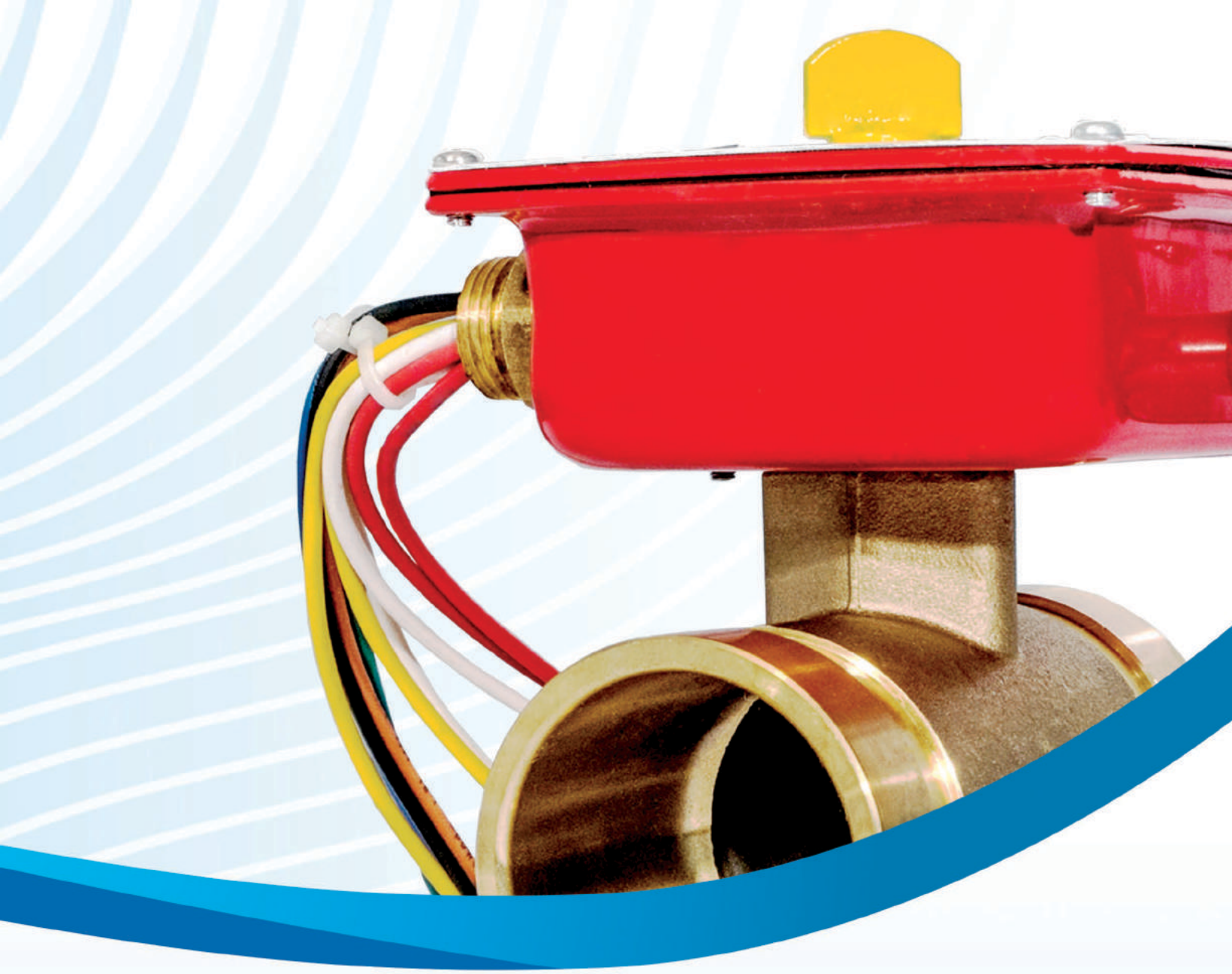

ALEUM

PRODUCT CATALOG

About Us

Aleum has over 35 years of manufacturing experience of flow control products. Aleum has manufacturing and distribution facilities in Asia, America, and Europe; our products and services reach over 80 countries and millions of people worldwide. Aleum's legacy starts with innovative engineering and superior construction, built upon proven science and cutting-edge technology. Commitment to quality and performance are at the top of our agenda. From start to finish, and design to construction, every piece is built to perfection.

Our products are designed, tested and certified by leading testing agencies, including Underwriters Laboratories and Factory Mutual, based on wide range of global standards. Aleum has been approved by many local jurisdictions including California Fire Marshal.

The success of our company is based on listening to our customers, understanding their needs and developing products and services that meet or exceed their requirements. We work in collaborative manner with our customers to develop innovative and effective solutions.

Customer service and technical support are recognized as second to none, And our extensive inventory and swift shipments enhance our customers competitive edge. At Aleum we aim for excellence in everything we do.

IN STOCK CALIFORNIA U.S.A.

WWW.ALEUMUSA.COM

TRADE AMERICAN COMPLIANCE

Trade Agreements Act of 1979 (TAA) allows US contractors to supply and use products and services from South Korea.

ALEUM USA. HEADQUARTERS • 1265 Grove St. Anaheim, CA 92806 USA • PH: 714.520.0338 FAX: 714.520.0335

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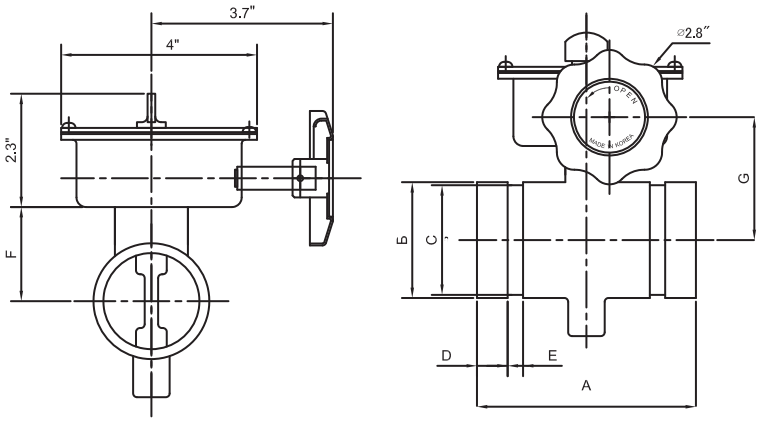
Bronze Butterfly Valve | Grooved

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2", 2-1/2"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Maximum Working Pressure:** 175PSI (Max. Test Pressure: 350PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- Factory-Installed Supervisory Tamper Switch Assembly

Components	Material	Specification
Body	Bronze	ASTM B505
Disc	Aluminum Bronze	ASTM B548
Disc Encapsulation	EPDM Rubber	ASTM D2000
Indicator	Brass	ASTM B16
Housing	Steel	ASTM A619
Handwheel	Steel	ASTM A619
Stem	Stainless Steel	ASTM A564 Type XM12



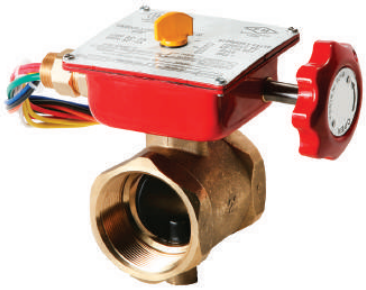
Dimensions:

Size	A		B		C		D		E		F		G		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2"	4.5	114.0	2.4	60.3	2.3	57.2	0.6	16.0	0.3	8.0	1.9	49.0	2.5	64.0	5.2
2-1/2"	4.5	114.0	3.0	75.0	2.3	59.1	0.6	16.0	0.3	8.0	2.3	59.0	2.9	74.0	5.3

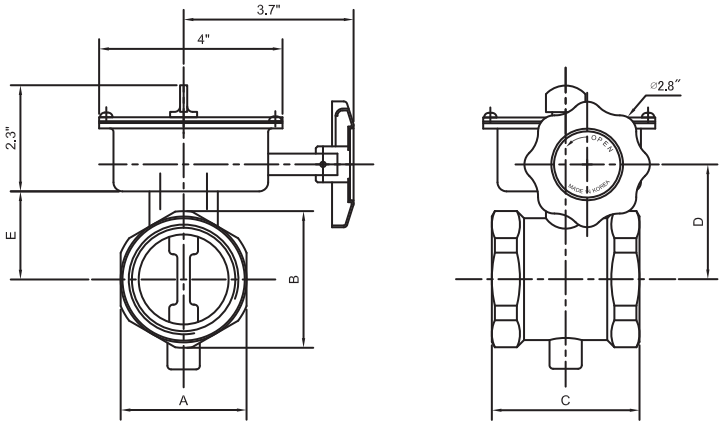
Bronze Butterfly Valve | Threaded

Technical Features

- **Connections:** Threaded Ends (ANSI / ASME B1.20.1 NPT)
- **Sizes:** 1", 1-1/4", 1-1/2", 2", 2-1/2"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Maximum Working Pressure:** 175PSI (Max. Test Pressure:350PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- Factory-Installed Supervisory Tamper Switch Assembly



Components	Material	Specification
Body	Bronze	ASTM B505
Disc	Aluminum Bronze	ASTM B548
Disc Encapsulation	EPDM Rubber	ASTM D2000
Indicator	Brass	ASTM B16
Housing	Steel	ASTM A619
Handwheel	Steel	ASTM A619
Stem	Stainless Steel	ASTM A564 Type XM12



Dimensions:

Size	A		B		C		D		E		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
1"	1.7	43.7	1.6	39.7	2.1	54.0	2.0	52.0	1.5	37.0	3.5
1-1/4"	2.1	54.0	1.9	49.0	2.6	67.0	2.2	56.0	1.6	41.0	3.9
1-1/2"	2.4	60.0	2.2	56.0	2.9	73.0	2.3	59.0	1.7	43.0	4.3
2"	3.0	76.0	2.8	70.0	3.2	82.4	2.5	64.0	1.9	49.0	5.2
2-1/2"	3.5	90.0	3.3	84.0	4.1	104.0	2.9	74.0	2.3	59.0	5.7

Bronze Butterfly Valve | Grooved

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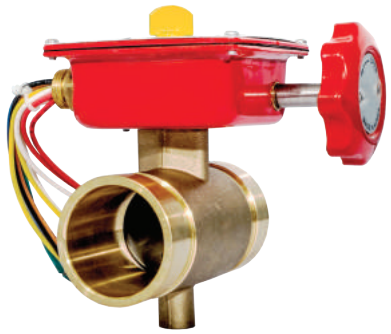
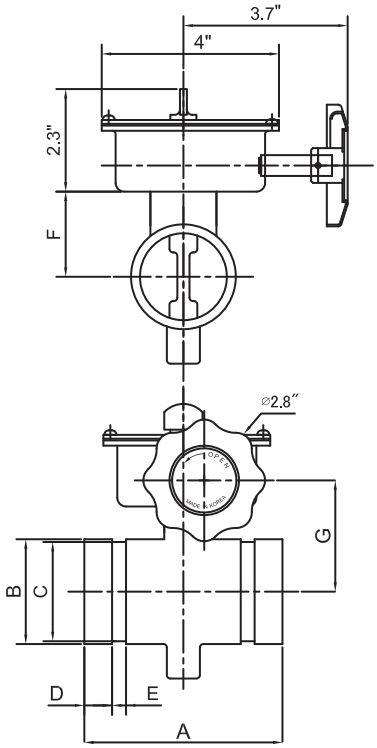
FM APPROVED

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 1", 1-1/4", 1-1/2", 2", 2-1/2", 3"
- **Approvals:** UL, ULC, FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- Factory-Installed Supervisory Tamper Switch Assembly





Components	Material	Specification
Body	Bronze	ASTM B505
Disc	Aluminum Bronze	ASTM B548
Disc Encapsulation	EPDM Rubber	ASTM D2000
Indicator	Brass	ASTM B16
Housing	Steel	ASTM A619
Handwheel	Steel	ASTM A619
Stem	Stainless Steel	ASTM A564 Type XM12

Dimensions:

Size	A		B		C		D		E		F		G	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1"	3.4	86	1.3	33.7	1.2	30.2	0.6	16.0	0.3	7.5	1.5	37	2.0	52
1-1/4"	3.9	99	1.7	42.4	1.5	39	0.6	16.0	0.3	7.5	1.6	41	2.2	56
1-1/2"	4.1	104	1.9	48.3	1.8	45.1	0.6	16.0	0.3	7.5	1.7	44	2.3	59
2"	4.5	114	2.4	60.3	2.3	57.15	0.6	16.0	0.3	8.0	1.9	49	3.6	90.5
2-1/2"	4.5	114	3.0	75	2.7	69.1	0.6	16.0	0.3	8.0	2.2	54.5	3.8	95.5
3"	4.5	114	3.5	88.9	3.4	84.95	0.6	16.0	0.3	8.0	2.8	70	3.9	98.5

Bronze Butterfly Valve | Threaded

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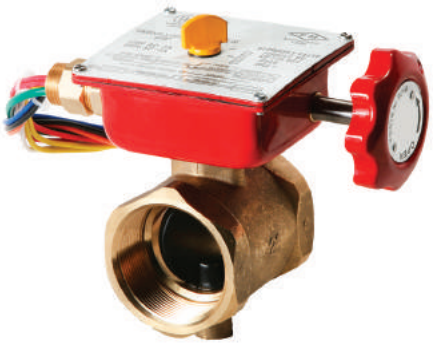
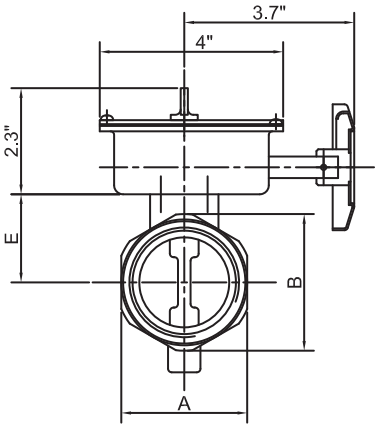
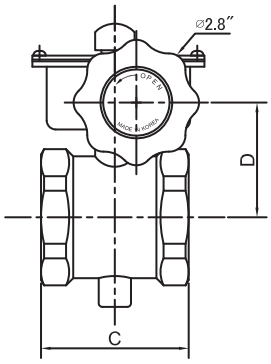
FM APPROVED

Technical Features

- **Connections:** Threaded Ends (ANSI / ASME B1.20.1 NPT)
- **Sizes:** 1", 1-1/4", 1-1/2", 2", 2-1/2"
- **Approvals:** UL, ULC, FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- Factory-Installed Supervisory Tamper Switch Assembly







Components	Material	Specification
Body	Bronze	ASTM B505
Disc	Aluminum Bronze	ASTM B548
Disc Encapsulation	EPDM Rubber	ASTM D2000
Indicator	Brass	ASTM B16
Housing	Steel	ASTM A619
Handwheel	Steel	ASTM A619
Stem	Stainless Steel	ASTM A564 Type XM12

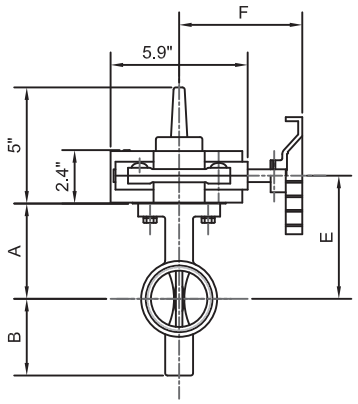
Dimensions:

Size	A		B		C		D		E	
	in	mm	in	mm	in	mm	in	mm	in	mm
1"	1.7	43.7	1.6	39.7	2.1	54.0	2.0	52.0	1.5	37.0
1-1/4"	2.1	54.0	1.9	49.0	2.6	67.0	2.2	56.0	1.6	41.0
1-1/2"	2.4	60.0	2.2	56.0	2.9	73.0	2.3	59.0	1.7	43.0
2"	3.0	76.0	2.8	70.0	3.2	82.4	2.5	64.0	1.9	49.0
2-1/2"	3.5	90.0	3.3	84.0	4.1	104.0	2.9	74.0	2.3	59.0

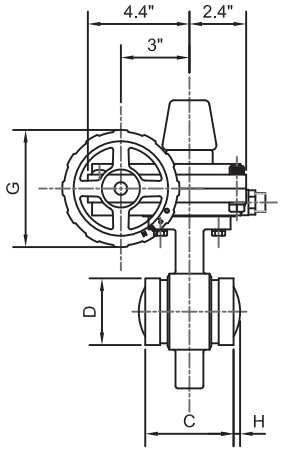
300 PSI Butterfly Valve | Grooved

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2-1/2", 3", 4", 6", 8"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- **Double-Seal Disc;** Resilient EPDM Coating
- Factory-Installed Supervisory Tamper Switch Assembly
- Also Available with Supervised Closed Switches



Components	Material	Specification
Body	Ductile Iron	ASTM A526 Nylon-11 Coated
Disc	Ductile Iron	ASTM A536 EPDM Ensapsulated
Indicator	Ductile Iron	ASTM A536
Housing	Ductile Iron	ASTM A536
Handwheel	Ductile Iron	ASTM A536
Stem	Stainless Steel	AISI 420
Worm Shaft	Stainless Steel	AISI 410
Shear Pin	Steel	ASTM A510
Gear Segment	Brass	ASTM B584
Housing Gasket	EPDM	EPDM Grade E
O-Ring (All)	EPDM	EPDM Grade E



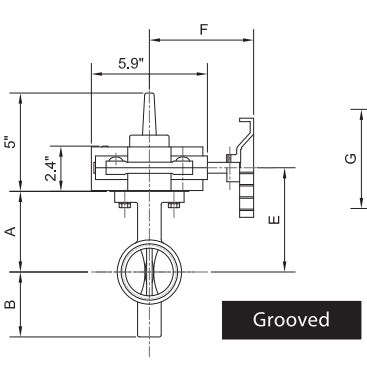
Dimensions:

Size	A		B		C		D		E		F		G		H		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	4.1	105.0	3.6	92.0	3.8	96.4	2.9	73.0	5.3	135.0	5.3	135.0	5.0	128.0			20.0
3"	4.4	112.0	3.7	95.0	3.8	96.4	3.5	88.9	5.6	142.0	5.3	135.0	5.0	128.0			21.0
4"	5.7	145.0	4.3	108.0	4.5	115.4	4.5	114.3	6.9	175.0	5.3	135.0	5.0	128.0			26.0
6"	7.0	179.0	5.7	146.0	5.2	132.4	6.6	168.3	8.2	209.0	7.6	193.0	8.7	220.0	0.3	6.8	39.0
8"	8.0	204.0	6.7	170.0	5.8	147.4	8.6	219.1	9.2	234.0	7.6	193.0	8.7	220.0	1.0	24.2	51.0

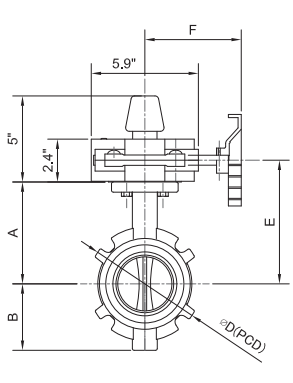
Supervised Closed Butterfly Valve | Grooved & Wafer

Technical Features

- **Connections:** Grooved Ends (AWWA C606) / Wafer Ends (ANSI Class 125)
- **Sizes:** 2-1/2", 3", 4", 6", 8"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Working Pressure:** Grooved & Wafer 300PSI / Grooved 175 PSI
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- **Double-Seal Disc;** Resilient EPDM Coating
- **Indicator:** Colored in White
- Factory-Installed Supervisory Tamper Switch Assembly
- Also Available with Normally Open Switches



Grooved



Wafer

Dimensions:

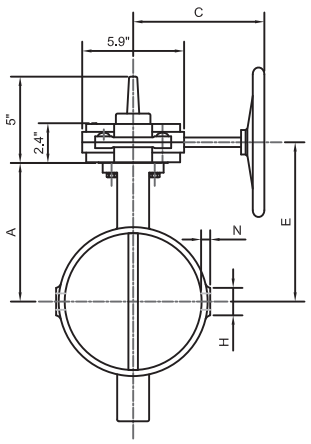
Grooved Supervised Closed Butterfly Valve																	
Size	A		B		C		D		E		F		G		H		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	4.1	105.0	3.6	92.0	3.8	96.4	2.9	73.0	5.3	135.0	5.3	135.0	5.0	128.0			20.0
3"	4.4	112.0	3.7	95.0	3.8	96.4	3.5	88.9	5.6	142.0	5.3	135.0	5.0	128.0			21.0
4"	5.7	145.0	4.3	108.0	4.5	115.4	4.5	114.3	6.9	175.0	5.3	135.0	5.0	128.0			26.0
6"	7.0	179.0	5.7	146.0	5.2	132.4	6.6	168.3	8.2	209.0	7.6	193.0	8.7	220.0	0.3	6.8	39.0
8"	8.0	204.0	6.7	170.0	5.8	147.4	8.6	219.1	9.2	234.0	7.6	193.0	8.7	220.0	1.0	24.2	51.0

Wafer Supervised Closed Butterfly Valve																	
Size	A		B		C		D		E		F		G		H		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	5.4	136.0	3.4	87.0	1.8	46.0	5.9	149.4	6.5	166.0	5.3	135.0	5.0	128.0	0.3	8.2	20.0
3"	5.6	143.0	3.7	93.0	1.8	46.0	6.6	168.2	6.8	173.0	5.3	135.0	5.0	128.0	0.6	14.5	21.0
4"	6.1	156.0	4.3	109.0	2.0	52.0	7.9	200.2	7.3	186.0	5.3	135.0	5.0	128.0	0.9	22.7	23.0
6"	7.4	188.0	5.7	144.0	2.2	56.0	10.6	269.8	8.6	218.0	7.6	193.0	8.7	220.0	1.8	45.4	32.0
8"	8.7	222.0	6.5	166.0	2.3	58.0	13.0	330.2	9.9	252.0	7.6	193.0	8.7	220.0	2.7	69.1	42.0

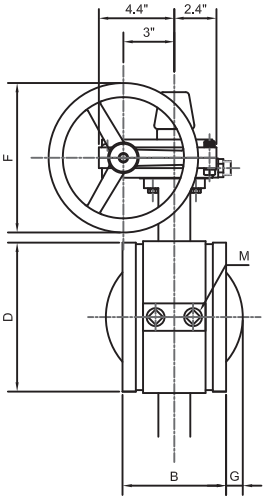
300 PSI Butterfly Valve | Grooved Tapped Body

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2-1/2", 3", 4", 6", 8"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- **Double-Seal Disc;** Resilient EPDM Coating
- Factory-Installed Supervisory Tamper Switch Assembly
- Also Available with Supervised Closed Switches



Components	Material	Specification
Body	Ductile Iron	ASTM A526 Nylon-11 Coated
Disc	Ductile Iron	ASTM A536 EPDM Ensapsulated
Indicator	Ductile Iron	ASTM A536
Housing	Ductile Iron	ASTM A536
Handwheel	Ductile Iron	ASTM A536
Stem	Stainless Steel	AISI 420
Worm Shaft	Stainless Steel	AISI 410
Shear Pin	Steel	ASTM A510
Gear Segment	Brass	ASTM B584
Housing Gasket	EPDM	EPDM Grade E
O-Ring (All)	EPDM	EPDM Grade E



Dimensions:

Size	A		B		C		D		E		F		G		H		N		M		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	4.1	105.0	5.0	127.0	5.3	135.0	2.9	73.0	5.3	135.0	5.0	128.0			1.2	30.0	0.5	13.0	4-1/2 NPT		20.0
3"	4.4	112.0	5.0	127.0	5.3	135.0	3.5	88.9	5.6	142.0	5.0	128.0			1.2	30.0	0.5	13.0	4-1/2 NPT		21.0
4"	5.7	145.0	5.0	127.0	5.3	135.0	4.5	114.3	6.9	175.0	5.0	128.0			1.6	40.4	0.6	15.0	4-3/4 NPT		26.0
6"	7.0	179.0	5.6	143.5	7.6	193.0	6.6	168.3	8.2	209.0	8.7	220.0	0.3	6.8	1.6	40.4	0.6	15.0	4-3/4 NPT		39.0
8"	8.0	204.0	6.0	152.4	7.6	193.0	8.6	219.1	9.2	234.0	8.7	220.0	1.0	24.2	1.6	40.4	0.6	15.0	4-3/4 NPT		51.0

300 PSI Butterfly Valve | Grooved

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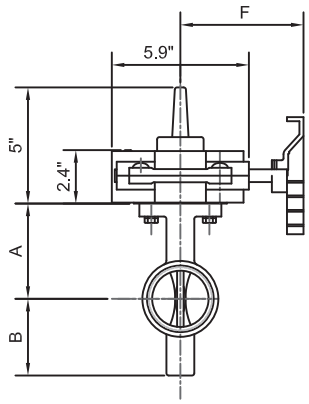
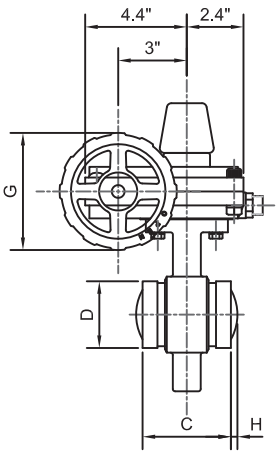
FM APPROVED

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2", 5", 10", 12"
- **Approvals:** UL, ULC, FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- **Double-Seal Disc;** Resilient EPDM Coating
- Factory-Installed Supervisory Tamper Switch Assembly
- Also Available with Supervised Closed Switches

Components	Material	Specification
Body	Ductile Iron	ASTM A526 Nylon-11 Coated
Disc	Ductile Iron	ASTM A536 EPDM Ensapsulated
Indicator	Ductile Iron	ASTM A536
Housing	Ductile Iron	ASTM A536
Handwheel	Ductile Iron	ASTM A536
Stem	Stainless Steel	AISI 420
Worm Shaft	Stainless Steel	AISI 410
Shear Pin	Steel	ASTM A510
Gear Segment	Brass	ASTM B584
Housing Gasket	EPDM	EPDM Grade E
O-Ring (All)	EPDM	EPDM Grade E





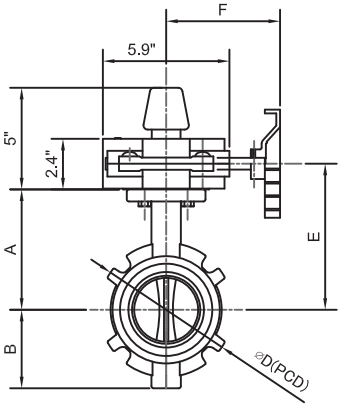
Dimensions:

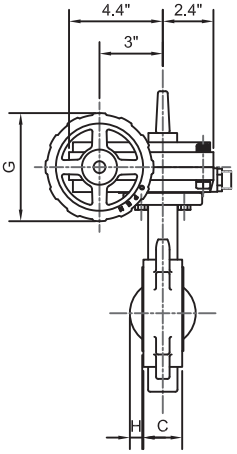
Size	A		B		C		D		F		G	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
2"	3.5	89	2.6	65	3.2	81	2.4	60.3	5.9	151	5.9	150
3"	4.4	112.0	3.7	95.0	3.8	96.4	3.5	88.9	5.9	151	5.9	150
4"	5.7	145.0	4.3	108.0	4.5	115.4	4.5	114.3	5.9	151	5.9	150
6"	7.1	179.0	5.8	146.0	5.2	132.4	6.6	168.3	5.9	151	5.9	150
8"	8.0	204.0	6.7	170.0	5.8	147.4	8.6	219.1	9.4	239	9.8	250

300 PSI Butterfly Valve | Wafer

Technical Features

- **Connections:** Wafer Ends (ANSI Class 125)
- **Sizes:** 2-1/2", 3", 4", 6", 8"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- **Double-Seal Disc;** Resilient EPDM Coating
- Factory-Installed Supervisory Tamper Switch Assembly
- Also Available with Supervised Closed Switches





Components	Material	Specification
Body	Ductile Iron	ASTM A526 Nylon-11 Coated
Disc	Ductile Iron	ASTM A536 EPDM Ensapsulated
Indicator	Ductile Iron	ASTM A536
Housing	Ductile Iron	ASTM A536
Handwheel	Ductile Iron	ASTM A536
Stem	Stainless Steel	AISI 420
Worm Shaft	Stainless Steel	AISI 410
Shear Pin	Steel	ASTM A510
Gear Segment	Brass	ASTM B584
Housing Gasket	EPDM	EPDM Grade E
O-Ring (All)	EPDM	EPDM Grade E

Dimensions:

Size	A		B		C		D		E		F		G		H		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	5.4	136.0	3.4	87.0	1.8	46.0	5.9	149.4	6.5	166.0	5.3	135.0	5.0	128.0	0.3	8.2	20.0
3"	5.6	143.0	3.7	93.0	1.8	46.0	6.6	168.2	6.8	173.0	5.3	135.0	5.0	128.0	0.6	14.5	21.0
4"	6.1	156.0	4.3	109.0	2.0	52.0	7.9	200.2	7.3	186.0	5.3	135.0	5.0	128.0	0.9	22.7	23.0
6"	7.4	188.0	5.7	144.0	2.2	56.0	10.6	269.8	8.6	218.0	7.6	193.0	8.7	220.0	1.8	45.4	32.0
8"	8.7	222.0	6.5	166.0	2.3	58.0	13.0	330.2	9.9	252.0	7.6	193.0	8.7	220.0	2.7	69.1	42.0

300 PSI Butterfly Valve | Lug Style

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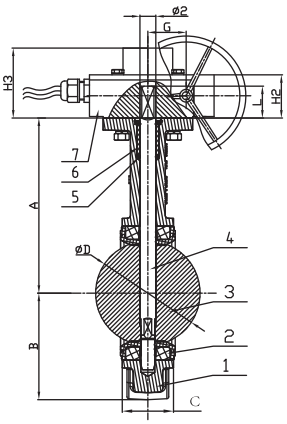
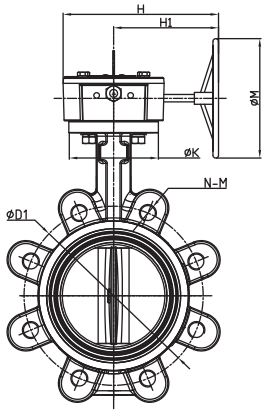
FM APPROVED

Technical Features

- **Connections:** Lug Style Wafer Ends (ASME B16.1 Class 125)
- **Sizes:** 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 176°F (80°C)
- Complies with AWWA C550
- Fusion Bonded Epoxy Coated Interior and Exterior tp AWWA C550





Parts	Components	Material	Specification
1	Body	Ductile Iron	ASTM A536
2	Seat	EPDM	EPDM Grade E
3	Disc	Ductile Iron	ASTM A536 EPDM Ensapsulated
4	Stem	Stainless Steel	AISI 420
5	O-Ring (All)	EPDM	EPDM Grade E
6	Bushing	Polytetrafluoroethylene	PTFE
7	Housing	Ductile Iron	ASTM A536

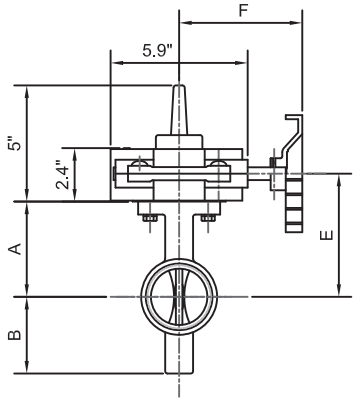
Dimensions:

Size	A		B		C		N-M	øD1		M		H		H1		H2		H3		K		G		øD		ø2		L	
	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
2"	5.5	140.5	2.5	64.5	1.7	43	4-5/8	4.8	120.7	6.0	150	8.2	208	5.9	151	2.6	65	4.3	108	3.5	90	2.3	59	2.1	53.9	0.6	14	1.3	32
2-1/2"	5.5	153	2.8	72	1.8	46	4-5/8	5.5	139.7	6.0	150	8.2	208	5.9	151	2.6	65	4.3	108	3.5	90	2.3	59	2.6	65.2	0.6	14	1.3	32
3"	6.0	157.5	3.4	86	1.8	46	4-5/8	6.0	152.4	6.0	150	8.2	208	5.9	151	2.6	65	4.3	108	3.5	90	2.3	59	3.1	79.7	0.6	14	1.3	32
4"	6.2	176	3.9	100	2.0	52	8-5/8	7.5	190.5	6.0	150	8.2	208	5.9	151	2.6	65	4.3	108	3.5	90	2.3	59	4.1	105	0.6	16	1.3	32
5"	6.9	191	4.4	112	2.6	56	8-3/4	8.5	215.9	6.0	150	8.2	208	5.9	151	2.6	65	4.3	108	3.5	90	2.3	59	5.1	129.8	0.6	16	1.3	32
6"	7.5	202.5	5.0	128	2.2	56	8-3/4	9.5	241.3	6.0	150	8.2	208	5.9	151	2.6	65	4.3	108	3.5	90	2.3	59	6.1	155.8	0.8	20	1.3	32
8"	7.0	243.5	6.4	162	2.4	60	8-3/4	11.8	298.5	7.9	200	11.7	298	8.8	223	3.0	77	4.8	121	4.9	125	3.1	77.5	8.1	206.7	1.0	26	1.8	45
10"	8.0	273	7.6	194	2.7	68	12-7/8	14.3	362	7.9	200	11.7	298	8.8	223	3.0	77	4.8	121	4.9	125	3.1	77.5	10.0	253.3	1.0	26	1.8	45
12"	7.0	311	8.8	223	3.1	78	12-7/8	17	431.8	9.8	250	11.7	299	8.9	224	3.0	77	4.8	121	4.9	125	3.1	77.5	11.9	301.9	1.0	26	1.8	45

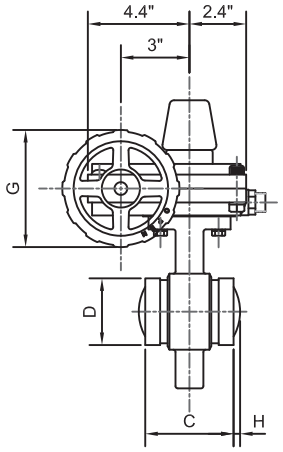
175 PSI Butterfly Valve | Grooved

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2-1/2", 3", 4", 6", 8"
- **Approvals:** UL, ULC, FM, and California State Fire Marshal
- **Maximum Working Pressure:** 175PSI (Max. Test Pressure: 350PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- **Double-Seal Disc;** Resilient EPDM Coating
- Factory-Installed Supervisory Tamper Switch Assembly
- Also Available with Supervised Closed Switches



Components	Material	Specification
Body	Ductile Iron	ASTM A526 Nylon-11 Coated
Disc	Ductile Iron	ASTM A536 EPDM Ensapsulated
Indicator	Ductile Iron	ASTM A536
Housing	Ductile Iron	ASTM A536
Handwheel	Ductile Iron	ASTM A536
Stem	Stainless Steel	AISI 420
Worm Shaft	Stainless Steel	AISI 410
Shear Pin	Steel	ASTM A510
Gear Segment	Brass	ASTM B584
Housing Gasket	EPDM	EPDM Grade E
O-Ring (All)	EPDM	EPDM Grade E



Dimensions:

Size	A		B		C		D		E		F		G		H		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	4.1	105.0	3.6	92.0	3.8	96.4	2.9	73.0	5.3	135.0	5.3	135.0	5.0	128.0			20.0
3"	4.4	112.0	3.7	95.0	3.8	96.4	3.5	88.9	5.6	142.0	5.3	135.0	5.0	128.0			21.0
4"	5.7	145.0	4.3	108.0	4.5	115.4	4.5	114.3	6.9	175.0	5.3	135.0	5.0	128.0			26.0
6"	7.0	179.0	5.7	146.0	5.2	132.4	6.6	168.3	8.2	209.0	7.6	193.0	8.7	220.0	0.3	6.8	39.0
8"	8.0	204.0	6.7	170.0	5.8	147.4	8.6	219.1	9.2	234.0	7.6	193.0	8.7	220.0	1.0	24.2	51.0

Butterfly Valve Switch Installation

Design Requirements

The Aleum grooved butterfly valve should be connected to the piping system with approved couplings or flange adapters. Flow may be from either direction, and the valve may be positioned in any direction.

Aleum butterfly valves have been designed with a slow close hand wheel operator which effectively minimizes water hammer. These valves feature minimum flow restriction and pressure loss when in the fully open position.

Care & Maintenance

Aleum butterfly valves require no regular maintenance. However, it is advisable to inspect and verify proper operation of the unit annually or in accordance with the authority having jurisdiction.

The inspection should include a visual check for leakage at the valve pipe connection and body to operator connection. Inspection and maintenance should be performed by a qualified inspection service.

Switch Installation

Aleum butterfly valves are provided with internal supervisor position switches. The tamper switch operates by a cam connected to the valve stem. The switch will change position and close within two (2) full turns of the hand from the fully open position.

Installation

When the valves are received from the manufacturer they should be handled carefully to avoid breakage and damage to the seating area. Before installation of the valve, clean piping, flange and coupling. When the valve closes hard, it is usually due to debris lodged in the sealing area. Often this may be corrected by backing off the hand wheel and closing again.

The valve should never be forced to seat by applying a wrench to the hand wheel as this may distort the valve components or score the sealing surface. The use of excessive force to open or close the valve violates all warranties whether express or implied. The inlet and oulet pipe adjacent to the valve should be properly supported to prevent excessive stress on the valve body. The valve should not be used to force a pipeline into position as this may result in distortion of the valve body.

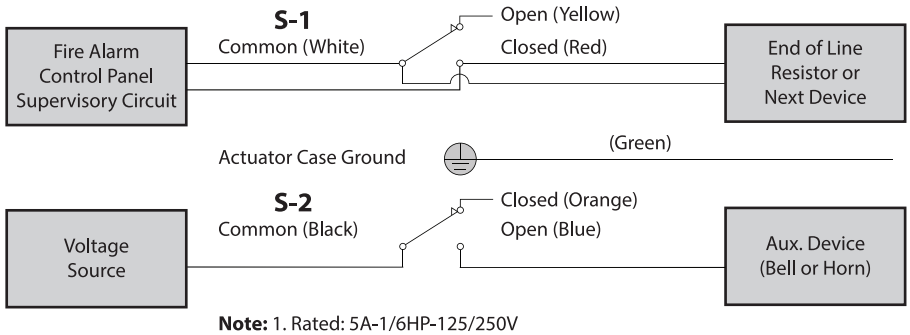
Conduit and electrical connections to the optional tamper switch must be in accordance with National Electrical Code (NFPA 72) and or the requirements of the local authority having jurisdiction.

Switch #1

For connection to the supervisory circuit
Normally closed: 2 Red
Normally open: 2 Yellow
Common: 2 White

Switch #2

Auxiliary switch connected per authority
Normally closed: 1 Orange
Normally open: 1 Blue
Common: 1 Black
Ground Lead: 1 Green



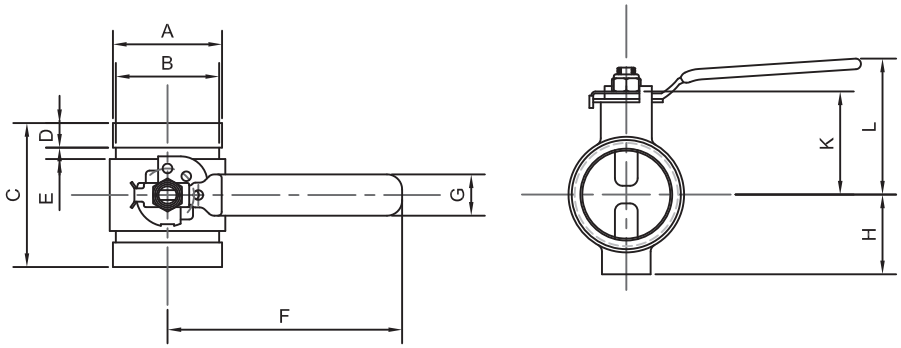
Note: 1. Rated: 5A-1/6HP-125/250V

Lever Handle Butterfly Valve | Grooved

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2-1/2", 3", 4", 6"
- **Maximum Working Pressure:** 200PSI (Max. Test Pressure: 350PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use

Components	Material
Body	Ductile Iron, Epoxy Coated
Disc	Ductile Iron, EPDM or NBR Encapsulated
Stem	Stainless Steel
Latch Plate	Steel, Zinc Plated
Handle	Carbon Steel, Epoxy Coating or Casting



Dimensions:

Size	A		B		C		D		E		F		G		H		K		L		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
2"	2.4	60.3	2.3	57.2	3.4	87.4	0.6	15.9	0.3	8.7	6.0	152.4	1.0	25.4	1.8	46.0	2.0	50.8	3.2	81.0	5.0
2-1/2"	2.9	74.2	2.8	70.2	3.8	96.8	0.6	15.9	0.4	8.9	6.0	152.4	1.0	25.4	2.1	52.3	2.4	62.0	3.6	91.9	7.0
3"	3.6	90.3	3.4	86.4	3.8	96.8	0.6	15.9	0.4	8.9	8.4	214.4	1.0	25.4	2.6	66.5	2.7	68.1	4.3	108.0	8.0
4"	4.6	116.1	4.4	111.8	4.6	117.3	0.6	15.9	0.4	8.9	8.4	214.4	1.0	25.4	3.3	84.1	3.3	84.1	4.9	125.5	12.0
6"	6.7	171.0	6.6	166.6	5.3	133.4	0.6	15.9	0.4	8.9	12.3	311.2	1.3	31.8	4.4	111.3	4.4	111.3	7.0	177.8	19.0

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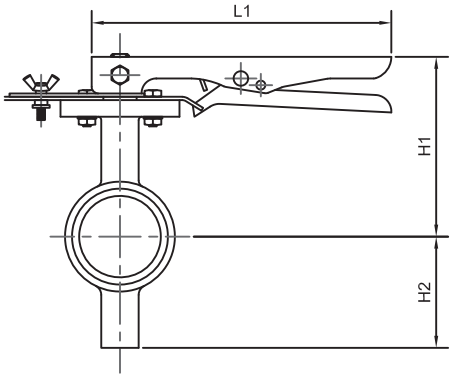
Lever Handle Butterfly Valve | Grooved / Wafer

Technical Features

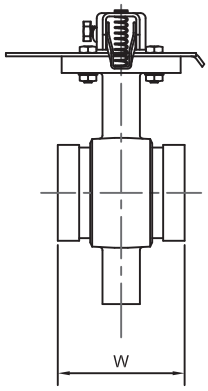
- **Connections:** Grooved Ends (AWWA C606)
- **Size:** 2", 2-1/2", 3", 4", 6", 8",10", 12", 14"
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 450PSI)
- **Maximum Working Temperature:** 250ºF (120ºC)
- **Application:** Indoor and Outdoor Use

Componets	Material
Body	Ductile Iron, Epoxy Coated
Disc	Ductile Iron, EPDM or NBR Encapsulated
Stem	Stainless Steel
Throttling Plate	Steel, Zinc Plated
Handle	Carbon Steel, Epoxy Coating or Casting



Dimensions: Grooved

Size	L1		W		H1		H2		Weight
	in	mm	in	mm	in	mm	in	mm	in
2-1/2"	9.0	228.6	3.8	96.3	5.4	136.9	3.3	84.8	8.5
3"	9.0	228.6	3.8	96.3	5.7	143.8	3.6	91.9	10.0
4"	4.6	228.6	4.5	115.3	7.0	176.8	4.2	107.9	13.5
6"	11.3	228.8	5.2	132.3	8.2	210.8	5.7	144.8	20.0
8"	13.3	337.82	5.8	147.32	9.3	235.97	6.7	169.93	33.51
10"	13.3	337.82	6.26	159	8.50	216	7.72	196	N/A
12"	13.3	337.82	6.50	165	10	254	8.90	226	N/A
14"	13.3	337.82	7.01	178	11.42	290	9.49	241	N/A

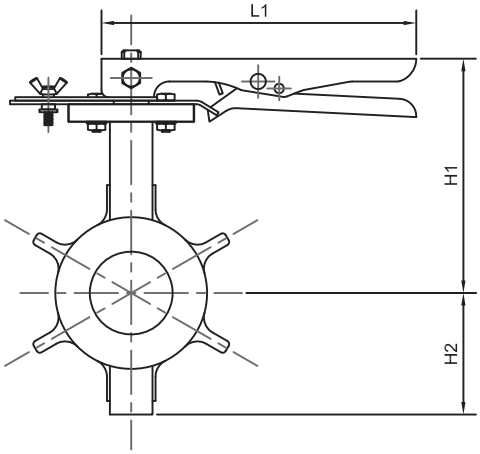


Lever Handle Butterfly Valve | Grooved / Wafer

Technical Features

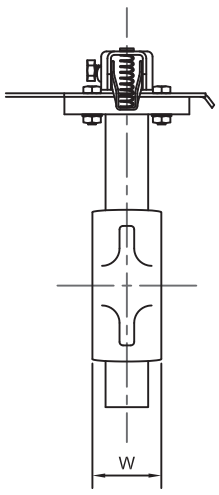
- **Connections:** Wafer Ends (ANSI Class 125)
- **Size:** 2", 2-1/2", 3", 4", 6", 8"
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 450PSI)
- **Maximum Working Temperature:** 250ºF (120ºC)
- **Application:** Indoor and Outdoor Use

Componets	Material
Body	Ductile Iron, Epoxy Coated
Disc	Ductile Iron, EPDM or NBR Encapsulated
Stem	Stainless Steel
Throttling Plate	Steel, Zinc Plated
Handle	Carbon Steel, Epoxy Coating or Casting



