

SERIES 700001 STAINLESS STEEL BALL VALVE

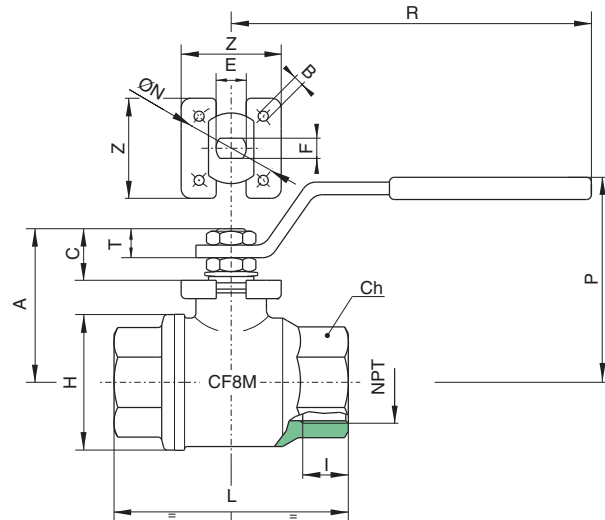
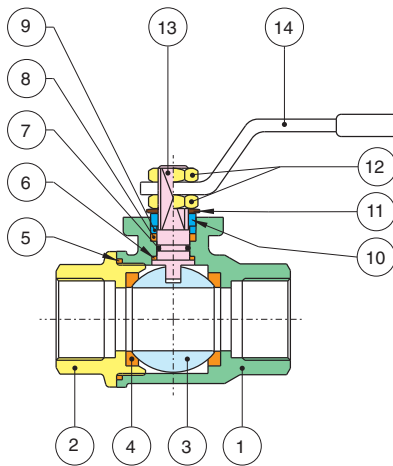
2-piece stainless steel FNPT threaded ball valve, full port.

- Pressure rating 2000 psi to 1/2", 1500 psi 3/4" to 1", 1000 psi 1 1/4" to 2", 150 psi steam.
- Temperature range -4°F to +366°F.
- Blow-out proof stem, adjustable stem packing.
- P.T.F.E. seats, packing, and thrust washer.
- ISO 5211 mounting pad and double "D" stem.
- 100% electronically tested in the open and closed position at 80 psi.
- TUV T.A. Luft approved.
- ANSI B1.20.1 connections.

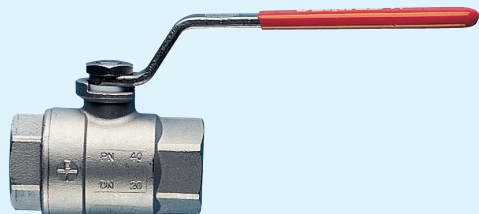
700001: size 1/8" to 4".

700001LL: WITH LOCKING HANDLE - size 1/8" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N POS	SIZE	I	L	H	CH	R	P	A	C	T	E	F	ØN ISO 5211	B	Z	Cv	psi	Weight Lbs
1	BODY	CF8M	1	1/8"	0.29	2.18	1.18	0.86	4.35	1.96	1.37	0.53	0.35	0.31	0.19	F03	0.21	1.41	5.80	2000	0.67
2	END CONNECTION	CF8M	1	1/4"	0.43	2.18	1.18	0.86	4.35	1.96	1.37	0.53	0.35	0.31	0.19	F03	0.21	1.41	6.36	2000	0.63
3	BALL	AISI 316 - CF8M	1	3/8"	0.44	2.18	1.18	0.86	4.35	1.96	1.37	0.53	0.35	0.31	0.19	F03	0.21	1.41	9.83	2000	0.60
4	BALL SEAT	P.T.F.E.	2	1/2"	0.59	2.59	1.41	1.06	4.35	2.08	1.49	0.53	0.35	0.31	0.19	F03	0.21	1.41	22.21	2000	0.80
5	SEAT	P.T.F.E.	1	3/4"	0.64	3.11	1.77	1.25	5.17	2.67	2.00	0.59	0.39	0.39	0.27	F04	0.21	1.65	40.50	1500	1.46
6	THRUST WASHER	P.T.F.E.	1	1"	0.77	3.66	2.12	1.61	6.88	3.11	2.36	0.76	0.49	0.47	0.31	F04	0.21	1.65	74.63	1500	2.25
7	O-RING	FKM (Viton®)	1	1 1/4"	0.84	3.93	2.51	1.96	6.88	3.28	2.53	0.76	0.49	0.47	0.31	F04	0.21	1.65	120.10	1000	3.09
8	STEM SEAL	P.T.F.E.	1	1 1/2"	0.84	4.33	3.14	2.16	9.84	3.93	3.11	0.94	0.64	0.62	0.39	F05	0.25	1.96	201.32	1000	5.29
9	PACKING GLAND	AISI 303 (1/8" - 2") STEEL (2 1/2" - 4")	1	2"	1.01	5.15	3.74	2.75	9.84	4.21	3.38	0.94	0.64	0.62	0.39	F05	0.25	1.96	348.60	1000	7.91
10	END STOP	AISI 430 (1/8" - 2") STEEL (2 1/2" - 4")	2	2 1/2"	1.18	6.25	4.80	3.54	12.65	5.00	4.09	1.12	0.72	0.78	0.55	F07	M8	2.51	631.37	350	15.45
11	SPRING WASHER	STEEL (2 1/2" - 4")	2	3"	1.31	7.28	5.66	4.13	12.65	5.41	4.48	1.10	0.70	0.78	0.55	F07	M8	2.51	1009.48	350	23.34
12	NUT	AISI 304 (1/8" - 2") STEEL (2 1/2" - 4")	2	4"	1.54	8.74	6.96	5.11	15.01	6.16	5.39	1.35	0.86	0.94	0.70	F10	M10	3.62	1577.34	350	41.41
13	STEM	AISI 316	1																		
14	HANDLE	AISI 430 (1/8" - 2") STEEL (2 1/2" - 4")	1																		



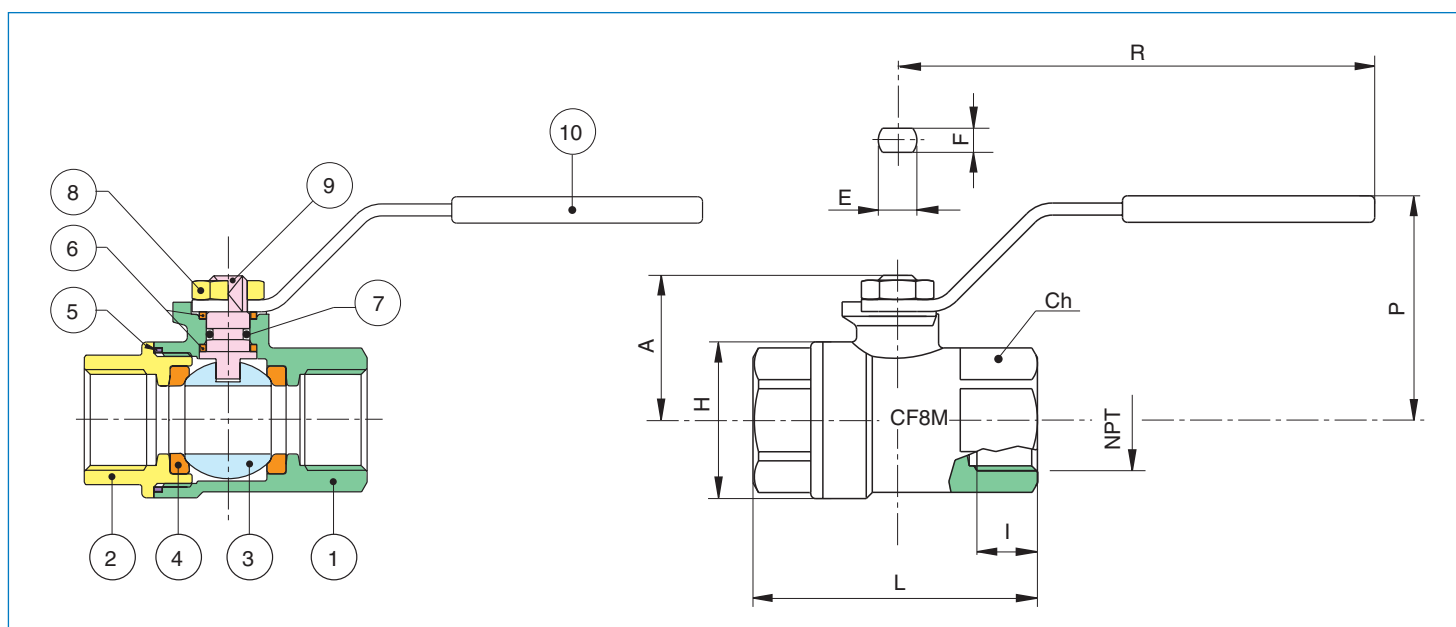
SERIES 700023 STAINLESS STEEL BALL VALVE

2-piece stainless steel FNPT threaded ball valve, full port.

- Pressure rating 1000 psi - 150 psi steam.
- Temperature range -4°F to +366°F.
- Blow-out proof stem.
- P.T.F.E. seats, packing, and thrust washer.
- 100% electronically tested in the open and closed position at 80 psi.
- ANSI B1.20.1 connections.

700023: size 1/4" to 2".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N POS
1	BODY	CF8M	1
2	END CONNECTION	CF8M	1
3	BALL	AISI 316 - CF8M	1
4	BALL SEAT	P.T.F.E.	2
5	SEAL	P.T.F.E.	1
6	STEM SEAL	P.T.F.E.	2
7	O-RING	FKM (Viton®)	1
8	NUT	AISI 304	1
9	STEM	AISI 316	1
10	HANDLE	AISI 430	1

SIZE	A	H	L	R	CH	I	E	F	P	Cv	psi	Weight Lbs
1/4"	1.10	1.18	2.10	4.35	0.86	0.39	0.31	0.19	1.75	6.36	1000	0.48
3/8"	1.10	1.18	2.10	4.35	0.86	0.39	0.31	0.19	1.75	9.83	1000	0.44
1/2"	1.20	1.27	2.36	4.35	1.06	0.51	0.31	0.19	1.85	22.21	1000	0.55
3/4"	1.45	1.57	2.75	5.17	1.25	0.55	0.39	0.27	2.14	40.50	600	1.00
1"	1.61	1.92	3.11	5.17	1.61	0.66	0.39	0.27	2.30	74.63	600	1.88
1 1/4"	1.96	2.44	3.58	6.87	1.96	0.74	0.47	0.31	0.27	120.10	350	2.66
1 1/2"	2.24	2.95	4.05	6.87	2.16	0.76	0.47	0.31	3.01	201.32	350	4.00
2"	2.59	3.74	4.88	6.87	2.75	0.88	0.47	0.31	3.38	348.60	350	6.00



SERIES 700056 CARBON STEEL BALL VALVE

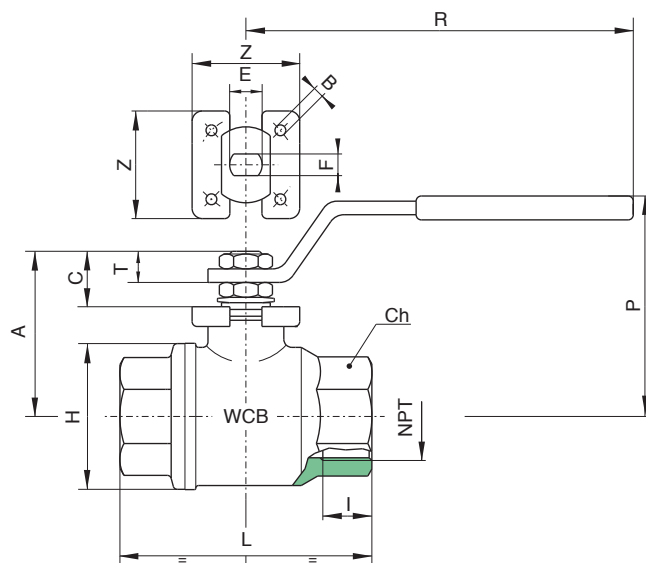
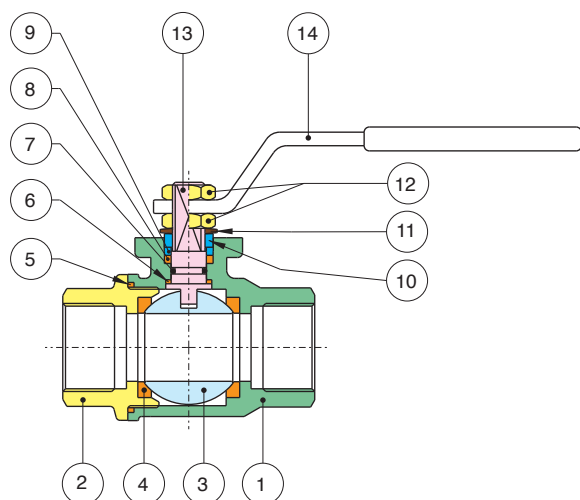
2-piece carbon steel, FNPT threaded ball valve, stainless steel ball and stem, full port.

- Pressure rating 1000 psi -150 psi steam.
- Temperature -4°F to +366°F.
- Blow-out proof stem, adjustable stem packing.
- P.T.F.E. seats, packing and thrust washer.
- 100% electronically tested in the open and closed position at 80 psi.
- TUV T.A. Luft approved.
- ISO 5211 pad with double "D" stem.
- ANSI B1.20.1 connections.

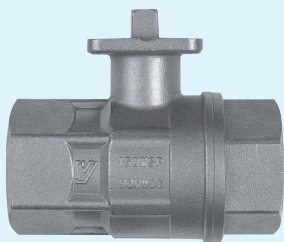
700056: size 1/4" to 2".

700056LL: WITH LOCKING HANDLE - size 1/4" to 2".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N PCS	SIZE	I	L	H	Ch	R	P	A	C	T	E	F	ISO 5211	B	Z	Cv	psi	Weight Lbs
1	BODY	ASTM A105-WCB	1	1/4"	0.43	2.17	1.18	0.87	4.33	1.97	1.38	0.53	0.31	0.31	0.20	F03	0.22	1.42	6.36	1000	0.63
2	END CONNECTION	ASTM A105-WCB	1	3/8"	0.45	2.17	1.18	0.87	4.33	1.97	1.38	0.53	0.31	0.31	0.20	F03	0.22	1.42	9.83	1000	0.60
3	BALL	AISI 304 - CF8	1	1/2"	0.59	2.60	1.42	1.06	4.33	2.09	1.50	0.53	0.31	0.31	0.20	F03	0.22	1.42	22.21	1000	0.80
4	BALL SEAT	P.T.F.E.	2	3/4"	0.64	3.11	1.77	1.26	5.16	2.68	2.01	0.59	0.39	0.39	0.28	F04	0.22	1.65	40.50	1000	1.46
5	SEAL	P.T.F.E.	1	1"	0.75	3.66	2.13	1.61	6.85	3.11	2.36	0.77	0.49	0.47	0.31	F04	0.22	1.65	74.63	1000	2.25
6	THRUST WASHER	P.T.F.E.	1	1 1/4"	0.84	3.86	2.52	1.97	6.85	3.27	2.52	0.77	0.49	0.47	0.31	F04	0.22	1.65	120.10	1000	3.09
7	O-RING	FKM (Viton®)	1	1 1/2"	0.84	4.33	3.15	2.17	9.84	3.94	3.11	0.94	0.65	0.63	0.39	F05	0.26	1.97	201.32	1000	5.29
8	STEM SEAL	P.T.F.E.	1	2"	1.01	5.12	3.74	2.76	9.84	4.21	3.39	0.94	0.65	0.63	0.39	F05	0.26	1.97	348.60	1000	7.91
9	PACKING GLAND	STEEL	1																		
10	END STOP	AISI 430	2																		
11	NUT	STEEL	2																		
12	STEM	AISI 304	1																		
13	HANDLE	STEEL	1																		



SERIES 700076

STAINLESS STEEL DIRECT MOUNT BALL VALVE

2-piece stainless steel FNPT threaded, direct mount ball valve, full port.

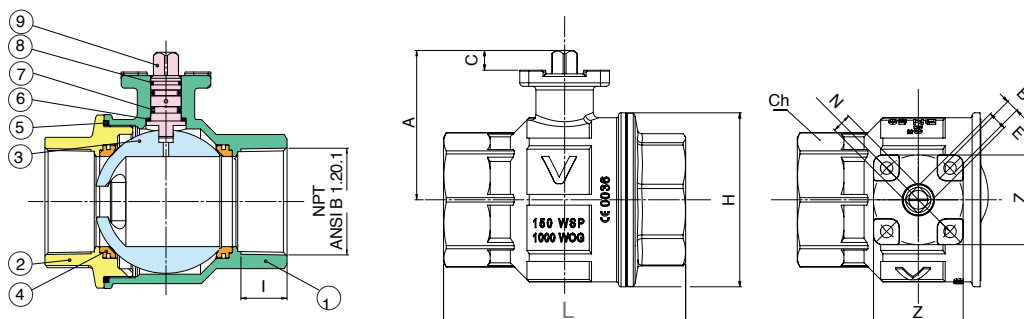
- Pressure rating 1000 psi, 150 psi steam.
- Temperature -4°F to +366°F.
- NSF 61, 372 certified.
- Blow-out proof stem.
- P.T.F.E seats with O-ring backing for low operating torque.
- P.T.F.E seals and double O-ring stem packing.
- 100% electronically tested in the open and closed position at 80 psi.
- ISO 5211 mounting pad.
- ANSI B1.20.1 connections

700076: size 1/4" to 3".



HEALTH
EFFECTS US-CA
NSF 372
NSF 61

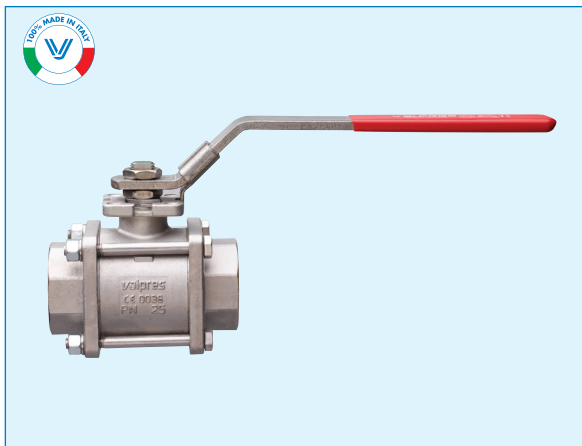
COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



* (in-Lbs) Torque values in the table are measured in laboratory tests under the following conditions:
TEMPERATURE: 68°F
PRESSURE: 0 psi
FLUID: PURIFIED WATER

N POS	PART NAME	MATERIAL	N PCS
1	BODY	CF8M	1
2	END CONNECTION	CF8M	1
3	BALL	AISI316-CF8M	1
4	BALL SEAT	P.T.F.E	2
5	SEAL	P.T.F.E	1
6	STEM SEAL	P.T.F.E	1
7	O-RING	FKM (Viton®)	2
8	STEM	AISI 316	1
9	STEM SEAL	P.T.F.E	1
10	O-RING	FKM (Viton®)	2

SIZE	I	L	H	CH	A	C	E mm	ISO 5211	B	Z	Cv	psi	Weight Lbs	* Torque in-Lbs
1/4"	0.59	2.56	1.44	1.02	1.78	0.26	9	F03/F04 1.42-1.65	0.24	1.65	7.91	1000	0.95	60
3/8"	0.59	2.56	1.44	1.02	1.78	0.26	9	F03/F04 1.42-1.65	0.24	1.65	10.22	1000	0.89	60
1/2"	0.59	2.63	1.35	1.06	1.63	0.35	9	1.42 (ISO F03)	0.23	1.49	22.21	1000	0.68	53.10
3/4"	0.64	3.07	1.65	1.25	1.71	0.35	9	1.42 (ISO F03)	0.23	1.49	40.50	1000	0.91	53.10
1"	0.75	3.54	2.02	1.61	2.10	0.35	9	1.42 (ISO F03)	0.23	1.49	74.63	1000	1.35	53.10
1 1/4"	0.84	3.93	2.53	1.96	2.24	0.35	9	1.42 (ISO F03)	0.23	1.49	120.10	1000	2.22	53.10
1 1/2"	0.84	4.40	3.03	2.16	2.91	0.43	11	1.97 (ISO F05)	0.27	1.96	201.32	1000	3.69	150.46
2"	1.01	5.31	3.81	2.75	3.27	0.43	11	1.97 (ISO F05)	0.27	1.96	348.60	1000	6.49	150.46
2 1/2"	1.22	6.32	4.64	3.39	4.94	0.66	17	F07/F10 2.76-4.02	0.39 0.47	3.64	631.37	800	16.38	484
3"	1.34	7.01	5.48	4.09	5.34	0.71	17	F07/F10 2.76-4.02	0.39 0.47	3.64	1009.48	800	22.82	772



SERIES 710190 - 710061 - 710062 STAINLESS STEEL 3-PC BALL VALVE FOR STEAM

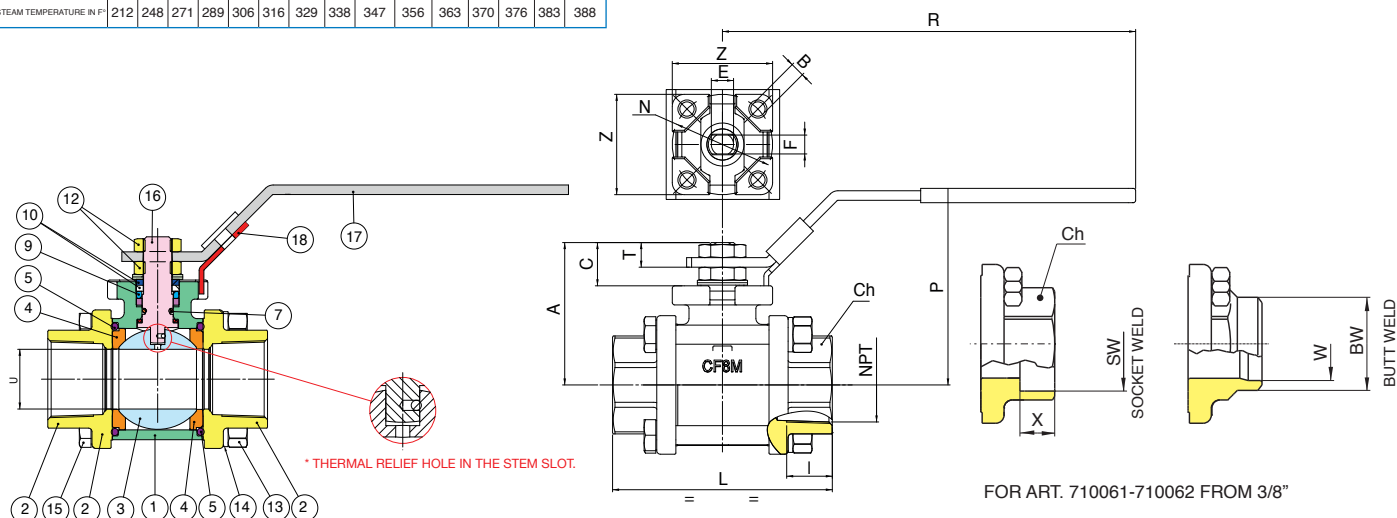
- 3-piece stainless steel ball valve for steam, full port.
 - Steam pressure to 250 psi.
 - Temperature range: -4°F to 406° F.
 - Blow-out proof stem, adjustable stem packing.
 - ISO 5211 mounting pad with double "D" stem.
 - 100% electronically tested in the open and closed position at 80 psi.
 - TUV T.A. Luft approved.
 - 25% carbon filled P.T.F.E. ball seats.
 - Standard Latch Lock Handle.
- 710190:** NPT THREADED - ANSI B1.20.1 CONNECTIONS - size 1/4" to 4".
710061: SOCKET WELD - size 3/8" to 4".
710062: BUTT WELD - size 3/8" to 4".

* On request available with gas Antistatic Device.
 COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

NEW

MAXIMUM WORKING PRESSURE 250 psi

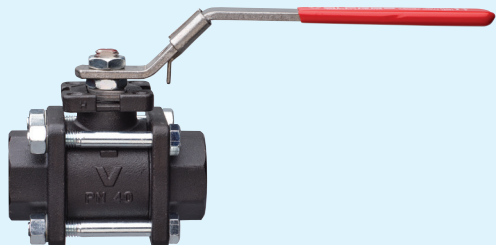
STEAM PRESSURE IN psi	15	29	44	58	73	87	102	116	131	145	160	174	189	203	220
STEAM TEMPERATURE IN °F	212	248	271	289	306	316	329	338	347	356	363	370	376	383	388



N POS	PART NAME	MATERIAL	N POS
1	BODY	A351/CF8M	1
2	END CONNECTION	A351/CF8M	2
3	BALL	A479-Tp316/ A351-CF8M	1
4	BALL SEAT	R.P.T.F.E.	2
5	O-RING	FKM-PEROX	2
6	STEM SEAL	R.P.T.F.E.	1
7	O-RING	FKM (Viton®)	1
8	STEM SEAL	R.P.T.F.E.	1
9	PACKING GLAND	AISI 316 (1/4" - 2") STEEL (2 1/2" - 4")	1
10	END STOP	AISI 430 (1/4" - 2") STEEL (2 1/2" - 4")	2
11	SPRING WASHER	STEEL (2 1/2"-4")	2
12	NUT	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	2
13	BOLT	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	4
14	WASHER	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	4
15	NUT	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	4
16	STEM	A479-Tp316	1
17	HANDLE	AISI 430	1
18	LOCKING HANDLE	AISI 430	1

SIZE	U	I	SW	X	BW	W	L	CH	R	P	A	C	T	E	F	ISO 5211	B	Cv	psi	Weight Lbs
1/4"*	0.39	0.43	-	-	-	-	2.24	0.87	4.33	1.97	1.38	0.53	0.35	0.31	0.20	-	-	6.40	250	0.65
3/8"	0.39	0.45	0.72	0.37	0.67	0.49	2.24	0.87	4.33	1.97	1.38	0.53	0.35	0.31	0.20	-	-	9.88	250	0.63
1/2"	0.59	0.59	0.88	0.37	0.84	0.62	2.56	1.06	5.16	2.52	1.85	0.59	0.39	0.39	0.28	F03	0.24	22.33	250	1.13
3/4"	0.79	0.64	1.09	0.44	1.05	0.83	2.99	1.26	5.16	2.68	2.05	0.63	0.39	0.39	0.28	F04	0.22	40.70	250	1.57
1"	0.98	0.75	1.36	0.50	1.31	1.05	3.62	1.61	6.85	3.11	2.36	0.77	0.49	0.47	0.31	F04	0.24	75.00	250	2.64
1 1/4"	1.26	0.84	1.70	0.56	1.66	1.38	4.17	1.97	6.85	3.27	2.52	0.77	0.49	0.47	0.31	F04	0.22	120.70	250	3.75
1 1/2"	1.57	0.84	1.95	0.63	1.90	1.61	4.57	2.17	9.84	3.94	3.11	0.94	0.65	0.63	0.39	F05	0.26	202.33	250	5.62
2"	1.97	1.01	2.44	0.69	2.37	2.07	5.35	2.76	9.84	4.21	3.39	0.94	0.65	0.63	0.39	F05	0.26	350.35	250	8.71
2 1/2"	2.56	1.19	3.01	0.79	2.87	2.47	6.02	3.54	12.64	4.96	4.06	1.10	0.71	0.79	0.55	F07	M8	634.53	250	18.09
3"	3.15	1.31	3.52	0.79	3.50	3.07	7.09	4.13	12.64	5.39	4.49	1.10	0.71	0.79	0.55	F07	M8	1014.53	250	28.34
4"	3.94	1.55	4.53	0.79	4.50	4.03	8.54	5.11	15.00	6.14	5.39	1.36	0.87	0.94	0.71	F10	M10	1585.23	250	47.58

* 1/4 available in art. 710190 only.



SERIES 710085 - 710064 - 710065 CARBON STEEL 3-PC BALL VALVE FOR STEAM

3-piece carbon steel ball valve for steam, full port.

- Steam pressure to 250 psi.
- Temperature range: -4°F to 406°F.
- Blow-out proof stem, adjustable stem packing.
- ISO 5211 mounting pad with double "D" stem.
- 100% electronically tested in the open and closed position at 80 psi.
- TUV T.A. Luft approved.
- 25% carbon filled P.T.F.E. ball seats.
- Standard Latch Lock Handle.

710085: NPT THREADED - ANSI B1.20.1 CONNECTIONS - size 1/4" to 4".

710064: SOCKET WELD - size 3/8" to 4".

710065: BUTT WELD - size 3/8" to 4".

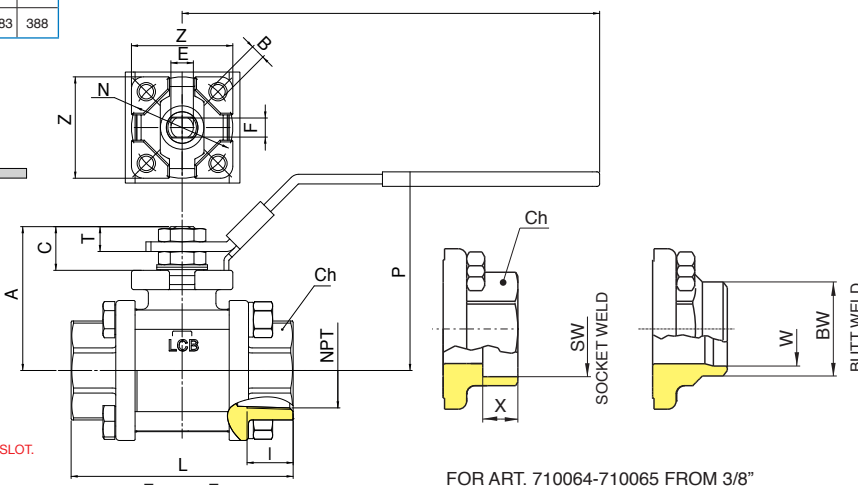
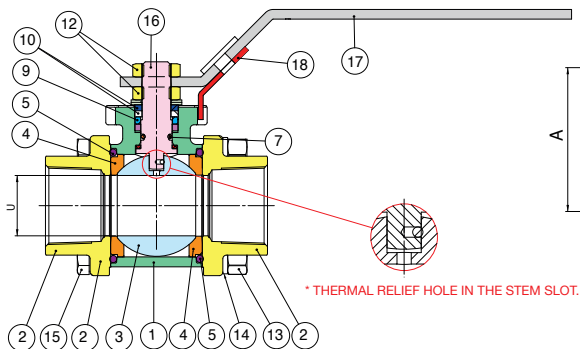
* On request available with gas Antistatic Device.

