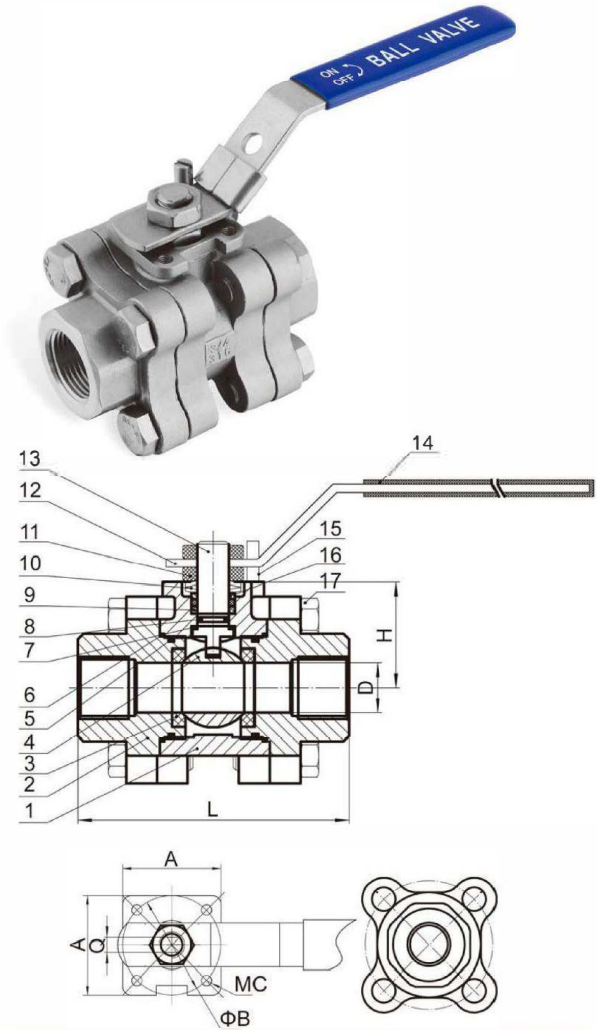
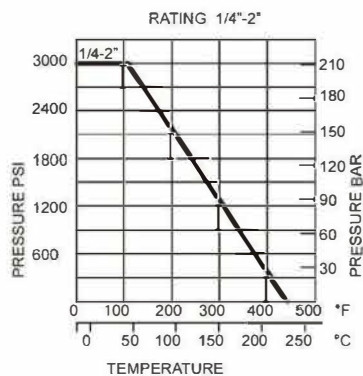


Ball Valve

3PC REDUCED 3000PSI BALL VALVE (QF306)

FEATURES

- ◆ 3000PSI
- ◆ Reduce Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Casting Approved AD2000-W0
- ◆ Anti-Static device(option)
- ◆ Thread: ASME B1.20.1 BS21.DIN2999/259, ISO228-1, JIS B 0203, ISO7/1
- ◆ Inspection Testing: API598, EN12266



ITEM	DESIGNATION	QTY	MATERIAL
1	BODY	1	CF8/CF8M
2	END CAP	2	CF8/CF8M
3	BALL SEAT	2	RPTFE
4	BALL	1	CF8/CF8M
5	O-RING	2	VITON
6	JOINT GASKET	2	PTFE
7	THRUST WASHER	2	PTFE
8	O-RING	2	VITON
9	STEM PACKING	2	PTFE
10	BELLEVILLE WASHER	2	301
11	STEM NUT	2	304
12	HANDLE	1	304
13	STEM	1	304/316
14	HANDLE SLEEVE	1	PVC
15	STOP PIN	1	304
16	RING	1	304
17	BOLT	1	304

SIZE	ΦD	L	H	W	A	B	MC	Q
1/4"	11	92.6	31.5	140	36	36	6	9
3/8"	12.5	92.6	31.5	140	36	36	6	9
1/2"	12.5	92.6	31.5	140	36	36	6	9
3/4"	15	89.6	37	140	36	36	6	9
1"	20	112.8	46.5	160	42	42	6	11
1-1/4"	25	125	53	160	42	42	6	11
1-1/2"	32	165	65	185	70	50	8	14
2"	38	165	82	185	70	50	8	14

