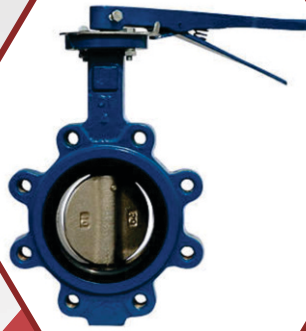




⚡ **STARTFLO CONTROLS**

The Masters in Flow Technology



PRODUCT CATALOGUE



STARTFLO CONTROLS

The Masters in Flow Technology

STARTFLO CONTROLS cares for Customers, Energy and Environment.

OUR MISSION :

To provide complete satisfaction to the customer through expert technical guidance, reliable product of highest quality backed by strong after sales service thus earning customers trust and confidence and become partner in their business.

STARTFLO CONTROLS is manufacturer of Ball Valves, Gate Valves, Globe Valves, Check Valves, & Butterfly valves, application for oil & gas, petrochemicals, water treatment, chemicals, pharma, sugar industries & paper industries etc.

STARTFLO CONTROLS has a team of qualified and well trained persons to take care of marketing and service. Startflo controls is known in the industries as a company who provides right solutions with prompt service. Startflo Controls helps the customers in proper selection of products for their requirement.

OUR VISION:

To become “Customer Preferred Company” worldwide that manufactures and delivers the valves with global support and zero errors within the smallest lead time.

OUR STRENGTHS:

Highly reliable products.
Qualified team to provide technical guidance and offers within record time
Well trained team for quick and satisfactory service
Customers trust earned through years of hard work

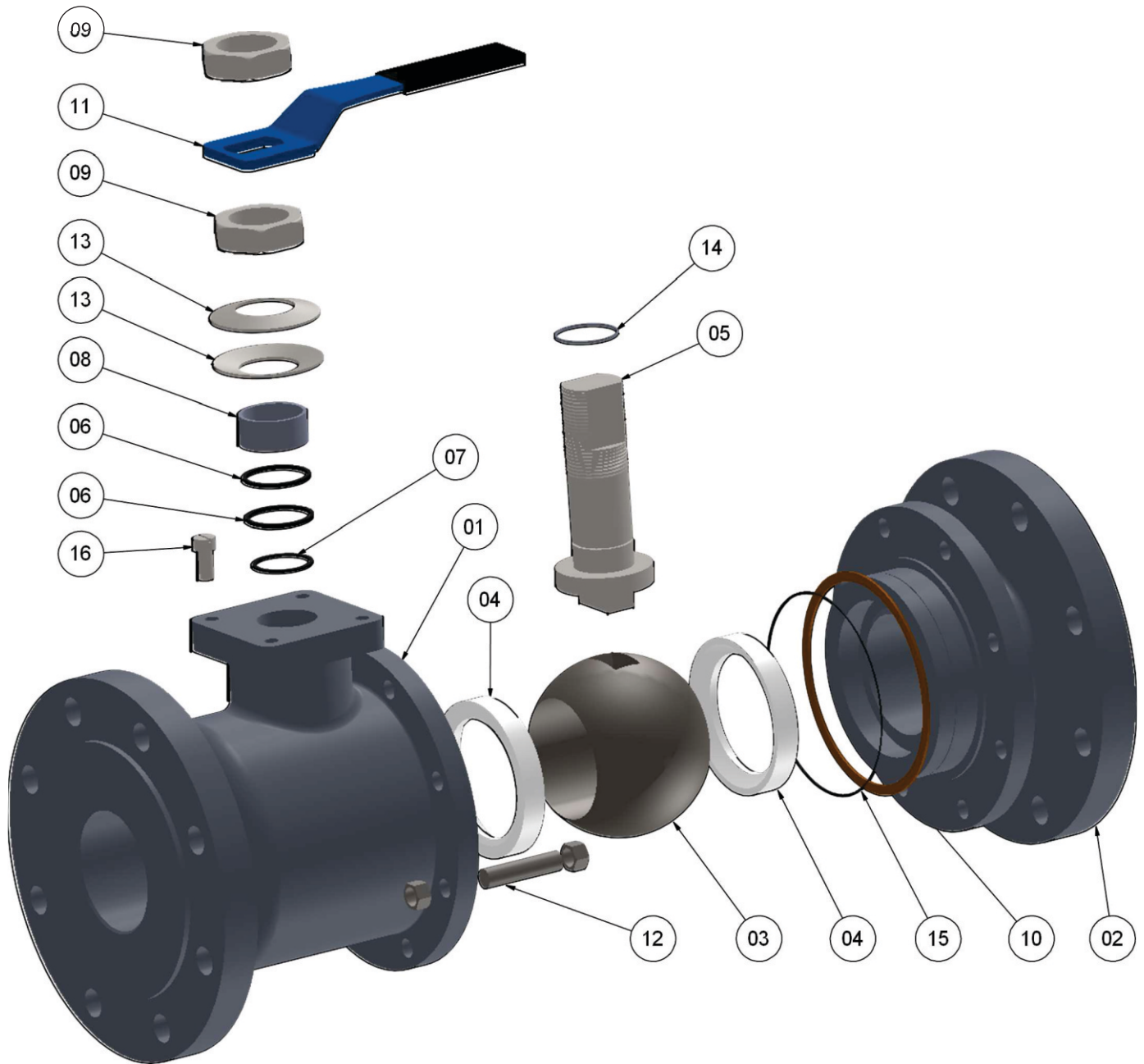
INDUSTRIES WE CAN SERVE

Chemical/Petrochemical/Fertilizer
Plant Power Plants
Food Industry
Oil and Gas
Pharmaceuticals
Water Treatment and supply, cooling Tower
Flow control

MISSION
VISION
STRENGTHS



2 PIECE FLOATING BALL VALVE



PART NAME

- | | |
|-------------------|------------------------|
| 01 : BODY | 09 : GLAND / LOCKNUT |
| 02 : BODY ADAPTER | 10 : BODY GASKET |
| 03 : BALL | 11 : LEVER SLEEVE |
| 04 : SEAT | 12 : STUD & NUT |
| 05 : STEM | 13 : BELLEVILLE WASHER |
| 06 : STEM PACKING | 14 : STEM ORING |
| 07 : STEM WASHER | 15 : ADAPTER ORING |
| 08 : GLAND | 16 : STOPPER PIN |



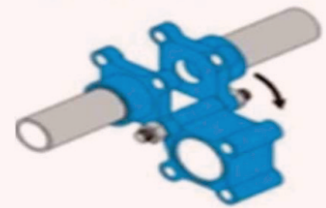
PRODUCT CONSTRUCTION & FEATURES

PRODUCT APPLICATIONS : FOOD INDUSTRY, PHARM INDUSTRY, CHEMICAL INDUSTRY, OIL & GAS, FIRE FIGHTING SYSTEM, BEVERAGE INDUSTRY, WATER TREATMENT PLANT, MARINE

In two piece design the body is constructed in two piece and the ball is held in position by body stud. There can be full bore or reduce bore design possible in this construction.



Three piece design valves are most easily on-line maintainable. By removing the body bolts keeping only one, the body can be swung away using the last bolt as fulcrum, to carry out any installation or maintenance operation on the valve. This feature reduces maintenance downtime to a bare minimum.

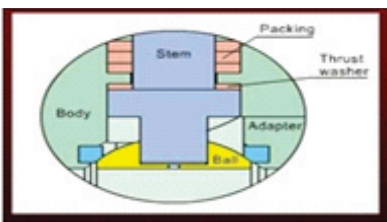


DESIGN FEATURES



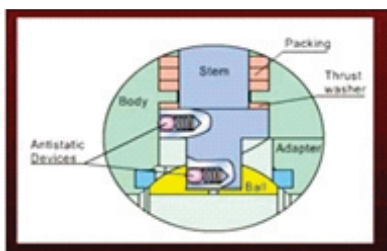
FIRE SAFE SEAT SEALING

When non-metal resilient seats are destroyed in a fire, the upstream medium pressure push the ball into the downstream metal seat lip to cut off the line fluid and prevent the internal leakage due to a secondary metal to metal seals



BLOW OUT PROOF STEM

The stem is designed with integral T-type shoulder to provide blow-out proof effectively. It is internally inserted the backseat function to assure stem sealing safety at all pressure



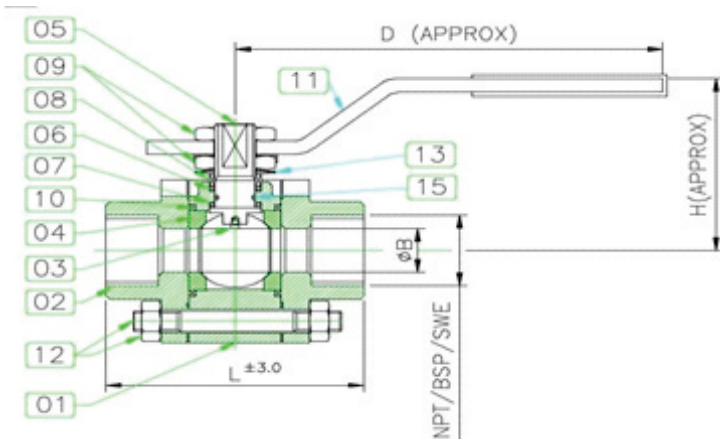
ANTI-STATIC DEVICE

Antistatic device between ball & stem & stem & body are assembled by a spring & a stainless steel ball, which ensure all metal valve parts are grounding.

- > ANY OTHER SPECIAL FEATURES SHOULD BE PROVIDED AS PER CUSTOMER REQUIREMENTS
- > DOUBLE SEALING FEATURE PROVIDED IN ADAPTOR JOINT & STEM JOINT, IF REQUEST
- > INTEGRAL MOUNTING FLANGE SUITABLE FOR PNEUMATIC ACTUATOR.



3PC - FLOATING BALL VALVE(SCREWED)



TECHNICAL STANDARDS

DESIGN STANDARDS :- BS EN ISO 17292
 SCREWED END :- BSP (BS21) / NPT (ASME B1.20.1)
 SOCKET WELD END :- ASME B16.11
 FACE TO FACE :- MANUFACTURERES
 TESTING STANDARDS :- API 598 / EN12266-1

TEST PRESSURE IN (Kg/cm²)

	CL-150	CL-300	CL-600
HYDRO SHELL	32	79	156
HYDRO SEAT	22	58	70
AIR SEAT	6.2	6.2	6.2

MATERIAL SPECIFICATION

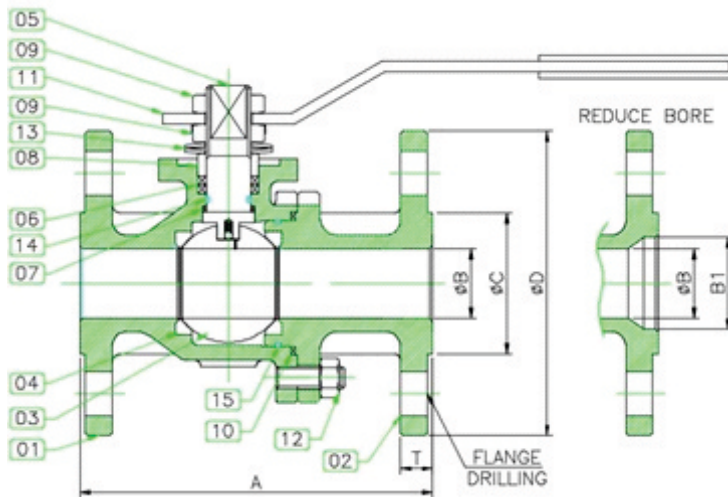
BODY	: WCB/CF8/CF8M/CF3/CF3M/LCB/CA15/Gr.4A,5A
BODY ADAPTER	: WCB/CF8/CF8M/CF3/CF3M/LCB/CA15/Gr.4A,5A
BALL	: CF8/CF8M/CF3/CF3M/Gr.4A,5A SS304/SS316/SS304L/SS316L/SS410/F51,F53
SEAT	: PTFE/RPTFE/GFT/PEEK/CFT
STEM	: SS304/SS316/SS304L/SS316L/SS410/F51,F53/17-4PH
STEM PACKING	: GRAPHITE/PTFE/GFT
STEM WASHER	: GFT/PTFE
GLAND	: SS304/SS316
GLAND/LOCK NUT	SS304/SS316
BODY GASKET	: GRAPHITE/PTFE/GFT
LEVER+SLEEVE	: CS+PLATE+PVC / SS+PVC
STUD & NUT	: ASTM A193 B7,B7M,B8,B8M / ASTM A320 L7,L7M ASTM A194 2H,2HM,GR.8,8M / GR.7, 7M
BELLEVILLE WASHER	: SPRING STEEL / 50 Cr V4
STEM ORING (OPTIONAL)	: VITON-B

