

# FB8905 Series

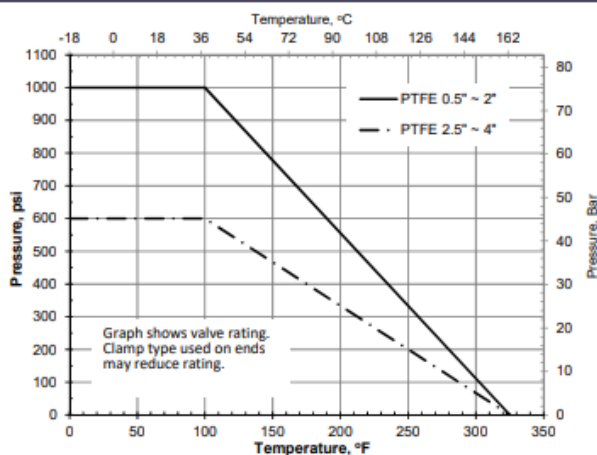
## 3A Approved Cavity-Filled Ball Valves

### Features

- In sizes from 1/2" (DN15) through 4" (DN100) with a true tube bore design, to provide unobstructed flow and better drainage
- Pressure ratings up to 1000 psi (68,9 bar) for 1/2" - 2"; and 600 psi (41,4 bar) for 2-1/2" - 4"
- PTFE cavity filler seats
- Internal finish 32 Ra
- Lockable handle prevents accidental opening or closing of valve
- ISO 5211 actuator mounting flange
- Designed for simple maintenance with swing-out for repair feature
- Anti-blowout stem
- No sharp internal fillet radius - for smooth finish
- Sanitary Clamp Connection



Pressure-Temperature Ratings



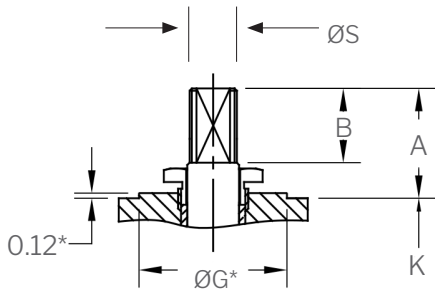
### Quick Spec

Product Scope	
Size Range	1/2" - 4"
Body Type	3-Piece
Pressure Rating	1000 psi WOG (69 bar) 1/2" - 2"; 600 psi WOG (41,4 bar) 2-1/2" - 4"
Temperature Range / WSP	325°F (160°C) / 80 psi (5,5 bar)
Body and End Caps	Stainless Steel
Ball & Stem	Stainless Steel
Ball Seats	FDA Approved PTFE
Stem Packing & Seals	FDA Approved PTFE
Operator/Mounting Pad	Manual Locking Lever / ISO 5211
Design Standards	
Design	ASME B16.34, Class 400/250
End Connections	Sanitary Clamp Ends
Testing Standards	
Pressure Testing	Industry Standard
Approvals	
3A 68-00	

FB8905 SERIES 3A APPROVED CAVITY-FILLED BALL VALVES

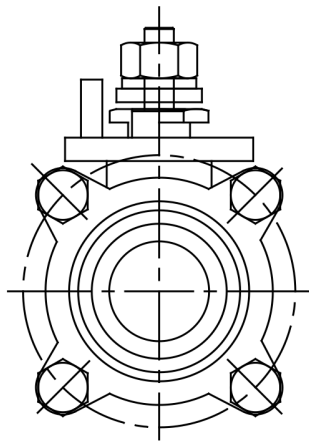
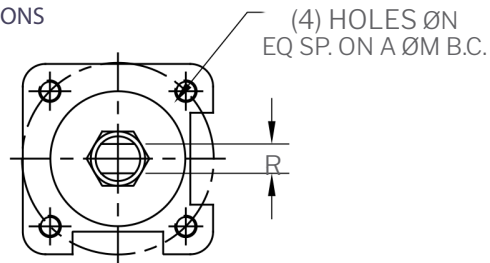
Technical Specifications			
Valve Size Inches	Operating Torque, in-lb	Cv	Weight (Lb)
			Clamp End
1/2"	87	9	1.5
3/4"	93	26	2.0
1"	109	61	2.9
1-1/2"	271	193	6.0
2"	380	432	8.6
2-1/2"	650	728	17.5
3"	932	1125	25.4
4"	1073	1986	45.2