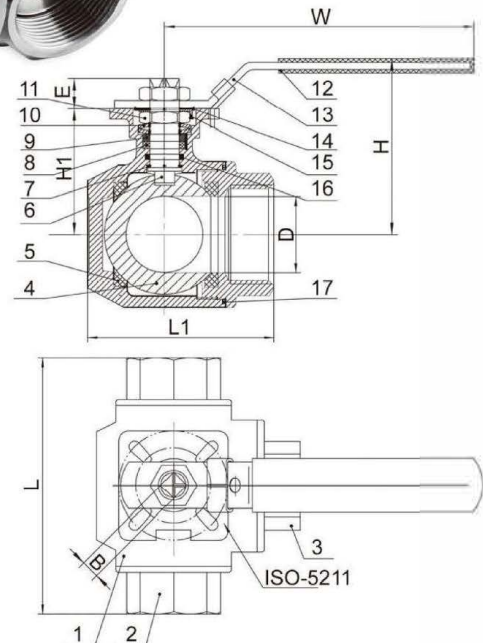
3WAY BALL VALVE WITH ISO5211 MOUNTING PAD (QF401L/T)

FEATURES

- ◆ 1000PSI/PN63
- ◆ Reduce Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ ISO5211 Mounting Pad
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option)
- ◆ L or T Port Option
- ◆ 4 Seats For Rigid Ball Supporting
- ◆ Thread: ASME B1.20.1 BS21.DIN2999/259, ISO228-1, JIS B 0203, ISO7/1
- ◆ Inspection Testing: API598, EN12266



ITEM	DESIGNATION	QTY	MATERIAL
1	BODY	1	CF8/CF8M
2	CAP(1)	2	CF8/CF8M
3	CAP(2)	1	CF8/CF8M
4	BALL	1	CF8/CF8M
5	BALL SEAT	4	RPTFE
6	STEM	1	304/316
7	THUST WASHER	1	PTFE
8	STEM PACKING	1	PTFE
9	GLAND NUT	1	304
10	SPRING WASHER	2	304
11	NUT	2	304
12	HANDLE COVER	1	PVC
13	HANDLE	1	304/316
14	WASHER	1	304
15	THRUST WASHER	1	304
16	O-RING	1	VITON
17	JOINT GASKET	1	PTFE



SIZE	ΦD	W	L±2	L1±2	H	B _{-0.07} ⁰	E±1	ISO5211	H1
1/4"	9	139	79	64	73	9	9	F04/03	42
3/8"	11	139	79	64	73	9	9	F04/03	42
1/2"	12.5	139	79	64	73	9	9	F04/03	42
3/4"	16	139	83	68	80	9	9	F04/03	49
1"	20	160	104	82	95	11	11	F05/04	59.5
1-1/4"	25	160	120	90	98	11	11	F05/04	63
1-1/2"	32	185	126	106	110	14	14	F07/05	73.5
2"	38	185	147	123	119	14	14	F07/05	82.8

Ball Valve

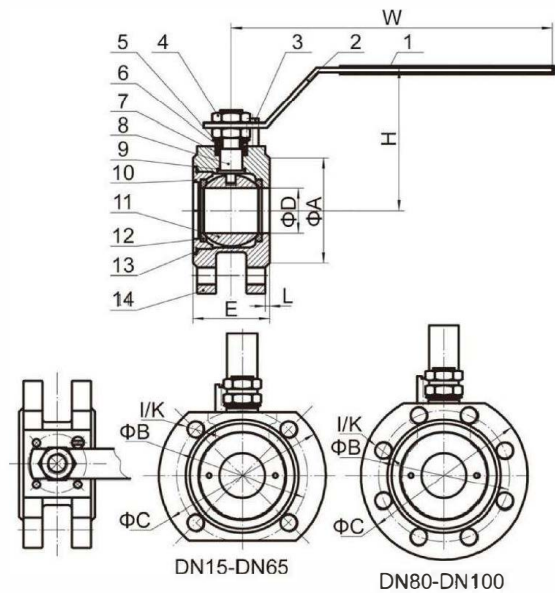
1PC WAFER BALL VALVE (QF101F)

