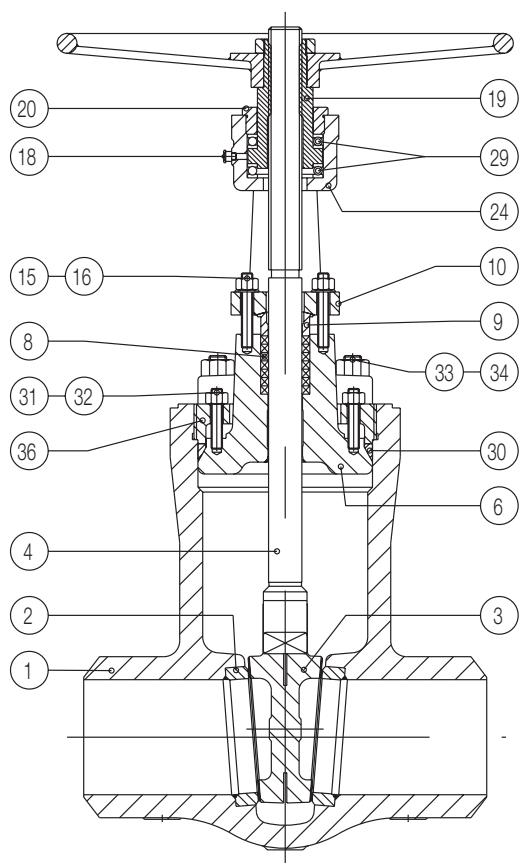
### TECHNICAL DATA

Sizes: DN 50 - 600 (NPS 2 - 24), larger diameters available upon request  
Temperature (°C): -46 to + 650  
Pressure ratings: ASME Class 600, 900, 1500 and 2500  
Body materials: All the cast materials stated in the ASTM spec

Connections standards:  
Butt weld according to ASME B16.25  
Flanged Ends according to ASME B16.5  
Special connections, such as clamp type, available upon request.

# FASANI PRESSURE SEAL CAST GATE VALVES - STYLE B

## WEDGE GATE



### MATERIAL SELECTION

Item	Description	Body in WCB	Body in WC6	Body in CF8M
1	Body	A216 WCB	A217 WC6	A351 CF8M
2	Seat ring	A105 + Stellite®	A182 F22 + Stellite®	A182 F316
3	Gate	A216 WCB + Stellite®	A217 WC6 + Stellite®	A351 CF8M
4	Stem	A182 F6a	A182 F6a	A182 F316
6	Bonnet	A216 WCB + Stellite®	A217 WC6 + Stellite®	A351 CF8M
8	Packing	Flexible graphite inner rings and suitable anti-extrusion rings		
9	Gland	A182 F6a	A182 F6a	A182 F316
10	Gland flange	A105 or A516 gr. 70	A105 or A516 gr. 70	A182 F316 or A240 Tp. 316
15	Gland bolt	A193 B7	A193 B7	A193 B8
16	Gland nut	A194 2H	A194 2H	A194 8
18	Lubricator	Steel	Steel	Steel
19	Yoke sleeve	A763 gr. A	A763 gr. A	A763 gr. A
20	Yoke nut bushing	A105	A105	A105
24	Yoke	A216 WCB	A216 WCB	A216 WCB
29	Bearings	Steel	Steel	Steel
30	P.S. gasket	Soft iron silver plated	Soft iron silver plated	A182 F316
31	Bolt	A193 B7	A193 B16	A193 B8
32	Nut	A194 2H	A194 4	A194 8
33	Body - yoke bolt	A193 B7	A193 B7	A193 B7
34	Body - yoke nut	A194 2H	A194 2H	A194 2H
36	Bonnet retaining ring	A105	A182 F22	A182 F316

### NOTES

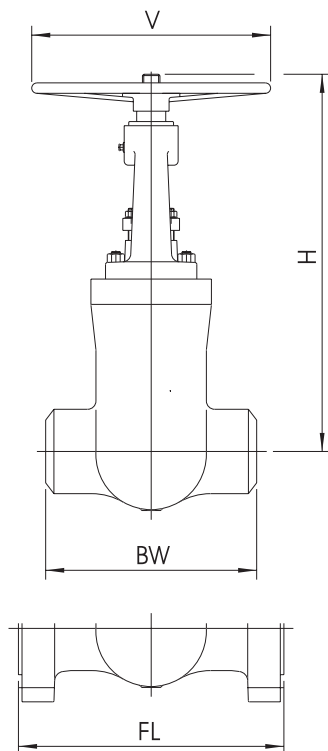
- Other materials are available on request.  
Please consult supplier.



