

K-BALL SERIES 172

FLOATING BALL VALVE

A three piece, full bore floating ball valve designed to ISO 5211



FEATURES

- Three piece, swing out design
- Investment casting for body and end cap
- Available in Carbon Steel (WCB / 1.0619) and Stainless Steel (CF8M / 1.4408) body materials
- Blow-out proof stem
- Locking device
- Full bore
- Tightness to EN 12266-1 Rate A and API 598
- Butt weld
- Socket weld
- Threaded ends to:
 - BSPP
 - BSPT
 - NPT

GENERAL APPLICATIONS

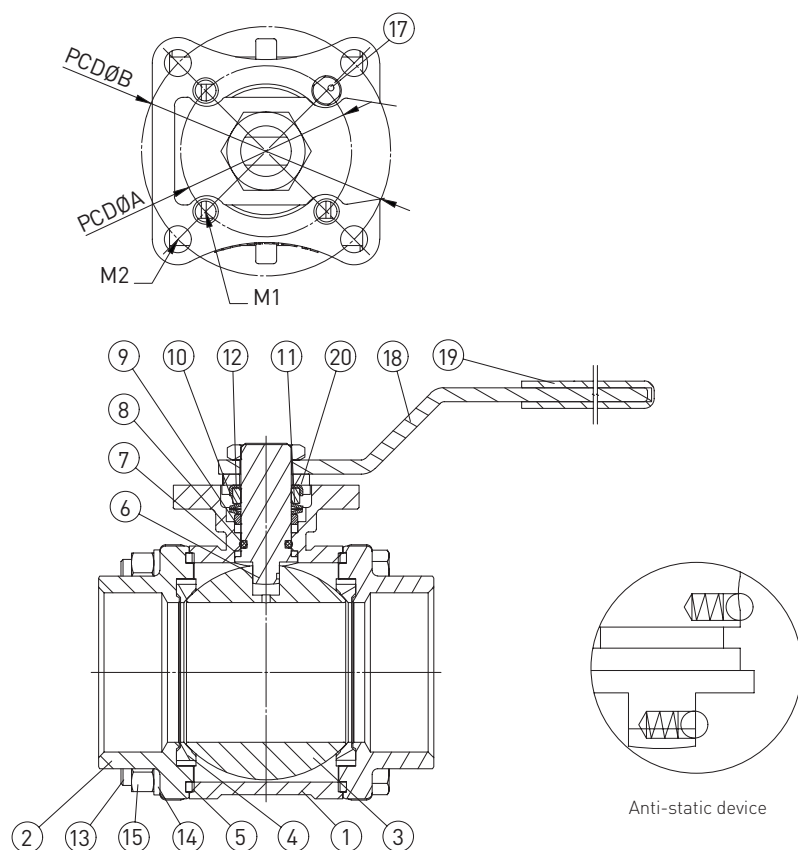
Ideal for general industrial and service applications including water, oil, gas and chemical processes.

TECHNICAL DATA

Size range:	DN 8 - 100 NPS ¼ - 4
End connections:	Threaded, Butt Weld, Socket Weld, Tri-clamp
Pressure rating:	DN 8 - 40 (NPS ¼ - 1½): 69 bar / PN 69 / 1000 psi DN 50 - 100 (NPS 2 - 4): 55 bar / 800 psi
Temperature rating:	See chart on page 9

