

**JC  
VALVES**  
*The quality option*



**GATE, GLOBE  
& CHECK VALVES**

*C. (open app.)*

*(app.)*

*(dado) B*

| GATE, GLOBE &amp; CHECK VALVES |

# GATE VALVES

2" - 36" | Class 150 - Class 2500

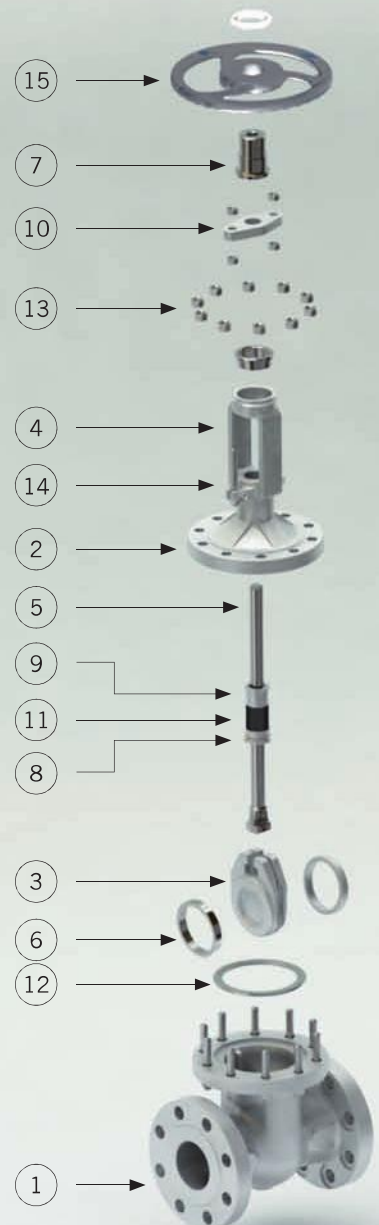


Gate valves serve as efficient on-off valves with flow in either direction. In such a design, a wedge slides across a general passageway in order to control fluid flow (like a sliding gate - hence, the name). One of the most significant characteristics of this type of valves is its straight-through, unobstructed passageway when set in the "full open" position. This is made possible by the wedge lifting entirely out of the passageway. As a result, gate valves are characterized by a minimum of turbulence and pressure drop in operation.

While gate valves are good for applications requiring these two factors, they are not recommended for installations in which throttling would be a function. They are designed for on/off service.

BILL OF MATERIALS		TRIM 8	TRIM 2	TRIM 8	TRIM 10
Item	Description	Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr. WCB	A 352 Gr. LCB	A 217 Gr. C5	A 351 Gr. CF8M
2	Bonnet	A 216 Gr. WCB	A 352 Gr. LCB	A 217 Gr. C5	A 351 Gr. CF8M
3	Wedge	A 216 Gr. WCB + ER410	A 352 Gr. LCB + ER308	A 217 Gr. C5 + ER410	A 351 Gr. CF8M
4	Yoke	A 216 Gr. WCB	A 352 Gr. LCB	A 217 Gr. C5	A 351 Gr. CF8M
5	Stem	A 182 Gr. F6a	A 182 Graph. F304	A 182 Gr. F6a	A 182 Gr. F316
6	Seat Ring	A 105 + Stellite	A 182 Gr. F304	A 182 Gr. F6a + Stellite	---
7	Stem Nut	B 148 / A 439 Gr. D2	B 148 / A 439 Gr. D2	B 148 / A 439 Gr. D2	B 148 / A 439 Gr. D2
8	Backseat	A182 Gr. F6a	A182 Gr. F304	A 182 Gr. F6a	---
9	Gland	A 105	A 105	A 182 Gr. F6a	A 182 Gr. F316
10	Gland Flange	A 105	A 105	A 105	A 182 Gr. F304
11	Stem Packing	Graphite	Graphite	Graphite	Graphite
12	Gasket (Class 150)	SS304 / Graphite	SS304 / Graphite	SS304 / Graphite	SS316 / Graphite
12	Gasket (Class 300)	Spw SS304 / Graphite	Spw SS304 / Graphite	Spw SS304 / Graphite	Spw SS316 / Graphite
12	Gasket (Class 600)	Spw SS304 / Graphite	Spw SS304 / Graphite	Spw SS304 / Graphite	Spw SS316 / Graphite
12	Gasket (Class 900)	RJ SS304	RJ SS304	RJ SS304	RJ SS316
12	Gasket (Class 1500)	RJ SS304	RJ SS304	RJ SS304	RJ SS316
12	Gasket (Class 2500)	RJ SS304	RJ SS304	RJ SS304	RJ SS316
13	Bonnet Bolt & Nut	A 193 Gr. B7 / A 194 Gr. 2H	A320 Gr. L7 / A194 Gr. 7	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H <sup>(1)</sup>
14	Eye Bolt & Nut	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H
15	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

\* Standard construction with trim 8, 2 and 10. Others constructions are available.  
(1) Zinc coating.