# FASANI PRESSURE SEAL CAST GATE VALVES - STYLE B

## WEDGE GATE

### PRESSURE SEAL CONFIGURATION



#### NOTES

1. All dimensions are in mm.
2. Gate valves in sizes and classes larger than mentioned here are available. Please consult supplier for more information.
3. Dim. H corresponds to the height of valve in open position.
4. BGO stands for "Bevel Gear Operator".
5. Kg1 corresponds to weight in kilos for flanged body style. For sizes larger than NPS 24, weight depends on flange standards.
6. Kg2 corresponds to weight in kilos for welding body style.

Size	ASME class 900 (Fig. VS 900 PS)								ASME class 1500 (Fig. VS 1500 PS)				ASME class 2500 (Fig. VS 2500 PS)							
	DN	NPS	FL	BW	H	V	Kg1	Kg2	FL	BW	H	V	Kg1	Kg2	FL	BW	H	V	Kg1	Kg2
50	2	-	-	-	-	-	-	-	368	216	515	350	60	40	451	279	620	400	105	65
65	2½	-	-	-	-	-	-	-	419	254	645	350	100	70	508	330	650	400	160	95
80	3	381	305	655	400	105	80	470	305	665	500	120	80	578	368	720	500	190	110	
100	4	457	356	780	500	180	125	546	406	775	575	190	135	673	457	865	575	290	175	
125	5	-	-	-	-	-	-	-	-	-	-	-	-	794	533	900	575	550	300	
150	6	610	508	1050	575	330	240	705	559	1155	650	455	320	914	610	1140	750	695	375	
200	8	737	660	1340	750	590	415	832	711	1380	750	900	595	1022	762	1285	900	1070	750	
250	10	838	787	1520	750	840	655	991	864	1560	900	1350	990	1270	914	1555	BGO	2050	1225	
300	12	965	914	1710	BGO	1300	1015	1130	991	1760	BGO	2000	1435	1422	1041	1640	BGO	2900	1605	
350	14	1029	991	1800	BGO	1650	1315	1257	1067	1800	BGO	2600	1785	-	1118	1750	BGO	-	1930	
400	16	1130	1092	2005	BGO	2070	1710	1384	1194	1920	BGO	3400	2315	-	1245	2080	BGO	-	2750	
450	18	1219	1143	2080	BGO	2600	2030	1537	1346	2250	BGO	4100	2980	-	1397	2150	BGO	-	3880	
500	20	1321	1245	2155	BGO	3340	2650	1664	1473	2470	BGO	5920	4665	-	1524	2350	BGO	-	6020	
550	22	-	-	-	BGO	-	-	-	-	-	BGO	-	-	-	-	-	BGO	-	-	
600	24	1549	1397	2820	BGO	5500	4050	1943	1943	2620	BGO	8460	6665	-	1676	2450	BGO	-	8170	

# FASANI PRESSURE SEAL CAST GATE VALVES - STYLE B

## WEDGE GATE

Standard ISO top mounting for easy assembly of any type of actuator or bevel gear

Pressure seal gasket developed with trapezoidal shape in graphite with integral stainless steel anti extrusion protection, for a low load on bolting