K-BALL SERIES 172

FLOATING BALL VALVE



PARTS LIST

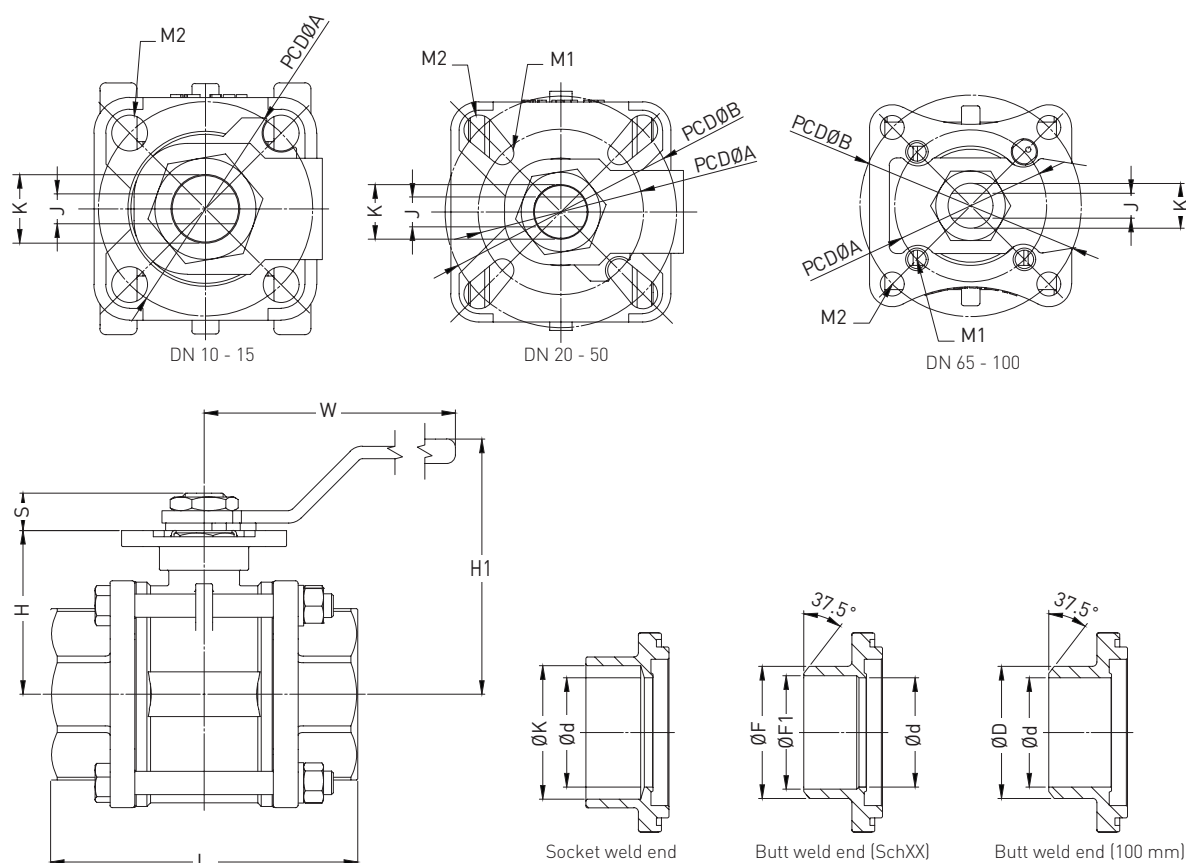
No.	Description	Material		Quantity
		SS	CS	
1	Body	ASTM-A351-CF8M	ASTM-A216-WCB	1
2	Cap	ASTM-A351-CF8M	ASTM-A216-WCB	2
3	Ball	ASTM-A351-CF8M		1
4	Ball seat	PTFE		2
5	Joint gasket	PTFE		2
6	Stem	AISI 316		1
7	Thrust washer	PTFE		1
8	O-ring	Viton		1
9	Stem packing	PTFE		1-2
10	Stem ring	AISI 304		1
11	Belleville washer	AISI 301		2
12	Stem nut	AISI 304		2
13	Bolt	AISI 304	DN 8-50 (NPS ¼-2)	4 pcs
			DN 65-100 (NPS 2½-4)	6 pcs
14	Spring washer	Plastic	DN 8-50 (NPS ¼-2)	4 pcs
			DN 65-100 (NPS 2½-4)	12 pcs
15	Hex nut	AISI 304	DN 8-50 (NPS ¼-2)	4 pcs
			DN 65-100 (NPS 2½-4)	12 pcs
16	Stopper	AISI 304		0-1
17	Stopper pin*	AISI 304		1
18	Handle	AISI 304		1
19	Plastic cover	Plastic		1
20	Lock washer	AISI 304		1

NOTE

* Stopper pin featured on DN 65 - 100 (NPS 2½ - 4) valves only.

K-BALL SERIES 172

FLOATING BALL VALVE - METRIC



DIMENSIONS (mm)

