

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 11/9/2023

Return Request: 11/19/2023

Project: UCA Snow – Fine Arts Center

Supplier: Comfort Systems USA (Arkansas), Inc.

Manufacturer: Various

Submittal: Plumbing Piping Specialties

Submittal Number: 22 10 06-01

Drawing # and Installation: Plumbing Drawings

ARCHITECT

H+N Architects
1009 Main Street
Conway, AR 72032
501-327-7525

ENGINEER

Pettit & Pettit
201 E. Markham St. #400
Little Rock, AR 72201
501-374-3731

GENERAL CONTRACTOR

Wagner General Contractors
600 W. Race Ave.
Searcy, AR 72143
501-203-0704

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

CSUSA PROJECT NO.

23-2020

chowell@comfortar.com

Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

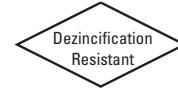
Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372-8 Commercial Hot 180°F

Size range: ¼" - 3"

Pressure rating: 600 PSI non-shock cold working pressure

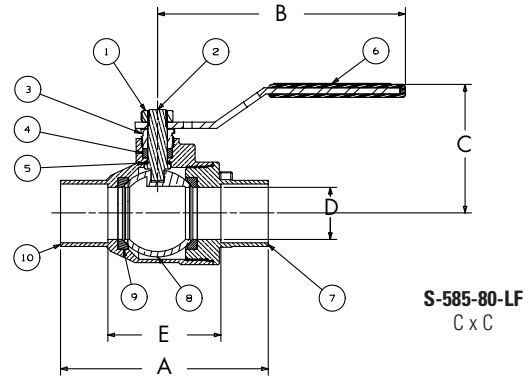
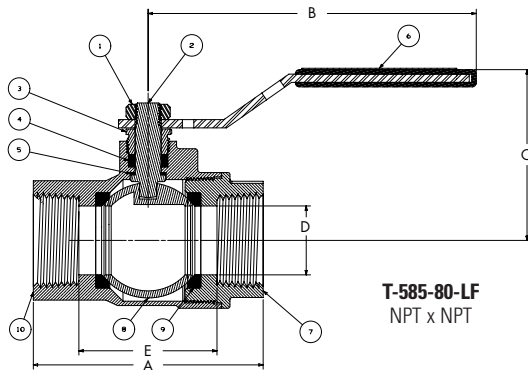
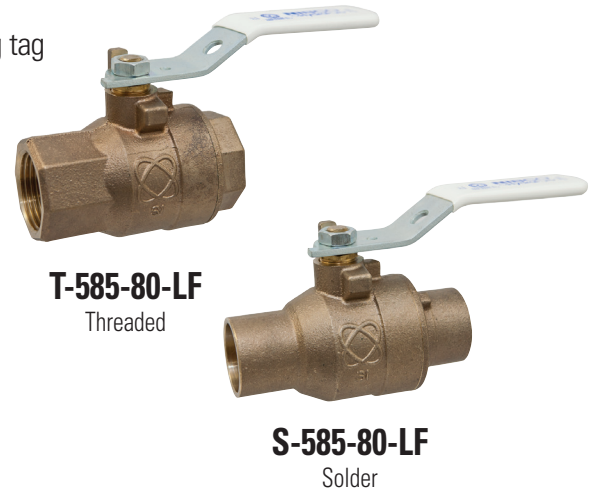
Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag



MATERIAL LIST

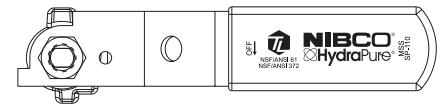
PART	SPECIFICATION
1. Handle Nut	Zinc Plated Steel
2. Stem	Silicon Bronze ASTM B371 Alloy C69300
3. Pack Gland	Brass ASTM B16 Alloy C36000
4. Packing, Stem	Virgin PTFE
5. Washer, Thrust	Reinforced PTFE
6. Handle	Zinc Plated Steel Clear Chromate Plastisol Coated
7. End Piece	Silicon Bronze ASTM B584 Alloy C87600
8. Seat Ring (2)	Reinforced PTFE
9. Ball	DZR Brass SAE J461 C46500 (¼"-1") Stainless Steel ASTM A276 S31600 or ASTM A351CF8M (1¼"-3")
10. Body	Silicon Bronze ASTM B584 Alloy C87600



