

Montréal, 18 septembre 2024.

CECYLIA GARBACZ
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ONTARIO
CANADA M9W6N9

Fabricant : ACME CRYGENICS, INC.
2801 MITCHELL AVENUE
ALLENTOWN PENNSYLVANIA
U.S.A. 18103

Numéro de dossier : 943555
Numéro(s) de dessin(s) : CRN-1060/1080 Rev K

Objet : Enregistrement des plans et devis – Confirmation de l'enregistrement

Bonjour,

Nous vous informons que votre demande d'enregistrement de plans et devis a été traitée et que cette conception a été enregistrée sous le numéro d'enregistrement canadien (NEC\CRN) suivant : **0C14626.56**.

Nous portons votre attention sur certaines exigences réglementaires concernant les installations sous pression, ainsi que des codes et normes qui y sont associés :

- Le fabricant doit maintenir un programme de contrôle de la qualité valide pour fabriquer un équipement selon ce NEC;
- Ce numéro d'enregistrement demeure valide tant et aussi longtemps que les paramètres de conception demeurent inchangés. Dans le cas d'accessoires, l'enregistrement est valide pour une durée de 10 ans à partir de la date d'enregistrement. Les documents de conception doivent alors être resoumis pour validation;
- Le fabricant doit nous transmettre une copie de la *Déclaration de conformité du constructeur (Manufacturer's Data Report)* pour chaque appareil ou chaudière fabriqué selon ce NEC dans les 30 jours suivant la signature de cette déclaration;
- Le numéro de dessin enregistré et le numéro de révision doivent être indiqués sur la déclaration de conformité pour les équipements fabriqués selon ce NEC.

Le présent avis d'approbation ne dégage pas le fabricant de ses responsabilités quant à la conception ou à la construction des équipements ou d'accessoires fabriqués selon un NEC.

Salutations distinguées,

Bureau d'expertise et d'homologation en équipements sous pression

Montréal

255, boul. Crémazie Est, 2^{ième} étage
Montréal (Québec) H2M 1L5
Téléphone : 514 873-2546
Sans frais : 1 866 262-2084
enregistrementdesplans@rbq.gouv.qc.ca
www.rbq.gouv.qc.ca

Montréal, le 18 septembre 2024.

CECYLIA GARBACZ
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ONTARIO
CANADA M9W6N9

Manufacturer : ACME CRYGENICS, INC.
2801 MITCHELL AVENUE
ALLENTOWN PENNSYLVANIA
U.S.A. 18103

OUR REFERENCE : 943555
Design number : CRN-1060/1080 Rev K

Subject: Design registration confirmation

Hi,

We wish to inform you that your design registration application has been evaluated and that it was registered under the following Canadian Registration Number (CRN): **0C14626.56.**

The following is a reminder of your obligations regarding certain requirements of the regulation respecting pressure vessels, and the referenced codes and standards:

- The manufacturer must maintain a valid quality control program to manufacture equipment according to the CRN.
- The CRN remains valid as long as there are no changes to the design calculations that might affect the pressure boundary. The design registration of fittings expires 10 years after acceptance. It must, therefore, be resubmitted for validation.
- The manufacturer shall submit a copy of the *Manufacturer's Data Report* to us for each boiler or pressure vessel manufactured according to this CRN within 30 days following the signing of this report.
- The drawing number and the revision number registered under this CRN must be indicated on the *Manufacturer's Data Report* for equipment manufactured according to the CRN.

This notice of approval does not relieve the manufacturer of their responsibilities with respect to the design or fabrication of equipment manufactured according to this CRN.

Yours sincerely,

Bureau d'expertise et d'homologation en équipements sous pression

Montréal

255, boul. Crémazie Est, 2ième étage
Montréal (Québec) H2M 1L5
Téléphone : 514 873-2546
Sans frais : 1 866 262-2084
enregistrementdesplans@rbq.gouv.qc.ca
www.rbq.gouv.qc.ca




Building Act (B-1.1)
Regulation respecting pressure vessels (B-1.1, r. 6.1)
Boiler, pressure vessel, and pressure piping code (CSA B51)

This declaration must be filled out and sent to the Régie du bâtiment du Québec (RBQ) by pressure fitting manufacturers when they make an application registration for fittings.

For more information on the application registration for fittings, consult the www.rbq.gouv.qc.ca/fittings-pv.

1. Fittings to register

List the fittings included in this declaration and that you wish to register.