Backseats, for easy maintenance without interrupting production time

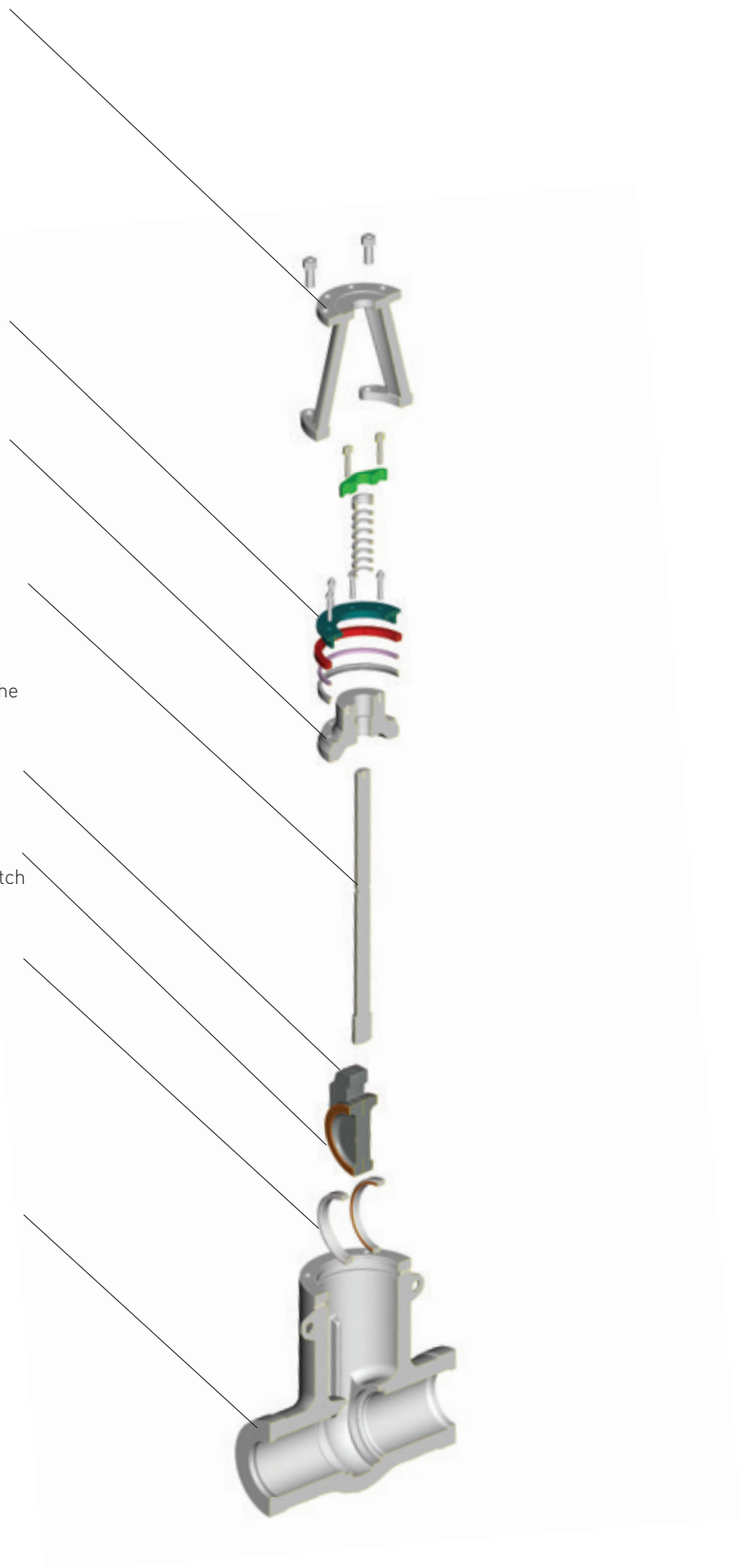
Rising stem - provides unrestricted flow with the disc completely outside the flow path

Integral T-head stem connection to the wedge - provides positive connection between stem and disc during all operating conditions.

Wedge guiding in the body for all the valve stroke - to ensure alignment of the disc with the seats, avoiding scratch or incorrect positioning

Renewable seats - for a simplified seats replacement

Bi-directional, except for the one equipped with by-pass and/or over pressure pipe





# FASANI PRESSURE SEAL CAST GATE VALVES - STYLE B

## WEDGE GATE

### WEDGE UNIQUENESS CODES

Old code	New uniqueness codes
VS600PSB	1B0D*****
VS900PSB	1B0E*****
VS1500PSB	1B0F*****
VS2500PSB	1B0G*****

### ORDERING GUIDE

Example:	1B	0	E	06	30	0	B2	H	A
<b>Valve type</b>									
<b>1B</b> Gate - Flexible wedge									
<b>Valve configuration</b>									
<b>0</b> Basic									
<b>Valve rating</b>									
<b>D</b> ASME 600			<b>F</b> ASME 1500						
<b>E</b> ASME 900			<b>G</b> ASME 2500						
<b>Nominal valve size</b>									
<b>02</b> 2"			<b>10</b> 10"			<b>22</b> 22"			
<b>25</b> 2½"			<b>12</b> 12"			<b>24</b> 24"			
<b>03</b> 3"			<b>14</b> 14"			<b>26</b> 26"			
<b>04</b> 4"			<b>16</b> 16"			<b>28</b> 28"			
<b>06</b> 6"			<b>18</b> 18"			<b>30</b> 30"			
<b>08</b> 8"			<b>20</b> 20"						
<b>Body material</b>									
<b>30</b> ASTM A216 WCB			<b>65</b> ASTM A351 CF8M						
<b>38</b> ASTM A217 C12A			<b>73</b> A352 LCB						
<b>44</b> ASTM A217 WC6			<b>78</b> ASTM A494 CW-6MC						
<b>45</b> ASTM A217 WC9			<b>99</b> ASTM A890 Gr 5A						
<b>62</b> ASTM A351 CF8C			<b>XY*</b> Other material						
<b>Cladding</b>									
<b>0</b> No Cladding									
<b>2</b> Sealing Gasket Area F316									
<b>Trim</b>									
<b>B2</b> 13% Cr. + 2 Stellite									
<b>D2</b> F316 + 2 Stellite									
<b>WZ*</b> Other material									
<b>Pipe connection</b>									
<b>A</b> Flanged per ASME B16.5									
<b>H</b> Weld End ASME B16.25									
<b>J</b> Weld End EN 12267									
<b>K</b> Weld End ISO 9692									
<b>Standard valve operation</b>									
<b>A</b> Handwheel									
<b>B</b> Bevel gear									
<b>C</b> Bare shaft (Coupling type A)									
<b>E</b> Bare shaft for linear actuator									

\* Other material available upon request.



