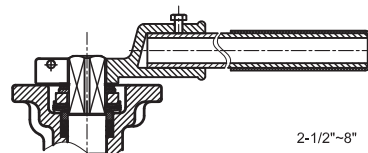


SPLIT BODY DIRECT-MOUNT FLANGE END BALL VALVE - GLAND DESIGN

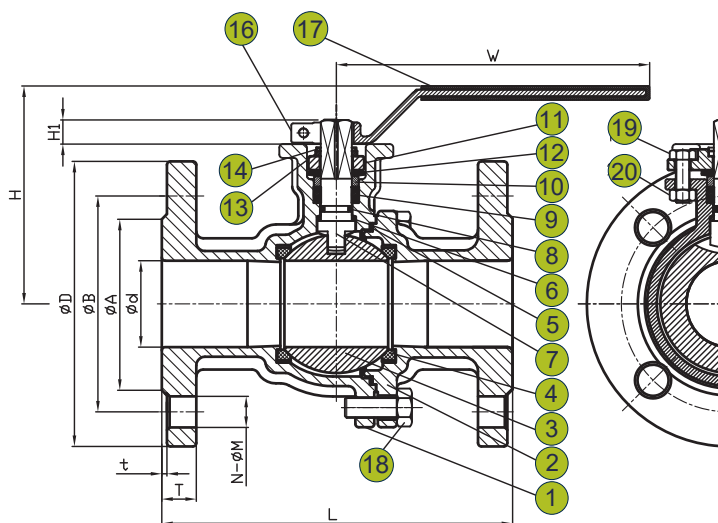
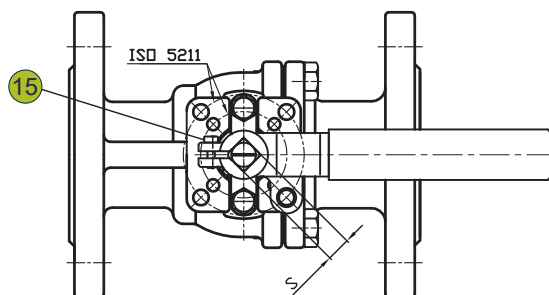
Model: Series 2D (Formerly TC-205FF)

ANSI CLASS 150

- Body Material**
CF8M, CF8, WCB
- Size Range**
1/2" - 8" (DN15~DN200)
- Pressure Rating**
Class150, 150PSI Saturated steam
- End Connection**
Flanged RF
- Standards**
Flange acc. to ASME B16.5
Face-to-face acc. to ASME B16.0
- Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats



2-1/2"-8"



Materials List:

NO.	PART NAME	MATERIAL
1	BODY	1.4408 / 1.4308 / 1.0619
2	CAP	1.4408 / 1.4308 / 1.0619
3	BALL	1.4408 / 1.4308
4	BALL SEAT	PTFE
5	BODY SEAL	PTFE
6	THRUST WASHER	TFM 4215
7	STEM	SS304 / SS316
8	O-RING	VITON
9	STEM PACKING	PTFE
10	GLAND	SS304
11	GLAND FALNGE	CF8
12	BELLEVILLE WASHER	SS301
13	STOPPER	SS304
14	SNAP RING	SS304
15	HANDLE BOLT	SS304
16	HANDLE	SS304
17	HANDLE SLEEVE	PLASTIC
18	BODY BOLT	SS304 / CARBON STEEL
19	GLAND BOLT	SS304 / CARBON STEEL
20	GLAND NUT	SS304 / CARBON STEEL

Class 150 Dimensions (mm):