## Body and Bonnet

Bodies and bonnets are high quality cast and afterwards precisely machined, directing the attention to prevent stress concentration.

The bodies of gate valves consist of a straight through port that guarantees minimal turbulence and resistance to flow. In both designs, bolted bonnet and pressure seal, the bodies consist of guide slots to accommodate the wedge during opening or closing of the valve.

Bonnets are made either of one piece only –the yoke then being an integral part of it– or have two pieces, depending on the size of the valve. This ensures the perfect alignment with the body what leads to an accurate opening and closing.

## Backseat

All JC gate and globe valves have backseat threaded in the bonnet, or for the pressure seal valves, welded to the bonnet. Into pressure seal the hard facing is stellite 6 or equivalent.

## Stem

The stems of JC gate valves are forged from one piece and ACME threaded, then mechanized and finally provided with a smooth finishing in order to minimize friction.

In gate valves, the union of stem and wedge shall be in T form, designed to prevent the stem disengaging itself from the wedge while being in service. This design includes a conical raised surface that presses the seat against the bonnet backseat in the fully open position.

## Body and Bonnet Gaskets

The design of the body-bonnet/gaskets varies depending on the class of the valve.

Class 150 gate valves consist of a square joint in 2" and an oval one for all other sizes. Depending on the valve service it can be supplied flat-face gasket with graphite or PTFE.

Class 300 and 600 valves consist of a circular spiral wound gasket.

Class 900 and above gate valves consist of a ring type joint.

In pressure seal designs the sealing is achieved through a gasket that takes advantage of the internal pressure of the line. The material most commonly used is high-purity graphite being located between the body and the body retainer ring.

## Flexible Wedge

All Jc gate valves 3" and above valves feature a flexible wedge unless otherwise specified by the customer. The flexible wedge shifts along the body of the valve during opening and closing, being held in position by a guide slot that minimizes the friction between body seat and wedge. This design is especially suited to compensate slight thermal deformations produced by the pipe or the valve itself safeguarding a better sealing between body and wedge seats.

# STELLITE

### DESIGN STANDARDS

Bolted Bonnet Gate Valve	API 600/ISO 10434 & ASME B16.34
Pressure Seal Gate Valve (Long & Short pattern)	ASME B16.34
API 603 Gate Valve	API 603
Through Conduit Gate Valve	API 6D
Cryogenic Gate	API 600 / BS 1873 & BS 6364
Face to Face / End to End Dimensions	ASME B16.10 / ISO 5752
End Flanged dimensions	ASME B16.5 / ISO 7005-1, ASME B16.47-A&B, MSS SP-44 & API 605
Butt-weld End dimensions	ASME B16.25
Valve inspection & testing	API 600 / ISO 10434 & ISO 5208, EN 17266
Pressure - Temperature rating	ASME B16.34

### TEST / INSPECTION METHODS & ACCEPTANCE CRITERIA

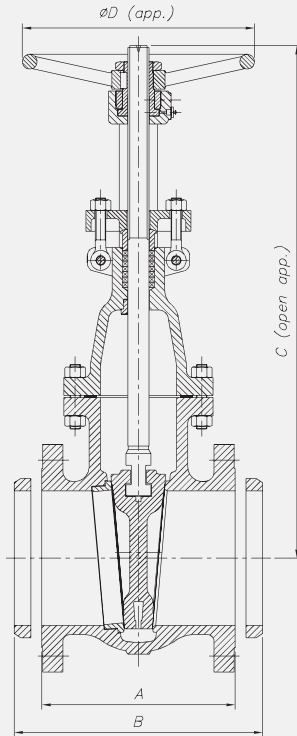
TEST / INSPECTION	METHOD	ACCEPTANCE CRITERIA
Visual Inspection		MSS SP-55
Marking		MSS SP-25 & ISO5208
Dimensional Inspection		Aplicable valve
Chemical Analysis	ASTM E350	Aplicable Standard
Mechanical Properties	ASTM A370	Aplicable Standard
Liquid Penetrant Inspection	ASTM A165	ASME B16.34
Magnetic Particle Inspection	ASTM E709	ASME B16.34
Radiographic Inspection	ASME B16.34	ASME B16.34
Ultrasonic Inspection	ASTM A388	ASME B16.34
Pressure Testing	API 598 / ISO 5208	API 598 / ISO 5208