FEATURES

- ◆ PN16/PN40
- ◆ Full Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Casting Approved AD2000-W0
- ◆ Anti-Static device(option)
- ◆ Design: EN12516
- ◆ End Flange: DIN2542-DIN2545
- ◆ Inspection Testing: API598, EN12266



ITEM	DESIGNATION	QTY	MATERIAL
1	HANDLE SLEEVE	1	PVC
2	HANDLE	1	304
3	STOP BLOCK	1	304
4	STEM NUT	2	304
5	SPRING WASHER	2	304
6	STEM RING	1	304
7	STEM PACKING	2	PTFE
8	STEM	1	304/316
9	THRUST WASHER	1	PTFE
10	CAP	1	CF8/CF8M
11	BALL	1	CF8/CF8M
12	BALL SEAT	2	RPTFE
13	JOINT GASKET	1	PTFE
14	BODY	1	CF8/CF8M



SIZE	ΦA	ΦB	ΦC	ΦD	E	H	W	L	I/K	ISO5211	pressure class
DN15	45	65	90	15	37	70	120	2	4-M12	F03	PN40
DN20	58	75	105	20	40	73	120	2	4-M12	F03	
DN25	68	85	115	25	43	78	165	2	4-M12	F04	
DN32	78	100	140	32	51	85	165	3	4-M16	F04	
DN40	88	110	150	38	63	92	200	3	4-M16	F05	
DN50	102	125	165	50	81	100	200	3	4-M16	F05	
DN65	122	145	185	64	101	140	240	3	4-M16	F07	PN16
DN80	138	160	200	80	118	150	240	3	8-M16	F07	
DN100	158	180	220	97	150	170	265	3	8-M16	F10	

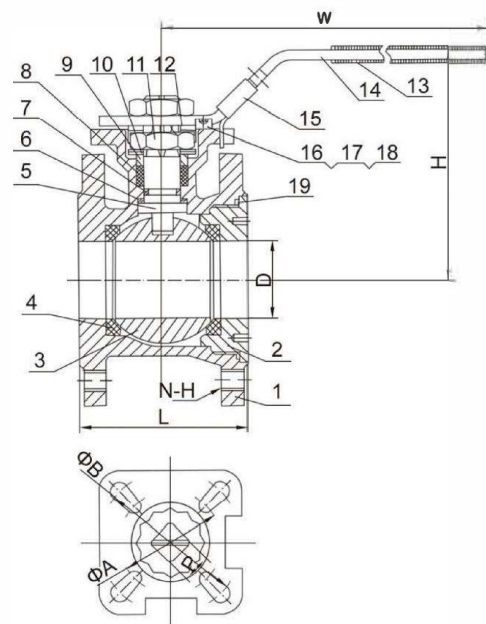
1PC WAFER FLANGED BALL VALVE WITH ISO5211 MOUNTING PAD (QF101M)

FEATURES

- ◆ PN16 ◆ Full Port
- ◆ Investment Casting ◆ Blow-out proof Stem
- ◆ ISO5211 Mounting Pad
- ◆ Locking Device Handle(Optional)
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option) ◆ Design: EN12516
- ◆ End Flange: DIN2542-DIN2545
- ◆ Inspection Testing: API598, EN12266



ITEM	DESIGNATION	MATERIAL
1	BODY	CF8/CF8M
2	CAP	CF8/CF8M
3	BALL	CF8/CF8M
4	SEAL	RPTFE
5	STEM	304
6	STEM PACKING	PTFE
7	O-RING	NBR
8	STEM SEAT	PTFE
9	GLAND	304
10	SPRING WASHER	301
11	NUT	304
12	WASHER	304
13	HANDLE SLEEVE	PVC
14	HANDLE	304
15	LOCKING	304
16	BOLT	304
17	BOLT NUT	304
18	BOLT WASHER	304
19	BODY PACKING	PTFE