DIMENSIONS—WEIGHTS—QUANTITIES

Dimensions

SIZE	T-585-80-LF		S-585-80-LF		T-585-80-LF		S-585-80-LF		T-585-80-LF		S-585-80-LF		T-585-80-LF		S-585-80-LF		Master Ctn. Qty.			
	A	A	B	C	D	E	E	E	E	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.					
¼	8	1.78	45	1.83	46	3.96	101	1.86	47	0.31	8	1.00	25	1.21	31	0.43	0.19	0.40	0.18	24
⅜	10	1.79	45	1.97	50	3.96	101	1.85	47	0.38	10	1.80	46	1.21	31	0.44	0.20	0.41	0.19	24
½	15	2.23	57	2.4	61	3.96	101	1.96	50	0.5	13	1.16	29	1.40	36	0.65	0.30	0.56	0.25	80
¾	20	2.78	71	3.16	80	4.76	121	2.28	58	0.75	19	1.68	43	1.66	42	1.20	0.55	1.02	0.46	60
1	25	3.34	85	3.99	101	4.76	121	2.48	63	1	25	2.00	51	2.17	55	1.63	0.74	1.50	0.68	40
1¼	32	3.75	95	4.13	105	6.75	171	3.10	79	1.25	32	2.39	61	2.19	56	2.87	1.30	2.41	1.09	20
1½	40	4.26	108	4.97	126	6.75	171	3.32	84	1.5	38	2.89	73	2.79	71	3.83	1.74	3.62	1.64	10
2	50	4.80	122	6.02	153	6.75	171	3.56	90	2	51	3.40	86	3.34	85	5.57	2.53	5.54	2.51	6
2½	65	6.00	152	7.21	183	8.06	205	4.40	112	2.50	64	4.12	105	4.27	108	13.70	6.21	12.80	5.80	2
3	76	6.5	165	8	202	8.06	205	4.65	118	2.95	75	4.46	113	4.62	117	14.30	6.49	12.50	5.67	2



Handle Markings

Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%

Lead-Free Bronze Gate Valves

Features: Silicon Performance Bronze® Alloy • Screw-In Bonnet • Rising Stem

Approvals: Conforms to MSS SP-139 • Solid Wedge • NSF/ANSI-61-8 Commercial Hot 180°F (includes annex F and G) and NSF/ANSI-372

Size range: 1/4" - 3"

Pressure rating: 300 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag



NSF/ANSI 61
NSF/ANSI 372



MATERIAL LIST

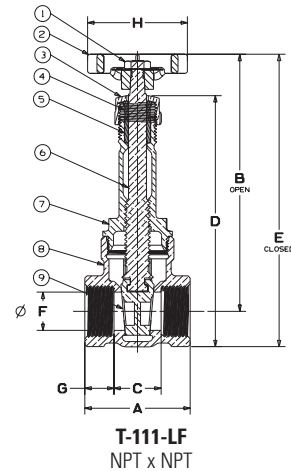
PART	SPECIFICATION
1. Handwheel Nut	300 Series Stainless Steel
2. Identification Plate	Aluminum
3. Handwheel	Malleable Iron ASTM A47
4. Stem	Silicon Bronze ASTM B371 Alloy C69430 or ASTM B99 Alloy C65100
5. Packing Nut	Bronze ASTM B62 or ASTM B584 Alloy C84400 or Brass ASTM B16
6. Packing Gland	Bronze ASTM B62 or ASTM B584 Alloy C84400 or Brass ASTM B16
7. Packing	Aramid Fibers with Graphite
8. Bonnet	Silicon Bronze ASTM B584 Alloy C87850
9. Body	Silicon Bronze ASTM B584 Alloy C87850
10. Wedge	Silicon Bronze ASTM B584 Alloy C87850