## API 600 / BS1414 BOLTED BONNET

Class 150

VC150BB

Sizes 2" to 36"



Carbon steel and alloy steel construction

Stainless steel construction

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-CrR A
16	Hardfaced	18Cr-8Ni-Mo	Co-CrR A
17	Hardfaced	18Cr-10Ni-Cb	Co-CrR A
18	Hardfaced	19Cr-29Ni	Co-CrR A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A	B	C	ØD	WEIGHT (App.) <sup>(*)</sup>
50 (2")	178	216	386	200	17
65 (2½")	190	241	435	200	27
80 (3")	203	282,5	483	250	33
100 (4")	229	305	587	250	48
125 (5")	254	381	673	300	65
150 (6")	267	403	767	300	78
200 (8")	292	419	955	350	120
250 (10")	330	457	1146	450	176
300 (12")	356	502	1328	500	260
350 (14")	381	572	1519	460 <sup>(*)</sup>	380 <sup>(*)</sup>
400 (16")	406	610	1721	460 <sup>(*)</sup>	530 <sup>(*)</sup>
450 (18")	432	660	1900	460 <sup>(*)</sup>	620 <sup>(*)</sup>
500 (20")	457	711	2116	610 <sup>(*)</sup>	810 <sup>(*)</sup>
550 (22")	483	762	2315	610 <sup>(*)</sup>	1050 <sup>(*)</sup>
600 (24")	508	813	2480	610 <sup>(*)</sup>	1150 <sup>(*)</sup>
650 (26")	559	-	2700	610 <sup>(*)</sup>	1380 <sup>(*)</sup>
700 (28")	610	-	2975	610 <sup>(*)</sup>	1980 <sup>(*)</sup>
750 (30")	610	-	3102	610 <sup>(*)</sup>	2200 <sup>(*)</sup>
900 (36")	711	-	3668	710 <sup>(*)</sup>	2800 <sup>(*)</sup>

<sup>(\*)</sup> With Gear Operator.<sup>(\*\*)</sup> With flanges.

Dimensions in mm and weight in kg.

Weights and dimensions can be changed without notice.

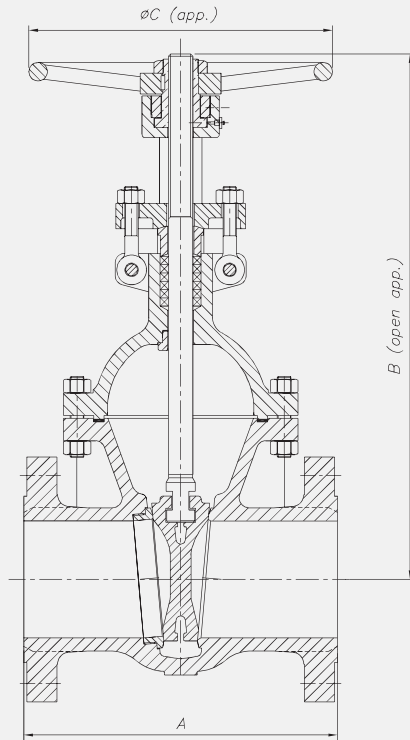
Bigger sizes available under customer request.

## API 600 / BS1414 BOLTED BONNET

Class 300

VC300BB

Sizes 2" to 24"



Carbon steel and alloy steel construction

Stainless steel construction

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A
18	Hardfaced	19Cr-29Ni	Co-Cr A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A (RF / BW)	B	ØC	WEIGHT (App.)
50 (2")	216	417	200	24
65 (2½")	241	460	250	35
80 (3")	282,5	526	250	49
100 (4")	305	650	250	69
125 (5")	381	694	300	92
150 (6")	403	824	350	130
200 (8")	419	987	450	208
250 (10")	457	1192	500	333
300 (12")	502	1431	560	536
350 (14")	762	1559	460 (*)	699 (*)
400 (16")	838	1758	460 (*)	1010 (*)
450 (18")	914	1942	610 (*)	1205 (*)
500 (20")	991	2145	610 (*)	1720 (*)
550 (22")	1092	2340	610 (*)	1920 (*)
600 (24")	1143	2526	610 (*)	2580 (*)

(\*) With Gear Operator.

