ABSA
the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

January 08, 2025

Attention: Cecylia Garbacz
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO, ON M9W 6N9

The design submission, Tracking Number 2024-04533, Web Portal Number 2024-S3249, originally received on July 29, 2024 was surveyed and accepted for registration as follows:

CRN : 0C15714.2 **Accepted on:** January 08, 2025

Reg Type: RENEWAL **Expiry Date:** January 08, 2035

Drawing No. : CRN-1060/1080 SHEET 1 TO 8 Rev M As Noted

Fitting type: CRYOGENIC GLOBE VALVES

Design registered in the name of : ACME CRYOGENICS

The registration is conditional on your compliance with the following notes:

- As of January 08, 2025, the registration issued on May 28, 2015, for CRN 0C15714.2 is expired. All registration letters showing an expiry date of May 28, 2025 shall be destroyed.
- See scope of registration for design conditions and notes

As indicated on AB-41 Statutory Declaration or AB-351 Declaration of Conformity form and submitted documentation, the code of construction are ASME B31.3 and B16.34.

- It is our understanding that the fitting(s), included as the scope of this submission, that is(are) subject to the Safety Codes Act shall comply with the requirements of the indicated Standard or Code of Construction on the AB-41 Statutory Declaration or AB-351 Declaration of Conformity as supported by the attached data which identifies the dimensions, materials of construction, press./temp. ratings and the basis for such ratings, and the identification marking of the fittings.
- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration or AB-351 Declaration of Conformity form.
- This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency, and maintains a valid Certification of Authorization Permit if required by the jurisdiction where manufacturing takes place, until that date.
- Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (587) 686-9372 or fax (780) 437-7787 or e-mail Bohuch@absa.ca.

Sincerely,

D Bohuch

BOHUCH, DAN, P. Eng.
DOP Cert. No. D00010785

Alberta Municipal Affairs

ABSA
the pressure equipment safety authority

AB-41 2019-08

STATUTORY DECLARATION
Registration of Fittings
Single or Multiple Fitting Designs within one Fitting Category

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.

CVI CVI ACME CRYOGENICS

I, David M. Rakos (name of applicant), Director of Engineering (position title) (must be in a position of authority)

of Acme Cryogenics, Inc. (name of manufacturer)

located at 2801 Mitchell Avenue, Allentown, PA, 18103, USA (plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (select only one)

☐ comply with the requirements of _____ (title of recognized North American Standard) which specifies the dimensions, materials of construction, pressure/temperature ratings and identification marking of the fittings, or

☑ are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ASME B31.3, B31.12, B16.34 (title of code of construction or other applicable document) as supported by the attached data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the identification marking of the fittings.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified as described in the below Table as being suitable for the manufacturing of these fittings to the stated standard, regulation, code, guideline or other applicable document. The fittings covered by the declaration for which I seek registration are as provided in the Supplementary Sheet(s) attached.

Quality Program Verification and Manufacturing Sites

A copy of the Quality Certificate from each manufacturing site must be included

Item #	Product Description, Model or Series	Quality Program	Scope of Certification	Expiry Date	Verifying Organization	Location(s) Plant Name and address
1.	Cryogenic valves	CSA B51	Category C, D, E, H	May 2030	TUV Rheinland	Allentown, PA
2.						

Tracking #: 2024-04533

In support of this application, the following information, calculations and/or test data are attached:

CRN-1060/1080, ~~Rev. J~~, Scope of CRN Registration; Calculation No. E11003, ~~Rev. 7~~

Rev. M - DB Rev. 8 - DB

(Signature of the Declarer) 8/4/2023 (Date)

DECLARED before me at Allentown (city) in the State of Pennsylvania (province, territory, or state)

this 4th day of August (Month), 2023 (Year)

(print) Sarah Painter (a Commissioner of Oaths or Notary Public)

(sign) (a Commissioner of Oaths or Notary Public)

08/10/26 (expiry date (mm/dd/yy))

Commonwealth of Pennsylvania - Notary Seal
SARAH PAINTER - Notary Public
Lehigh County
My Commission Expires August 10, 2026
Commission Number 1424224

Commissioner of Oaths / Notary Public in and for: Commonwealth of Pennsylvania (province, territory, or state)

For ABSA Office Use Only:

NOTES:

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Part 1, Clause 4.2, and is accepted for registration in Category .

