

CRYOGENIC CAST BODY BELLOW SEAL VALVE MANUAL OR AUTOMATIC

21,000 SERIES

0 to 300 PSIG



Valve Size:

1" to 3"



APPLICATIONS

- Cryogenic Storage Tanks
- Cryogenic Transports & ISO Containers
- Vacuum Jacketed and Foam Insulated Pipe
- Wherever Leak Tight Valves are Required



FEATURES

- Vacuum Jacketed or Non-Jacketed
- Multi-Ply Bellow with Redundant Packing Seals and O-rings for Leak Tight Operation
- Manual OS&Y or Automatic Available with AutoSeal or Specified Actuator
- High Flow Cast Body Design
- Globe or "Y" Pattern Valve Configurations
- Easy In-line Maintenance
- Top Entry Flanged Bonnet
- Butt Weld End Connections



OPTIONS

- Cold Box Cuff
- Bonnet Flange Purge (Overseat)
- Down Stream 1/4" MNPT Purge
- Control Tips
- Instrumentation and Accessories



OPERATING RANGES

Temperature..... -456° F to +300° F
(-271°C to +149°C)

Max. Operating Pressure 300 PSIG



TECHNICAL DATA

All Major Structural Components are 300 Series Stainless Steel
Inner Cylinder and Stem Assembly are Stainless Steel and Teflon®

Materials of Construction:

Seat Kel-F
Packing Teflon® or Graphite
Gasket Glass Filled Teflon®
Redundant Seals Viton®

Testing:

External Leakage Mass spec. to 1x10⁻⁹scc
GHe/sec
Seat Leakage Bubble Tight 150 PSIG in
Liquid Nitrogen with GHe
Proof Pressure 330 PSIG

ORDERING GUIDE

BASE MODEL NUMBER
21,000 Series Bellow Seal

VALVE SIZE
08 - 1"
12 - 1-1/2"
16 - 2"
24 - 3"

CLEANING
O - Oxygen (per 216-2 specification)
C - Standard

BODY CONFIGURATION
GP - Pipe, Globe Pattern
GT - Tube, Globe Pattern
YP - Pipe, "Y" Pattern
YT - Tube, "Y" Pattern

PACKING
1 - Teflon®
6 - Graphite

21 08 - O GP 1 M - NJ

SPECIAL ADD ON

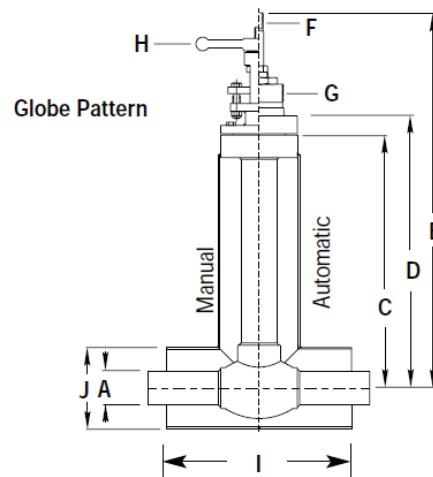
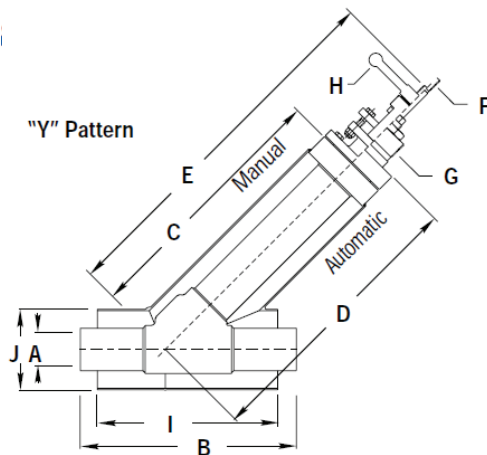
Blank - Vacuum Jacketed
NJ - Non-Vacuum Jacketed
CB - Cold Box Cuff
TW - Top Works Bonnet
SA - Stem Assembly
CK - Complete Change Out Kit
SG - Soft Goods Kit
Packing
Gaskets
Seals

TOP WORKS

M - Manual Valve
A - Automatic Valve Only
B - Automatic Valve with AutoSeal
E - Automatic Valve with AutoSeal and Control Tip - EQ%
L - Automatic Valve with AutoSeal and Control Tip - Linear
P - Automatic Valve with Piston and Spring for Trailer (EIV)



DIMENSIONS & SPECIFICATIONS



GLOBE VALVE DIMENSIONS

Size	A	B	C	D	E	F (UNF) Stem	G	H	I	J	CV	ΔQ
1.00"	1.0 PS	11.75"	11.25"	12.12"	17.43"	0.375-24	2.06-12	5	9.75"	3 PS	14	14.4
1.50"	1.5 PS	12.25"	14.00"	15.12"	20.68"	0.500-20	2.75-12	7	10.25"	4 PS	34	20.0
2.00"	2.0 PS	12.25"	14.00"	15.12"	20.68"	0.500-20	2.75-12	7	10.25"	4 PS	50	21.0
3.00"	3.0 PS	17.88"	20.00"	-	-	-	-	-	12.00"	8 PS	139	29.0

"Y" PATTERN VALVE DIMENSIONS

Size	A	B	C	D	E	F (UNF) Stem	G	H	I	J	CV	ΔQ
1.00"	1.0 PS	11.75"	11.25"	12.12"	17.43"	0.375-24	2.06-12	5	9.75"	3 PS	22	14.4
1.50"	1.5 PS	12.25"	14.00"	14.00"	20.68"	0.500-20	2.75-12	7	10.25"	4 PS	47	20.0
2.00"	2.0 PS	12.25"	14.00"	14.00"	20.68"	0.500-20	2.75-12	7	10.25"	4 PS	96	21.0

ΔQ - Heat leak for vacuum jacketed valves only. BTU-Hr @ 20°K

Please consult your Distributor, Representative or our factory for information on special connections, alternate materials and larger sizes.