SERIES SFCBV36 - FULL BORE					BSP/NPT/SWE	SERIES SFCBV36R - REDUCE BORE				
SIZE	L	ØB	D	H		SIZE	L	ØB	D	H
1/2"	65	13	110	70		1/2"	65	9	110	70
3/4"	75	19	110	75		3/4"	70	13	110	75
1"	85	25	160	85		1"	85	19	160	85
1-1/2"	115	38	180	115		1-1/2"	115	25	180	115
2"	128	50	220	125		2"	125	38	220	125

- > Other special MOC can be provided as per customer requirements.
- > Any special requirements provide as per customer requirements.



2PC - FLOATING BALL VALVE



TECHNICAL STANDARDS

DESIGN STANDARDS :- BS EN ISO 17292 / API 6D
 FLANGE ENDS :- ASME B16.5
 BUTT WELD ENDS :- ASME B16.25
 FACE TO FACE :- ASME B16.10 / API 6D
 TESTING STANDARDS :- API 598 / EN12266-1
 FIRE SAFE :- API 607

TEST PRESSURE IN (Kg/cm²)

	CL-150	CL-300
HYDRO SHELL	32	79
HYDRO SEAT	22	58
AIR SEAT	6.2	6.2

MATERIAL SPECIFICATION

BODY	: WCB/CF8/CF8M/CF3/CF3M/LCB/CA15/Gr.4A,5A
BODY ADAPTER	: WCB/CF8/CF8M/CF3/CF3M/LCB/CA15/Gr.4A,5A
BALL	: CF8/CF8M/CF3/CF3M/Gr.4A,5A SS304/SS316/SS304L/SS316L/SS410/F51,F53
SEAT	: PTFE/RPTFE/GFT/PEEK/CFT
STEM	: SS304/SS316/SS304L/SS316L/SS410/F51,F53/17-4PH
STEM PACKING	: GRAPHITE/PTFE/GFT
STEM WASHER	: GFT/PTFE
GLAND	: SS304/SS316
GLAND/LOCK NUT	: SS304/SS316
BODY GASKET	: GRAPHITE/PTFE/GFT/SPW+SS304/316
LEVER+SLEEVE	: CS+PLATE+PVC / SS+PVC
STUD & NUT	: ASTM A193 B7,B7M,B8,B8M / ASTM A320 L7,L7M : ASTM A194 2H,2HM,GR.8,8M / GR.7, 7M
BELLEVILLE WASHER	: SPRING STEEL / 50 Cr V4
STEM ORING (OPTIONAL)	: VITON-B
ADAPTER ORING (OPTIONAL)	: VITON-B

- > Valve up to 4" (#300) provided lever operated, Above (#600) & 6" provided Gear/Pneumatic, Actuator
- > Other special MOC can be provided as per customer requirements.
- > Any special requirements provide as per customer requirements.



DIMENSIONAL DETAIL

SERIES : SFCBV21 FULL BORE (#150),2P, FLANGE END

Sr. No	SIZE		A	ØB	ØB1	ØC	ØD	T	FLANGE DRILLING		
	DN	NPS							PCD	ØH	Nos.
1	15	1/2"	108	13	-	35	90	10	60.3	16	4
2	20	3/4"	117	19	-	43	100	10.9	69.9	16	4
3	25	1"	127	25	-	51	110	11.6	79.4	16	4
4	40	1-1/2"	165	38	-	73	125	14.7	98.4	16	4
5	50	2"	178	50	-	92	150	16.3	120.7	19	4
6	65	2-1/2"	190	62	-	105	180	17.9	139.7	19	4
7	80	3"	203	76	-	127	190	19.5	152.4	19	4
8	100	4"	229	101	-	157	230	24.3	190.5	19	8
9	150	6"	267	152	-	216	280	25.9	241.3	22.2	8
10	200	8"	457	201	-	270	345	29	298.5	22.2	8

