

Series 1W Wafer Type 1-Piece

Full Port Ball Valve with Flanged End

½" – 6" (DN15 – DN150)
ANSI Class 150
DIN PN 16 , PN 40



Ball Valve Feature Wafer Design

PVS Series 1W wafer type ball valve is designed to be used in compact pipeline system, where spaces, weight, and easiness of installation are priority issues. The Series 1W ball valves have similar features as other uni-body ball valves, including fire-safe design and the standard blowout-safe stem design.

The ISO 5211 mounting pad design also allows Series 1W ball valves to perfectly connect with valve automation products

In the situation where pipeline system is compact, the Series 1W ball valve is the answer. The reduced length of the valve body not only provides the shorter distance, it also decreases the valve weight by maximum of 40% in compare with other conventional flanged end uni-body ball valve. The valve can be installed on a pipeline system without any extra support, regardless of the pipeline length. The unit body design avoids using unnecessary joint faces, and therefore, removes the possibility of leakage from the valve body.

Similar to other uni-body ball valves, the Series 1W wafer type ball valves provide optional fire-safe design to reduce the leaking problem caused by fire. The purpose of this design is such that the valve can still maintain its operation after fire damage the soft PTFE seat. The precisely machined valve ball then comes into contact with the metal contact or the lip, and forms a new metal-to-metal seal.

All the Series 1W wafer type ball valves are equipped with blowout-safe design for the stem. The live-loaded and self-adjusting stem was designed and manufactured to have a protruded ring surrounded the stem body. This special design allows the stem to stay in the valve body during excess pressure occurs in the pipeline system.

PVS Series 1W wafer type ball valves are accompanied with a wide range of material to choose from for the seat. The floating ball design provides a low operating torque and prolongs the life span of the valve. In addition, all of our valve bodies are investment cast construction for extra strength, as well as furnace number for future references.



The whole series of ball valves are approved according to European Directive 2014/68/EU

Compact Uni-Body Design

The reduced length and lighter body weight of the valve body allows Series 1W ball valve to be installed in compact working conditions. The uni-body design also reduces the possibilities of leaking.

Fire-Safe Design (optional)

Series 1W ball valve can still operate after fire damage the soft PTFE seat. Valve ball comes into contact with the specially designed fire-safe lip and establishes a metal-to-metal contact sealing.

Pressure Rating

ANSI Class 150 up to 4"

DIN PN16 up to DN150

DIN PN40 up to DN50

150 psi (10 bar) with saturated steam

Temperature Range:

-4°F to 350°F (-20°C to 180°C) with PTFE/RPTFE

End Connection:

Wafer end connection

Body Material:

ASTM CF8M, WCB

DIN 1.4408, 1.0619

Size Range:

1/2"~6" (DN15 ~ DN150)

Standards and Specifications

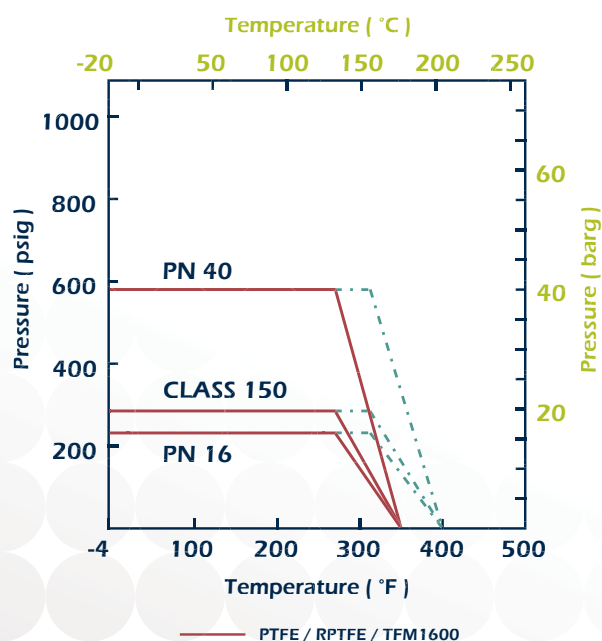
Flanged end connection basic construction design according to ANSI B16.34

