

Victaulic® Gate Valve

Series 871



1.0 PRODUCT DESCRIPTION

Available Sizes

- 2 – 8"/DN50 – DN200

Maximum Working Pressure

- Suitable for use in saturated steam systems rated up to 200 psi/1379 kPa. Not suitable for use in superheated steam applications.
- For nonsteam applications: Provides working pressures ranging from full vacuum (29.9 inches Hg/760 mm Hg) up to 200 psi/1379 kPa.

Operating Temperature

- +32°F to +388°F/0°C to +198°C

Function

- Flexible-wedge, metal-seated valve for bi-directional shut off service.
- Valve can be mounted in vertical and horizontal runs. On horizontal runs, the stem should be in the vertical up position.

Actuation Options

- Handwheel (provided by factory).
- For other actuation options, contact Victaulic.

Pipe Preparation

- The Series 871 Gate Valve is exclusively for use on pipe, couplings and fittings which feature the Victaulic OGS-200 groove profile (see section 6.0 for Reference Materials).

2.0 CERTIFICATION/LISTINGS



Valve construction and performance meets API 600 and API 598 requirements.

NOTE

- The valve does not have a potential internal source of ignition and can be used in potentially explosive atmospheres, Group II, category 2 (zones 1+21) and category 3 (zones 2+22) to ATEX 94/9/EC.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

| | | | |
|--------------|--|----------|--|
| System No. | | Location | |
| Submitted By | | Date | |

| | | | |
|--------------|--|-----------|--|
| Spec Section | | Paragraph | |
| Approved | | Date | |

3.0 SPECIFICATIONS – MATERIAL

Body: ASTM A216 WCB cast steel.

Yoke: ASTM A216 WCB cast steel.

Flexible Wedge: ASTM A216 WCB cast steel, hard faced with ASTM A276-410 stainless steel.

Seat Ring: ASTM A105 carbon steel, hard faced with ASTM A276-410 stainless steel.

Stem: ASTM A276-410 stainless steel.

Back Seat Bushing: ASTM A276-410 stainless steel.

Gland: ASTM A276-410 stainless steel.

Gland Flange: ASTM A105 carbon steel.

Threaded Bushing: ASTM A276-410 stainless steel.

Stud: ASTM A193 B7 steel.

Nut: ASTM A194 2H steel.

Gland Packing: Flexible graphite.

Joint Ring: Flexible graphite and stainless steel.

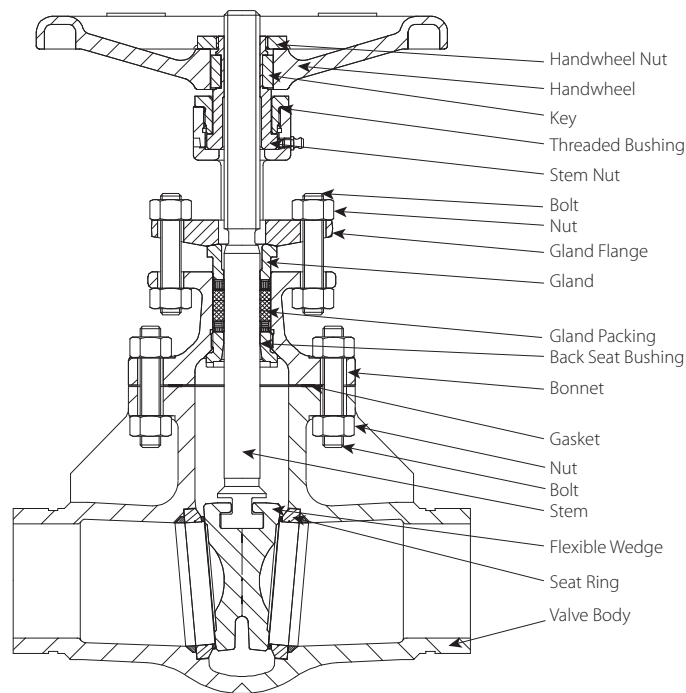
Pin: 1035 carbon steel.

Hand Wheel: Ductile iron equivalent to EN-GJS-400-18.

Hand Wheel Nut: 1035 carbon steel.