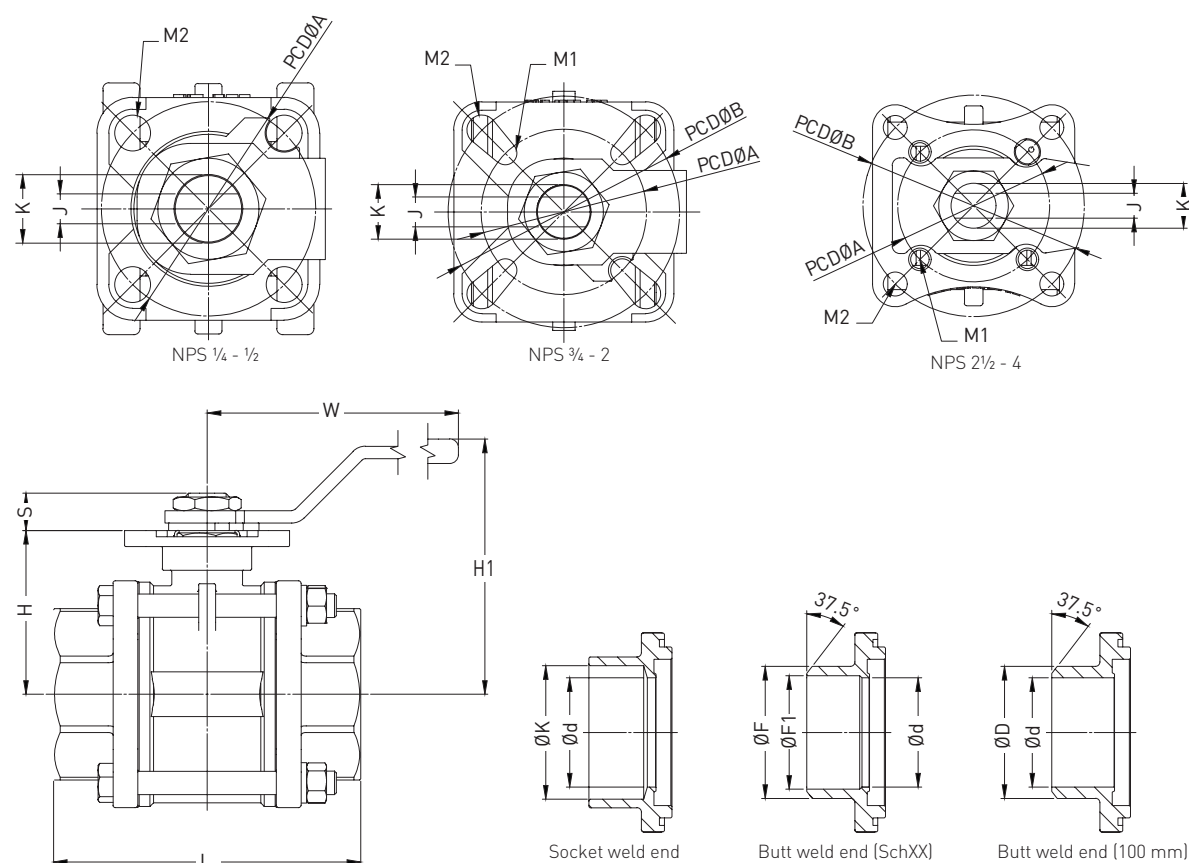
DIMENSIONS (mm)				L								ISO 5211					
Size DN	ØD	Ød	ØK	SD&SW	BW	BW 100 mm	H1	H2	W	S	PCDØA	PCDØB	M1	M2	J	K	
8	18.1	11.6	14.1	59.0	52.4	235.0	37.0	62.0	112.0	8.5	F03Ø36	-	-	6	8.0	7/16-20	
10	18.1	12.7	17.6	59.0	52.4	235.0	37.0	62.0	112.0	8.5	F03Ø36	-	-	6	8.0	7/16-20	
15	21.7	15.0	21.7	62.0	56.0	236.0	39.0	64.0	112.0	7.3	F03Ø36	-	-	6	8.0	7/16-20	
20	27.2	20.0	27.2	77.0	75.0	245.0	42.7	70.0	138.0	10.5	F04Ø42	F05Ø50	R3	R3.5	9.5	M14x1.5	
25	34.0	25.0	33.9	83.0	83.0	249.0	46.4	74.0	138.0	10.0	F04Ø42	F05Ø50	R3	R3.5	9.5	M14x1.5	
32	42.7	32.0	43.2	94.0	95.0	260.0	52.8	86.0	160.0	15.0	F05Ø50	F07Ø70	R3.5	R4.5	14.0	M18x1.5	
40	48.6	40.0	48.7	107.0	107.0	269.0	58.5	93.0	205.0	15.0	F05Ø50	F07Ø70	R3.5	R4.5	14.0	M18x1.5	
50	60.5	50.0	61.1	124.0	120.0	276.0	66.0	101.0	205.0	15.0	F05Ø50	F07Ø70	R3.5	R4.5	14.0	M18x1.5	
65	76.3	65.0	73.8	156.0	156.0	302.0	101.5	143.0	322.5	18.0	F07Ø70	F10Ø102	M10	Ø11	17.0	7/8-14	
80	93.0	80.0	89.8	182.0	182.0	321.0	112.5	154.0	322.5	18.0	F07Ø70	F10Ø102	Ø8.5	Ø11	17.0	7/8-14	
100	114.0	100.0	115.4	213.6	213.6	345.0	127.0	168.0	322.5	18.0	F07Ø70	F10Ø102	Ø8.5	Ø11	17.0	7/8-14	

DIMENSIONS (mm) continued

Size DN	Weight (kg)	ØF	ØF1		
			Sch10	Sch40	Sch80
8	0.46	13.7	10.4	9.2	7.7
10	0.44	18.1	13.8	12.5	10.7
15	0.57	21.7	17.1	15.8	13.8
20	0.85	27.2	22.5	21.0	18.9
25	1.00	34.0	27.9	26.6	24.3
32	1.70	42.7	36.7	35.1	32.5
40	2.39	48.6	42.8	40.9	38.1
50	3.53	60.5	54.8	52.5	49.2
65	8.83	73.0	66.9	62.7	59.0
80	12.38	88.9	82.8	77.9	73.7
100	19.83	114.0	108.2	102.8	98.1

K-BALL SERIES 172

FLOATING BALL VALVE - IMPERIAL



DIMENSIONS (inch)