Technical Specifications			
Valve Size DN	Operating Torque, Nm	Kv	Weight (Kg)
			Clamp End
1/2" (DN15)	9,8	7,8	0,7
3/4" (DN20)	10,4	22,5	0,9
1" (DN25)	12,2	52,8	1,3
1-1/2" (DN40)	30,6	167	2,7
2" (DN50)	42,8	375	3,9
2-1/2" (DN65)	73,5	630	7,9
3" (DN80)	104	973	11,5
4" (DN100)	122	1718	20,5

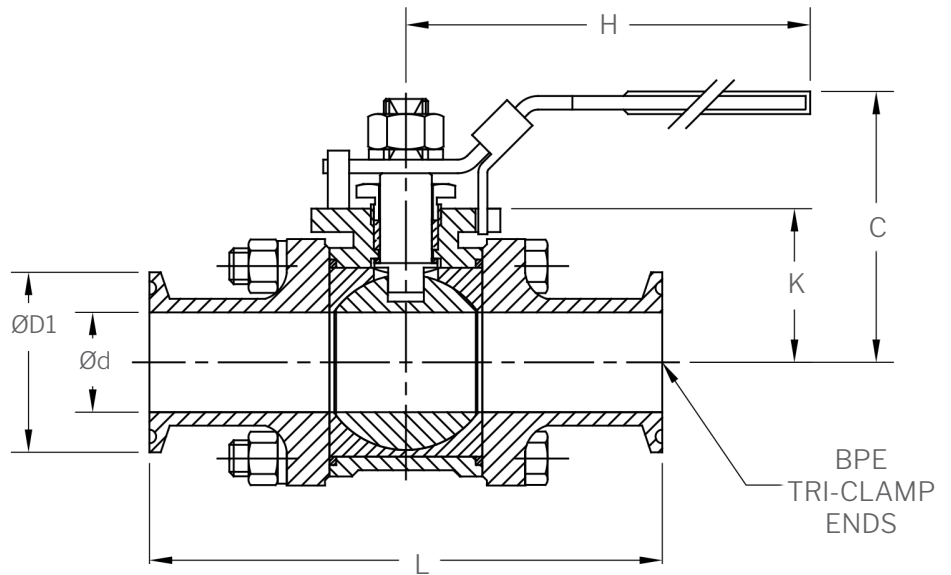


\*2 1/2" - 4" Only

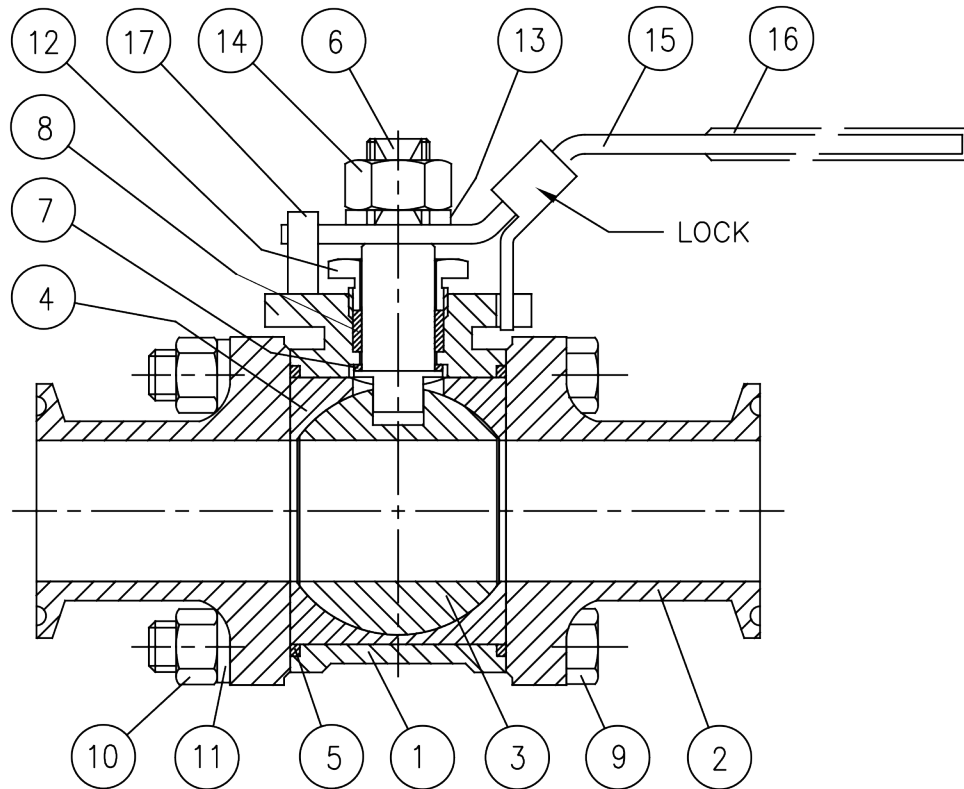
DIMENSIONS



ART1344



Tri-Clamp Ends Dimensions, inches														
Valve Size	A in.	B in.	C in.	Ød in.	ØD1 in.	ØG in.	H in.	K in.	L in.	ØM (B.C) in.	ØN in.	ISO Pat-tern	R in.	ØS in
0.5"	DN15	0.71	0.56	2.44	0.37	1.00	-	5.20	1.18	3.50	1.42	10-24	F03	0.197 0.394
0.75"	DN20	0.69	0.53	2.62	0.62	1.00	-	5.20	1.36	3.98	1.42	10-24	F03	0.197 0.394
1"	DN25	0.91	0.56	2.83	0.87	1.98	-	6.50	1.38	4.49	1.65	10-24	F04	0.256 0.551