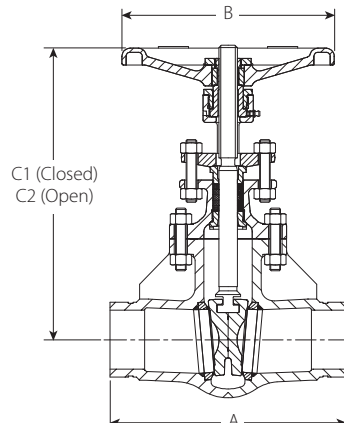
Bearing: 1035 carbon steel.

Lantern Ring: ASTM A276-410 stainless steel



4.0 DIMENSIONS







Series 871 Gate Valve



| Size | | Dimensions | | | | Weight |
|--------------|-------------------------|--------------|--------------|--------------|--------------|--------------------|
| Nominal | Actual Outside Diameter | A | B | C1 (Closed) | C2 (Open) | Approximate (Each) |
| inches DN | inches mm | inches mm | inches mm | inches mm | inches mm | lb kg |
| 2 | 2.375 | 8.50 | 8.00 | 12.30 | 14.60 | 30.0 |
| DN50 | 60.3 | 216 | 203 | 312 | 371 | 13.6 |
| 2 ½ | 2.875 | 9.45 | 10.00 | 13.80 | 17.00 | 46.0 |
| | 73.0 | 240 | 254 | 351 | 432 | 20.9 |
| | 3.000 | 11.14 | 10.00 | 13.90 | 17.00 | 46.0 |
| DN65 | 76.1 | 283 | 254 | 352 | 432 | 20.9 |
| 3 | 3.500 | 11.14 | 10.00 | 13.90 | 17.00 | 50.5 |
| DN80 | 88.9 | 283 | 254 | 353 | 432 | 22.9 |
| 4 | 4.500 | 12.00 | 10.00 | 16.00 | 20.10 | 73.0 |
| DN100 | 114.3 | 305 | 254 | 406 | 511 | 33.1 |
| | 5.500 | 15.00 | 14.00 | 22.00 | 22.80 | 121.0 |
| DN125 | 139.7 | 381 | 356 | 559 | 579 | 54.9 |
| | 6.500 | 15.90 | 14.00 | 22.40 | 28.70 | 148.0 |
| | 165.1 | 404 | 356 | 569 | 729 | 67.1 |
| 6 | 6.625 | 15.90 | 14.00 | 22.40 | 28.70 | 148.0 |
| DN150 | 168.3 | 404 | 356 | 569 | 729 | 67.1 |
| 8 | 8.625 | 16.50 | 14.00 | 31.40 | 40.22 | 264.0 |
| DN200 | 219.1 | 419 | 356 | 798 | 1022 | 119.7 |

5.0 NOTIFICATIONS

⚠ WARNING



- **Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.**
- **Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.**
- **Wear safety glasses, hardhat, and foot protection.**

Failure to follow these instructions could result in death or serious personal injury and property damage.

6.0 REFERENCE MATERIALS

- [05.10: Victaulic Chemical Compatibility Guide for the Style 870 High Performance Rigid Coupling Seal Assembly](#)
- [24.11: Victaulic In-Place OGS-0200 Roll Grooving Tool Model RG1200](#)
- [24.14: Victaulic OGS-200 Roll Grooving Tool Model RG1210](#)
- [25.12: Victaulic OGS-200 Roll Groove Specifications](#)
- [100.01: Victaulic OGS-200 Grooved End Fittings](#)
- [100.02: Victaulic Rigid Coupling Style 870](#)
- [100.13: Victaulic Flexible Loop for Steam Series 159](#)
- [I-870: Victaulic Installation Instructions Style 870 Rigid Coupling](#)
- [I-871: Victaulic Installation Instructions Series 871 Gate Valve](#)
- [TM-RG1200: Victaulic Operating and Maintenance instructions Manual RG1200 Roll Grooving Tool](#)
- [TM-RG1210: Victaulic Operating and Maintenance instructions Manual RG1210 Roll Grooving Tool](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

Intellectual Property Rights

No statement contained herein concerning a possible or suggested use of any material, product, service, or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Victaulic or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service, or design in the infringement of any patent or other intellectual property right. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries.

Note

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

Trademarks

Victaulic and all other Victaulic marks are the trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries.