


Inspection and Technical Services Manitoba

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www.firecomm.gov.mb.ca/codes_steam_pressure.html

October 2, 2018

ABSA
 9410-20 Ave. NW
 Edmonton, AB
 T6N 0A4

Attn: Cynthia Formaniuk

REGISTRATION OF VALVES AND FITTINGS

Manufacturer: Generant Company Inc.

The design(s) for the following Valves/Fittings has been received by us and has been examined and accepted for registration in the Province of Manitoba as follows.

DRAWING / CATALOGUE	CRN	FILE
CRYOGENIC RELIEF VALVE	0C09270.24	39078

An invoice covering survey and registration fees is enclosed.

NOTE:

- *CRN registered under reciprocal agreement & is conditional based on compliance with the notes set by the original issuing Jurisdiction: **ABSA***
- *See attached stamped "this is part of CRN" for scope of registration.*
- *This registration expires **June 5, 2028**.*

This registration is valid until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

The registration of this design does not relieve the manufacturer, the owner or his agent of the responsibility for the design or construction of a fitting in accordance with the applicable Acts, Codes and Standards. Inspection and Technical Services assumes no responsibility by registering designs, examining plans and/or inspecting equipment or facility.

Yours truly,

Rabie Harb, P. Eng.

Engineer

Office of the Fire Commissioner
 Inspection and Technical Services Manitoba
 508 - 401 York Avenue
 Winnipeg, Manitoba, R3C 0P8
 Phone: 204-945-3373
 Email: rabie.harb@gov.mb.ca

STATUTORY DECLARATION
Registration of Fittings

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

I, James Lesky, Director of Quality Assurance
(name of applicant) (position title) (must be in a position of authority)
of Generant Company, Inc.
(name of manufacturer)
located at 1865 Rt. 23 South, P.O. Box 768, Butler, NJ 07405 USA
(plant address)

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

[X] comply with the requirements of ASME B31.3 Process Piping Code which specifies the dimensions, (title of recognized North American Standard)

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 as supported by the attached (title of code of construction or other applicable document)

data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, Kiwa Belgium, N.V. as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are

Series Stainless Steel Cryogenic Relief Valves

(brief description of fittings)

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

Product Literature, Assembly Drawing and Selection Guide, Design Calculations Statement and Wall Stress Calculations, Drawing of the Body, and ISO 9001:2015 Certificate.

DECLARED before me at Butler in the State of NJ
(city) (province or state)
this 16th day of May, 2018
(Month) (Year)

(print) Nancy Dyak
(a Commissioner of Oaths or Notary Public)

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

NANCY JEAN DYAK
ID # 2273767
NOTARY PUBLIC
STATE OF NEW JERSEY
My Commission Expires March 31, 2021

(signature of applicant)

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, Clause 4.2, and is accepted for registration in Category 'C'

Registration Number: PC09270.24
(Rabie Harb)
(Signature of the Administrator/SCO)

Date Registered: 2018/10/02 Expiry Date: June 5, 2028



CRYOGENIC RELIEF VALVE (STAINLESS)

1/4" and 1/2" NPT

-4 and -8 Metal To Metal Face Seal

1/4" and 1/2" Bi-Lok Dual Ferrule Tube

10 - 750 Psig (0.69 - 51.7 Bar)

SERIES CRV STAINLESS

Description

The Generant Series Stainless Steel CRV, Cryogenic Relief Valve is a spring reference over pressure protection device. The Stainless CRV is supplied cleaned and packaged for oxygen service making it an ideal choice for most cryogenic relief valve applications. The valve can be ordered with set pressures ranging from 10 to 750 Psig (0.69 to 51.7 Bar) and come factory preset and permanently locked. Relief pressure can not be altered or adjusted in the field. Seat and poppet geometry combined with optimized spring ranges provide high flow rates with minimum pressure accumulation. Compact design and availability of a variety of inlet and outlet configurations reduces size and piping requirements. Relief pressure can be discharged to atmosphere or to a downstream connection. The CRV can be specified with PCTFE (set pressures above 50 Psig (3.54 Bar)), Viton®, and Fluorsilicone seals.

Features

- Available in NPT, Metal to Metal Face Seal and Bi-Lok Dual Ferrule Tube Connections
- High Flow Capacity and Excellent Reseal Performance
- Discharge to Atmosphere or a Wide Variety of Inline Piping Configurations
- Supplied Factory Preset Set and Permanently Locked for Tamper Proof Service
- 100% Factory Tested for Leakage, Crack and Reseal Performance
- Optional Deflector Cap available for diverting exhausted gas
- Cleaned and Packaged for Oxygen Service

Technical Data

Nominal Set Pressure Range: 10 – 750 Psig (0.69 to 51.7 Bar)
 Factory Set Tolerance: +/- 5% of Specified Pressure
 Zero Leakage to 95% of Set Pressure
 Full Rated Flow @ 110% of Set Pressure
 Reseal: 90% (80% for PCTFE seals set below 100 psig (6.9 Bar))
 Unaffected by up to 10% Back Pressure
 Temperature Rating: -320° to 392° F (-196° C to 200° C)
based on seal material (see How To Order)
 Lubricant: Krytox®

Materials of Construction

Component	Material
Body, Poppet, Seat Screw, Spring Retainer, In-Line Adapter ¹ , Nuts and Ferrules	316 Stainless Steel (ASTM A479) ²
Spring	302 or 17-7 PH Stainless Steel (ASTM A313)
Seals	PCTFE (ASTM D1430), Viton® or Teflon®

¹ Inline Adapters utilize Viton® o-ring seals. Metal to Metal Face Seal Inline Adapters are Electro Polished to 10 Ra Max.

² Valves supplied with Metal to Metal Face Seal connections have Electro Polished Inlet, Poppet and Seat Screw to 10 Ra Max.

