# **CAST IRON FLANGED FITTINGS**



# Class 125 (Standard)

| FIGURE 803                 | Size        |     |                               |     | A                             |     | Unit Weight |       |
|----------------------------|-------------|-----|-------------------------------|-----|-------------------------------|-----|-------------|-------|
| 90° Reducing Flanged Elbow |             | 01  |                               |     |                               | •   | Black       |       |
|                            | NPS         | DN  | NPS                           | DN  | in                            | mm  | lbs         | kg    |
|                            | 21/2        | 65  | 2                             | 50  | 5                             | 127 | 18.00       | 8.16  |
|                            | 3           | 80  | 2                             | 50  | 5 <sup>1</sup> / <sub>2</sub> | 140 | 19.00       | 8.62  |
|                            | ა           | 00  | 2 <sup>1</sup> / <sub>2</sub> | 65  | 3.72                          |     | 22.00       | 9.98  |
| Bar V.                     | 4           | 100 | 21/2                          | 65  | 6 <sup>1</sup> / <sub>2</sub> | 165 | 31.00       | 14.06 |
|                            |             |     | 3                             | 80  | 0.72                          |     | 33.00       | 14.97 |
|                            | 5           | 125 | 4                             | 100 | 71/2                          | 191 | 48.00       | 21.77 |
|                            | 6           | 150 | 3                             | 80  | 8                             | 203 | 47.00       | 21.32 |
|                            |             |     | 4                             | 100 |                               |     | 56.00       | 25.40 |
|                            |             |     | 5                             | 125 |                               |     | 60.00       | 27.21 |
|                            | 8           | 200 | 4                             | 100 |                               | 229 | 77.00       | 34.92 |
| j                          |             |     | 5                             | 125 | 9                             |     | 82.00       | 37.19 |
| A                          |             |     | 6                             | 150 |                               |     | 90.00       | 40.82 |
|                            | 10          | 250 | 6                             | 150 | 44                            | 070 | 125.00      | 56.69 |
|                            |             |     | 8                             | 200 | 11                            | 279 | 150.00      | 68.03 |
|                            | 12 <i>3</i> | 200 | 8                             | 200 | 10                            | 205 | 190.00      | 86.17 |
|                            |             | 300 | 10                            | 250 | 12                            | 305 | 220.00      | 99.77 |

| FIGURE 804                    | c:  | 70     |                                | )        | Flai                           | nge         |                                       | Thick | ness                         |       | Unit W | leight |
|-------------------------------|-----|--------|--------------------------------|----------|--------------------------------|-------------|---------------------------------------|-------|------------------------------|-------|--------|--------|
| 90° Long Radius Flanged Elbow |     | Size B |                                | Diameter |                                | Min. Flange |                                       | Wall  |                              | Black |        |        |
|                               | NPS | DN     | in                             | mm       | in                             | mm          | in                                    | mm    | in                           | mm    | lbs    | kg     |
| B B B                         | 2   | 50     | 61/2                           | 165      | 6                              | 152         | <sup>5</sup> / <sub>8</sub>           | 16    | <sup>5</sup> / <sub>16</sub> | 8     | 16.00  | 7.26   |
|                               | 3   | 80     | 73/4                           | 197      | 71/2                           | 191         | 3/4                                   | 19    | 3/8                          | 10    | 28.00  | 12.70  |
|                               | 4   | 100    | 9                              | 229      | 9                              | 229         | <sup>15</sup> / <sub>16</sub>         | 24    | 1/2                          | 13    | 48.00  | 21.77  |
|                               | 6   | 150    | 11 <sup>1</sup> / <sub>2</sub> | 292      | 11                             | 279         | 1                                     | 25    | 9/16                         | 14    | 85.00  | 38.55  |
|                               | 8   | 200    | 14                             | 356      | 13 <sup>1</sup> / <sub>2</sub> | 343         | 1 <sup>1</sup> /8                     | 29    | <sup>5</sup> / <sub>8</sub>  | 16    | 145.00 | 65.76  |
|                               | 10  | 250    | 16 <sup>1</sup> / <sub>2</sub> | 419      | 16                             | 406         | <b>1</b> <sup>3</sup> / <sub>16</sub> | 30    | 3/4                          | 19    | 230.00 | 104.31 |