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

NEW

MAXIMUM WORKING PRESSURE 250 psi

STEM PRESSURE IN psi	15	29	44	58	73	87	102	116	131	145	160	174	189	203	220
STEM TEMPERATURE IN °F	212	248	271	289	306	316	329	338	347	356	363	370	376	383	388



N POS	PART NAME	MATERIAL	N POS
1	BODY	A352/LCB	1
2	END CONNECTION	A352/LCB	2
3	BALL	A479-Tp316/ A351-CF8	1
4	BALL SEAT	R.P.T.F.E.	2
5	O-RING	FKM-PEROX	2
6	STEM SEAL	R.P.T.F.E.	1
7	O-RING	FKM-PEROX	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1
10	END STOP	AISI 430 (1/8" - 2") STEEL (2 1/2" - 4")	2 1
11	SPRING WASHER	CARBON STEEL	2
12	NUT	STEEL	2
13	BOLT	STEEL (1/4" - 2") STEEL (2 1/2" - 4")	4 6
14	WASHER	STEEL (1/4" - 2") STEEL (2 1/2" - 4")	4 6
15	NUT	STEEL (1/4" - 2") STEEL (2 1/2" - 4")	4 6
16	STEM	A479-Tp304	1
17	HANDLE	AISI 430	1
18	LOCKING HANDLE	AISI 430	1

SIZE	U	I	SW	X	BW	W	L	CH	R	P	A	C	T	E	F	ISO 5211	B	Cv	psi	Weight Lbs
1/4"	0.39	0.43	-	-	-	-	2.24	0.87	4.33	1.97	1.38	0.53	0.35	0.31	0.20	-	-	6.40	250	0.65
3/8"	0.39	0.45	0.72	0.37	0.67	0.49	2.24	0.87	4.33	1.97	1.38	0.53	0.35	0.31	0.20	-	-	9.88	250	0.63
1/2"	0.59	0.59	0.88	0.37	0.84	0.62	2.56	1.06	5.16	2.52	1.85	0.59	0.39	0.39	0.28	F03	0.24	22.33	250	1.13
3/4"	0.79	0.64	1.09	0.44	1.05	0.83	2.99	1.26	5.16	2.68	2.05	0.63	0.39	0.39	0.28	F04	0.22	40.70	250	1.57
1"	0.98	0.75	1.36	0.50	1.31	1.05	3.62	1.61	6.85	3.11	2.36	0.77	0.49	0.47	0.31	F04	0.24	75.00	250	2.64
1 1/4"	1.26	0.84	1.70	0.56	1.66	1.38	4.17	1.97	6.85	3.27	2.52	0.77	0.49	0.47	0.31	F04	0.22	120.70	250	3.75
1 1/2"	1.57	0.84	1.95	0.63	1.90	1.61	4.57	2.17	9.84	3.94	3.11	0.94	0.65	0.63	0.39	F05	0.26	202.33	250	5.62
2"	1.97	1.01	2.44	0.69	2.37	2.07	5.35	2.76	9.84	4.21	3.39	0.94	0.65	0.63	0.39	F05	0.26	350.35	250	8.71
2 1/2"	2.56	1.19	3.01	0.79	2.87	2.47	6.02	3.54	12.64	4.96	4.06	1.10	0.71	0.79	0.55	F07	M8	634.53	250	18.09
3"	3.15	1.31	3.52	0.79	3.50	3.07	7.09	4.13	12.64	5.39	4.49	1.10	0.71	0.79	0.55	F07	M8	1014.53	250	28.34
4"	3.94	1.55	4.53	0.79	4.50	4.03	8.54	5.11	15.00	6.14	5.39	1.36	0.87	0.94	0.71	F10	M10	1585.23	250	47.58

* 1/4 available in art. 710085 only.

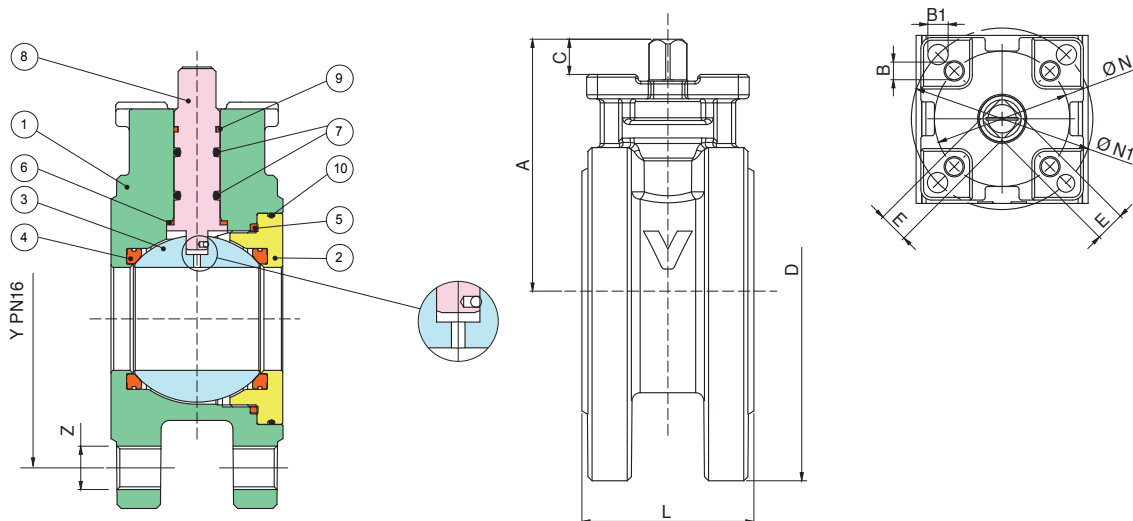


SERIES 723101 DIRECT MOUNT STAINLESS STEEL WAFER BALL VALVE

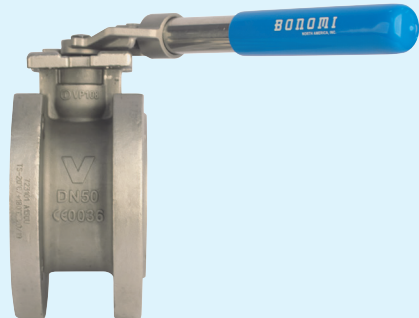
Direct mount, stainless steel ANSI class 150 wafer-style flanged ball valve, full port.

- Temperature range -4°F to +366°F.
- Antistatic stem device.
- TFM-MPTFE ball seats and thrust washer standard.
- Triple stem seals-two Viton® (FKM) O-rings and one P.T.F.E. seat.
- ISO 5211 mounting pad.
- Low torque design.

723101: size 1" to 4".



N POS	PART NAME	MATERIAL	N PCS	SIZE	D	Y	Z	L	A	C	E	ISO 5211 ØN	B	B1	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	A351-CF8M	1	1"	4.33	3.35	4x5/8"	1.89	2.76	0.43	9	F03/F05	0.22	0.28	89	74.63	5.29
2	END CONNECTION	A479-Tp316/A182-F316	1	1 1/4"	5.12	3.94	4x5/8"	2.13	3.23	0.39	9	F03/F05	0.22	0.28	116	120.10	7.72
3	BALL	A351-CF8M	1	1 1/2"	5.51	4.33	4x3/4"	2.50	3.66	0.51	11	F05	0.26	-	151	201.32	9.92
4	BALL SEAT	TFM-MPTFE	2	2"	6.10	4.92	8x5/8"	3.23	4.00	0.53	11	F05/F07	0.26	0.35	177	348.60	14.77
5	BODY SEAT	P.T.F.E.	1	2 1/2"	7.09	5.71	8x3/4"	4.06	5.06	0.73	14	F07	0.35	-	284	596.66	24.03
6	THRUST WASHER	TFM-MPTFE	1	3"	7.48	6.30	8x3/4"	4.80	5.43	0.71	14	F07	0.35	-	390	1009.48	30.87
7	O-RING	FKM (Viton®)	2	4"	8.66	7.09	8x3/4"	5.98	6.02	0.73	17	F07	0.35	-	531	1577.34	46.08
8	STEM	A564-Tp630 H1150D (17-4-PH)	1														
9	STEM SEAT	P.T.F.E.	1														
10	O-RING	FKM (Viton®)	1														



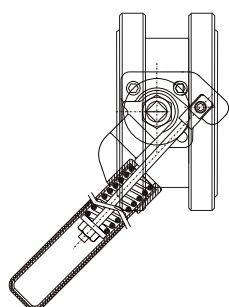
SERIES 723101 SRL DEADMAN SPRING RETURN

Stainless steel direct mount, ASME/ANSI class 150 Wafer-style flanged ball valve, full port with deadman spring return handle.

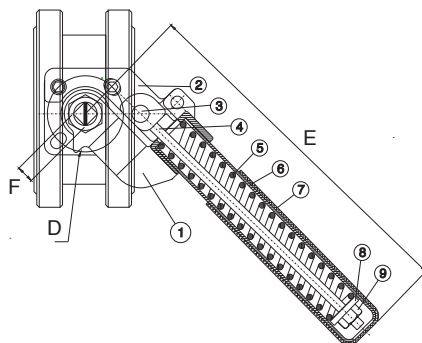
- Temperature range -4°F to +366°F.
- Anti-static stem device.
- TFM-MPTFE ball seats and thrust washer standard.
- Triple stem seals-two Viton® (FKM) O-rings and one P.T.F.E seat.
- ISO 5211 mounting pad/square stem.
- 17-4 PH stem.
- Lockable spring return handle.

723101 SRL: size 1" to 3".

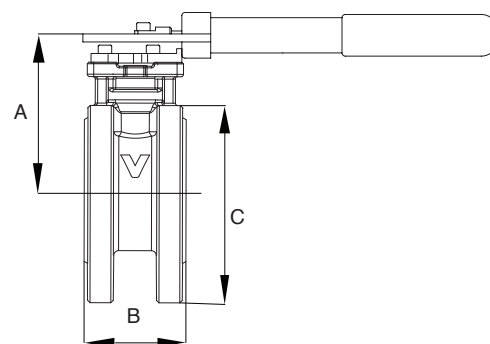
NEW



OPEN POSITION



CLOSED POSITION



N POS	PART NAME	MATERIAL	N PCS
1	HANDLE HEAD	ASTM A351-CF8M	1
2	ANCHOR	ASTM A351-CF8M	1
3	ANCHOR SCREW	AISI 316	1
4	SPRING ROD	AISI 316	1
5	SPRING	AISI 301	1
6	HANDLE EXTENSION	AISI 304	1
7	SLEEVE	VINYL	1
8	WASHER	AISI 304	1
9	HEX NUT	AISI 304	1
10	SOCKET HEAD SCREW	AISI 304	1

SIZE	A	B	C	D ISO 5211	E	F mm	Valve Torque in. Lbs.	Handle Torque in. lbs.
1"	2.76	1.89	4.33	F05	8.75	11	85	195
1-1/4"	3.23	2.13	5.12	F05	8.75	11	112	195
1-1/2"	3.66	2.50	5.51	F05	11.50	11	142	195
2"	4.00	3.23	6.10	F05	11.50	11	169	195
2-1/2"	5.06	4.06	7.09	F07	17.72	14	275	487
3"	5.43	4.80	7.48	F07	17.72	14	381	487



SERIES 724101 DIRECT MOUNT CARBON STEEL WAFER BALL VALVE

Direct mount, carbon steel ANSI class 150 wafer-style flanged ball valve, full port.

- Temperature range -4°F to +366°F.

Antistatic stem device.

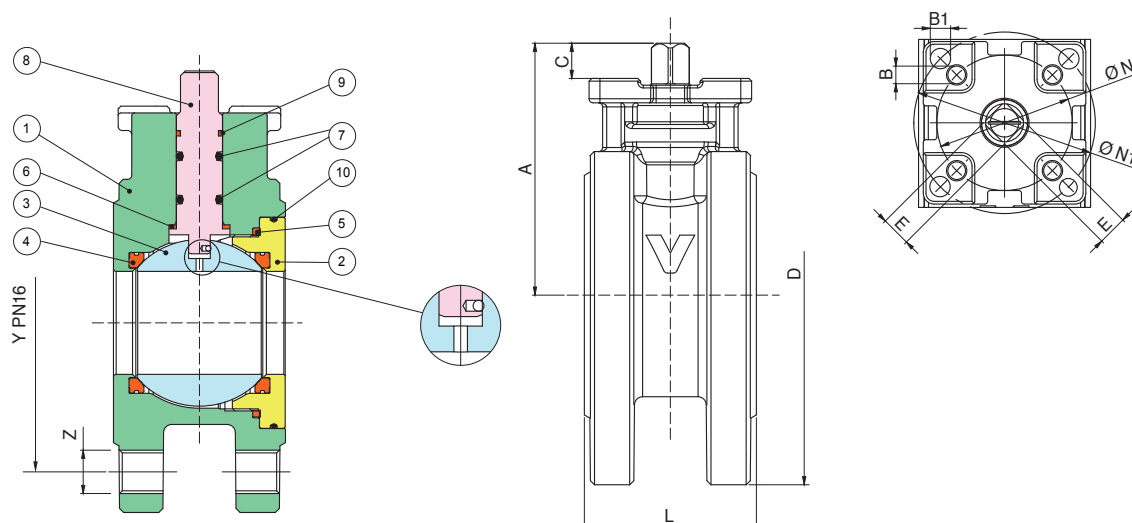
- TFM-MPTFE ball seats and thrust washer standard.

- Triple stem seals-two Viton® (FKM) O-rings and one P.T.F.E. seat.

- ISO 5211 mounting pad.

- Low torque design.

724101: size 1" to 4".



N POS	PART NAME	MATERIAL	N POS	SIZE	D	Y	Z	L	A	C	E	ISO 5211 ØN	B	B1	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	A352-LCB	1	1"	4.33	3.35	4x5/8"	1.89	2.76	0.43	9	F03/F05	0.22	0.28	89	74.63	5.29
2	END CONNEC- TION	ASTM A105	1	1 1/4"	5.12	3.94	4x5/8"	2.13	3.23	0.39	9	F03/F05	0.22	0.28	116	120.10	7.72
3	BALL	A351-CF8/A182-F304	1	1 1/2"	5.51	4.33	4x3/4"	2.50	3.66	0.51	11	F05	0.26	-	151	201.32	9.92
4	BALL SEAT	TFM-MPTFE	2	2"	6.10	4.92	8x5/8"	3.23	4.00	0.53	11	F05/F07	0.26	0.35	177	348.60	14.77
5	BODY SEAT	P.T.F.E.	1	2 1/2"	7.09	5.71	8x3/4"	4.06	5.06	0.73	17	F07	0.35	-	284	596.66	24.03
6	THRUST WASHER	TFM-MPTFE	1	3"	7.48	6.30	8x3/4"	4.80	5.43	0.71	17	F07	0.35	-	390	1009.48	30.87
7	O-RING	FKM (Viton®)	2	4"	8.66	7.09	8x3/4"	5.98	6.02	0.73	17	F07	0.35	-	531	1577.34	46.08
8	STEM	A564-Tp630 H1150D (17-4-PH)	1														
9	STEM SEAT	P.T.F.E.	1														
10	O-RING	FKM (Viton®)	1														



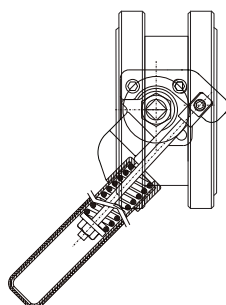
SERIES 724101 SRL DEADMAN SPRING RETURN

Carbon steel direct mount, ASME/ANSI class 150 Wafer-style flanged ball valve, full port with deadman spring return handle.

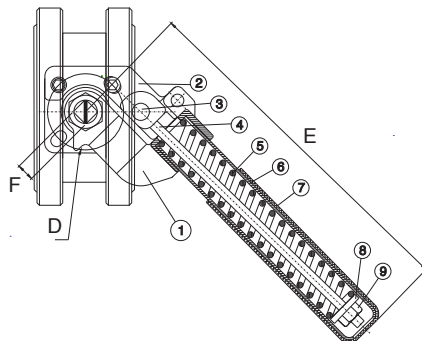
- Temperature range -4°F to +366°F.
- Anti-static stem device.
- TFM-MPTFE ball seats and thrust washer standard.
- Triple stem seals-two Viton® (FKM) O-rings and one P.T.F.E seat.
- ISO 5211 mounting pad/square stem.
- 17-4 PH stem.
- Lockable spring return handle.

724101 SRL: size 1" to 3".

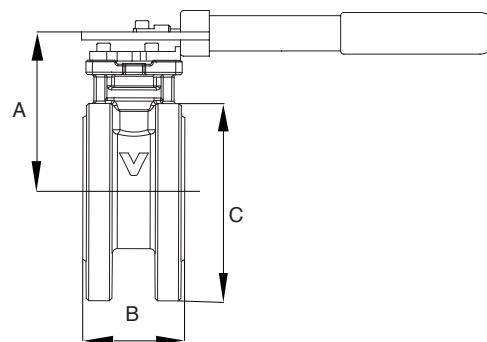
NEW



OPEN POSITION

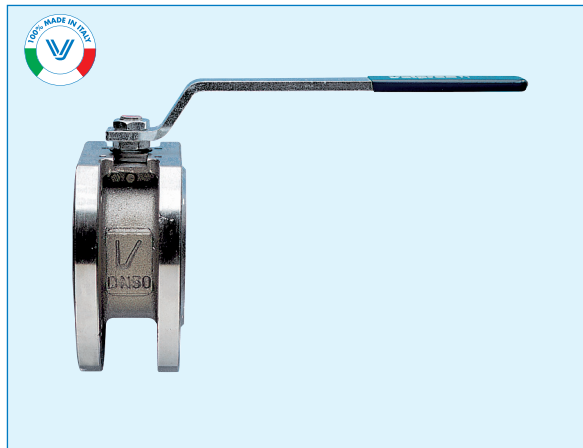


CLOSED POSITION



N POS	PART NAME	MATERIAL	N POS
1	HANDLE HEAD	ASTM A351-CF8M	1
2	ANCHOR	ASTM A351-CF8M	1
3	ANCHOR SCREW	AISI 316	1
4	SPRING ROD	AISI 316	1
5	SPRING	AISI 301	1
6	HANDLE EXTENSION	AISI 304	1
7	SLEEVE	VINYL	1
8	WASHER	AISI 304	1
9	HEX NUT	AISI 304	1
10	SOCKET HEAD SCREW	AISI 304	1

SIZE	A	B	C	D ISO 5211	E	F mm	Valve Torque in. Lbs.	Handle Torque in. lbs.
1"	2.76	1.89	4.33	F05	8.75	11	85	195
1 1/4"	3.23	2.13	5.12	F05	8.75	11	112	195
1 1/2"	3.66	2.50	5.51	F05	11.50	11	142	195
2"	4.00	3.23	6.10	F05	11.50	11	169	195
2 1/2"	5.06	4.06	7.09	F07	17.72	14	275	487
3"	5.43	4.80	7.48	F07	17.72	14	381	487



SERIES 720016 STAINLESS STEEL WAFER BALL VALVE

Stainless steel ANSI class 150 flanged ball valve, full port.

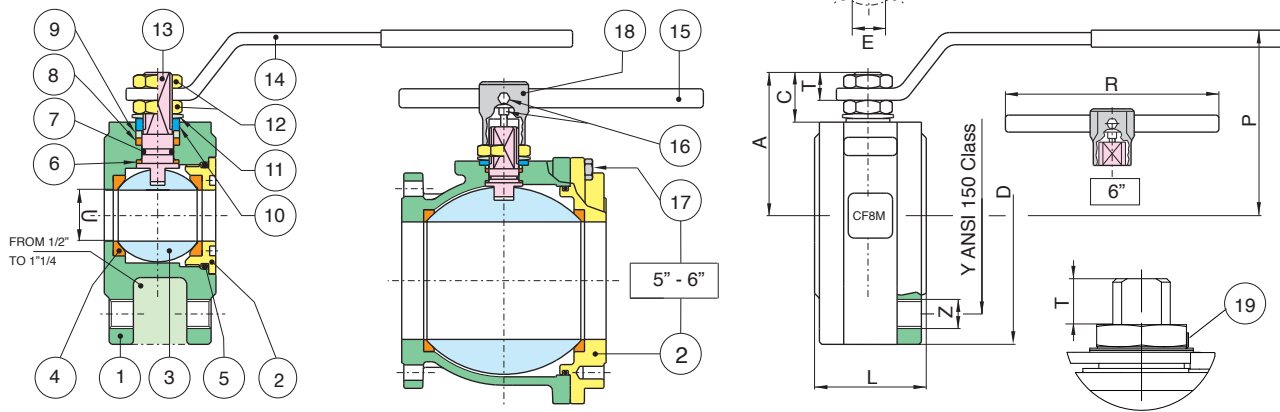
- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- Space saving design.
- 100% tested.
- TUV T.A. Luft approved.
- ANSI B16.34 design.
- ISO 5211 mounting pad with double "D" stem.
- Locking handles available.

720016: size 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



Low temperature design
-40°C



- BODY FROM 1/2" TO 1 1/4" MADE FROM BAR STOCK
- BODY FROM 1 1/2" TO 6" MADE FROM CASTING

POS	PART NAME	MATERIAL	QTY
1	BODY	A479-316 / A351 CF8M	1
2	END CONNECTION	A479-316 / A351 CF8M	1
3	BALL	A479-316 / A351 CF8M	1
4	BALL SEATS	R.P.T.F.E.	2
5	RING	FKM (Viton®)	1
6	THRUST WASHER	P.T.F.E.	1
7	RING	FKM (Viton®)	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1
10	END STOP	AISI 430 (1/2"-2") STEEL (2 1/2"-6")	2 1
11	SPRING WASHER	STEEL	2
12	NUT	STEEL	2
13	STEM	A479-316	1
14	HANDLE	STEEL	1
15	HANDLE DN 150-200	STEEL	1
16	SCREW	STEEL	2
17	SCREW	STEEL	8
18	BODY HANDLE DN150-200	CAST IRON	1
19	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z UNC	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.50	2.38	4x1/2"	1.37	5.17	2.53	1.85	0.61	0.35	M10	0.27	1.26	4XM5	35	22.21	2.86
3/4"	3.88	2.75	4x1/2"	1.57	5.17	2.71	2.02	0.61	0.35	M10	0.27	1.26	4XM5	115	40.50	3.96
1"	4.25	3.12	4x1/2"	1.81	6.87	3.16	2.40	0.76	0.45	M12	0.31	1.65 (F04)	4XM5	124	74.63	5.95
1 1/4"	4.62	3.50	4x1/2"	2.12	6.87	3.32	2.53	0.64	0.45	M12	0.31	1.65 (F04)	4XM5	150	120.10	9.47
1 1/2"	5.00	3.88	4x1/2"	2.50	9.86	4.03	3.07	0.96	0.51	M16	0.39	1.97 (F05)	4XM6	195	201.32	7.27
2"	6.00	4.75	4x5/8"	3.22	9.86	4.37	3.42	0.98	0.53	M16	0.39	1.97 (F05)	4XM6	292	348.60	12.12
2 1/2"	7.00	5.50	4x5/8"	4.05	12.65	5.03	4.11	1.10	0.70	M20	0.55	2.76 (F07)	4XM8	540	631.37	21.16
3"	7.50	6.00	4x5/8"	4.80	12.65	5.45	4.52	1.12	0.70	M20	0.55	2.76 (F07)	4XM8	637	1009.48	28.21
4"	9.00	7.50	8x5/8"	5.98	15.01	6.16	5.39	1.35	0.86	M24	0.70	4.02 (F10)	4XM10	956	1577.34	46.07
5"	10.00	8.50	8x3/4"	7.71	15.01	7.02	6.25	1.33	0.86	M24	0.70	4.02 (F10)	4XM10	1018	2730.87	82.67
6"	11.00	9.50	8x3/4"	9.13	27.55	9.33	7.93	2.02	1.18	M42	1.18	4.92 (F12)	4XM12	2903	4247.46	101.63

V-PACK

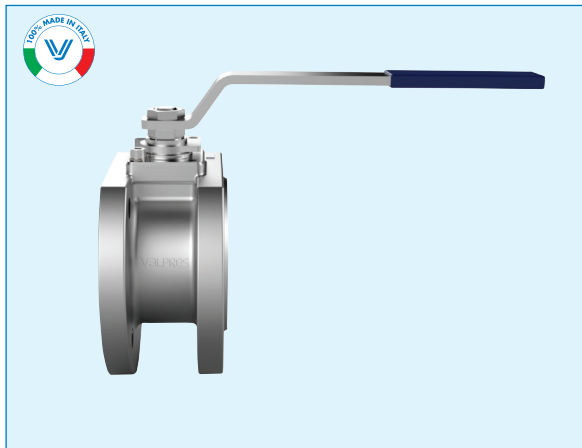
This type of shaft seal utilizes polymers in substitution of elastomers.

The stem is sealed by applying an axial compression setting to a series of P.T.F.E. rings positioned between the stem and the valve body.

The advantage of this seal is that the polymer (virgin P.T.F.E.) is not altered in contact with the fluids and can be used in many industrial applications including highly corrosive chemical ones.



Valve section with V-pack stem seal



SERIES 721V16 STAINLESS STEEL WAFER BALL VALVE

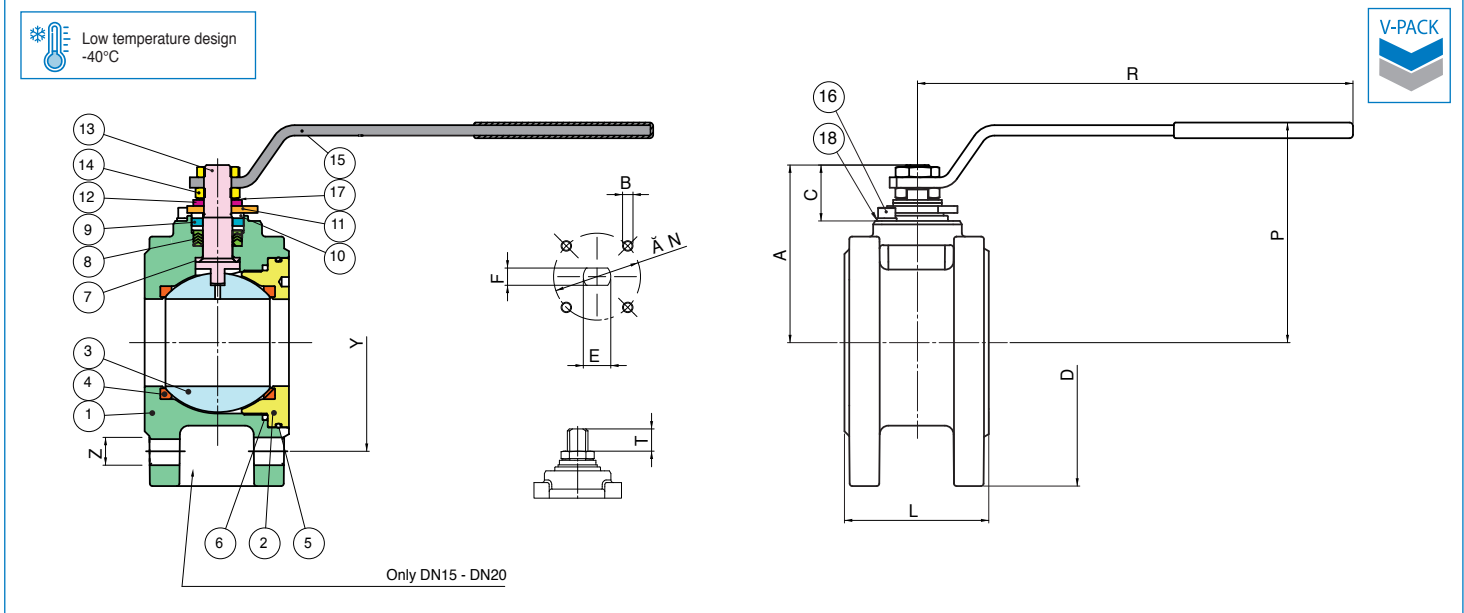
Stainless steel ANSI class 150 flanged ball valve, full port.

- Temperature range -40°F to 366°F.
- Blow-out proof stem.
- TFM-MPTFE ball seats P.T.F.E. V-pack stem packing graphoil stem seat.
- Space saving design.
- 100% tested.
- Fugitive emission 15848 tested.
- ANSI B16.34 design.
- ISO 5211 mounting pad with double "D" stem.
- Locking handles available.
- Fire safe certified to EN ISO 10497 and API 607.

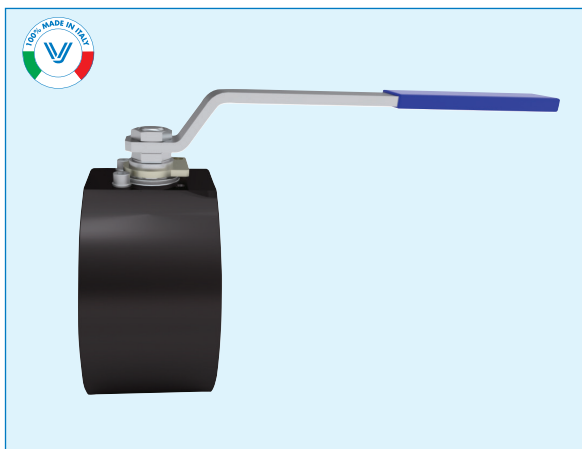
721V16: size 1/2" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

NEW



N POS	PART NAME	MATERIAL	N PCS	SIZE	D	Y	L	R	P	A	C	T	E	F	ISO5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	A351-CF8M	1	1/2"	3.74	2.37	1.42	5.16	2.76	2.05	0.71	0.31	M10	0.28	F03	4XM5	35	19.20	1.64
2	END CONNECTION	A479-Tp316 / A182-F316	1	3/4"	4.13	2.75	1.54	5.16	2.95	2.20	0.69	0.30	M10	0.28	F03	4XM5	115	35.00	2.15
3	BALL	A351-CF8M	1	1"	4.53	3.13	1.73	6.85	3.66	2.85	1.02	0.41	M12	0.31	F04	4XM5	124	64.50	2.56
4	BALL SEATS	TFM-MPTFE	2	1 1/4"	5.51	3.50	2.05	6.85	3.82	2.97	0.98	0.37	M12	0.31	F04	4XM5	150	103.80	3.86
5	O-RING	FKM (Viton®)	1	1 1/2"	5.91	3.87	2.52	9.84	4.65	3.66	1.22	0.51	M16	0.39	F05	4XM6	195	174.00	5.35
6	BODY SEAT	P.T.F.E.	1	2"	6.50	4.75	3.27	9.84	5.00	4.02	1.26	0.51	M16	0.39	F05	4XM6	292	301.30	7.50
7	ANTI-FRICTION RING	TFM-MPTFE	1	2 1/2"	7.28	5.50	4.13	12.64	5.63	4.76	1.52	0.75	M20	0.55	F07	4XM8	540	545.70	12.30
8	V-PACK	P.T.F.E.	1	3"	7.87	6.00	4.76	12.64	6.06	5.20	1.71	0.79	M20	0.71	F07	4XM8	637	872.50	16.83
9	STEM SEAT	GRAPHOIL	1	4"	8.66	7.50	5.98	15.00	6.61	5.75	1.65	0.75	M24	0.71	F10	4XM10	956	1363.30	24.30
10	PACKING GLAND	A479-Tp316	2																
11	END STOP	AISI 316	1																
12	SPRING WASHER	AISI 304	2																
13	STEM	A479-Tp316	1																
14	NUT	A2-70	2																
15	HANDLE	AISI 316	1																
16	SCREW	A2-70	2																
17	ENSCREWING WASHER	AISI 316	1																
18	WASHER	AISI 316	2																



SERIES 722V17 CARBON STEEL WAFER BALL VALVE

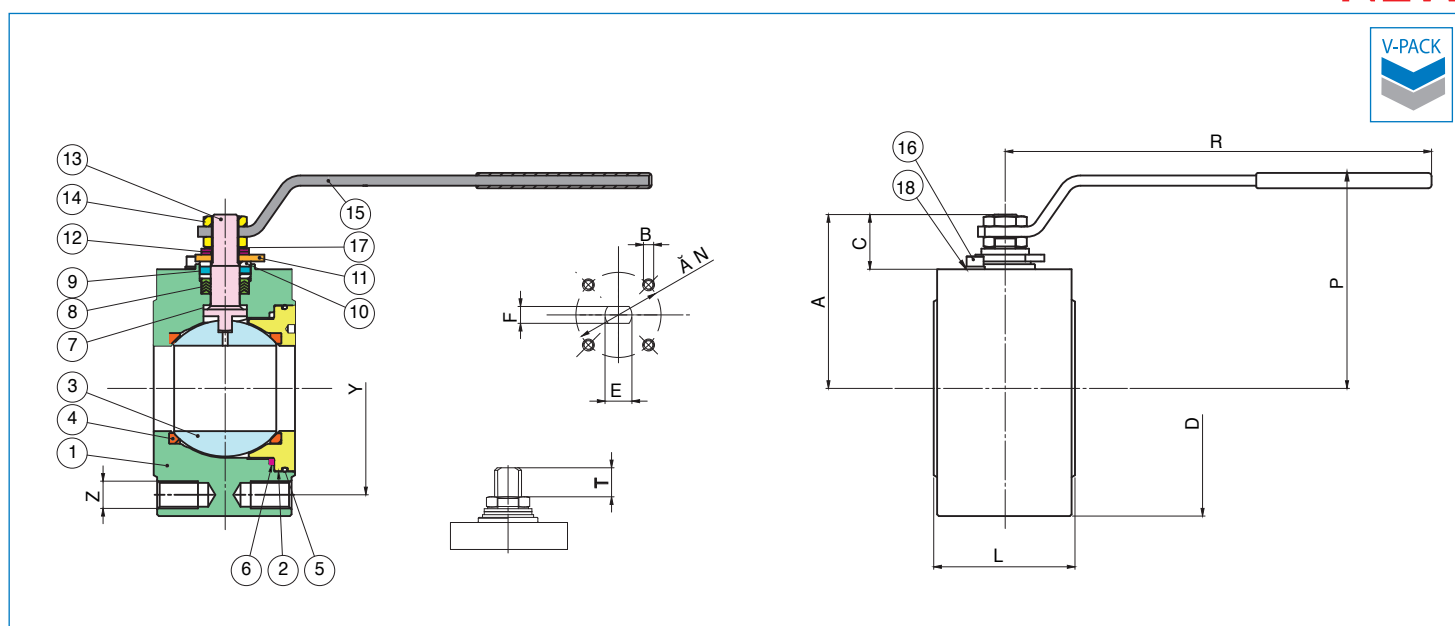
Carbon steel ANSI class 150 flanged ball valve, full port.

- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- TFM-MPTFE ball seats P.T.F.E. V-pack stem packing graphoil stem seat.
- Space saving design.
- 100% tested.
- Fugitive emission 15848 tested.
- ANSI B16.34 design.
- ISO 5211 mounting pad with double "D" stem.
- Locking handles available.
- Fire safe certified to EN ISO 10497 and API 607.

722V17: size 1/2" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

NEW



N POS	PART NAME	MATERIAL	N POS	SIZE	D	Y	L	R	P	A	C	T	E	F	ISO5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	ASTM -A105	1	1/2"	3.74	2.37	1.42	5.16	2.76	2.05	0.71	0.31	M10	0.28	F03	4XM5	35	19.20	1.64
2	END CONNECTION	ASTM -A105	1	3/4"	4.13	2.75	1.54	5.16	2.95	2.20	0.69	0.30	M10	0.28	F03	4XM5	115	35.00	2.15
3	BALL	A351-CF8	1	1"	4.53	3.13	1.73	6.85	3.66	2.85	1.02	0.41	M12	0.31	F04	4XM5	124	64.50	2.56
4	BALL SEATS	TFM-MPTFE	2	1 1/4"	5.51	3.50	2.05	6.85	3.82	2.97	0.98	0.37	M12	0.31	F04	4XM5	150	103.80	3.86
5	O-RING	FKM (Viton®)	1	1 1/2"	5.91	3.87	2.52	9.84	4.65	3.66	1.22	0.51	M16	0.39	F05	4XM6	195	174.00	5.35
6	BODY SEAT	P.T.F.E.	1	2"	6.50	4.75	3.27	9.84	5.00	4.02	1.26	0.51	M16	0.39	F05	4XM6	292	301.30	7.50
7	ANTIFRICTION RING	TFM-MPTFE	1	2 1/2"	7.28	5.50	4.13	12.64	5.63	4.76	1.52	0.75	M20	0.55	F07	4XM8	540	545.70	12.30
8	V-PACK	P.T.F.E.	1	3"	7.87	6.00	4.76	12.64	6.06	5.20	1.71	0.79	M20	0.71	F07	4XM8	637	872.50	16.83
9	STEM SEAT	GRAPHOIL	1	4"	8.66	7.50	5.98	15.00	6.61	5.75	1.65	0.75	M24	0.71	F10	4XM10	956	1363.30	24.30
10	PACKING GLAND	A479-Tp316	2																
11	END STOP	A37 ENP CS	1																
12	SPRING WASHER	50CrV4	2																
13	STEM	A479-Tp316	1																
14	NUT	6S ENP CS	2																
15	HANDLE	A37 ENP CS	1																
16	SCREW	A2-70	2																
17	ENSCREWING WASHER	AISI 316	1																
18	WASHER	AISI 304	2																



SERIES 720017 CARBON STEEL WAFER BALL VALVE

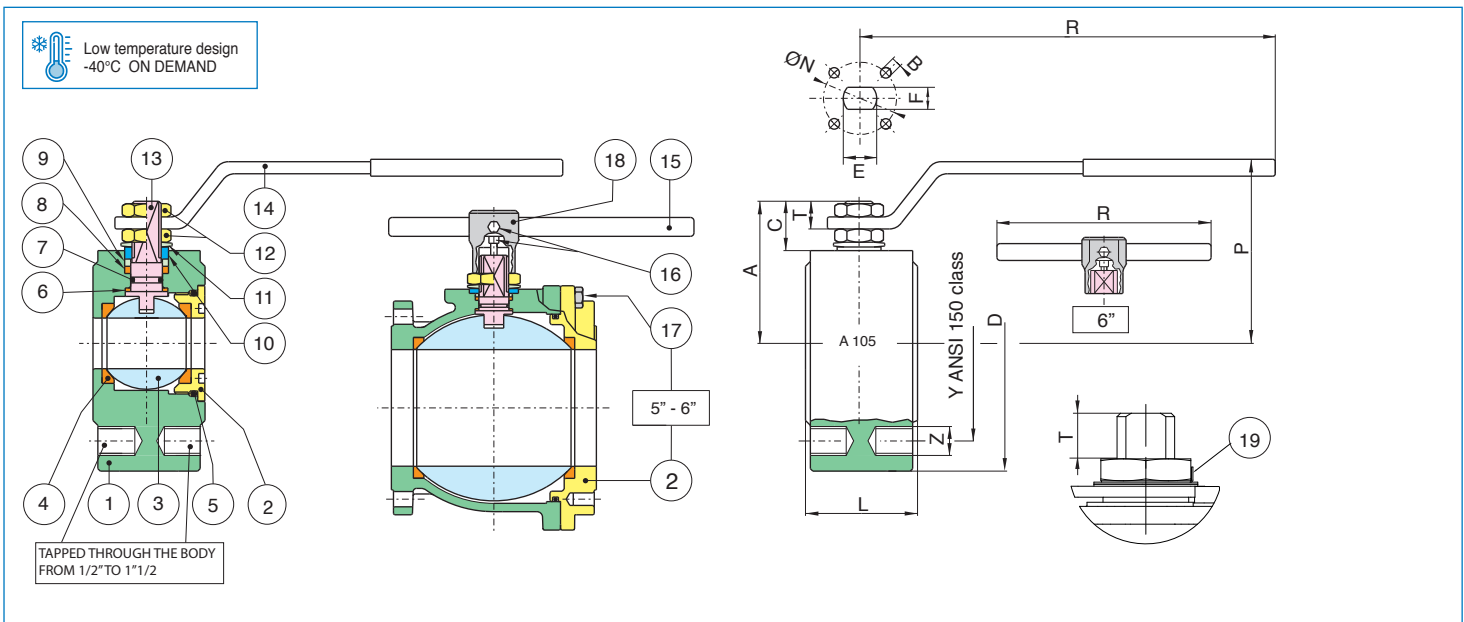
Carbon steel ANSI class 150 flanged ball valve, full port.

- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- Space saving design.
- 100% tested.
- TUV T.A. Luft approved.
- ANSI B16.34 design.
- ISO 5211 mounting pad with double "D" stem.
- Locking handles available.

720017: size 1/2" to 6".

720791: STEAM SERVICE TRIM - size 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N POS
1	BODY	ASTM A105/WCB	1
2	END CONNECTION	ASTM A105/WCB	1
3	BALL	A479-304 / A351 CF8	1
4	BALL SEATS	R.P.T.F.E.	2
5	O-RING	FKM (Viton®)	1
6	THRUST WASHER	P.T.F.E.	1
7	RING	FKM (Viton®)	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1
10	END STOP	STEEL	2-1
11	SPRING WASHER	STEEL	2
12	NUT	STEEL	2
13	STEM	AISI 304	1
14	HANDLE	STEEL	1
15	HANDLE DN 150-200	STEEL	1
16	SCREW	STEEL	2
17	SCREW	STEEL	8-12
18	BODY HANDLE DN150-200	CAST IRON	1
19	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z UNC	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.50	2.38	4x1/2"	1.37	5.17	2.53	1.85	0.61	0.35	M10	0.27	1.26	4XM5	35	22.21	2.86
3/4"	3.88	2.75	4x1/2"	1.57	5.17	2.71	2.02	0.61	0.35	M10	0.27	1.26	4XM5	115	40.50	3.96
1"	4.25	3.12	4x1/2"	1.81	6.87	3.16	2.40	0.76	0.45	M12	0.31	1.65 (F04)	4XM5	124	74.63	5.95
1 1/4"	4.62	3.50	4x1/2"	2.12	6.87	3.32	2.53	0.64	0.45	M12	0.31	1.65 (F04)	4XM5	150	120.10	9.47
1 1/2"	5.00	3.88	4x1/2"	2.50	9.86	4.03	3.07	0.96	0.51	M16	0.39	1.97 (F05)	4XM6	195	201.32	11.31
2"	6.00	4.75	4x5/8"	3.22	9.86	4.37	3.42	0.98	0.53	M16	0.39	1.97 (F05)	4XM6	292	348.60	19.18
2 1/2"	7.00	5.50	4x5/8"	4.05	12.65	5.03	4.11	1.10	0.70	M20	0.55	2.76 (F07)	4XM8	540	631.37	34.17
3"	7.50	6.00	4x5/8"	4.80	12.65	5.45	4.52	1.12	0.70	M20	0.55	2.76 (F07)	4XM8	637	1009.48	45.85
4"	9.00	7.50	8x5/8"	5.98	15.01	6.16	5.39	1.35	0.86	M24	0.70	4.02 (F10)	4XM10	956	1577.34	75.39
5"	10.00	8.50	8x3/4"	7.71	15.01	7.02	6.25	1.33	0.86	M24	0.70	4.02 (F10)	4XM10	1018	2730.87	115.74
6"	11.00	9.50	8x3/4"	9.13	27.55	9.33	7.93	2.02	1.18	M42	1.18	4.92 (F12)	4XM12	2903	4247.46	135.5



SERIES 720288 STAINLESS STEEL WAFER BALL VALVE

Stainless steel, ANSI class 300 flanged ball valve full port, stainless steel ball and stem.

- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- Space saving design.
- 100% tested.
- TUV T.A. Luft approved.
- ANSI B16.34 design.
- ISO 5211 mounting pad with double "D" stem.

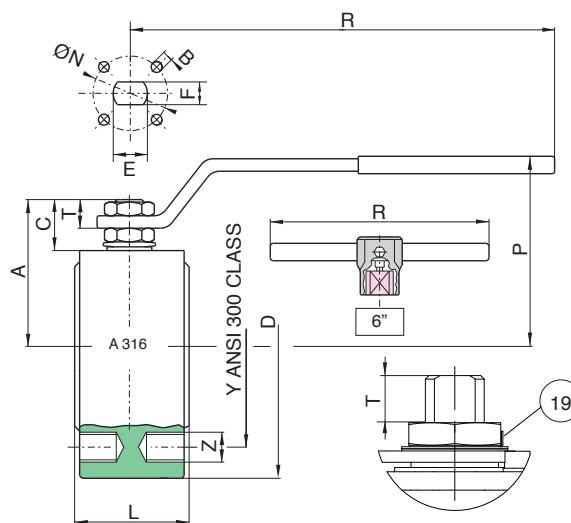
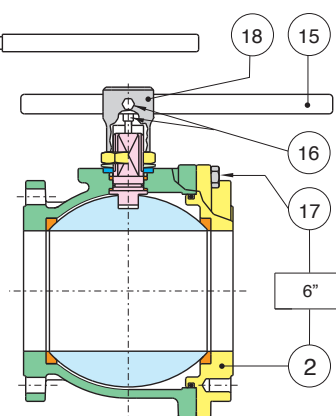
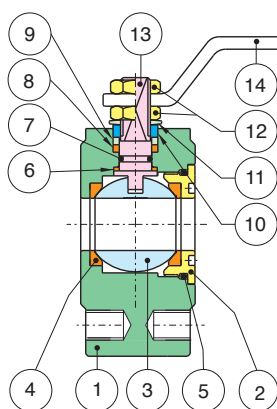
720288: size 1/2" to 6".

720741: FIRE SAFE APPROVED TO BS6755PART.2 WITH ANTISTATIC STEM DEVICE AND CARBON FILLED P.T.F.E. SEATS - size 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N POS
1	BODY	A479-316/A351 CF8M	1
2	END CONNECTION	A479-316/A351 CF8M	1
3	BALL	A479-316/A351 CF8M	1
4	BALL SEATS	R.P.T.F.E.	2
5	RING	FKM (Viton®)	1
6	THRUST WASHER	P.T.F.E.	1
7	RING	FKM (Viton®)	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1
10	END STOP	STEEL	2-1
11	SPRING WASHER	STEEL	2
12	NUT	STEEL	2
13	STEM	AISI 316	1
14	HANDLE	STEEL	1
15	HANDLE DN 150-200	STEEL	1
16	SCREW	STEEL	2
17	SCREW	STEEL	12
18	BODY HANDLE DN150-200	CAST IRON	1
19	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z UNC	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.75	2.62	4X1/2"	1.38	5.17	2.54	1.85	0.45	0.33	M10	0.28	1.26	4XM5	35	22.21	3.10
3/4"	4.62	3.25	4X5/8"	1.57	5.17	2.71	2.03	0.37	0.33	M10	0.28	1.26	4XM5	115	40.50	5.50
1"	4.88	3.50	4X5/8"	1.81	6.87	3.17	2.40	0.51	0.45	M12	0.32	1.65 (F04)	4XM5	124	74.63	6.80
1 1/4"	5.25	3.88	4X5/8"	2.12	6.87	3.33	2.54	0.65	0.45	M12	0.32	1.65 (F04)	4XM5	150	120.10	9.30
1 1/2"	6.12	4.50	4X3/4"	2.50	9.86	4.03	3.07	0.80	0.47	M16	0.39	1.97 (F05)	4XM6	195	201.32	15.00
2"	6.50	5.00	8X5/8"	3.23	9.86	4.43	3.43	0.63	0.47	M16	0.39	1.97 (F05)	4XM6	292	348.60	23.00
2 1/2"	7.50	5.88	8X3/4"	4.05	12.66	5.08	4.11	0.73	0.67	M20	0.55	2.75 (F07)	4XM8	540	631.37	39.00
3"	8.25	6.62	8X3/4"	4.80	12.66	5.45	4.53	0.83	0.71	M20	0.55	2.75 (F07)	4XM8	637	1009.48	55.00
4"	10.00	7.88	8X3/4"	5.98	15.02	6.20	5.39	0.93	0.83	M24	0.71	4.02 (F10)	4XM10	956	1577.34	100.00
6"	12.50	10.62	12X3/4"	9.13	27.56	9.33	7.93	2.03	1.18	M42	1.18	4.92 (F12)	4XM12	2903	4247.46	223.00



SERIES 720289 CARBON STEEL WAFER BALL VALVE

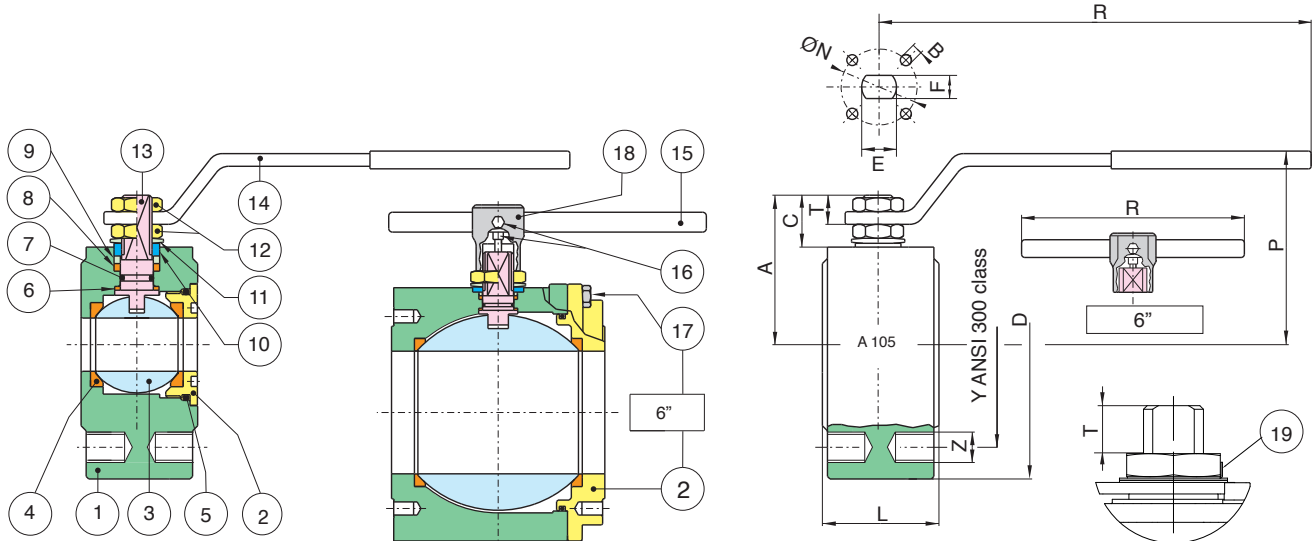
Carbon steel, ANSI class 300 flanged ball valve, stainless steel ball and stem.

- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- Space saving design.
- 100% tested.
- TUV T.A. Luft approved.
- ANSI B16.34 design.
- ISO 5211 mounting pad with double "D" stem.
- Locking handles available.

720288: size 1/2" to 6".

720744: FIRE SAFE APPROVED TO BS6755PART.2 WITH ANTISTATIC STEM DEVICE AND CARBON FILLED P.T.F.E. SEATS - size 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N PCS
1	BODY	ASTM A105/WCB	1
2	END CONNECTION	ASTM A105	1
3	BALL	A479-304/A351CF8	1
4	BALL SEATS	R.P.T.F.E.	2
5	RING	FKM (Viton®)	1
6	THRUST WASHER	P.T.F.E.	1
7	RING	FKM (Viton®)	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1
10	END STOP	STEEL	2-1
11	SPRING WASHER	STEEL	2
12	NUT	STEEL	2
13	STEM	AISI 304	1
14	HANDLE	STEEL	1
15	HANDLE DN 150-200	STEEL	1
16	SCREW	STEEL	2
17	SCREW	STEEL	12
18	BODY HANDLE DN150-200	CAST IRON	1
19	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z UNC	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.75	2.62	4X1/2"	1.38	5.17	2.54	1.85	0.45	0.33	M10	0.28	1.26	4XM5	35	22.21	3.10
3/4"	4.62	3.25	4X5/8"	1.57	5.17	2.71	2.03	0.37	0.33	M10	0.28	1.26	4XM5	115	40.50	5.50
1"	4.88	3.50	4X5/8"	1.81	6.87	3.17	2.40	0.51	0.45	M12	0.32	1.65 (F04)	4XM5	124	74.63	6.80
1 1/4"	5.25	3.88	4X5/8"	2.12	6.87	3.33	2.54	0.35	0.45	M12	0.32	1.65 (F04)	4XM5	150	102.10	9.30
1 1/2"	6.12	4.50	4X3/4"	2.50	9.86	4.03	3.07	0.80	0.47	M16	0.39	1.97 (F05)	4XM6	195	201.32	15.00
2"	6.50	5.00	8X5/8"	3.23	9.86	4.43	3.43	0.63	0.47	M16	0.39	1.97 (F05)	4XM6	292	348.60	23.00
2 1/2"	7.50	5.88	8X3/4"	4.05	12.66	5.08	4.11	0.73	0.67	M20	0.55	2.76 (F07)	4XM8	540	631.37	39.00
3"	8.25	6.62	8X3/4"	4.80	12.66	5.45	4.53	0.83	0.71	M20	0.55	2.76 (F07)	4XM8	637	1009.48	55.00
4"	10.00	7.88	8X3/4"	5.98	15.02	6.20	5.39	0.93	0.83	M24	0.71	4.02 (F10)	4XM10	956	1577.34	100.00
6"	15.74	10.62	12X3/4"	9.13	27.56	9.33	7.93	2.03	1.18	M42	1.18	4.92 (F12)	4XM12	2903	4247.46	223.00



FOR STEAM

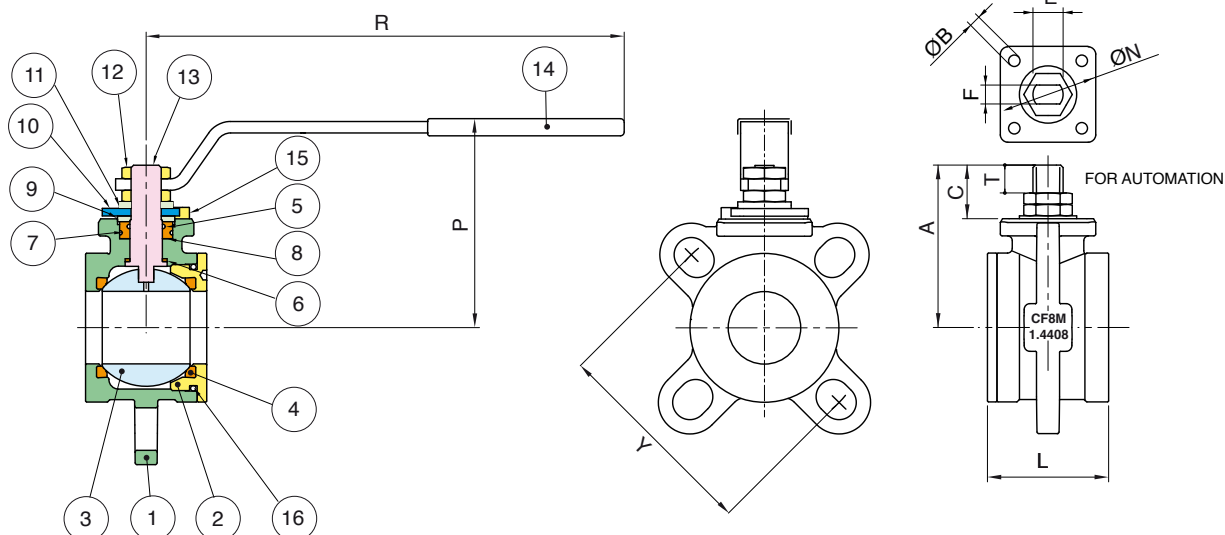
COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

SERIES 725002 STAINLESS STEEL WAFER BALL VALVE

Stainless steel, ANSI class 150 flanged ball valve, full port.

- Temperature range -4°F to 406°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- Space saving design.
- 100% tested.
- TUV T.A. Luft approved.
- Antistatic stem device.
- Steam service trim (250 WSP).
- ISO 5211 mounting pad with double "D" stem.

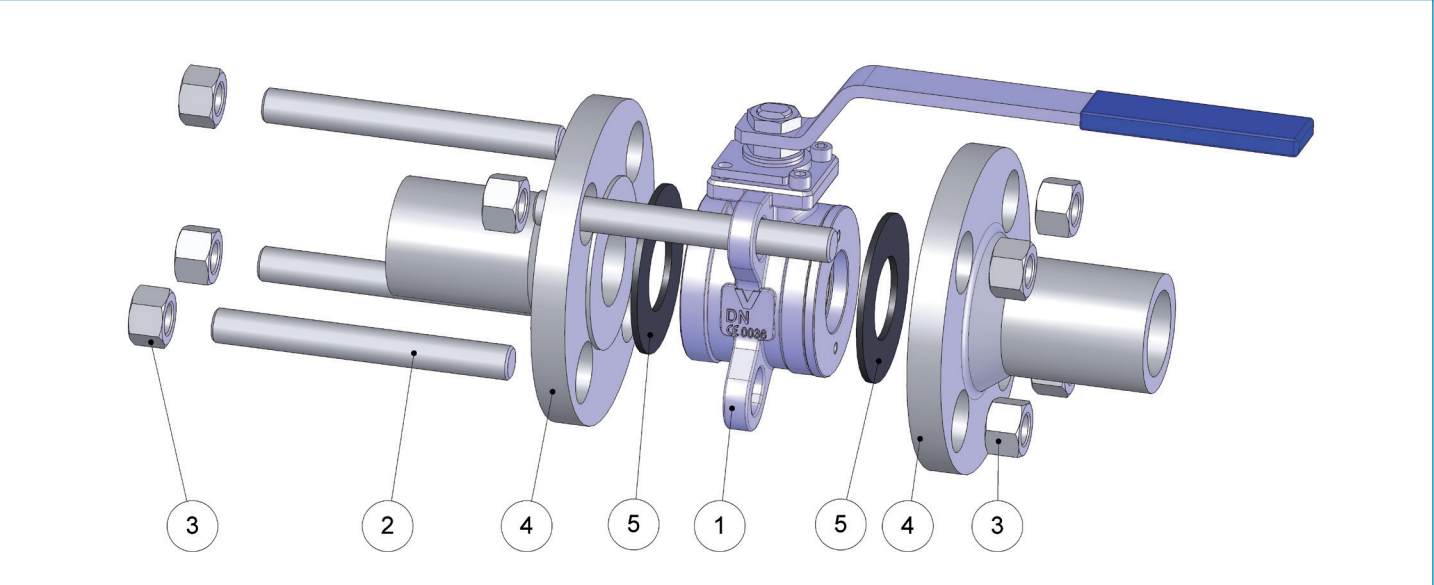
725002: size 1" to 4".



N POS	PART NAME	MATERIAL	N POS
1	BODY	A351 - CF8M	1
2	END CONNECTION	A479-316	1
3	BALL	A479-316/A351 CF8M	1
4	BALL SEAT	R.P.T.F.E.	2
5	O-RING	FKM (Viton®)	1
6	THRUST WASHER	P.T.F.E.	1
7	RING	FKM (Viton®)	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	A479-316	1
10	END STOP	CARBON STEEL	1
11	SPRING WASHER	CARBON STEEL	2
12	NUT	CARBON STEEL	2
13	STEM	A479-316	1
14	HANDLE	CARBON STEEL	1
15	SCREW	CARBON STEEL	2
16	O-RING	FKM (Viton®)	1

SIZE	Y	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1"	ANSI-150	1.81	6.85	3.58	2.81	0.90	0.41	M12	0.31	1.65 (F04)	4XM5	124	74.63	2.86
1 1/4"	ANSI-150	2.12	6.85	3.74	2.95	0.90	0.41	M12	0.31	1.65 (F04)	4XM5	150	120.10	3.64
1 1/2"	ANSI-150	2.50	9.84	4.33	3.34	1.10	0.59	M16	0.39	1.96 (F05)	4XM6	195	201.32	4.74
2"	ANSI-150	3.23	9.84	4.68	3.68	1.10	0.59	M16	0.39	1.96 (F05)	4XM6	292	348.60	8.27
2 1/2"	ANSI-150	4.05	12.63	5.70	4.78	1.31	0.70	M20	0.55	2.76 (F07)	4XM8	540	631.37	16.20
3"	ANSI-150	4.80	12.63	6.06	5.15	1.31	0.70	M20	0.55	2.76 (F07)	4XM8	637	1009.48	22.71
4"	ANSI-150	5.60	12.63	6.57	5.67	1.31	0.70	M20	0.55	2.76 (F07)	4XM8	956	1577.34	35.28

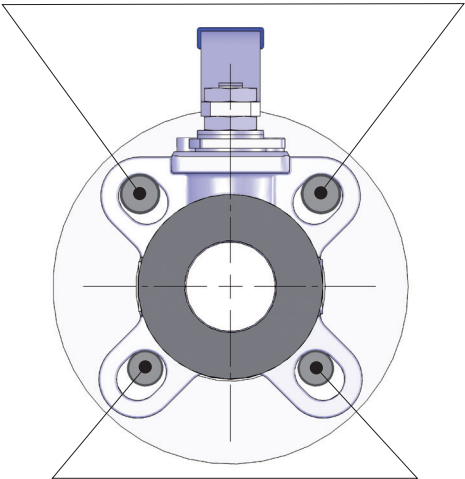
ASSEMBLING BETWEEN FLANGES LAYOUT



POS.	PART NAME
1	BODY
2	BOLT
3	NUT
4	END CONNECTION
5	TIGHTENING SEAL

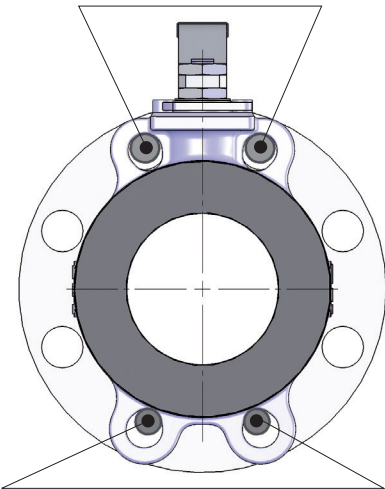
VALVE ALIGNMENT SIZES FROM (1" TO 3")

First insert the two bottom bolts. Let the valve lean, insert the two upper bolts, tighten the nuts.



VALVE ALIGNMENT (4")

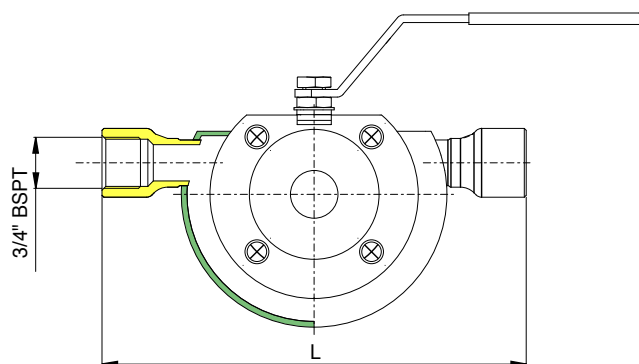
First insert the two upper bolts. Let the valve lean, put the two bottom bolts, tighten the nuts.





