

Bronze Gate Valves for Cryogenic Service Goddard 302, 306, 310 & 310X Series

Features

- **Top Entry:** This union bonnet valve can be permanently installed in the line and serviced from the top
- **Construction:**
Bronze cast body and bonnet
Rugged construction for long life
Straight through design for high C_v
Designed with unique KOLD-SEAL™
- **Sizes:** ½" - 3" (15mm - 80mm)
- **Ends:** Threaded (FNPT), Sil Braze Tube (SBT), or with stainless steel pipe nipples brazed in
- **Service:** Liquified and vaporized atmospheric gases, LNG
- **Temperature Rating:** -325°F - +150°F (-196°C +65°C)
- **Pressure Rating:** (Cold, Non-shock)
310, 310x Series 300 PSIG
302 Series 400 PSIG
306 Series 600 PSIG

Designed to MSS SP-80 and ASME B31.3
Sizes 1.5" - 3.0" PED approved per EN 10204, 3.1
- **Soft Seated** Series 310 & 310X: Solid wedge with PCTFE (Neoflon®) provides a bubble tight seal and is replaceable.
- **Metal Seated** Series 302 & 306: Split wedge made of Bronze and also replaceable.

Gate design for high flow applications.
Straight-through flow for highest C_v rating in the industry.

302, 306 Non-Extended stem for selective cold gas applications

310, 310X Extended stem ideal for cryogenic supply applications



Bronze Gate Valves for Cryogenic Service Goddard 302, 306, 310 & 310X Series

Ordering Information

302 Series

Bronze Gate Valves
Bronze Body Non-Extended Bonnet, Split Wedge
For selected cold gas operations
400 PSIG COLD WORKING PRESSURE

Part Number	NPT Size Inches	NPT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000302-4T4	½"	15	Threaded	1.50	0.70	19.80
B-000302-20T4	2½"	65	Threaded	17.50	8.00	372.00
B-000302-24T4	3"	80	Threaded	26.00	11.80	588.00

Part Number	SBT Size Inches*	SBT Size mm*	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000302-4S4	½"	15	Silver Braze	1.25	0.60	19.80
B-000302-6S4	¾"	20	Silver Braze	2.25	1.00	36.00
B-000302-8S4	1"	25	Silver Braze	3.00	1.40	60.80
B-000302-12S4	1½"	40	Silver Braze	6.00	2.70	152.00
B-000302-16S4	2"	50	Silver Braze	9.50	4.30	245.00
B-000302-20S4	2½"	65	Silver Braze	14.50	6.60	372.00
B-000302-24S4	3"	80	Silver Braze	22.00	10.00	588.00

*Nominal Size

306 Series

600 PSIG Bronze Body, Non-Extended Bonnet, Split Wedge

Part Number	NPT Size Inches	NPT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000306-6T6	¾"	20	Threaded	2.25	1.00	36.00
B-000306-8T6	1"	25	Threaded	3.00	1.40	60.80
B-000306-12T6	1½"	40	Threaded	6.00	2.70	152.00
B-000306-16T6	2"	50	Threaded	9.50	4.30	245.00

310 Series

300 PSIG Bronze Body, Extended Bonnet, Solid Wedge, Soft Seat

Part Number	NPT Size Inches	NPT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000310-20T	2½"	65	Threaded	14.50	6.60	372.00
B-000310-24T	3"	80	Threaded	22.00	10.00	588.00

Part Number	SBT Size Inches *	SBT Size mm *	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000310-24S	3"	80	Silver Braze	22.00	10.00	588.00

*Nominal Size

310X Series

Short Top Works for Trailer Service

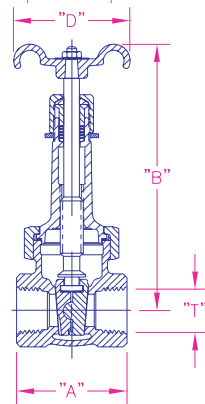
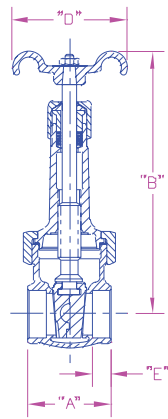
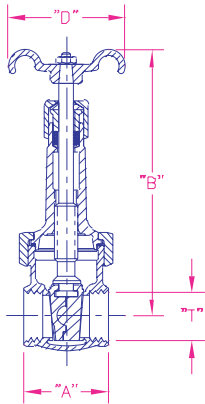
300 PSIG Bronze Body, Extended Bonnet, Solid Wedge, Soft Seat

