

KF8900 Series

Cavity-Filled Three Piece Ball Valves

Engineered for sanitary, food and beverage, paint systems, resins and other applications where product can not be allowed to collect in the valve body cavity

The Marwin **KF8900 Series** is a sanitary ball valve designed with FDA approved cavity filler seats and quick disconnect ends to minimize pockets where media can collect. The inner diameters and end connections are exactly the same size as the ID of the ball/seat ensuring no obstruction of flow from tubing through the valve.

- In sizes from 1/2" (DN15) through 4" (DN100) with "tube ID design" to provide unobstructed flow and better drainage.
- Pressure ratings up to 1000 psi (70 bar)
- Virgin Teflon cavity filler
- Internal finish to 25 Ra
- Lockable handle prevents accidental opening or closing
- ISO 5211 actuator mounting flange
- Designed for simple maintenance with in-line repairable feature
- Anti-blowout stem
- Spring-loaded stem seal – no threads in packing chamber
- No sharp internal fillets – for smooth finish
- Tri-clamp, tube weld, or threaded NPT ends
- Available as manual or actuated (pneumatic/ electric) valve



KF8900 Series with tri-clamp ends



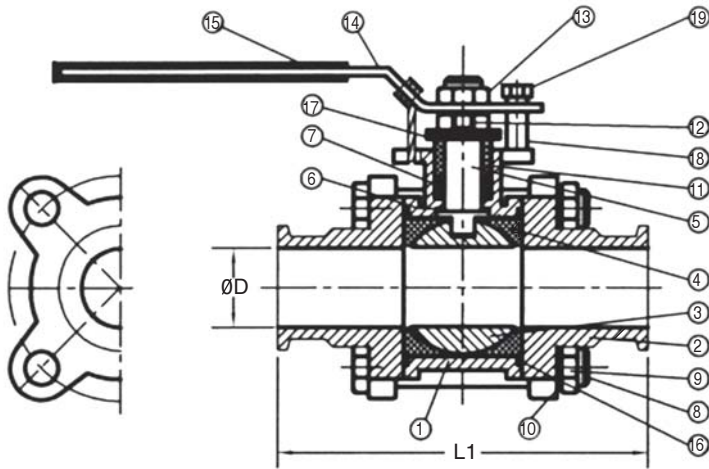
KF8900 Series with NPT ends



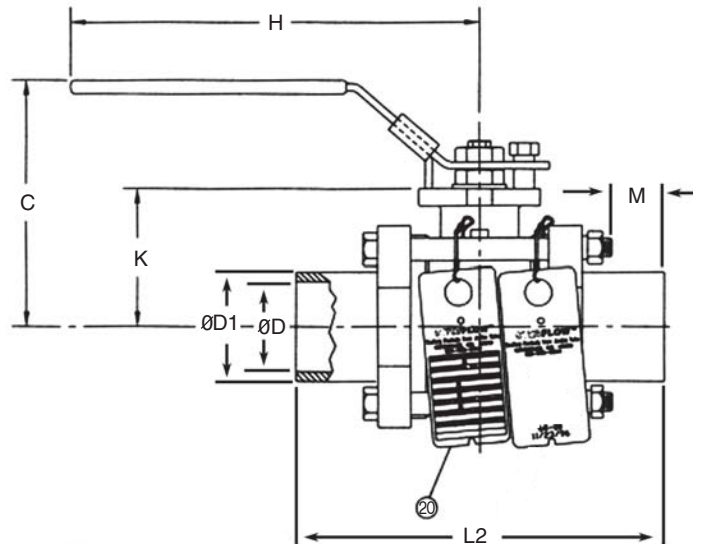
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Marwin Valve KF8900 Series – Material Specifications

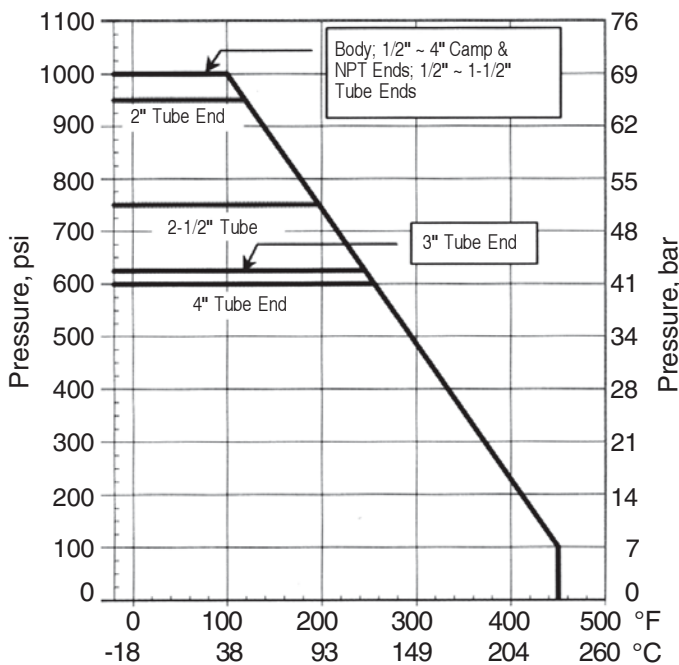
KF8900 with Clamp Ends



KF8900 with Tube Ends



Pressure – Temperature Chart



Clamp pressure and temperature rating may be less than valve rating, depending on type of clamp and gasket material used. Consult clamp manufacturer's pressure – temperature rating.