SERIES **WAFER** - SPECIAL USES

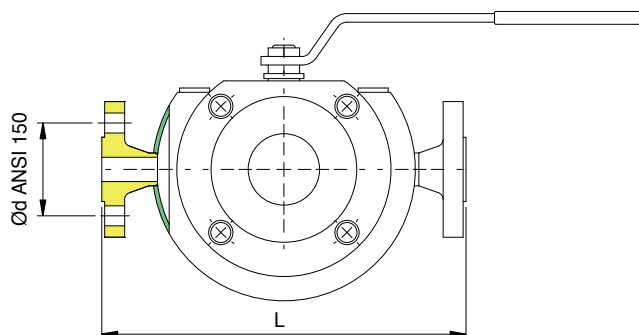
Flanged ball valve, with heating jacket in stainless or carbon steel.
• Full port sizes from 1/2" to 6".



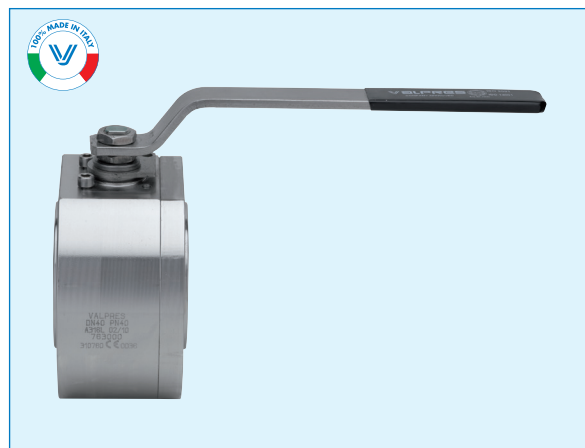
SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
Ød	3/4" BSPT									1" BSPT	
CARBON STEEL	8.86	9.25	8.86	9.45	9.84	10.24	10.83	11.42	11.81	12.60	14.17
STAINLESS STEEL							10.63	10.63	10.63	12.01	13.39

SERIES **WAFER** - SPECIAL USES

Flanged ball valve, with heating jacket in stainless or carbon steel.
• Full port sizes from 1/2" to 6".



SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
Ød	1/2"									1"	
CARBON STEEL	7.87	8.27	8.27	9.05	9.45	10.04	10.83	11.42	12.60	14.96	16.34
STAINLESS STEEL							10.24	10.83	11.81	14.96	16.34



SERIES 763101 STAINLESS STEEL WAFER BALL VALVE

Stainless steel, ANSI class 600 flanged ball valve, full port.

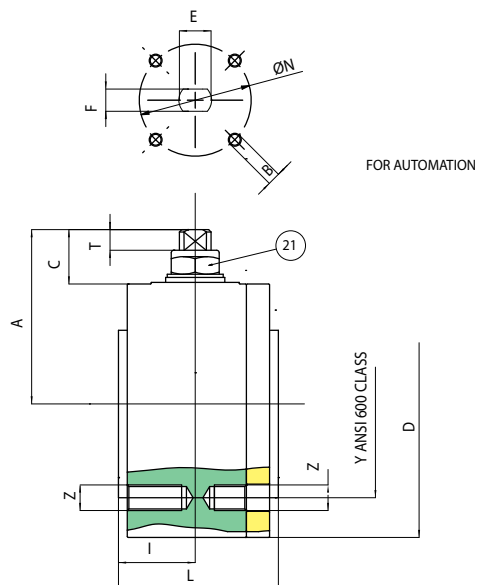
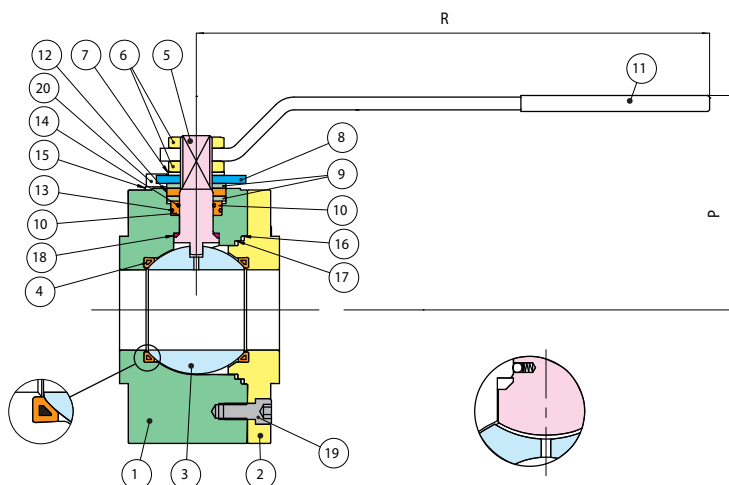
- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- Metal filled P.T.F.E. seats.
- Space saving design.
- 100% tested.
- Fire Safe certified to API 607.
- ANSI B16.34 design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.

763101: size 1/2" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

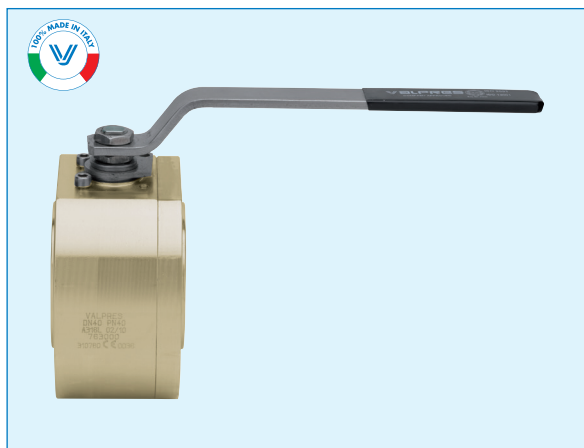


Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A182-F316/F316L	1
2	END CONNECTION	A182-F316/F316L	1
3	BALL	A479-316/A351-CF8M	1
4	BALL SEAT	R.P.T.F.E.	2
5	STEM	A479-316	1
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	STAINLESS STEEL	2
8	90° STOP	STAINLESS STEEL	1
9	BUSH	A479-316	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	STAINLESS STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	RING	FKM (Viton®)	1
14	RING	FKM (Viton®)	1
15	WASHER	A479-304	2
16	BODY SEAL	GRAPHOIL	1
17	BODY SEAL	P.T.F.E.	1
18	THRUST WASHER	P.T.F.E.	1
19	SCREW	STAINLESS STEEL	3-4-7
20	SCREW	STAINLESS STEEL	2
21	NUT	STAINLESS STEEL	1

SIZE	D	Y	Z	I	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.74	2.63	4x1/2"	0.93	2.17	5.16	2.80	2.07	0.69	0.30	M10	0.28	1.65-F04	M5	58	22.21	5.29
3/4"	4.53	3.25	4x5/8"	0.94	2.36	6.85	3.46	2.66	0.89	0.40	M12	0.31	1.65-F04	M5	93	40.50	8.38
1"	4.92	3.50	4x5/8"	1.04	2.56	6.85	3.62	2.85	0.93	0.43	M12	0.31	1.65-F04	M5	177	74.63	10.58
1 1/2"	6.10	4.50	4x3/4"	1.50	3.35	9.88	5.16	4.21	1.26	0.48	M16	0.39	1.97-F05	M6	354	201.32	24.68
2"	6.50	5.00	8x5/8"	1.89	3.94	12.64	5.28	4.29	1.34	0.51	M20	0.55	2.76-F07	M8	443	348.60	30.86
3"	8.27	6.63	8x3/4"	2.95	5.91	15.00	6.10	5.20	1.71	0.63	M24	0.71	2.76-F07	M8	2213	1009.48	70.53
4"	10.83	8.50	8x7/8"	3.64	7.28	15.00	7.28	6.50	1.71	0.75	M24	0.71	4.02-F10	M10	2478	1577.34	154.28



SERIES 764101 LOW TEMPERATURE CARBON STEEL WAFER BALL VALVE

Carbon steel, ANSI class 600 flanged ball valve, full port.

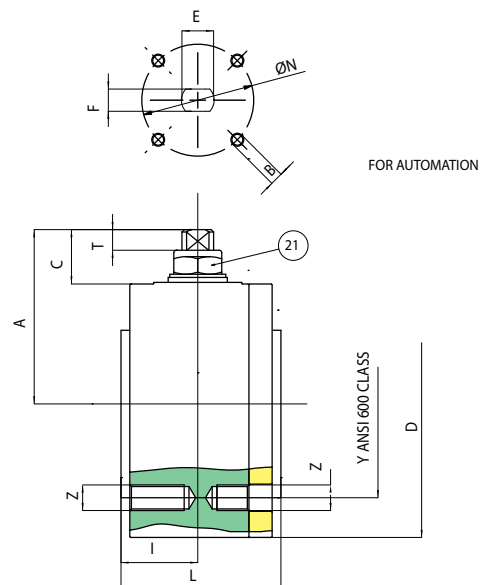
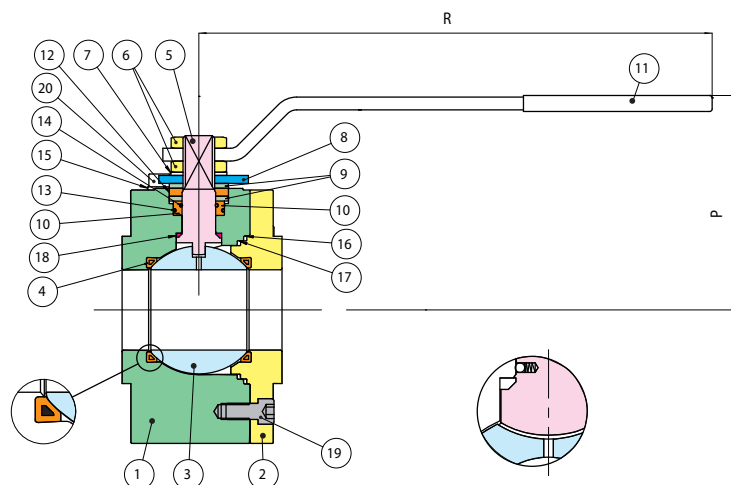
- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- Metal filled P.T.F.E. seats.
- Space saving design.
- 100% tested.
- Fire Safe certified to API 607.
- ANSI B16.34 design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.

764101: size 1/2" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

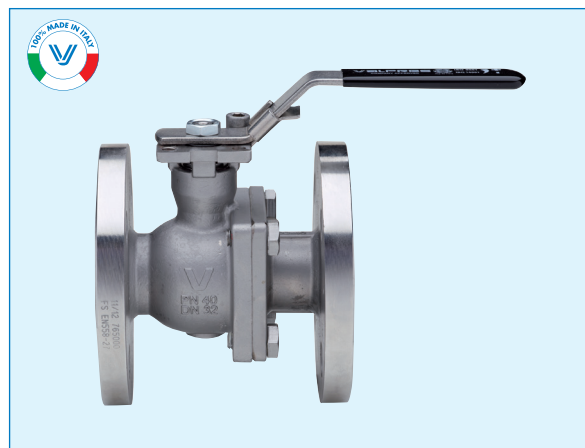


Low temperature design
-40°C ON DEMAND



N° POS	PART NAME	MATERIAL	N° POS
1	BODY	A350 - LF2	1
2	END CONNECTION	A350 - LF2	1
3	BALL	A479-304/A351-CF8	1
4	BALL SEAT	R.P.T.F.E.	2
5	STEM	A182 - F304	1
6	NUT	CARBON STEEL	2
7	SPRING WASHER	CARBON STEEL	2
8	90° STOP	CARBON STEEL	1
9	BUSH	A479-316	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	CARBON STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	RING	FKM (Viton®)	1
14	RING	FKM (Viton®)	1
15	WASHER	A479-304	2
16	BODY SEAL	GRAPHOIL	1
17	BODY SEAL	P.T.F.E.	1
18	THRUST WASHER	P.T.F.E.	1
19	SCREW	CARBON STEEL	3-4-7
20	SCREW	STAINLESS STEEL	2
21	NUT	STAINLESS STEEL	1

SIZE	D	Y	Z	I	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.74	2.63	4x1/2"	0.93	2.17	5.16	2.80	2.07	0.69	0.30	M10	0.28	1.65-F04	M5	58	22.21	5.29
3/4"	4.53	3.25	4x5/8"	0.94	2.36	6.85	3.46	2.66	0.89	0.40	M12	0.31	1.65-F04	M5	93	40.50	8.38
1"	4.92	3.50	4x5/8"	1.04	2.56	6.85	3.62	2.85	0.93	0.43	M12	0.31	1.65-F04	M5	177	74.63	10.58
1 1/2"	6.10	4.50	4x3/4"	1.50	3.35	9.88	5.16	4.21	1.26	0.48	M16	0.39	1.97-F05	M6	354	201.32	24.68
2"	6.50	5.00	8x5/8"	1.89	3.94	12.64	5.28	4.29	1.34	0.51	M20	0.55	2.76-F07	M8	443	348.60	30.86
3"	8.27	6.63	8x3/4"	2.95	5.91	15.00	6.10	5.20	1.71	0.63	M24	0.71	2.76-F07	M8	2213	1009.48	70.53
4"	10.83	8.50	8x7/8"	3.64	7.28	15.00	7.28	6.50	1.71	0.75	M24	0.71	4.02-F10	M10	2478	1577.34	154.28



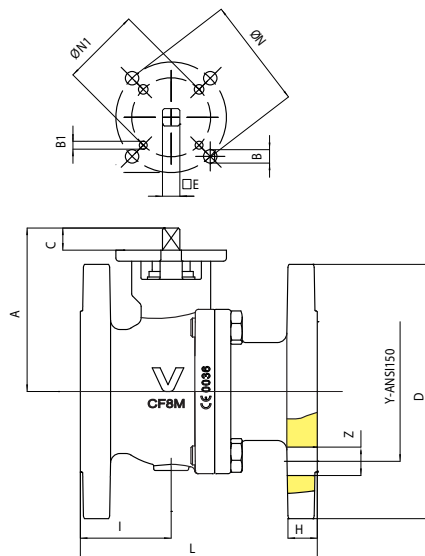
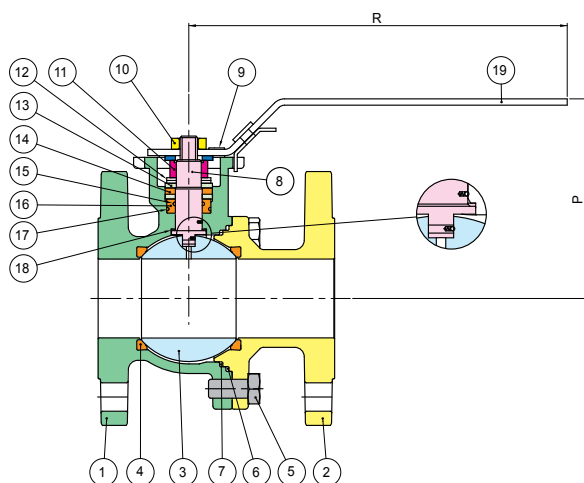
SERIES 766000 STAINLESS STEEL DIRECT MOUNT BALL VALVE

Stainless steel, ANSI class 150 flanged ball valve, full port, with locking handle.

- Direct mount ISO 5211/square stem.
- Temperature range -4°F to 366°F.
- Blow-out proof stem, adjustable stem packing.
- P.T.F.E. seats, packing and thrust washer and FKM Viton® O-rings.
- Fire safe certified to API 607.
- 100% tested.
- ANSI B16.5, B16.10, B16.34 design.
- Antistatic Device.
- Standard locking handle.

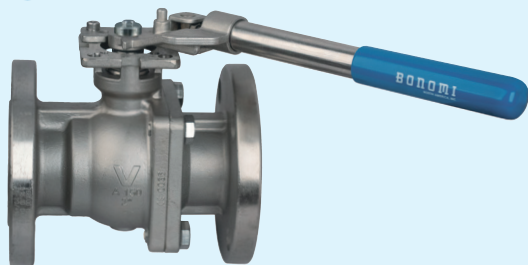
766000: size 1" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A351-CF8M	1
2	END CONNECTION	A351-CF8M	1
3	BALL	A479-304/A351-CF8	1
4	BALL SEAT	P.T.F.E.	2
5	SCREW	STAINLESS STEEL	4-8
6	BODY SEAL	GRAPHOIL	1
7	BODY SEAL	P.T.F.E.	1
8	STEM	A479-304	1
9	SCREW	STAINLESS STEEL	1
10	NUT	STAINLESS STEEL	1
11	NUT	STAINLESS STEEL	1
12	SPRING WASHER	STAINLESS STEEL	2
13	BUSH	A479-316	2
14	STEM SEAL	GRAPHOIL	1
15	O-RING	FKM (Viton®)	1
16	STEM SEAL	P.T.F.E.	1
17	O-RING	FKM (Viton®)	1
18	THRUST WASHER	P.T.F.E.	1
19	HANDLE	STAINLESS STEEL	1

SIZE	D	Y	Z	H	I	L	P	R	A	C	E mm	ØN	B	ISO 5211	B1	Break Torque (in/Lbs)	Cv	Weight Lbs
1"	4.33	3.13	4xØ0.63	0.57	2.13	5.00	3.66	6.30	2.72	0.43	9	1.97-F05	0.28	-	-	124	74.63	8.38
1 1/2"	5.12	3.88	4xØ0.63	0.69	2.99	6.50	4.65	9.45	3.70	0.55	11	2.76-F07	0.33	1.97-F05	M6	195	201.32	15.43
2"	5.91	4.04	4xØ0.75	0.77	3.33	7.01	5.00	9.45	4.06	0.53	11	2.76-F07	0.33	1.97-F05	M6	292	348.60	21.16
3"	7.48	6.00	4xØ 0.75	0.94	3.66	7.99	6.38	12.60	5.41	0.69	14	4.02-F10	0.43	2.76-F07	M10	637	1009.48	39.45
4"	9.06	7.50	8xØ0.75	0.94	3.92	9.02	6.97	14.96	6.04	0.75	17	4.02-F10	0.43	2.76-F07	M10	956	1577.34	53.56

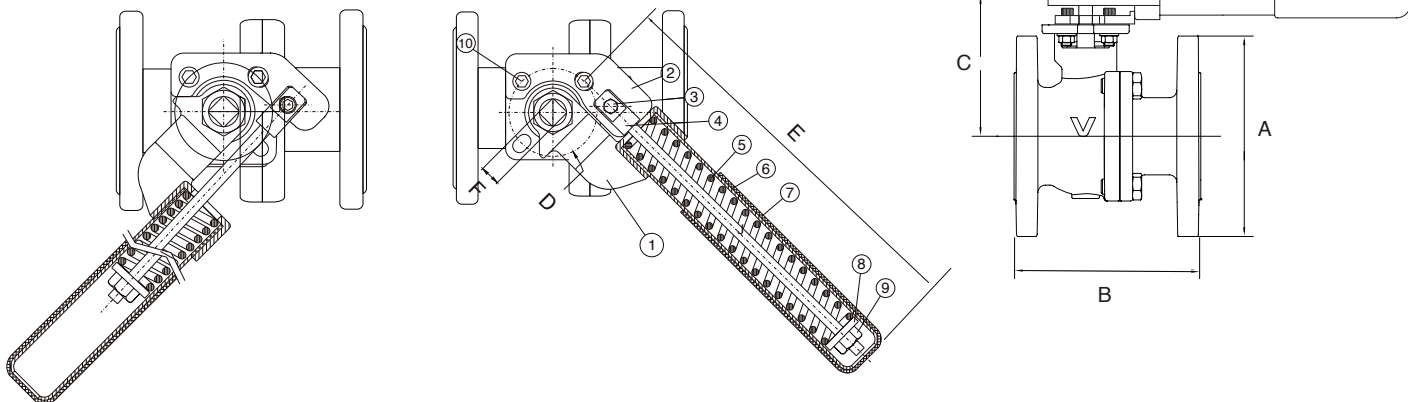


SERIES 766000 SRL DEADMAN SPRING RETURN

Deadman spring lever, Split Body style, ANSI 150 class flanged raised face stainless steel ball valve, full port.

- ISO 5211 mounting pad and stem.
- Blowout proof stem.
- Standard grounded ball & stem.
- Certified to API 607 and API 6FA.
- Designed to ANSI 16.5, 16.10, 16.34.
- TUV T.A. Luft approved.
- NACE MR 0175.

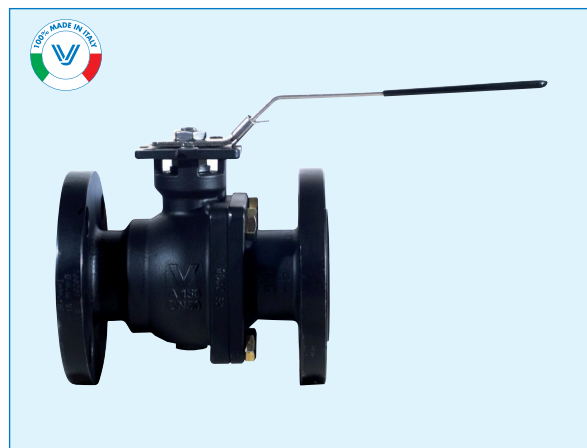
766000 SRL: size 1" to 2".



N POS	HANDLE COMPONENTS	MATERIAL
1	HANDLE HEAD	ASTM A351 - CF8M
2	ANCHOR	ASTM A351 - CF8M
3	ANCHOR SCREW	AISI 316
4	SPRING ROD	AISI 316
5	SPRING	AISI 301
6	HANDLE EXTENSION	AISI 304
7	SLEEVE	VINYL
8	WASHER	AISI 304
9	HEX NUT	AISI 304
10	SOCKET HEAD SCREW	AISI 304

SIZE	A	B	C	D ISO 5211	E	F (mm)
1"	4.33	5.00	2.72	F03	8.75	9
1 1/2"	5.12	6.50	3.70	F05	11.50	11
2"	5.91	7.01	4.06	F05	11.50	11

Valve materials and size: see Table page 98; Series 766000



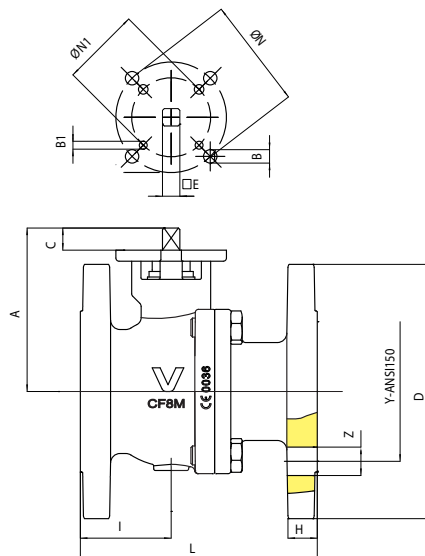
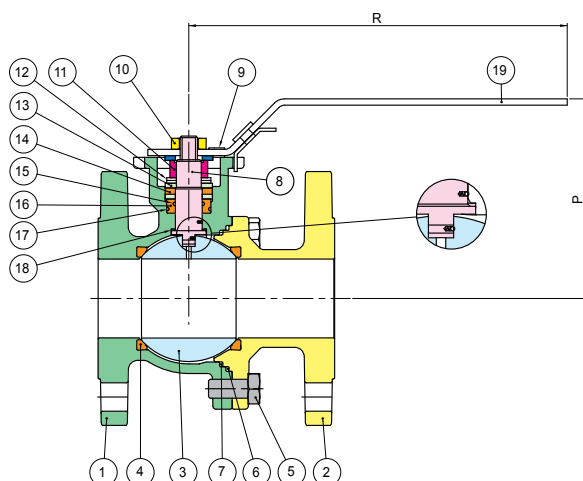
SERIES 766001 CARBON STEEL DIRECT MOUNT BALL VALVE

Carbon steel, ANSI class 150 flanged ball valve, full port, with locking handle.

- Direct mount ISO 5211/square stem.
- Temperature range -4°F to 366°F.
- Blow-out proof stem, adjustable stem packing.
- P.T.F.E. seats, and FKM Viton® O-rings.
- Fire Safe certified to API 607.
- 100% tested.
- ANSI B16.5, B16.10, B16.34 design.
- Antistatic Device.
- Standard locking handle.

766001: size 1" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 010.3



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A352-LCB	1
2	END CONNECTION	A352-LCB	1
3	BALL	A479-304 A351-CF8	1
4	BALL SEAT	P.T.F.E.	2
5	SCREW	CARBON STEEL	4-8
6	BODY SEAL	GRAPHOIL	1
7	BODY SEAL	P.T.F.E.	1
8	STEM	A479-304	1
9	SCREW	CARBON STEEL	1
10	NUT	CARBON STEEL	1
11	NUT	CARBON STEEL	1
12	SPRING WASHER	CARBON STEEL	2
13	BUSH	A479-316	2
14	STEM SEAL	GRAPHOIL	1
15	O-RING	FKM (Viton®)	1
16	STEM SEAL	P.T.F.E.	1
17	O-RING	FKM (Viton®)	1
18	THRUST WASHER	P.T.F.E.	1
19	HANDLE	STAINLESS STEEL	1

SIZE	D	Y	Z	H	I	L	P	R	A	C	E mm	ØN	B	ISO 5211	B1	Break Torque (in/Lbs)	Cv	Weight Lbs
1"	4.33	3.13	4xØ0.63	0.57	2.13	5.00	3.66	6.30	2.72	0.43	9	1.97-F05	0.28	-	-	124	74.63	8.38
1 1/2"	5.12	3.88	4xØ0.63	0.69	2.99	6.50	4.65	9.45	3.70	0.55	11	2.76-F07	0.33	1.97-F05	M6	195	201.32	15.43
2"	5.91	4.04	4xØ0.75	0.77	3.33	7.01	5.00	9.45	4.06	0.53	11	2.76-F07	0.33	1.97-F05	M6	292	348.60	21.16
3"	7.48	6.00	4xØ 0.75	0.94	3.66	7.99	6.38	12.60	5.41	0.69	14	4.02-F10	0.43	2.76-F07	M10	637	1009.48	39.45
4"	9.06	7.50	8xØ0.75	0.94	3.92	9.02	6.97	14.96	6.04	0.75	17	4.02-F10	0.43	2.76-F07	M10	956	1577.34	53.56



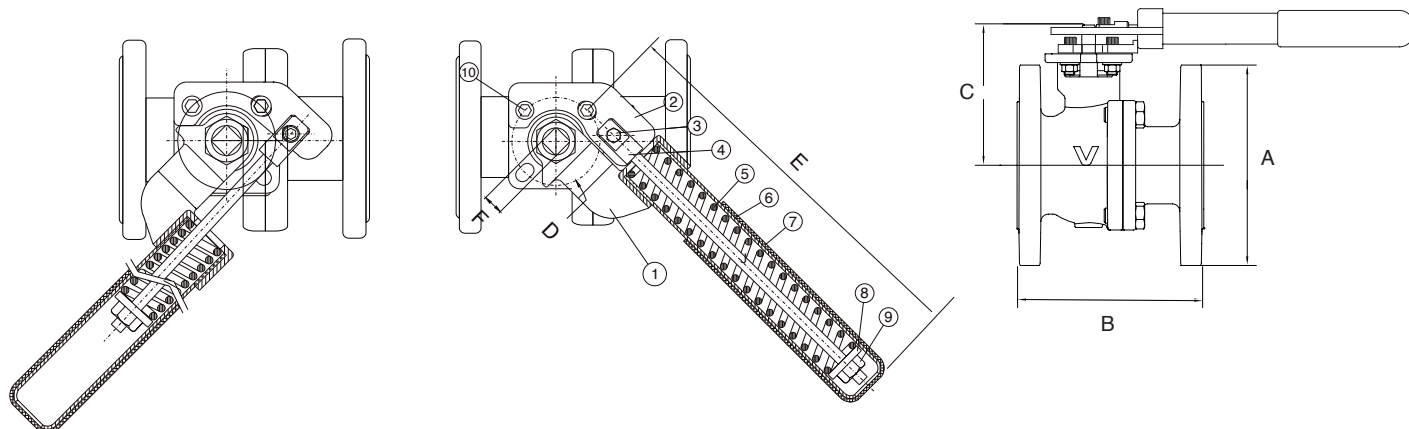
SERIES 766001 SRL DEADMAN SPRING RETURN

Carbon steel, ANSI class 150 flanged ball valve, full port, with locking handle.

- Direct mount ISO 5211/square stem.
- Temperature range -4°F to 366°F.
- Blow-out proof stem, adjustable stem packing.
- P.T.F.E. seats, and FKM Viton® O-rings.
- Fire Safe certified to API 607.
- 100% tested.
- ANSI B16.5, B16.10, B16.34 design.
- Antistatic Device.
- Standard locking handle.

766001 SRL: size 1" to 2".

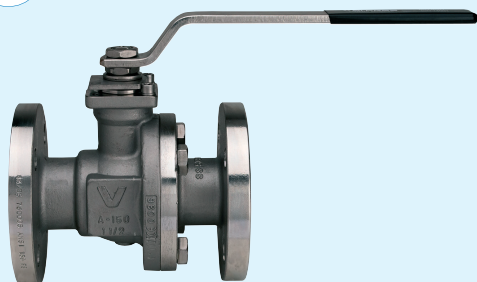
COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 010.3



N POS	HANDLE COMPONENTS	MATERIAL
1	HANDLE HEAD	ASTM A351 - CF8M
2	ANCHOR	ASTM A351 - CF8M
3	ANCHOR SCREW	AISI 316
4	SPRING ROD	AISI 316
5	SPRING	AISI 301
6	HANDLE EXTENSION	AISI 304
7	SLEEVE	VINYL
8	WASHER	AISI 304
9	HEX NUT	AISI 304
10	SOCKET HEAD SCREW	AISI 304

SIZE	A	B	C	D ISO 5211	E	F (mm)
1"	4.33	5.00	2.72	F03	8.75	9
1 1/2"	5.12	6.50	3.70	F05	11.50	11
2"	5.91	7.01	4.06	F05	11.50	11

Valve materials and size: see Table page 96; Series 766001.



SERIES 760005

STAINLESS STEEL BALL VALVE

Stainless steel, ANSI class 150 flanged ends ball valve, full port.

- Blow-out proof stem, adjustable stem packing.
- P.T.F.E. seats, packing and thrust washer.
- Standard grounded stem and ball.
- 100% tested.
- PED 97/23/CE.
- Locking handle plate.
- Temperature range -4°F to 366°F.
- ANSI B16.5, B16.10, B16.34 design.
- Fire Safe API 6FA-API 607.
- Antistatic Device.
- ISO 5211 mounting pad and double "D" stem.
- Fugitive emissions tested to ISO 15848-1.

