

# Bronze Swing Check Valve for Cryogenic Service Including 846M Goddard 840 Series

## Application

The RegO Goddard 846M and 840 series check valve is designed for handling of cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Compatible with oxygen, nitrogen, CO<sub>2</sub>, argon and LNG.



## Features

- **Top Entry:** This swing check valve can be permanently installed in the line and serviced from the top
- **Construction:** Designed to prevent back flow in cryogenic systems. Higher fluid capacity (Cv) than poppet or lift check valves. Bronze body and internals. Rugged construction for long life and minimal down time
- **Sizes:** ½" through 2" (15mm through 50mm)
- **Ends:** Threaded (FNPT), or with Sil Brazed Tube (SBT) SCH-10, Threaded back brazed pipe nipples in 1" increments up to 6" SCH-40, Threaded back brazed pipe nipples in 1" increments up to 6" SCH-80, Threaded back brazed pipe nipples in 1" increments up to 6"
- **Temperature Rating:** -320°F to +150°F (-196°C to +65°C)
- Cleaned for Oxygen Service per CGA G-4.1.
- **Pressure Rating:** (Cold, Non-shock)  
840 Series 400 psig (27.6 barg)  
846M Series 600 psig (41.4 barg)  
Sizes 1½" to 2" PED Approved

**Note: Do not use for reciprocating gas service.**

- **Cracking Pressure:** 0.5 psig (.03 barg)



**840 Series**

## Ordering Information

### 840

Bronze Swing Check Valves - Soft Seated, Threaded, Sil Brazed Ends, Threaded and Back Brazed Pipe Nipples  
400 psig (28 barg) Cold Working Pressure

#### Threaded Ends

Part Number	NPT Size Inches	NPT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-840-4T	½"	15	Threaded	2.00	0.91	4.50 (3.89)
B-840-6T	¾"	20		4.00	1.81	7.00 (6.05)
B-840-8T	1"	25		4.50	2.04	10.00 (8.65)
B-840-12T	1½"	40		8.50	3.86	40.00 (34.6)
B-840-16T	2"	50		14.50	6.58	100.00 (86.5)

#### Silver Brazed - Pipe Nipple

Part Number	SBT Size Inches*	SBT Size DN*	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-840-4S	½"	15	Silver Braze	2.50	1.13	4.50 (3.89)
B-840-6S	¾"	20		4.5	2.05	7.00 (6.05)
B-840-8S	1"	25		5.25	2.38	10.00 (8.65)
B-840-12S	1½"	40		10.75	4.88	40.00 (34.6)
B-840-16S	2"	50		17.50	7.94	100.00 (86.5)

\* Nominal Size

### 846M

Bronze Swing Check Valves - Metal Seated, Threaded, Sil Brazed Ends, Threaded and Back Brazed Pipe Nipples  
600 psig (42 barg) Cold Working Pressure

#### Threaded Ends

Part Number	NPT Size Inches	NPT Size DN	Ends	Weight Lbs.	Weight Kg	Estimated Cv (Kv)
B-846M-4T6	½"	15	Threaded	2.00	0.91	4.50 (3.89)
B-846M-8T6	1"	25		4.50	2.04	10.00 (8.65)
B-846M-12T6	1½"	40		8.50	3.86	40.00 (34.6)
B-846M-16T6	2"	50		14.50	6.58	100.00 (86.5)

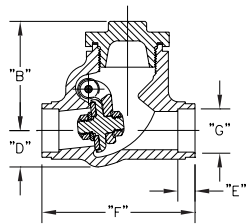
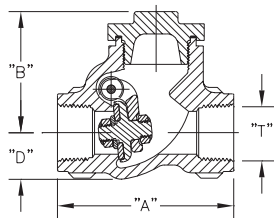
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## Silver Brazed - Pipe Nipple

Part Number	SBT Size Inches*	SBT Size DN*	Ends	Weight Lbs.	Weight Kg	Estimated CV
<b>B-846M-4S6</b>	1/2"	15	Silver Braze	2.50	1.13	4.50
<b>B-846M-6S6</b>	3/4"	20		4.50	2.04	7.00
<b>B-846M-8S6</b>	1"	25		5.25	2.38	10.00
<b>B-846M-12S6</b>	1 1/2"	40		10.75	4.88	40.00
<b>B-846M-16S6</b>	2"	50		17.50	7.94	100.00

\* Nominal Size

- Contact company for threaded, back brazed pipe nipple information

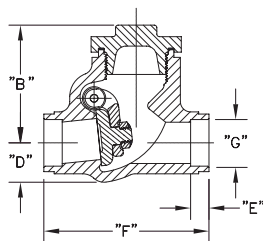
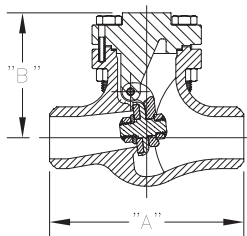


### 840 Series

Pressure Rating MSS SP-80 Class 200  
MAWP 400 psig (28 barg) Non-Shock Cold  
Temperature Rating +150°F to -325°F (+65°C to -198°C)

#### Dimensional data

Size		"A"		"B"		"D"		"T" NPT		"E"		"F"		"G"	
Inches	DN	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
1/2"	15	3.00"	76	2.13"	54	3/4"	19	1/2"	13	.38"	10	2.94"	75	.63"	16
3/4"	20	3.69"	94	2.81"	71	1.12"	28	3/4"	19	.41"	11	3.60"	91	.88"	22
1"	25	4.00"	102			1.13"	29	1"	25	.45"	11	4.00"	102	1.13"	29
1 1/2"	40	5.03"	128	3.63"	92	1.44"	36	1 1/2"	38	.63"	16	5.03"	128	1.63"	41
2"	50	6.35"	161	4.34"	110	1.84"	47	2"	51	.66"	17	6.35"	161	2.13"	54



### 846M Series

Pressure Rating MSS SP-80 Class 300  
MAWP 600 psig (42 barg) Non-Shock Cold  
Temperature Rating +150°F to -325°F (+65°C to -198°C)

#### Dimensional data

Size		"A"		"B"		"D"		"T" NPT		"E"		"F"		"G"	
Inches	DN	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
1/2"	15	3.00"	76	2.13"	54	3/4"	19	1/2"	13	.38"	10	2.94"	75	.63"	16
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2"	50	6.35"	161	4.34"	110	1 27/32"	47	2"	51	.66"	17	6.35"	161	2.13"	54