

## SBM-PTV Series 100SP™ 3PC Ball Valve

SS316 CF8M/A216 WCB Body Material

Series 100SP™ Ball valve provide the 3-piece design with the highest flexibility in selection of end connections and seat materials. The 3-piece design features in-line and out-of-line maintenance as the center section can be easily accessed without disturbing the pipe connections. Integrally ISO 5211 cast mounting pads ensure alignment and convenience for ease automation with the bracket and adaptor. All of these valves are suitable for applications requiring high flow capacity and tight shutoff, where reliability, functionality and interchangeability are essential for the product quality at an economical price. Available ends: Female Threaded (NPT), Socket Welded (SW) and Butt Weld (BT).

### Features:

- A) Blow-out proof stem, Fire-safe design.
- B) Built in ISO 5211 direct mounting pad for easy automation
- C) Pressure balance hole in ball slot
- D) Various ends available
- E) Handle with locking device
- F) Full bore construction
- G) RPTFE Seat as standard
- H) Investment casting body
- I) Adjustable packing
- J) Disassembly is very convenient
- K) Standard body material SS316 CF8M and A216 WCB, other materials upon request

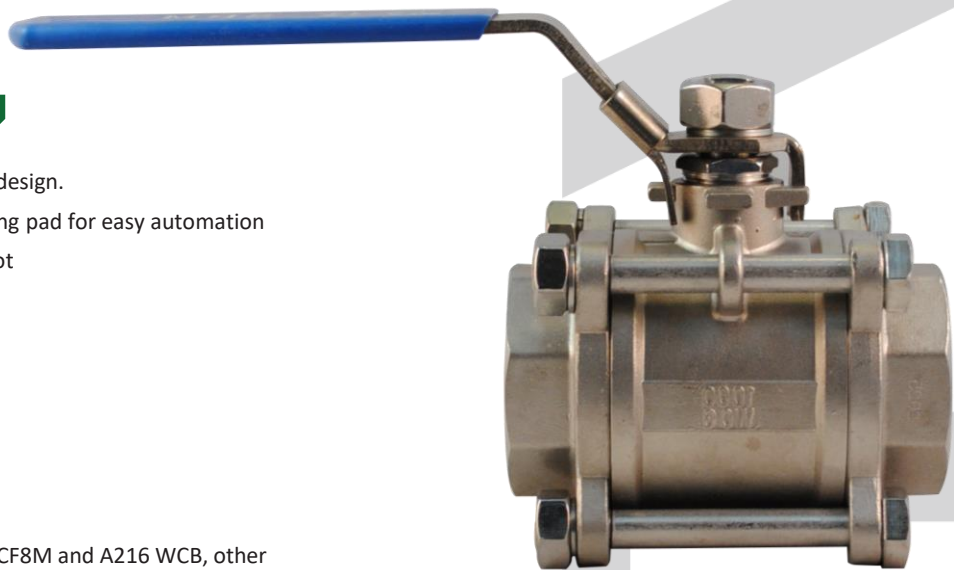
### Technical Data

1. Size range: NPS 1/4"~4"
2. Pressure ratings: 1000 PSI Non-Shock 150 PSI WSP
3. Working temperature: -29 ~ +200 4. Suitable Medium: Water, Oil, Gas, Steam. etc
5. Body Material: A351 CF8M / A216 WCB
7. Ball Material: A276 SS316
7. Stem Material: A276 SS316
8. Seat: RPTFE / PTFE

### Performance Standard

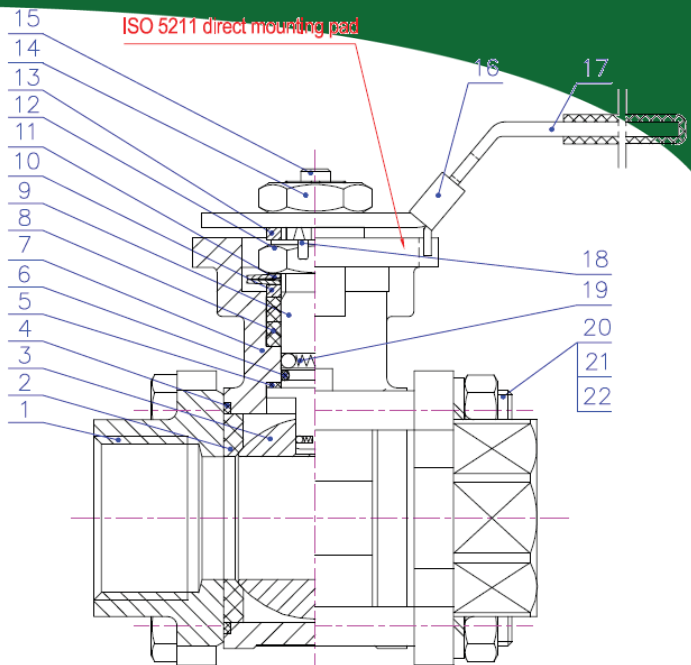
Design & Manufacture standard as to: ASME B16.34  
MSS SP-110  
Face to Face dimension standard as to: MFR-STD  
Threaded dimension conforms as to: NPT: ASME B1.20.1  
SW: ASME B16.11 / BW: ASME B16.25  
Testing and Inspection as to: API 598 / MSS SP-110  
/ EN 12266  
Pressure-temperature conforms as to: ASME B16.34  
Anti-Corrosion as per NACE MR-0175(2002)  
requirement

PTV® Brand is replacing SBM-PTV™ from May 2023, which is made by Sino Base Metal Co., Ltd, Subsidiary of SBM group, 11C, No.1208 South Xizang Road, Shanghai, China Sino Base Metal Co., Ltd, reserves the right to change design/ specifications without further notices.