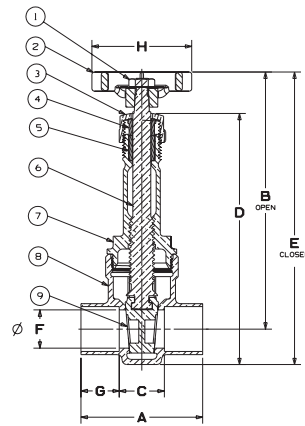
T-111-LF
Threaded



S-111-LF
Solder



T-111-LF
NPT x NPT



S-111-LF
C x C

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE	A	B	C	D	E	F	G	T-111-LF		Master
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	Lbs.	Kg.	Ctn Qty.
1/4†	8 1.68	43 5.12	130 0.88	22 3.62	92 4.54	115 0.31	8 0.38	10 0.75	0.34	50
3/8†	10 1.68	43 5.20	132 0.84	21 3.62	92 4.56	116 0.38	10 0.42	11 0.72	0.33	50
1/2†	15 1.94	49 4.85	123 0.86	22 3.92	100 4.82	122 0.5	13 0.54	14 0.83	0.38	50
3/4	20 2.06	52 5.89	150 0.92	23 4.93	125 5.74	146 0.75	19 0.57	14 1.13	0.51	50
1	25 2.44	62 7.21	183 1.04	26 5.95	151 6.93	176 1.00	25 0.70	18 1.88	0.86	30
1-1/4	32 2.62	67 8.20	208 1.20	30 6.69	170 7.84	199 1.25	32 0.71	18 2.53	1.15	20
1-1/2	40 2.88	73 9.40	239 1.38	35 7.51	191 8.94	227 1.50	38 0.75	19 3.57	1.62	10
2	50 3.06	78 11.54	293 1.48	38 9.65	245 10.84	275 2.00	51 0.79	20 5.28	2.39	10
2-1/2	65 4.12	105 14.40	366 1.84	47 11.86	301 13.52	343 2.50	64 1.14	29 10.26	4.66	5
3	80 4.50	114 16.60	422 2.10	53 13.89	353 15.65	398 3.00	76 1.20	30 14.72	6.67	4

SIZE	A	B	C	D	E	F	G	S-111-LF		Master
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	Lbs.	Kg.	Ctn Qty.
1/2†	15 1.75	44 5.46	139 0.75	19 3.88	99 4.80	122 0.50	13 0.50	13 0.69	0.31	50
3/4	20 2.38	60 5.89	150 0.88	22 4.93	125 5.74	146 0.75	19 0.75	19 1.02	0.47	50
1	25 2.82	72 7.21	183 1.00	25 5.87	149 6.85	174 1.00	25 0.91	23 1.68	0.76	30
1-1/4	32 3.12	79 8.20	208 1.18	30 6.69	170 7.84	199 1.25	32 0.97	25 2.39	1.08	20
1-1/2	40 3.42	87 9.40	239 1.24	31 7.48	190 8.91	226 1.50	38 1.09	28 3.25	1.47	10
2	50 4.00	102 11.54	293 1.31	33 9.60	244 10.78	274 2.00	51 1.34	34 4.97	2.25	10

†No packing gland, packing only in this size.



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%

Lead-Free Bronze Check Valves

Features: Silicon Performance Bronze® Alloy • Horizontal Swing • Regrinding Type • Y-Pattern • Renewable Seat and Disc

Approvals: Conforms to MSS SP-139 • NSF/ANSI-61-8 Commercial Hot 180°F (includes annex F and G) and NSF/ANSI-372

Size Range: 1/4" - 2"

Pressure Rating: 200 PSI Non-Shock Cold Working Pressure
Maximum Pressure / Temperature: 100 PSI at 300° F