Dimensions: Wafer

Size	L1		W		H1		H2		Weight
	in	mm	in	mm	in	mm	in	mm	in
2-1/2"	9.0	228.6	1.8	46.0	6.6	167.9	3.4	86.9	7.5
3"	9.0	228.6	1.8	46.0	6.9	174.8	3.7	93.0	8.0
4"	4.6	228.6	2.0	52.0	7.4	188.0	4.3	109.0	12.0
6"	11.3	228.8	2.2	56.0	8.7	220.0	5.7	143.8	22.5
8"	13.3	337.82	2.4	60	10	254	6.5	165.86	33.51

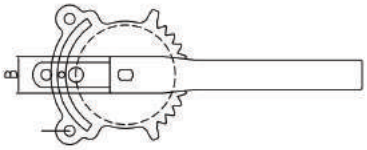


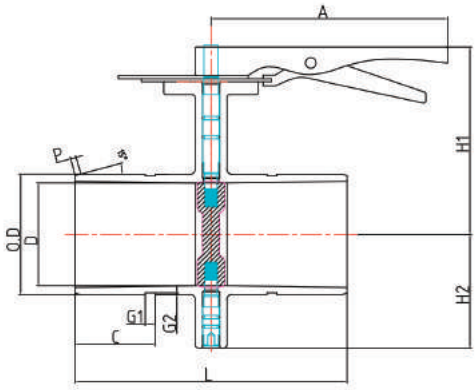
Lever Handle Butterfly Valve | Grooved G-Mine

Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2", 3", 4", 6", 8"
- **Maximum Working Pressure:** 320PSI (22 bar)
- **Maximum Working Temperature:** 32°F to 140°F (0°C to 60°C)

Components	Material
Body	Ductile Iron, Epoxy Coated
Disc	Ductile Iron, EPDM or NBR Encapsulated
Stem	Stainless Steel
Throttling Plate	Steel, Zinc Plated
Handle	Carbon Steel, Epoxy Coating or Casting





Dimensions: Grooved

Size	A		B		C		D		O.D.		G1		G2		H1		H2		L		P	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
2"	7.95	202.00	1.42	36.00	1.75	44.50	1.89	48.00	2.38	60.30	0.25	6.40	0.10	2.54	5.16	131.00	2.52	63.90	7.52	191.10	0.19	4.78
3"	7.95	202.00	1.42	36.00	2.50	63.50	2.88	73.20	3.50	88.90	0.38	9.50	0.14	3.43	5.75	146.00	3.62	92.00	9.18	233.20	0.19	4.78
4"	7.95	202.00	1.42	36.00	3.00	76.20	3.85	97.80	4.50	114.30	0.38	9.50	0.14	3.43	7.05	179.00	4.25	108.00	10.18	258.60	0.19	4.78
6"	10.28	261.00	1.46	37.00	3.00	76.20	5.74	145.80	6.63	168.30	0.38	9.50	0.14	3.43	8.39	213.00	5.71	145.00	10.42	264.60	0.31	7.95
8"	12.40	315.00	1.57	40.00	2.50	63.50	7.65	194.20	8.63	219.10	0.50	12.70	0.15	3.69	9.37	238.00	6.69	170.00	10.96	278.47	0.31	7.95

Swing Check Valve | Grooved

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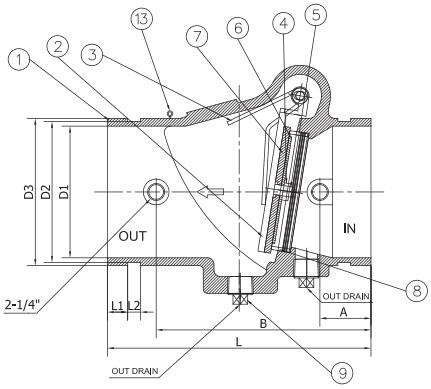
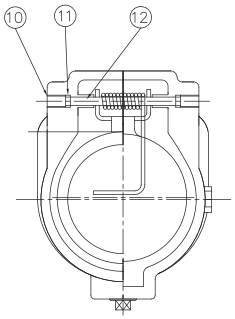
Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2", 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, and FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- Low pressure-drop, Non-slam performance





Number	Components	Material	Specification
1	Body	Ductile Iron, Epoxy Coated	A536 65-45-12
2	Clapper	Stainless Steel	ANSI 304
3	Coil Spring	Stainless Steel	ANSI 302
4	Nut	Stainless Steel	ANSI 304
5	Bolt	Stainless Steel	ANSI 304
6	Washer	Stainless Steel	ANSI 304
7	Facing Seal	Rubber	EPDM
8	Seat Ring	Stainless Steel	AISI 304
9	Drain Plug	Ductile Iron	A536 65-45-12
10	Pin Plug	Ductile Iron	A536 65-45-12
11	Bushing	Aluminum Bronze	B148
12	Hinge Pin	Stainless Steel	ANSI 304
13	Hook	Steel	ASTM A307

Dimensions:

Size	L		D1		D2		B		C		H		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2"	6.7	171.0	2.3	57.2	2.4	60.3	0.3	7.9	0.6	15.9	3.2	80.3	8.0
2-1/2"	7.2	184.0	2.7	69.1	2.9	73.0	0.3	7.9	0.6	15.9	3.4	85.1	8.5
3"	7.8	197.0	3.3	84.9	3.5	88.9	0.3	7.9	0.6	15.9	3.7	93.0	10.5
4"	8.1	206.0	4.3	110.1	4.5	114.3	0.4	9.5	0.6	15.9	4.2	107.2	17.0
5"	9.8	247.7	5.4	137.0	5.6	141.3	0.4	9.5	0.6	15.9	4.6	117.3	22.0
6"	12.8	324.0	6.5	164.0	6.6	168.3	0.4	9.5	0.6	15.9	6.7	171.4	42.5
8"	14.6	370.8	8.4	214.4	8.6	219.1	0.4	11.1	0.8	19.1	7.9	201.9	66.5
10"	18.0	457.2	10.6	268.3	10.7	273.0	0.5	12.7	0.8	19.1	9.2	234.4	115.0
12"	21.1	534.9	12.5	318.3	12.8	323.9	0.5	12.7	0.8	19.1	10.5	266.7	166.5

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Swing Check Valve | Flanged

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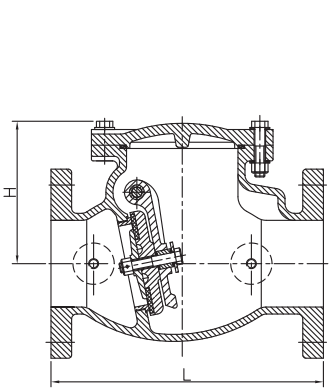
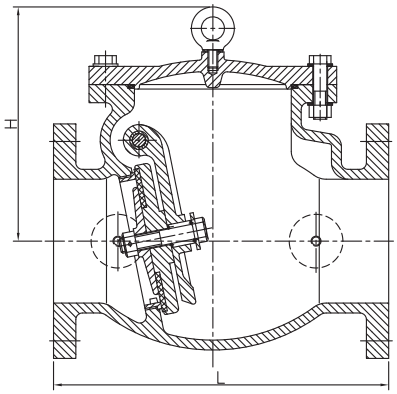
Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125)
- **Sizes:** 2", 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, and FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C508, Clear Waterway Design
- Two Test Plugs Installed on One Side of Valve Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

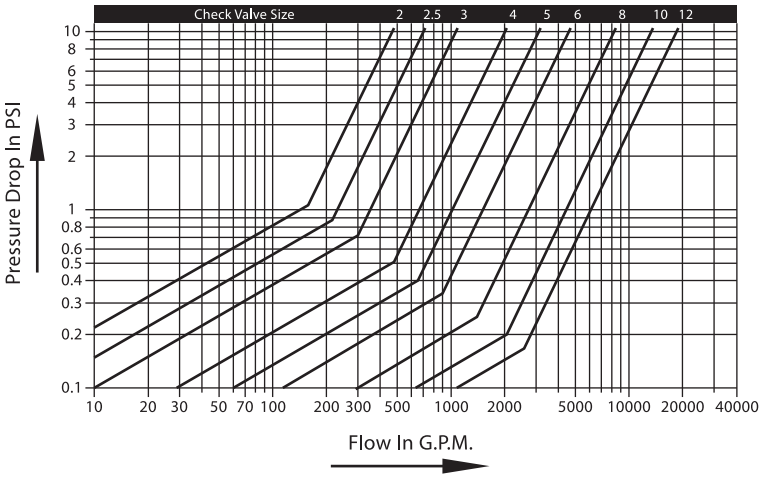
Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Seat Ring	Bronze	B62 C83600
Disc Ring	Rubber	EPDM
Disc Ring Retainer	Ductile Iron	A536 65-45-12
Retainer Bolt	Stainless Steel	AISI 304
Disc	Ductile Iron	A536 65-45-12
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Hinge Pin	Stainless Steel	AISI 304
Clapper Arm	Ductile Iron	A536 65-45-12
Pin Plug	Stainless Steel	AISI 304
NPT Plug	Malleable Iron	Commerical
Bonnet Bolts	Carbon Steel	A307 B
Eyebolt	Carbon Steel	A307 B





Dimensions					
Size	L		H		Weight
	in	mm	in	mm	lbs
2"	8.0	203.0	5.2	132.0	25.0
2-1/2"	10.0	254.0	5.7	145.0	29.0
3"	11.0	279.0	5.9	150.0	37.5
4"	13.0	330.0	6.9	175.0	55.0
5"	14.0	356.0	11.7	298.0	8.0
6"	16.0	406.0	11.8	300.0	110.0
8"	19.5	495.0	13.9	352.0	129.0
10"	22.0	559.0	15.6	395.0	480.0
12"	26.0	660.0	17.5	445.0	621.0

Flow Versus Pressure Drop



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Riser Swing Check Valve | Grooved Ends

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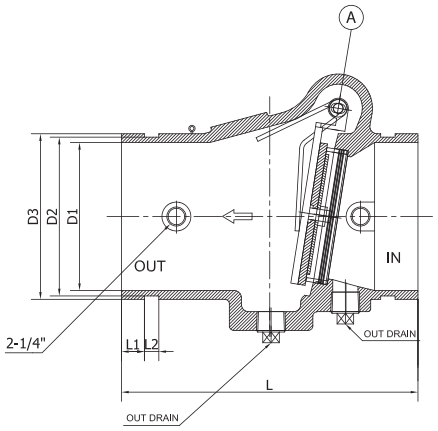
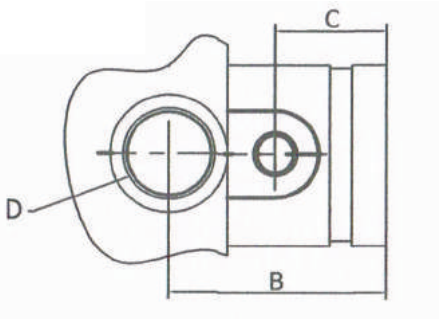
Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2", 2-1/2", 3", 4", 6", 8"
- **Approvals:** UL, ULC, and FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 250°F (120°C)
- **Application:** Indoor and Outdoor Use
- Low pressure-drop, Non-slam performance

Number	Components	Material	Specification
1	Body	Ductile Iron	A536 65-45-12
2	Clapper	Stainless Steel	ANSI 304
3	Coil Spring	Stainless Steel	ANSI 302
4	Nut	Stainless Steel	ANSI 304
5	Bolt	Stainless Steel	ANSI 304
6	Washer	Stainless Steel	ANSI 304
7	Facing Seal	Rubber	EPDM
8	Seat Ring	Stainless Steel	ANSI 304
9	Drain Plug	Ductile Iron	A536 65-45-12
10	Pin Plug	Ductile Iron	A536 65-45-12
11	Bushing	Aluminum Bronze	B148
12	Hinge Pin	Stainless Steel	ANSI 304
13	Hook	Steel	ASTM A307





Dimensions:

Size	D1		D2		D3		L		L1		L2		A		B		C		D		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2"	1.9	49.0	2.2	57.1	2.4	60.3	6.7	170.0	0.6	15.8	0.3	8.7	0.4	9.5	3.7	95.0	1.7	43.0	1.0	25.4	8.0
2-1/2"	2.4	62.2	2.7	69.0	2.9	73.0	7.2	184.0	0.6	15.8	0.3	8.7	0.4	9.5	3.7	93.0	1.6	41.0	1.3	31.8	8.5
3"	2.9	74.0	3.3	84.7	3.5	89.1	7.7	195.0	0.6	15.8	0.3	8.7	0.4	9.5	3.8	97.0	1.7	42.0	1.3	31.8	10.5
4"	3.9	98.0	4.3	109.8	4.5	114.3	8.1	205.0	0.6	15.8	0.3	8.7	0.5	12.7	4.4	113.0	2.0	50.0	2.0	50.8	17.0
6"	6.1	156.0	6.4	163.7	6.6	168.3	12.6	320.0	0.6	15.8	0.3	8.7	0.5	12.7	5.7	146.0	2.4	60.0	2.0	50.8	42.5
8"	7.9	201.6	8.5	215.8	8.6	218.2	14.6	372.0	0.8	20.1	0.4	10.5	0.5	12.7	6.9	176.0	2.8	70.0	2.0	50.8	66.5