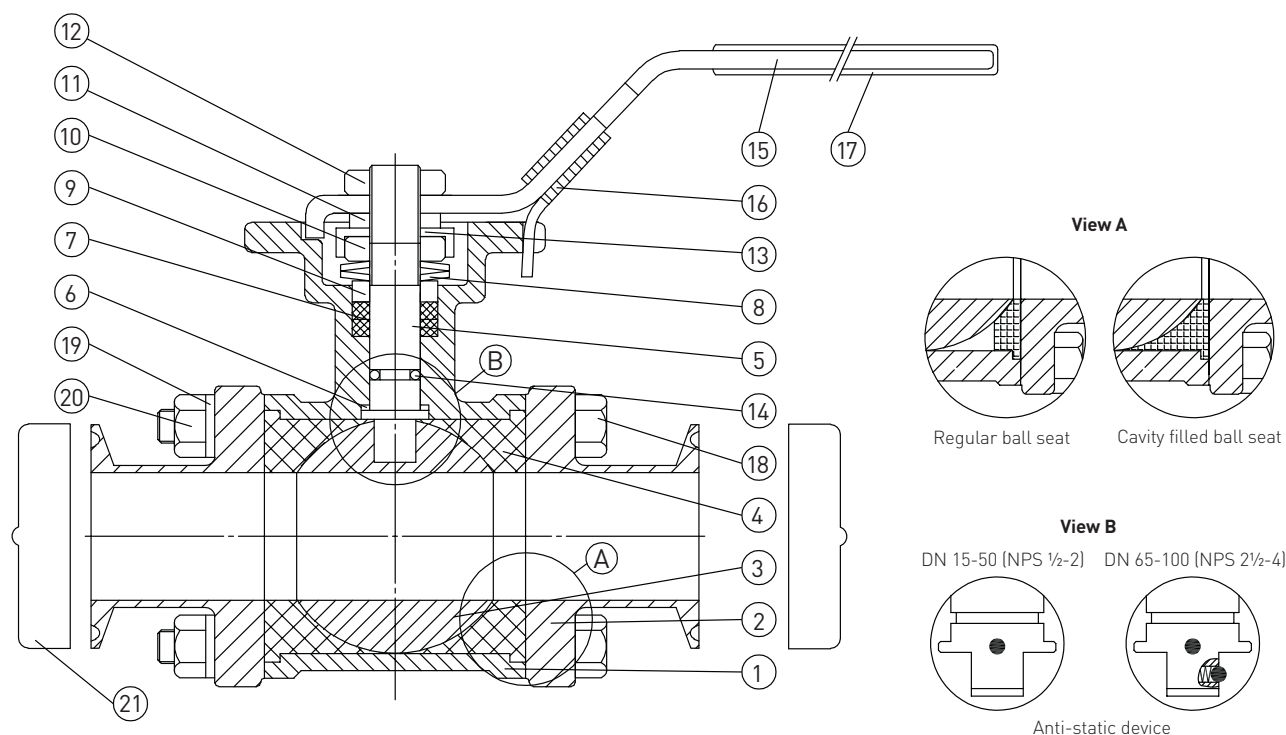
				L							ISO 5211					
Size NPS	ØD	Ød	ØK	SD&SW	BW	BW 100 mm	H1	H2	W	S	PCDØA	PCDØB	M1	M2	J	K
1/4"	0.71	0.46	0.56	2.32	2.06	9.25	1.46	2.44	4.41	0.33	F03Ø1.42	-	-	6	8	7/16-20
3/8"	0.71	0.50	0.69	2.32	2.06	9.25	1.46	2.44	4.41	0.33	F03Ø1.42	-	-	6	8	7/16-20
1/2"	0.85	0.59	0.85	2.44	2.20	9.29	1.54	2.52	4.41	0.29	F03Ø1.42	-	-	6	8	7/16-20
3/4"	1.07	0.79	1.07	3.03	2.95	9.65	1.68	2.76	5.43	0.41	F04Ø1.65	F05Ø1.97	R3	R3.5	9.5	M14x1.5
1"	1.34	0.98	1.33	3.27	3.27	9.80	1.83	2.91	5.43	0.39	F04Ø1.65	F05Ø1.97	R3	R3.5	9.5	M14x1.5
1 1/4"	1.68	1.26	1.70	3.70	3.74	10.24	2.08	3.39	6.30	0.59	F05Ø1.97	F07Ø2.76	R3.5	R4.5	14	M18x1.5
1 1/2"	1.68	1.26	1.70	3.70	3.74	10.24	2.08	3.39	6.30	0.59	F05Ø1.97	F07Ø2.76	R3.5	R4.5	14	M18x1.5
2"	2.38	1.97	2.41	4.88	4.72	10.87	2.60	3.98	8.07	0.59	F05Ø1.97	F07Ø2.76	R3.5	R4.5	14	M18x1.5
2 1/2"	3.00	2.56	2.91	6.14	6.14	11.89	4.00	5.63	12.70	0.71	F07Ø2.76	F10Ø4.02	M10	Ø0.43	0.67	7/8-14
3"	3.66	3.15	3.54	7.17	7.17	12.64	4.43	6.06	12.70	0.71	F07Ø2.76	F10Ø4.02	Ø0.33	Ø0.43	0.67	7/8-14
4"	4.49	3.94	4.54	8.41	8.41	13.58	5.00	6.61	12.70	0.71	F07Ø2.76	F10Ø4.02	Ø0.33	Ø0.43	0.67	7/8-14

DIMENSIONS (inch) continued

Size NPS	Weight (lb)	ØF	ØF1		
			Sch10	Sch40	Sch80
1/4"	1.01	0.54	0.41	0.36	0.30
3/8"	0.97	0.71	0.54	0.49	0.42
1/2"	1.26	0.85	0.67	0.62	0.54
3/4"	1.87	1.07	0.89	0.83	0.74
1"	2.20	1.34	1.10	1.05	0.96
1 1/4"	3.75	1.68	1.44	1.38	1.28
1 1/2"	3.75	1.68	1.44	1.38	1.28
2"	7.78	2.38	2.16	2.07	1.94
2 1/2"	-	2.87	2.63	2.47	2.32
3"	-	3.50	3.26	3.07	2.90
4"	-	4.49	4.26	4.05	3.86