N°	Description	Additional information (detail, calculations or approval sheets)
1	CRN-1060/1080, Rev. 7 K	
2	Scope of CRN Registration;	 
3	Calculation No. E11003, Rev. 7	
4		
5	COMPANY LOGO - SEE RIGHT	

2. Declaration of the person in charge

The person in charge is someone in a position of authority, such as a vice-president, a plant manager or a chief engineer.

2.1 Design	
I, the undersigned, <u>David M. Rakos</u>	<u>Director of Engineering</u>
(Name of the person in charge)	(Title of the person in charge)
from <u>Acme Cryogenics, Inc.</u> , located at <u>2801 Mitchell Avenue, Allentown, PA 18103</u>	
(Company's name)	(Plant's address)
hereby declare that the above-mentioned fittings and subject to the Regulation respecting pressure installations:	
<input type="checkbox"/> comply with the requirements of the ANSI/ASME codes as to their dimensions, identification, material and purpose or <input checked="" type="checkbox"/> are not covered by the ANSI/ASME codes, but are in compliance with <u>ASME B31.3, ASME B31.12 & ASME B16.34</u> (Name of code or standard)	
code or standard and are designed according to the best current engineering practice, as proven by the enclosed approval report.	
2.2 Manufacturing quality control	
I further declare that the manufacture of these fittings is controlled by a quality control program that complies with the requirements of the following code: <u>CSA B51</u> , and has been verified by <u>TUV Rheinland</u>	
(Name of code)	(Authorized agency)
Signature of the person in charge: 	Date (yyyy-mm-dd): <u>2023-08-04</u>

3. Declaration of commissioner for oaths

I certify that this declaration has been administered before me, at 2801 Mitchell Ave, on 2023-08-04.
(Location) (Date (yyyy-mm-dd)):

Signature of commissioner for oaths:

Date (yyyy-mm-dd):

2023-08-04

Stamp the seal:

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

4. Registration confirmation (for RBQ's use only)

As far as I know, this application complies with the requirements of the Act and with standard CSA B51, Part 1, section 4.2, and is accepted for registration in the class _____.

This registration expires in ten (10) years after the date of registration indicated above, and it must be validated again after this period.

Canadian registration number (CRN):

Registration date (yyyy-mm-dd):



Documents to attach

Any application registration for fittings must include these documents:

- Statutory Declaration Registration of Fittings (2 copies)
- Detailed calculations or burst test report (1 copy)
- Detailed technical drawings or catalogues (2 copies)
- Example of the manufacturer's marking (1 copy)
- Proof that a valid and approved quality control program has been implemented (1 copy)
- Form Application for design registration (1 copy)

Sending the form

This declaration is necessary to submit an application for design registration. Design registration applications must be sent by email only to enregistrementdesplans@rbq.gouv.qc.ca.

Documents must be in PDF format and in separate files.

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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	DRAWING NO.
CV0500HHVPxxxx CV0500HHVVPxxxx CV0500AXXVPxxxx CV0500AXXDPxxxx	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: 0.075/0.078 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 88, CL1	E11003 Rev 7	D-07833
CV1000HHVPxxxx CV1000HHVVPxxxx CV1000AXXVPxxxx CV1000AXXDPxxxx	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: 0.049/0.038 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 88, CL1	E11003 Rev 7	D-07708
CV1500HHVPxxxx CV1500HHVVPxxxx CV1500AXXVPxxxx CV1500AXXDPxxxx	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 88, CL1	E11003 Rev 7	D-07584
CV2000HHVPxxxx CV2000HHVVPxxxx CV2000AXXVPxxxx CV2000AXXDPxxxx	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 88, CL1	E11003 Rev 7	D-07688
CV3000HHVPxxxx CV3000HHVVPxxxx CV3000AXXVPxxxx CV3000AXXDPxxxx	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 88, CL1	E11003 Rev 7	830-A08540 830-A08550
CV4000HHVPxxxx CV4000HHVVPxxxx CV4000AXXVPxxxx CV4000AXXDPxxxx	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 88, CL1	E11003 Rev 7	830-A08560 830-A08570
CV0500HHVSPxxx CV0500AXXVSPxxx	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 88, CL1	E11003 Rev 7	D-07833
CV1000HHVSPxxx CV1000AXXVSPxxx	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: 0.049/0.038 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 88, CL1	E11003 Rev 7	D-07708
CV1500HHVSPxxx CV1500AXXVSPxxx	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 88, CL1	E11003 Rev 7	D-07584
CV2000HHVSPxxx CV2000AXXVSPxxx	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 88, CL1	E11003 Rev 7	D-07688
LV0500JXKXV-CHK CV0500AXXDP-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 88, CL1	E11003 Rev 7	D-07903
CV1000AXXVP-CHK CV1000AXXDP-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: 0.049/0.038 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 88, CL1	E11003 Rev 7	D-07833
CV1500AXXVP-CHK CV1500AXXDP-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 88, CL1	E11003 Rev 7	D-06798
CV2000AXXVP-CHK CV2000AXXDP-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 88, CL1	E11003 Rev 7	C-08280