CRN:

Registered Date:

Expiry Date: Jan. 08, 2035

Signature:

(Signature of the Administrator/SCO)

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline

2024-04533
ABSA
SAFETY CODES ACT - PROVINCE OF ALBERTA
ACCEPTED: 0C15714.2
See acceptance letter for conditions of registration.
Date: 2025-01-08 By: D Bohuch
DAN BOHUCH, P. Eng.
DOP: D00010785

This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act.

Tracking #:

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
CV0500HHYVPxxxx CV0500HHYOPxxxx CV0500AxxVPxxxx CV0500AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1000HHYVPxxxx CV1000HHYOPxxxx CV1000AxxVPxxxx CV1000AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1500HHYVPxxxx CV1500HHYOPxxxx CV1500xxYVPxxxx CV1500xxYOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV2000HHYVPxxxx CV2000HHYOPxxxx CV2000xxYVPxxxx CV2000xxYOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24 Bonnet: 0.375/0.248	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV3000HHYVPxxxx CV3000HHYOPxxxx CV3000AxxVPxxxx CV3000AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.38/0.28	NPS 3 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV4000HHYVPxxxx CV4000HHYOPxxxx CV4000AxxVPxxxx CV4000AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.45/0.32	NPS 4 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV0500HHYOSPxx CV0500AxxOSPxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15	NPS 1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1000HHYOSPxx CV1000AxxOSPxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1500HHYOSPxx CV1500AxxOSPxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV2000HHYOSPxx CV2000AxxOSPxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24 Bonnet: 0.375/0.248	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV0500AXXVP-CHK CV0500AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15 Bonnet: 0.376/0.164	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV1000AXXVP-CHK CV1000AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165 Bonnet: 0.315/0.201	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV1500AXXVP-CHK CV1500AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205 Bonnet: 0.375/0.248	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV2000AXXVP-CHK CV2000AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24 Bonnet: 0.625/0.28	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4

GENERAL NOTES:

1. CODES OF DESIGN & CONSTRUCTION
   - ASME B31.3, PROCESS PIPING CODE
   - ASME B31.12, HYDROGEN PIPING & PIPELINES CODE
   - ASME B16.34, VALVES -FLANGED, THREADED, AND WELDING END
   - CSA B51, BOILER, PRESSURE VESSEL, & PRESSURE PIPING CODE
2. SAFE WORKING PRESSURE (NON SHOCK) 600 PSIG MAX. WITHIN THE TEMPERATURE RANGE OF -425˚F TO +200˚F (LIMITED TO 150˚F BY THE SEAL MATERIALS)
3. REFERENCE CALCULATION: E11003, REV. 8
4. MDMT LIMITED TO -325°F FOR VALVES WITH BONNETS CONSTRUCTED FROM ASTM B283 (SB-283) C37700 MATERIAL

REV	DESCRIPTION	DATE	REV BY	APPD BY	ECN NO.
K	MULTIPLE CHANGES; SEE ECN FOR DETAILS	05/30/2024	AJH	DRH	10559
L	MULTIPLE CHANGES; SEE ECN FOR DETAILS	9/17/2024	AJH	DRH	10601
M	MULTIPLE CHANGES; SEE ECN FOR DETAILS	12/18/2024	AJH	DMR	10642

UNLESS OTHERWISE SPECIFIED
INTERPRET PER ASME Y14.5-2009
1. THE FOLLOWING TOLERANCES APPLY: .XX: ±.01" .XXX: ±.005" FRACTIONS: ± 1/32" ANGLES" ±0.5°
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE	05/23/2011
DRAWN BY	AJH	DATE	07/17/2023
CHECKED BY	BL	DATE	07/20/2023
APPROVED BY	DRH	DATE	08/04/2023