Riser Swing Check Valve | Grooved Ends

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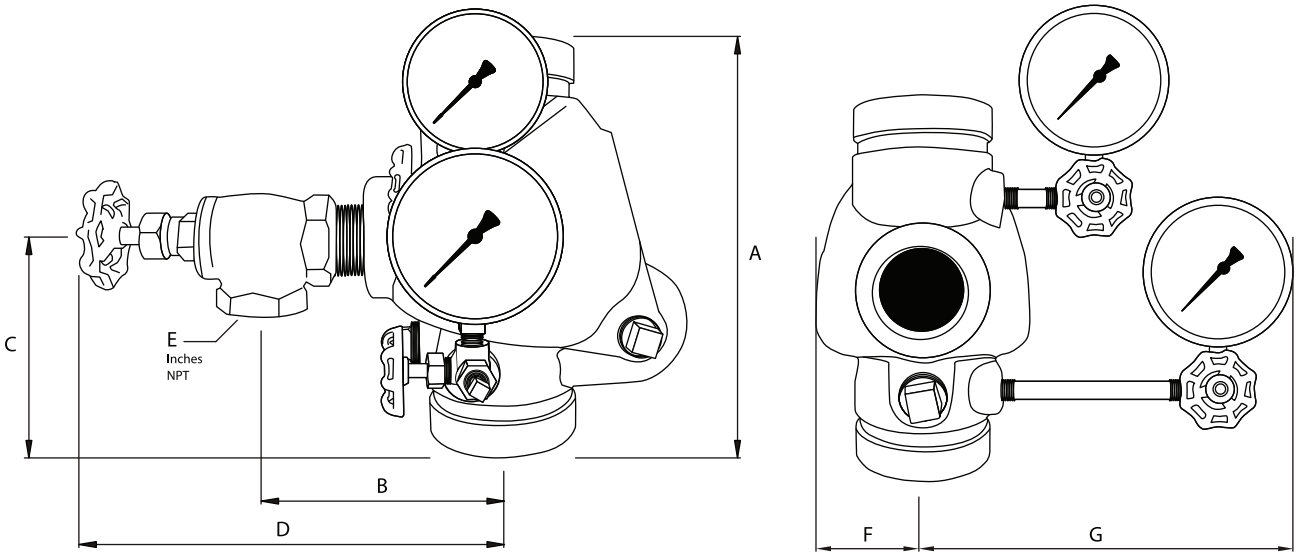
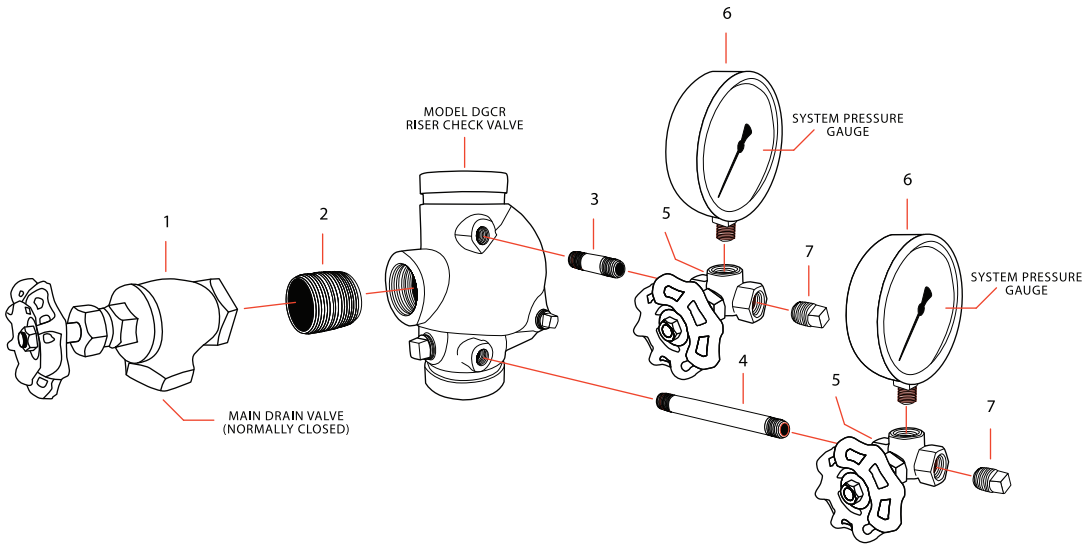


Dimensions: Inches (Millimeters)							
Size	A	B	C	D	E	F	G
2"	6.7 (170)	5.0 (127)	3.9 (99.06)	8.7 (220.98)	1" NPT	1.75 (44.45)	7.25 (184.15)
2-1/2"	7.2 (184)	5.2 (132)	3.6 (91.44)	8.75 (222.25)	1-1/4" NPT	1.75 (44.45)	8.75 (222.25)
3"	7.7 (195)	5.4 (137)	4.0 (101.6)	9.0 (228.6)	1-1/4" NPT	1.5 (38.1)	8.75 (222.25)
4"	8.1 (205)	6.75 (171)	4.5 (114.3)	13.4 (340.36)	2" NPT	2.75 (69.85)	8.5 (215.9)
6"	12.6 (320)	7.75 (197)	5.75 (146.05)	14.5 (368.3)	2" NPT	4.0 (101.6)	9.25 (234.95)
8"	14.6 (372)	8.7 (221)	6.25 (158.75)	15.0 (381)	2" NPT	5.0 (127)	11.75 (298.45)

Riser Check Valve | Grooved



2 Inch (DN50)			
Trim Kit Part#	Components	Description	Qty
2" **STK200**	1	1"Angle Valve	1
	2	1" Close Nipple	1
	3	1/4"x1-1/2"Nipple	1
	4	1/4" x 5-1/2" Nipple	1
	5	1/4" 3 Way Valve	2
	6	Water Pressure Gauge 300PSI / 2000kOa	2
	7	1/4" Plug	2
2-1/2 Inch (DN65) through 3 Inch (DN80)			
Trim Kit Part#	Components	Description	Qty
2-1/2" **STK2050** 3" **STK300**	1	1-1/4" Angle Valve	1
	2	1-1/4" Close Nipple	1
	3	1/4" x 1-1/2" Nipple	1
	4	1/4" x 5-1/2" Nipple	1
	5	1/4" 3 Way Valve	2
	6	Water Pressure Gauge 300PSI / 2000 kOa	2
	7	1/4" Plug	2
4 Inch (DN100) through 12Inch (DN300)			
Trim Kit Part#	Components	Description	Qty
4" **STK450** 6" **STK600** 8" **STK800**	1	2"Angle Valve	1
	2	2" Close Nipple	1
	3	1/4" x 1-1/2" Nipple	1
	4	1/4" x 5-1/2" Nipple	1
	5	1/4" 3 Way Valve	2
	6	Water Pressure Gauge 300PSI / 2000 kOa	2
	7	1/4" Plug	2

OS&Y Gate Valve | Flanged

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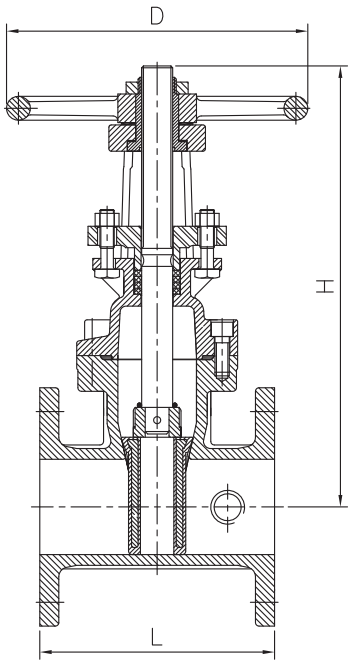
Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125)
- **Sizes:** 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61, and NSF-372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Stainless Steel	AISI 304
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Packing	Graphite	Commercial
Gland	Ductile Iron	A536 65-45-12
Yoke Nut	Bronze	B62 C83600
Handwheel	Ductile Iron	A536 65-45-12
Handwheel Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Gland Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Carbon Steel	A307 B



Dimensions

Size	L		H (OPEN)		H (CLOSE)		D		Weight
	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	7.5	190.5	16.3	415.0	13.8	350.0	7.2	184.0	44.0
3"	8.0	203.0	18.9	480.0	15.7	400.0	10.0	254.0	55.0
4"	9.0	229.0	21.7	550.0	17.7	450.0	10.0	254.0	66.0
5"	10.0	254.0	25.8	655.0	20.9	530.0	12.0	305.0	92.5
6"	10.5	267.0	29.1	740.0	23.2	590.0	12.0	305.0	110.0
8"	11.5	292.0	36.6	930.0	28.7	730.0	14.0	356.0	170.0
10"	13.0	330.0	44.5	1130.0	34.6	880.0	17.5	445.0	264.0
12"	14.0	356.0	52.0	1320.0	40.2	1020.0	17.5	445.0	374.0

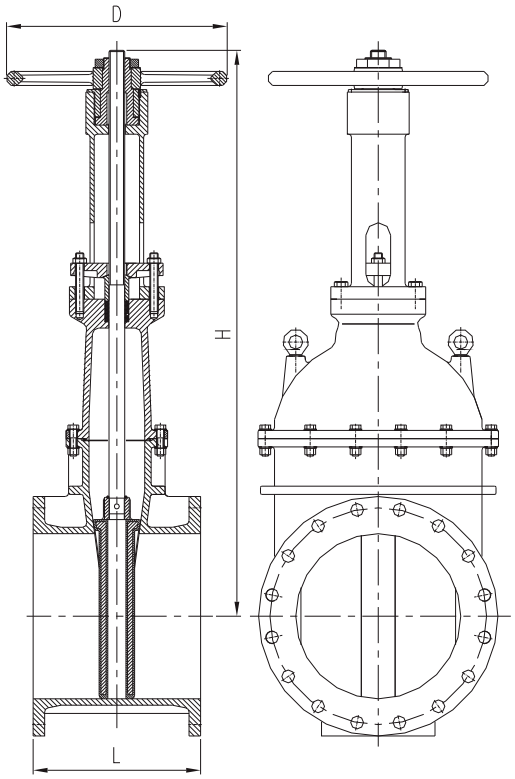
OS&Y Gate Valve | Flanged

c UL us LISTED FM APPROVED NSF

Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125)
- **Sizes:** 14", 16", 18" (250 PSI) / 20", 24" (200 PSI)
- **Approvals:** UL (14"-24") / FM (14"-16")
- **Working Temperature:** 42ºF (180ºF)
- **Type:** Resilient Wedge, Outside Stem & Yoke
- **Finish:** Epoxy Coated Interior and Exterior
- **Specifications:** Design and Dimensions Confrom to AWWA C515

Part Name	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Stainless Steel	AISI 304
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Packing	Graphite	Commercial
Gland	Ductile Iron	A536 65-45-12
Yoke Nut	Bronze	B62 C83600
Handwheel	Ductile Iron	A536 65-45-12
Handwheel Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Gland Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Carbon Steel	A307 B



Dimensions								
Size	L		H (OPEN)		H (CLOSE)		D	
	in	mm	in	mm	in	mm	in	mm
14"	15	381	61.97	1574	48.19	1224	17.5	445
16"	16	406	70.31	1786	54.57	1386	21	535
18"	17	432	79.53	2020	61.81	1570	24	610
20"	18	457	89.61	2276	69.92	1776	24	610
24"	20	508	102.36	2600	78.74	2000	30	762

OS&Y Gate Valve | Flanged x Grooved

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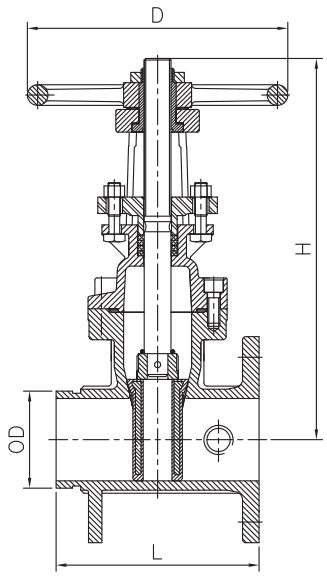
Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125) / Grooved Ends (AWWA C606)
- **Sizes:** 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61, and NSF-372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Stainless Steel	AISI 304
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Packing	Graphite	Commercial
Gland	Ductile Iron	A536 65-45-12
Yoke Nut	Bronze	B62 C83600
Handwheel	Ductile Iron	A536 65-45-12
Handwheel Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Gland Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Carbon Steel	A307 B



Dimensions

Size	OD		L		H (OPEN)		H (CLOSE)		D		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	2.9	73.0	7.5	190.5	16.3	415.0	13.8	350.0	7.2	184.0	36.5
3"	3.5	88.9	8.0	203.0	18.9	480.0	15.7	400.0	10.0	254.0	47.0
4"	4.5	114.3	9.0	229.0	21.7	550.0	17.7	450.0	10.0	254.0	64.0
5"	5.6	141.3	10.0	254.0	25.8	655.0	20.9	530.0	12.0	305.0	91.0
6"	6.6	168.3	10.5	267.0	29.1	740.0	23.2	590.0	12.0	305.0	103.0
8"	8.6	219.1	11.5	292.0	36.6	930.0	28.2	730.0	14.0	356.0	160.0
10"	10.7	273.0	13.0	330.0	44.5	1130.0	34.6	880.0	17.5	445.0	257.0
12"	12.8	323.9	14.0	356.0	52.0	1320.0	40.2	1020.0	17.5	445.0	356.0

OS&Y Gate Valve | Grooved

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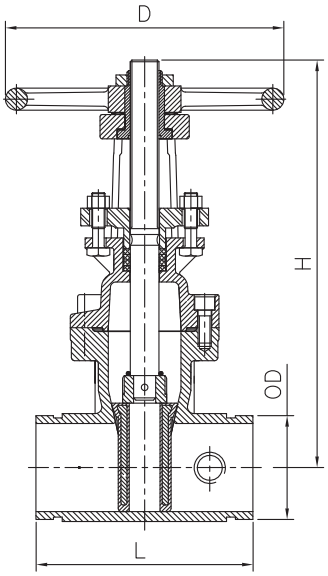
Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Size:** 2", 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

Componets	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Stainless Steel	AISI 304
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Packing	Graphite	Commercial
Gland	Ductile Iron	A536 65-45-12
Yoke Nut	Bronze	B62 C83600
Handwheel	Ductile Iron	A536 65-45-12
Handwheel Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Gland Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Carbon Steel	A307 B



Size	OD		L		H (OPEN)		H (CLOSE)		D		Weight
	in	mm	in	mm	in	mm	in	mm	in	mm	lbs
2"	2.37	60.3	7.0	178	15	380	13	330	7.2	184.0	25.4
2-1/2"	2.9	73.0	7.5	190.5	16.3	415.0	13.8	350.0	7.2	184.0	29.0
3"	3.5	88.9	8.0	203.0	18.9	480.0	15.7	400.0	10.0	254.0	38.5
4"	4.5	114.3	9.0	229.0	21.7	550.0	17.7	450.0	10.0	254.0	62.0
5"	5.6	141.3	10.0	254.0	25.8	655.0	20.9	530.0	12.0	305.0	89.0
6"	6.6	168.3	10.5	267.0	29.1	740.0	23.2	590.0	12.0	305.0	96.0
8"	8.6	219.1	11.5	292.0	36.6	930.0	28.2	730.0	14.0	356.0	150.0
10"	10.7	273.0	13.0	330.0	44.5	1130.0	34.6	880.0	17.5	445.0	249.9
12"	12.8	323.9	14.0	356.0	52.0	1320.0	40.2	1020.0	17.5	445.0	337.0

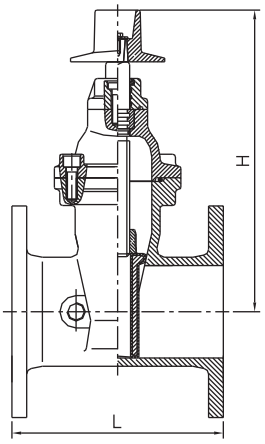
PIV Gate Valve | Flanged

c UL us LISTED FM APPROVED NSF

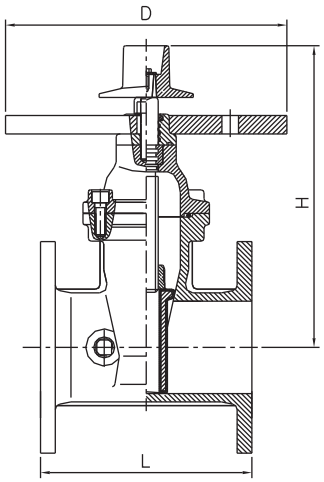
Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125)
- **Sizes:** 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61 & NSF-372, ANSI 61 & 372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Bronze	B62 C83600
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Gland	Ductile Iron	A536 65-45-12
Thrust Collar	Bronze	B62 C83600
O-Ring	Rubber	EPDM
Post Flange	Ductile Iron	A536 65-45-12
Operating Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Post Flange Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Stainless Steel	AISI 304



Size 2.5" & 3"



Size 4" to 12"

Dimensions

Size	L		H		D		Weight
	in	mm	in	mm	in	mm	lbs
2-1/2"	7.5	190.5	10.6	270.0			31.0
3"	8.0	203.0	11.7	296.0			41.0
4"	9.0	229.0	13.8	350.0	1.2	305.0	64.0
5"	10.0	254.0	16.1	410.0	1.2	305.0	79.0
6"	10.5	267.0	17.9	455.0	1.2	305.0	103.0
8"	11.5	292.0	21.5	545.0	1.2	305.0	161.0
10"	13.0	330.0	25.4	645.0	1.2	305.0	235.0
12"	14.0	356.0	28.7	730.0	1.2	305.0	339.0

