



Technical Standards and Safety Authority
 345 Carlingview Drive
 Toronto, Ontario M9W 6N9
 www.tssa.org

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

GENERANT

**STATUTORY DECLARATION
 Registration of Fittings**

I, James Lesky, Director of Quality Assurance
 (Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Generant Company, Inc.
 (Name of Manufacturer)

Located at 1865 Route 23 South, P.O. Box 768, Butler, NJ 07405 973-838-6500 973-838-4888
 (Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME B31.3 Process Piping Code
 (Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

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 data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001 which has been verified by the following authority, Kiwa

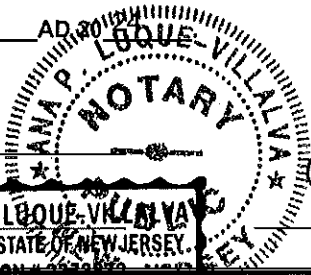
The items covered by this declaration, for which I seek registration, are category "C" type fittings. In support of this application, the following information and/or test data are attached as follows:
ISO 9001 Certificate, BLD Series Tests, BOMs, Drawings, Design Calculations
 (drawings, calculations, test reports, etc.)

Declared before me at Generant Company, Inc. in the State of New Jersey

the 11 day of June

Commissioner for Oaths:

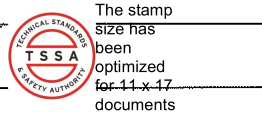
Ana Patricia Luque-Villalva
 (Printed name)



[Signature] (Signature of Declarer)

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category C.

CRN: _____
 Registered by: _____
 Dated: _____



Technical Standards and Safety Authority
 Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: 0C25486.5
 Signed: *[Signature]*
 Date: September 23, 2024.

NOTE: This registration expires on: Sep 23, 2034

*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.



CRN Scope of Registration: Series BLD (Cryogenic Pressure Regulator)

Series	ASME Design Standard	Size Range	Spring Models	Main Pressure Bearing Element Material	Operating Temperature Range	Device MAWP @ Max Temp	Device MAWP Burst Test Report
BLD	B31.3	3/8" & 1/2" NPT	A, B, C, D	ASTM B124 Brass (UNS C37700), ASTM B283 Brass (UNS C37700), ASTM A479 316 Stainless Steel (UNS S31600)	-320°F to 200°F	600 PSIG @ 225°F	Hydrostatic Test Report: BLD-500B Hydrostatic Burst Test Report

Catalog References

BLD Product Literature: SA.SL.BLD001_B.5285

Drawing: 2BLD-375B-C-350

Drawing: 2BLD-500B-D-450

Drawing: 2BLD-500SS-B-125

THIS IS PART OF CRN

0C25486.5

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
Program

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OC25486.5

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Boilers and Pressure Vessels Safety
Program

BLD

SERIES

DESCRIPTION:

BLD Series cryogenic pressure regulators provide high flow and shut off quickly at the desired set pressure. The regulator design is a non-balanced, spring reference, reducing type regulator and comes with PTFE seals for cryogenic use. These regulators are optimized for use in pressure build applications. The solid (non-tied) metal diaphragms provide long lasting, leak-free performance. The springs for BLD Series regulators have been designed for optimized flow within the set pressure range. All BLD Series regulators are supplied cleaned for oxygen service.

FEATURES:

- **OPTIMIZED FOR HIGH FLOW:** Design provides high flow rates at low pressure differential.
- **QUICK SHUT-OFF:** Regulators transition from the flowing condition to shut in a tight pressure band.
- **SOLID, NON-TIED, DIAPHRAGM:** Solid diaphragm eliminates potential leak path and increases sensitivity.
- **DESIGNED FOR CRYOGENICS:** All materials were selected specifically for use in cryogenic environments.
- **CLEANED FOR OXYGEN SERVICE:** Regulators are cleaned for use in Oxygen service standard.
- **EXTENSIVELY FIELD QUALIFIED**

TECHNICAL DATA:

Max. Inlet Pressure: 600 PSIG (41.4 bar)

Outlet Pressure Ranges:

Spring	Outlet Pressure Range	PSI/Turn*
A	15 to 75 PSI (1.0 to 5.2 bar)	12
B	50 to 200 PSI (3.4 to 13.8 bar)	20
C	100 to 350 PSI (6.9 to 24.1 bar)	40
D	300 to 600 PSI (20.7 to 41.4 bar)	70

*PSI/Turn Value is approximate change in setpoint per full turn of the adjustment screw (CW to increase, CCW to decrease), for reference only.