Flange end connection face dimension according to DIN2633

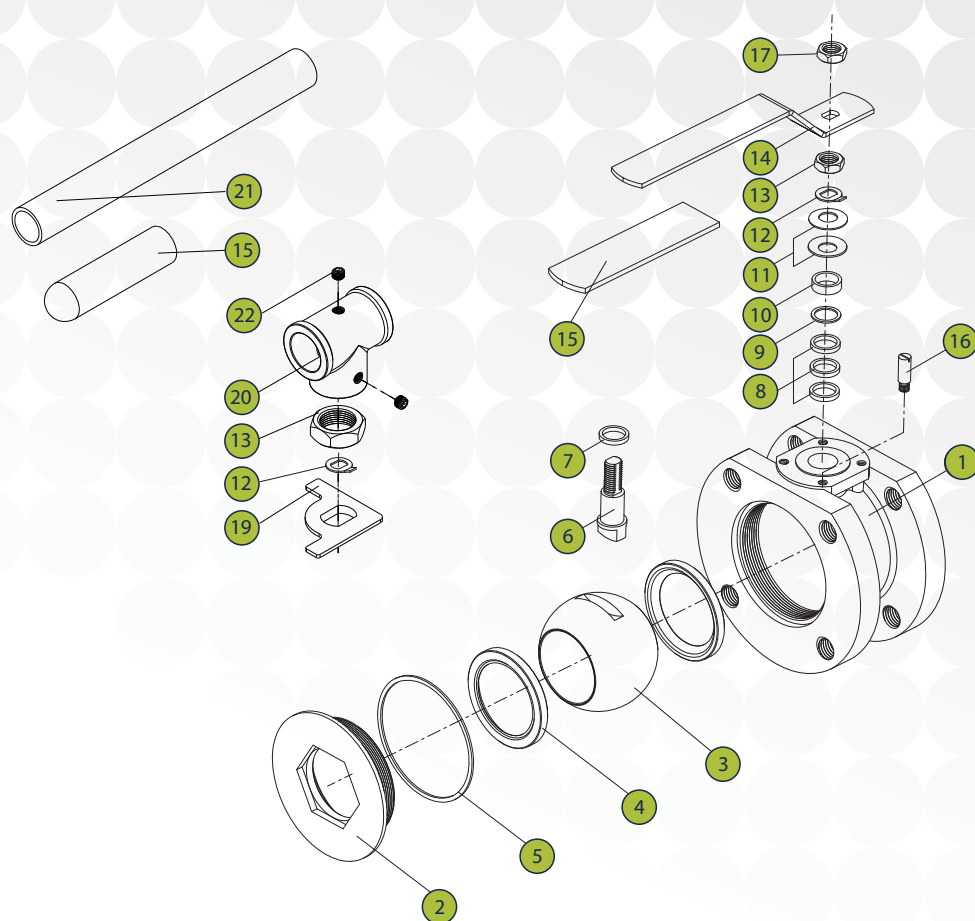
Valve body and end cap connections are high quality investment cast. Body material can be special processed to ensure the highest quality: stainless steel can be annealed, and carbon steel can be normalized. Body and end cap are designed according to ASME regulation.

Valve stems are blowout-proof for maximum safety, and meet ASME/ANSI specifications. All of PVS FLOW CONTROL valves are factory tested and inspected to meet the API 598 regulations.

Valve Body Rating with Seat Material Plot:

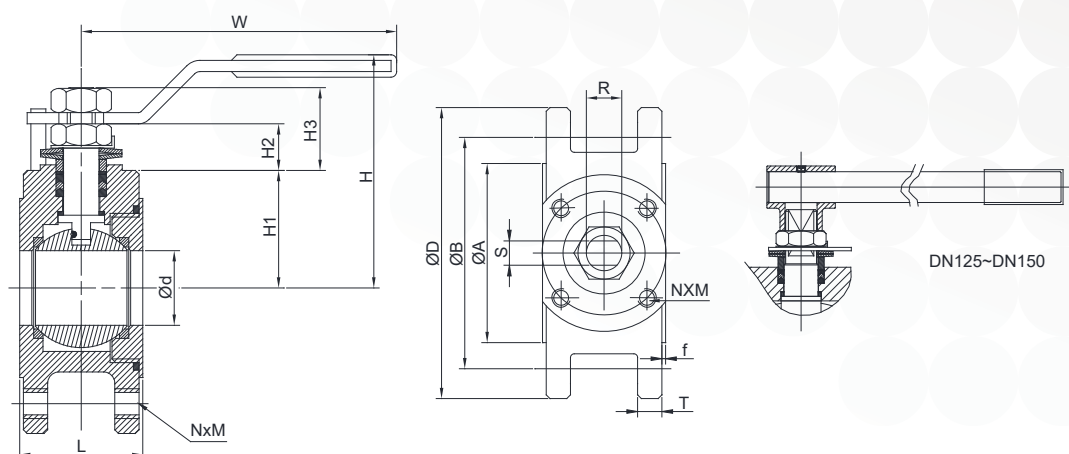


Series 1W Wafer Type Flanged Ball Valve



NO	PART NAME	MATERIAL
1	BODY	1.4408 / 1.0619
2	INSERT CAP	1.4408 / 1.0619
3	BALL	CF8M / CF8
4	BALL SEAT	PTFE + 15%G.F
5	BODY SEAL	PTFE
6	STEM	SS316 / SS304
7	THRUST WASHER	PTFE
8	STEM PACKING	PTFE
9	UPPER THRUST WASHER	PTFE + 25%G.F
10	GLAND	SS304
11	BELLEVILLE WASHER	SS301
12	LOCKING SADDLE	SS304

NO	PART NAME	MATERIAL
13	STEM NUT	SS304
14	HANDLE	SS304
15	HANDLE SLEEVE	VINYL
16	STOP PIN	SS304
17	HANDLE NUT	SS304
18	ANTI-STATIC DEVICE	SS316
19	STOPPER	SS304
20	HANDLE ADAPTER	CF8
21	HANDLE PIPE	STEEL
22	ADAPTER BOLT	SS304



Class 150 Dimensions inch/mm

Size Inch DN	d	L	H	W	H1	H2	H3	D	B	A	S	R	T	f	N	M	ISO 5211
1/2" 15	0.59 15	1.38 35	2.76 70	4.57 116	1.16 29.5	0.46 11.6	0.83 21	3.50 89	2.38 60.5	1.38 35	0.25 6.35	0.38 9.6	0.28 7	0.06 1.6	0.16 4	1/2"- 13UNC	F03 x M5(0.8)
3/4" 20	0.79 20	1.50 38	2.91 74	4.57 116	1.44 36.5	0.38 9.6	0.71 18	3.88 98.6	2.76 70	1.69 43	0.25 6.35	0.38 9.6	0.26 6.7	0.06 1.6	0.16 4	1/2"- 13UNC	F03 x M5(0.8)
1" 25	0.98 25	1.65 42	2.95 75	6.50 165	1.57 40	0.38 9.6	0.72 18.3	4.25 108	3.12 79.2	2.01 51	0.25 6.35	0.38 9.6	0.26 6.7	0.06 1.6	0.16 4	1/2"- 13UNC	F03 x M5(0.8)
1 1/4" 32	1.50 38	2.44 62	3.54 90	7.60 193	2.03 51.5	0.61 15.6	1.02 26	5.00 127	3.88 98.6	2.88 73.2	0.31 8	0.44 11.2	0.69 17.5	0.06 1.6	0.16 4	1/2"- 13UNC	F05 x M6(1.0)
2" 50	1.97 50	3.15 80	3.90 99	7.60 193	2.39 60.8	0.57 14.6	0.98 25	6.00 152.5	4.75 120.7	3.62 92	0.31 8	0.44 11.2	0.68 17.3	0.06 1.6	0.16 4	5/8"- 11UNC	F05 x M6(1.0)
2 1/2" 65	2.52 64	3.98 101	5.55 141	9.25 235	3.15 80	0.70 17.8	1.22 31	7.28 185	5.50 139.7	4.80 122	0.37 9.5	0.63 16	0.63 16	0.06 1.6	0.16 4	5/8"- 11UNC	F07 x M8(1.25)
3" 80	2.99 76	4.65 118	5.91 150	9.25 235	3.48 88.5	0.74 18.8	1.24 31.5	7.50 190.5	6.00 152.4	5.00 127	0.37 9.5	0.63 16	0.94 23.9	0.06 1.6	0.16 4	5/8"- 11UNC	F07 x M8(1.25)
4" 100	3.78 96	6.02 153	6.77 172	10.47 266	4.17 106	1.10 28	2.01 51	9.00 228.6	7.50 190.5	6.19 157.2	0.67 17	1.10 28	0.94 23.9	0.06 1.6	0.31 8	5/8"- 11UNC	F10 x M10(1.5)