ORIGINAL

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

ACME CRYOGENICS
PART OF OPW | a DOVER company

P/N: SEE TABLE

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 1 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
CV0500HHYVPxxxx CV0500HHYOPxxxx CV0500AxxVPxxxx CV0500AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1000HHYVPxxxx CV1000HHYOPxxxx CV1000AxxVPxxxx CV1000AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1500HHYVPxxxx CV1500HHYOPxxxx CV1500xxYVPxxxx CV1500xxYOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV2000HHYVPxxxx CV2000HHYOPxxxx CV2000xxYVPxxxx CV2000xxYOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV3000HHYVPxxxx CV3000HHYOPxxxx CV3000AxxVPxxxx CV3000AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.313/0.281	NPS 3 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV4000HHYVPxxxx CV4000HHYOPxxxx CV4000AxxVPxxxx CV4000AxxOPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.313/0.281	NPS 4 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV0500HHYOSPxx CV0500AxxOSPxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15	NPS 1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1000HHYOSPxx CV1000AxxOSPxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV1500HHYOSPxx CV1500AxxOSPxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV2000HHYOSPxx CV2000AxxOSPxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CV0500AXXVP-CHK CV0500AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15 Bonnet: 0.375/0.164	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV1000AXXVP-CHK CV1000AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165 Bonnet: 0.315/0.201	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV1500AXXVP-CHK CV1500AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205 Bonnet: 0.375/0.248	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV2000AXXVP-CHK CV2000AXXOP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24 Bonnet: 0.625/0.28	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4

GENERAL NOTES:

1. CODES OF DESIGN & CONSTRUCTION
   - ASME B31.3, PROCESS PIPING CODE
   - ASME B31.12, HYDROGEN PIPING & PIPELINES CODE
   - ASME B16.34, VALVES -FLANGED, THREADED, AND WELDING END
   - CSA B51, BOILER, PRESSURE VESSEL, & PRESSURE PIPING CODE
2. SAFE WORKING PRESSURE (NON SHOCK) 600 PSIG MAX. WITHIN THE TEMPERATURE RANGE OF -425°F TO +200°F (LIMITED TO 150°F BY THE SEAL MATERIALS)
3. REFERENCE CALCULATION: E11003, REV. 8
4. MDMT LIMITED TO -325°F FOR VALVES WITH BONNETS CONSTRUCTED FROM ASTM B283 (SB-283) C37700 MATERIAL

REV	DESCRIPTION	DATE	REV BY	APPD BY	ECN NO.
K	MULTIPLE CHANGES; SEE ECN FOR DETAILS	05/30/2024	AJH	DRH	10559
L	MULTIPLE CHANGES; SEE ECN FOR DETAILS	9/17/2024	AJH	DRH	10601
M	MULTIPLE CHANGES; SEE ECN FOR DETAILS	12/18/2024	AJH	DMR	10642

UNLESS OTHERWISE SPECIFIED
INTERPRET PER ASME Y14.5-2009
1. THE FOLLOWING TOLERANCES APPLY: .XX: ±.01" .XXX: ±.005" FRACTIONS: ± 1/32" ANGLES" ±0.5°
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE	05/23/2011
DRAWN BY	AJH	DATE	07/17/2023
CHECKED BY	BL	DATE	07/20/2023
APPROVED BY	DRH	DATE	08/04/2023

ORIGINAL

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

ACME CRYOGENICS
PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 1 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
CV0500AXXSP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15 Bonnet: 0.375/0.164	NPS 1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV1000AXXSP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165 Bonnet: 0.315/0.201	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV1500AXXSP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205 Bonnet: 0.375/0.248	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
CV2000AXXSP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24 Bonnet: 0.625/0.28	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-4
AV1000HHYVPxxxx AV1000HHYOPxxxx AV1000AxxVPxxxx AV1000AxxOPxxxx	MODEL CV (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.175	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
AV1500HHYVPxxxx AV1500HHYOPxxxx AV1500AxxVPxxxx AV1500AxxOPxxxx	MODEL CV (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.21	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
AV2000HHYVPxxxx AV2000HHYOPxxxx AV2000xxVPxxxx AV2000AxxOPxxxx	MODEL CV (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.247	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
AV1000HHYOSPxx AV1000AxxOSPxx	MODEL CV (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.175	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
AV1500HHYOSPxx AV1500AxxOSPxx	MODEL CV (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.21	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
AV2000HHYOSPxx AV2000AxxOSPxx	MODEL CV (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.247	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
YV1000HHYVPxxxx YV1000HHYOPxxxx YV1000AxxVPxxxx YV1000AxxOPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.288/0.172	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV1500HHYVPxxxx YV1500HHYOPxxxx YV1500AxxVPxxxx YV1500AxxOPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.205	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV2000HHYVSPxx YV2000HHYOPxxxx YV2000AxxVSPxx YV2000AxxOPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.240	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV3000HHYVSPxx YV3000HHYOPxxxx YV3000AxxVSPxx YV3000AxxOPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.341/0.281	NPS 3 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV4000HHYVPxxxx YV4000HHYOPxxxx YV4000AxxVPxxxx YV4000AxxOPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.611/0.314	NPS 4 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2

ORIGINAL

UNLESS OTHERWISE SPECIFIED
INTERPRET PER ASME Y14.5-2009
1. THE FOLLOWING TOLERANCES APPLY: .XX: ±.01" .XXX: ±.005" FRACTIONS: ± 1/32" ANGLES" ±0.5"
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE	05/23/2011
DRAWN BY	AJH	DATE	07/17/2023
CHECKED BY	BL	DATE	07/20/2023
APPROVED BY	DRH	DATE	08/04/2023

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

SCALE: N/A | Project No.: E220040 | B

ACME CRYOGENICS PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SHEET: SHEET 2 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
YV1000HHYOSPxx YV1000AxxOSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.288/0.172	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV1500HHYOSPxx YV1500AxxOSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.205	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV2000HHYOSPxx YV2000AxxOSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.240	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV3000HHYOSPxx YV3000AxxOSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.341/0.281	NPS 3 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
YV4000HHYOSPxx YV4000AxxOSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.611/0.314	NPS 4 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT1000HHYVPxxxx CT1000AxxVPxxxx	MODEL CT (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CT1500HHYVPxxxx CT1500AxxVPxxxx	MODEL CT (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CT2000HHYVPxxxx CT2000AxxVPxxxx	MODEL CT (Acme) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
CT100AHHYCSPxx CT100AxxYCSPxx	MODEL CT (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.175	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
CT150AHHYCSPxx CT150AAxxYCSPxx	MODEL CT (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.21	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
CT200AHHYCSPxx CT200AAxxYCSPxx	MODEL CT (Acme) ANGLE-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.247	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-3
CT100YHHYCSPxx CT100YAxxCSPxx	MODEL CT (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.288/0.172	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT150YHHYCSPxx CT150YAxxxCSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.205	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT200YHHYCSPxx CT200YAxxCSPxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.240	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT05YTYHHYVPxxxx CT05YTYAxxVPxxxx	MODEL CT (Acme) Y-PATTERN LOW FLOW GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.188/0.14	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT07YTYHHYVPxxxx CT07YTYAxxVPxxxx	MODEL CT (Acme) Y-PATTERN LOW FLOW GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3/4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.188/0.14	NPS 3/4 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT10YTYHHYVPxxxx CT10YTYAxxVPxxxx	MODEL CT (Acme) Y-PATTERN LOW FLOW GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.188/0.14	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2

ORIGINAL

UNLESS OTHERWISE SPECIFIED

INTERPRET PER ASME Y14.5-2009

1. THE FOLLOWING TOLERANCES APPLY: .XX: ± .01" .XXX: ± .005" FRACTIONS: ± 1/32" ANGLES" ±0.5°
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE 05/23/2011
DRAWN BY	AJH	DATE 07/17/2023
CHECKED BY	BL	DATE 07/20/2023
APPROVED BY	DRH	DATE 08/04/2023

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

ACME CRYOGENICS
PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 3 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
CT05YTHHYxSPxx CT05YTAxxxSPxx	MODEL CT (Acme) Y-PATTERN LOW FLOW GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.188/0.14	NPS 1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT07YTHHYxSPxx CT07YTAxxxxSPxx	MODEL CT (Acme) Y-PATTERN LOW FLOW GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3/4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.188/0.14	NPS 3/4 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
CT10YTHHYxSPxx CT10YTAxxxSPxx	MODEL CT (Acme) Y-PATTERN LOW FLOW GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.188/0.14	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-2
81-2542-02594 81-2542-02601 81-2542-02605 88-2542-02874 88-2542-02881 88-2542-02885 78-2542-03645 78-2542-03650 78-2542-03655 78-2542-03371 78-2542-03372 78-2542-03373 78-2542-03505 78-2542-03510 78-2542-03515 78-2542-03174 78-2542-03181 78-2542-03185	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.083/0.033 Valve body: 0.19/0.155	NPS 1/2 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1
81-2542-02613 81-2542-02617 81-2542-02621 88-2542-02893 88-2542-02897 88-2542-02901 78-2542-03665 78-2542-03670 78-2542-03675 78-2542-03375 78-2542-03376 78-2542-03377 78-2542-03525 78-2542-03530 78-2542-03535 78-2542-03193 78-2542-03197 78-2542-03201	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3/4	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.083/0.033 Valve body: 0.19/0.156	NPS 3/4 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1