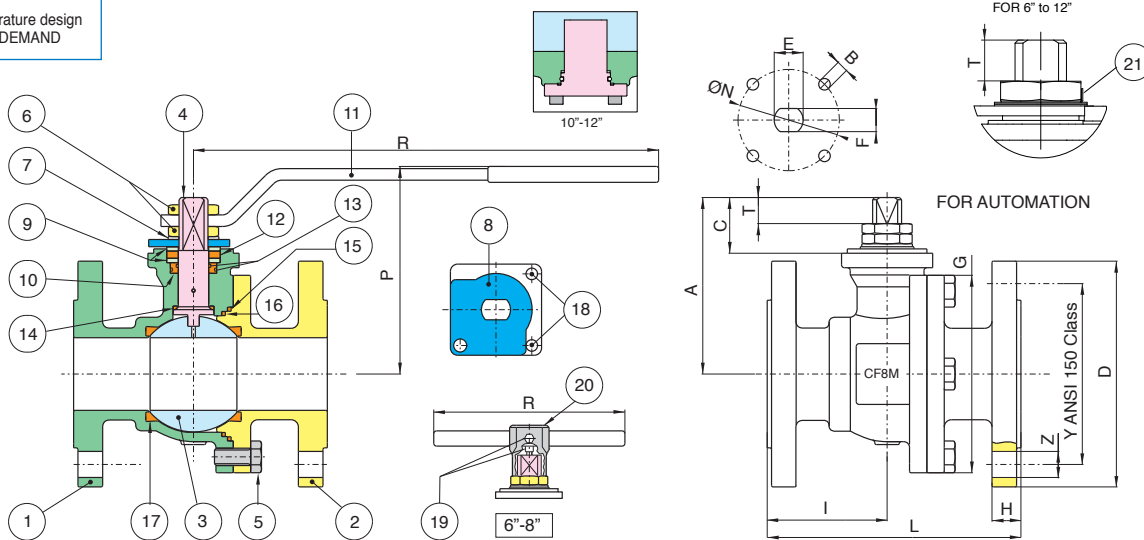
F.E. TESTED
ISO 15848-1

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

760005: sizes 1/2" to 12" (10" and 12" TRUNNION).

760021: STEAM SERVICE TRIM - sizes 1/2" to 8".

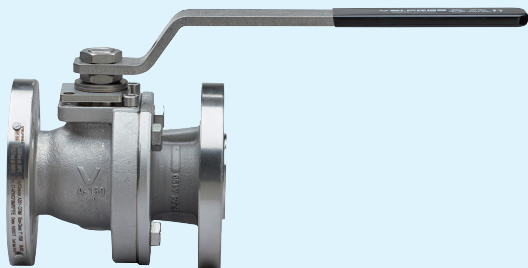
760V05: V-PACK AVAILABLE - sizes 1/2" to 8".



N POS	PART NAME	MATERIAL	N POS
1	BODY	A351 CF8M	1
2	END CONNECTION	A351 CF8M	1
3	BALL	A479-316/A351-CF8M	1
4	STEM	A479-316	1
5	SCREW	STAINLESS STEEL	4-8-12
6	NUT	STAINLESS STEEL	1-2
7	SPRING WASHER	STAINLESS STEEL	2
8	TRAVEL STOP	STAINLESS STEEL	1
9	PACKING GLAND	STAINLESS STEEL	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	STAINLESS STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	O-RING	FKM (Viton®)	2
14	THRUST WASHER	P.T.F.E.	1
15	SEAL	GRAPHOIL	1
16	SEAL	P.T.F.E.	1
17	BALL SEATS	P.T.F.E.	2
18	SCREW	STAINLESS STEEL	2
19	SCREW	STAINLESS STEEL	2
20	BODY HANDLE	CAST IRON	1
21	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.38	4xØ0.63	0.45	1.83	4.25	2.80	3.46	5.16	2.05	0.75	0.31	M10	0.28	1.65-F04	M5	35	22.21	4.21
3/4"	3.94	2.76	4xØ0.63	0.51	2.09	4.61	2.89	3.66	5.16	2.20	0.75	0.31	M10	0.28	1.65-F04	M5	115	40.50	5.36
1"	4.33	3.13	4xØ0.63	0.57	2.34	5.00	3.56	3.50	6.85	2.85	1.08	0.51	M12	0.31	1.97-F05	M6	124	74.63	8.15
1 1/2"	5.12	3.88	4xØ0.63	0.69	3.03	6.50	4.49	5.24	9.84	4.17	1.18	0.39	M16	0.39	1.97-F05	M6	195	201.32	15.65
2"	5.91	4.74	4xØ0.75	0.77	3.39	7.01	5.37	5.67	12.64	4.80	1.52	0.71	M20	0.55	2.76-F07	M8	292	348.60	23.80
2 1/2"	7.01	5.49	4x0.75	0.69	3.74	7.48	6.3	6.24	13.59	6.03	1.61	0.71	M20	0.63	F07	M8	620	631.37	35.71
3"	7.48	6.00	4xØ0.75	0.94	3.13	7.99	7.03	6.81	15.00	5.94	1.69	0.71	M24	0.71	4.02-F10	M10	637	1009.48	47.61
4"	9.06	7.50	8xØ0.75	0.94	4.33	9.02	8.21	7.36	15.00	6.50	1.69	0.71	M24	0.71	4.02-F10	M10	956	1577.34	67.00
6"	11.02	9.51	8xØ0.87	1.00	7.13	15.51	12.24	12.01	27.56	9.65	2.68	1.61	M42	1.18	4.92-F12	M12	2903	4247.46	171.91
8"	13.58	11.75	8xØ0.87	1.14	8.35	17.99	15.83	13.70	27.56	11.34	2.68	1.61	M42	1.18	4.92-F12	M12	5824	7886.81	274.62
10" *	15.94	14.25	12xØ1.02	1.27	11.88	20.98	19.69	-	-	13.90	3.19	1.85	M52	1.50	5.51-F14	M16	-	12924.50	429.78
12" *	19.09	17.00	12xØ1.02	1.33	13.93	24.02	22.05	-	-	15.12	3.19	1.85	M52	1.50	5.51-F14	M16	-	19444.08	559.82

* TRUNNION supplied without handle.



SERIES 68J000 API 608 STAINLESS STEEL BALL VALVE

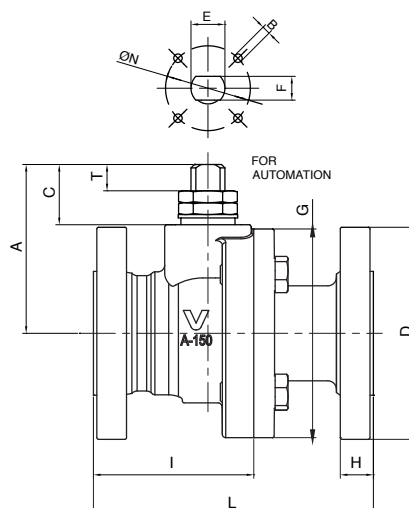
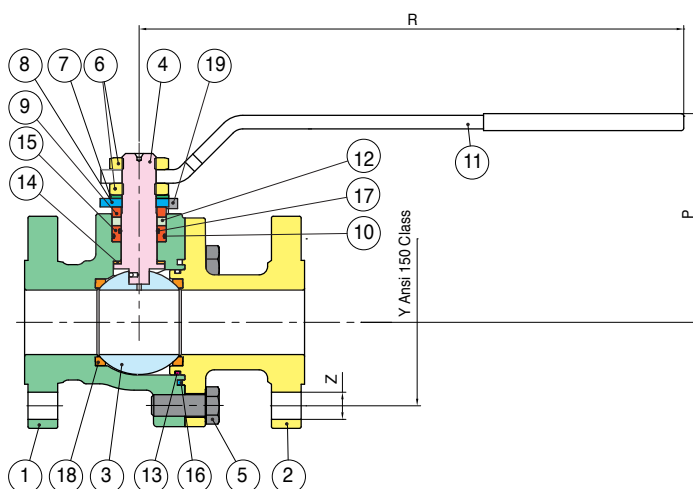
Stainless steel, ANSI class 150, flanged ball valve, full port.

- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
- Temperature range -4°F to 366°F.
- 100% tested according to API 598 standards.
- R.T.F.E seats, packing and thrust washer.
- Blow-out proof stem, locking handle.
- Fire Safe design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Locking device.

68J000: sizes 1/2" to 6".

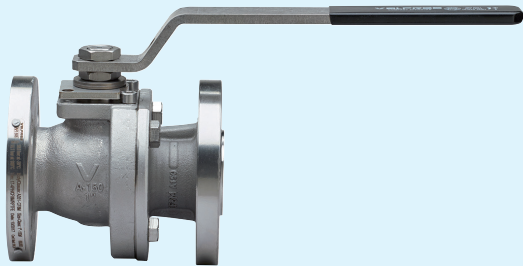
Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



POS	PART NAME	MATERIAL	POS
1	BODY	A351-CF8M	1
2	END CONNECTION	A351-CF8M	1
3	BALL	A479-Tp316	1
4	STEM	A564 Tp630 H1150D (17-4-PH)	1
5	SCREW	A193 B8 Cl.2	4-8-12
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	A182-F304	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	AISI 316	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (VITON)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	A2-70	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 QN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.37	4x00.63	0.46	1.79	4.25	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	66.38	16.59	5.29
3/4"	3.94	2.75	4x00.63	0.53	1.91	4.61	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	115.05	30.25	7.28
1"	4.33	3.13	4x00.63	0.58	2.09	5.00	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	168.15	55.75	10.61
1 1/2"	4.92	3.87	4x00.63	0.71	3.72	6.50	4.84	4.84	12.64	3.94	0.61	M20	14	1.96-F05	M6	327.45	150.39	19.18
2"	5.91	4.74	4x00.63	0.77	2.99	7.01	5.51	5.24	12.64	4.27	0.65	M20	14	1.96-F05	M6	495.60	260.41	26.24
3"	7.48	6.00	4x00.63	0.96	3.35	7.99	7.40	6.57	15.00	5.89	0.81	M24	18	2.75-F07	M8	1053.15	754.11	53.14
4"	9.06	7.50	4x00.63	0.96	3.54	9.02	9.25	7.32	15.00	6.57	0.73	M24	18	4.01-F10	M10	1654.95	1178.31	84.89
6"	11.02	9.50	4x00.63	1.02	9.49	15.51	12.40	0.00	0.00	9.65	1.61	M42	30	4.92-F12	M12	4469.25	3172.95	189.19



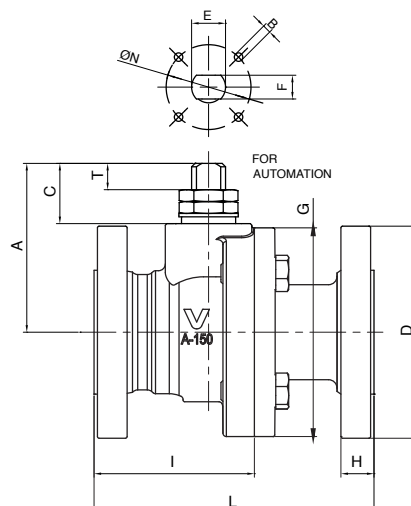
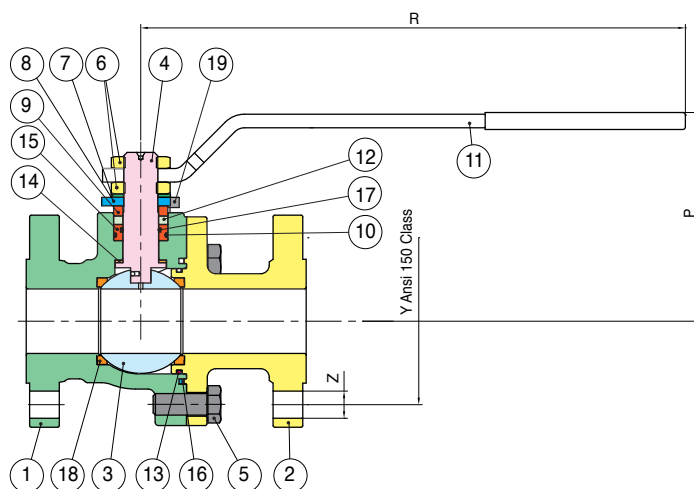
SERIES 68R015 API 608 SUPER DUPLEX STAINLESS STEEL BALL VALVE

- Super Duplex Stainless steel, ANSI class 150, flanged ball valve, full port.
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
 - Temperature range: -4°F to 366°F.
 - 100% tested according to API 598 standards.
 - R.T.F.E seats, packing and thrust washer.
 - Blow-out proof stem, locking handle.
 - Fire Safe design.
 - Antistatic Device.
 - ISO 5211 mounting pad with double "D" stem.
 - Locking device.

68R015: sizes 1/2" to 6".

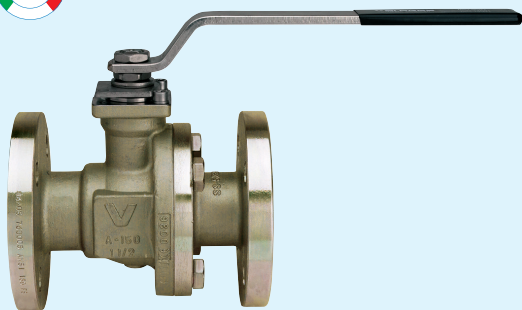
Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N POS
1	BODY	UNS S32760 (ASTM A995-Gr. 6)	1
2	END CONNECTION	UNS S32760 (ASTM A995-Gr. 6)	1
3	BALL	UNS S32760 (ASTM A995-Gr. 6)/A479-F55	1
4	STEM	A479-F55 / A182-F55	1
5	SCREW	A193 B8 Cl.2	4-8-12
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	STAINLESS STEEL	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	AISI 316	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (Viton®)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	A2-70	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.37	4xØ0.63	0.46	1.79	4.25	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	66.38	16.59	5.29
3/4"	3.94	2.75	4xØ0.63	0.53	1.91	4.61	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	115.05	30.25	7.28
1"	4.33	3.13	4xØ0.63	0.58	2.09	5.00	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	168.15	55.75	10.61
1 1/2"	4.92	3.87	4xØ0.63	0.71	3.72	6.50	4.84	4.84	12.64	3.94	0.61	M20	14	1.96-F05	M6	327.45	150.39	19.18
2"	5.91	4.74	4xØ0.63	0.77	2.99	7.01	5.51	5.24	12.64	4.27	0.65	M20	14	1.96-F05	M6	495.60	260.41	26.24
3"	7.48	6.00	4xØ0.63	0.96	3.35	7.99	7.40	6.57	15.00	5.89	0.81	M24	18	2.75-F07	M8	1053.15	754.11	53.14
4"	9.06	7.50	4xØ0.63	0.96	3.54	9.02	9.25	7.32	15.00	6.57	0.73	M24	18	4.01-F10	M10	1654.95	1178.31	84.89
6"	11.02	9.50	4xØ0.63	1.02	9.49	15.51	12.40	0.00	0.00	9.65	1.61	M42	30	4.92-F12	M12	4469.25	3172.95	189.19



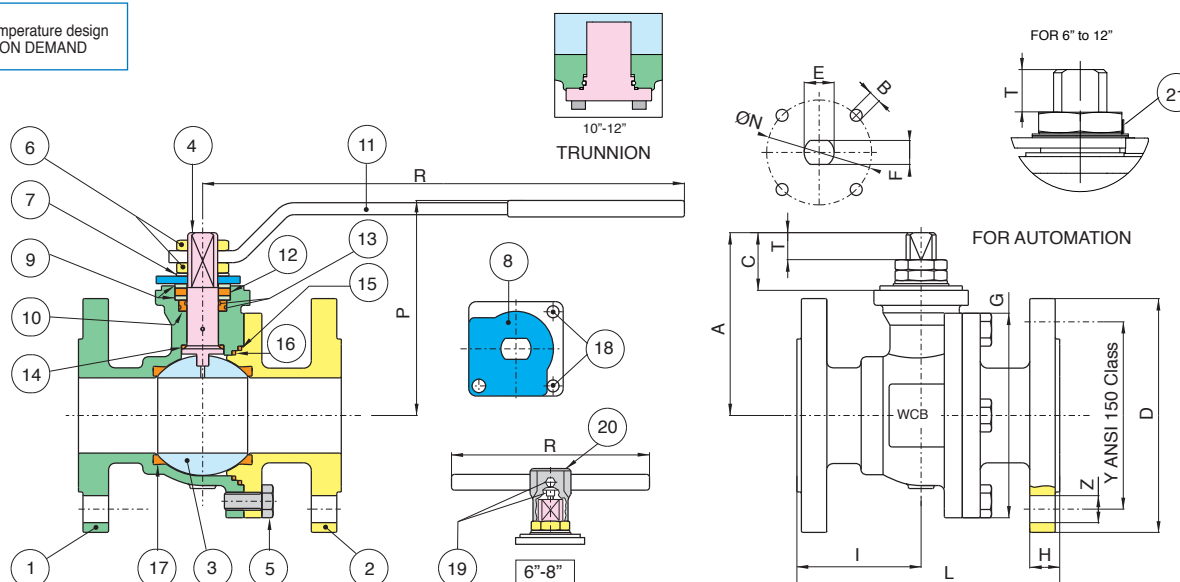
SERIES 762000 CARBON STEEL BALL VALVE

F.E. TESTED
ISO 15848-1

Carbon steel, ANSI class 150 flanged ball valve, full port.

- Temperature range -4°F to 366°F.
 - Blow-out proof stem, adjustable stem packing.
 - P.T.F.E. seats, packing and thrust washer.
 - 100% tested.
 - PED 97/23/CE.
 - Locking handle plate.
 - ANSI B16.5, B16.10, B16.34 design.
 - Fire Safe API 6FA-API 607.
 - Antistatic Device.
 - ISO 5211 mounting pad with double "D" stem.
 - Fugitive emissions tested to ISO 15848-1.
- 762000** sizes 1/2" to 12" (10" and 12" TRUNNION).
762V00: V-PACK AVAILABLE - sizes 1/2" to 8".
760137: STEAM SERVICE TRIM - sizes 1/2" to 8".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N POS
1	BODY	A216 WCB	1
2	END CONNECTION	A216 WCB	1
3	BALL	A479-304/A351 CF8	1
4	STEM	A479-304	1
5	SCREW	STAINLESS STEEL	4-8-12
6	NUT	STAINLESS STEEL	1-2
7	SPRING WASHER	STEEL	2
8	TRAVEL STOP	STEEL	1
9	PACKING GLAND	STEEL	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	O-RING	FKM (Viton®)	2
14	THRUST WASHER	P.T.F.E.	1
15	SEAL	GRAPHOIL	1
16	SEAL	P.T.F.E.	1
17	BALL SEATS	P.T.F.E.	2
18	SCREW	STEEL	2
19	SCREW	STEEL	2
20	BODY HANDLE	CAST IRON	1
21	UNSCREWING GROWER	A182-F316	1

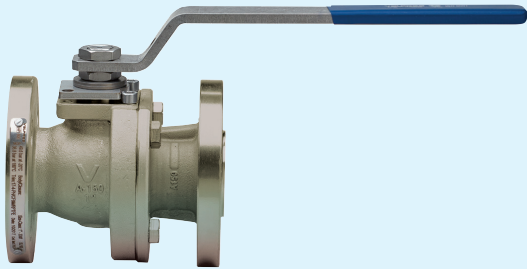
SIZE	D	Y	Z	H	I	L	G	P	R	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.38	4xØ0.63	0.45	1.83	4.25	2.80	3.46	5.16	2.05	0.75	0.31	M10	0.28	1.65-F04	M5	35	22.21	4.21
3/4"	3.94	2.76	4xØ0.63	0.51	2.09	4.61	2.89	3.66	5.16	2.20	0.75	0.31	M10	0.28	1.65-F04	M5	115	40.50	5.36
1"	4.33	3.13	4xØ0.63	0.57	2.34	5.00	3.56	3.50	6.85	2.85	1.08	0.51	M12	0.31	1.97-F05	M6	124	74.63	8.15
1 1/2"	5.12	3.88	4xØ0.63	0.69	3.03	6.50	4.49	5.24	9.84	4.17	1.18	0.39	M16	0.39	1.97-F05	M6	195	201.32	15.65
2"	5.91	4.74	4xØ0.75	0.77	3.39	7.01	5.37	5.67	12.64	4.80	1.52	0.71	M20	0.55	2.76-F07	M8	292	348.60	23.80
3"	7.48	6.00	4xØ0.75	0.94	3.13	7.99	7.03	6.81	15.00	5.94	1.69	0.71	M24	0.71	4.02-F10	M10	637	1009.48	47.61
4"	9.06	7.50	8xØ0.75	0.94	4.33	9.02	8.21	7.36	15.00	6.50	1.69	0.71	M24	0.71	4.02-F10	M10	956	1577.34	67.00
6"	11.02	9.51	8xØ0.87	1.00	7.13	15.51	12.24	12.01	27.56	9.65	2.68	1.61	M42	1.18	4.92-F12	M12	2903	4247.46	171.91
8"	13.58	11.75	8xØ0.87	1.14	8.35	17.99	15.83	13.70	27.56	11.34	2.68	1.61	M42	1.18	4.92-F12	M12	5824	7886.81	274.62
10" *	15.94	14.25	12xØ1.02	1.27	11.88	20.98	19.69	-	-	13.90	3.19	1.85	M52	1.50	5.51-F14	M16	-	12924.50	429.78
12" *	19.09	17.00	12xØ1.02	1.33	13.93	24.02	22.05	-	-	15.12	3.19	1.85	M52	1.50	5.51-F14	M16	-	19444.08	559.82

* TRUNNION supplied without handle.



VALPRES





SERIES 68F000 API 608 CARBON STEEL BALL VALVE

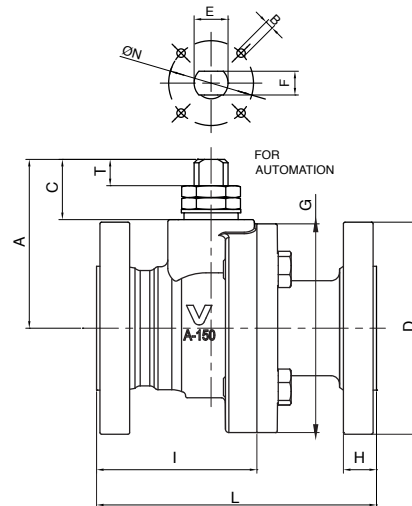
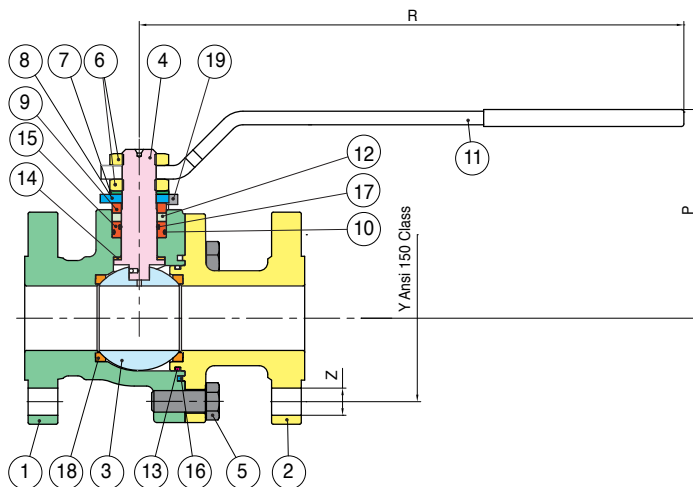
- Carbon steel, ANSI class 150, flanged ball valve, full port.
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
 - 100% tested according to API 598 standards.
 - R.T.F.E seats, packing and thrust washer.
 - Blow-out proof stem, locking handle.
 - Fire Safe design.
 - Antistatic Device.
 - ISO 5211 mounting pad with double "D" stem.
 - Locking device.
 - Temperature range -4°F to 366°F.
- 68F000:** sizes 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103

Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

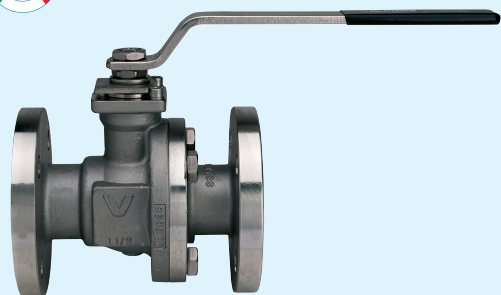


Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A352-LCC	1
2	END CONNECTION	A352-LCC	1
3	BALL	A479-Tp316	1
4	STEM	A564-Tp316 H1150D (17-4-PH)	1
5	SCREW	A32017	4-8-12
6	NUT	CARBON STEEL	2
7	SPRING WASHER	CARBON STEEL	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	CARBON STEEL	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (Viton®)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	CARBON STEEL	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.37	4xØ0.63	0.46	1.79	4.25	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	66.38	16.59	5.29
3/4"	3.94	2.75	4xØ0.63	0.53	1.91	4.61	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	115.05	30.25	7.28
1"	4.33	3.13	4xØ0.63	0.58	2.09	5.00	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	168.15	55.75	10.61
1 1/2"	4.92	3.87	4xØ0.63	0.71	3.72	6.50	4.84	4.84	12.64	3.94	0.61	M20	14	1.96-F05	M6	327.45	150.39	19.18
2"	5.91	4.74	4xØ0.75	0.77	2.99	7.01	5.51	5.24	12.64	4.27	0.65	M20	14	1.96-F05	M6	495.60	260.41	26.24
3"	7.48	6.00	4xØ0.75	0.96	3.35	7.99	7.40	6.57	15.00	5.89	0.81	M24	18	2.75-F07	M8	1053.15	754.11	53.14
4"	9.06	7.50	8xØ0.75	0.96	3.54	9.02	9.25	7.32	15.00	6.57	0.73	M24	18	4.01-F10	M10	1654.95	1178.31	84.89
6"	11.02	9.50	8xØ0.87	1.02	9.49	15.51	12.40	0.00	0.00	9.65	1.61	M42	30	4.92-F12	M12	4469.25	3172.95	189.19



SERIES 761030 STAINLESS STEEL BALL VALVE

F.E. TESTED
ISO 15848-1

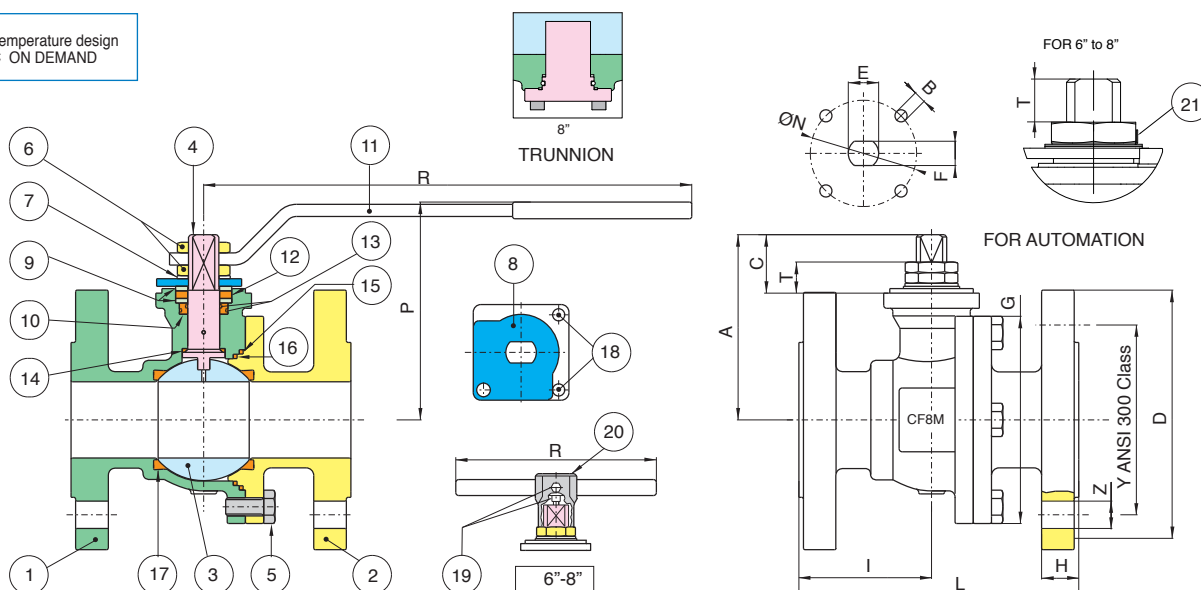
Stainless steel, ANSI class 300 flanged ball valve, full port.

- Blow-out proof stem, adjustable stem packing.
- R.T.F.E. seats, packing and thrust washer.
- 100% tested.
- PED 97/23/CE.
- Locking handle plate.
- Temperature range -4°F to 366°F.
- ANSI B16.5, B16.10, B16.34 design.
- Fire Safe API 6FA-API 607.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Fugitive emissions tested to ISO 15848-1.

761030: sizes 1/2" to 8" (8" TRUNNION).

760195: STEAM SERVICE TRIM - size 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



POS	PART NAME	MATERIAL	POS
1	BODY	CF8M	1
2	END CONNECTION	CF8M	1
3	BALL	A479-316/A351-CF8M	1
4	STEM	A479-316	1
5	SCREW	STAINLESS STEEL	4-8-12
6	NUT	STAINLESS STEEL	1-2
7	SPRING WASHER	STAINLESS STEEL	2
8	TRAVEL STOP	STAINLESS STEEL	1
9	PACKING GLAND	STAINLESS STEEL	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	STAINLESS STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	O-RING	FKM (Viton®)	2
14	THRUST WASHER	P.T.F.E.	1
15	SEAL	P.T.F.E.	1
16	SEAL	P.T.F.E.	1
17	BALL SEATS	R.P.T.F.E.	2
18	SCREW	STAINLESS STEEL	2
19	SCREW	STAINLESS STEEL	2
20	BODY HANDLE	CAST IRON	1
21	UNSCREWING GROWER	A182-F316	1

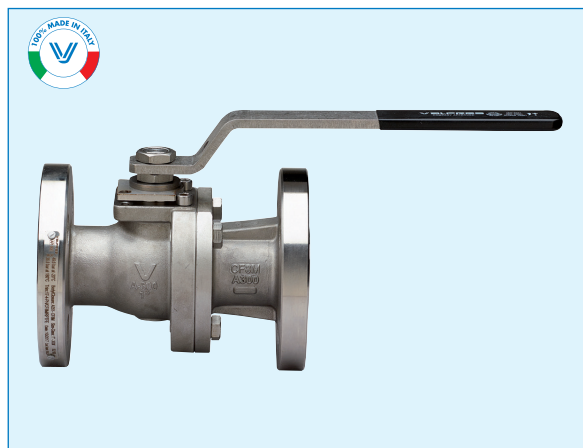
SIZE	D	Y	Z	H	I	L	G	P	R	A	C	T	E	F	ISO 5211 QN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.74	2.62	4xØ0.63	0.57	2.42	5.51	3.35	3.46	5.16	2.05	0.75	0.31	M10	0.28	1.65-F04	M5	44	22.21	5.07
3/4"	4.53	3.25	4xØ0.75	0.63	2.40	5.98	3.07	3.66	5.16	2.20	0.75	0.31	M10	0.28	1.65-F04	M5	142	40.50	7.71
1"	4.92	3.50	4xØ0.79	0.69	2.78	6.50	3.78	4.29	6.85	2.85	1.08	0.51	M12	0.31	1.97-F05	M6	150	74.63	11.46
1 1/2"	6.10	4.51	4xØ0.87	0.83	3.09	7.48	4.96	5.24	9.84	4.21	1.18	0.39	M16	0.39	1.97-F05	M6	240	201.32	22.04
2"	6.50	5.00	8xØ0.79	0.89	3.39	8.50	5.37	5.67	12.64	4.80	1.52	0.71	M20	0.55	2.76-F07	M8	345	348.60	26.45
3"	8.27	6.63	8xØ0.87	1.14	3.19	11.14	7.03	6.81	15.00	5.94	1.69	0.71	M24	0.71	4.02-F10	M10	770	1009.48	59.51
4"	10.04	7.87	8xØ0.87	1.26	3.48	12.01	8.62	7.36	15.00	6.50	1.69	0.71	M24	0.71	4.02-F10	M10	1160	1577.34	90.36
6"	12.60	10.63	12xØ0.87	1.46	6.77	15.87	12.05	12.01	27.56	9.65	2.68	1.61	M42	1.18	4.92-F12	M12	1240	4247.46	204.97
8" *	15.00	12.99	12xØ1.02	1.63	9.88	19.76	16.14	13.70	27.56	11.34	2.70	1.61	M42	1.18	4.92-F12	M12	3505	7886.81	332.80

* TRUNNION max Δp= 362 psi.