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. 7



J	REDRAWN IN SOLIDWORKS; MULTIPLE CHANGES - SEE ECH FOR DETAILS	8/4/2023	AJH	DRH	10495
K	MULTIPLE CHANGES - SEE ECH FOR DETAILS	5/30/2024	AJH	DRH	10559
REV	DESCRIPTION	DATE	REV BY	APPD BY	ECH NO.

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

ORIGINAL

ACME CRYOGENICS
PART OF OPW | a world company

DWG NO. CRN-1060/1080

SHEET: SHEET 1 OF 8 REV. K

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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	DRAWING NO.
CV0500AXXP-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 88, CL 1	E11003 Rev 7	CV0500AXXP-CHK
CV1000AXXP-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 88, CL 1	E11003 Rev 7	CV1000AXXP-CHK
CV1500AXXP-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 88, CL 1	E11003 Rev 7	CV1500AXXP-CHK
CV2000AXXP-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 88, CL 1	E11003 Rev 7	CV2000AXXP-CHK
AV1000HHVFPxxxx	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 88, CL 1	E11003 Rev 7	AV1000HHVFPxxxx
AV1500HHVFPxxxx	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 88, CL 1	E11003 Rev 7	AV1500HHVFPxxxx
AV2000HHVFPxxxx	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 88, CL 1	E11003 Rev 7	AV2000HHVFPxxxx
AV1000HHVSPxxx	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-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; SA-479 316/316L; VITON; SA-320 88, CL 1	E11003 Rev 7	AV1000HHVSPxxx
AV1500HHVSPxxx	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 88, CL 1	E11003 Rev 7	AV1500HHVSPxxx
AV2000HHVSPxxx	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-312 TP 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 88, CL 1	E11003 Rev 7	AV2000HHVSPxxx
YV1000HHVFPxxxx	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 88, CL 1	E11003 Rev 7	YV1000HHVFPxxxx
YV1500HHVFPxxxx	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 88, CL 1	E11003 Rev 7	YV1500HHVFPxxxx
YV2000HHVFPxxxx	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 88, CL 1	E11003 Rev 7	YV2000HHVFPxxxx
YV3000HHVFPxxxx	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 88, CL 1	E11003 Rev 7	YV3000HHVFPxxxx
YV4000HHVFPxxxx	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 88, CL 1	E11003 Rev 7	YV4000HHVFPxxxx

ORIGINAL

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF UNLESS OTHERWISE SPECIFIED.

1. THE FOLLOWING TOLERANCES APPLY UNLESS OTHERWISE SPECIFIED:

2. ALL DIMENSIONS ARE DECIMALS UNLESS OTHERWISE SPECIFIED.

3. FINISH ALL SURFACES UNLESS OTHERWISE SPECIFIED.

4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE TO BE TO THE CENTER OF THE HOLE OR TO THE CENTER OF THE HOLE UNLESS OTHERWISE SPECIFIED.

5. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE TO BE TO THE CENTER OF THE HOLE OR TO THE CENTER OF THE HOLE UNLESS OTHERWISE SPECIFIED.