SIZE	D	P	A	B	N-H	W	H	L	ISO5211
DN15	15	9	36	42	4-M12	140	78	42	F04/03
DN20	20	9	36	42	4-M12	140	84	44	F04/03
DN25	25	11	42	50	4-M12	152	93	50	F04/03
DN32	32	11	42	50	4-M16	152	105	60	F04/03
DN40	38	14	50	70	4-M16	188	112	65	F05/04
DN50	50	14	50	70	4-M16	188	120	80	F05/04
DN65	65	17	70	102	4-M16	230	145	113	F07/05
DN80	76	17	70	102	8-M16	230	155	120	F07/05
DN100	94	22	102	102	8-M16	230	189	154	F10

Ball Valve

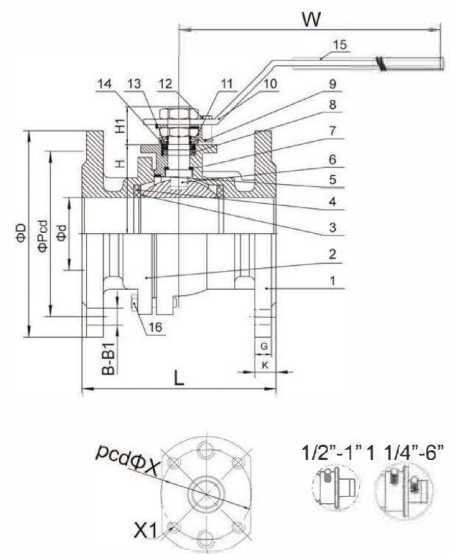
2PC ANSI FLANGED BALL VALVE (QF201F)

FEATURES

- ◆ ANSI CLASS150
- ◆ Full Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Casting Approved AD2000-W0
- ◆ Anti-Static device(option)
- ◆ Design: ASME B16.34
- ◆ End Flange:ASME B16.5
- ◆ Inspection Testing: API598



ITEM	DESIGNATION	QTY	MATERIALS
1	BODY	1	CF8/CF8M
2	CAP	1	CF8/CF8M
3	BALL	1	CF8/CF8M
4	BALL SEAT	2	RPTFE
5	JOINT GASKET	1	PTFE
6	STEM	1	304/316
7	THRUST WASHER	1	PTFE
8	STEM PACKING	1	PTFE
9	STOPPER	1	304
10	HANDLE	1	304
11	NUT	2	304
12-1	BOLT	1	304
12-2	PIN	1	304
13	STEM RING	1	304
14	BELLEVILLE WASHER	2	304
15	HANDLE SLEEVE	1	PVC
16	BOLT	4-8	304



SIZE	Φd	CLASS-150					L	H	H1	W	X	X1
		G	K	D	B	B1						
1/2"	15	8.2	10.7	88	10.2	4	108	26.5	16.45	130	42	M5
3/4"	20	9.5	12	97	16.2	4	117.1	30.1	17.2	130	42	M5
1"	25	10.5	13	107	16.2	4	127	35.25	23.3	160	50	M6
1-1/4"	32	11.5	14	115	16.2	4	140	40.8	23.3	160	50	M6
1-1/2"	38	12.5	16	125	16.2	4	166	48	30.2	200	70	M8
2"	50	14	17.5	150.5	19.3	4	178	56.5	30.2	200	70	M8
2-1/2"	65	16.8	20.3	176	19.3	4	190	74.5	29.7	220	70	M8
3"	80	17.7	21	188.5	19.3	4	203	86	39.6	260	102	M10
4"	100	17.5	21	227	19.3	8	229	107.75	38.1	260	102	M10
5"	125	20	23	252	22	8	356	133.25	-	-	125	M12
6"	150	21	24	277	22	8	394	152.75	-	-	125	M12

Ball Valve

2PC

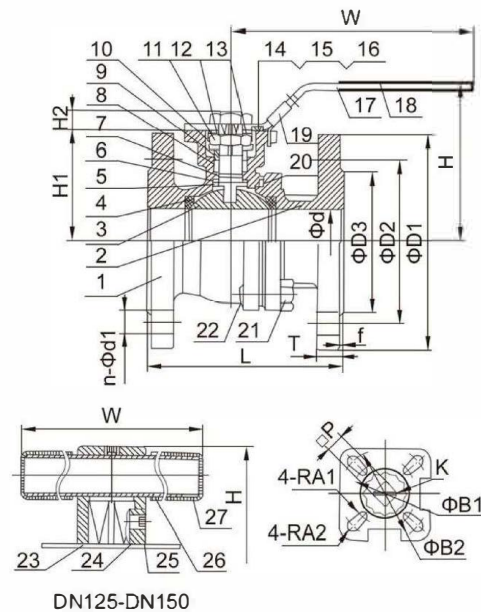
ANSI FLANGED BALL VALVE WITH DIRECT MOUNTING PAD (QF201M)