PN16 Dimensions inch/mm

Size Inch DN	d	L	H	W	H1	H2	H3	D	B	A	S	R	T	f	N	M	ISO 5211
1/2" 15	0.59 15	1.42 36	2.76 70	4.57 116	1.16 29.5	0.46 11.6	0.83 21	3.74 95	2.56 65	1.77 45	0.25 6.35	0.38 9.6	0.28 7	0.08 2	0.16 4	M12	F03 x M5(0.8)
3/4" 20	0.79 20	1.57 40	2.91 74	4.57 116	1.44 36.5	0.38 9.6	0.71 18	4.13 105	2.95 75	2.28 58	0.25 6.35	0.38 9.6	0.28 7	0.08 2	0.16 4	M12	F03 x M5(0.8)
1" 25	0.98 25	1.73 44	2.95 75	6.50 165	1.57 40	0.38 9.6	0.72 18.3	4.53 115	3.35 85	2.56 65	0.25 6.35	0.38 9.6	0.30 7.5	0.08 2	0.16 4	M12	F03 x M5(0.8)
1 1/4" 32	1.26 32	2.13 54	3.43 87	6.50 165	1.89 48	0.61 15.6	1.04 26.5	5.51 140	3.94 100	3.07 78	0.31 8	0.44 11.2	0.66 16.8	0.08 2	0.16 4	M16	F04 x M5(0.8)
1 1/2" 40	1.50 38	2.44 62	3.54 90	7.60 193	2.03 51.5	0.61 15.6	1.02 26	5.91 150	4.33 110	3.46 88	0.31 8	0.44 11.2	0.75 19	0.08 2	0.16 4	M16	F05 x M6(1.0)
2" 50	1.97 50	3.15 80	3.90 99	7.60 193	2.39 60.8	0.57 14.6	0.98 25	6.50 165	4.92 125	4.02 102	0.31 8	0.44 11.2	0.76 19.2	0.08 2	0.16 4	M16	F05 x M6(1.0)
2 1/2" 65	2.52 64	3.98 101	5.55 141	9.25 235	3.15 80	0.70 17.8	1.22 31	7.28 185	5.71 145	4.80 122	0.37 9.5	0.63 16	0.63 16	0.08 2	0.16 4	M16	F07 x M8(1.25)
3" 80	2.99 76	4.65 118	5.91 150	9.25 235	3.48 88.5	0.74 18.8	1.24 31.5	7.87 200	6.30 160	5.43 138	0.37 9.5	0.63 16	0.79 20	0.12 3	0.31 8	M16	F07 x M8(1.25)
4" 100	3.78 96	5.91 150	6.77 172	10.47 266	4.17 106	1.10 28	2.01 51	8.66 220	7.09 180	6.22 158	0.67 17	1.10 28	0.83 21	0.12 3	0.31 8	M16	F10 x M10(1.5)
5" 125	4.65 118	7.05 179	8.07 205	15.75 400	4.61 117	1.22 31	1.97 50	9.84 250	8.27 210	7.40 188	0.67 17	1.10 28	0.87 22	0.12 3	0.31 8	M16	F10 x M10(1.5)
6" 150	5.31 135	7.95 202	8.66 220	23.62 600	5.12 130	1.22 31	1.97 50	11.22 285	9.45 240	8.35 212	0.67 17	1.10 28	0.87 22	0.12 3	0.31 8	M20	F12 x M12(1.75)

Automation Accessories

Actuators

With the mounting pad design, Series 1F ball valves can be combined with every PVS FLOW CONTROL automatic control products easily with bracket and connector. Currently, PVS FLOW CONTROL offers pneumatic rack and pinion actuator and Jexme electric actuator to accompany the Series 1W ball valves.

How to order

VALVE TYPE	PORT	BODY MATERIAL	SEAT	TRIM	TYPE OF CONNECTION	PRESSURE RATING	SPECIAL REQUEST	SIZE OF CONNECTION	OTHERS
A	B	C	D	E	F	G	H	I	J



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 Qingpu District,Shanghai,201702

PVS FLOW CONTROL Co.,Ltd.
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