Tube end valve rating is the lesser of the body rating or the tube end rating based on ANSI B31.3 using $S_y=20\text{ksi}$, $Y=0.4$, and $E=0.8$

No.	Part	Material	Qty
1	Body	CF8M	1
2	Cap	CF8M	2
3	Ball	316	1
4	Seat	PTFE	2
5	Stem	AISI 316	1
6	Thrust Washer	PTFE	1
7	Stem Packing	PTFE	2
8	Bolt, Body	AISI 304	4~6
9	Nut, Body	AISI 304	4~12
10	Washer, Body	AISI 304	4~12
11	Gland	AISI 304	1
12	Lock Washer	AISI 304	1
13	Stem Nut	AISI 304	2
14	Locking Handle	AISI 304	1
15	Handle Cover	Vinyl	1
16	Seal, Body	PTFE	2
17	Disc Spring	AISI 304	2
18	Spacer, Stop	AISI 304	1
19	Cap Screw, Stop	AISI 304	1
20	* Name Plate	SST	1

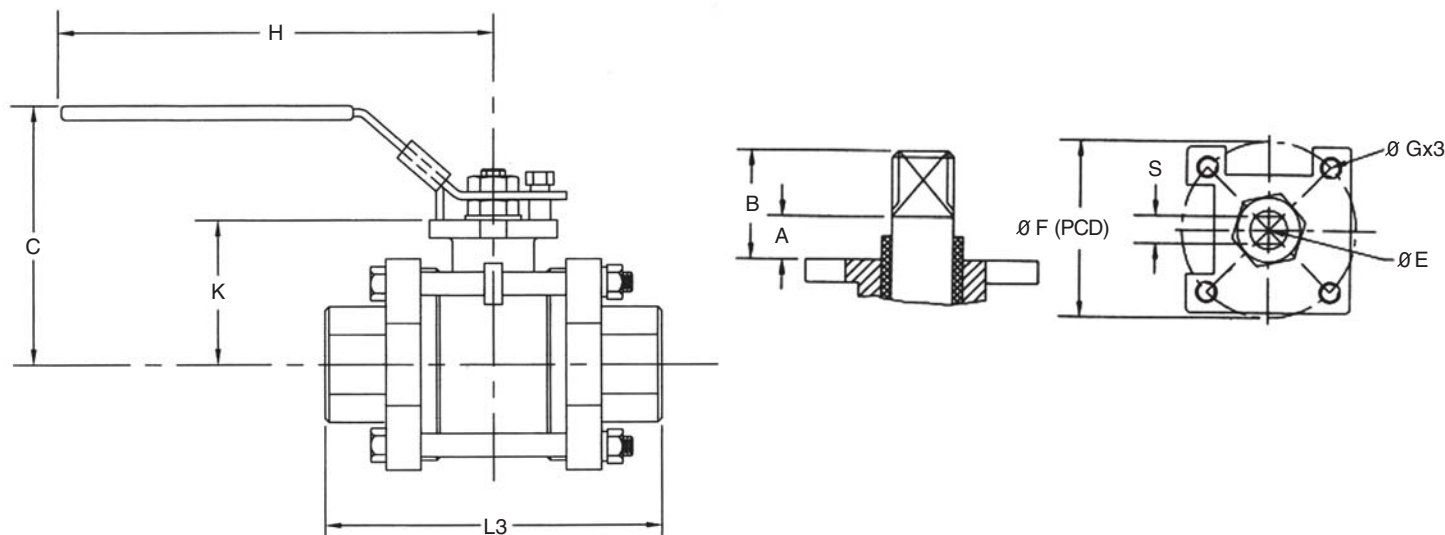
* For clamp and tube end only

Technical Specifications

Size	Operating Torque in-lbs (Nm)	Cv (Kv)	Weight (Clamp End) Lb (Kg)
1/2" (DN15)	89 (10)	8 (6,9)	1.6 (0,73)
3/4" (DN20)	142 (16)	30 (26)	1.8 (0,82)
1" (DN25)	177 (20)	65 (56)	2.8 (1,3)
1-1/2" (DN40)	310 (35)	190 (163)	5.4 (2,5)
2" (DN50)	443 (50)	435 (374)	8.1 (3,7)
2-1/2" (DN65)	752 (85)	720 (619)	18.9 (8,6)
3" (DN80)	974 (110)	1120 (963)	26.5 (12,1)
4" (DN100)	1195 (135)	2100 (1800)	47.6 (21,6)