Lead-free marking: Double oval in body casting



NSF/ANSI 61
NSF/ANSI 372



T-413-Y-LF
Threaded

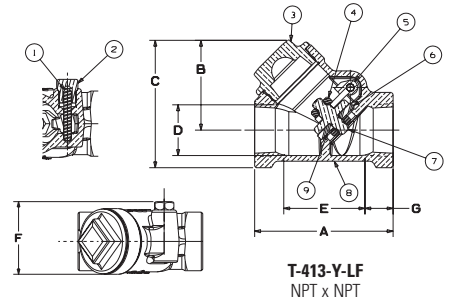


S-413-Y-LF
Solder

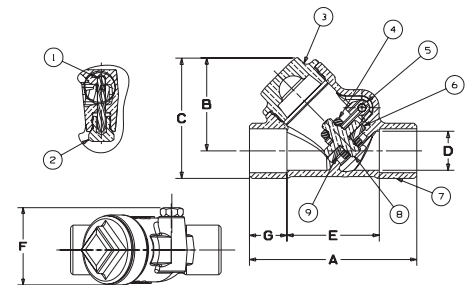
MATERIAL LIST

PART	SPECIFICATION
1. Hinge Pin	316SS or 304SS
2. Hinge Pin Plug	Silicon Bronze ASTM B283 Alloy C69300
3. Bonnet	Silicon Bronze ASTM B584 Alloy C87850
4. Nut (2)	316SS or 304SS
5. Disc Hanger	Silicon Bronze ASTM B584 Alloy C87850 or MPIF SS-316NI-25
6. Seat Disc	PTFE
7. Seat Disc Washer *	304SS or 316SS
8. Disc Holder	Silicon Bronze ASTM B283 Alloy C69300
9. Body	Silicon Bronze ASTM B584 Alloy C87850

*Sizes 3/4", 1", 1 1/4", 1 1/2" and 2" only. No Seat Disc Washers on 1/2" and 3/4" with PTFE (Y) discs.



T-413-Y-LF
NPT x NPT



S-413-Y-LF
C x C

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE	A		B		C		D		E		F		G		T-413-Y-LF		Master	
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	Lbs.	Kg.	Ctn Qty.	
1/4	8	2.12	53.85	1.31	33.27	1.37	34.79	0.67	17	1.57	40	1.401	27	0.26	7	0.508	0.23	50
3/8	10	2.12	53.85	1.31	33.27	1.31	33.27	0.67	17	1.40	36	1.401	27	0.35	9	0.478	0.22	50
1/2	15	2.44	62	1.66	42	2.31	59	0.81	21	1.61	41	1.401	33	0.42	11	0.55	0.25	50
3/4	20	2.9	74	1.88	48	2.67	68	1.04	26	2.06	52	1.702	40	0.42	11	0.90	0.41	50
1	25	3.56	90	2.27	58	3.29	84	1.26	32	2.44	62	1.953	52	0.55	14	1.46	0.66	30
1-1/4	32	4.18	106	2.73	69	3.93	100	1.59	40	3.00	76	2.179	60	0.59	15	2.17	0.99	20
1-1/2	40	4.48	114	3.08	78	4.44	113	1.86	47	3.39	86	2.430	70	0.57	13	2.95	1.34	10
2	50	5.29	134	3.84	98	5.48	139	2.29	58	3.74	95	3.067	83	0.76	19	4.79	2.17	10

SIZE	A		B		C		D		E		F		G		S-413-Y-LF		Master	
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	Lbs.	Kg.	Ctn Qty.	
1/4	8	2.12	53.85	1.31	33.27	1.37	34.79	0.67	17	1.57	40	1.401	27	0.26	7	0.508	0.23	50
3/8	10	2.12	53.85	1.31	33.27	1.31	33.27	0.67	17	1.40	36	1.401	27	0.35	9	0.478	0.22	50
1/2	15	2.52	64	1.540	42	1.940	49	0.54	14	1.52	39	1.416	20	0.50	13	0.55	0.25	50
3/4	20	3.34	85	1.861	48	2.410	61	0.78	20	1.84	47	1.717	28	0.75	19	0.88	0.40	50
1	25	4.06	103	2.206	29	2.880	73	1.02	26	2.25	57	1.947	34	0.91	23	1.48	0.67	30
1-1/4	32	4.69	119	2.737	38	3.520	89	1.26	32	2.75	70	2.178	40	0.97	25	2.22	1.01	20
1-1/2	40	5.28	134	3.030	44	3.950	100	1.51	38	3.09	78	2.429	47	1.09	28	3.00	1.36	10
2	50	6.44	164	3.640	98	4.863	123	1.98	50	3.74	95	3.073	62	1.34	34	4.87	2.21	10

NIBCO check valves may be installed in both horizontal and vertical lines with upward flow or in any intermediate position. They will operate satisfactorily in a declining plane (no more than 15°). Install check valves as far from pump discharge or line direction change as possible and at a minimum length of 5 times the pipe diameter.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Do not use for reciprocating air compressor service.

LEAD-FREE: Weighted average lead content ≤ 0.25%