

Appendix 1

Product Description and/or Approval Condition

Certificate No : BSN35101-VV007

Date of Issue : 28th May, 2019

A. Product Description

1. Product Specification

- 1) Cryogenic Glove Valve
 - Design Temp. : -196°C to +80°C
 - Pressure Class : ANSI Class 150
 - Size : 2", 3", 10", 12"
 - End Connection : Flanged , Butt welded(including thier combination)
 - Material
 - Shell : ASTM A351 CF8M
 - Stem : ASTM A276 316

2. Approved Drawings and Documents

180220-01-124-01, CGBARF1-321BY-C1, CGBA-32-BT-C1, CGBA-32-DC-C1, CGBA-32-SM-C1,
180220-01-124-02, CGBARF1-48-BY-R1, CGBA-48-BT-R1, CGBA-48-DC-R1, CGBA-48-SM-R1,
190129-01-119-01, CGBARF2-160-BY-R1, CGBA-160-BT-R1, CGBA-160-DC-R1, CGBA-160-SM-R1,
190129-01-119-02, CGBARF2-192-BY-R1, CGBA-192-BT-R1, CGBA-192-DC-R1, CGBA-192-SM-R1

3. Test Reports, etc.

- 1) Type Approval Test Report No. BMT-CTR-190403-01/-02/-03/-04 dated on Apr.08 2019

B. Approval Condition

1. Application & Limitation

- 1) The materials used for valve body & etc. as appropriately are to be certified by this Society or to be satisfactory to the Surveyor.
- 2) Gaskets and packings are to be suitable for the condition of use and to have a construction specified in Korean Industrial Standards or equivalent construction thereto.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is required.
- 2) The minimum average energy for Charpy V-notch impact test should be complied with the relevant requirements of the Rules, Pt.7, Ch.5.
- 3) The following tests are to be applicable for each size of the valves as individual product certification.
 - Hydrostatic test of the valve body at a pressure equal to 1.5 times the design pressure
 - Cryogenic testing consisting of valve operation and leakage verification for a minimum of 10% of each type and size of valve for valves
 - Proving testing at ambient temperature consisting of leakage test at a pressure equal to 1.1 times the design pressure

3. Marking

- 1) The product is to be permanently marked with manufacturer name and type designation on a suitable position.

4. Others

N/A

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