1.5"	DN40	1.08	0.67	3.46	1.38	1.98	-	7.68	1.79	5.51	1.97	1/4-20	F05	0.335 0.748
2"	DN50	0.97	0.70	3.78	1.87	2.52	-	7.68	2.11	6.14	1.97	1/4-20	F05	0.335 0.748
2.5"	DN65	1.59	1.04	5.24	2.37	3.05	0.96	9.92	2.98	7.76	2.76	5/16-18	F07	0.472 0.984
3"	DN80	1.59	1.04	5.59	2.87	3.58	0.96	9.92	3.35	9.01	2.76	5/16-18	F07	0.472 0.984
4"	DN100	2.17	1.38	6.50	3.84	4.68	1.73	13.07	4.13	9.57	4.02	3/8-16	F10	0.630 1.181



ART1343

Standard Materials of Construction		
Item	Part Name	Material
1	Body	ASTM A351 CF8M
2	End Cap	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M
4	Seat, Cavity Filler	PTFE
5	Body Seal	PTFE
6	Stem	316/316L
7	Thrust Washer	PTFE
8	Packing, Stem	PTFE
9	Bolt or Stud, Body	SS 304
10	Nut, Body Bolt	SS 304
11	Washer, Body Bolt	SS 304
12	Gland Nut	SS 304
13	Washer, Handle	SS 304
14	Nut, Handle	SS 304
15	Handle	SS 304
16	Cover, Handle	VINYL
17	Stop Pin, Handle	SS 304