SERIES : SFCBV23 FULL BORE (#300),2P, FLANGE END

Sr. No	SIZE		A	ØB	ØB1	ØC	ØD	T	FLANGE DRILLING		
	DN	NPS							PCD	ØH	Nos.
1	15	1/2"	140	13	-	35	95	14.7	66.7	16	4
2	20	3/4"	152	19	-	43	115	16.3	82.6	19	4
3	25	1"	165	25	-	51	125	17.9	88.9	19	4
4	40	1-1/2"	190	38	-	73	155	21.1	114.3	22.2	4
5	50	2"	216	50	-	92	165	22.7	127	19	8
6	65	2-1/2"	241	62	-	105	190	25.9	149.2	22.2	8
7	80	3"	282	76	-	127	210	29	168.3	22.2	8
8	100	4"	305	101	-	157	255	32.2	200	22.2	8
9	150	6"	403	152	-	216	320	37	269.9	22.2	12
10	200	8"	502	201	-	270	380	41.7	330.2	25.4	12

SERIES : SFCBV21R REDUCE BORE (#150),2P, FLANGE END

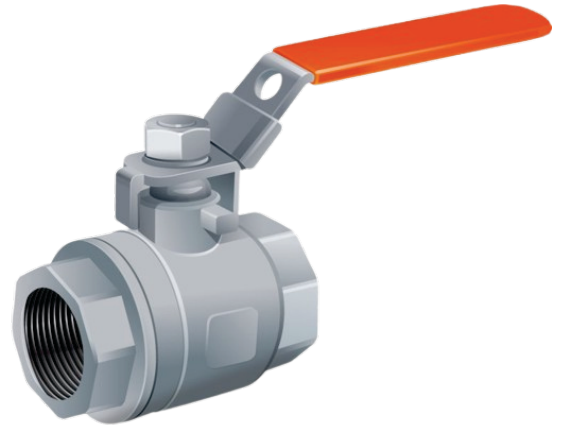
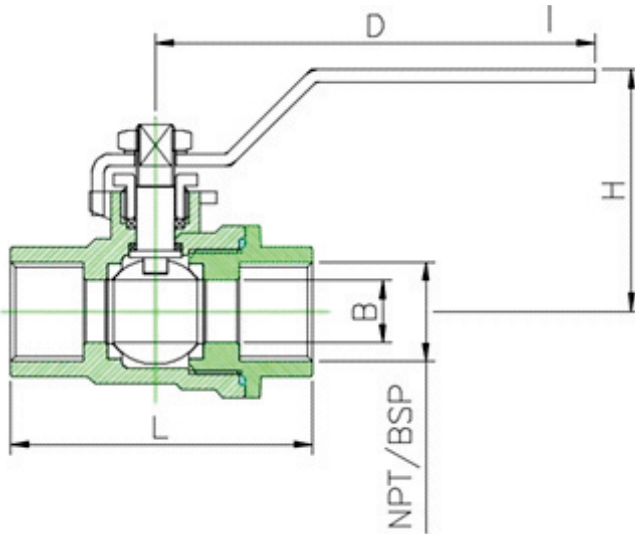
Sr. No	SIZE		A	ØB	ØB1	ØC	ØD	T	FLANGE DRILLING		
	DN	NPS							PCD	ØH	Nos.
1	15x10	1/2"x3/8"	108	10	13	35	90	10	60.3	16	4
2	20x15	3/4"x1/2"	117	13	19	43	100	10.9	69.9	16	4
3	25x20	1"x3/4"	127	19	25	51	110	11.6	79.4	16	4
4	40x25	1-1/2"x1"	165	25	38	73	125	14.7	98.4	16	4
5	50x40	2"x 1-1/2"	178	38	50	92	150	16.3	120.7	19	4
6	65x50	2-1/2"x2"	190	50	62	105	180	17.9	139.7	19	4
7	80x62	3"x2-1/2"	203	62	80	127	190	19.5	152.4	19	4
8	100x80	4"x3"	229	76	101	157	230	24.3	190.5	19	8
9	150x100	6"x4"	267	101	152	216	280	25.9	241.3	22.2	8

