Series 1T (F)
Direct Mount

Top Entry Flanged Ball Valve

Standard Port
½" – 4" (DN15 - 100)
ANSI Class 150, 300
DIN PN16, 40

API 598 ISO 5208 Safety Assurance

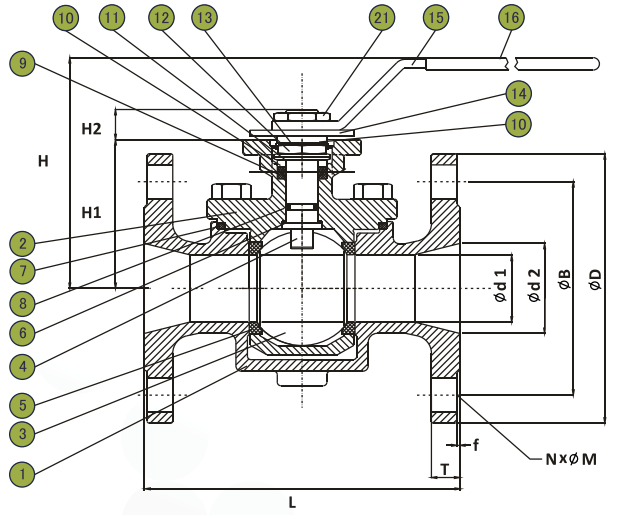
In-line Maintenance Made Easy

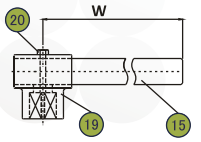
Die Erste is proud to present Series 1T, Top-Entry ball valve for a revolutionary easy in-line maintenance experience. Better yet, equipped with the ever-important ISO 5211 direct-mounting pad, Series 1T offers the flexibility to be automated with actuator, or operated manually with hand lever.

Conventional v-style wedge-seated top-entry ball valves allow access to the body cavity without dismantling the valve from the pipeline, however requiring special tools and highly experienced workers to take out both ball and seats with care and precision. Series 1T Top-Entry ball valve offers easy and direct maintenance with special "basket" design, without the need for special tools or highly trained workers. In an instant, both the ball and seats can be lifted in the "basket" designed to contain both parts.

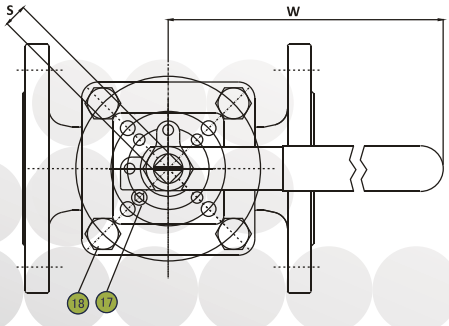
Features and benefits

- Conveniently designed for simple in-line maintenance.
- Removal of the bonnet allows easy access for seat replacement.
- Design according to ASME B16.34.
- Low emission stem seal.
- Equipped with ISO 5211 direct-mounting pad
- Spring Return Deadman handle available





3"&4" with round bar handle



CE marking CE 0035

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

Body Material

ASTM CF8M, CF8, WCB
DIN 1.4408, 1.4308, 1.0619
Super alloy or other material available upon request

Size Range

1/2" ~ 4" Standard Port

Standards and Specifications

Class 150, 300	• ASME B16.34 • ASME B16.10, B16.5
PN16, PN40	• DIN 3202 F1 • DIN 2543 , DIN 2545

Pressure Rating

Class 150, Class 300
PN16, PN40

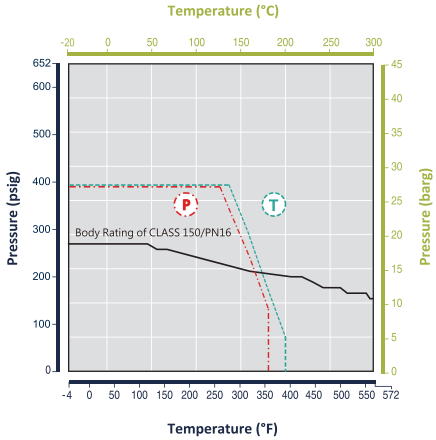
Temperature Range

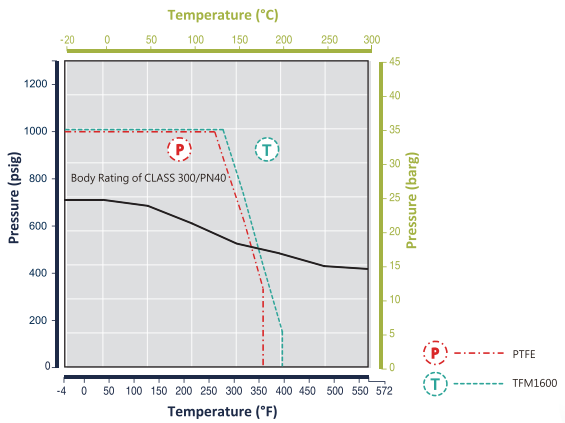
- -40°F to 400°F (-40°C to 200°C) with TFM 1600 seat
- -4°F to 350°F (-20°C to 180°C) with PTFE seat

