

# GRINNELL Figure 71H Flange Adapters - Hinged

# General Description

The GRINNELL Figure 71H Hinged Flange Adapter allows a direct transition from flanged components to GRINNELL grooved components. The two segments design comes with a pre-pressed ring at one of the mating ends which facilitates a hinged action. This allows for an easy and quick installation. The specially designed gasket enables the transition from a grooved system to a flanged system with a single flange adapter. The flange bolt patterns conform to ANSI Class 125 and 150.

## NOTICE

The GRINNELL Products Figure 71H Hinged Flange Adapter described herein must be installed and maintained in compliance with this document, in addition to the standards of any authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Material and gasket selection should be verified to be compatible for the specific application. Always read and understand the installation instructions.

The owner is responsible for maintaining their mechanical system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

# Technical Data

#### **Sizes**

2 to 12 in. (DN50 to DN300 ANSI Class 125/150)

#### **Approvals**

UL and ULC Listed
UL, C-UL Listed Water Quality Classified
FM Approved
Certified to all requirements of
NSF/ANSI 61
IAPMO UPC Certified

## **Maximum Pressure**

Refer to Figure 1.

#### Housing

Ductile iron conforming to ASTM A536, Grade 65-45-12 and/or ASTM A395, Grade 65-45-15

## **Protective Coatings**

- Non-lead orange paint
- RAL3000 red non-lead paint (optional)
- Hot-dipped galvanized conforming to ASTM A153 (optional)

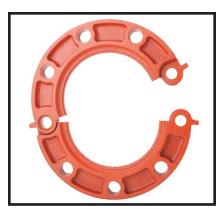
#### Gaske

- Grade "E" EPDM, Green color code -30°F to 230°F (-34°C to 110°C)
- Grade "T" Nitrile, Orange color code -20°F to 180°F (-29°C to 82°C)
- Grade "O" Fluoroelastomer, blue color code +20°F (-7°C) to +300°F (+149°C)
- Grade "L" Silicone, red gasket -30°F (-34°C) to +350°F (+177°C)

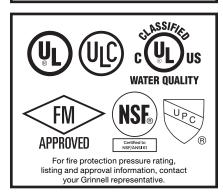
Refer to Technical Data Sheet G610 for aid in selecting proper gasket.

## Installation

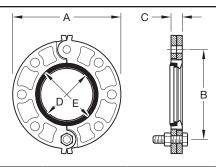
The GRINNELL Figure 71H Hinged Flange Adapter must be installed in accordance with the installation instructions provided in Technical Data Sheet G907.