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



DWG NO. CRN-1060/1080

SHEET: SHEET 2 OF 8 REV. K

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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	DRAWING NO.
YV1000HHYOSPx 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 BB, CL 1	E11003 Rev 7	YV1000HHYOSPx
YV1500HHYOSPx 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 BB, CL 1	E11003 Rev 7	YV1500HHYOSPx
YV2000HHYOSPx 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 BB, CL 1	E11003 Rev 7	YV2000HHYOSPx
YV3000HHYOSPx 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 BB, CL 1	E11003 Rev 7	YV3000HHYOSPx
YV4000HHYOSPx 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 BB, CL 1	E11003 Rev 7	YV4000HHYOSPx
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: 0.19/0.185	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 BB, CL 1	E11003 Rev 7	CT1000HHYVPxxxx
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 BB, CL 1	E11003 Rev 7	CT1500HHYVPxxxx
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 BB, CL 1	E11003 Rev 7	CT2000HHYVPxxxx
CT100AHHYCSPx CT100AxxYCSPx	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 BB, CL 1	E11003 Rev 7	CT100AHHYCSPx
CT150AHHYCSPx CT150AxxYCSPx	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 BB, CL 1	E11003 Rev 7	CT150AHHYCSPx
CT200AHHYCSPx CT200AxxYCSPx	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: 0.25/0.24	NPS 2 SWE	SA-351 CF8M; SA-479 316/316L; SA-213 TP 316/316L; SA-182 F316/316L; VITON; SA-320 BB, CL 1	E11003 Rev 7	CT200AHHYCSPx
CT100YHHYCSPx CT100YxxYCSPx	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 BB, CL 1	E11003 Rev 7	CT100YHHYCSPx
CT150YHHYCSPx CT150YxxYCSPx	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 BB, CL 1	E11003 Rev 7	CT150YHHYCSPx
CT200YHHYCSPx CT200YxxYCSPx	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 BB, CL 1	E11003 Rev 7	CT200YHHYCSPx
CT05YTHYHVPxxxx CT05YTHYHVPxxxx	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 BB, CL 1	E11003 Rev 7	CT05YTHYHVPxxxx
CT07YTHYHVPxxxx CT07YTHYHVPxxxx	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 BB, CL 1	E11003 Rev 7	CT07YTHYHVPxxxx
CT10YTHYHVPxxxx CT10YTHYHVPxxxx	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 BB, CL 1	E11003 Rev 7	CT10YTHYHVPxxxx

ORIGINAL

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
1. THE FOLLOWING TOLERANCES APPLY
2. ALL DIMENSIONS ARE DECIMALS
3. SURFACE ALLIAGES AND FINISHES SHALL BE AS SPECIFIED
4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE TO THE CENTERLINE OF THE PART
5. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE TO THE CENTERLINE OF THE PART
6. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE TO THE CENTERLINE OF THE PART



DESIGNED 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



DWG NO. CRN-1060/1080
SHEET: SHEET 3 OF 8 REV. K

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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	DRAWING NO.
CT05YTHHYCS Pxx CT05YTAxxxxSPxx	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 88, CL 1	E11003 Rev 7	CT05YTHHYCS Pxx
CT07YTHHYCS Pxx 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 88, CL 1	E11003 Rev 7	CT07YTHHYCS Pxx
CT10YTHHYCS Pxx CT10YTAxxxxSPxx	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 88, CL 1	E11003 Rev 7	CT10YTHHYCS Pxx
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; 58-283 C642 10; VITON; SA-320 88, CL 1	E11003 Rev 7	81-2542-025 / 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: 0.19/0.155	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; 58-283 C642 10; VITON; SA-320 88, CL 1	E11003 Rev 7	81-2542-02571

ORIGINAL

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS PER ASME Y14.5-2000
1. THE FOLLOWING TOLERANCES APPLY:
FRACTIONS: ±0.005
DECIMALS: ±0.010
DIMENSIONS IN PARENTHESES ARE PRECEDENCE
2. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED
3. FINISH: ALL SURFACES UNLESS OTHERWISE SPECIFIED
4. DIMENSIONS TO BE TO DIMENSIONS OF PARTS UNLESS OTHERWISE SPECIFIED
5. DIMENSIONS TO BE TO DIMENSIONS OF PARTS UNLESS OTHERWISE SPECIFIED

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

THIRD ANGLE PROJECTION

Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE
Project No.: E220040



DWG NO. CRN-1060/1080
SHEET: SHEET 4 OF 8 REV. K

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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	DRAWING 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; SB-283 C642.10; VITON; SA-320 BB, CL1	E11003 Rev 7	81-2542-02571
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; SB-283 C642.10; VITON; SA-320 BB, CL1	E11003 Rev 7	81-2542-02571

ORIGINAL

UNLESS OTHERWISE SPECIFIED:
INTERPRET PER ASME Y14.2-2000
 1. THE FOLLOWING TOLERANCES APPLY:
 FRACTIONS: ± 0.005
 DECIMALS: ± 0.010
 ANGLES: ± 0.010°
 2. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
 3. SURFACE FINISH: UNLESS OTHERWISE SPECIFIED.
 4. DIMENSIONS TO BE 1:1 UNLESS OTHERWISE SPECIFIED.
 5. UNLESS OTHERWISE SPECIFIED.



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



DWG NO. CRN-1060/1080
 SHEET: SHEET 5 OF 8 REV. K

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PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN TEMPERATURE @ MAX TEMPERATURE			MDMT	ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF CALCULATION	DRAWING 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 78-2542-03887 78-2542-03888 78-2542-03889 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; SB-288 C642.10; VITON: SA-320 B8, CL1	E11003 Rev 7	81-2542-02571
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 78-2542-03890 78-2542-03891 78-2542-03892 78-2542-03893 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; SB-288 C642.10; VITON: SA-320 B8, CL1	E11003 Rev 7	81-2542-02571



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UNLESS OTHERWISE SPECIFIED DIMENSIONS FOR UNITS: IN/16/3200 1- THE FOLLOWING TOLERANCES APPLY FRACTIONS: ± 1/32" ANGLES: ± 0.5° 2- ALL DIMENSIONS ARE DECIMALS 3- DIMENSIONS ALL DIMENSIONS AND SHARP EDGES 25° R 4- DIMENSIONS TO BE 1/16" UNLESS NOTED OTHERWISE 5- UNLESS NOTED OTHERWISE	DESIGN BY	DMR	DATE	05/23/2011	Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES P/N: SEE TABLE SCALE: N/A Project No.: E220040	 ACME CRYOGENICS PART OF OPW a world company DWG NO. CRN-1060/1080
	DRAWN BY	AJH	DATE	07/17/2023		
	CHECKED BY	BL	DATE	07/20/2023		
	APPROVED BY	DRH	DATE	08/04/2023		
 THIRD ANGLE PROJECTION	<small>THIS DRAWING AND THE INFORMATION ON THIS DRAWING ARE THE PROPERTY OF ACME CRYOGENICS. IT IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED IN THE TITLE. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF ACME CRYOGENICS. THE INFORMATION ON THIS DRAWING IS SUBJECT TO CHANGE WITHOUT NOTICE. THE INFORMATION ON THIS DRAWING IS SUBJECT TO CHANGE WITHOUT NOTICE. THE INFORMATION ON THIS DRAWING IS SUBJECT TO CHANGE WITHOUT NOTICE.</small>				SHEET: SHEET 6 OF 8 REV.: K	

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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	DRAWING 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 78-2542-03770 78-2542-03775 78-2542-03304 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 CF8M; SA-479 316/316L; SA-213 TP 304/304L; SA-182 F304/304L; SA-479 304/304L; SB-283 C64210; VITON; SA-320 88, CL1	E11003 Rev 7	81-2542-02571
81-2542-02571 88-2542-02851 78-2542-03640 78-2542-03970 78-2542-03901	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 88, CL1	E11003 Rev 7	81-2542-02571
81-2542-02600 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 88, CL1	E11003 Rev 7	81-2542-02571
81-2542-02625 88-2542-02905 78-2542-03690 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 88, CL1	E11003 Rev 7	81-2542-02571
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 88, CL1	E11003 Rev 7	81-2542-02571
81-2542-02687 88-2542-02961 78-2542-03720 78-2542-03986 78-2542-03580 78-2542-03268	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 88, CL1	E11003 Rev 7	81-2542-02571

ORIGINAL

UNLESS OTHERWISE SPECIFIED: DIMENSIONS PER ASME Y14.5-2000 1. THE FOLLOWING TOLERANCES APPLY: FRACTIONS ± 0.005 INCHES DECIMALS ± 0.001 INCHES 2. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED. 3. SURFACE ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED. 4. FINISHED SURFACE TO BE 115 MICRO INCHES RA MAXIMUM. 5. UNLESS OTHERWISE SPECIFIED.	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	
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Title: SCOPE OF REGISTRATION - CRYOGENIC GLOBE VALVES