VALPRES





SERIES 68J100 API 608 STAINLESS STEEL BALL VALVE

Stainless steel, ANSI class 300, flanged ball valve, full port.

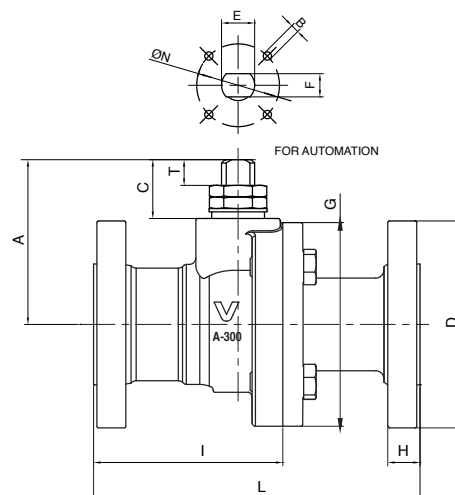
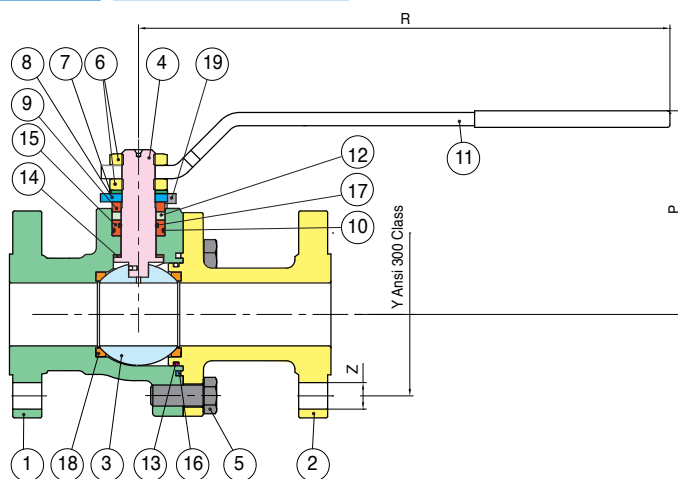
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
- Temperature range -4°F to 366°F.
- 100% tested according to API 598 standards.
- R.T.F.E seats, packing and thrust washer.
- Blow-out proof stem, locking handle.
- Fire Safe design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Locking device.

68J100: sizes 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

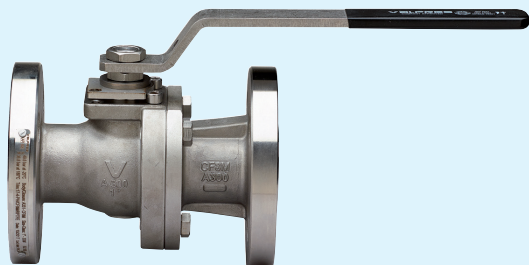
Temperature range: -20° +180°
Vacuum: 10⁻⁸ torr.

Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A351-CF8M	1
2	END CONNECTION	A351-CF8M	1
3	BALL	A479-Tp316	1
4	STEM	A564 Tp630 H1150D (17-4-PH)	1
5	SCREW	A193 B8 Cl.2	4-6-8-12
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	A182-F304	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	AISI 316	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (Viton®)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	A2-70	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.63	4xØ0.63	0.58	2.47	5.51	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	110.63	16.59	6.84
3/4"	3.94	3.25	4xØ0.75	0.64	2.64	5.98	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	168.15	30.25	9.92
1"	4.33	3.50	4xØ0.75	0.70	2.78	6.50	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	247.80	55.75	14.11
1 1/2"	4.92	4.50	4xØ0.86	0.83	4.09	7.48	5.04	4.84	12.64	3.90	0.61	M20	14	1.96-F05	M6	429.23	150.39	25.58
2"	5.91	5.00	8xØ0.75	0.91	3.54	8.50	5.51	5.24	12.64	4.29	0.65	M20	14	1.96-F05	M6	601.80	260.41	31.75
3"	7.48	6.63	8xØ0.86	1.14	4.80	11.10	7.40	6.57	15.00	5.91	0.81	M24	18	2.75-F07	M8	1389.45	754.11	70.56
4"	9.06	7.87	8xØ0.86	1.27	5.04	12.01	9.25	7.32	24.02	6.57	0.73	M24	18	4.01-F10	M10	3309.90	1178.31	115.54
6"	11.02	10.63	12xØ0.86	1.46	7.89	15.87	12.68	0.00	0.00	9.65	1.48	M42	30	4.92-F12	M12	8673.00	3172.95	240.35



SERIES 68R115 API 608 SUPER DUPLEX STAINLESS STEEL BALL VALVE

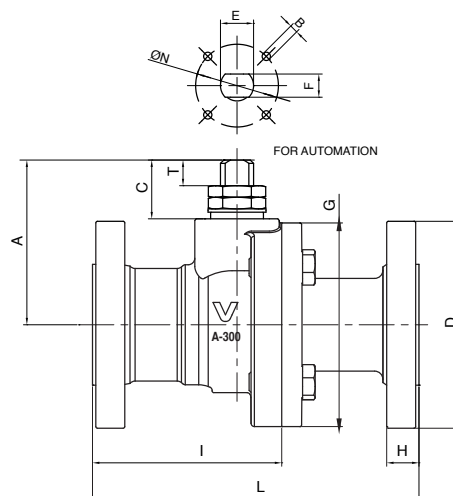
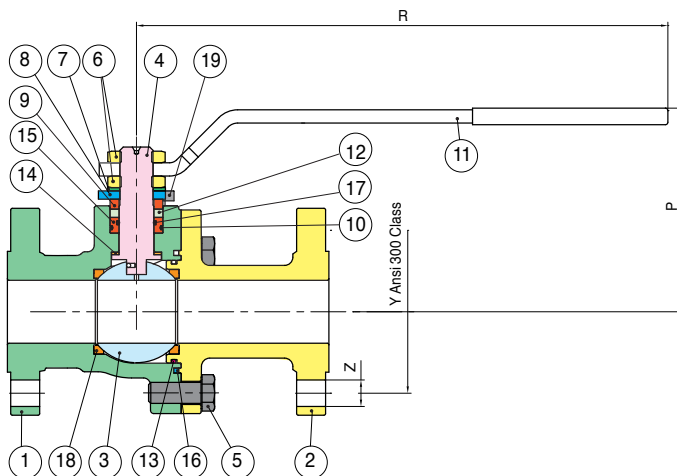
- Super Duplex stainless steel, ANSI class 300, flanged ball valve, full port.
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
 - Temperature range: -4°F to 366°F.
 - 100% tested according to API 598 standards.
 - R.T.F.E seats, packing and thrust washer.
 - Blow-out proof stem, locking handle.
 - Fire Safe design.
 - Antistatic Device.
 - ISO 5211 mounting pad with double "D" stem.
 - Locking device.

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103

68R115: sizes 1/2" to 6".

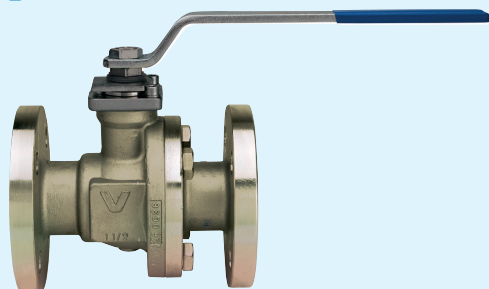
Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N PCS
1	BODY	UNS S32760 (ASTM A995-Gr. 6)	1
2	END CONNECTION	UNS S32760 (ASTM A995-Gr. 6)	1
3	BALL	UNS S32760 (ASTM A995-Gr. 6)/A479-F55	1
4	STEM	A479-F55 / A182-F55	1
5	SCREW	A193 B8 Cl.2	4-6-8-12
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	STAINLESS STEEL	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	AISI 316	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (Viton®)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	A2-70	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.63	4xØ0.63	0.58	2.47	5.51	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	110.63	16.59	6.84
3/4"	3.94	3.25	4xØ0.75	0.64	2.64	5.98	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	168.15	30.25	9.92
1"	4.33	3.50	4xØ0.75	0.70	2.78	6.50	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	247.80	55.75	14.11
1-1/2"	4.92	4.50	4xØ0.86	0.83	4.09	7.48	5.04	4.84	12.64	3.90	0.61	M20	14	1.96-F05	M6	429.23	150.39	25.58
2"	5.91	5.00	8xØ0.75	0.91	3.54	8.50	5.51	5.24	12.64	4.29	0.65	M20	14	1.96-F05	M6	601.80	260.41	31.75
3"	7.48	6.63	8xØ0.86	1.14	4.80	11.10	7.40	6.57	15.00	5.91	0.81	M24	18	2.75-F07	M8	1389.45	754.11	70.56
4"	9.06	7.87	8xØ0.86	1.27	5.04	12.01	9.25	7.32	24.02	6.57	0.73	M24	18	4.01-F10	M10	3309.90	1178.31	115.54
6"	11.02	10.63	12xØ0.86	1.46	7.89	15.87	12.68	0.00	0.00	9.65	1.48	M42	30	4.92-F12	M12	8673.00	3172.95	240.35



SERIES 761031 CARBON STEEL BALL VALVE

F.E. TESTED
ISO 15848-1

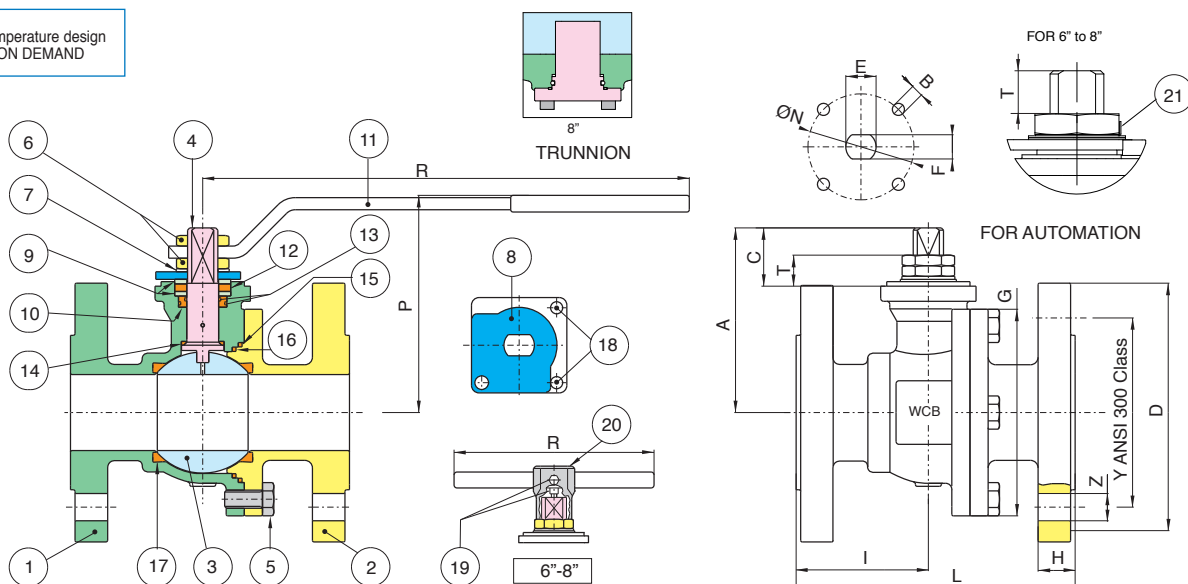
Carbon steel, ANSI class 300 flanged ball valve, full port.

- Temperature range -4°F to 366°F.
- Blow-out proof stem, adjustable stem packing.
- R.T.F.E. seats, packing and thrust washer.
- 100% tested.
- PED 97/23/CE.
- Locking handle plate.
- ANSI B16.5 - B16.10 B16.34 design.
- Fire Safe API 6FA-API 607.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Fugitive emissions tested to ISO 15848-1.

761031: sizes 1/2" to 8" (8" TRUNNION).

760266: STEAM SERVICE TRIM - sizes 1/2" to 8".

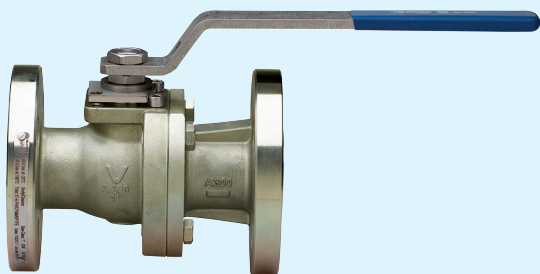
COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A216 WCB	1
2	END CONNECTION	A216 WCB	1
3	BALL	A479-304/A351-CF8	1
4	STEM	A479-304	1
5	SCREW	STAINLESS STEEL	4-8-12
6	NUT	CARBON STEEL 1/2"-1 1/2"	1-2
7	SPRING WASHER	STEEL	2
8	TRAVEL STOP	CARBON STEEL	1
9	PACKING GLAND	CARBON STEEL	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	CARBON STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	O-RING	FKM (Viton®)	2
14	THRUST WASHER	P.T.F.E.	1
15	SEAL	GRAPHOIL	1
16	SEAL	P.T.F.E.	1
17	BALL SEATS	R.P.T.F.E.	2
18	SCREW	CARBON STEEL	2
19	SCREW	CARBON STEEL	2
20	BODY HANDLE	CAST IRON	1
21	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	C	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.74	2.62	4xØ0.63	0.57	2.42	5.51	3.35	3.46	5.16	2.05	0.75	0.31	M10	0.28	1.65-F04	M5	44	22.21	5.07
3/4"	4.53	3.25	4xØ0.75	0.63	2.40	5.98	3.07	3.66	5.16	2.20	0.75	0.31	M10	0.28	1.65-F04	M5	142	40.50	7.71
1"	4.92	3.50	4xØ0.79	0.69	2.78	6.50	3.78	4.29	6.85	2.85	1.08	0.51	M12	0.31	1.97-F05	M6	150	74.63	11.46
1 1/2"	6.10	4.51	4xØ0.87	0.83	3.09	7.48	4.96	5.24	9.84	4.21	1.18	0.39	M16	0.39	1.97-F05	M6	240	201.32	22.04
2"	6.50	5.00	8xØ0.79	0.89	3.39	8.50	5.37	5.67	12.64	4.80	1.52	0.71	M20	0.55	2.76-F07	M8	345	348.60	26.45
3"	8.27	6.63	8xØ0.87	1.14	3.19	11.14	7.03	6.81	15.00	5.94	1.69	0.71	M24	0.71	4.02-F10	M10	770	1009.48	59.51
4"	10.04	7.87	8xØ0.87	1.26	3.48	12.01	8.62	7.36	15.00	6.50	1.69	0.71	M24	0.71	4.02-F10	M10	1160	1577.34	90.36
6"	12.60	10.63	12xØ0.87	1.46	6.77	15.87	12.05	12.01	27.56	9.65	2.68	1.61	M42	1.61	4.92-F12	M12	1240	4247.46	204.97
8" *	15.00	12.99	12xØ1.02	1.63	9.88	19.76	16.14	13.70	27.56	11.34	2.70	1.61	M42	1.61	4.92-F12	M12	3505	7886.81	332.80

* TRUNNION max Δp= 362 psi



SERIES 68F100

API 608 CARBON STEEL BALL VALVE

Carbon steel, ANSI class 300, flanged ball valve, full port.

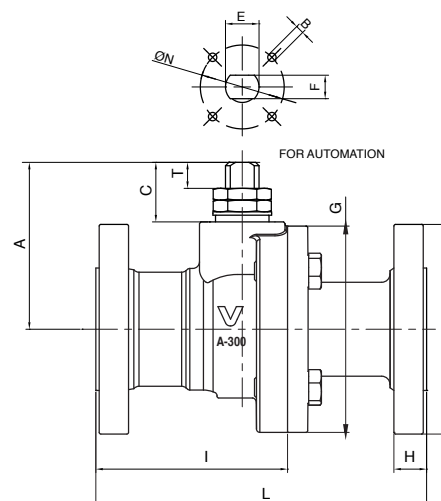
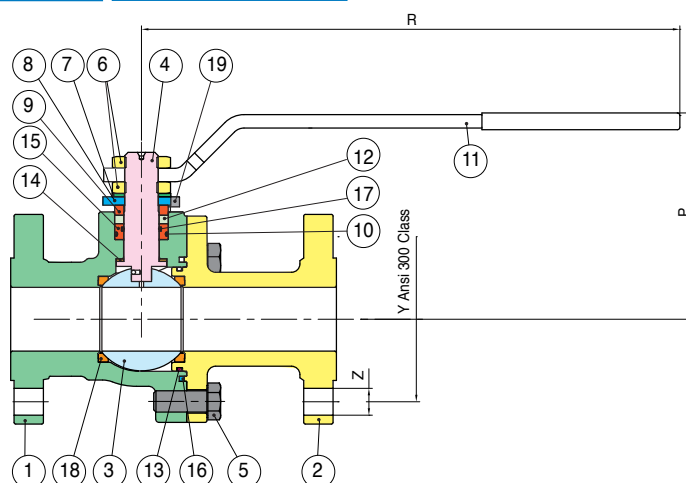
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
- 100% tested according to API 598 standards.
- R.T.F.E seats, packing and thrust washer.
- Blow-out proof stem, locking handle.
- Fire Safe design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Locking device.
- Temperature range -4°F to 366°F.

68F100: sizes 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103

Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



N° POS	PART NAME	MATERIAL	N° PCS	SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	A352-LCC	1	1/2"	3.54	2.63	4xØ0.63	0.58	2.47	5.51	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	110.63	16.59	6.84
2	END CONNECTION	A352-LCC	1	3/4"	3.94	3.25	4xØ0.75	0.64	2.64	5.98	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	168.15	30.25	9.92
3	BALL	A479-Tp316	1	1"	4.33	3.50	4xØ0.75	0.70	2.78	6.50	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	247.80	55.75	14.11
4	STEM	A564-Tp316 H1150D (17-4-PH)	1	1 1/2"	4.92	4.50	4xØ0.86	0.83	4.09	7.48	5.04	4.84	12.64	3.90	0.61	M20	14	1.96-F05	M6	429.23	150.39	25.58
5	SCREW	A32017	4-6-8-12	2"	5.91	5.00	8xØ0.75	0.91	3.54	8.50	5.51	5.24	12.64	4.29	0.65	M20	14	1.96-F05	M6	601.80	260.41	31.75
6	NUT	CARBON STEEL	2	3"	7.48	6.63	8xØ0.86	1.14	4.80	11.10	7.40	6.57	15.00	5.91	0.81	M24	18	2.75-F07	M8	1389.45	754.11	70.56
7	SPRING WASHER	CARBON STEEL	2	4"	9.06	7.87	8xØ0.86	1.27	5.04	12.01	9.25	7.32	24.02	6.57	0.73	M24	18	4.01-F10	M10	3309.90	1178.31	115.54
8	90° STOP	AISI 316	1	6"	11.02	10.63	12xØ0.86	1.46	7.89	15.87	12.68	0.00	0.00	9.65	1.48	M42	30	4.92-F12	M12	8673.00	3172.95	240.35
9	BUSH	A479-Tp316L	1																			
10	O-RING	FKM (Viton®)	1																			
11	HANDLE	CARBON STEEL	1																			
12	STEM SEAL	GRAPHITE	1																			
13	O-RING	FKM (Viton®)	1																			
14	THRUST WASHER	R.P.T.F.E.	1																			
15	O-RING BUSH	A479-Tp316L	1																			
16	BODY SEAT	GRAPHITE	1																			
17	O-RING	FKM (Viton®)	2																			
18	BALL SEAT	R.P.T.F.E.	2																			
19	SCREW	CARBON STEEL	1																			



SERIES 68J401 API 608 STAINLESS STEEL BALL VALVE

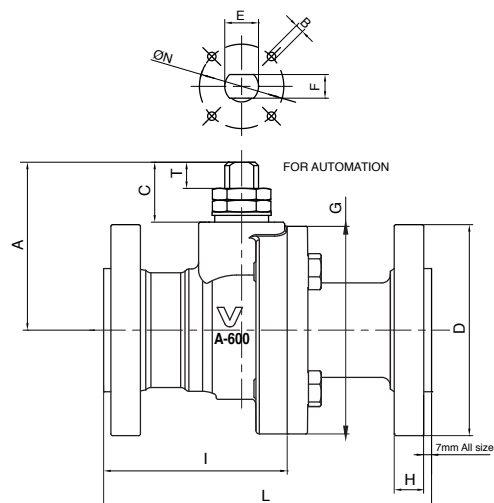
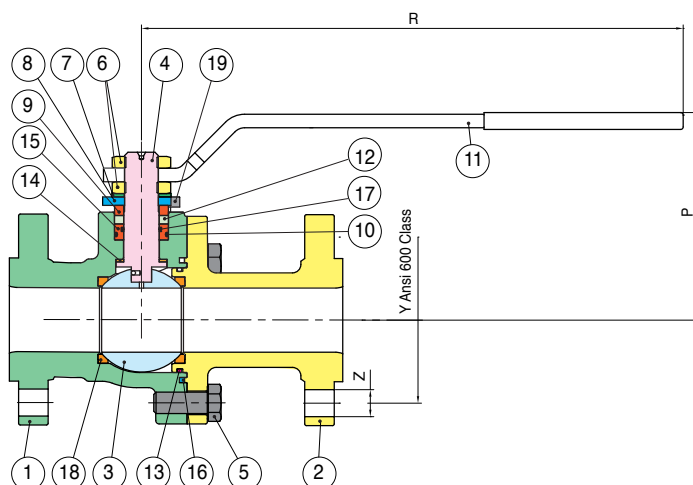
Stainless steel, ANSI class 600, flanged ball valve, full port.

- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
- Temperature range -4°F to 366°F.
- 100% tested according to API 598 standards.
- R.T.F.E seats, packing and thrust washer.
- Blow-out proof stem, locking handle.
- Fire Safe design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Locking device.

68J401: sizes 1/2" to 2".

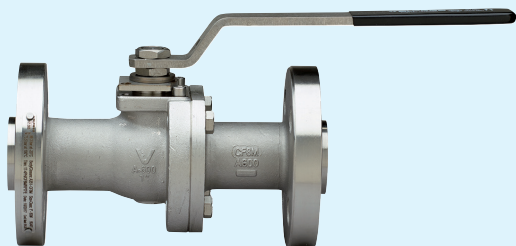
Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N PCS
1	BODY	A351-CF8M	1
2	END CONNECTION	A351-CF8M	1
3	BALL	A479-Tp316	1
4	STEM	A564 Tp630 H1150D (17-4-PH)	1
5	SCREW	A193 B8 Cl.2	4-6
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	A182-F304	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	AISI 316	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (Viton®)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	A2-70	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.63	4xØ0.63	0.58	2.47	5.51	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	159.30	16.59	7.94
3/4"	3.94	3.25	4xØ0.75	0.64	2.64	5.98	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	225.68	30.25	11.25
1"	4.33	3.50	4xØ0.75	0.70	2.78	6.50	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	354.00	55.75	15.88
1 1/2"	4.92	4.50	4xØ0.86	0.83	4.09	7.48	5.04	4.84	12.64	3.90	0.61	M20	14	1.96-F05	M6	610.65	150.39	29.11
2"	5.91	5.00	8xØ0.75	0.91	3.54	8.50	5.51	5.24	12.64	4.29	0.65	M20	14	1.96-F05	M6	1062.00	260.41	38.37



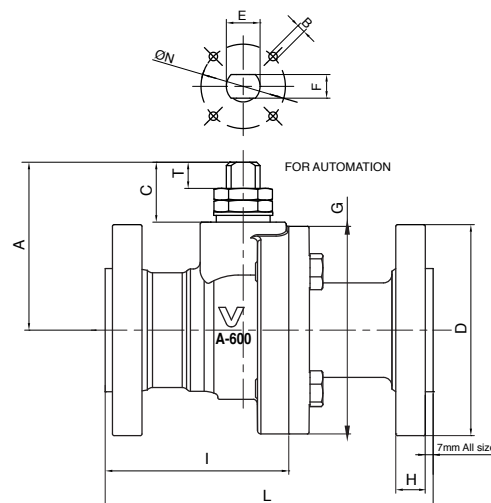
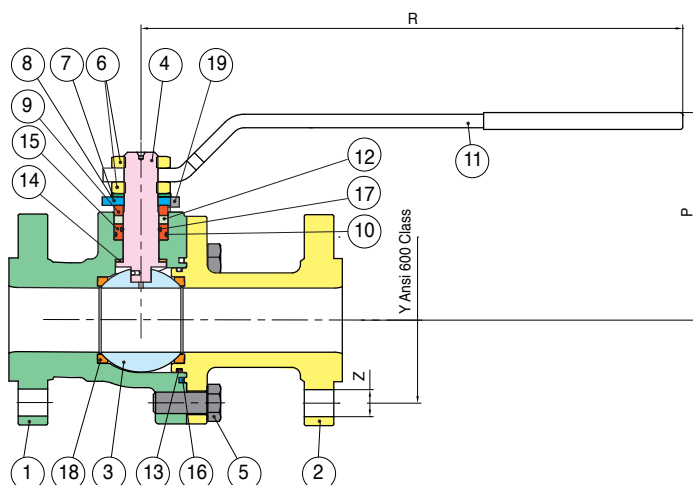
SERIES 68R415 API 608 SUPER DUPLEX STAINLESS STEEL BALL VALVE

- Super Duplex stainless steel, ANSI class 600, flanged ball valve, full port.
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
 - Temperature range -4°F to 366°F.
 - 100% tested according to API 598 standards.
 - R.T.F.E seats, packing and thrust washer.
 - Blow-out proof stem, locking handle.
 - Fire Safe design.
 - Antistatic Device.
 - ISO 5211 mounting pad with double "D" stem.
 - Locking device.

68R415: sizes 1/2" to 2".

Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N PCS
1	BODY	UNS S32780 (ASTM A895-Gr. 6)	1
2	END CONNECTION	UNS S32780 (ASTM A895-Gr. 6)	1
3	BALL	UNS S32780 (ASTM A895-Gr. 6) / A479-F55	1
4	STEM	A564 Tp630 H1150D (17-4-PH)	1
5	SCREW	A193 B8 Cl.2	4-6
6	NUT	STAINLESS STEEL	2
7	SPRING WASHER	STAINLESS STEEL	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (VITON)	1
11	HANDLE	AISI 316	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (VITON)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (VITON)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	A2-70	1

SIZE	D	Y	ØZ	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.63	4xØ0.63	0.58	2.47	5.51	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	159.30	16.59	7.94
3/4"	3.94	3.25	4xØ0.75	0.64	2.64	5.98	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	225.68	30.25	11.25
1"	4.33	3.50	4xØ0.75	0.70	2.78	6.50	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	354.00	55.75	15.88
1 1/2"	4.92	4.50	4xØ0.86	0.83	4.09	7.48	5.04	4.84	12.64	3.90	0.61	M20	14	1.96-F05	M6	610.65	150.39	29.11
2"	5.91	5.00	8xØ0.75	0.91	3.54	8.50	5.51	5.24	12.64	4.29	0.65	M20	14	1.96-F05	M6	1062.00	260.41	38.37



SERIES 68F400 API 608 CARBON STEEL BALL VALVE

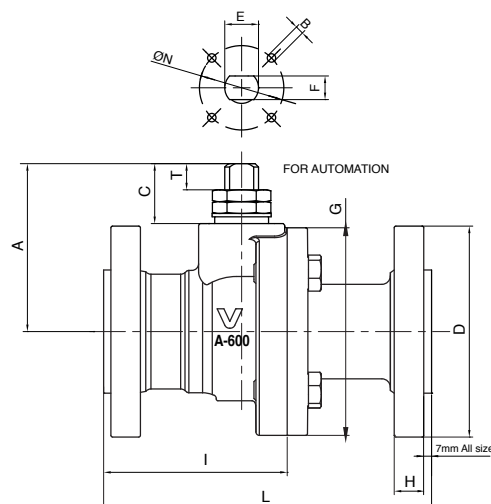
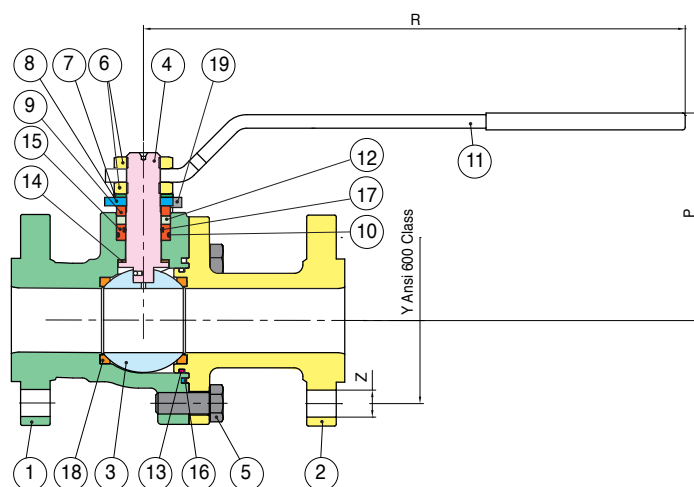
- Carbon steel, ANSI class 600, flanged ball valve, full port.
- API 608, ASME B16.34, ASME B16.10, ASME B16.5, ASME B1.1 design.
- Temperature range: -4°F to 366°F.
- 100% tested according to API 598 standards.
- R.T.F.E seats, packing and thrust washer.
- Blow-out proof stem, locking handle.
- Fire Safe design.
- Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- Locking device.

68F400: sizes 1/2" to 2".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103

Temperature range: -20° +180°
Vacuum: 10⁻³ torr.