Dimensions in mm and weight in kg.

Weights and dimensions can be changed without notice.

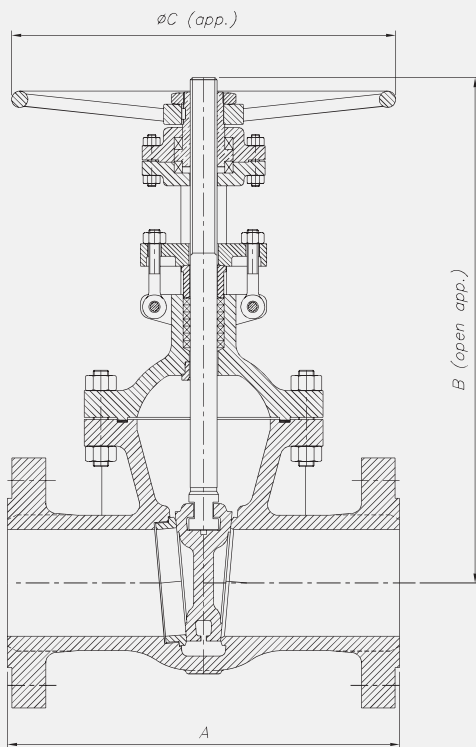
Bigger sizes available under customer request.

## API 600 / BS1414 BOLTED BONNET

Class 600

VC600BB

Sizes 2" to 24"



Carbon and alloy steel construction

Stainless steel construction

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-CrR A
16	Hardfaced	18Cr-8Ni-Mo	Co-CrR A
17	Hardfaced	18Cr-10Ni-Cb	Co-CrR A
18	Hardfaced	19Cr-29Ni	Co-CrR A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34

DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M, DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A (RF/BW)	B	ØC	WEIGHT (App.)
50 (2")	292	427	250	33
65 (2½")	330	473	250	58
80 (3")	356	538	300	63
100 (4")	432	657	350	131
125 (5")	508	770	400	182
150 (6")	559	872	500	253
200 (8")	660	1101	560	413
250 (10")	787	1279	720	623
300 (12")	838	1486	610 (*)	784 (*)
350 (14")	889	1643	610 (*)	1288 (*)
400 (16")	991	1798	610 (*)	1820 (*)
450 (18")	1092	2101	610 (*)	2150 (*)
500 (20")	1194	2259	710 (*)	2540 (*)
550 (22")	1295	2405	760 (*)	2800 (*)
600 (24")	1397	2545	760 (*)	3350 (*)

(\*) With Gear Operator.

Dimensions in mm and weight in kg.

Weights and dimensions can be changed without notice.

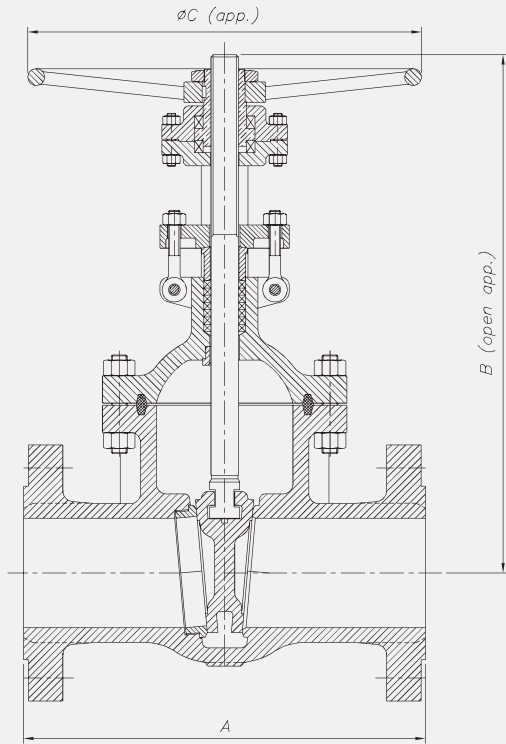
Bigger sizes available under customer request.

## API 600 / BS1414 BOLTED BONNET

Class 900

VC900BB

Sizes 2" to 20"



Carbon and alloy steel construction

Stainless steel construction

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A
18	Hardfaced	19Cr-29Ni	Co-Cr A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A (RF/BW)	B	ØC	WEIGHT (App.)
50 (2")	368	547	300	90
65 (2½")	419	700	350	110
80 (3")	381	648	400	123
100 (4")	457	729	450	148
125 (5")	559	890	500	280
150 (6")	610	1041	560	420
200 (8")	737	1260	460 (*)	650 (*)
250 (10")	838	1590	610 (*)	1160 (*)
300 (12")	965	1795	610 (*)	1700 (*)
350 (14")	1029	2025	760 (*)	2300 (*)
400 (16")	1130	2170	760 (*)	2750 (*)
450 (18")	1219	2345	760 (*)	3120 (*)
500 (20")	1321	2610	760 (*)	3550 (*)

(\*) With Gear Operator.