End Connection

Flanged End

Valve Body Rating with Seat Material Plot:





This table express Seat material resistance as declared by the original manufacturers. The values are to be considered with other parameters such as size, seat design and temperature limitations as governed by relevant standards such as ASME B16.34 or EN-12516.

ANSI CLASS 150 Dimensions (mm)

size	d1	d2	H	H1	H2	L	W	D	B	N	M	T	f	S	ISO 5211	Torque N.m
3/4"	19.5	19.5	96	65.0	14	117	165	98.5	69.9	4	16	11.2	1.6	11	F04/F05	12
1"	19.5	25.4	96	65.0	14	127	165	108.0	79.5	4	16	11.2	1.6	11	F04/F05	12
1-1/2"	32.0	38.1	111	75.5	18	165	205	127.0	98.5	4	16	14.3	1.6	14	F05/F07	19
2"	38.0	50.6	111	80.5	18	178	205	152.4	120.7	4	19	15.9	1.6	14	F05/F07	29
3"	57.2	78.0	153	106.0	23	203	340	190.5	152.5	4	19	19.1	1.6	17	F07/F10	121
4"	76.0	101.6	153	130.0	23	229	340	228.6	190.5	8	19	23.9	1.6	17	F07/F10	188

ANSI CLASS 300 Dimensions (mm)

size	d1	d2	H	H1	H2	L	W	D	B	N	M	T	f	S	ISO 5211	Torque N.m
1/2"	15.0	15.0	96	65.0	14	140	165	95.3	66.7	4	16.0	14.3	1.6	11	F04/F05	12
3/4"	19.5	19.5	96	65.0	14	152	165	117.5	82.5	4	19.0	15.9	1.6	11	F04/F05	17
1"	19.5	25.4	96	65.0	14	165	165	123.9	88.9	4	19.0	17.5	1.6	11	F04/F05	17
1-1/2"	32.0	38.1	111	75.5	18	191	205	155.6	114.3	4	22.2	20.7	1.6	14	F05/F07	29
2"	38.0	50.6	111	80.5	18	216	205	165.1	127.0	8	19.0	22.3	1.6	14	F05/F07	44
3"	57.2	78.0	153	106.0	23	283	340	209.6	168.3	8	22.2	28.6	1.6	17	F07/F10	182
4"	76.0	101.6	153	130.0	23	305	340	254.0	200.0	8	22.2	31.8	1.6	17	F07/F10	281

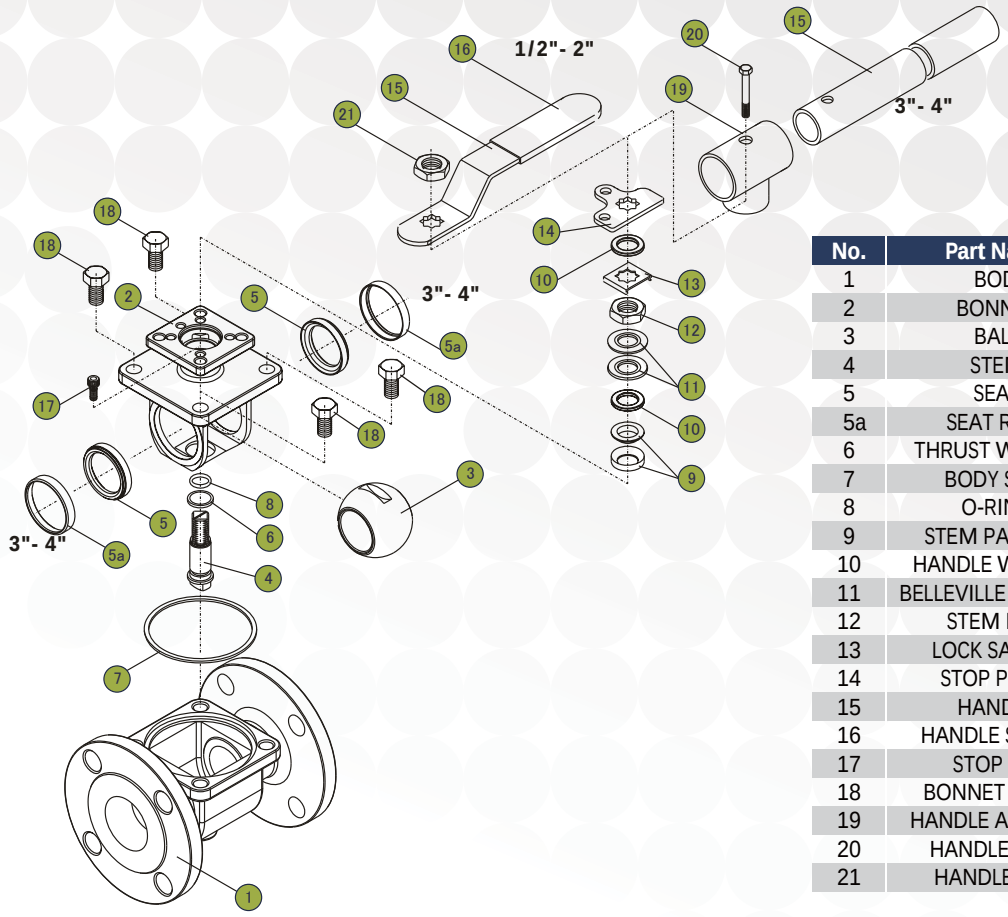
DIN PN16 - F1 Dimensions (mm)