FEATURES

- ◆ ANSI CLASS150
- ◆ Full Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ ISO5211 Mounting Pad
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option)
- ◆ Design: ASME B16.34
- ◆ End Flange:ASME B16.5
- ◆ Inspection Testing: API598



ITEM	DESIGNATION	MATERIAL
1	BODY	CF8/CF8M
2	CAP	CF8/CF8M
3	BALL	CF8/CF8M
4	BALL SEAT	RPTFE
5	STEM	304/316
6	THRUST WASHER	PTFE
7	O-RING	NBR
8	V-RING PACKING	PTFE
9	GLAND	304
10	BELIEVLE WASHER	301
11	NUT	304
12	WASHER	304
13	HANDLE	304
14	STOP BOLT	304
15	NUT	304
16	WASHER	304
17	HANDLE	304
18	HANDLE SLEEVE	PVC
19	LOCKING	304
20	BODY GASKET	PTFE
21	NUT	304
22	BOLT	304
23	TRIANGLE STOPPER	304
24	HANDLE ADAPTER	304
25	SET SCREWED	304
26	HANDLE	304
27	HANDLE SLEEVE	PVC



SIZE	Φd	L	T	f	D1	D2	D3	n	Φd1	H1	H2	H	W	K	P	A1	A2	B1	B2
1/2"	15	108	9.7	1.6	89	60.5	35	4	16	48.3	8	80	140	M12×1.5	9	3	3	36	42
3/4"	20	117	10.5	1.6	98.6	70	43	4	16	53	8	85	140	M12×1.5	9	3	3	36	42
1"	25	127	11.2	1.6	108	79.2	51	4	16	58.5	11	95	160	M14×1.5	11	3	3.5	42	50
1 1/4"	32	140	12.7	1.6	117	88.9	63.5	4	16	71	11	108	160	M14×1.5	11	3	3.5	42	50
1 1/2"	38	165	14.7	2	125	98.4	73.2	4	16	76	14	114	185	M18×1.5	14	3.5	4.5	50	70
2"	50	178	16.3	2	150	120.7	92	4	19	84.5	14	124	185	M18×1.5	14	3.5	4.5	50	70
2 1/2"	65	190	17.9	2	180	139.7	104.7	4	19	101.5	17	148	230	M22×1.5	17	4.5	5.5	70	102
3"	76	203	19.5	2	190	152.4	127	4	19	111.5	17	158	230	M22×1.5	17	4.5	5.5	70	102
4"	100	229	24.3	2	230	190.5	157.2	8	19	141	22	191	230	M28×2	22	M10		102	
5"	120	356	24	2	254	216	186	8	22.4	160	40.5	242	500	M36×2	27	M12		125	
6"	150	394	25.4	2	279.4	241.3	216	8	22.4	184	40.5	270	800	M36×2	27	M12		125	

Ball Valve

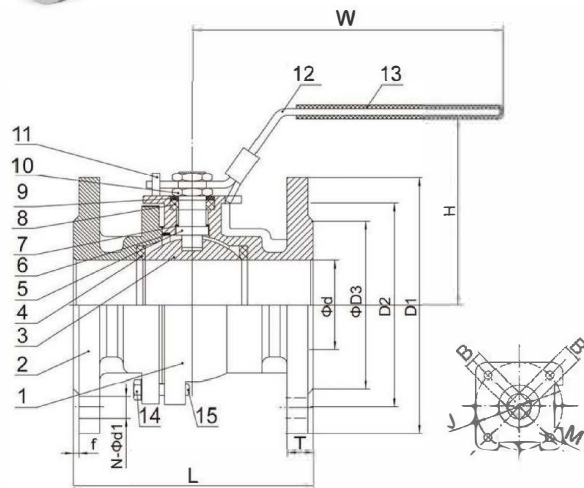
2PC DIN FLANGED BALL VALVE (QF203F)