P/N: SEE TABLE

SCALE: N/A Project No.: E220040



DWG NO. CRN-1060/1080

SHEET: SHEET 7 OF 8 REV. K

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PART NO.	PRODUCT DESCRIPTION	PRIMARY PRESSURE RETAINING COMPONENT	ASME / ANSI DESIGN STANDARD	SIZE OR SIZE RANGE	DESIGN PRESSURE		ACTUAL WALL THICKNESS VS MIN REQUIRED	END CONNECTION & SIZE RANGE	ASME / ASTM MATERIAL SPECIFICATION	REF		
					@ MAX TEMPERATURE	MDMT				CALCULATION	DRAWING 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 88, CL1	E11003 Rev 7	CV050PHHYVPxxxx CV050PAXXVPxxxx
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 88, CL1	E11003 Rev 7	CV100PHHYVPxxxx CV100PAXXVPxxxx
CV150PHHYVPxxxx CV150PAXXVPxxxx	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 88, CL1	E11003 Rev 7	CV150PHHYVPxxxx CV150PAXXVPxxxx
CV200PHHYVPxxxx CV200PAXXVPxxxx	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 88, CL1	E11003 Rev 7	CV200PHHYVPxxxx CV200PAXXVPxxxx
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 88, CL1	E11003 Rev 7	CV050PAXXVP-CHK
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 88, CL1	E11003 Rev 7	CV100PAXXVP-CHK
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 88, CL1	E11003 Rev 7	CV150PAXXVP-CHK
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 88, CL1	E11003 Rev 7	CV200PAXXVP-CHK
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 88, CL1	E11003 Rev 7	YV100PHHYVPxxxxx YV100PAXXVPxxxx
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 88, CL1	E11003 Rev 7	YV150PHHYVPxxxx YV150PAXXVPxxxx
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 88, CL1	E11003 Rev 7	YV200PHHYVPxxx YV200PAXXVPxxxx