K-BALL SERIES 172T

SANITARY FLOATING BALL VALVE

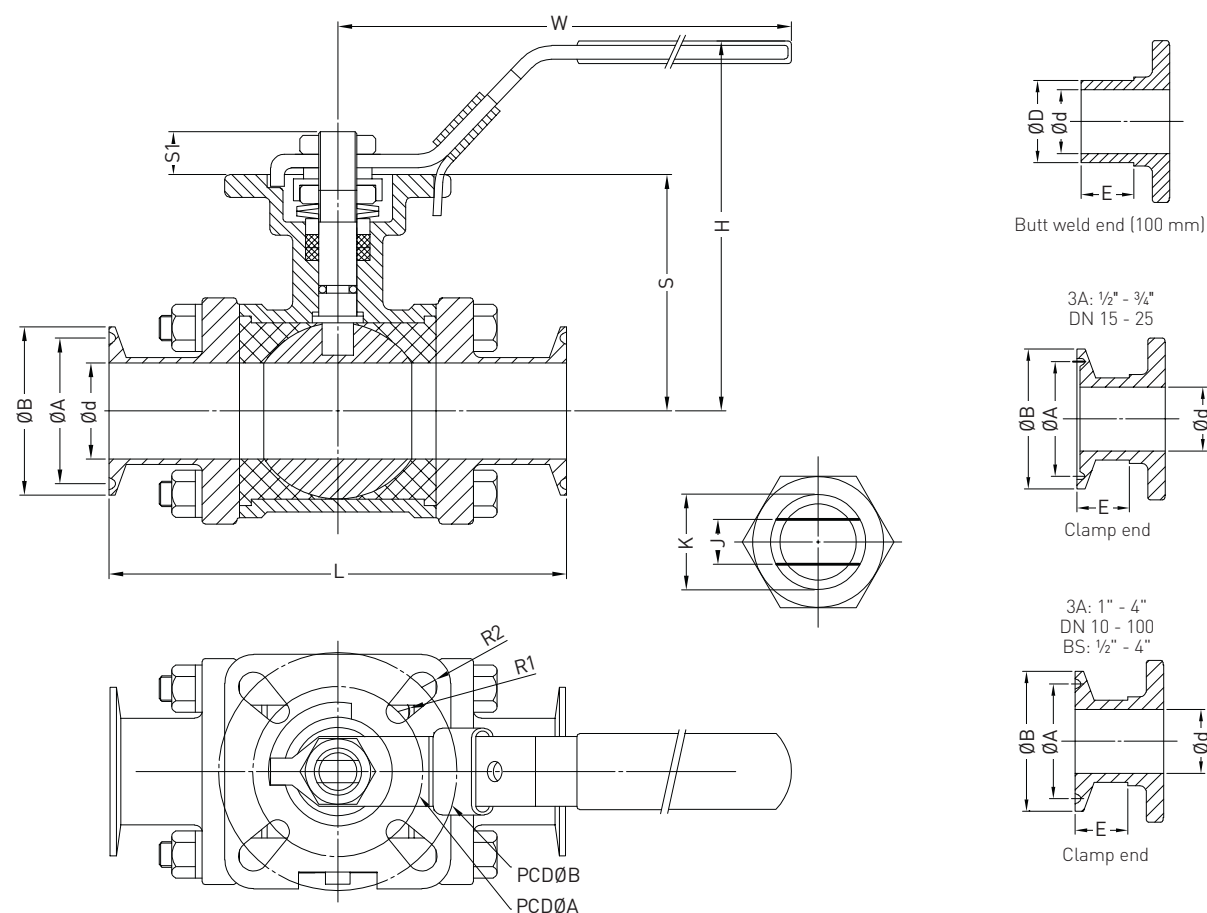


PARTS LIST

No.	Description	Material	Quantity
1	Body	CF8M	1
2	Cap	CF8M	2
3	Ball	CF8M	1
4	Ball seat	PTFE	2
5	Stem	AISI 316	1
6	Thrust washer	PTFE	1
7	Stem packing	PTFE	2
8	Belleville washer	AISI 301	2
9	Stem ring	AISI 304	1
10	Stem nut	AISI 304	1
11	Square washer	AISI 304	1
12	Handle nut	AISI 304	1
13	Lock washer	AISI 304	1
14	O-ring	Silicon rubber	1
15	Handle	AISI 304	1
16	Lock device	AISI 304	1
17	Plastic cover	P.V.C	1
18	Bolt	AISI 304	DN 15-65 (NPS 3/8-2 1/2) 4 DN 80-100 (NPS 3-4) 6
19	Spring washer	AISI 304	DN 15-65 (NPS 3/8-2 1/2) 8 DN 80-100 (NPS 3-4) 12
20	Hex nut	AISI 304	DN 15-65 (NPS 3/8-2 1/2) 8 DN 80-100 (NPS 3-4) 12
21	Cap cover	P.V.C	2

K-BALL SERIES 172T

SANITARY FLOATING BALL VALVE - METRIC



DIMENSIONS (mm)

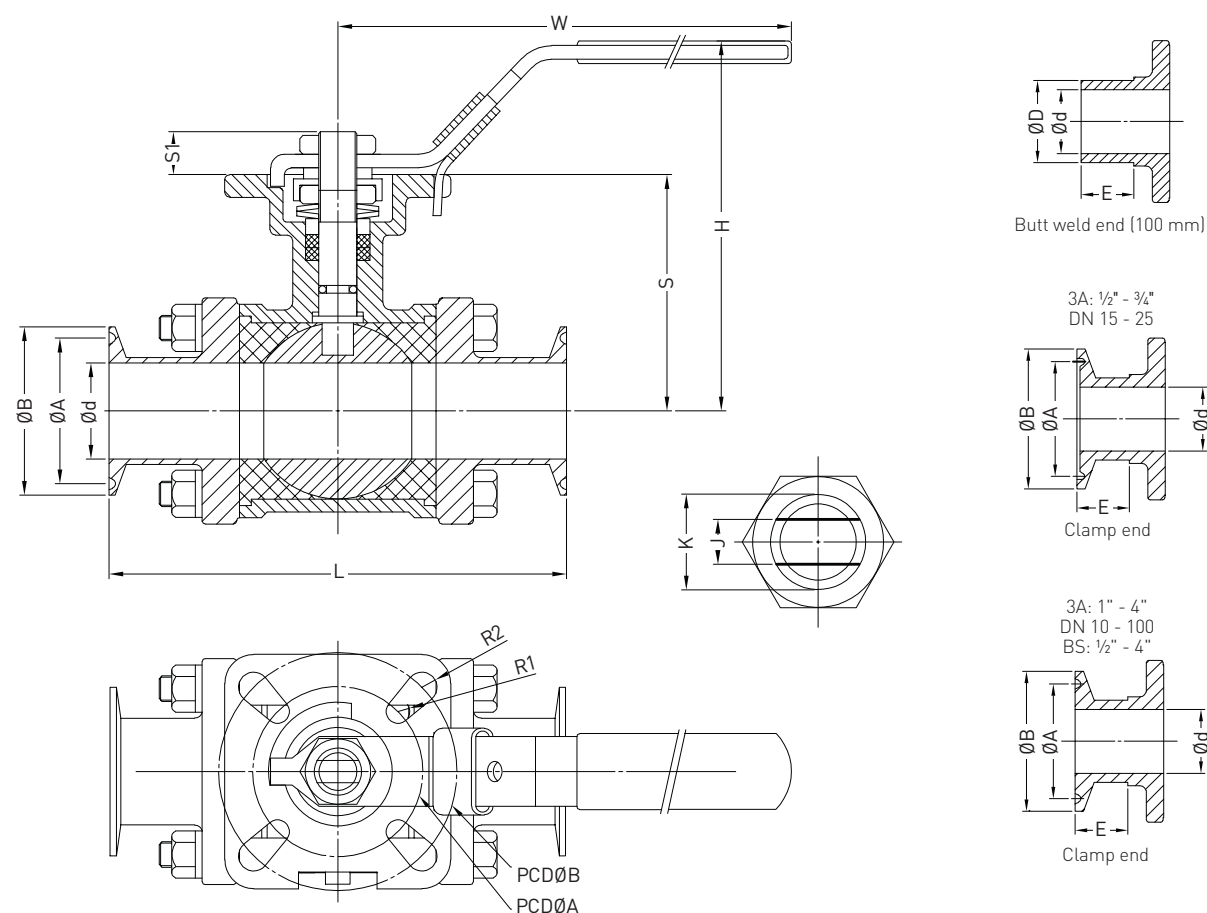
DIMENSIONS (mm)																						
Size	3A				DIN				BS				L				E					
DN	Ød	ØD	ØA	ØB	Ød	ØD	ØA	ØB	Ød	ØD	ØA	ØB	L	(100 mm)	H	W	E	(100 mm)	S	S1	J	K
10	-	-	-	-	10.0	13.0	27.5	34.0	-	-	-	-	79.0	230.0	53.0	95.0	21.5	80.0	33.0	10.0	8.0	7/16-20
15	9.4	12.7	20.2	25.0	16.0	19.0	27.5	34.0	9.5	12.7	20.3	25.4	89.0	237.0	57.0	95.0	21.5	80.0	36.5	10.0	8.0	7/16-20
20	15.8	19.1	20.2	25.0	20.0	23.0	27.5	34.0	15.9	19.1	20.3	25.4	101.0	241.0	64.0	95.0	25.0	80.0	44.0	10.0	8.0	7/16-20
25	22.1	25.4	43.5	50.5	26.0	29.0	43.5	50.5	22.2	25.4	43.5	50.5	114.0	247.0	75.0	120.0	28.7	80.0	52.0	12.0	9.5	M14x1.5
32	-	-	-	-	32.0	35.0	43.5	50.5	-	-	-	-	127.0	255.0	81.0	120.0	28.0	80.0	57.5	12.0	9.5	M14x1.5
40	34.8	38.1	43.5	50.5	38.0	41.0	43.5	50.5	34.9	38.1	43.5	50.5	140.0	265.0	100.0	150.0	29.7	80.0	69.3	16.0	14.0	M18x1.5
50	47.5	50.8	56.5	64.0	50.0	53.0	56.5	64.0	47.6	50.8	56.5	64.0	156.0	278.0	109.0	150.0	31.0	80.0	78.5	16.0	14.0	M18x1.5
65	60.2	63.5	70.5	77.5	66.0	70.0	83.5	91.0	60.3	63.5	70.5	77.5	197.0	302.0	135.0	215.0	37.5	80.0	101.0	19.0	17.0	7/8-14
80	72.9	76.2	83.5	91.0	81.0	85.0	97.0	106.0	73.0	76.2	83.5	91.0	229.0	319.0	145.0	215.0	46.0	80.0	111.0	19.0	17.0	7/8-14
100	97.4	101.6	110.0	119.0	100.0	104.0	110.0	119.0	97.6	101.6	110.0	119.0	241.0	346.0	160.0	300.0	37.5	80.0	126.5	19.0	17.0	7/8-14