FEATURES

- ◆ DIN PN16-40
- ◆ Full Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ Locking Device Handle(Optional)
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option)
- ◆ Design: DIN3357, EN12516
- ◆ End Flange: DIN2501, PN10-40
- ◆ Face to Face: DIN3202-F4
- ◆ Inspection Testing: DIN3230/3, EN12266



ITEM	DESIGNATION	QTY	MATERIAL
1	BODY	1	1.4408/1.4308
2	CAP	1	1.4408/1.4308
3	BALL	1	1.4408/1.4308
4	BALL SEAT	2	RPTFE
5	STEM	1	304/316
6	BODY GASKET	1	PTFE
7	STEM PACKING	1	PTFE
8	V-RING PACKING	1	PTFE
9	GLAND	1	304
10	NUT	2	304
11	STOP PIN	1	304
12	HANDLE	1	304
13	HANDLE SLEEVE	1	PVC
14	NUT	4-8	304
15	BOLT	4-8	304



SIZE	d	B	H	W	L	D3	D2	D1	T	f	d1	N	J	M1	BOLT NUMBER	
1/2"	15	11	80	160	115	45	65	95	16	2	14	4	42	M5	4	PN16 PN40
3/4"	20	11	90	160	120	58	75	105	18	2	14	4	42	M5	4	
1"	25	14	95	160	125	68	85	115	18	2	14	4	50	M6	4	
1-1/4"	32	14	105	160	130	78	100	140	18	2	18	4	50	M6	4	
1-1/2"	38	17	110	220	140	88	110	150	18	3	18	4	70	M8	4	
2"	50	17	118	220	150	102	125	165	18	3	18	4	70	M8	4	
2-1/2"	65	17	136	220	170	122	145	185	18	3	18	8	70	M8	6	PN16
3"	76	22	158	320	180	138	160	200	20	3	18	8	102	M10	6	
4"	94	22	178	320	190	158	180	220	20	3	18	8	102	M10	8	

Ball Valve

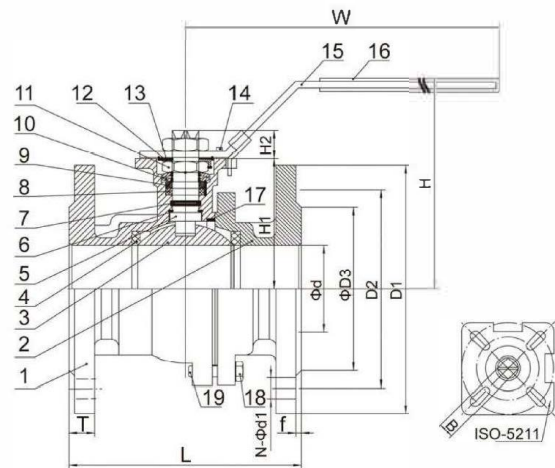
2PC DIN FLANGED BALL VALVE WITH DIRECT MOUNTING PAD(QF203M)

FEATURES

- ◆ DIN PN16-40
- ◆ Full Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ ISO5211 Mounting Pad
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option)
- ◆ Design: DIN3357, EN12516
- ◆ End Flange: DIN2501, PN10-40
- ◆ Face to Face: DIN3202-F4(DN15-DN100)
- ◆ Inspection Testing: DIN3230/3, EN12266



ITEM	DESIGNATION	QTY	MATERIAL
1	BODY	1	1.4408/1.4308
2	CAP	1	1.4408/1.4308
3	BALL	1	1.4408/1.4308
4	BALL SEAT	2	RPTFE
5	STEM	1	304/316
6	THRUST WASHER	1	PTFE
7	O-RING	1	VITON
8	V-RING PACKING	1	PTFE
9	GLAND	1	304
10	BELIEVILLE WASHER	2	301
11	NUT	2	304
12	THRUST WASHER	1	304
13	WASHER	1	304
14	STOP PIN	1	304
15	HANDLE	1	304
16	HANDLE SLEEVE	1	PVC
17	BODY GASKET	1	PTFE
18	NUT	4-8	304
19	BOLT	4-8	304



