

# Series 1W Wafer Type 1-Piece

**Full Port Ball Valve  
with Flanged End**

½" – 6" (DN15 – DN150)  
PN 16 / PN 40



# Ball Valve Feature Wafer Design

DIE ERSTE's 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.

DIE ERSTE's 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.

**CE marking**  **0035**

The whole series of ball valves are approved according to European Directive 97/23/EC.

## 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

DN 15~50: PN40

DN 65~150: PN16

150 psi (10 bar) with saturated steam

PN40 pressure rating for size smaller than DN50, PN16 pressure rating for size larger than DN65.

## Temperature Range:

-20°F to 400°F (-28°C to 204°C) with PTFE/RPTFE

## End Connection:

Flanged end connection

## Body Material:

ASTM CF8M, WCB

(DIN 1.4408, 1.0619)

## Size Range:

DN15 ~ DN150

## Standards and Specifications

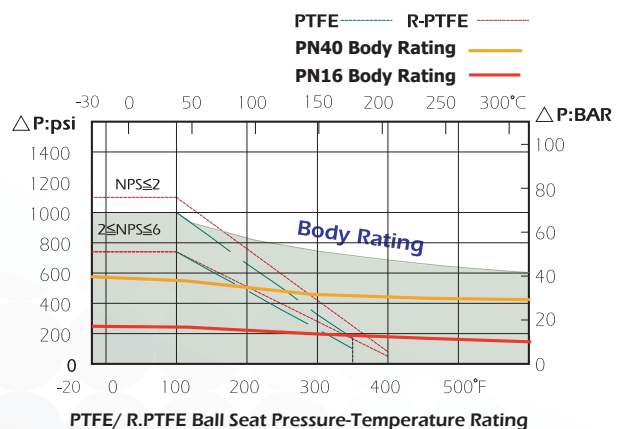
Flanged end connection basic construction design according to ANSI B16.34

Flange end connection face dimension according to DIN2633

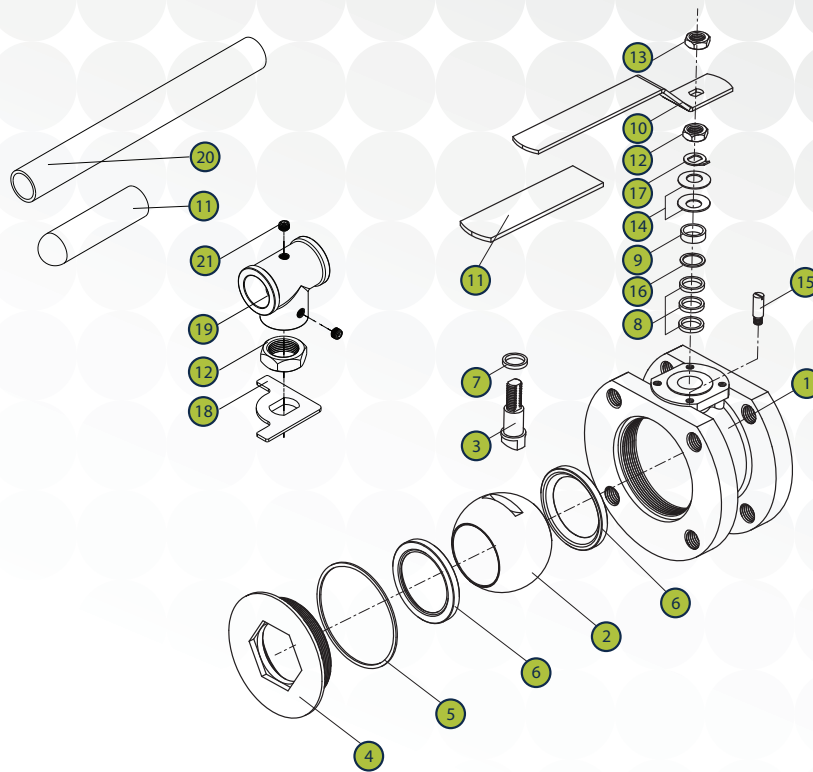
Valve body and end cap connections are high quality investment cast. Body material can be special processed to ensure the highest quality: stainless steel can be annealed, and carbon steel can be normalized. Body and end cap are designed according to ASME regulation.