ORDERING SCHEMATIC

FB8905		1	2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15

Series	
FB8905F	3-Piece Cavity-Filled

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

Body Material	
S6	A351 CF8M

1	Packing / Seat
A	PTFE/PTFE

2	End Connections
K	Clamp

3 & 4	Operation
HL	Lever
NN	None
P1	UT-0A-DA
P2	UT-0-DA
P3	UT-1-DA
P4	UT-2-DA
P5	UT-2.5-DA
P6	UT-3-DA
P7	UT-3.5-DA
P8	UT-4-DA
PF	UT-4.5-DA
P9	UT-5-DA
S1	UT-0-SR
S2	UT-1-SR
S3	UT-2-SR
S4	UT-2.5-SR
S5	UT-3-SR
S6	UT-3.5-SR
S7	UT-4-SR
SF	UT-4.5-SR
S8	UT-5-SR
M1	ER-1-2.5-4 110 VAC
M2	ER-2-5-4 110 VAC
M3	ER-3-5-4 110 VAC
M8	ER-4-10-4 110 VAC
M4	ER-6-15-4 110 VAC
M5	ER-10-15-4 110 VAC
M9	ER-15-30-4 110 VAC
ZZ	Non-Standard

5 & 6	Actuator Pressure
40	40 psi
60	60 psi
80	80 psi
NN	N/A (no pneumatic actuator)
ZZ	Non-Standard

ORDERING SCHEMATIC, CONT.

7&8	Solenoid Feature*	Act. Type
00	None	
3A	3W 8551-120VAC N4 UT-0/5	SR
3C	3W EF8551-120VAc N7 UT-0/5	SR
3J	3W 8317G35-120VAC N4 UT-0/2.5	SR
3M	3W 8321G1-120VAC N4 UT-3/5	SR
3Q	3W EF8317G35-120VAC N7 UT-0/2.5	SR
3R	3W EF8321G1-120VAC N7 UT-3/5	SR
4A	4W 8551-120VAC N4 UT-0A	DA
4B	4W 8551-120VAC N4 UT-0/5	DA
4D	4W EF8551-120VAC N7 UT-0A	DA
4E	4W EF8551-120VAC N7 UT0/5	DA
ZZ	Non-Standard	

9&10	Limit Switch
00	None
AA	LS FMYB-5120-N4 to UT-0/3
AB	LS FMYB-5120-N4 to UT-3.5/7
AC	LS AMYB-5120-N7 to UT-0/3
AD	LS AMYB-5120-N7 to UT-3.5/7
ZZ	Non-Standard

11&12	Fail Position
NN	Fail Position N/A (No "SR" Actuator)
01	Fail Closed
02	Fail Open



13&14	Positioner*
00	None
AA	Siemens 760P (3-15 psi), for UT-0/3
AB	Siemens 760P (3-15 psi), for UT-3.5/7
AC	Siemens 760E (4-20 mA), for UT-0/3
AD	Siemens 760E (4-20 mA), for UT-3.5/7
AE	Siemens 2-IQ (4-20 mA), for UT-0/3 DA
AF	Siemens 2-IQ (4-20 mA), for UT-3.5/7DA
AQ	Siemens 2-IQ (4-20 mA), for UT-0/3 SR
AR	Siemens 2-IQ (4-20 mA), for UT-3.5/7SR
ZZ	Non-Standard

15	Miscellaneous Features*
0	None
4	Air Filter Reg. 4Z030A to UT-0 thru 2.5
5	Air Filter Reg. 4Z030A to UT-3 thru 5
Z	Non-Standard

\* SST Tubing & Fitting standard for automation

DOCUMENTATION

A Certificate of Compliance is available at no charge when requested at time of order. The "Unicert" is a chargeable document. If needed, a "Unicert" must be requested at time of order.

Richards Industries reserves the right to make revisions to its products, specifications, literature, and related information without notice.



3170 Wasson Road • Cincinnati, OH 45209  
 513.533.5600 • 800.543.7311 • 513.871.0105 (f)  
 steriflowfoodandbev.com • foodandbev@richardsind.com