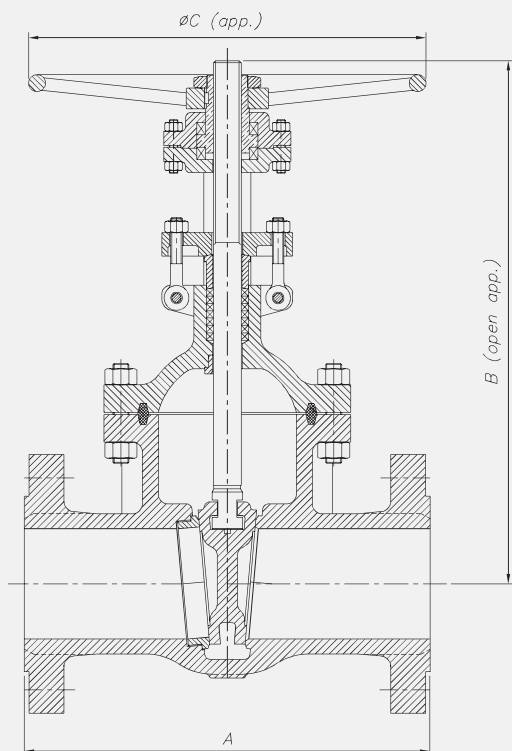
Dimensions in mm and weight in kg.  
 Weights and dimensions can be changed without notice.  
 Bigger sizes available under customer request.

## API 600 / BS1414 BOLTED BONNET

Class 1500

VC1500BB

Sizes 2" to 16"



Carbon and alloy steel construction

Stainless steel construction

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-CrR A
16	Hardfaced	18Cr-8Ni-Mo	Co-CrR A
17	Hardfaced	18Cr-10Ni-Cb	Co-CrR A
18	Hardfaced	19Cr-29Ni	Co-CrR A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A (RF/BW)	B	ØC	WEIGHT (App.)
50 (2")	368	574	350	117
65 (2½")	419	700	400	175
80 (3")	470	806	450	240
100 (4")	546	887	560	337
125 (5")	673	995	560	485
150 (6")	705	1079	305 <sup>(*)</sup>	680
200 (8")	832	1370	610 <sup>(*)</sup>	1228 <sup>(*)</sup>
250 (10")	991	1520	760 <sup>(*)</sup>	2218 <sup>(*)</sup>
300 (12")	1130	1651	760 <sup>(*)</sup>	3260 <sup>(*)</sup>
350 (14")	1257	1825	760 <sup>(*)</sup>	3990 <sup>(*)</sup>
400 (16")	1384	1995	760 <sup>(*)</sup>	5420 <sup>(*)</sup>

<sup>(\*)</sup> With Gear Operator.  
 Dimensions in mm and weight in kg.  
 Weights and dimensions can be changed without notice.  
 Bigger sizes available under customer request.

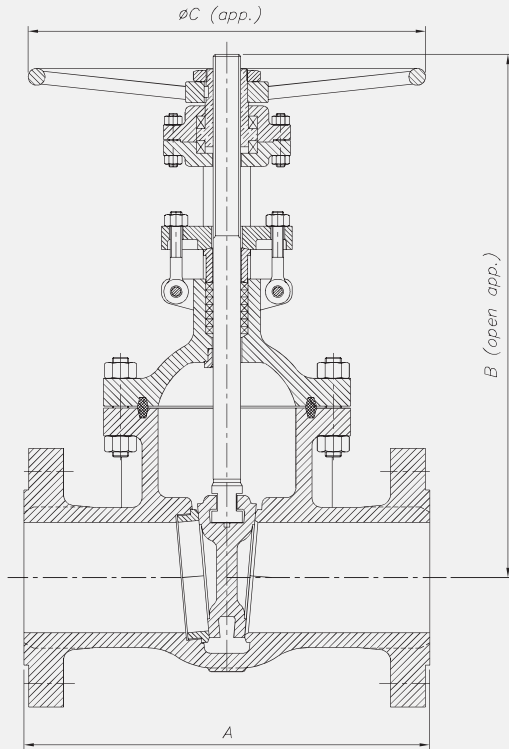


## API 600 / BS1414 BOLTED BONNET

Class 2500

VC2500BB

Sizes 2" to 14"