Valve stems are blowout-proof for maximum safety, and meet ASME/ANSI specifications. All of DIE ERSTE's 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

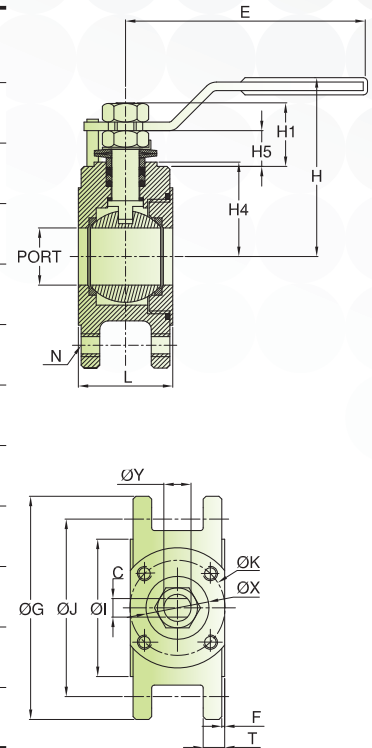


NO	PART NAME	MATERIAL
1	BODY	1.4408 / 1.0619
2	SOLID BALL	CF8M / CF8
3	STEM	SS 316 / SS 304
4	SEAT RETAINER	1.4408 / 1.0619
5	BODY SEAL	PTFE
6	SEAT	PTFE
7	THRUST WASHER	PTFE
8	STEM PACKING	PTFE
9	GLAND	SS 304
10	HANDLE	SS 304
11	HANDLE COVER	PLASTIC
12	STEM NUT	SS 304

NO	PART NAME	MATERIAL
13	HANDLE NUT	SS 304
14	BELLEVILLE WASHER	SS 301
15	STOP PIN	SS 304
16	PACKING FOLLOWER	PTFE + 25% G.F.
17	SADDLE WASHER	SS 304
18	STOP PLATE	SS 304
19	HANDLE ADAPTER	CF8
20	HANDLE BAR	STEEL
21	BOLT	SS 304

**Dimensions inch/mm**

SIZE Inch DN	L	E	H	H1	H4	H5	C	øX	øY	øG	øJ	øI	T	F	øK	N
1/2" 15	1.38 35	4.6 116	2.8 70	0.76 19.2	1.3 32	0.41 10.5	0.25 6.35	0.98 25.0	0.38 9.6	3.74 95	2.56 65.0	1.77 45.0	0.28 7.0	0.08 2.0	1.42 36	M12
3/4" 20	1.50 38	4.6 116	2.9 74	0.65 16.5	1.5 38	0.3 7.5	0.25 6.35	0.98 25.0	0.38 9.6	4.13 105	2.95 75.0	2.28 58.0	0.28 7.0	0.08 2.0	1.42 36	M12
1" 25	1.73 44	6.5 165	3.0 75	0.69 17.5	1.7 42	0.3 7.5	0.25 6.35	0.98 25.0	0.38 9.6	4.53 115	3.35 85.0	2.56 65.0	0.3 7.5	0.08 2.0	1.42 36	M12
1 1/4" 32	2.13 54	6.5 165	3.4 87	0.94 24	2.0 50	0.47 12.0	0.31 8.0	1.26 32.0	0.44 11.2	5.51 140	3.94 100	3.07 78.0	0.67 17.0	0.08 2.0	1.65 42	M16
1 1/2" 40	2.44 62	7.6 193	3.5 90	0.94 24	2.1 54	0.47 12.0	0.31 8.0	1.38 35.0	0.44 11.2	5.91 150	4.33 110	3.46 88.0	0.75 19.0	0.08 2.0	1.97 50	M16
2" 50	3.15 80	7.6 193	3.9 99	0.94 24	2.4 62	0.47 12.0	0.31 8.0	1.38 35.0	0.44 11.2	6.5 165	4.92 125	4.02 102	0.77 19.5	0.08 2.0	1.97 50	M16
2 1/2" 65	3.98 101	9.3 235	5.6 141	1.0 25.5	3.2 82	0.57 14.5	0.37 9.5	2.09 53.0	0.63 16.0	7.28 185	5.71 145	4.8 122	0.67 17.0	0.08 2.0	2.76 70	M16
3" 80	4.65 118	9.3 235	5.9 150	1.0 25.5	3.6 91	0.57 14.5	0.37 9.5	2.09 53.0	0.63 16.0	7.87 200	6.3 160	5.43 138	0.79 20.0	0.12 3.0	2.76 70	M16
4" 100	5.91 150	8.9 226	6.8 172	1.93 49	4.2 107	0.94 24.0	0.67 17.0	2.17 55.0	1.10 28.0	8.66 220	7.09 180	6.22 158	0.83 21.0	0.12 3.0	4.02 102	M16
5" 125	7.05 179	16 400	8.1 205	1.97 50	4.6 117	1.22 31.0	0.67 17.0	2.17 55.0	1.10 28.0	9.84 250	8.27 210	7.4 188	0.87 22.0	0.12 3.0	4.02 102	M16
6" 150	7.95 202	24 600	8.7 220	1.97 50	5.1 130	1.22 31.0	0.67 17.0	2.36 60.0	1.10 28.0	11.2 285	9.45 240	8.35 212	0.87 22.0	0.12 3.0	4.92 125	M20



# Automation Accessories

## Actuators

With the mounting pad design, Series 1F ball valves can be combined with every DIE ERSTE automatic control products easily with bracket and connector. Currently, DIE ERSTE 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	OTHER
A	B	C	D	E	F	G	H	I	J



Taiwan  
5F-1, No.936,  
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