SERIES : SFCBV23R REDUCE BORE (#300),2P, FLANGE END

Sr. No	SIZE		A	ØB	ØB1	ØC	ØD	T	FLANGE DRILLING		
	DN	NPS							PCD	ØH	Nos.
1	15x10	1/2"x3/8"	140	10	13	35	95	14.7	66.7	16	4
2	20x15	3/4"x1/2"	152	13	19	43	115	16.3	82.6	19	4
3	25x20	1"x3/4"	165	19	25	51	125	17.9	88.9	19	4
4	40x25	1-1/2"x1"	190	25	38	73	155	21.1	114.3	22.2	4
5	50x40	2"x 1-1/2"	216	38	50	92	165	22.7	127	19	8
6	65x50	2-1/2"x2"	241	50	62	105	190	25.9	149.2	22.2	8
7	80x62	3"x2-1/2"	282	62	80	127	210	29	168.3	22.2	8
8	100x80	4"x3"	305	76	101	157	255	32.2	200	22.2	8
9	150x100	6"x4"	403	101	152	216	320	37	269.9	22.2	12



2PC - COMMERCIAL BALL VALVE(SCREWED)



TECHNICAL STANDARDS

DESIGN STANDARDS :- BS EN ISO 17292
SCREWED END :- BSP (BS21) / NPT (ASME B1.20.1)
SOCKET WELD END :- ASME B16.11
FACE TO FACE :- MANUFACTURERES
TESTING STANDARDS :- API 598 / EN12266-1

TEST PRESSURE IN (Kg/cm²)

	CL-150	CL-300
HYDRO SHELL	32	79
HYDRO SEAT	22	58
AIR SEAT	6.2	6.2

MATERIAL SPECIFICATION

BODY : WCB/CF8/CF8M/CF3/CF3M
BODY ADAPTER : WCB/CF8/CF8M/CF3/CF3M
BALL : CF8/CF8M/CF3/CF3M
SEAT : SS304/SS316/SS304L/SS316L
STEM : PTFE/RPTFE/GFT
STEM PACKING : SS304/SS316/SS304L/SS316L
STEM WASHER : PTFE/GFT
GLAND : GFT/PTFE
LOCK NUT : SS304/SS316
BODY GASKET : SS304/SS316
LEVER+SLEEVE : PTFE/GFTCS+PLATE+PVC / SS+PVC

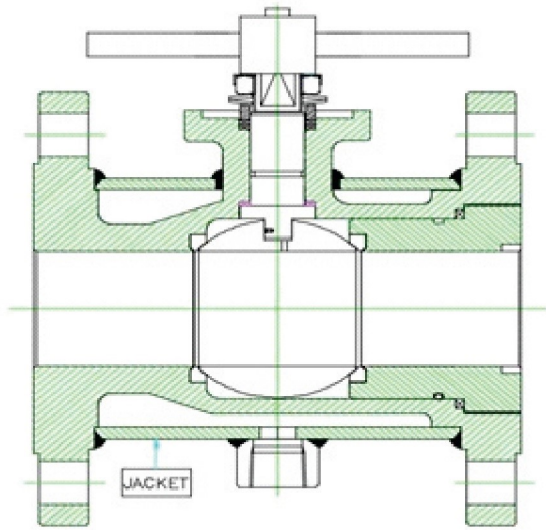
DIMENSIONAL DETAILS

SERIES - SFCBV21C - FULL BORE				
SIZE	L	ØB	D	H
1/2"	62	13	100	51
3/4"	75	19	120	62
1"	85	25	150	66
1-1/2"	110	38	180	80
2"	128	50	220	110

- > Other special MOC can be provided as per customer requirements.
- > Any special requirements provide as per customer requirements.