Carbon and alloy steel construction

Stainless steel construction

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A
18	Hardfaced	19Cr-29Ni	Co-Cr A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A (RF/BW)	B	ØC	WEIGHT (App.)
50 (2")	451	595	400	155
65 (2½")	508	675	450	215
80 (3")	578	750	560	285
100 (4")	673	805	610	405
125 (5")	794	1010	610	715
150 (6")	914	1200	460 (*)	1050 (*)
200 (8")	1022	1346	610 (*)	1700 (*)
250 (10")	1270	1500	760 (*)	2950 (*)
300 (12")	1422	1700	760 (*)	4120 (*)
350 (14")	1575	1950	760 (*)	5790 (*)

(\*) With Gear Operator.

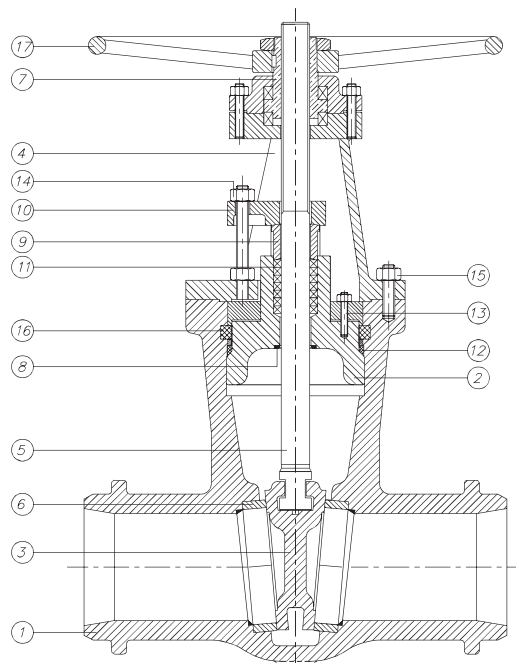
Dimensions in mm and weight in kg.  
 Weights and dimensions can be changed without notice.  
 Bigger sizes available under customer request.

| GATE, GLOBE, CHECK VALVES |

# GATE VALVES

# PRESSURE SEAL

2" - 20" | Class 900 - Class 2500



BILL OF MATERIALS		TRIM 8	TRIM 2	TRIM 8	TRIM 10
Item	Description	Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr. WCB	A 352 Gr. LCB	A 217 Gr. C5	A 351 Gr. CF8M
2	Bonnet	A 216 Gr. WCB	A 352 Gr. LCB	A 217 Gr. C5	A 351 Gr. CF8M
3	Wedge	A 216 Gr. WCB + Stellite	A 352 Gr. LCB + Stellite	A 217 Gr. C5 + Stellite	A 351 Gr. CF8M + Stellite
4	Yoke	A 216 Gr. WCB	A 352 Gr. LCB	A 217 Gr. C5	A 351 Gr. CF8M
5	Stem	A 182 Gr. F6a	A 182 Gr. F304	A 182 Gr. F6a	A 182 Gr. F316
6	Seat Ring	A 105 + Stellite	A 182 Gr. F304 + Stellite	A 182 Gr. F6a + Stellite	A 182 Gr. F316 + Stellite
7	Stem Nut	B 148 / A 439 Gr. D2	B 148 / A 439 Gr. D2	B 148 / A 439 Gr. D2	B 148 / A 439 Gr. D2
8	Backseat	Stellite	Stellite	Stellite	Stellite
9	Gland	A 105	A 105	A 182 Gr. F6a	A 182 Gr. F316
10	Gland Flange	A 105	A 105	A 105	A 182 Gr. F304
11	Stem Packing	Graphite	Graphite	Graphite	Graphite
12	Gasket (Class 900)	Graphite or SS304L	Graphite or SS304L	Graphite or SS304L	Graphite or SS316L
12	Gasket (Class 1500)	Graphite or SS304L	Graphite or SS304L	Graphite or SS304L	Graphite or SS316L
12	Gasket (Class 2500)	Graphite or SS304L	Graphite or SS304L	Graphite or SS304L	Graphite or SS316L
13	Bonnet Bolt & Nut	A 193 Gr. B7 / A 194 Gr. 2H	A320 Gr. L7 / A194 Gr. 7	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H <sup>(1)</sup>
14	Bolt & Nut	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H
15	Yoke Bolt & Nut	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H	A 193 Gr. B7 / A 194 Gr. 2H <sup>(1)</sup>
16	Segmental Ring	A 515 Gr. 70	A 182 Gr. F304	A 182 Gr. F304	A 182 Gr. F316
17	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