size	d1	d2	H	H1	H2	L	W	D	B	N	M	T	f	S	ISO 5211	Torque N.m
1/2"	15.0	15	96	65.0	14	130	165	95	65	4	14	16	2	11	F04/F05	8
3/4"	19.5	19.5	96	65.0	14	150	165	105	75	4	14	18	2	11	F04/F05	12
1"	19.5	25.4	96	65.0	14	180	165	115	85	4	14	18	2	11	F04/F05	12
1-1/2"	32.0	38.1	111	75.5	18	200	205	150	110	4	18	18	3	14	F05/F07	19
2"	38.0	50.6	111	80.5	18	230	205	165	125	4	18	20	3	14	F05/F07	29
3"	57.2	78.0	153	106.0	23	310	340	200	160	8	18	20	3	17	F07/F10	121
4"	76.0	101.6	153	130.0	23	350	340	220	180	8	18	20	3	17	F07/F10	188

DIN PN40 - F1 Dimensions (mm)

size	d1	d2	H	H1	H2	L	W	D	B	N	M	T	f	S	ISO 5211	Torque N.m
1/2"	15.0	15.0	96	65.0	14	130	165	95	65	4	14	16	2	11	F04/F05	12
3/4"	19.5	19.5	96	65.0	14	150	165	105	75	4	14	18	2	11	F04/F05	17
1"	19.5	25.4	96	65.0	14	180	165	115	85	4	14	18	2	11	F04/F05	17
1-1/2"	32.0	38.1	111	75.5	18	200	205	150	110	4	18	18	3	14	F05/F07	29
2"	38.0	50.6	111	80.5	18	230	205	165	125	4	18	20	3	14	F05/F07	44
3"	57.2	78.0	153	106.0	23	310	340	200	160	8	18	24	3	17	F07/F10	182
4"	76.0	101.6	153	130.0	23	350	340	235	190	8	22	24	3	17	F07/F10	281

Note: Torque measured at ambient temperature with no loading; safety factor is not included.



No.	Part Name	Material
1	BODY	CF8M/WCB
2	BONNET	CF8M/WCB
3	BALL	SS 316
4	STEM	SS 316
5	SEAT	TFM 1600
5a	SEAT RING	SS 316
6	THRUST WASHER	TFM 1600
7	BODY SEAL	TFM 1600
8	O-RING	VITON
9	STEM PACKING	TFM 1600
10	HANDLE WASHER	SS 304
11	BELLEVILLE WASHER	SS 301
12	STEM NUT	SS 304
13	LOCK SADDLE	SS 304
14	STOP PLATE	SS 304
15	HANDLE	SS 304/STEEL
16	HANDLE SLEEVE	PLASTIC
17	STOP PIN	SS 304
18	BONNET BOLTS	GRADE B8/B7
19	HANDLE ADAPTER	1.4308
20	HANDLE BOLT	SS 304
21	HANDLE NUT	SS 304

Accessories

Automation

DIE ERSTE Series 1T Top-Entry Ball Valves are equipped with ISO 5211 direct mount design, easy for actuator installation without any brackets and spindles. Currently, DIE ERSTE provides VT Series pneumatic actuator and JS Series electric actuator for automation control purposes.

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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