2PC - JACKETED BALL VALVE (CL-150 /300)



TECHNICAL STANDARDS

DESIGN STANDARDS :- BS EN ISO 17292 /API 6D
 FLANGE ENDS :- ASME B16.5
 BUTT WELD ENDS :- ASME B16.25/ISO17292
 FACE TO FACE :- ASME B16.10 /API 6D
 TESTING STANDARDS :- API 598 / EN12266-1
 FIRE SAFE :- API 607

TEST PRESSURE IN (Kg/cm²)

	CL-150	CL-300
HYDRO SHELL	32	79
HYDRO SEAT	22	58
AIR SEAT	6.2	6.2

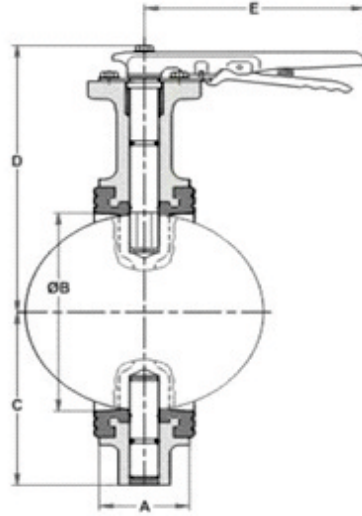
MATERIAL SPECIFICATION

BODY	: WCB/CF8/CF8M/CF3/CF3M/LCB/CA15/Gr.4A,5A
BODY ADAPTER	: WCB/CF8/CF8M/CF3/CF3M/LCB/CA15/Gr.4A,5A
BALL	: CF8/CF8M/CF3/CF3M/Gr.4A,5A SS304/SS316/SS304L/SS316L/SS410/F51,F53
SEAT	: PTFE/RPTFE/GFT/PEEK/CFT
STEM	: SS304/SS316/SS304L/SS316L/SS410/F51,F53/17-4PH
STEM PACKING	: GRAPHITE/PTFE/GFT
STEM WASHER	: GFT/PTFE
GLAND	: SS304/SS316
GLAND/LOCK NUT	: SS304/SS316
BODY GASKET	: GRAPHITE/PTFE/GFT/SPW+SS304/316
LEVER+SLEEVE	: CS+PLATE+PVC / SS+PVC
STUD & NUT	: ASTM A193 B7,B7M,B8,B8M / ASTM A320 L7,L7M ASTM A194 2H,2HM,GR.8,8M / GR.7, 7M
BELLEVILLE WASHER	: SPRING STEEL / 50 Cr V4
STEM ORING	: VITON-B
ADAPTER ORING	: VITON-B
JACKET	: SS304 /SS316
WELDO FLANGE / DRAIN BOSS	: SS304/SS316

SIZE RANGE :- 1/2" TO 8" (FULL BORE / REDUCE BORE), FLANGE END,2PC, #150 & 300



WAFER TYPE - BUTTERFLY VALVE



TECHNICAL STANDARDS

DESIGN STANDARDS :- BS EN 593 / API 609
TESTING STANDARDS :- API 598 / EN12266-1

TEST PRESSURE IN (Kg/cm²)

	PN10	PN16
HYDRO SHELL	15	24
SEAT	11	18

MATERIAL SPECIFICATION

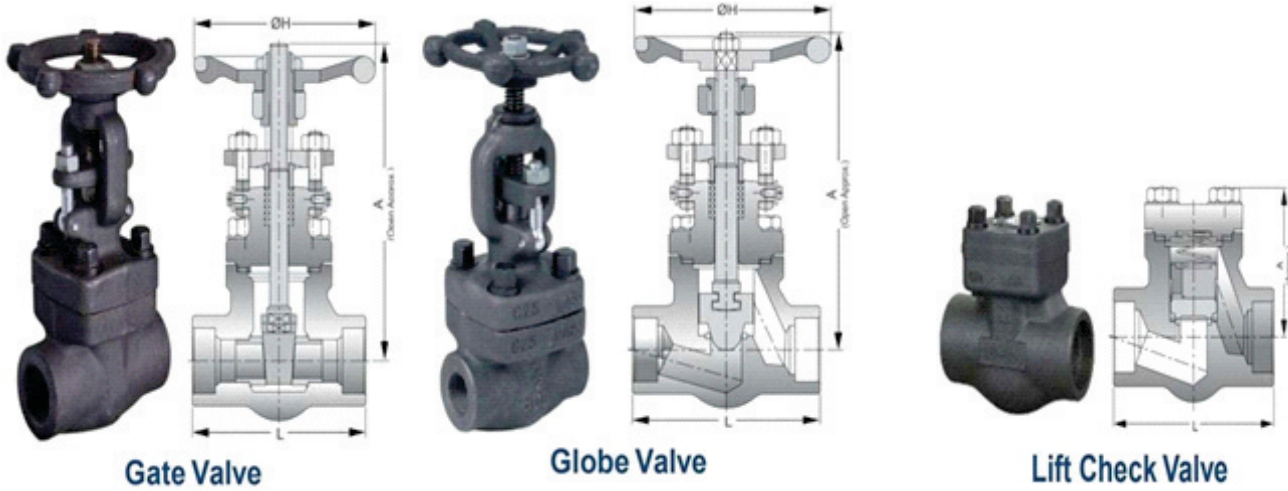
BODY : CI / ASTM A216 Gr.WCB/ ASTM A351 Gr.CF8,CF8M,CF3,CF3M
DISC : SGI,DI, A216 Gr.WCB, A351 Gr.CF8,CF8M,CF3,CF3M
SEAT : EPDM, NITRILE
STEM : ASTM A276 Tp.SS410/SS304/SS316/SS304L/SS316L
ORING : NITRILE
LEVER/GEAR BOX : SGI etc.