SIZE	d	B	H	W	L	D3	D2	D1	T	f	d1	N	H1	H2	ISO5211	
1/2"	15	11	80	140	115	45	65	95	16	2	14	4	48	8	F04/03	PN16 PN40
3/4"	20	11	95	140	120	58	75	105	18	2	14	4	53	8	F04/03	
1"	25	14	95	160	125	68	85	115	18	2	14	4	58	11	F05/04	
1-1/4"	32	14	105	160	130	78	100	140	18	2	18	4	71	11	F05/04	
1-1/2"	38	17	114	190	140	88	110	150	18	3	18	4	76	14	F07/05	
2"	50	17	124	190	150	102	125	165	18	3	18	4	85	14	F07/05	PN16
2-1/2"	65	17	148	230	170	122	145	185	18	3	18	8	101	17	F10/07	
3"	76	22	158	230	180	138	160	200	20	3	18	8	111.5	17	F10/07	
4"	100	22	190	320	190	158	180	220	20	3	18	8	141	22	F12/10	

Ball Valve

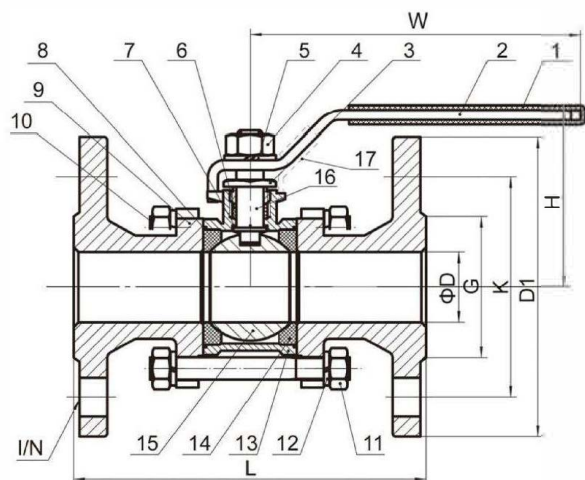
3PC DIN FLANGED BALL VALVE (QF301F)

FEATURES

- ◆ DIN PN16-40
- ◆ Full Port
- ◆ Investment Casting
- ◆ Blow-out proof Stem
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option)
- ◆ Design: DIN3357, En12516
- ◆ End Flange: DIN2501, PN10-40
- ◆ Face to Face: DIN3202-F1 (DN15-DN100)
- ◆ Inspection Testing: DIN3230/3, EN12266

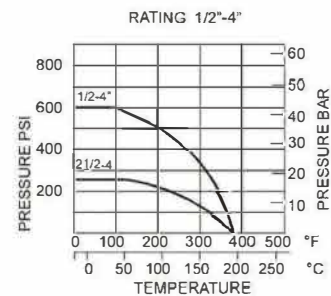


ITEM	DESIGNATION	QTY	MATERIAL
1	HANDLE SLEEVE	1	PVC
2	HANDLE	1	304
3	GLAND NUT	1	304
4	STEM NUT	1	304
5	STEM WASHER	1	304
6	STEM PACKING	1	PTFE
7	THRUST WASHER	1	PTFE
8	JOINT GASKET	2	PTFE
9	END CAP	2	CF8/CF8M
10	BOLT	4(6)	304
11	NUT	8(12)	304
12	SPRING WASHER	8(12)	304
13	BODY	1	CF8/CF8M
14	BALL SEAT	2	RPTFE
15	BALL	1	CF8/CF8M
16	STEM	1	304/316
17	LOCKING DEVICE	1	304



SIZE	D	L	H	W	D1	K	G	I/N
1/2"	15	130	55	103	95	65	45	14/4
3/4"	20	150	61	103	105	75	58	14/4
1"	25	160	61	135	115	85	68	14/4
1-1/4"	32	180	78	135	140	100	78	18/4
1-1/2"	40	200	90	190	150	110	88	18/4
2"	50	230	97	190	165	125	102	18/4
2-1/2"	64	290	143	310	185	145	122	18/4
3"	76	310	152	310	200	160	138	18/8
4"	100	350	187	400	220	180	158	18/8
					235	190	162	22/8