Low temperature design
-40°C ON DEMAND



N POS	PART NAME	MATERIAL	N POS
1	BODY	A352-LCC	1
2	END CONNECTION	A352-LCC	1
3	BALL	A479-Tp316	1
4	STEM	A564-Tp316 H115OD (17-4-PH)	1
5	SCREW	A32017	4-6
6	NUT	CARBON STEEL	2
7	SPRING WASHER	CARBON STEEL	2
8	90° STOP	AISI 316	1
9	BUSH	A479-Tp316L	1
10	O-RING	FKM (Viton®)	1
11	HANDLE	CARBON STEEL	1
12	STEM SEAL	GRAPHITE	1
13	O-RING	FKM (Viton®)	1
14	THRUST WASHER	R.P.T.F.E.	1
15	O-RING BUSH	A479-Tp316L	1
16	BODY SEAT	GRAPHITE	1
17	O-RING	FKM (Viton®)	2
18	BALL SEAT	R.P.T.F.E.	2
19	SCREW	CARBON STEEL	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	T	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	Cv	Weight Lbs
1/2"	3.54	2.63	4xØ0.63	0.58	2.47	5.51	3.23	3.74	6.85	2.13	0.27	M12	8	1.65-F04	M5	159.30	16.59	7.94
3/4"	3.94	3.25	4xØ0.75	0.64	2.64	5.98	3.54	3.90	6.85	2.28	0.27	M12	8	1.65-F04	M5	225.68	30.25	11.25
1"	4.33	3.50	4xØ0.75	0.70	2.78	6.50	4.13	3.94	9.84	2.94	0.37	M16	10	1.96-F05	M6	354.00	55.75	15.88
1 1/2"	4.92	4.50	4xØ0.86	0.83	4.09	7.48	5.04	4.84	12.64	3.90	0.61	M20	14	1.96-F05	M6	610.65	150.39	29.11
2"	5.91	5.00	8xØ0.75	0.91	3.54	8.50	5.51	5.24	12.64	4.29	0.65	M20	14	1.96-F05	M6	1062.00	260.41	38.37



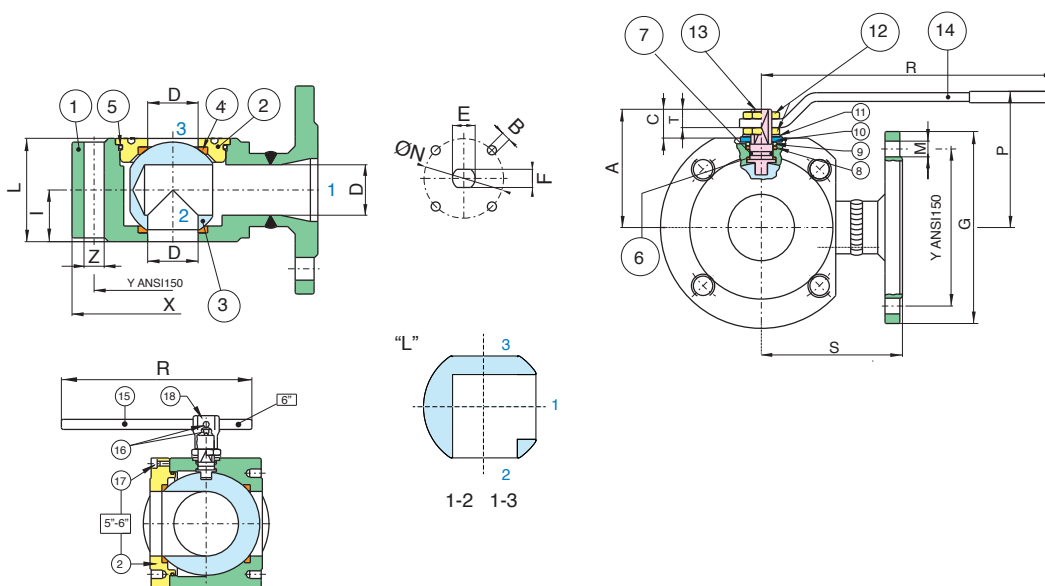
SERIES 776032 (L)

CARBON STEEL 3-WAY BALL VALVE

Compact design, carbon steel, ANSI class 150 flanged 3-way ball valve. stainless steel ball and stem.

- 3-way, diverter, two seats, L reduced port.
- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- 100% tested.
- TUV T.A. Luft approved.
- ISO 5211 mounting pad with double "D" stem.

776032: sizes 1/2" to 6".



POS	PART NAME	MATERIAL	POS	SIZE	X	Y	Z UNC	I	L	R	P	A	C	T	G	M	D	S	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	CV	Weight Lbs
1	BODY	ASTM A105	1	1/2"	3.50	2.38	4X1/2"	0.78	1.57	5.17	2.54	1.85	0.61	0.35	3.50	4 X Ø 0.62	0.39	2.99	0.39	0.27	1.26	4XM5	35	3.2	4.91
2	END CONNECTION	ASTM A105	1	3/4"	3.88	2.75	4X1/2"	0.78	1.57	5.17	2.71	1.95	0.53	0.35	3.88	4 X Ø 0.62	0.59	3.23	0.39	0.27	1.26	4XM5	115	6	6.30
3	BALL	AISI 304	1	1"	4.25	3.12	4X1/2"	0.90	1.81	6.87	3.17	2.32	0.70	0.49	4.25	4 X Ø 0.62	0.78	3.38	0.47	0.31	1.65 (F04)	4XM5	124	10.6	8.57
4	BALL SEATS	R.P.T.F.E.	2	1 1/4"	4.62	3.50	4X1/2"	1.14	2.28	6.87	3.33	2.52	0.61	0.45	4.62	4 X Ø 0.62	0.98	3.93	0.47	0.31	1.65 (F04)	4XM5	150	16.6	13.69
5	O-RING	FKM (Viton®)	1	1 1/2"	5.00	3.88	4X1/2"	1.39	2.79	9.86	4.03	3.07	0.96	0.51	5.00	4 X Ø 0.62	1.26	4.13	0.63	0.39	1.97 (F05)	4XM6	195	29.9	18.73
6	THRUST WASHER	P.T.F.E.	1	2"	6.00	4.75	4X5/8"	1.61	3.22	9.86	4.29	3.35	0.98	0.53	6.00	4 X Ø 0.75	1.57	4.52	0.63	0.39	1.97 (F05)	4XM6	292	46.7	27.05
7	O-RING	FKM (Viton®)	1	2 1/2"	7.00	5.50	4X5/8"	2.08	4.17	12.65	4.29	4.11	1.10	0.71	7.00	4 X Ø 0.75	1.97	4.92	0.78	0.55	2.76 (F07)	4XM8	540	73.1	44.10
8	STEM SEAL	P.T.F.E.	1	3"	7.50	6.00	4X5/8"	2.40	4.80	12.65	5.37	4.45	1.10	0.71	7.50	4 X Ø 0.75	2.52	5.90	0.78	0.55	2.76 (F07)	4XM8	637	133.9	53.66
9	PACKING GLAND	STEEL	1	4"	9.00	7.50	8X5/8"	2.99	5.98	15.01	6.12	5.35	1.36	0.86	9.00	8 X Ø 0.75	2.99	6.26	0.94	0.70	4.02 (F10)	4XM10	956	188.7	84.76
10	END STOP	STEEL (1 1/2" - 2") STEEL (2 1/2" - 6")	2 1	5"	9.84	8.50	8x3/4"	3.85	7.70	15.02	7.01	6.25	1.36	0.86	10.03	8 X Ø 0.86	3.93	7.48	0.94	0.72	4.92 (F12)	4xM10	1018	326.7	140.00
11	SPRING WASHER	STEEL	2	6***	11.08	9.50	8x3/4"	4.56	9.13	27.6	9.92	7.90	1.92	1.18	11.02	8 X Ø 0.86	4.90	8.26	1.65	1.18	4.92 (F12)	4xM12	2903	510.5	220.00
12	NUT	STEEL	2																						
13	STEM	AISI 304	1																						
14	HANDLE	STEEL	1																						
15	HANDLE DN 150	CARBON STEEL	1																						
16	SCREW	CARBON STEEL	1																						
17	SCREW	CARBON STEEL	8																						
18	BODY HANDLE	EN-GJL250	1																						

* For automation please consult factory.

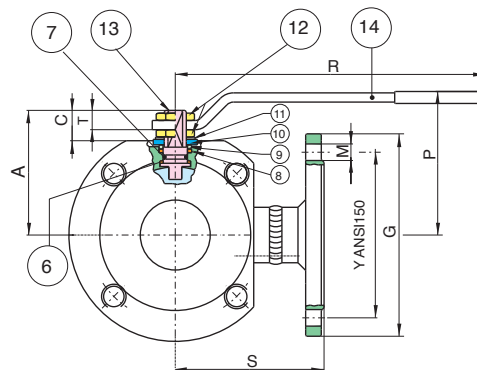
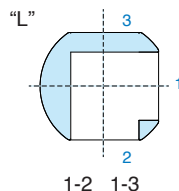
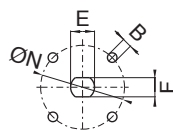
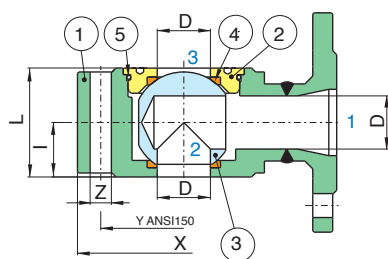


SERIES 776018 (L) STAINLESS STEEL 3-WAY BALL VALVE

Compact design, stainless steel, ANSI class 150 flanged 3-way ball valve.

- 3-way, diverter, two seats, L reduced port.
- Temperature range -4°F to 366°F.
- Blow-out proof stem.
- R.P.T.F.E. seats, packing and thrust washer.
- 100% tested.
- TUV T.A. Luft approved.
- ISO 5211 mounting pad with double "D" stem.

776018: sizes 1/2" to 4".



N° POS	PART NAME	MATERIAL	N° PCS
1	BODY	AISI 316	1
2	END CONNECTION	AISI 316	1
3	BALL	AISI 316	1
4	BALL SEATS	R.P.T.F.E.	2
5	O-RING	FKM (Viton®)	1
6	THRUST WASHER	P.T.F.E.	1
7	O-RING	FKM (Viton®)	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1
10	END STOP	STEEL (1/2" - 2") STEEL (2 1/2" - 4")	2 1
11	SPRING WASHER	STEEL	2
12	NUT	STEEL	2
13	STEM	AISI 316	1
14	HANDLE	STEEL	1

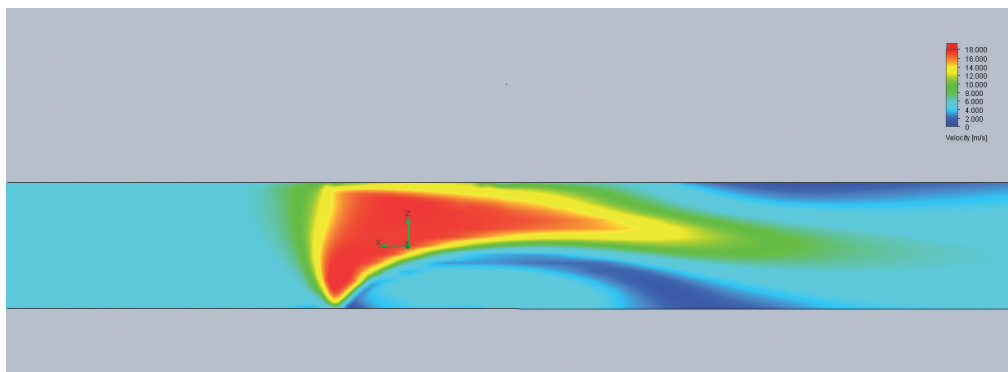
SIZE	X	Y	Z UNC	I	L	R	P	A	C	T	G	M	D	S	E	F	ISO 5211 ØN	B	Break Torque (in/Lbs)	CV	Weight Lbs
1/2"	3.50	2.38	4X1/2"	0.78	1.57	5.17	2.54	1.85	0.61	0.35	3.50	4 X Ø 0.62	0.39	2.99	0.39	0.27	1.26	4XM5	35	3.2	4.91
3/4"	3.88	2.75	4X1/2"	0.78	1.57	5.17	2.71	1.95	0.53	0.35	3.88	4 X Ø 0.62	0.59	3.23	0.39	0.27	1.26	4XM5	115	6	6.30
1"	4.25	3.12	4X1/2"	0.90	1.81	6.87	3.17	2.32	0.70	0.49	4.25	4 X Ø 0.62	0.78	3.38	0.47	0.31	1.65 (F04)	4XM5	124	10.6	8.57
1 1/4"	4.62	3.50	4X1/2"	1.14	2.28	6.87	3.33	2.52	0.61	0.45	4.62	4 X Ø 0.62	0.98	3.93	0.47	0.31	1.65 (F04)	4XM5	150	16.6	13.69
1 1/2"	5.00	3.88	4X1/2"	1.39	2.79	9.86	4.03	3.07	0.96	0.51	5.00	4 X Ø 0.62	1.26	4.13	0.63	0.39	1.97 (F05)	4XM6	195	29.9	18.73
2"	6.00	4.75	4X5/8"	1.61	3.22	9.86	4.29	3.35	0.98	0.53	6.00	4 X Ø 0.75	1.57	4.52	0.63	0.39	1.97 (F05)	4XM6	292	46.7	27.05
2 1/2"	7.00	5.50	4X5/8"	2.08	4.17	12.65	4.29	4.11	1.10	0.71	7.00	4 X Ø 0.75	1.97	4.92	0.78	0.55	2.76 (F07)	4XM8	540	73.1	44.10
3"	7.50	6.00	4X5/8"	2.40	4.80	12.65	5.37	4.45	1.10	0.71	7.50	4 X Ø 0.75	2.52	5.90	0.78	0.55	2.76 (F07)	4XM8	637	133.9	53.66
4"	9.00	7.50	8X5/8"	2.99	5.98	15.01	6.12	5.35	1.36	0.86	9.00	8 X Ø 0.75	2.99	6.26	0.94	0.70	4.02 (F10)	4XM10	956	188.7	84.76

Floating control valves

Valpres has expanded its own product range adding V-ball control ball valves. This type of ball can be mounted on the valve series INOX-VAL, RADIAMONT, WAFER, SPLIT-BODY, WAFER-SPLIT. V-ball control valves are available with the patterns V30-60, V60, V90.

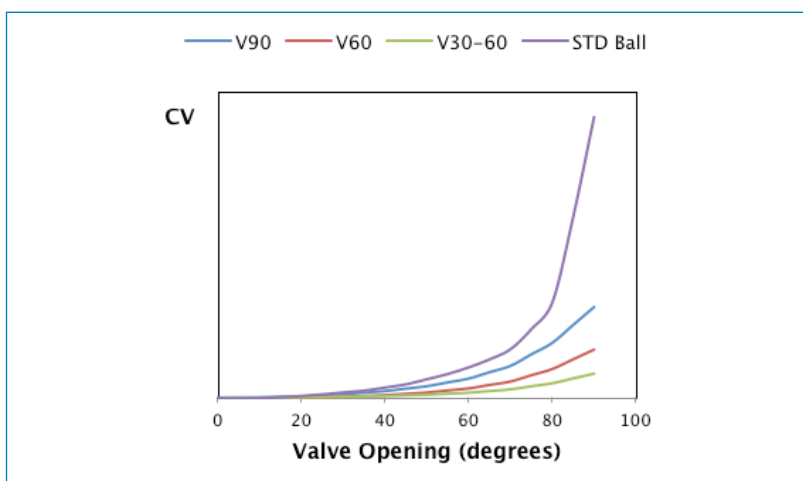
Valve type	Pressure Class Range	Openings (Degrees)	10°	20°	30°	40°	50°	60°	70°	80°	90°
		SIZE [inch]	Cv	Cv	Cv	Cv	Cv	Cv	Cv	Cv	Cv
 V 90	150-300 CLASS	1/2"	0	0.1	0.3	0.7	1.2	2.0	3.4	5.9	10
		3/4"	0	0.3	0.8	1.6	2.7	4.6	7.7	13.3	22
		1"	0	0.5	1.4	2.8	4.9	8.2	13.7	23.7	39
		1 1/4"	0	0.8	2.2	4.5	8.0	13.4	22.4	38.8	64
		1 1/2"	0	1.1	3.3	6.6	11.6	19.5	32.6	56.4	93
		2"	0	2.0	6.0	12.0	21.2	35.6	59.5	102.9	170
		3"	0	4.7	13.6	27.3	48.1	80.9	135.4	234.1	387
		4"	0	8.1	23.6	47.5	83.8	140.8	235.7	407.5	675
		6"	0	17.7	51.6	103.8	183.1	307.6	514.9	890.2	1473
F ₁	-	-	0.94	0.93	0.92	0.88	0.85	0.81	0.75	0.65	0.50
X ₁	-	-	0.84	0.86	0.84	0.82	0.82	0.82	0.79	0.62	0.24
 V 60	150-300 CLASS	1/2"	0	0.1	0.2	0.4	0.7	1.2	1.9	3.3	6
		3/4"	0	0.1	0.4	0.9	1.5	2.6	4.3	7.5	12
		1"	0	0.3	0.8	1.6	2.7	4.6	7.7	13.4	22
		1 1/4"	0	0.4	1.3	2.5	4.5	7.6	12.7	21.9	36
		1 1/2"	0	0.7	2.0	4.0	7.1	11.9	20.0	34.5	57
		2"	0	1.1	3.1	6.3	11.1	18.7	31.2	54.0	89
		3"	0	2.7	7.9	16.0	28.2	47.4	79.3	137.1	227
		4"	0	4.3	12.4	25.0	44.1	74.1	124.1	214.5	355
		6"	0	9.6	28.0	56.3	99.3	166.8	279.3	482.8	799
F ₁	-	-	0.94	0.93	0.92	0.88	0.85	0.81	0.75	0.65	0.50
X ₁	-	-	0.84	0.86	0.84	0.82	0.82	0.82	0.79	0.62	0.24
 V 30-60	150-300 CLASS	1/2"	0	0.0	0.1	0.2	0.4	0.6	1.0	1.7	3
		3/4"	0	0.1	0.2	0.5	0.8	1.3	2.2	3.9	6
		1"	0	0.1	0.4	0.8	1.4	2.4	4.0	6.9	11
		1 1/4"	0	0.2	0.7	1.3	2.3	3.9	6.5	11.3	18
		1 1/2"	0	0.3	1.0	2.0	3.5	5.9	9.8	17.0	28
		2"	0	0.5	1.5	3.1	5.5	9.2	15.4	26.7	44
		3"	0	1.3	3.9	7.8	13.8	23.2	38.9	67.2	111
		4"	0	2.1	6.1	12.3	21.6	36.3	60.8	105.2	174
		6"	0	4.7	13.7	27.6	48.7	81.9	137.0	236.9	392
F ₁	-	-	0.94	0.93	0.92	0.88	0.85	0.81	0.75	0.65	0.5
X ₁	-	-	0.84	0.86	0.84	0.82	0.82	0.82	0.79	0.62	0.24

Quotes valid for series: Inox-val, Radiamont, Wafer and Split Body for the relevant sizes and pressure classes.



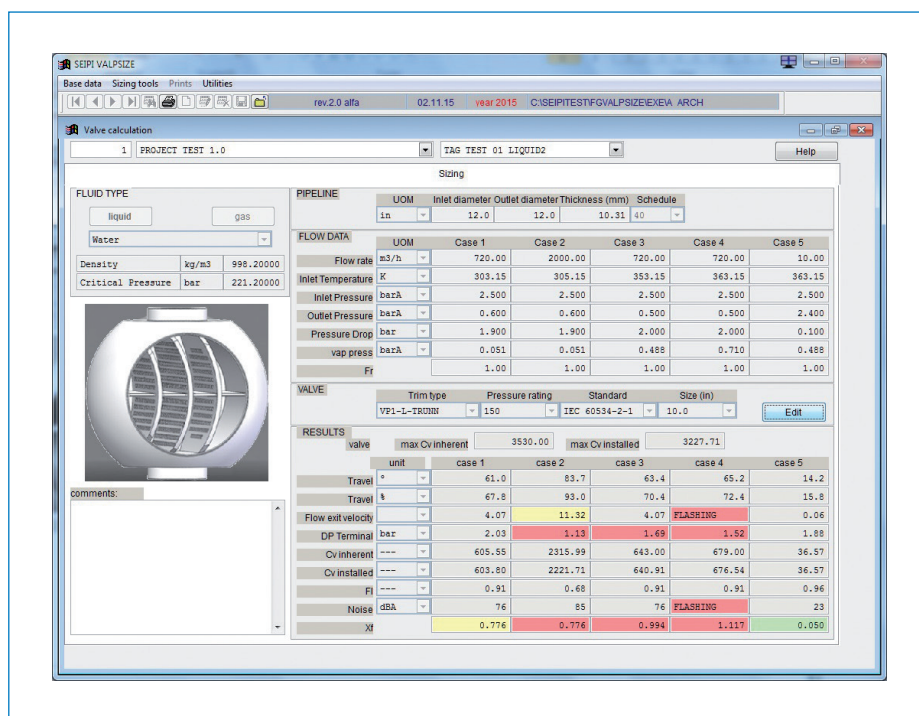
Example velocity plot for V-ball 30-60

V-ball can be used on liquid, gas and steam service and grants an accurate and precise flow control with a rangeability up to 500:1. Valve design has been validated using finite element analysis software FEA, computational fluid dynamics software CFD and Flow Loop testing. CV and KV curves are available upon request.



VALPSIZE software, available upon request, allows the user to size the valves properly (ISA 75.02, IEC 60534-2-1) to check fluid velocity, valve openings, noise and other critical issues.

Valpres control valves are available with manual lever, Valbia electric or pneumatic actuators.



VALPRES

CONTROL VALVE CALCULATION SHEET

VALPRES rev.3.0.xls

tag no TAG TEST 01 LIQUID2

project PROJECT TEST 1.0

customer Petrofac

end user HFD 126156

quotation no 27052014-05

date 29.05.2014

LIQUID

Material	Water
Density kg/m3	999.20
Critical Pressure barA	221.20

PIPELINE

unit	inlet dia	outlet dia	thickness mm	schedule
in	12.0	12.0	10.31	40

FLOW DATA

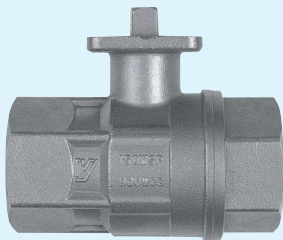
unit	case 1	case 2	case 3	case 4	case 5
flow rate m3/h	720.00	2000.00	720.00	720.00	10.00
inlet temp K	303.15	305.15	353.15	363.15	363.15
inlet press barA	2.500	2.500	2.500	2.500	2.500
outlet press barA	0.600	0.600	0.500	0.500	2.400
pressure drop bar	1.900	1.900	2.000	2.000	0.100
vap press barA	0.051	0.051	0.485	0.710	0.485
Reynold's nr	1.00	1.00	1.00	1.00	1.00

VALVE

type	pressure rating	ISA	size (in)
VP1-L-TR000	150	IEC 60534-2-1	10.0

RESULTS

valve	max Cv inherent	3530.00	max Cv installed	3227.71
Travel	61.0	83.7	63.4	65.2
Travel %	67.8	93.0	70.4	72.4
Flow velocity m/s	4.07	11.32	4.07	FLASHING
DP terminal bar	2.03	1.13	1.69	1.52
Cv inherent	605.55	2315.99	643.00	679.00
Cv installed	603.80	2221.71	640.91	676.54
F1	0.91	0.68	0.91	0.91
Noise dBA	76	85	76	FLASHING
Xi	0.776	0.776	0.994	1.117



SERIES 700076-V36 - 700076-V6 - 700076-V9 STAINLESS STEEL DIRECT MOUNT BALL VALVE



2-piece stainless steel FNPT threaded, direct mount ball valve, full port.

- Pressure rating 1000 psi, 150 psi steam.
- Temperature -4°F to +366°F.
- Blow-out proof stem.
- 23% carbon and 2% graphite filled P.T.F.E. seats.
- Low operating torque.
- Double O-ring stem packing.
- 100% electronically tested in the open and closed position at 80 psi.
- ISO 5211 mounting pad.
- ANSI B1.20.1 connections.

700076V36 - 700076V6 - 700076V9: size 1/2" to 3".

NEW

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

V-ball options



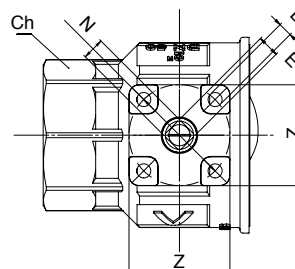
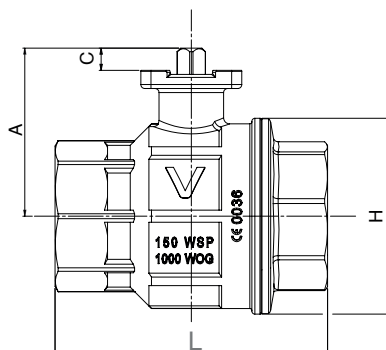
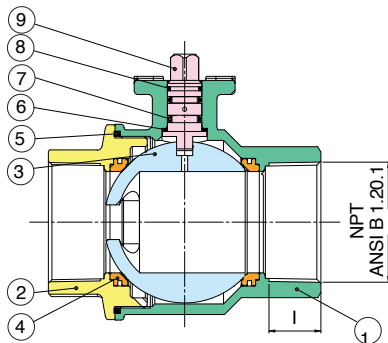
V30-60



V6

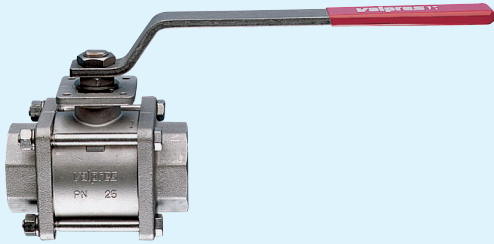


V9



N POS	PART NAME	MATERIAL	N PCS
1	BODY	CF8M	1
2	END CONNECTION	CF8M	1
3	BALL	A182-F316	1
4	BALL SEAT	23% CARBON + 2% GRAPHITE FILLED P.T.F.E.	2
5	BODY SEAT	P.T.F.E.	1
6	ANTI-FRICTION RING	TFM	1
7	O-RING	FKM (Viton)	2
8	STEM SEAT	Virgin P.T.F.E.	1
9	STEM	A182-F316	1

SIZE	I	L	H	CH	A	C	E mm	ISO 5211	B	Z	Cv	psi	Weight Lbs	Break Torque in. lbs.
1/2"	0.59	2.63	1.35	1.06	1.63	0.35	9	F03	0.23	1.49	22.21	1000	0.68	53.10
3/4"	0.64	3.07	1.65	1.25	1.71	0.35	9	F03	0.23	1.49	40.50	1000	0.91	53.10
1"	0.75	3.54	2.02	1.61	2.10	0.35	9	F03	0.23	1.49	74.63	1000	1.35	53.10
1 1/4"	0.84	3.93	2.53	1.96	2.24	0.35	9	F03	0.23	1.49	120.10	1000	2.22	53.10
1 1/2"	0.84	4.40	3.03	2.16	2.91	0.43	11	F05	0.27	1.96	201.32	1000	3.69	150.46
2"	1.01	5.31	3.81	2.75	3.27	0.43	11	F05	0.27	1.96	348.60	1000	6.49	150.46
2 1/2"	1.22	6.32	4.64	3.39	4.94	0.66	17	F07/F10	0.39/0.47	3.64	631.37	800	16.38	484
3"	1.34	7.01	5.48	4.09	5.34	0.71	17	F07/F10	0.39/0.47	3.64	1009.48	800	22.82	772



SERIES 710190-V36 - 710190-V6 - 710190-V9 STAINLESS STEEL 3-PC V-BALL VALVE

3-piece stainless steel 1000 psi-250 psi stem, FNPT threaded V-ball valve, 30-60, 60,90 degrees V ports.

- Temperature range -4°F to 406°F.
- Blow-out proof stem, Antistatic Device.
- ISO 5211 mounting pad with double "D" stem.
- 100% tested.
- TUV T.A. Luft approved.
- 25% carbon filled P.T.F.E. ball seats; thermal relief hole in the ball.

710190V36 - 710190V6 - 710190V9: size 1/2" to 4".

710061V36 - 710061V6 - 710061V9: SOCKET WELD - size 1/2" to 4".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

V-ball options



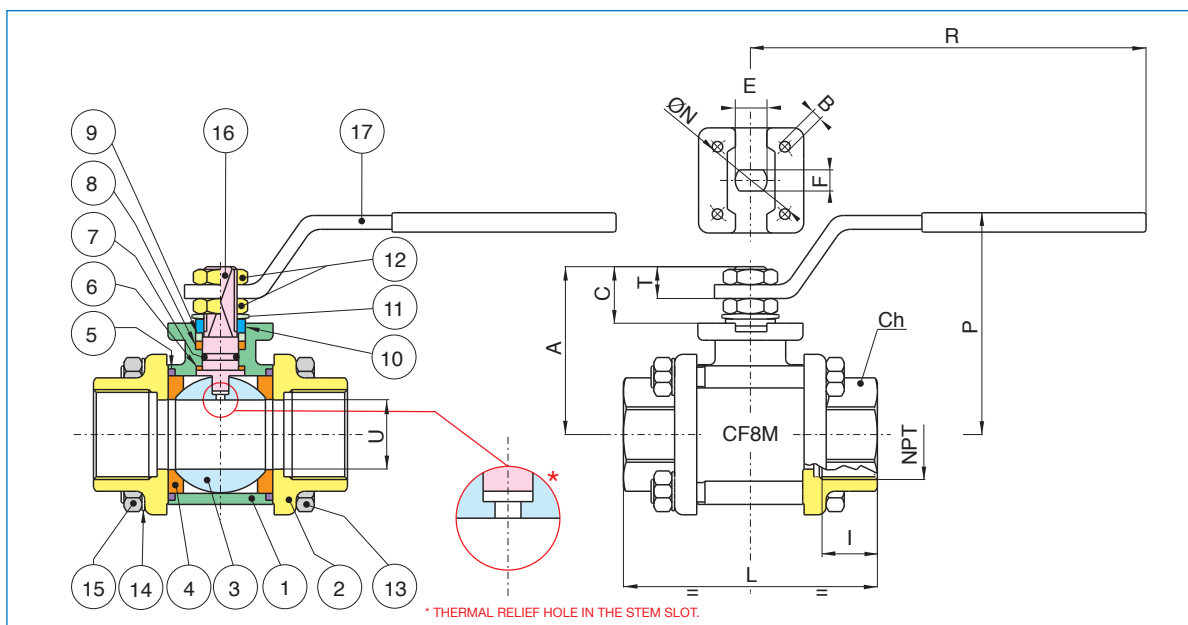
V30-60



V6



V9



N POS	PART NAME	MATERIAL	N POS	SIZE	U	I	L	CH	R	P	A	C	T	E	F	ISO 5211 ØN	B	psi	Weight Lbs
1	BODY	CF8M	1	1/2"	0.59	0.59	2.55	1.06	5.17	2.51	1.85	0.59	0.39	0.39	0.27	1.41 (F03)	0.23	250	0.88
2	END CONNECTION	CF8M	2	3/4"	0.78	0.64	2.99	1.25	5.17	2.67	2.02	0.59	0.39	0.39	0.27	1.65 (F04)	0.21	250	1.32
3	BALL	AISI 316	1	1"	0.98	0.75	3.62	1.61	6.87	3.09	2.36	0.76	0.49	0.47	0.31	1.65 (F04)	0.23	250	2.42
4	BALL SEAT	R.P.T.F.E.	2	1 1/4"	1.25	0.84	4.19	1.96	6.87	3.28	2.53	0.76	0.49	0.47	0.31	1.65 (F04)	0.21	250	3.36
5	O-RING	FKM (Viton®)	2	1 1/2"	1.49	0.84	4.56	2.16	9.86	3.93	3.11	0.94	0.64	0.62	0.39	1.96 (F05)	0.25	250	4.61
6	STEM SEAL	R.P.T.F.E.	1	2"	1.96	1.01	5.35	2.75	9.86	4.21	3.38	0.94	0.64	0.62	0.39	1.96 (F05)	0.25	250	7.03
7	O-RING	FKM (Viton®)	1	3"	3.15	1.31	7.08	4.13	12.65	5.41	4.48	1.10	0.70	0.78	0.55	2.75 (F07)	M8	250	29.45
8	STEM SEAL	R.P.T.F.E.	1	4"	3.93	1.54	8.54	5.11	15.01	6.16	5.39	1.35	0.86	0.94	0.70	4.01 (F10)	M10	250	46.79
9	PACKING GLAND	AISI 303 (1/4" - 2") STEEL (2 1/2" - 4")	1																
10	END STOP	AISI 430 (1/4" - 2") STEEL (2 1/2" - 4")	2																
11	SPRING WASHER	STEEL (2 1/2" - 4")	2																
12	NUT	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	2																
13	BOLT	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	4																
14	WASHER	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	4																
15	NUT	AISI 304 (1/4" - 2") STEEL (2 1/2" - 4")	4																
16	STEM	AISI 316	1																
17	HANDLE	AISI 430 (1/4" - 2") STEEL (2 1/2" - 4")	1																



SERIES 723102-V36 - 723102-V6 - 723102-V9

DIRECT MOUNT

STAINLESS STEEL WAFER V-BALL VALVE

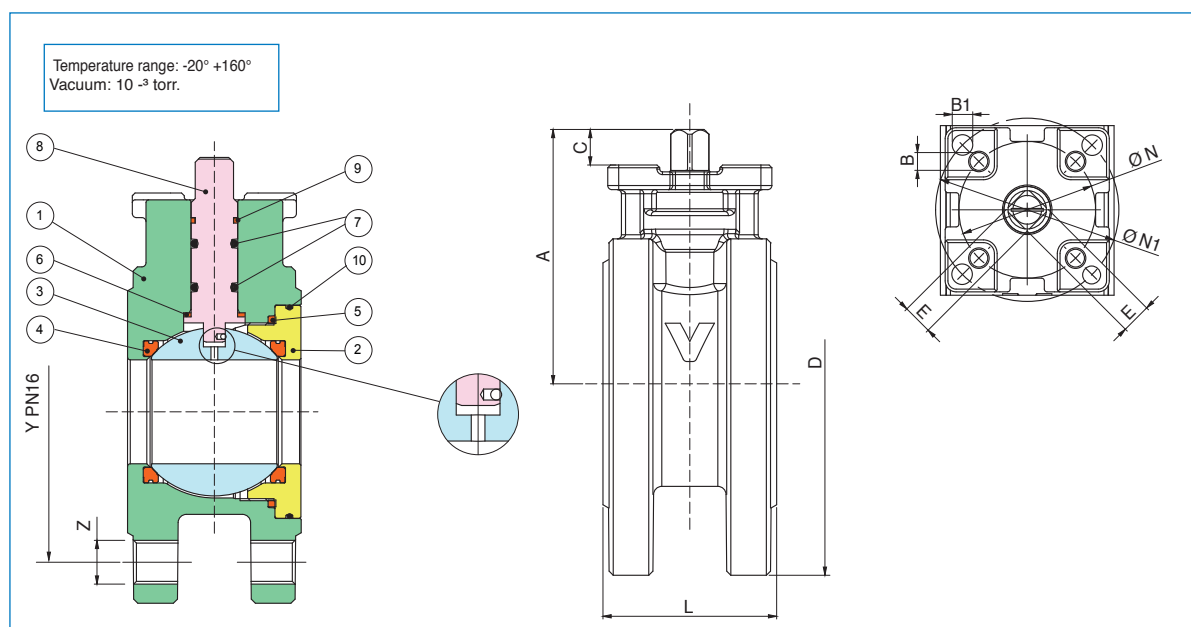
Direct mount Stainless steel ANSI class 150 flanged V-ball valve 30-60, 60, 90 degrees V ports.