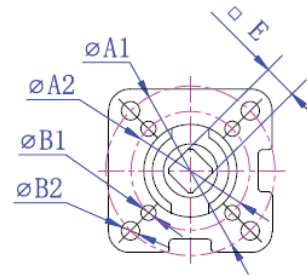
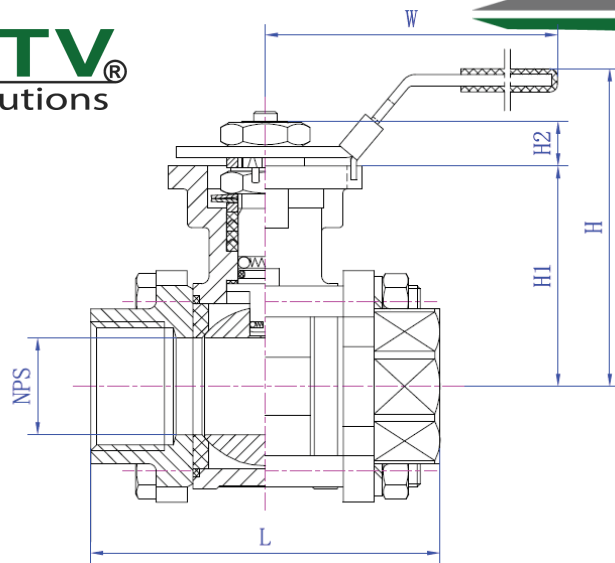


## Part List:

### Series 100SP™ Ball Valve Part List (SS316 CF8M/A216 WCB)



No	Part Name	Material	Standard
1.	Bonnet	CF8M	ASTM A351
2.	Seat	RPTFE	25% Carbon filled PTFE
3.	Ball	F316	ASTM A182
4.	Gasket	RPTFE	25% Carbon filled PTFE
5.	Stem Gasket	RPTFE	25% Carbon filled PTFE
6.	O-Ring	EPDM	BNS-D00040
7.	Body	CF8M / A216 WCB	ASTM A351 /A216 WCB
8.	Packing	RPTFE	25% Carbon filled PTFE
9.	Stem	F316	ASTM A182
10.	Packing Bushing	SS316	ASTM A276
11.	Butterfly Spring	SS316	ASTM A276
12.	Stem Nut	SS304	ASTM A276
13.	Packing Gland	CF8M	ASTM A351
14.	Locking Nut	SS304	A193 B8
15.	Stop Pin	SS304	ASTM A276
16.	Locking Device	SS201	ASTM A276
17.	Hand Lever	SS201+PVC	ASTM A276
18.	Anti Loosing Cap	SS304	ASTM A276
19.	Anti-Static Device	SS304	ASTM A276
20.	Bolt	SS304	A193 B8
21.	Gasket	SS304	ASTM A276
22.	Nut	SS304	A194 8



ISO 5211 Direct Mounting Pad

## Series 100SP Series 100SP™ Ball Valve Thread NPT End Dimensions:

1. Threaded dimension conforms as to:  
NPT ASME B1.20.1

NPS	NPT	d	L	H	H1	H2	øE	W	ΦA1	ΦA2	ΦB1	ΦB2	ISO5211	Weight (Kg)	Torque (N*M)
1/4"	1/4"	8	63	67	40	8	9	110	42	36	6	6	F03/F04	0.35	4
3/8"	3/8"	10	63	67	40	8	9	110	42	36	6	6	F03/F04	0.34	4
1/2"	1/2"	15	63	67	40	8	9	110	42	36	6	6	F03/F04	0.42	5
3/4"	3/4"	20	70	71	44	8	9	110	42	36	6	6	F03/F04	0.52	8
1"	1"	25	81	86	55	10	11	160	50	42	6	7	F04/F05	0.72	12
1 1/4"	1 1/4"	32	95	91.5	60.5	10	11	160	50	42	6	7	F04/F05	1.27	16
1 1/2"	1 1/2"	39	101	105.5	68.5	14	14	185	70	50	7	9	F05/F07	1.49	39
2"	2"	48	125	112.5	75.5	14	14	185	70	50	7	9	F05/F07	2.2	42
2 1/2"	2 1/2"	65	168	165	96	16	17	300	102	70	9	11	F07/F10	4.86	59
3"	3"	79	187	175	106.5	16	17	305	102	70	9	11	F07/F10	6.76	85
4"	4"	100	252	195	120	16	17	350	102	70	9	11	F07/F10	13.76	130