DIMENSIONS (mm) continued

Size	ISO 5211				
DN	PCDØA	PCDØB	R1	R2	Weight kg
10	F03Ø36	F04Ø42	3.0	3.0	
15	F03Ø36	F04Ø42	3.0	3.0	0.48
20	F03Ø36	F04Ø42	3.0	3.0	0.62
25	F04Ø42	F05Ø50	3.0	3.5	0.97
32	F04Ø42	F05Ø50	3.0	3.5	
40	F05Ø50	F07Ø70	3.5	4.5	1.9
50	F05Ø50	F07Ø70	3.5	4.5	2.8
65	F07Ø70	F10Ø102	4.5	5.5	6.1
80	F07Ø70	F10Ø102	4.5	5.5	10.0
100	F07Ø70	F10Ø102	4.5	5.5	17.0

K-BALL SERIES 172T

SANITARY FLOATING BALL VALVE - IMPERIAL



DIMENSIONS (inch)

DIMENSIONS (mm)																						
Size	3A				DIN				BS				L				E					
NPS	Ød	ØD	ØA	ØB	Ød	ØD	ØA	ØB	Ød	ØD	ØA	ØB	L	(100 mm)	H	W	E	(100 mm)	S	S1	J	K
3/8"	-	-	-	-	0.39	0.51	1.08	1.34	-	-	-	-	3.11	9.06	2.09	3.74	0.85	3.15	1.30	0.39	0.31	7/16-20
1/2"	0.37	0.50	0.80	0.98	0.63	0.75	1.08	1.34	0.37	0.50	0.80	1.00	3.50	9.33	2.24	3.74	0.85	3.15	1.44	0.39	0.31	7/16-20
3/4"	0.62	0.75	0.80	0.98	0.79	0.91	1.08	1.34	0.62	0.75	0.80	1.00	3.98	9.49	2.52	3.74	0.98	3.15	1.73	0.39	0.31	7/16-20
1"	0.87	1.00	1.71	1.99	1.02	1.14	1.71	1.99	0.87	1.00	1.71	1.99	4.49	9.72	2.95	4.72	1.13	3.15	2.05	0.47	0.37	M14x1.5
1 1/4"	0.00	0.00	0.00	0.00	1.26	1.38	1.71	1.99	0.00	0.00	0.00	0.00	5.00	10.04	3.19	4.72	1.10	3.15	2.26	0.47	0.37	M14x1.5
1 1/2"	1.37	1.50	1.71	1.99	1.50	1.61	1.71	1.99	1.37	1.50	1.71	1.99	5.51	10.43	3.94	5.91	1.17	3.15	2.73	0.63	0.55	M18x1.5
2"	1.87	2.00	2.22	2.52	1.97	2.09	2.22	2.52	1.87	2.00	2.22	2.52	6.14	10.94	4.29	5.91	1.22	3.15	3.09	0.63	0.55	M18x1.5
2 1/2"	2.37	2.50	2.78	3.05	2.60	2.76	3.29	3.58	2.37	2.50	2.78	3.05	7.76	11.89	5.31	8.46	1.48	3.15	3.98	0.75	0.67	7/8-14
3"	2.87	3.00	3.29	3.58	3.19	3.35	3.82	4.17	2.87	3.00	3.29	3.58	9.02	12.56	5.71	8.46	1.81	3.15	4.37	0.75	0.67	7/8-14
4"	3.83	4.00	4.33	4.69	3.94	4.09	4.33	4.69	3.84	4.00	4.33	4.69	9.49	13.62	6.30	-	1.48	3.15	4.98	0.75	0.67	7/8-14

DIMENSIONS (inch) continued

Size	ISO 5211				
NPS	PCDØA	PCDØB	R1	R2	Weight lb
10	F03Ø1.42	F04Ø1.65	0.12	0.12	-
15	F03Ø1.42	F04Ø1.65	0.12	0.12	1.06
20	F03Ø1.42	F04Ø1.65	0.12	0.12	1.37
25	F04Ø1.65	F05Ø1.97	0.12	0.14	2.14
32	F04Ø1.65	F05Ø1.97	0.12	0.14	-
40	F05Ø1.97	F07Ø2.76	0.14	0.18	4.19
50	F05Ø1.97	F07Ø2.76	0.14	0.18	6.17
65	F07Ø2.76	F10Ø4.02	0.18	0.22	13.45
80	F07Ø2.76	F10Ø4.02	0.18	0.22	22.05
100	F07Ø2.76	F10Ø4.02	0.18	0.22	37.48