- Temperature range -4°F to +366°F.
- Antistatic stem device.
- Blow-out proof stem.
- TFM-MPTFE ball seats and thrust washer standard.
- Triple stem seals - two Viton (FKM) O-rings and one P.T.F.E. seat.
- 100% electronically tested in the open and closed position at 80 psi
- Low torque design.

723102V36 - 723102V6 - 723102V9: size 1" to 4".

NEW

V-ball options



V30-60



V6



V9

N POS	PART NAME	MATERIAL	N PCS	SIZE	D	Y	Z	L	A	C	E	ISO 5211 ØN	B	B1	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	A351-CF8M	1	1"	4.33	3.35	4x5/8"	1.89	2.76	0.43	9	F03/F05	0.22	0.28	89	74.63	5.29
2	END CONNECTION	A479-Tp316/A182-F316	1	1 1/4"	5.12	3.94	4x5/8"	2.13	3.23	0.39	9	F03/F05	0.22	0.28	116	120.10	7.72
3	BALL	A351-CF8M	1	1 1/2"	5.51	4.33	4x3/4"	2.50	3.66	0.51	11	F05	0.26	-	151	201.32	9.92
4	BALL SEAT	TFM-MPTFE	2	2"	6.10	4.92	8x5/8"	3.23	4.00	0.53	11	F05/F07	0.26	0.35	177	348.60	14.77
5	BODY SEAT	P.T.F.E.	1	2 1/2"	7.09	5.71	8x3/4"	4.06	5.06	0.73	14	F07	0.35	-	284	596.66	24.03
6	THRUST WASHER	TFM-MPTFE	1	3"	7.48	6.30	8x3/4"	4.80	5.43	0.71	14	F07	0.35	-	390	1009.48	30.87
7	O-RING	FKM (Viton®)	2	4"	8.66	7.09	8x3/4"	5.98	6.02	0.73	17	F07	0.35	-	531	1577.34	46.08
8	STEM	A564-Tp630 H1150D (17-4-PH)	1														
9	STEM SEAT	P.T.F.E.	1														
10	O-RING	FKM (Viton®)	1														



SERIES 724102-V36 - 724102-V6 - 724102-V9

DIRECT MOUNT

CARBON STEEL WAFER V-BALL VALVE

Direct mount Carbon steel ANSI class 150 flanged V-ball valve 30-60, 60, 90 degrees V ports.

- Temperature range -4°F to +366°F.
- Antistatic stem device.
- TFM-MPTFE ball seats and thrust washer standard.
- Triple stem seals - two Viton (FKM) O-rings and one P.T.F.E. seat.
- ISO 5211 Pad.
- Low torque design.

724102V36 - 724102V6 - 724102V9: size 1" to 4".

NEW

V-ball options



V30-60

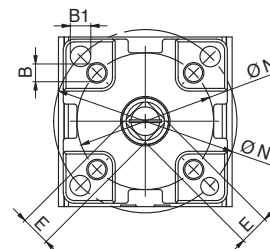
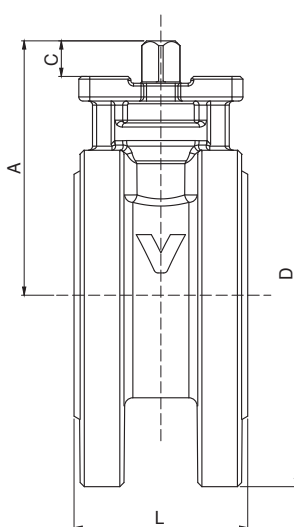
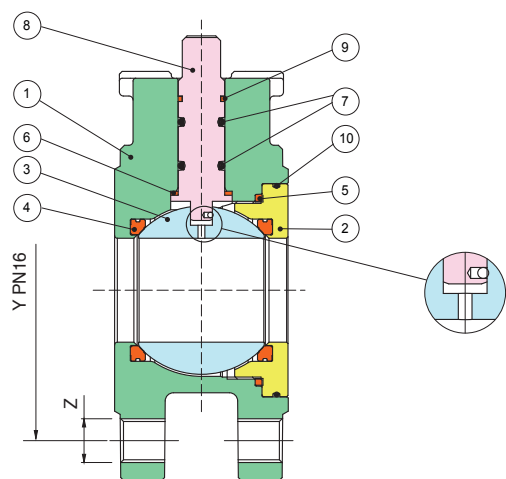


V6

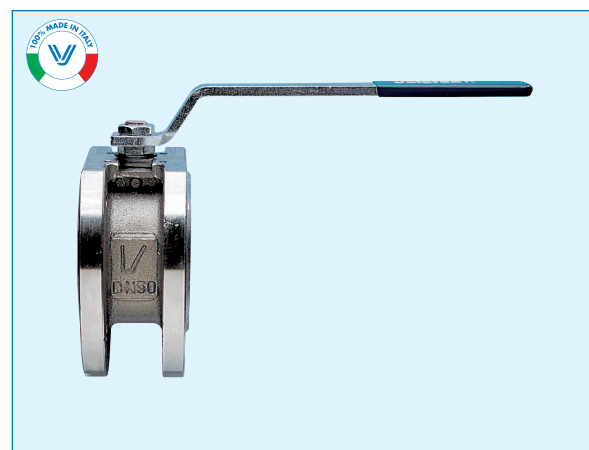


V9

Temperature range: -20° +160°
Vacuum: 10⁻³ torr.



N POS	PART NAME	MATERIAL	N PCS	SIZE	D	Y	Z	L	A	C	E	ISO 5211 ØN	B	B1	Break Torque (in/Lbs)	Cv	Weight Lbs
1	BODY	A352-LCB	1	1"	4.33	3.35	4x5/8"	1.89	2.76	0.43	9	F03/F05	0.22	0.28	74.63	89	5.29
2	END CONNECTION	ASTM A105	1	1-1/4"	5.12	3.94	4x5/8"	2.13	3.23	0.39	9	F03/F05	0.22	0.28	120.10	116	7.72
3	BALL	A351-CF8/A182-F304	1	1-1/2"	5.51	4.33	4x3/4"	2.50	3.66	0.51	11	F05	0.26	-	201.32	151	9.92
4	BALL SEAT	TFM-MPTFE	2	2"	6.10	4.92	8x5/8"	3.23	4.00	0.53	11	F05/F07	0.26	0.35	348.60	177	14.77
5	BODY SEAT	P.T.F.E.	1	2-1/2"	7.09	5.71	8x3/4"	4.06	5.06	0.73	17	F07	0.35	-	596.66	284	24.03
6	THRUST WASHER	TFM-MPTFE	1	3"	7.48	6.30	8x3/4"	4.80	5.43	0.71	17	F07	0.35	-	1009.48	390	30.87
7	O-RING	FKM (Viton®)	2	4"	8.66	7.09	8x3/4"	5.98	6.02	0.73	17	F07	0.35	-	1577.34	531	46.08
8	STEM	A564-Tp630 H1150D (17-4-PH)	1														
9	STEM SEAT	P.T.F.E.	1														
10	O-RING	FKM (Viton)	1														



SERIES 720370-V36 - 720370-V6 - 720370-V9 STAINLESS STEEL WAFER V-BALL VALVE

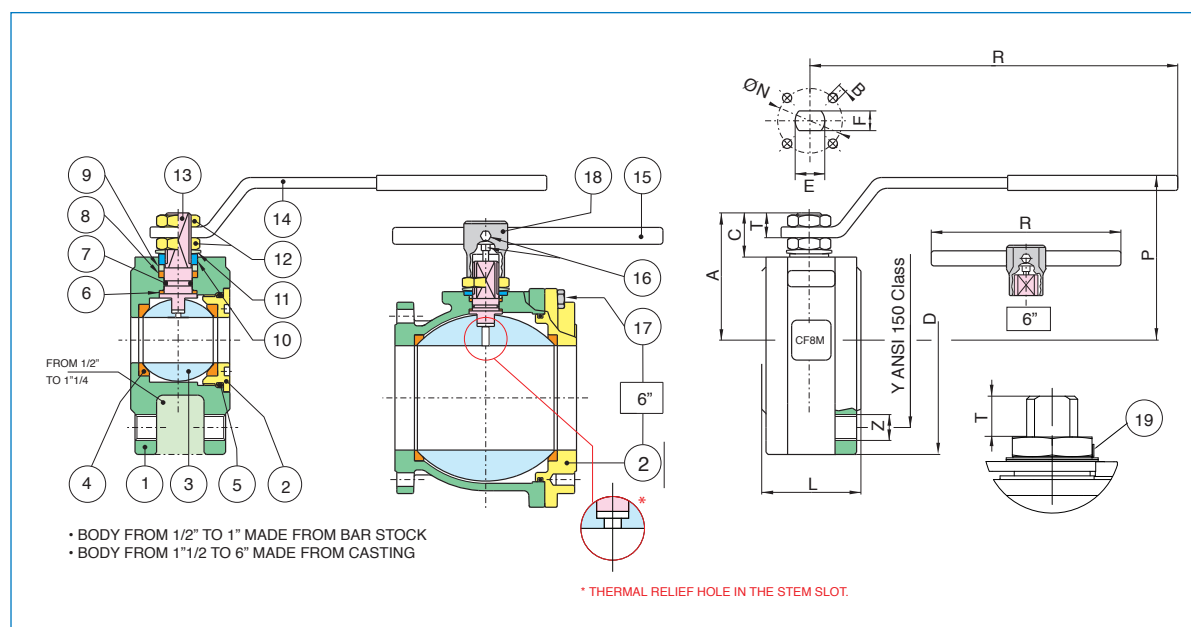
Stainless steel ANSI class 150 flanged V-ball valve 30-60, 60, 90 degrees V ports.

- Temperature range -4°F to 406°F.
- Blow-out proof stem, Antistatic Device.
- R.P.T.F.E. seats, packing and thrust washer.
- Thermal relief hole in the ball.
- Space saving design.
- 100% tested.
- TUV T.A. Luft approved.
- ANSI B16.34 design.
- ISO 5211 mounting pad and double "D" stem.

720370V36 - 720370V6 - 720370V9: size 1/2" to 6".

COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

V-ball options



V30-60

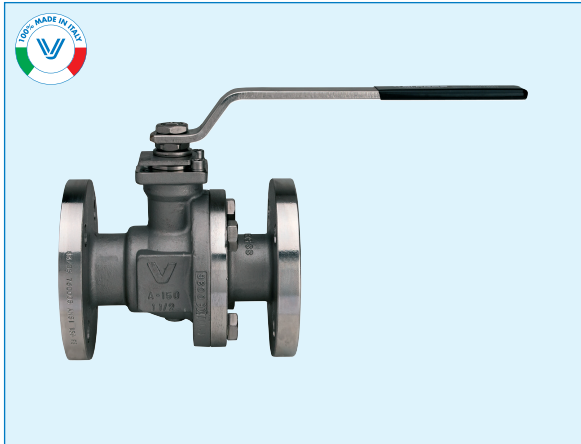


V6



V9

N POS	PART NAME	MATERIAL	N POS	SIZE	D	Y	Z UNC	L	R	P	A	C	T	E	F	ISO 5211 ØN	B	Weight Lbs
1	BODY	A479-316 / A351 CF8M	1	1/2"	3.50	2.38	4x1/2"	1.37	5.17	2.53	1.85	0.61	0.35	M10	0.27	1.26 (F03)	4XM5	2.86
2	END CONNECTION	A479-316 / A351 CF8M	1	3/4"	3.88	2.75	4x1/2"	1.57	5.17	2.71	2.02	0.61	0.35	M10	0.27	1.26 (F03)	4XM5	3.96
3	BALL	A479-316 / A351 CF8M	1	1"	4.25	3.12	4x1/2"	1.81	6.87	3.16	2.40	0.76	0.45	M12	0.31	1.65 (F04)	4XM5	5.95
4	BALL SEATS	R.P.T.F.E.	2	1 1/2"	5.00	3.88	4x1/2"	2.50	9.86	4.03	3.07	0.96	0.51	M16	0.39	1.97 (F05)	4XM6	7.27
5	RING	FKM (Viton®)	1	2"	6.00	4.75	4x5/8"	3.22	9.86	4.37	3.42	0.98	0.53	M16	0.39	1.97 (F05)	4XM6	12.12
6	THRUST WASHER	R.P.T.F.E.	1	3"	7.50	6.00	4x5/8"	4.80	12.65	5.45	4.52	1.12	0.70	M20	0.55	2.76 (F07)	4XM8	28.21
7	RING	FKM (Viton®)	1	4"	9.00	7.50	8x5/8"	5.98	15.01	6.16	5.39	1.35	0.86	M24	0.70	4.02 (F10)	4XM10	46.07
8	STEM SEAL	R.P.T.F.E.	1	6"	11.00	9.50	8x3/4"	9.13	27.55	9.33	7.93	2.02	1.18	M42	1.18	4.92 (F12)	4XM12	101.63
9	PACKING GLAND	STEEL	1															
10	END STOP	AISI 430 (1/2"-2") STEEL (2 1/2"-6")	2 1															
11	SPRING WASHER	STEEL	2															
12	NUT	STEEL	2															
13	STEM	A479-316 / A351 CF8M	1															
14	HANDLE	STEEL	1															
15	HANDLE DN 150-200	STEEL	1															
16	SCREW	STEEL	2															
17	SCREW	STEEL	8															
18	BODY HANDLE DN150-200	CAST IRON	1															
19	UNSCREWING GROWER	A182-F316	1															



COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

SERIES 760021V36 - 760021V6 - 760021V9 STAINLESS STEEL V-BALL VALVE

- Stainless steel, ANSI class 150 flanged ends V-ball valve 30-60, 60, 90 degrees V ports.
- Temperature range -4°F to 406°F.
 - Blow-out proof stem, adjustable stem packing.
 - R.P.T.F.E. seats, packing and thrust washer.
 - Standard grounded stem and ball.
 - Thermal relief hole in the ball.
 - 100% tested.
 - PED 97/23/CE.
 - Locking handle plate.
 - ANSI B16.5, B16.10, B16.34 design.
 - Fire Safe API 6FA-API 607.
 - Antistatic Device.
 - ISO 5211 mounting pad and double "D" stem.

760021V36 - 760021V6 - 760021V9: size 1/2" to 6".

V-ball options



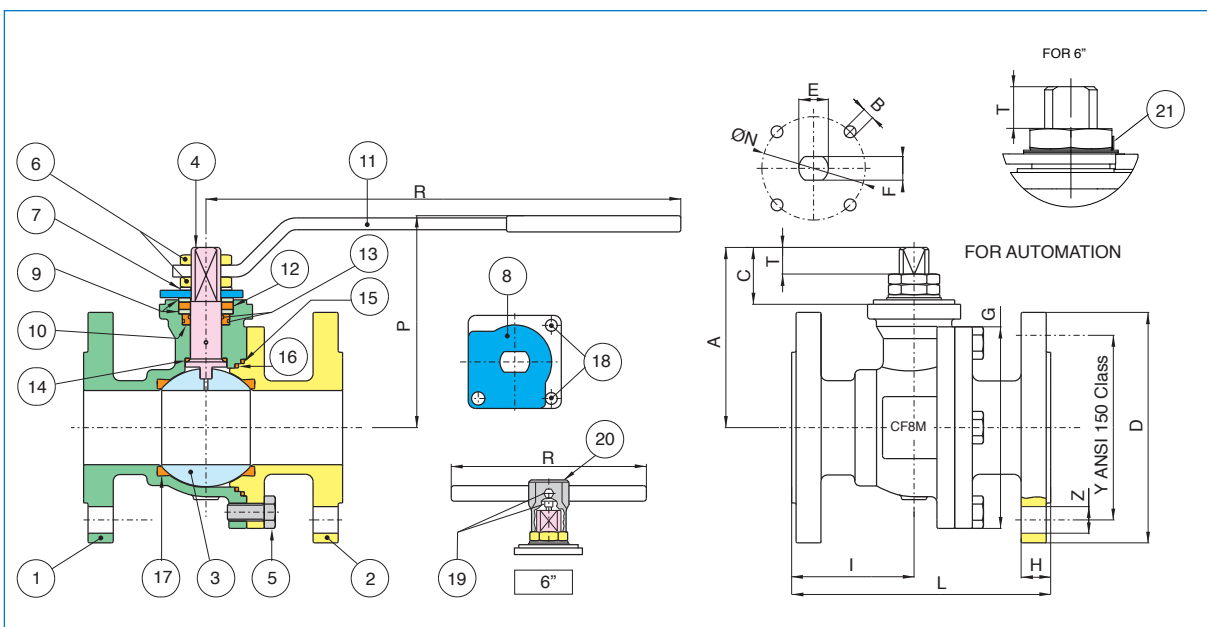
V30-60



V6

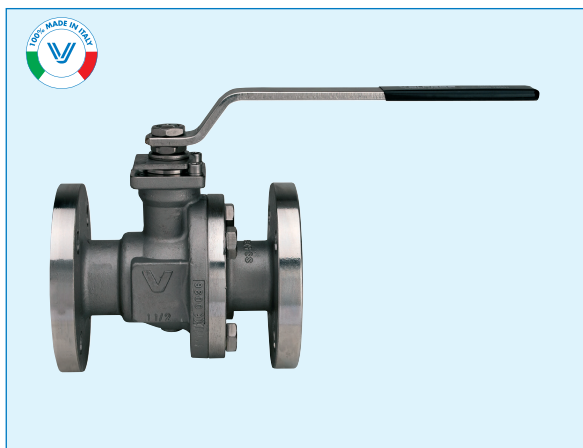


V9



N POS	PART NAME	MATERIAL	N POS
1	BODY	A351 CF8M	1
2	END CONNECTION	A351 CF8M	1
3	BALL	A479-316/A351-CF8M	1
4	STEM	A479-316	1
5	SCREW	STAINLESS STEEL 1/2" - 2" 4 3" - 6" 8	
6	NUT	STAINLESS STEEL 1/2" - 4" 2 6" 1	
7	SPRING WASHER	STAINLESS STEEL	2
8	TRAVEL STOP	STAINLESS STEEL	1
9	PACKING GLAND	STAINLESS STEEL	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	STAINLESS STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	O-RING	FKM (Viton®)	2
14	THRUST WASHER	R.P.T.F.E.	1
15	SEAL	GRAPHOIL	1
16	SEAL	P.T.F.E.	1
17	BALL SEATS	R.P.T.F.E.	2
18	SCREW	STAINLESS STEEL	2
19	SCREW	STAINLESS STEEL	2
20	BODY HANDLE	CAST IRON	1
21	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	C	T	E	F	ISO 5211 ØN	B	Weight Lbs
1/2"	3.54	2.38	4xØ0.63	0.45	1.83	4.25	2.80	3.46	5.16	2.05	0.75	0.31	M10	0.28	1.65-F04	M5	4.21
3/4"	3.94	2.76	4xØ0.63	0.51	2.09	4.61	2.89	3.66	5.16	2.20	0.75	0.31	M10	0.28	1.65-F04	M5	5.36
1"	4.33	3.13	4xØ0.63	0.57	2.34	5.00	3.56	3.50	6.85	2.85	1.08	0.51	M12	0.31	1.97-F05	M6	8.15
1 1/2"	5.12	3.88	4xØ0.63	0.69	3.03	6.50	4.49	5.24	9.84	4.17	1.18	0.39	M16	0.39	1.97-F05	M6	15.65
2"	5.91	4.74	4xØ0.75	0.77	3.39	7.01	5.37	5.67	12.64	4.80	1.52	0.71	M20	0.55	2.76-F07	M8	23.80
3"	7.48	6.00	4xØ0.75	0.94	3.13	7.99	7.03	6.81	15.00	5.94	1.69	0.71	M24	0.71	4.02-F10	M10	47.61
4"	9.06	7.50	8xØ0.75	0.94	4.33	9.02	8.21	7.36	15.00	6.50	1.69	0.71	M24	0.71	4.02-F10	M10	67.00
6"	11.02	9.51	8xØ0.87	1.00	7.13	15.51	12.24	12.01	27.56	9.65	2.68	1.61	M42	1.18	4.92-F12	M12	171.91



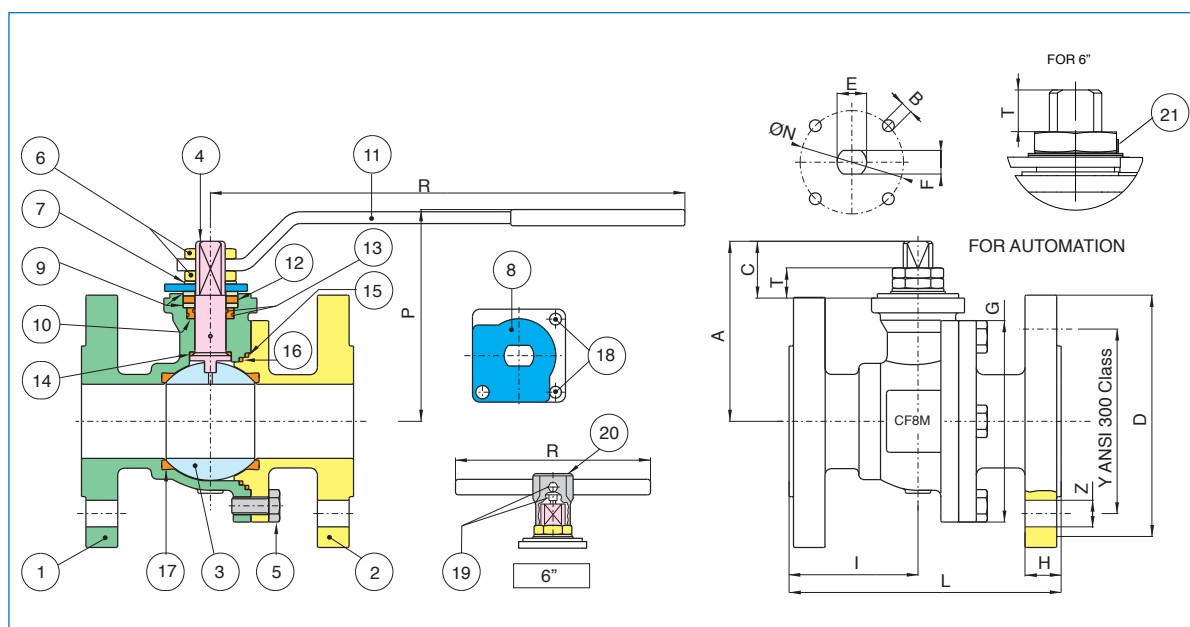
COMPLIES WITH NACE MR 0175/ISO 15156 AND NACE MR 0103.

SERIES 760195-V36 - 760195-V6 - 760195-V9 STAINLESS STEEL V-BALL VALVE

Stainless steel, ANSI class 300 flanged V-ball valve 30-60, 60, 90 degrees V ports.

- Temperature range -4°F to 406°F.
- Blow-out proof stem, adjustable stem packing.
- R.P.T.F.E. seats, packing and thrust washer.
- 100% tested.
- PED 97/23/CE.
- Locking handle plate.
- Thermal relief hole in the ball.
- ANSI B16.5, B16.10, B16.34 design.
- Fire Safe API 6FA-API 607.
- Antistatic Device.
- ISO 5211 mounting pad and double "D" stem.

760195V36 - 760195V6 - 760195V9: size 1/2" to 6".



V-ball options



V30-60



V6



V9

N POS	PART NAME	MATERIAL	N POS
1	BODY	CF8M	1
2	END CONNECTION	CF8M	1
3	BALL	A479-316/A351-CF8M	1
4	STEM	A479-316	1
5	SCREW	STAINLESS 1/2"x1 1/2" 2-6"	4
6	NUT	STAINLESS 1/2"x1 1/2" 2-6"	2
7	SPRING WASHER	STAINLESS STEEL	2
8	TRAVEL STOP	STAINLESS STEEL	1
9	PACKING GLAND	STAINLESS STEEL	2
10	STEM SEAL	P.T.F.E.	1
11	HANDLE	STAINLESS STEEL	1
12	STEM SEAL	GRAPHOIL	1
13	O-RING	FKM (Viton®)	2
14	THRUST WASHER	R.P.T.F.E.	1
15	SEAL	GRAPHOIL	1
16	SEAL	P.T.F.E.	1
17	BALL SEATS	R.P.T.F.E.	2
18	SCREW	STAINLESS STEEL	2
19	SCREW	STAINLESS STEEL	2
20	BODY HANDLE	CAST IRON	1
21	UNSCREWING GROWER	A182-F316	1

SIZE	D	Y	Z	H	I	L	G	P	R	A	C	T	E	F	ISO 5211 ØN	B	Weight Lbs
1/2"	3.74	2.62	4xØ0.63	0.57	2.42	5.51	3.35	3.46	5.16	2.05	0.75	0.31	M10	0.28	1.65-F04	M5	5.07
3/4"	4.53	3.25	4xØ0.75	0.63	2.40	5.98	3.07	3.66	5.16	2.20	0.75	0.31	M10	0.28	1.65-F04	M5	7.71
1"	4.92	3.50	4xØ0.79	0.69	2.78	6.50	3.78	4.29	6.85	2.85	1.08	0.51	M12	0.31	1.97-F05	M6	11.46
1 1/2"	6.10	4.51	4xØ0.87	0.83	3.09	7.48	4.96	5.24	9.84	4.21	1.18	0.39	M16	0.39	1.97-F05	M6	22.04
2"	6.50	5.00	8xØ0.79	0.89	3.39	8.50	5.37	5.67	12.64	4.80	1.52	0.71	M20	0.55	2.76-F07	M8	26.45
3"	8.27	6.63	8xØ0.87	1.14	3.19	11.14	7.03	6.81	15.00	5.94	1.69	0.71	M24	0.71	4.02-F10	M10	59.51
4"	10.04	7.87	8xØ0.87	1.26	3.48	12.01	8.62	7.36	15.00	6.50	1.69	0.71	M24	0.71	4.02-F10	M10	90.36
6"	12.60	10.63	12xØ0.87	1.46	6.77	15.87	12.05	12.01	27.56	9.65	2.68	1.08	M42	1.18	4.92-F12	M12	204.97



EXTENSION STEM

ART.	SIZE	H	ØD	B	FOR USE WITH SERIES	NOT VALID FOR	MATERIALS
890021	1/8"	2.17	0.90	M5	70	Series 700076 (all sizes) Series 700023 (all sizes) Series 766 (all sizes)	PLATED CARBON STEEL
	1/4"	2.17	0.90	M5	70 - 71		
	3/8"	2.17	0.90	M5	70 - 71		
	1/2"	2.17	0.90	M5	70		
890022	1/2"	2.17	0.90	M6	71 - 72 - 76 - 776		
	3/4"	2.17	0.90	M6	70 - 71 - 72 - 76 - 776		
890023	1"	2.17	0.90	M6	70 - 71 - 72 - 73 - 76 - 776		
	1 1/4"	2.17	0.90	M6	70 - 71 - 72 - 73 - 76 - 776		
890024	1 1/2"	1.97	1.10	M6	70 - 71 - 72 - 73 - 76 - 776		
	2"	1.97	1.10	M6	70 - 71 - 72 - 73 - 75 - 776		
	2 1/2"	1.97	1.10	M6	75		
890025	2"	1.85	1.33	M8	76		
	2 1/2"	1.85	1.33	M8	70 - 71 - 72 - 73 - 76 - 776		
	3"	1.85	1.33	M8	70 - 71 - 72 - 73 - 776 - 75		
	4"	1.85	1.33	M8	75		
890026	3"	1.57	1.46	M8	76		
	4"	1.57	1.46	M8	70 - 71 - 72 - 73 - 76 - 776		
	5"	1.57	1.46	M8	72 - 73 - 75 - 76 - 776		