SFCBF10 -DIMENSIONAL DETAIL

SIZE	A	B	C	D	E	WT.Kg
2"	45	52	64	130	250	3
3"	48	75	82	155	250	4.5
4"	54	102	95	182	250	6
5"	58	122	105	215	250	7
6"	58	145	120	215	250	8
8"	65	205	165	380	GEAR	19
10"	70	245	205	450	GEAR	28



FORGED STEEL GATE, GLOBE & LIFT CHECK VALVE- CL-800



TECHNICAL STANDARDS

DESIGN STANDARDS :- API 602 / EN ISO 15761 / ASME B16.34
 SCREWED END :- BSP (BS21) / NPT (ASME B1.20.1)
 SOCKET WELD END :- ASME B16.11 / BUTT WELD - ASME B16.25
 FACE TO FACE :- MANUFACTURERES
 TESTING STANDARDS :- API 598 / EN12266-1

TEST PRESSURE IN (Kg/cm²)

	CL-800
HYDRO SHELL	210
HYDRO SEAT & BACK SEAT	155
AIR SEAT	6.2

MATERIAL SPECIFICATION

BODY, BONNET, COVER & GLAND FLANGE : ASTM A105 / ASTM A182 Gr.F304, F316, F304L, F316L, F11, F22, A350 Gr.LF2
 WEDGE & DISC : ASTM A217 Gr.CA15, ASTM A351 Gr.CF8/CF8M/CF3/CF3M
 STEM, SEAT RING & GLAND : ASTM A276 Tp.SS410/SS304/SS316/SS304L/SS316L
 YOKE SLEEVE / YOKE BUSH : S.G.Iron/ Ni-Resist ASTM A439 Gr.D2
 PACKING : GRAFOIL / BRAIDED GRAPHITE
 GASKET : SPW SS304/ 316+GRAFOIL, SPWSS304/316+PTFE
 SPRING : SS304/SS316
 STUD & NUT : ASTM A193 B7, B7M, B8, B8M / ASTM A320 L7, L7M
 ASTM A194 2H, 2HM, GR.8, 8M / GR.7, 7M
 HAND WHEEL : MALLEABLE IRON / CARBON STEEL

DIMENSIONAL DETAIL										
SFCGT18 -GATE VALVE - CLASS -800				SFCGL18 - GLOBE VALVE - CLASS -800				SFC LC18 -LIFT CHECK VALVE - CLASS -800		
SIZE	L	A	ØH	SIZE	L	A	ØH	SIZE	L	A
1/2"	85	155	100	1/2"	85	160	100	1/2"	85	55
3/4"	90	160	100	3/4"	90	165	100	3/4"	90	64
1"	102	170	100	1"	102	175	100	1"	102	70
1-1/2"	130	230	160	1-1/2"	130	240	160	1-1/2"	130	110
2"	140	245	180	2"	140	255	180	2"	140	115

- > Other special MOC can be provided as per customer requirements.
- > Valves shall be supplied with welded flanges for class 150/300 if required
- > Air seat & Back seat test not applicable for Lift Check Valves
- > Any special requirements provide as per customer requirements.

MACHINE SHOP & TESTING FACILITY



TEST RIG



STARTFLO CONTROLS

The Masters in Flow Technology

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