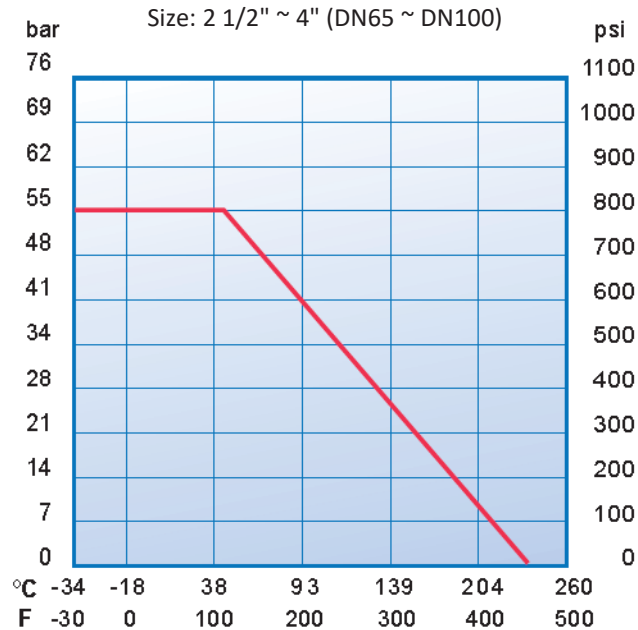
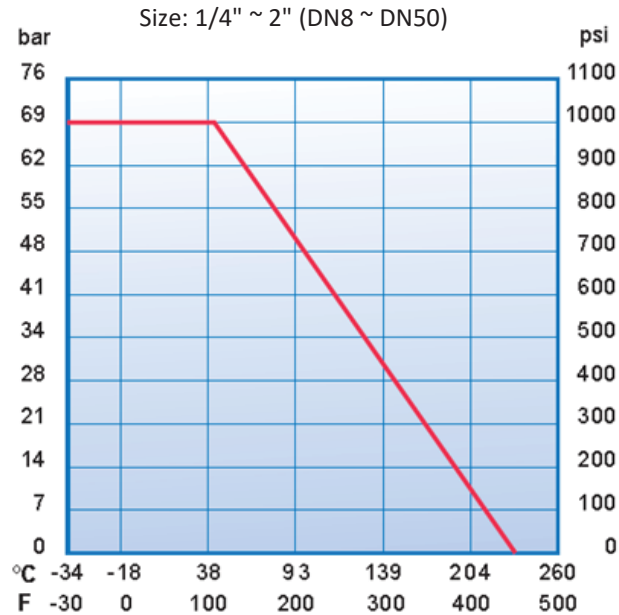
## Series 100SP™ Ball Valve Socket Weld End Dimensions:

Socket Weld dimension conforms as to:  
ASME B16.11

NPS	S	A	d	L	H	H1	H2	øE	W	ΦA1	ΦA2	ΦB1	ΦB2	ISO5211	Weight(Kg)	Torque (N*M)
1/4"	14.1	9.6	8	63	67	40	8	9	110	42	36	6	6	F03/F04	0.35	4
3/8"	17.6	9.6	10	63	67	40	8	9	110	42	36	6	6	F03/F04	0.34	4
1/2"	21.8	9.6	15	63	67	40	8	9	110	42	36	6	6	F03/F04	0.42	5
3/4"	27.1	12.7	20	70	71	44	8	9	110	42	36	6	6	F03/F04	0.52	8
1"	33.8	12.7	25	81	86	55	10	11	160	50	42	6	7	F04/F05	0.72	12
1 1/4"	42.6	12.7	32	95	91.5	60.5	10	11	160	50	42	6	7	F04/F05	1.27	16
1 1/2"	48.7	12.7	39	101	105.5	68.5	14	14	185	70	50	7	9	F05/F07	1.49	39
2"	61.1	15.9	48	125	112.5	75.5	14	14	185	70	50	7	9	F05/F07	2.2	42
2 1/2"	73.9	15.9	65	168	165	96	16	17	300	102	70	9	11	F07/F010	4.86	59
3"	89.8	15.9	79	187	175	106.5	16	17	300	102	70	9	11	F07/F010	6.76	85
4"	115.2	15.9	100	240	195	120	16	17	300	102	70	9	11	F07/F010	13.76	130

## SBM PTV Engineering Data

Pressure and Temperature rating chart indicate bore size:



## ORDERING CODE:

**Example: 100SP-422-2-100**

Ball Valve, 100SP Series, 3pc, A216 WCB Body, SS316 CF8M  
ball and stem, RPTFE Seat, Socket Weld End, Size 1"

## Available Body Material Code:

SS304 CF8 Stainless Steel: 1

SS316 CF8M Stainless Steel: 2

SS316L CF3M Stainless Steel: 3

A216 WCB Cast Steel: 4

## Available Ball and Stem Material:

SS304 CF8 Stainless Steel: 1 SS316 CF8M

Stainless Steel: 2

SS316L CF3M Stainless Steel: 3

## Available End Code:

PTFE: 1

RPTFE: 2

## Available Seat Material Code:

Female NPT Thread: 1

Socket Weld: 2

Butt Weld: 3