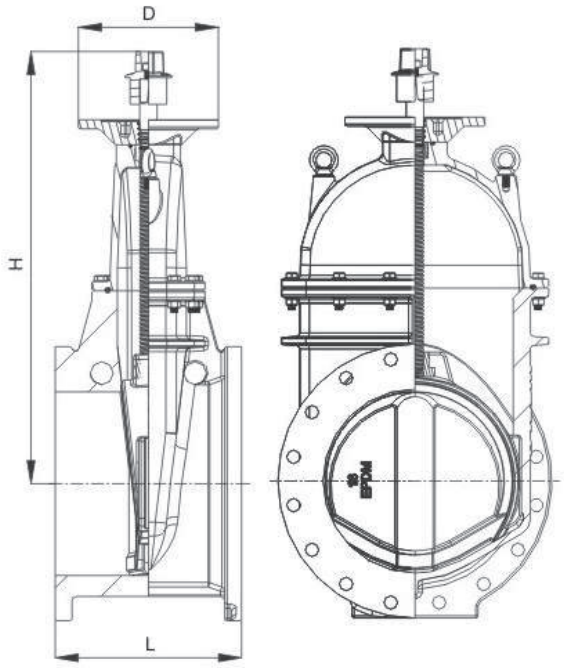
PIV Gate Valve | Flanged

c UL us LISTED FM APPROVED NSF

Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125)
- **Sizes:** 14", 16", 18", 20", 24"
- **Approvals:** UL, ULC, FM, NSF-61 & NSF-372, ANSI 61 & 372
- **Maximum Working Pressure:** 14", 16", 18" (250PSI) 20", 24" (200PSI)
- **Working Temperature:** 10°C to 82°C
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Bronze	B62 C83600
Stem	Stainless Steel	AISI 4231
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Packing	Graphite	Commercial
Post Flange	Ductile Iron	A536 65-45-12
Trust Collar	Brass	C67400
O-Ring	Rubber	EPDM
Operating Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Post Flange Bolt	Carbon Steel	A307 B
Bonnet Bolt	Carbon Steel	A307 B



Dimensions						
Size	L		H		D	
	in	mm	in	mm	in	mm
14"	15	381	32.87	835	12	305
16"	16	406	35.83	910	12	305
18"	17	432	41.34	1050	12	305
20"	18	457	44.09	1120	12	305
24"	20	508	50.79	1290	12	305

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PIV Gate Valve | Grooved

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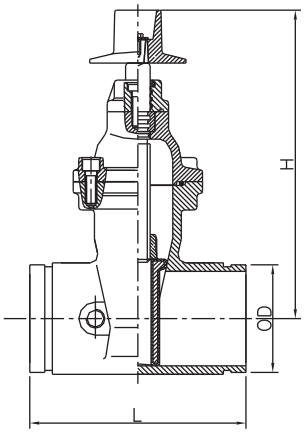
Technical Features

- **Connections:** Grooved Ends (AWWA C606)
- **Sizes:** 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61 & NSF-372, ANSI 61 & 372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

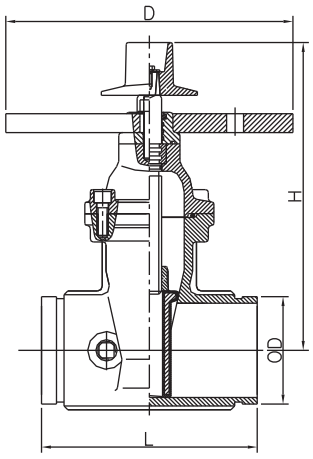
Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Bronze	B62 C83600
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Gland	Ductile Iron	A536 65-45-12
Thrust Collar	Bronze	B62 C83600
O-Ring	Rubber	EPDM
Post Flange	Ductile Iron	A536 65-45-12
Operating Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Post Flange Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Stainless Steel	AISI 304

Dimensions

Size	OD		L		H		D		Weight
	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	2.9	73.0	7.5	190.5	10.6	270.0			25.0
3"	3.5	88.9	8.0	203.0	11.7	296.0			30.0
4"	4.5	114.3	9.0	229.0	13.8	350.0	12.0	305.0	62.0
5"	5.6	141.3	10.0	254.0	16.1	410.0	12.0	305.0	80.0
6"	6.6	168.3	10.5	267.0	17.9	455.0	12.0	305.0	96.0
8"	8.6	219.1	11.5	292.0	21.5	545.0	12.0	305.0	156.0
10"	10.7	273.0	13.0	330.0	25.4	645.0	12.0	305.0	227.0
12"	12.8	323.9	14.0	356.0	28.7	730.0	12.0	305.0	317.0



Size 2.5" & 3 "



Size 4" to 12"

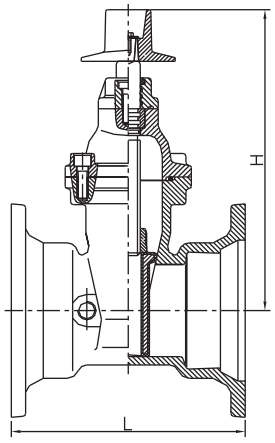
PIV Gate Valve | Mechanical Joint

c UL us LISTED FM APPROVED NSF

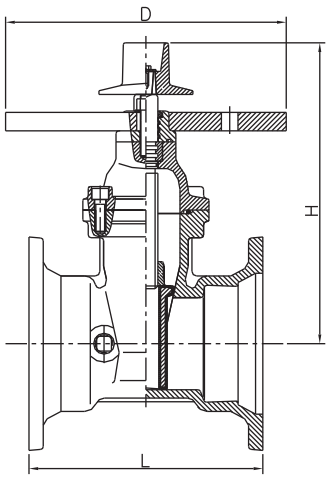
Technical Features

- **Connections:** Mechanical Joint Ends (ANSI/AWWA C153/A21.53)
- **Sizes:** 3", 4", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61 & NSF-372, ANSI 61 & 372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C550

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Bronze	B62 C83600
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Gland	Ductile Iron	A536 65-45-12
Thrust Collar	Bronze	B62 C83600
O-Ring	Rubber	EPDM
Post Flange	Ductile Iron	A536 65-45-12
Operating Nut	Ductile Iron	A536 65-45-12
NPT Plug	Malleable Iron	Commercial
Post Flange Bolt	Stainless Steel	AISI 316
Bonnet Bolt	Stainless Steel	AISI 304



Size 3"



Size 4" to 12"

Dimensions:

Size	L		H		D		Weight
	in	mm	in	mm	in	mm	lbs
3"	9.5	241.0	11.7	296.0			45.0
4"	10.0	254.0	13.8	350.0			71.0
6"	11.5	292.0	17.9	455.0	1.2	305.0	116.0
8"	12.5	318.0	21.5	545.0	1.2	305.0	176.0
10"	14.8	375.0	25.4	645.0	1.2	305.0	260.0
12"	14.9	378.0	28.7	730.0	1.2	305.0	386.0

Indicator Post | Vertical Type

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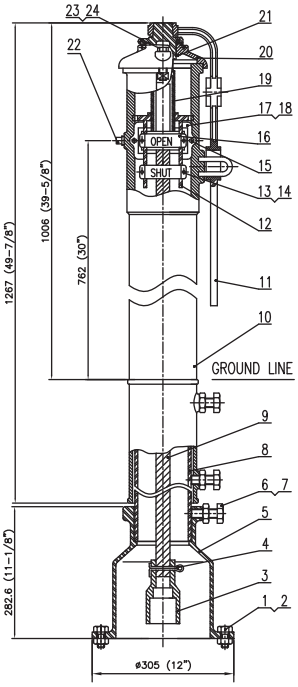
Technical Features

- Vertical Type, Adjustable
- **Approvals:** UL, ULC, FM
- Corrosion Protection - Internal & External Epoxy Coated (RAL 3000)

Number	Components	Material	Specification
1	Hex Cap Screw	Carbon Steel	ASTM A307B
2	Hex Nut	Carbon Steel	ASTM A307B
3	Crane Coupling	Ductile Iron	ASTM A536 Gr. 65-45-12
4	Cotter Pin	Stainless Steel	AISI 304
5	Base Flange	Cast Iron	ASTM A126 Class B
6	Hex Nut	Carbon Steel	ASTM A307B
7	Hex Cap Screw	Carbon Steel	ASTM A307B
8	Standpipe	Carbon Steel	ASTM A536 Gr. 65-45-12
9	Stem 1" Square	Carbon Steel	AISI 1045
10	Body	Cast Iron	ASTM A126 Class B
11	Locking Wrench	Ductile Iron	ASTM A536 Gr. 65-45-12
12	Target Carrier Nut	Bronze	ASTM B62 C83600
		Stainless Steel	AISI 304
13	Hex Cap Screw	Carbon Steel	ASTM A307B
14	Hex Nut	Carbon Steel	ASTM A307B
15	Hex Cap Screw	Carbon Steel	ASTM A307B
16	Target	Cast Aluminium	Cast Aluminium
17	Window Glass	Plexiglass	Plexiglass
18	Gasket	PTFE	PTFE
19	Operating Nut	Bronze	ASTM B62 C83600
		Stainless Steel	AISI 304
20	Top Section	Cast Iron	ASTM A126 Class B
21	Snap Ring	Stainless Steel	AISI 1066
22	Plug	Malleable Iron	Malleable Iron
23	Square Nut	Carbon Steel	ASTM A307B
24	Hex Cap Screw	Carbon Steel	ASTM A307B



Field Adjustment

1. Remove the top section from the top of the Indicator Post assembly.

2. Cut the required length off the bottom of the Standpipe for the Ground Line to match up with Standpipe Ground Line mark.

3. Set the "Open" and "Shut" targets for the appropriate valve size.

4. Reattach the top section to the top of the Indicator Post assembly.

5. Design and dimensions are subject to change without notice.

Indicator Post | Wall Type

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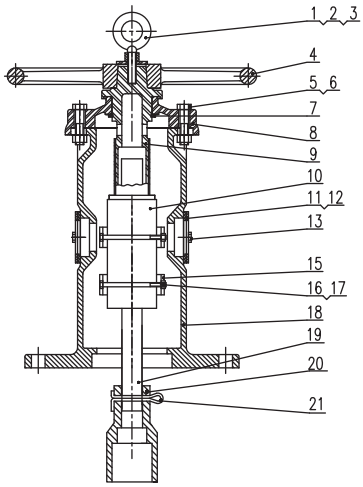
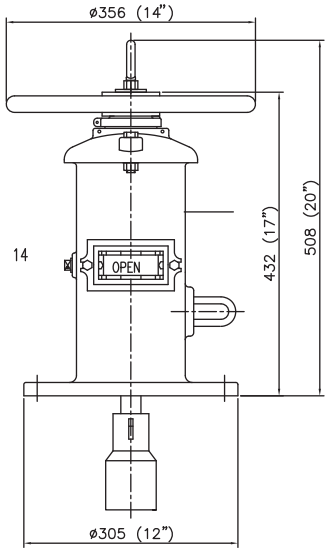
Technical Features

- Wall Type
- **Approvals:** UL, ULC, FM
- Corrosion Protection - Internal & External Epoxy Coated (RAL 3000)

Number	Components	Material	Specification
1	Eyebolt	Carbon Steel	ASTM A307B
2	Hex Nut	Carbon Steel	ASTM A307B
3	Washer	Carbon Steel	ASTM A570 Gr. 33
4	Handwheel	Ductile Iron	ASTM A536 Gr. 65-45-12
5	Hex Cap Screw	Carbon Steel	ASTM A307B
6	Square Nut	Carbon Steel	ASTM A307B
7	Snap Ring	Stainless Steel	AISI 1066
8	Cover	Cast Iron	ASTM A126 Class B
9	Operating Nut	Bronze	ASTM B62 C83600
		Stainless Steel	AISI 304
10	Target Carrier Nut	Bronze	ASTM B62 C83600
		Stainless Steel	AISI 304
11	Window Glass	Plexiglass	Plexiglass
12	Gasket	PTFE	PTFE
13	Hex Nut	Carbon Steel	ASTM A307B
14	Plug	Malleable Iron	Malleable Iron
15	Target	Cast Aluminium	Cast Aluminium
16	Hex Cap Screw	Carbon Steel	ASTM A307B
17	Hex Nut	Carbon Steel	ASTM A307B
18	Body	Cast Iron	ASTM A126 Class B
19	Stem	Carbon Steel	AISI 1045
20	Crane Coupling	Ductile Iron	ASTM A536 Gr. 65-45-12
21	Cotter Pin	Stainless Steel	AISI 304





Field Adjustment

1. Remove the top section from the top of the indicator Post assembly
2. Set the "Open" and "Shut" targets for the appropriate valve size.
3. Reattach the top section to the top of the indicator post assembly.
4. Design and dimensions are subject to change without notice.