| Nominal<br>Pipe Size |                       | March   | Max End   | Nominal Dimensions<br>Inches/mm |                     |                    |                      |                     | Recommended<br>Flange Mating Bolts |      |  | Anney                        |
|----------------------|-----------------------|---|---|---------------------------------|---------------------|--------------------|----------------------|---------------------|------------------------------------|------|--|------------------------------|
| ANSI<br>Inch<br>DN   | O.D.<br>Inches/<br>mm | Max <sup>b</sup><br>Pressure<br>psi<br><i>bar</i> | Load <sup>b</sup><br>(CWP)<br>Lbs.<br><i>kN</i> | A                               | В                   | С                  | Dª                   | Eª                  | Size<br>Dia. x Lg.<br>Inches       | Qty. | Bolt<br>Torque<br>Range<br>Lbsft.<br><i>Nm</i> | Approx.<br>Wt.<br>Lbs.<br>kg |
| <b>2</b><br>DN50     | 2.375<br>60,3         | 500<br>34,5                                       | 1,330<br><i>5,92</i>                            | 6.00<br><i>152</i>              | 4.75<br>121         | 0.87<br>22         | 2.36<br><i>60</i>    | 3.42<br>87          | 5/8 x 3                            | 4    | 110-140<br><i>14</i> 9-190                     | 4.0<br>1,8                   |
| <b>2-1/2</b><br>DN65 | 2.875<br>73,0         | 500<br>34,5                                       | 1,950<br><i>8,67</i>                            | 7.00<br><i>17</i> 8             | 5.50<br><i>140</i>  | 0.88<br><i>22</i>  | 2.87<br><i>7</i> 3   | 4.00<br>102         | 5/8 x 3                            | 4    | 110-140<br><i>14</i> 9-190                     | 5.1<br>2,3                   |
| <b>3</b><br>DN80     | 3.500<br>88,9         | 500<br>34,5                                       | 2,880<br>12,81                                  | 7.50<br>190                     | 6.00<br><i>152</i>  | 0.94<br><i>24</i>  | 3.50<br>89           | 4.56<br><i>116</i>  | 5/8 x 3                            | 4    | 110-140<br><i>14</i> 9-190                     | 6.2<br>2,8                   |
| <b>4</b><br>DN100    | 4.500<br>114,3        | 500<br>34,5                                       | 4,770<br>21,22                                  | 9.00<br><i>22</i> 9             | 7.50<br>191         | 0.94<br><i>24</i>  | 4.50<br><i>114</i>   | 5.56<br><i>141</i>  | 5/8 x 3                            | 8    | 110-140<br><i>14</i> 9-190                     | 8.3<br>3,8                   |
| <b>5</b><br>DN125    | 5.563<br>141,3        | 500<br>34,5                                       | 7,290<br>32,43                                  | 10.00<br><i>254</i>             | 8.50<br><i>216</i>  | 1.00<br><i>2</i> 5 | 5.56<br><i>141</i>   | 6.73<br><i>171</i>  | 3/4 x 3-1/2                        | 8    | 220-250<br>298-339                             | 10.3<br><i>4,7</i>           |
| <b>6</b><br>DN150    | 6.625<br>168,3        | 500<br>34,5                                       | 10,340<br><i>44,47</i>                          | 11.00<br><i>27</i> 9            | 9.50<br><i>241</i>  | 1.00<br><i>2</i> 5 | 6.62<br><i>168</i>   | 7.78<br>198         | 3/4 x 3-1/2                        | 8    | 220-250<br>298-339                             | 11.1<br>5,0                  |
| <b>8</b><br>DN200    | 8.625<br>219,1        | 400<br>27,6                                       | 17,520<br><i>75,37</i>                          | 13.50<br><i>343</i>             | 11.75<br>298        | 1.12<br><i>2</i> 8 | 8.62<br><i>21</i> 9  | 9.94<br><i>253</i>  | 3/4 x 3-1/2                        | 8    | 220-250<br>298-339                             | 17.2<br>7,8                  |
| <b>10</b><br>DN250   | 10.750<br>273,0       | 400<br>27,6                                       | 27,210<br><i>117,01</i>                         | 16.00<br><i>406</i>             | 14.25<br>362        | 1.18<br><i>30</i>  | 10.75<br><i>27</i> 3 | 12.31<br><i>313</i> | 7/8 x 4                            | 12   | 320-400<br><i>434-542</i>                      | 25.7<br>11,7                 |
| <b>12</b><br>DN300   | 12.750<br>323,9       | 400<br>27,6                                       | 38,280<br><i>164,71</i>                         | 19.00<br><i>4</i> 82            | 17.00<br><i>432</i> | 1.25<br>32         | 12.75<br>324         | 14.31<br><i>364</i> | 7/8 x 4                            | 12   | 320-400<br><i>434-542</i>                      | 37.6<br><i>17,1</i>          |

#### NOTES:

- a. Dimensions D and E represent minimum and maximum sealing surfaces.
- b. Maximum pressure and end load are total from all loads based on standard weight steel pipe. Pressure ratings and end loads may differ on other pipe materials and/or wall thickness. Contact GRINNELL Products for details.

### FIGURE 1 FIGURE 71H FLANGE ADAPTER - HINGED FOR USE WITH ANSI CLASS 125 AND 150 FLANGES

# Ordering Procedure

GRINNELL Products are available globally through a network of distribution centers. For the nearest distributor, visit www.grinnell.com. When placing an order, indicate the full product name.

Specify the following:

- GRINNELL Figure 71H Flange Adapter Hinged
- Quantity
- Size:

ANSI Inch size, DN, or pipe O.D.

- Flange Bolt Pattern Designation: Class 125/150
- Protective coating: non-lead orange paint, RAL red non-lead paint, epoxy coated, or hot-dipped galvanized
- Type of gasket: Grade "E" EPDM, Grade "T" Nitrile, Grade "O" Fluoroelastomer, or Grade "L" Silicone

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