ORIGINAL

UNLESS OTHERWISE SPECIFIED

INTERPRET PER ASME Y14.5-2009

1. THE FOLLOWING TOLERANCES APPLY:
   .XX: ±.01" .XXX: ±.005"
   FRACTIONS: ± 1/32" ANGLES" ±0.5"
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE 05/23/2011
DRAWN BY	AJH	DATE 07/17/2023
CHECKED BY	BL	DATE 07/20/2023
APPROVED BY	DRH	DATE 08/04/2023

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

ACME CRYOGENICS
PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 4 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE			MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
81-2542-02634 81-2542-02640 81-2542-02644 88-2542-02914 88-2542-02920 88-2542-02924 78-2542-03685 78-2542-03690 78-2542-03695 78-2542-03379 78-2542-03380 78-2542-03381 78-2542-03545 78-2542-03550 78-2542-03555 78-2542-03214 78-2542-03220 78-2542-03224	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.033 Valve body: 0.20/0.174	NPS 1 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1
81-2542-02671 81-2542-02679 81-2542-02683 88-2542-02951 88-2542-02955 88-2542-02958 78-2542-03705 78-2542-03710 78-2542-03715 78-2542-03383 78-2542-03384 78-2542-03385 78-2542-03565 78-2542-03570 78-2542-03575 78-2542-03250 78-2542-03258 78-2542-03262	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.042 Valve body: 0.22/0.212	NPS 1-1/2 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1

ORIGINAL

UNLESS OTHERWISE SPECIFIED

INTERPRET PER ASME Y14.5-2009

1. THE FOLLOWING TOLERANCES APPLY: .XX: ± .01" .XXX: ± .005" FRACTIONS: ± 1/32" ANGLES" ±0.5°
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE 05/23/2011
DRAWN BY	AJH	DATE 07/17/2023
CHECKED BY	BL	DATE 07/20/2023
APPROVED BY	DRH	DATE 08/04/2023

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

ACME CRYOGENICS PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 5 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
81-2542-02701 81-2542-02710 81-2542-02714 88-2542-02964 88-2542-02967 88-2542-02970 78-2542-03725 78-2542-03730 78-2542-03735 78-2542-03387 78-2542-03388 78-2542-03389 78-2542-03585 78-2542-03590 78-2542-03595 78-2542-03288 78-2542-03292 81-2542-02729	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.083/0.051 Valve body: 0.25/0.247	NPS 2 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1
81-2542-02729 81-2542-02730 81-2542-02731 81-2542-02732 88-2542-02973 88-2542-02976 88-2542-02979 88-2542-02982 78-2542-03740 78-2542-03745 78-2542-03750 78-2542-03755 78-2542-03390 78-2542-03391 78-2542-03392 78-2542-03393 78-2542-03600 78-2542-03605 78-2542-03610 78-2542-03615	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.188/0.074 Valve body: 0.313/0.281	NPS 3 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1

ORIGINAL

UNLESS OTHERWISE SPECIFIED
INTERPRET PER ASME Y14.5-2009
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5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE 05/23/2011
DRAWN BY	AJH	DATE 07/17/2023
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APPROVED BY	DRH	DATE 08/04/2023

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

SCALE: N/A | Project No.: E220040 | B

ACME CRYOGENICS
PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SHEET: SHEET 6 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE			MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
81-2542-02751 81-2542-02752 81-2542-02753 81-2542-02754 88-2542-02985 88-2542-02988 88-2542-02991 88-2542-02994 78-2542-03760 78-2542-03765 78-2542-03770 78-2542-03775 78-2542-03394 78-2542-03395 78-2542-03396 78-2542-03397 78-2542-03620 78-2542-03625 78-2542-03630 78-2542-03635	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 4	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.188/0.088 Valve body: 0.375/0.314	NPS 4 BWE	SA-351 CF3; SA-312 TP 304/304L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SA-320 B8, CL1; VITON; SA-283 C46400 OR C37700 (SEE NOTE 4)	E11003 Rev 8	A-1
81-2542-02571 88-2542-02851 78-2542-03640 78-2542-03370 78-2542-03501 78-2542-03151	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.033 Valve body: 0.19/0.155	NPS 1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
81-2542-02609 88-2542-02889 78-2542-03660 78-2542-03374 78-2542-03520 78-2542-03189	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 3/4	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.033 Valve body: 0.19/0.156	NPS 3/4 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
81-2542-02625 88-2542-02905 78-2542-03680 78-2542-03378 78-2542-03540 78-2542-03205	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.033 Valve body: 0.20/0.174	NPS 1 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
81-2542-02648 88-2542-02928 78-2542-03700 78-2542-03382 78-2542-03560 78-2542-03228	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.042 Valve body: 0.22/0.212	NPS 1-1/2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1
81-2542-02687 88-2542-02961 78-2542-03720 78-2542-03386 78-2542-03580 78-2542-03266	V-SERIES (CVI) STRAIGHT-PATTERN GLOBE VALVE	BODY; BONNET; EXTENSION TUBE; FLANGE; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600	PSIG @	150 °F	-425 °F	Ext Tube: 0.083/0.051 Valve body: 0.25/0.247	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-1

ORIGINAL

UNLESS OTHERWISE SPECIFIED

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1. THE FOLLOWING TOLERANCES APPLY: .XX: ±.01" .XXX: ±.005" FRACTIONS: ± 1/32" ANGLES" ±0.5°
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THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE 05/23/2011
DRAWN BY	AJH	DATE 07/17/2023
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Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

ACME CRYOGENICS
PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 7 OF 8 | REV. M

PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE @ MAX TEMPERATURE	MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	REF CALC FIGURE NO.
CV050PHHYVPxxxx CV050PAxxVPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV100PHHYVPxxxx CV100PAxxVPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV150PHHYVPxxxx CV150PAxxYVPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV200PHHYVPxxxx CV200PAxxYVPxxxx	MODEL CV (Acme) STRAIGHT-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV050PAXXVP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.035/0.028 Valve body: 0.15/0.15 Bonnet: 0.375/0.164	NPS 1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV100PAXXVP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.19/0.165 Bonnet: 0.315/0.201	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV150PAXXVP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.23/0.205 Bonnet: 0.375/0.248	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
CV200PAXXVP-CHK	MODEL CV (Acme) STRAIGHT-PATTERN CHECK VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.25/0.24 Bonnet: 0.625/0.28	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-5
YV100PHHYVPxxxxx YV100PAxxVPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.033 Valve body: 0.288/0.172	NPS 1 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-6
YV150PHHYVPxxxx YV150PAxxVPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 1-1/2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.205	NPS 1-1/2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-6
YV200PHHYVPxxx YV200PAxxVPxxxx	MODEL CV (Acme) Y-PATTERN GLOBE VALVE W/ RISER	BODY; STUBS; EXTENSION TUBE; FLANGE; BONNET; GASKET; BOLTS	ASME B31.3 ASME B31.12 ASME B16.34	NPS 2	600 PSIG @ 150 °F	-425 °F	Ext Tube: 0.049/0.042 Valve body: 0.341/0.240	NPS 2 BWE	SA-351 CF8M; SA-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 B8, CL.1	E11003 Rev 8	A-6

ORIGINAL

UNLESS OTHERWISE SPECIFIED

INTERPRET PER ASME Y14.5-2009

1. THE FOLLOWING TOLERANCES APPLY: .XX: ± .01" .XXX: ± .005" FRACTIONS: ± 1/32" ANGLES" ±0.5°
2. ALL DIMENSIONS ARE INCHES.
3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX
4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.
5. DO NOT SCALE DRAWING.

THIRD ANGLE PROJECTION

DESIGN BY	DMR	DATE 05/23/2011
DRAWN BY	AJH	DATE 07/17/2023
CHECKED BY	BL	DATE 07/20/2023
APPROVED BY	DRH	DATE 08/04/2023

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

ACME CRYOGENICS PART OF OPW | a DOVER company

DWG NO. CRN-1060/1080

SCALE: N/A | Project No.: E220040 | B | SHEET: SHEET 8 OF 8 | REV. M