AWWA NRS Gate Valve | Flanged

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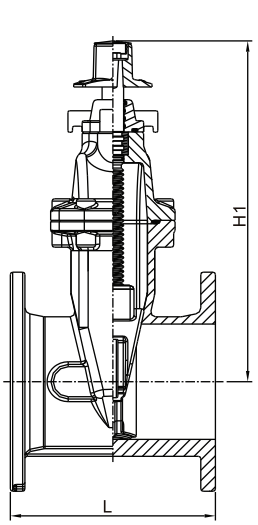
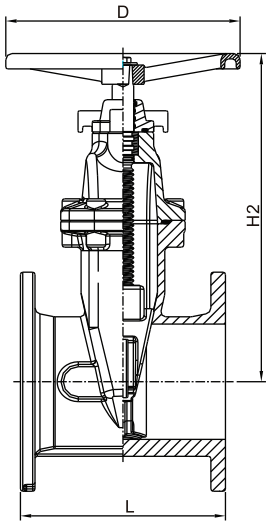
Technical Features

- **Connections:** Flanged Ends (ANSI B16.1 Class 125)
- **Sizes:** 2-1/2", 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61 & NSF-372, ANSI 61 & 372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C55

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Bronze	B62 C83600
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Gland	Ductile Iron	A536 65-45-12
Thrust Collar	Bronze	B62 C83600
O-Ring	Rubber	EPDM
Operating Nut	Ductile Iron	A536 65-45-12
Handwheel	Ductile Iron	A536 65-45-12
Gland Bolt	Stainless Steel	AISI 304
Bonnet Bolt	Stainless Steel	AISI 304



With Operating Nut



With Handwheel

Dimensions:

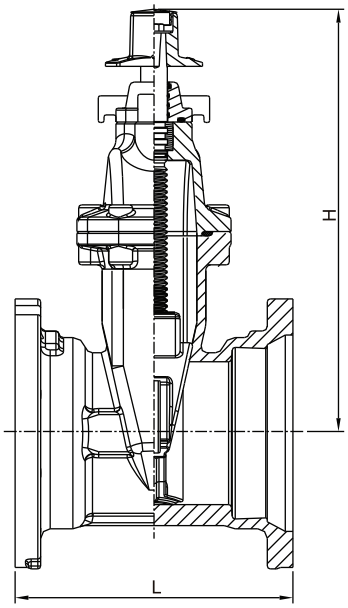
Size	L		H1		H2		D		Weight
	in	mm	in	mm	in	mm	in	mm	lbs
2-1/2"	7.5	190.5	10.6	270.0	10.0	255.0	6.9	175.0	31.0
3"	8.0	203.0	11.7	296.0	11.9	302.0	10.0	255.0	41.0
4"	9.0	229.0	13.8	350.0	12.9	327.0	10.0	255.0	49.0
5"	10.0	254.0	16.1	410.0	16.4	417.0	12.0	305.0	64.0
6"	10.5	267.0	17.9	455.0	17.2	436.0	12.0	305.0	88.0
8"	11.5	292.0	21.5	545.0	20.9	532.0	14.0	355.0	146.0
10"	13.0	330.0	25.4	645.0	24.4	619.0	15.9	405.0	220.0
12"	14.0	356.0	28.7	730.0	28.2	716.0	15.9	405.0	324.0

AWWA NRS Gate Valve | Menchanical Joint

Technical Features

- **Connections:** Mechanical Joint Ends (ANSI/AWWA C153/A21.53)
- **Sizes:** 3", 4", 5", 6", 8", 10", 12"
- **Approvals:** UL, ULC, FM, NSF-61 & NSF-372, ANSI 61 & 372
- **Maximum Working Pressure:** 300PSI (Max. Test Pressure: 600PSI)
- **Maximum Working Temperature:** 180°F (82°C)
- Complies with AWWA C515
- NPT Plug on Body
- Fusion Bonded Epoxy Coated Interior and Exterior to AWWA C55

Components	Material	Specification
Body	Ductile Iron	A536 65-45-12
Wedge	Ductile Iron, EPDM Encapsulated	
Wedge Nut	Bronze	B62 C83600
Stem	Stainless Steel	AISI 420
Bonnet	Ductile Iron	A536 65-45-12
Gasket	Rubber	EPDM
Gland	Ductile Iron	A536 65-45-12
Thrust Collar	Bronze	B62 C83600
O-Ring	Rubber	EPDM
Operating Nut	Ductile Iron	A536 65-45-12
Gland Bolt	Stainless Steel	AISI 304
Bonnet Bolt	Stainless Steel	AISI 304



Dimensions:

Size	L		H1		Weight
	in	mm	in	mm	lbs
3"	9.5	241.0	11.7	296.0	45.0
4"	10.0	254.0	13.8	350.0	56.0
6"	11.5	292.0	17.9	455.0	101.0
8"	12.5	318.0	21.5	545.0	161.0
10"	14.8	375.0	25.4	645.0	245.0
12"	14.9	378.0	28.7	730.0	371.0

Flexible Sprinkler Connector | Braided & Unbraided

Technical Features

- **Hose Types:** Braided or Unbraided
- **Hose Lengths:** 24", 36", 48", 60", 72"
- **Maximum Working Pressure:** 175 PSI
- **Maximum Working Temp**: 225˚F
- **K factor:** ½" Outlet 5.6, ¾" Outlet 8.0
- **Connections:** To branch line (inlet) via 1"/25.4mm NPT male thread
- **Connections:** To sprinkler (outlet) via ½" or ¾" 15mm or 20mm NPT female thread

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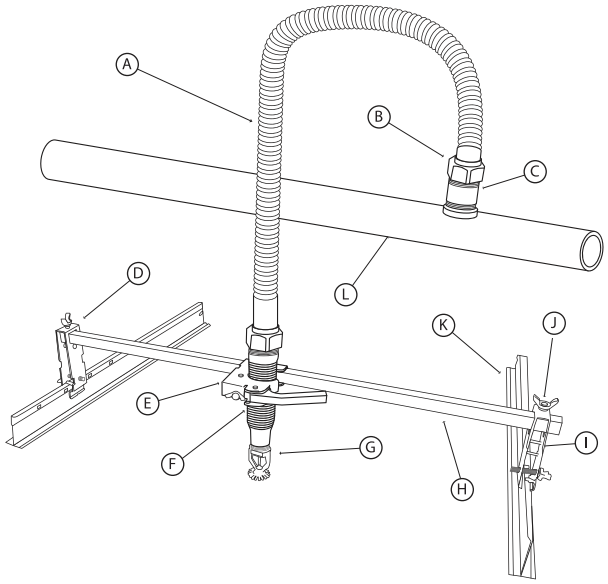
Approvals & Standards

- **Braided:** UL, ULC 2443, FM 1637
- **Unbraided:** UL, ULC 2443
- NFPA 13, NFPA 13D, NFPA 13R, ASTM C635, ASTM C636



Part	Material
Flexible Hose	Type 304 Stainless Steel
Nut	S10C
Isolation Ring	Nylon 66
Gasket Seal	Silicon
Reducer	Zinc Plated Grade 1020 Steel
End & Center Brackets	Zinc Plated Steel ASTM A109
Square Bar	Zinc Plated Steel Grade 1010 Steel

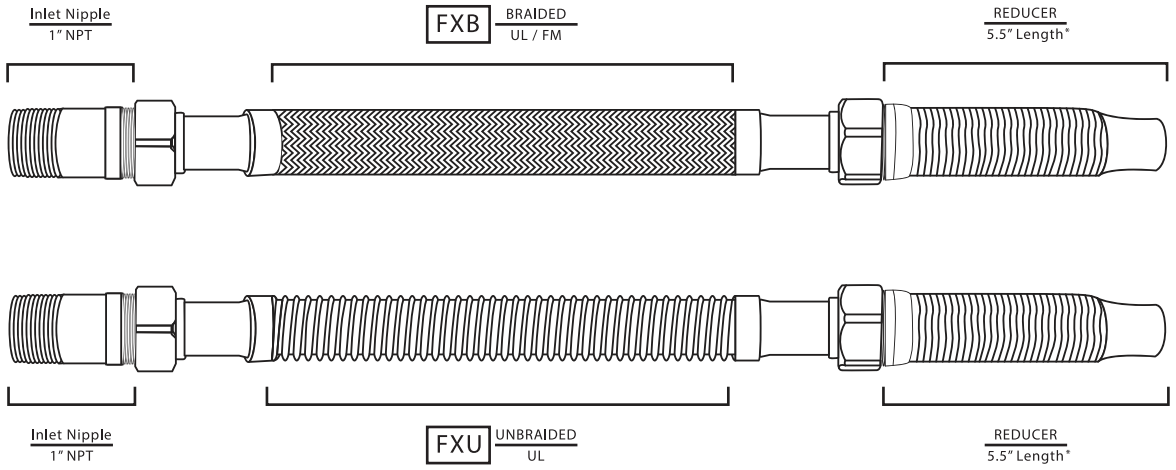
ASSEMBLY DRAWING: FXB (Braided) & FXU (Unbraided)

A. Stainless Steel Flexible Hose
B. Connection Nut
C. 1" Inlet Nipple
D. End Bracket with Wing Nut
E. Center Bracket
F. 5.5" Reducer
G. Sprinkler
H. Steel Bar
I. End Bracket with Wing Nut
J. Wing Nut
K. Ceiling Rail (T-Bar)
L. Branch Line

FRICTION LOSS DATA - Braided (FXB)				
Length	Outlet Size	Max # of 90° Bends	Min Bend Radius, in.	Equivalent Length of 1" Sch. 40 Pipe
Inches	Inches			
24	1/2	1	7.5	26.4
	3/4	1	7.5	19.4
36	1/2	2	7.5	34.1
	3/4	2	7.5	28.4
48	1/2	2	7.5	46.8
	3/4	2	7.5	39.5
60	1/2	3	7.5	61.4
	3/4	3	7.5	54.8
72	1/2	4	7.5	76.1
	3/4	4	7.5	70.1

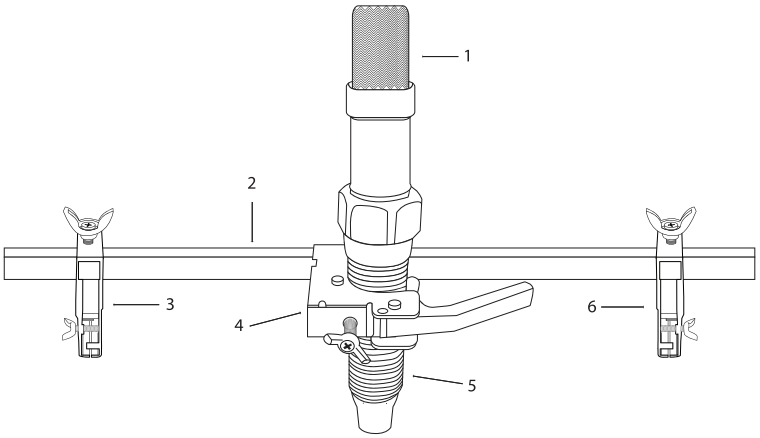
FRICTION LOSS DATA - Unbraided (FXU)				
Length	Outlet Size	Max # of 90° Bends	Min Bend Radius, in.	Equivalent Length of 1" Sch. 40 Pipe
Inches	Inches			
24	1/2	1	4	24
	3/4	1	4	30
36	1/2	2	4	44
	3/4	2	4	48
48	1/2	2	4	49
	3/4	2	4	55
60	1/2	2	4	59
	3/4	2	4	64
72	1/2	3	4	84
	3/4	3	4	86

Flexible Sprinkler Connector | Braided & Unbraided



* Other Reducer lengths Availible

ASSEMBLY DRAWING: Suspended Ceiling T-Bar Grid System



	Item Description
1	Stainless Steel Flexible Sprinkler Hose
2	Steel Square Bar 25" & 50"
3	97mm End Bracket with Wing Nut
4	Center Bracket D-Type
5	1/2" or 3/4" Reducer NPT
6	97mm End Bracket with Wing Nut

c UL us LISTED

FM APPROVED

STANDARDS OF COMPLIANCE

• UL / ULC LISTING

UL 2443 standards for Flexible Sprinkler Hose with Fittings for fire protection service.

• FM APPROVAL

FM class number 1637 approved standard for Flexible Sprinkler Hose with Threaded Ends and Fittings.

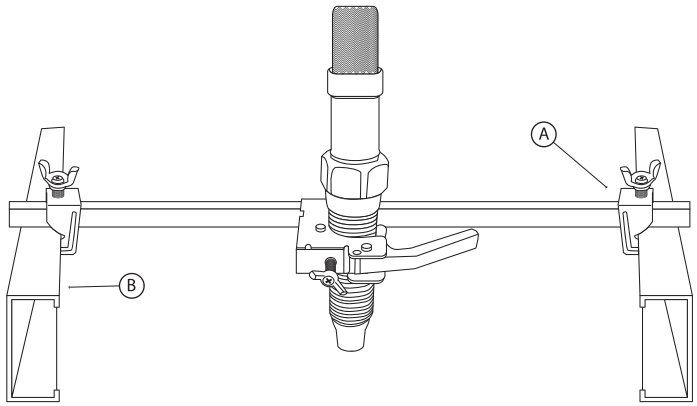
• NFPA

NFPA 13 Standard for the installation of sprinkler system.
NFPA 13D Standard for the installation of sprinkler systems in one and two family dwellings and manufactured homes.
NFPA 13R Standard for the installation of sprinkler systems in residential occupancies up to and including four stories in height.

• ASTM

ASTM C635 Standards specification for the manufacture, performance, and testing of metal suspension systems for acoustical tile and lay-in panel ceilings.
ASTM C636 Standards practice for installation of metal ceilings suspension systems for acoustical tile and lay-in panels.

Flexible Sprinkler Connector | Braided & Unbraided

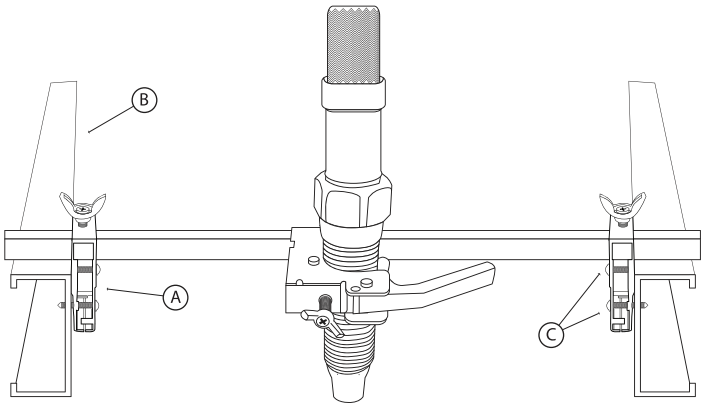


Metal Joist / Stud (Option A)

A. Metal Stud End Bracket (Part# FX-EB-MTL)

B. Metal Stud (C Channel)

Package Includes:
(1) Stainless Steel Flexible Sprinkler Hose
(1) Steel Square Bar
(2) End Brackets
(1) Center Bracket



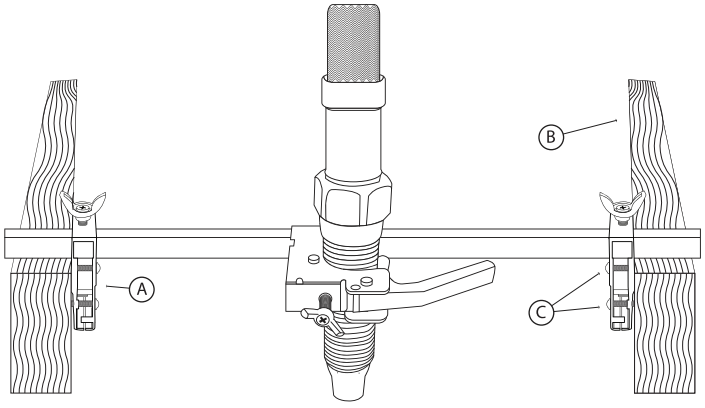
Metal Joist / Stud (Option B)

A. End Bracket (Part# FX-EB-97MM)

B. Metal Stud (C Channel)

C. 1-1/4" #10 Self-Drilling Sheet Metal Screw

Package Includes:
(1) Stainless Steel Flexible Sprinkler Hose
(1) Steel Square Bar
(2) End Brackets
(1) Center Bracket



Wood Joist / Stud

A. End Bracket (Part# FX-EB-97MM)

B. Wood Joist

C. 1-1/2" #10 Self-Drilling Wood Screw

Package Includes:
(1) Stainless Steel Flexible Sprinkler Hose
(1) Steel Square Bar
(2) End Brackets
(1) Center Bracket

Flexible Sprinkler Connector | Braided & Unbraided

	Part #	Description
	FX-NPT-050C	Straight Reducer 1/2" Outlet x 5-1/4" Length
	FX-NPT-075C	Straight Reducer 3/4" Outlet x 5-1/4" Length

	Part #	Description
	FX-NPT-INL	Inlet Nipple 1" x 2-3/8" NPT

	Part #	Description
	FX-NPT-700	Straight Reducer 1/2" Outlet x 7" Length
	FX-NPT-900	Straight Reducer 1/2" Outlet x 9" Length

	Part #	Description
	FX-SB-25	Square Bar - 25"
	FX-SB-50	Square Bar - 50"

	Part #	Description
	FX-90D-50C	90º Degree Elbow Reducer 1/2" NPT
	FX-90D-75C	90º Degree Elbow Reducer 3/4" NPT

	Part #	Description
	FX-GSKT	EPDM Gasket

	Part #	Description
	FX-CB-B	Center Bracket

	Part #	Description
	DX-CB-D	Center Bracket D TYPE

	Part #	Description
	FX-EB-97MM	97mm End Bracket

	Part #	Description
	FX-EB-MTL STUD	Metal Stud End Brackets

Flexible Sprinkler Connector | Braided & Unbraided

**For ASTM C635 metal ceiling suspension systems installed in accordance with ASTM C636 standards.*

⚠WARNING

* Read and follow these installation instructions before attempting to install Fivalco products.
* Installer must understand the purpose of these products with common standards of the industry for safety, and the consequences of improper product installation.
* Wear safety glasses, hardhat, and foot protection during installation.
* Failure to follow these instructions could cuase improper sprinkler operation, resulting in serious personal injury and / or property damage.
* The flexible hose are not to be bent within 2.5 inches of the connection nut at both ends.

ASSEMBLY INSTRUCTIONS

1

1

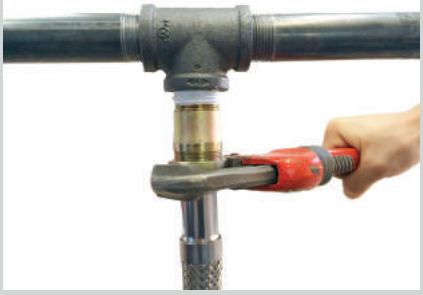
(A) Pipe side: Apply PTFE thread seal tape or pipe joint compound to the tapered threads of the inlet nipple. **(B)** Flexible hose side: DO NOT use both pipe PTFE or pipe joint compund.

2

2

Tighten the inlet nipple into branch line using pipe wrench.

3



3

Connect the nut of flexible hose to the inlet nipple using a pipe wrench. DO NOT use PTFE or pipe joint compound on the inlet nipple at the hose side since there is already a seal gasket in place to seal the joint. Tighten the connection to a maximum torque of 15 ft-lbs/20 N*m. Too much torque may cause damage to the seal gasket.

Flexible Sprinkler Connector | Braided & Unbraided

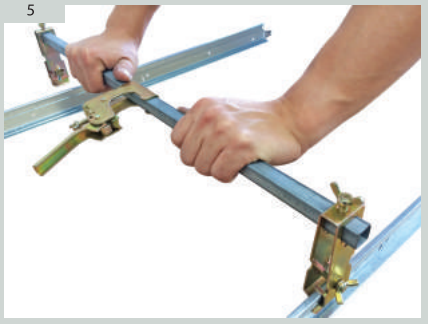
**For ASTM C635 metal ceiling suspension systems installed in accordance with ASTM C636 standards.*

4

4

Connect the nut of the flexible hose to the outlet reducer. DO NOT use PTFE or pipe joint compound since on outlet reducer at the hose side since there is already a seal gasket in place to seal the joint. Tighten the connection to a maximum torque of 15 ft-lbs/20 N*m. TOO much torque may cause damage to the seal gasket.

5



5

Indentify the t-bar bracket assembly and confirm if all parts are in present: (1) end bracket at each side, (1) center bracket, (1) square steel bar. Adjust as necessary if the positions of the end brackets to match the length of the t-bar rails.

6

6

Attach the end brackets to the t-bar rails by loosening the wing nut and pushing in the end bracket into the t-bar rail.

7

7

Tighten the wing nut to a torque of 3 ft-lbs/4 N*m to secure end brackets to the rails.

Flexible Sprinkler Connector | Braided & Unbraided

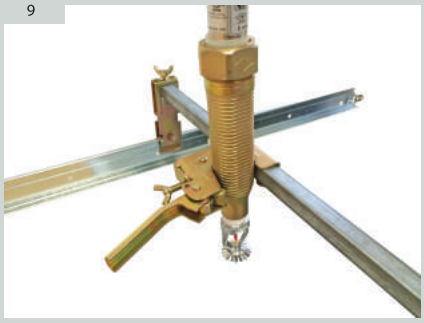
**For ASTM C635 metal ceiling suspension systems installed in accordance with ASTM C636 standards.*

8

8

Adjust the positions of the center bracket and the flexible hose to desired location.

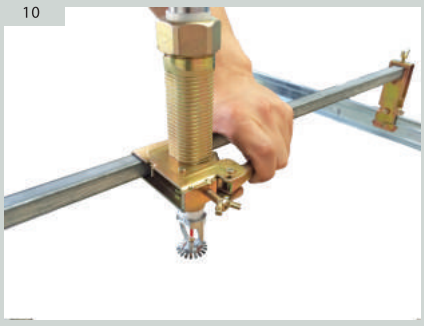
9



9

Slide the outlet reducer into the center bracket.

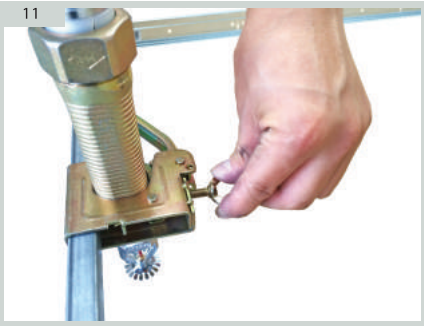
10



10

With outlet reducer positioned inside the center bracket, grasp and firmly close the handle completely to secure the reducer in place.

11



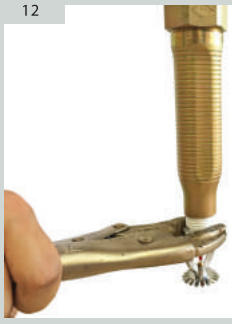
11

Optional: Tighten the wing nut to a torque of 3 ft-lbs/4 N*m.

Flexible Sprinkler Connector | Braided & Unbraided

**For ASTM C635 metal ceiling suspension systems installed in accordance with ASTM C636 standards.*

12

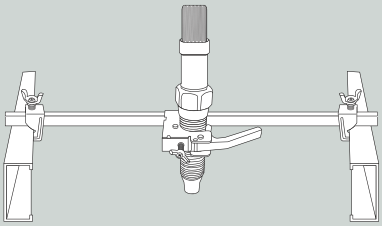


12

Apply PTFE or pipe joint compound to the male threads of sprinkler. Install the sprinkler into the female threads of the outlet reducer by following sprinkler manufacturer's installation instructions.

HARD-LID CEILING JOIST / STUD
ASSEMBLY INSTRUCTIONS

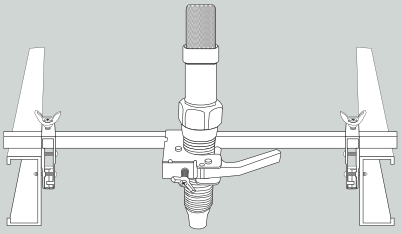
A



A

Metal Joist / Stud (Option A)
Refer to instructions for "ASTM C635 Metal Ceiling Suspension Systems" and perform steps 1 to 3. Slide the Metal Stud End Bracket (Part # FX-EB-MTL) on each end of square steel bar, making sure the "lip" of the bracket engages the metal joist/stud. Tighten the wing nuts to a torque of 3 ft-lbs/4 N*m to secure to the metal joist/stud. Perform steps 8 to 12 of the "ASTM C635 Metal Ceiling Suspension Systems".

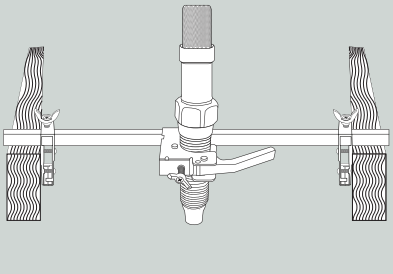
B



B

Metal Joist / Stud (Option B)
Refer to instructions for "ASTM C635 Metal Ceiling Suspension Systems" and perform steps 1 to 3. Place the bracket assembly on top of the metal joist/stud, where the end brackets (Part # FX-EB-97MM) are on the inner side of each metal joist/stud. Drill 1-1/4 inch long #10 self-drilling sheet metal screws (4) in the locations shown in the picture. Perform steps 8 to 12 of the "ASTM C635 Metal Ceiling Suspension Systems".

C



C

Wood Joist / Stud
Refer to instructions for "ASTM C635 Metal Ceiling Suspension Systems" and perform steps 1 to 3. Place the bracket assembly on top of the wood joist/stud, where the end brackets (Part # FX-EB-97MM) are on the inner side of each wood joist/stud. Drill 1-1/4 inch long #10 self-drilling wood screws (4) in the locations shown in the picture. Perform steps 8 to 12 of the "ASTM C635 Metal Ceiling Suspension Systems".

ALEUM QUICKONNECT

Working Pressure
300 PSI

c UL us LISTED
FM APPROVED

COUPLING

ALRC
RIGID COUPLING
1" thru 12"

ALFC
FLEXIBLE COUPLING
1" thru 12"

ALAPC
ANGLE-PAD COUPLING
1" thru 12"

ALREC
REDUCING COUPLING
2" x 1/2" thru 8" x 6"

MECHANICAL TEE

ALTMT
THREADED MECHANICAL TEE
2" x 1/2" thru 8 x 3 OD (76.1mm)

ALGMT
GROOVED MECHANICAL TEE
2" x 1" thru 8" x 6"

ALUTMT
U-BOLT THREADED MECH. TEE
1" x 1/2" thru 3 OD (76.1 mm) x 1"

GROOVED FLANGE

ALGFPN
GROOVED FLANGE PN16
2" thru 12"

ALGF150
GROOVED FLANGE CLASS 150
2" thru 12"

ALFLAG
FLANGE ADAPTOR GRV. 1.6Mpa
2" thru 12"

ALFLAG150
FLANGE ADAPTOR GRV. CLASS 150
Sizes: 2" thru 12"

ELBOW

AL90ESR
90° ELOW SHORT RADIUS
1" thru 12"

AL90ESTDR
90° ELOW STANDARD RADIUS
1" thru 12"

AL45E
45° ELOW
1" thru 12"

AL225E
22.5° ELBOW
1" thru 8"

AL1125E
11.25° ELBOW
1" thru 8"

TEE

ALETSR
EQUAL TEE SHORT RADIUS
1" thru 12"

ALETSTDR
EQUAL TEE STANDARD RADIUS
1" thru 12"

ALRTG
REDUCING TEE GROOVED
2" x 1" thru 12" x 10"

ALRTT
REDUCING TEE THREADED
2" x 1" thru 6" x 4"

CROSS

ALEC
EQUAL CROSS
1-1/4" thru 12"

ALRCG
REDUCING CROSS GROOVED
3" x 2" thru 8" x 6"

ALRCT
REDUCING CROSS THREADED
3 OD (76.1mm) x 2" thru 8" x 3"

REDUCER

ALRG
REDUCER GROOVED
1-1/4" x 1" thru 8" x 6"

ALRT
REDUCER THREADED
2" x 1" thru 8" x 4"

ALEGR
ECCENTRIC GROOVED REDUCER
3" x 2" thru 10" x 8"

CAP

ALC
CAP
1" thru 12"

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Terms & Conditions

Controlling Provisions:
These terms and conditions shall control with respect to any and all purchase orders or sales of Aleum products. No alteration, modification or waiver of these terms and conditions whether on the customer's purchase order or otherwise shall be valid unless the alteration, modification, or waiver is specially accepted in writing by an authorized representative of Aleum.

Shipping Terms:
All orders are quoted F.O.B. shipping point unless otherwise agreed upon in writing.

Orders accepted are subject to approval by our Head Office and Credit Department and are contingent upon acts of God, war, civil unrest or disturbance, strikes, labor difficulties, governmental regulations or rulings, delays of carriers (land, air, or seas), inability to obtain materials, accidents or any other cause beyond our control.

Shipping dates are estimated, and we will make effort to ship within the time estimated. We cannot guarantee shipping dates, and in the event of a production or shipment delay, we reserve the right to change the estimated shipping date. Under no circumstances shall Aleum be liable for damages of any kind, including but not limited to incidental or consequential damages for lost sales or profits or liquidated damages, directly or indirectly arising from delays or failure to meet shipping dates.

Orders accepted cannot be changed or cancelled without our written consent.

Orders for special (non-standard) goods may not be cancelled, nor will we accept return of these goods for credit.

Claims for Shortages:
All claims for shortages must be made within 10 days of receipt of goods. Our responsibility ceases when the goods are delivered to the carrier in good condition. Carriers are responsible for goods lost, damaged or delayed in transit. For your own protection have the transportation company's agent verify any damage, shortage or delay and note them on the freight bill over his/her signature.

Product Specs:
All weights are approximate and subject to change without notice. Aleum reserves the right to change or modify product designs, specifications and/or standard equipment without notice and without incurring obligation. Prices and Terms and Conditions of Sale are subject to change without notice.

Warranty:
We warrant all Aleum products to be free from defects in materials and workmanship under normal conditions of use and service. Our obligation under this warranty is limited to repairing or replacing at our option at our factory or designated facility any product within 2 years after delivery to the original buyer, which shall be returned with transportation charges prepaid, and which our examination and inspection shall show to our satisfaction to have been defective.

This warranty is made expressly in lieu of any other warranties, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose. The buyer's sole and exclusive remedy shall be for the replacement or repair of defective products as provided herein. The buyer agrees that no other remedy, including but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property or any other incidental or consequential loss shall be available to him/her.

Aleum neither assumes nor authorizes any person to assume any other liability in connection with the sale of such products. Item purchased by Aleum and resold will have the original equipment manufacturers warranty extended to Aleum customers where applicable.

This warranty shall not apply to any product which has been the subject to misuse, negligence or accident, which has been repaired or altered in any manner outside of Aleum's factory or designated facility or which has been used in a manner contrary to Aleum's instructions, recommendations or generally accepted practices. Aleum shall not be responsible for design errors due to inaccurate or incomplete information supplied by the buyer or his representatives.

Trade Agreement Act

CERTIFICATE OF COMPLIANCE

Trade Agreements Act of 1979 (TAA)

Aleum Corporation certifies that products specified below comply with the Trade Agreements Act of 1979 (TAA) that allows US contractors to supply and use products and services from South Korea:

Model	Description
BG, BT	Bronze Butterfly Valve 175 PSI With Supervisory Switch
DG, DW	Ductile Butterfly Valve 175 PSI With Supervisory Switch
HPG, HPW, HPGT	Ductile Butterfly Valve 300 PSI With Supervisory Switch
DG1C, HPG1C	Ductile Butterfly Valve With Normally Closed Supervisory Switch
DGC	Grooved Swing Check Valve
DGCR	Riser Grooved Swing Check Valve
FXB, FXU	Flexible Sprinkler Hose

Above listed Aleum products are manufactured in South Korea, which is one of the GPA countries eligible for TAA.

Unlike the Buy American Act, which creates only a preference for domestic end products, the Trade Agreements Act prohibits supplying products and services from countries not approved as TAA-eligible, including China, India, Malaysia, Thailand and Vietnam.

ALEUM
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"The Only Source of Knowledge is Experience"

35yrs
and growing

Aleum is a premier manufacturer of flow control products reaching 80 countries and protecting lives of millions worldwide. Every product is meticulously designed and crafted with highest quality, meeting or exceeding standards of UL, FM, ISO, NSF, and AWWA. Our solutions span a range of applications, including fire protection and mechanical industries. We welcome you to come visit us at the Expo or www.aleumUSA.com

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FIRE PROTECTION

& MECHANICAL TECHNOLOGIES

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