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<small>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED 1- THE FOLLOWING TOLERANCES APPLY FRACTIONS DECIMALS ANGLES 2- ALL DIMENSIONS ARE DIMENSIONS 3- FINISH ALL SURFACES UNLESS OTHERWISE SPECIFIED 4- UNLESS OTHERWISE SPECIFIED TO BE 115 5- UNLESS OTHERWISE SPECIFIED TO BE 115 6- UNLESS OTHERWISE SPECIFIED TO BE 115 7- UNLESS OTHERWISE SPECIFIED TO BE 115 8- UNLESS OTHERWISE SPECIFIED TO BE 115 9- UNLESS OTHERWISE SPECIFIED TO BE 115 10- UNLESS OTHERWISE SPECIFIED TO BE 115 11- UNLESS OTHERWISE SPECIFIED TO BE 115 12- UNLESS OTHERWISE SPECIFIED TO BE 115 13- UNLESS OTHERWISE SPECIFIED TO BE 115 14- UNLESS OTHERWISE SPECIFIED TO BE 115 15- UNLESS OTHERWISE SPECIFIED TO BE 115 16- UNLESS OTHERWISE SPECIFIED TO BE 115 17- UNLESS OTHERWISE SPECIFIED TO BE 115 18- UNLESS OTHERWISE SPECIFIED TO BE 115 19- UNLESS OTHERWISE SPECIFIED TO BE 115 20- UNLESS OTHERWISE SPECIFIED TO BE 115 21- UNLESS OTHERWISE SPECIFIED TO BE 115 22- UNLESS OTHERWISE SPECIFIED TO BE 115 23- UNLESS OTHERWISE SPECIFIED TO BE 115 24- UNLESS OTHERWISE SPECIFIED TO BE 115 25- UNLESS OTHERWISE SPECIFIED TO BE 115 26- UNLESS OTHERWISE SPECIFIED TO BE 115 27- UNLESS OTHERWISE SPECIFIED TO BE 115 28- UNLESS OTHERWISE SPECIFIED TO BE 115 29- UNLESS OTHERWISE SPECIFIED TO BE 115 30- UNLESS OTHERWISE SPECIFIED TO BE 115 31- UNLESS OTHERWISE SPECIFIED TO BE 115 32- UNLESS OTHERWISE SPECIFIED TO BE 115 33- UNLESS OTHERWISE SPECIFIED TO BE 115 34- UNLESS OTHERWISE SPECIFIED TO BE 115 35- UNLESS OTHERWISE SPECIFIED TO BE 115 36- UNLESS OTHERWISE SPECIFIED TO BE 115 37- UNLESS OTHERWISE SPECIFIED TO BE 115 38- UNLESS OTHERWISE SPECIFIED TO BE 115 39- UNLESS OTHERWISE SPECIFIED TO BE 115 40- UNLESS OTHERWISE SPECIFIED TO BE 115 41- UNLESS OTHERWISE SPECIFIED TO BE 115 42- UNLESS OTHERWISE SPECIFIED TO BE 115 43- UNLESS OTHERWISE SPECIFIED TO BE 115 44- UNLESS OTHERWISE SPECIFIED TO BE 115 45- UNLESS OTHERWISE SPECIFIED TO BE 115 46- UNLESS OTHERWISE SPECIFIED TO BE 115 47- UNLESS OTHERWISE SPECIFIED TO BE 115 48- UNLESS OTHERWISE SPECIFIED TO BE 115 49- UNLESS OTHERWISE SPECIFIED TO BE 115 50- UNLESS OTHERWISE SPECIFIED TO BE 115 51- UNLESS OTHERWISE SPECIFIED TO BE 115 52- UNLESS OTHERWISE SPECIFIED TO BE 115 53- UNLESS OTHERWISE SPECIFIED TO BE 115 54- UNLESS OTHERWISE SPECIFIED TO BE 115 55- UNLESS OTHERWISE SPECIFIED TO BE 115 56- UNLESS OTHERWISE SPECIFIED TO BE 115 57- UNLESS OTHERWISE SPECIFIED TO BE 115 58- UNLESS OTHERWISE SPECIFIED TO BE 115 59- UNLESS OTHERWISE SPECIFIED TO BE 115 60- UNLESS OTHERWISE SPECIFIED TO BE 115 61- UNLESS OTHERWISE SPECIFIED TO BE 115 62- UNLESS OTHERWISE SPECIFIED TO BE 115 63- UNLESS OTHERWISE SPECIFIED TO BE 115 64- UNLESS OTHERWISE SPECIFIED TO BE 115 65- UNLESS OTHERWISE SPECIFIED TO BE 115 66- UNLESS OTHERWISE SPECIFIED TO BE 115 67- UNLESS OTHERWISE SPECIFIED TO BE 115 68- UNLESS OTHERWISE SPECIFIED TO BE 115 69- UNLESS OTHERWISE SPECIFIED TO BE 115 70- UNLESS OTHERWISE SPECIFIED TO BE 115 71- UNLESS OTHERWISE SPECIFIED TO BE 115 72- UNLESS OTHERWISE SPECIFIED TO BE 115 73- UNLESS OTHERWISE SPECIFIED TO BE 115 74- UNLESS OTHERWISE SPECIFIED TO BE 115 75- UNLESS OTHERWISE SPECIFIED TO BE 115 76- UNLESS OTHERWISE SPECIFIED TO BE 115 77- UNLESS OTHERWISE SPECIFIED TO BE 115 78- UNLESS OTHERWISE SPECIFIED TO BE 115 79- UNLESS OTHERWISE SPECIFIED TO BE 115 80- UNLESS OTHERWISE SPECIFIED TO BE 115 81- UNLESS OTHERWISE SPECIFIED TO BE 115 82- UNLESS OTHERWISE SPECIFIED TO BE 115 83- UNLESS OTHERWISE SPECIFIED TO BE 115 84- UNLESS OTHERWISE SPECIFIED TO BE 115 85- UNLESS OTHERWISE SPECIFIED TO BE 115 86- UNLESS OTHERWISE SPECIFIED TO BE 115 87- UNLESS OTHERWISE SPECIFIED TO BE 115 88- UNLESS OTHERWISE SPECIFIED TO BE 115 89- UNLESS OTHERWISE SPECIFIED TO BE 115 90- UNLESS OTHERWISE SPECIFIED TO BE 115 91- UNLESS OTHERWISE SPECIFIED TO BE 115 92- UNLESS OTHERWISE SPECIFIED TO BE 115 93- UNLESS OTHERWISE SPECIFIED TO BE 115 94- UNLESS OTHERWISE SPECIFIED TO BE 115 95- UNLESS OTHERWISE SPECIFIED TO BE 115 96- UNLESS OTHERWISE SPECIFIED TO BE 115 97- UNLESS OTHERWISE SPECIFIED TO BE 115 98- UNLESS OTHERWISE SPECIFIED TO BE 115 99- UNLESS OTHERWISE SPECIFIED TO BE 115 100- UNLESS OTHERWISE SPECIFIED TO BE 115</small>	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



DWG NO. CRN-1060/1080

SHEET: SHEET 8 OF 8 REV. K

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