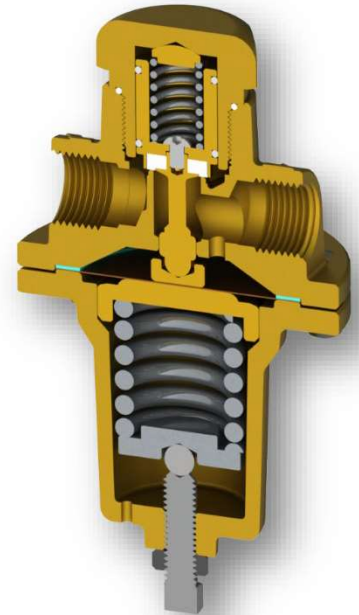
Temperature Range: -320° to 200°F (-196° to 93°C)

Full Open Flow Coefficient: 2.20

MATERIALS OF CONSTRUCTION:

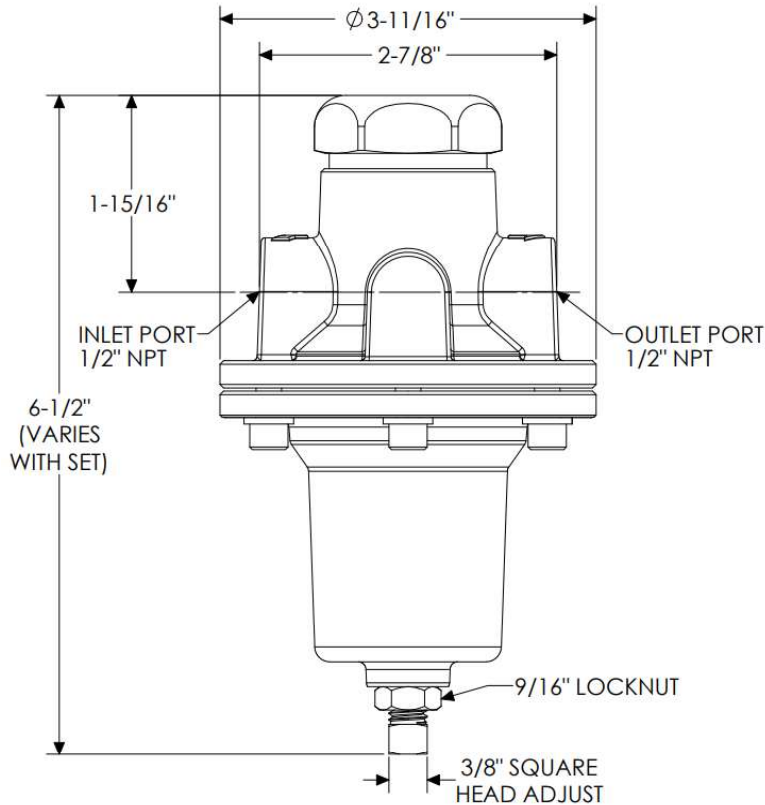
Component	Material
Body, Chamber	Brass, ASTM B124
Stem, Spring Retainer, Bottom Plug, BP Button, Stem Cap	Brass, ASTM B16
Adjustment Springs, Valve Spring	17-7PH SS
Adjustment Bolt, Locknut, Chamber Bolts, Lock Washers, Valve Screw	18-8 SS
Adjustment Screw Ball Bearing	440C SS
Diaphragms	Phosphor Bronze
Spring Button	303SS, ASTM A582
Valve Seal, Bottom Plug Seal, Chamber Seal, Valve O'Rings	PTFE

NOTE: Regulators are assembled with Dupont Krytox® lubricant.



CRYOGENIC PRESSURE REGULATOR

DIMENSIONAL DATA



SPRING KITS

Part Number	Range
BLD-SK-A	15 to 75 PSI
BLD-SK-B	50 to 200 PSI
BLD-SK-C	100 to 350 PSI
BLD-SK-D	300 to 600 PSI

All Replacement Spring Kits come with a Replacement Spring, Spring Retainer, and Chamber Seal. D Range Spring Kits also come with a Chamber Ring.

REPAIR KITS

Part Number	Description
BLD-RK	<u>Complete Repair Kit</u> Includes Valve Assembly, Valve Spring, Bottom Plug Seal, Chamber Seal, and Diaphragms (4)
BLD-VLV-RK	<u>Valve Only Repair Kit</u> Includes Valve Assembly, Valve Spring, and Bottom Plug Seal

PERFORMANCE INFORMATION

Generant has flow information based on actual testing for both Pressure Build circuit applications and true cryogenic pressure reducing regulator applications. For more information, see Generant document SA.TD.BLD001.5256 *BLD Series Flow Datasheet*. The Full Open Flow Coefficient is listed in Technical Data.

HOW TO ORDER

2BLD - 500B - B - 125

SERIES ————

2BLD - 2 Port BLD Regulator

INLET SIZE ————

500B - 1/2" NPT Ports, Brass

SET PRESSURE

Specify Set Pressure in PSI
OMIT FOR STANDARD SET
(BY SPRING, SEE TABLE)

OUTLET PRESSURE RANGE

A - 15 to 75 PSI (1.0 to 5.2 bar)
B - 50 to 200 PSI (3.4 to 13.8 bar)
C - 100 to 350 PSI (6.9 to 24.1 bar)
D - 300 to 600 PSI (20.7 to 41.4 bar)

Spring	Std. Set
A	35
B	125
C	300
D	450

Standard Sets do not come engraved with "Factory Set Pressure."

ADAPTER KIT

Order Part Number **BLD-A401-B**.
Adapter Kit consists of two (2) fittings for easy interchange with other commonly used 1/2" NPT PB Regulators. No hard piping changes required.

PROPER COMPONENT SELECTION – When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.



Valves & **Bl-Lok** Fittings

www.generant.com

1865 Route 23 South PO Box 768 Butler, New Jersey 07405 973.838.6500 Fax 973.838.4888

BEX-SP-CRN-BLD - TSSA Ontario Rev. 092324 DCR6285
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