Part Number	NPT Size Inches	NPT Size mm	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000310X-20T	2½"	65	Threaded	14.50	6.60	372.00
B-000310X-24T	3"	80	Threaded	22.00	10.00	588.00

Part Number	SBT Size Inches *	SBT Size mm *	Ends	Weight Lbs.	Weight Kgs.	Estimated Cv
B-000310X-24S	3"	80	Silver Braze	22.00	10.00	588.00

*Nominal Size

Bronze Gate Valves for Cryogenic Service Goddard 302, 306 Series



302 Series

MAWP: 400 PSIG Non-Shock Cold Temperature Rating +150° F to -325°F
Non-Extended Valve for selective cold gas applications

Dimensional Data

All dimensions are in inches

Threaded End (NPT)

Size	"A"	"B"	"D"	"T" NPT
1/2"	2.34"	5.81"	2.37"	1/2"
3/4"	2.50"	6.94"	2.75"	3/4"
1"	2.84"	8.43"	3.00"	1"
1 1/2"	3.43"	11.19"	4.00"	1 1/2"
2"	3.81"	13.19"	4.75"	2"
2 1/2"	4.68"	15.81"	5.25"	2 1/2"
3"	5.12"	18.25"	6.12"	3"

Sil Braze End

Size	"A"	"B"	"D"	"T" NPT
1/2"	2.50"	5.81"	2.37"	.38"
3/4"	3"	6.94"	2.75"	.40"
1"	3.25"	8.43"	3"	.43"
1 1/2"	4"	11.19"	4"	.62"
2"	4.5"	13.19"	4.75"	.65"
2 1/2"	5.25"	15.81"	5.25"	.78"
3"	6"	18.25"	6.12"	.82"

306 Series

MAWP: 600 PSIG Non-Shock Cold-Temperature Rating +150° F to -325°F
Non-Extended Valve for selective cold gas applications

Dimensional Data

All dimensions are in inches

Size	"A"	"B"	"D"	"T" NPT
3/4"	2.5"	6.93"	2 3/4"	3/4"
1"	2.84"	8.43"	3"	1"
1 1/2"	3.43"	11.18"	4"	1 1/2"
2"	3.81"	13.81"	4 3/4"	2"

SB-00310X-24SW

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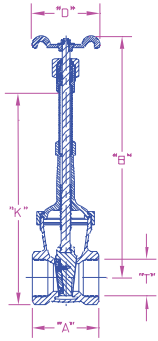
Bronze Gate Valves for Cryogenic Service Goddard 310 & 310X Series

310 Series

MAWP: 300 PSIG Non-Shock Cold-Temperature Rating +150° F to -325°F
Extended Valve for selective cold gas applications

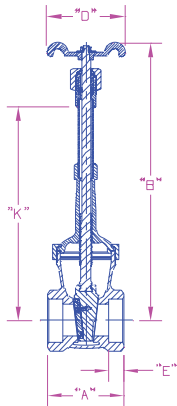
Dimensional Data

All dimensions are in inches



Threaded End (NPT)

Size	"A"	"B"	"D"	"K"
2½"	6"	25.38"	6.12"	16.30"
3"				



Sil Braze End

Size	"A"	"B"	"D"	"E"	"K"
2½"	6"	25.38"	6.12"	.03"	16.30"
3"					

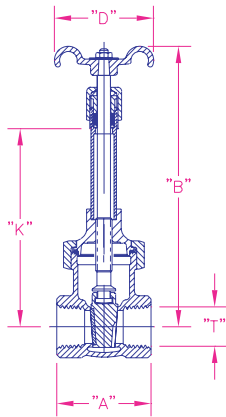
310X Series

MAWP: 300 PSIG Non-Shock Cold-Temperature Rating +150° F to -325°F

Extended Valve for selective cold gas applications, Ideal for Trailer Service

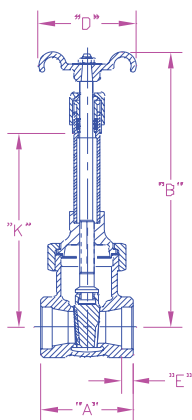
Dimensional Data

All dimensions are in inches



Threaded End (NPT)

Size	"A"	"B"	"D"	"K"
2½"	6"	20.38"	6.12"	11.5"
3"				



Sil Braze End

Size	"A"	"B"	"D"	"E"	"K"
2½"	6"	20.38"	6.12"	0.3"	11.5"
3"					