K-BALL SERIES 172

FLOATING BALL VALVE

TORQUE VALUES

Differential pressure torque values in Nm (ft-lb)								
Size		Pressure in bar (psi)						MAST
DN	NPS	0 (0)	6.9 (100)	20.7 (300)	48.3 (700)	69 (1000)	103.4 (1500)	A276-316 SS
8	¼	4.0 (3.0)	4.0 (3.0)	4.0 (3.0)	5.0 (3.7)	5.0 (3.7)	-	35.0 (25.8)
10	⅜	4.0 (3.0)	4.0 (3.0)	4.0 (3.0)	5.0 (3.7)	5.0 (3.7)	-	35.0 (25.8)
15	½	6.2 (4.6)	6.4 (4.7)	6.8 (5.0)	7.2 (5.3)	8.6 (6.3)	-	35.0 (25.8)
20	¾	8.8 (6.5)	9.0 (6.6)	9.6 (7.1)	10.5 (7.7)	11.5 (8.5)	-	64.0 (47.2)
25	1	12.0 (8.9)	12.5 (9.2)	12.5 (9.2)	13.0 (9.6)	13.0 (9.6)	-	64.0 (47.2)
32	1¼	13.5 (10.0)	14.0 (10.3)	14.5 (10.7)	17.0 (12.5)	20.5 (15.1)	-	167.0 (123.2)
40	1½	18.0 (13.3)	18.5 (13.6)	19.5 (14.4)	23.5 (17.3)	33.0 (24.3)	-	167.0 (123.2)
50	2	21.0 (15.5)	21.5 (15.9)	23.0 (17.0)	38.5 (28.4)	68.0 (50.2)	-	167.0 (123.2)
65	2½	42.5 (31.3)	45.0 (33.2)	61.0 (45.0)	125.0 (92.2)	-	-	307.0 (226.4)
80	3	61.0 (45.0)	64.0 (47.2)	83.0 (61.2)	180.0 (132.8)	-	-	307.0 (226.4)
100	4	80.0 (59.0)	83.0 (61.2)	105.0 (77.4)	213.0 (157.1)	-	-	307.0 (226.4)

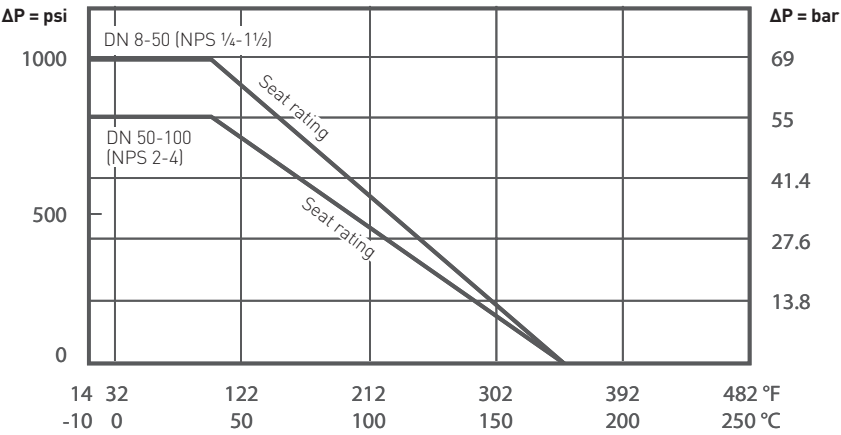
NOTE

Seat: PTFE / RPTFE
 Stem: A276-316 SS

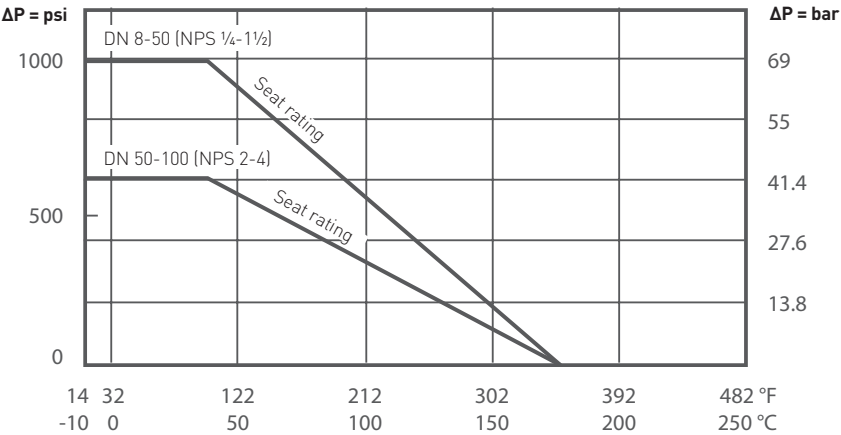
K-BALL SERIES 172

FLOATING BALL VALVE

PRESSURE / TEMPERATURE RATING - SERIES 172 STANDARD VALVE



PRESSURE / TEMPERATURE RATING - SERIES 172T SANITARY VALVE



NOTE

Tri-clamp end max. working pressure: 13.8 bar at 38 °C (200 psi at 100 °F)
 Body rating PN 63: DN 10 - 40 (NPS 3/8 - 1 1/2)
 Body rating PN 40: DN 50 - 100 (NPS 2 - 4)

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