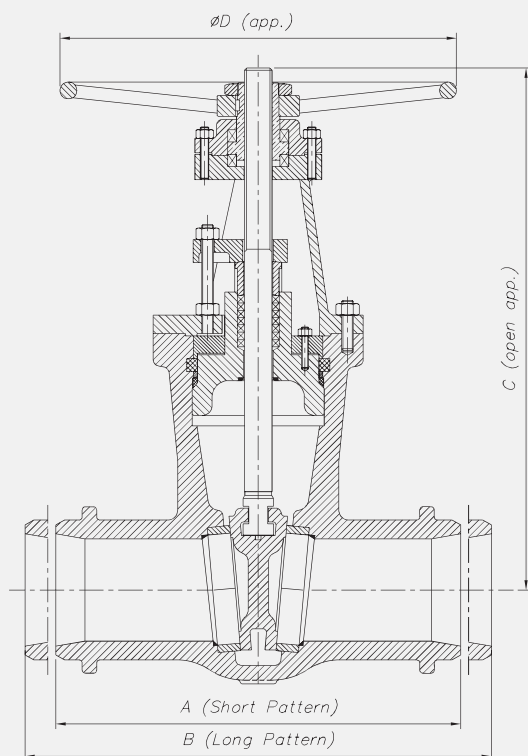
(1) Zinc coating.

## ASME B16.34 PRESSURE SEAL

Class 900

VC900PS

Sizes 2" to 20"



\* Long pattern available with flanges.

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A
18	Hardfaced	19Cr-29Ni	Co-Cr A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A	B	C	ØD	WEIGHT (App.) <sup>(1)</sup>
50 (2")	216	368	570	250	55
65 (2½")	254	419	680	250	65
80 (3")	305	381	795	350	80
100 (4")	356	457	870	350	215
125 (5")	432	559	975	400	275
150 (6")	508	610	1070	460	320
200 (8")	660	737	1360	400 <sup>(2)</sup>	580 <sup>(2)</sup>
250 (10")	787	838	1505	400 <sup>(2)</sup>	890 <sup>(2)</sup>
300 (12")	914	965	1630	460 <sup>(2)</sup>	1105 <sup>(2)</sup>
350 (14")	991	1029	1795	500 <sup>(2)</sup>	1370 <sup>(2)</sup>
400 (16")	1092	1130	1945	610 <sup>(2)</sup>	2050 <sup>(2)</sup>
450 (18")	-	1219	2155	610 <sup>(2)</sup>	2780 <sup>(2)</sup>
500 (20")	-	1321	2305	710 <sup>(2)</sup>	3420 <sup>(2)</sup>

<sup>(1)</sup> With Gear Operator.<sup>(2)</sup> BW ends, short pattern.

Dimensions in mm and weight in kg.

Weights and dimensions can be changed without notice.

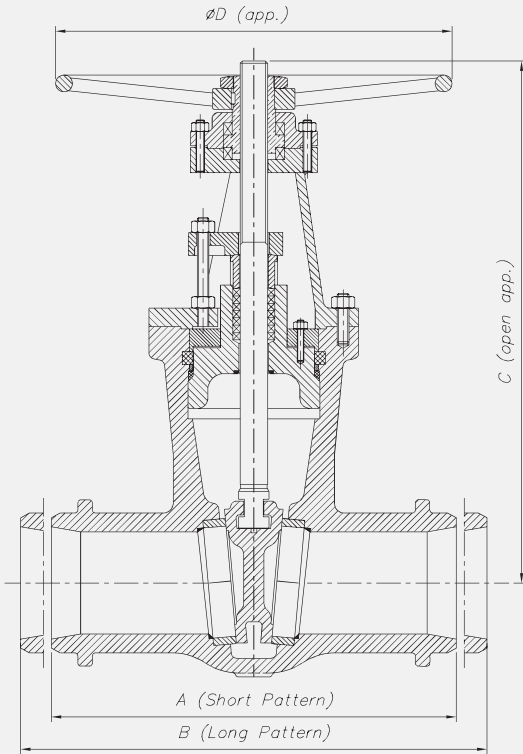
Bigger sizes available under customer request.