SIZE		d	L	H	W	D	B	C	T	f	S	H1	N	M	ISO 5211	Torque N.m	Torque lbs.in	Cv	Kv
IN	DN																		
1/2"	15	15	108	84	123	89	60.5	35	11.1	1.6	9	9	4	16	F03/F04	14	123.9	24	20.8
3/4"	20	20	117	94	123	98	70.0	43	11.1	1.6	9	9	4	16	F03/F04	18	159.3	47	40.6
1"	25	25	127	101	153	108	79.5	51	11.1	1.6	11	11	4	16	F04/F05	22	194.7	81	70
1-1/4"	32	32	140	108	153	117	89.5	64	12.7	1.6	11	11	4	16	F04/F05	25	221.3	132	114
1-1/2"	40	40	165	121	183	127	98.5	73	14.3	1.6	14	14	4	16	F05/F07	29	256.7	202	174.7
2"	50	50	178	127	183	152	120.5	92	15.9	1.6	14	14	4	19	F05/F07	34	300.9	376	325.2
2-1/2"	65	65	190	154	352	178	139.5	105	17.5	1.6	17	17	4	19	F07/F10	50	442.5	642	555.3
3"	80	80	203	165	352	190	152.5	127	19.1	1.6	17	17	4	19	F07/F10	75	663.8	901	779.2
4"	100	100	229	183	397	229	190.5	157	23.9	1.6	22	22	8	19	F10/F12	100	885.1	1588	1373.4
5"	125	125	356	229	708	254	216.0	186	23.9	3	27	27	8	22	F10/F12	170	1504.6	-	-
6"	150	150	394	248	708	279	241.5	216	25.4	1.6	27	27	8	22	F10/F12	270	2389.7	3847	3328
8"	200	200	457	304	920	343	298.5	270	28.6	1.6	36	36	8	22	F14	600	5310.4	6900	5969

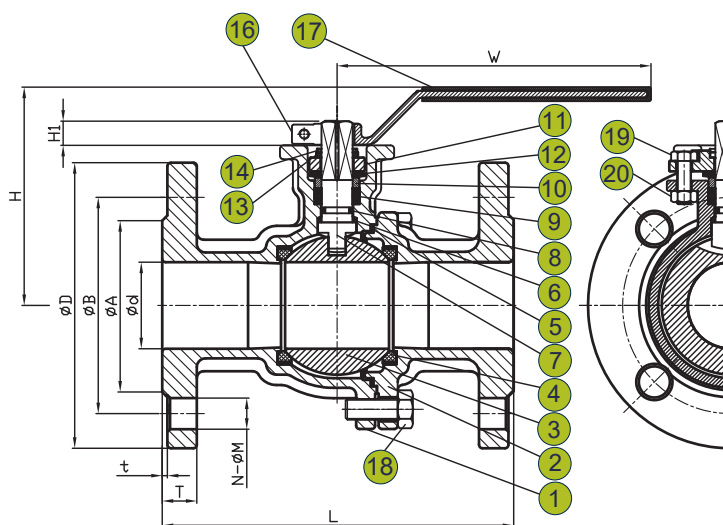
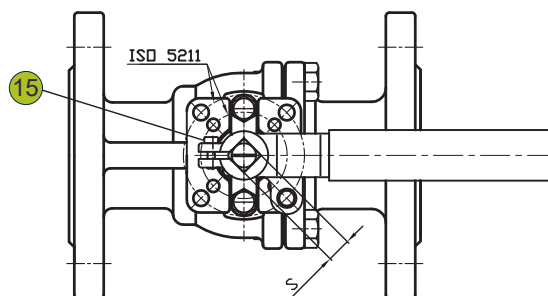
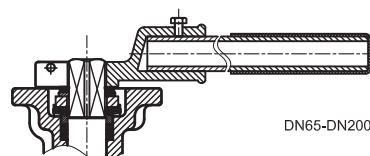
Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.

SPLIT BODY DIRECT-MOUNT FLANGE END BALL VALVE - GLAND DESIGN

Model: Series 2D (Formerly TC-205FF)

DIN PN 16

- **Body Material**
1.4408, 1.4308, 1.0619
- **Size Range**
1/2" - 8" (DN15~DN200)
- **Pressure Rating**
PN16, 150PSI Saturated steam
- **End Connection**
Flanged RF
- **Standards**
Flange acc. to DIN 2633 PN16
Face-to-face acc. to DIN3202 -F4/F5
- **Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats



Materials List:

NO.	PART NAME	MATERIAL
1	BODY	1.4408 / 1.4308 / 1.0619
2	CAP	1.4408 / 1.4308 / 1.0619
3	BALL	1.4408 / 1.4308
4	BALL SEAT	PTFE
5	BODY SEAL	PTFE
6	THRUST WASHER	TFM 4215
7	STEM	SS304 / SS316
8	O-RING	VITON
9	STEM PACKING	PTFE
10	GLAND	SS304
11	GLAND FLANGE	CF8
12	BELLEVILLE WASHER	SS301
13	STOPPER	SS304
14	SNAP RING	SS304
15	HANDLE BOLT	SS304
16	HANDLE	SS304
17	HANDLE SLEEVE	PLASTIC
18	BODY BOLT	SS304 / CARBON STEEL
19	GLAND BOLT	SS304 / CARBON STEEL
20	GLAND NUT	SS304 / CARBON STEEL

PN 16 Dimensions (mm):

SIZE		d	L	H	W	D	B	C	T	f	S	H1	N	M	ISO 5211	Torque N.m	Cv	Kv
IN	DN																	
1/2"	15	15	115	84	123	95	65	45	14	2	9	9	4	14	F03/F04	14	24	20.8
3/4"	20	20	120	94	123	105	75	58	16	2	9	9	4	14	F03/F04	18	47	40.6
1"	25	25	125	101	153	115	85	68	16	2	11	11	4	14	F04/F05	22	81	70
1-1/4"	32	32	130	108	153	140	100	78	16	2	11	11	4	18	F04/F05	25	132	114
1-1/2"	40	40	140	121	183	150	110	88	16	3	14	14	4	18	F05/F07	29	202	174.7
2"	50	50	150	127	183	165	125	102	18	3	14	14	4	18	F05/F07	34	376	325.2
2-1/2"	65	65	170	154	352	185	145	122	18	3	17	17	4	18	F07/F10	50	642	555.3
3"	80	80	180	165	352	200	160	138	20	3	17	17	8	18	F07/F10	75	901	779.2
4"	100	100	190	183	397	220	180	158	20	3	22	22	8	18	F10/F12	100	1588	1373.4
5"	125	125	325	229	708	250	210	188	22	3	27	27	8	18	F10/F12	170	-	-
6"	150	150	350	248	708	285	240	212	22	3	27	27	8	22	F10/F12	270	3847	3328
8"	200	200	400	304	920	340	295	268	24	3	36	36	12	22	F14	600	6900	5969

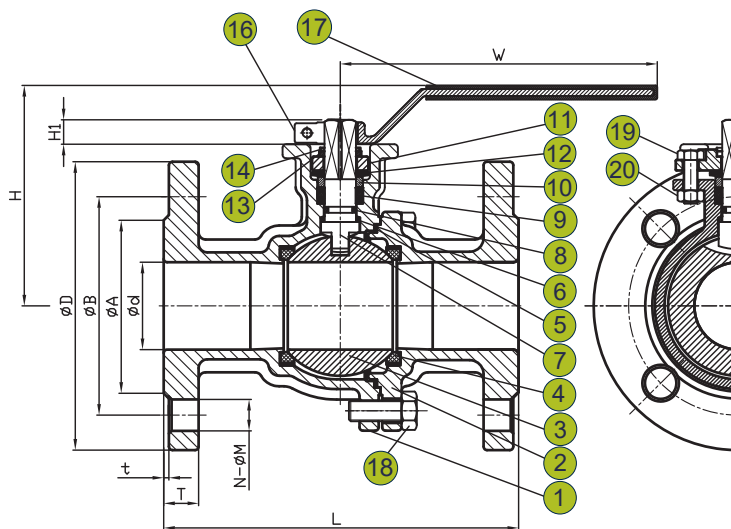
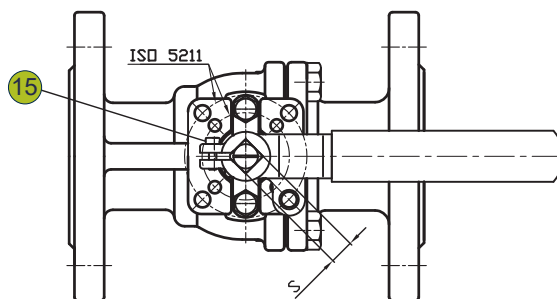
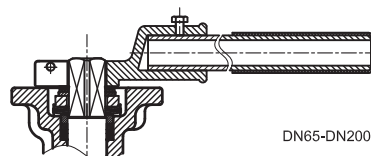
Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.

SPLIT BODY DIRECT-MOUNT FLANGE END BALL VALVE - GLAND DESIGN

Model: Series 2D (Formerly TC-205FF)

DIN PN 40

- Body Material**
1.4408, 1.4308, 1.0619
- Size Range**
1/2" - 8" (DN15~DN200)
- Pressure Rating**
PN40, 150PSI Saturated steam
- End Connection**
Flanged RF
- Standards**
Flange acc. to DIN 2635 PN40
Face-to-face acc. to DIN3202 -F4/F5
- Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats



Materials List:

NO.	PART NAME	MATERIAL
1	BODY	1.4408 / 1.4308 / 1.0619
2	CAP	1.4408 / 1.4308 / 1.0619
3	BALL	1.4408 / 1.4308
4	BALL SEAT	PTFE
5	BODY SEAL	PTFE
6	THRUST WASHER	TFM 4215
7	STEM	SS304 / SS316
8	O-RING	VITON
9	STEM PACKING	PTFE
10	GLAND	SS304
11	GLAND FALNGE	CF8
12	BELLEVILLE WASHER	SS301
13	STOPPER	SS304
14	SNAP RING	SS304
15	HANDLE BOLT	SS304
16	HANDLE	SS304
17	HANDLE SLEEVE	PLASTIC
18	BODY BOLT	SS304 / CARBON STEEL
19	GLAND BOLT	SS304 / CARBON STEEL
20	GLAND NUT	SS304 / CARBON STEEL

PN 40 Dimensions (mm):

SIZE		d	L	H	W	D	B	C	T	f	S	H1	N	M	ISO 5211	Torque N.m	Cv	Kv
IN	DN																	
1/2"	15	15	115	84	123	95	65	45	16	2	9	9	4	14	F03/F04	18	24	20.8
3/4"	20	20	120	94	123	105	75	58	18	2	9	9	4	14	F03/F04	22	47	40.6
1"	25	25	125	101	153	115	85	68	18	2	11	11	4	14	F04/F05	26	81	70
1-1/4"	32	32	130	108	153	140	100	78	18	2	11	11	4	18	F04/F05	32	132	114
1-1/2"	40	40	140	121	183	150	110	88	18	3	14	14	4	18	F05/F07	38	202	174.7
2"	50	50	150	127	183	165	125	102	20	3	14	14	4	18	F05/F07	47	376	325.2
2-1/2"	65	65	170	154	352	185	145	122	22	3	17	17	8	18	F07/F10	58	642	555.3
3"	80	80	180	165	352	200	160	138	24	3	17	17	8	18	F07/F10	100	901	779.2
4"	100	100	190	183	397	235	190	162	24	3	22	22	8	22	F10/F12	150	1588	1373.4
5"	125	125	325	229	708	270	220	188	26	3	27	27	8	26	F10/F12	200	-	-
6"	150	150	350	248	708	300	250	218	28	3	27	27	8	26	F10/F12	320	3847	3328
8"	200	200	400	304	920	375	320	285	34	3	36	36	12	30	F14	600	6900	5969

Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.

SPLIT BODY DIRECT-MOUNT FLANGE END BALL VALVE - GLAND DESIGN

Model: Series 2D (Formerly TC-205FF)

Option: VB 2D V-Port ball valve

Flow Coefficients (Cv) of V-port Ball Valve

Valve Size	V Type	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%
1/2"	10°	2.95	2.36	1.94	1.53	1.19	0.84	0.51	0.36	0.00	0.00
	30°	5.76	3.99	3.15	2.22	1.46	0.89	0.51	0.32	0.02	0.00
	60°	10.13	6.93	4.56	3.18	2.02	1.32	0.73	0.33	0.03	0.00
	90°	15.28	9.83	6.29	4.10	2.57	1.58	0.84	0.34	0.03	0.00
3/4"	10°	4.27	3.55	2.70	2.13	1.55	1.19	0.66	0.37	0.03	0.00
	30°	8.43	6.45	4.88	3.51	2.18	1.49	0.79	0.38	0.03	0.00
	60°	16.84	11.09	7.59	5.12	3.17	2.09	0.95	0.41	0.03	0.00
	90°	27.63	17.52	11.28	6.70	4.14	2.47	1.29	0.46	0.03	0.00
1"	10°	5.88	4.97	4.25	3.28	2.14	1.74	1.06	0.84	0.22	0.00
	30°	12.34	9.86	7.50	5.36	3.89	2.41	1.63	0.95	0.24	0.00
	60°	26.91	17.37	12.47	8.19	5.45	3.45	2.16	0.97	0.26	0.00
	90°	40.62	26.78	17.96	11.74	7.48	4.49	2.55	1.09	0.28	0.00
1-1/4"	10°	10.24	6.87	6.86	5.22	3.73	2.86	2.23	1.19	0.52	0.00
	30°	20.10	16.09	12.17	8.66	6.09	4.22	2.55	1.67	0.56	0.00
	60°	39.26	27.25	19.36	13.11	8.82	5.60	3.25	1.75	0.56	0.00
	90°	70.96	44.32	29.44	18.79	11.83	7.44	4.51	2.32	0.75	0.00
1-1/2"	10°	12.76	11.06	7.65	5.94	5.21	3.50	2.41	0.89	0.00	0.00
	30°	28.60	22.35	15.23	11.38	8.30	5.48	2.46	1.37	0.46	0.00
	60°	55.73	40.16	26.54	17.53	11.87	7.31	3.07	1.59	0.34	0.00
	90°	96.99	62.87	38.90	24.95	15.69	9.73	5.46	2.37	0.62	0.00
2"	10°	21.53	16.98	16.01	12.47	10.07	5.26	4.43	2.37	0.79	0.00
	30°	47.47	37.46	27.32	20.75	14.12	9.65	6.53	3.05	1.15	0.00
	60°	92.06	69.69	49.08	31.92	21.36	13.98	8.52	4.21	1.31	0.00
	90°	173.40	110.49	73.44	48.50	29.56	18.56	11.54	5.13	1.44	0.00
2-1/2"	10°	35.16	29.35	24.60	19.68	14.70	10.63	7.63	3.85	1.32	0.00
	30°	79.21	63.94	49.22	34.32	25.24	15.90	9.98	4.98	2.16	0.00
	60°	150.59	107.54	80.65	52.93	34.89	22.72	14.87	6.44	2.02	0.00
	90°	253.06	180.69	119.78	84.32	50.76	32.69	21.11	11.67	1.79	0.00
3"	10°	47.02	32.65	26.34	19.84	15.89	12.27	7.97	3.98	1.81	0.00
	30°	105.15	80.57	58.10	42.90	29.96	19.58	12.14	5.04	1.96	0.00
	60°	190.26	136.08	112.14	82.22	54.10	27.60	15.80	13.54	1.43	0.00
	90°	388.90	235.03	157.48	99.49	64.78	38.40	22.20	11.64	2.10	0.00
4"	10°	58.97	52.74	43.58	33.52	25.93	18.16	11.12	7.42	3.66	0.00
	30°	160.29	131.67	100.78	72.91	53.71	35.10	19.49	10.73	3.90	0.00
	60°	332.17	243.98	174.60	118.86	81.15	51.80	24.79	15.34	6.48	0.00
	90°	652.17	401.89	262.88	170.63	111.42	73.39	43.49	24.32	7.20	0.00
6"	10°	148.00	112.00	91.00	76.00	55.00	40.00	30.00	19.00	7.40	0.00
	30°	367.00	286.00	205.00	146.00	104.00	70.00	47.00	25.00	9.00	0.00
	60°	816.00	568.00	414.00	272.00	177.00	110.00	67.00	34.00	10.00	0.00
	90°	1292.00	890.00	581.00	382.00	234.00	145.00	88.00	45.00	14.40	0.00