1/2-2=PN40 2 1/2-4=PN16/PN40

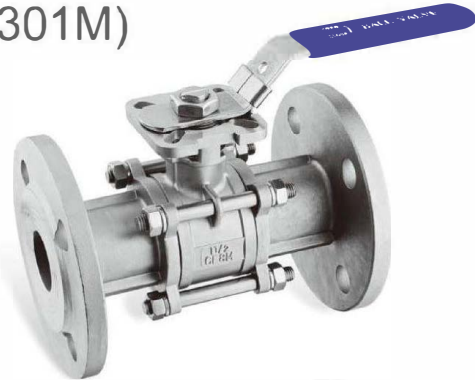


Ball Valve

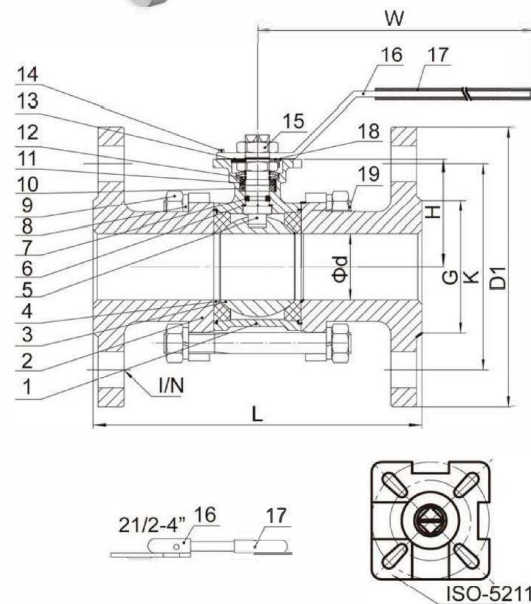
3PC DIN FLANGED BALL VALVE WITH ISO 5211 MOUNTING PAD (QF301M)

FEATURES

- ◆ DIN PN16-40 ◆ Full Port
- ◆ Investment Casting ◆ Blow-out proof Stem
- ◆ ISO5211 Mounting Pad
- ◆ PED97/23/PE (CE0035) Approved
- ◆ Anti-Static device(option)
- ◆ Design: DIN3357, EN12516
- ◆ End Flange: DIN2501
- ◆ Face to Face: DIN3202-F1 (DN15-DN100)
- ◆ Inspection Testing: DIN3230/3, EN12266



ITEM	DESIGNATION	QTY	MATERIAL
1	BODY	1	CF8/CF8M
2	CAP	2	CF8/CF8M
3	BALL	1	CF8/CF8M
4	BALL SEAT	2	RPTFE
5	STEM	1	304/316
6	THRUST WASHER	1	304
7	O-RING	1	VITON
8	SPRING WASHER	4(6)	304
9	BOLT NUT	4(6)	304
10	STEM PACKING	1	PTFE
11	RING	1	304
12	BELIEVILLE WASHER	1	301
13	LOCK WASHER	1	301
14	STOP PIN	1	304
15	HANDLE NUT	1	304
16	HANDLE	1	304
17	HANDLE SLEEVE	1	PVC
18	WASHER	1	304
19	BOLT	4(6)	304



SIZE	d	L	H	W	D1	K	G	I/N	ISO5211
1/2"	15	130	40	140	95	65	45	14/4	F04/03
3/4"	20	150	47	140	105	75	58	14/4	F04/03
1"	25	160	57	160	115	85	68	14/4	F05/04
1-1/4"	32	180	62	160	140	100	78	18/4	F05/04
1-1/2"	38	200	77	180	150	110	88	18/4	F07/05
2"	50	230	86	180	165	125	102	18/4	F07/05
2-1/2"	64	290	108	300	185	145	122	18/4	F10/07
3"	76	310	115	300	200	160	138	18/8	F10/07
4"	100	350	133	400	220	180	158	18/8	F12/10
					235	190	162	22/8	