## ASME B16.34 PRESSURE SEAL

Class 1500

VC1500PS

Sizes 2" to 18"



\* Long pattern available with flanges.

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-CrR A
16	Hardfaced	18Cr-8Ni-Mo	Co-CrR A
17	Hardfaced	18Cr-10Ni-Cb	Co-CrR A
18	Hardfaced	19Cr-29Ni	Co-CrR A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A	B	C	$\varnothing D$	WEIGHT (A.pp.) <sup>(**)</sup>
50 (2")	216	368	574	250	67
65 (2½")	254	419	700	350	95
80 (3")	305	470	806	350	119
100 (4")	406	546	887	400	280
125 (5")	483	673	990	460	370
150 (6")	559	705	1079	460 <sup>(*)</sup>	475 <sup>(*)</sup>
200 (8")	711	832	1370	710 <sup>(*)</sup>	855 <sup>(*)</sup>
250 (10")	863	991	1520	710 <sup>(*)</sup>	1222 <sup>(*)</sup>
300 (12")	991	1130	1650	710 <sup>(*)</sup>	1470 <sup>(*)</sup>
350 (14")	1067	1257	1820	710 <sup>(*)</sup>	1990 <sup>(*)</sup>
400 (16")	1194	1384	1990	760 <sup>(*)</sup>	2850 <sup>(*)</sup>
450 (18")	1346	1537	2180	760 <sup>(*)</sup>	3905 <sup>(*)</sup>

(\*) With Gear Operator.

(\*\*) BW ends, short pattern.

Dimensions in mm and weight in kg.

Weights and dimensions can be changed without notice.

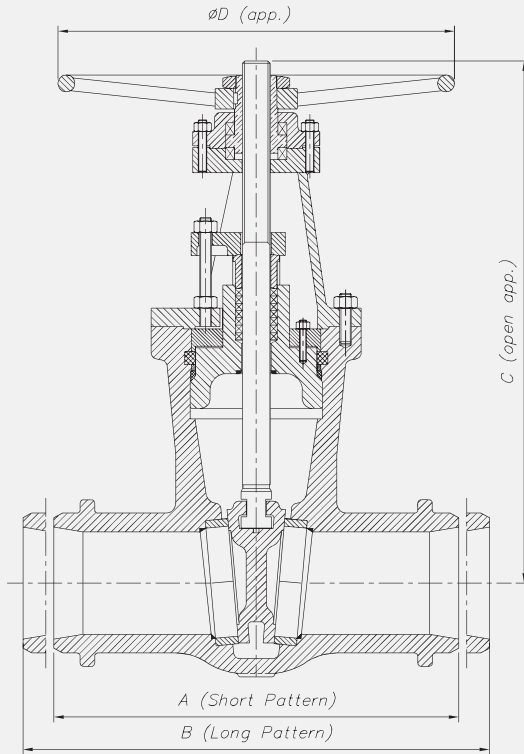
Bigger sizes available under customer request.

## ASME B16.34 PRESSURE SEAL

Class 2500

VC2500PS

Sizes 2" to 12"



\* Long pattern available with flanges.

## TRIM

API 600 TRIM N°	Nominal TRIM	Stem / Backseat	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A
18	Hardfaced	19Cr-29Ni	Co-Cr A

HF: Hard Facing using CoCr welding alloy (Stellite)

## Materials

ACC. / ASME B16.34  
 DI, WCB, WCC, WC1, WC6, WC9, C5, C12, LCB, LCC, CF8, CF8C, CF8M, CF3, CF3M,  
 DUPLEX, SUPERDUPLEX, EXOTIC MATERIALS.

## General dimensions

DN	A	B	C	ØD	WEIGHT (App.) <sup>(**)</sup>
50 (2")	279	451	585	250	90
65 (2½")	330	508	710	350	120
80 (3")	368	578	820	250	155
100 (4")	457	673	895	400	315
125 (5")	533	794	980	500	395
150 (6")	610	914	1060	500 <sup>(*)</sup>	525 <sup>(*)</sup>
200 (8")	762	1022	1310	710 <sup>(*)</sup>	980 <sup>(*)</sup>
250 (10")	914	1270	1480	710 <sup>(*)</sup>	1315 <sup>(*)</sup>
300 (12")	1041	1422	1520	760 <sup>(*)</sup>	1850 <sup>(*)</sup>

(\*) With Gear Operator.

(\*\*) BW ends, short pattern.

Dimensions in mm and weight in kg.

Weights and dimensions can be changed without notice.

Bigger sizes available under customer request.