Marwin Valve KF8900 Series – Dimensions

KF8900 with Threaded Ends



Clamp End and Common Dimensions — inches

Size	Ø D	L1	H	A	B	C	S Flats	Ø E	F B.C.	G THD	ISO 5211	K
1/2"	0.370	3.5	5.2	0.28	0.57	2.6	0.197	0.315	1.65	M5	F04	1.18
3/4"	0.620	4.0	5.2	0.35	0.69	2.8	0.276	0.394	1.65	M5	F04	1.37
1"	0.870	4.5	6.5	0.39	0.79	3.1	0.276	0.394	1.97	M6	F05	1.48
1-1/2"	1.370	5.5	7.9	0.51	1.00	4.0	0.354	0.472	1.97	M6	F05	2.10
2"	1.870	6.1	8.4	0.51	0.96	4.3	0.354	0.472	2.76	M8	F07	2.43
2-1/2"	2.370	7.8	10.9	0.75	1.44	6.1	0.472	0.787	2.76	M8	F07	3.14
3"	2.870	9.0	14.7	0.75	1.46	6.4	0.472	0.787	4.02	M10	F10	3.41
4"	3.834	9.5	14.7	0.83	1.61	7.6	0.630	0.945	4.02	M10	F10	4.54

Clamp End and Common Dimensions — metric

Size	Ø D	L1	H	A	B	C	S Flats	Ø E	F B.C.	G THD	ISO 5211	K
DN15	9,4	89	132	7,0	14,5	65	5,00	8,0	42,0	M5	F04	30,0
DN20	15,7	101	132	9,0	17,5	71	7,00	10,0	42,0	M5	F04	34,8
DN25	22,1	114	164	10,0	20,0	78	7,00	10,0	50,0	M6	F05	37,6
DN40	34,7	140	200	13,0	25,5	102	9,00	12,0	50,0	M6	F05	53,4
DN50	47,5	156	213	13,0	24,5	110	9,00	12,0	70,0	M8	F07	61,7
DN65	60,3	197	275	19,0	36,5	155	12,00	20,0	70,0	M8	F07	79,7
DN80	73,0	229	371	19,0	37,0	162	12,00	20,0	102,0	M10	F10	86,7
DN100	97,4	241	372	21,0	41,0	193	16,00	24,0	102,0	M10	F10	115,2

Tube and Threaded End Dimensions — inches

Size	Threaded		Tube	
	L3	L2	Ø D1	M
1/2"	2.95	6.57	0.500	1.57
3/4"	3.15	6.69	0.750	1.57
1"	3.54	7.05	1.000	1.57
1-1/2"	4.72	7.95	1.500	1.57
2"	5.57	8.54	2.000	1.57
2-1/2"	7.28	9.96	2.500	1.57
3"	8.07	10.63	3.000	1.57
4"	9.45	12.87	4.000	2.09

Tube and Threaded End Dimensions — metric

Size	Threaded		Tube	
	L3	L2	Ø D1	M
DN15	75	167	12,8	40
DN20	80	170	19,1	40
DN25	90	179	25,4	40
DN40	120	202	38,1	40
DN50	140	217	50,8	40
DN65	185	253	63,6	40
DN80	205	270	76,3	40
DN100	240	327	101,7	53

KF8900 Series Ordering Schematic

Series	Port		Size		Body Material	Packing/Seat	Ends	Handle		Option
KF8900	F	—	10A	—	S6	A	A	HL	—	00

Series	
KF8900	Standard

Packing/Seat	
A	PTFE/PTFE

Port	
F	Full Port

Ends	
K	Clamp (standard)
A	FNPT
J	Tube (Butt Weld)

Size	
05A	1/2"
07A	3/4"
10A	1"
12A	1-1/4"
15A	1-1/2"
20A	2"
25A	2-1/2"
30A	3"
40A	4"

Handle	
HL	Lever (standard)
NN	None
*DA	Double Acting Pneumatic Actuator
*SR	Spring Return Pneumatic Actuator
*EA	Electric Actuator
*GO	Gear Operator
ZZ	Non-Standard

Body Material	
S6	CF8M

Option	
00	No Option

* These automation codes are general only, and require additional information. Specify type and size of actuator. Provide appropriate operating parameters, such as fail position, air supply pressure, electrical power supply characteristics, NEMA 4 weatherproof or NEMA 7 explosion proof electrical enclosures, etc. Also include any desired accessories. A unique code for the automation specified appears on the order, not these general codes.

Series KF8900 valves are suitable for a wide range of automation and accessories, including UT-SR spring return pneumatic actuators, UT-DA double acting pneumatic actuators, ER electric actuators, etc. Available accessories include solenoid valves, position indicators/limit switches, valve positioners, etc.



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