 $\textbf{Note:} \ \mathsf{See} \ \mathsf{following} \ \mathsf{page} \ \mathsf{for} \ \mathsf{pressure-temperature} \ \mathsf{ratings}.$ 

| PROJECT INFORMATION | APPROVAL STAMP    |
|---------------------|-------------------|
| Project:            | Approved          |
| Address:            | Approved as noted |
| Contractor:         | ☐ Not approved    |
| Engineer:           | Remarks:          |
| Submittal Date:     |                   |
| Notes 1:            |                   |
| Notes 2:            |                   |

## **CAST IRON FLANGED FITTINGS AND FLANGES**



## Class 125 (Standard) and Class 250 (Extra Heavy)





For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil Sales Representative.

### **Specifications**

All Cast Iron Flanged Fittings and Flanges in sizes listed are made to ASME and are marked 125 or 250 for pipe sizes 12 NPS (300 DN) and smaller. Unless otherwise specified, cast iron flanges and fittings are drilled and faced in accordance with ASME B 16.1.

### **Coatings**

Flanged fittings and flanges are available in both black painted and galvanized. Consult an Anvil Representative for available sizes.

#### Sizes

Size of all flanged fittings and flanges scheduled indicates nominal pipe diameter of ports. Standard reducing elbows carry the same dimensions center-to-face as regular elbows of largest straight size.

### Ordering

To order reducing companion flanges, specify threaded or reduced size first, then the outside diameter of flange wanted. For instance, if a reducing flange is required to connect a 5-inch pipe to an 8-inch flanged valve or fitting having a  $13^{1}/_{2}$  inch O.D. flange, order:  $5 \times 13^{1}/_{2}$  inch standard reducing flange.

#### **Dimensions**

Bolt holes for bolts smaller than  $1^{3}/_{4}$  inches (44mm) in diameter are drilled  $^{1}/_{8}$  inch larger than the bolt diameter;  $1^{3}/_{4}$  inch (44mm) and larger bolts have holes drilled  $^{1}/_{4}$  inch (6mm) larger than bolt diameter. Bolt holes straddle the center line. Bolt holes are spot faced on order only.

#### **Tolerances**

An inspection limit of plus or minus  $^{1}/_{32}$  inch (1mm) shall be allowed on all center to contact surface dimensions for sizes up to and including 10 NPS  $(250 \, DN)$ ; plus or minus  $^{1}/_{16}$  inch (1.5mm) on sizes larger than 10 NPS  $(250 \, DN)$ . Inspection limit of plus or minus  $^{1}/_{16}$  inch (1.5mm) shall be allowed on all contact surface to contact surface dimensions for sizes up to and including 10 NPS  $(250 \, DN)$ ; plus or minus  $^{1}/_{8}$  inch (3mm) on sizes larger than 10 NPS  $(250 \, DN)$ . The largest opening in the fitting governs the tolerance to be applied to all openings.



| Cast Iron Flanged Fittings and Cast Iron Flanges |                 |                |       |           |      |  |  |  |
|--|-----------------|----------------|-------|-----------|------|--|--|--|
|  |                 | Pressure*      |       |           |      |  |  |  |
| Temp   | erature         | Class          | s 125 | Class 250 |      |  |  |  |
|  |                 | 1"-            | 12"   | 1"-12"    |      |  |  |  |
| (°F)   | (°C)            | psi <i>bar</i> |       | psi       | bar  |  |  |  |
| -20° to 150°                                     | -28.9° to 65.6° | 200            | 13.8  | 500       | 34.5 |  |  |  |
| 200°   | 93.3°           | 190            | 13.1  | 460       | 31.7 |  |  |  |
| 225°   | 107.2°          | 180            | 12.4  | 440       | 30.3 |  |  |  |
| 250°   | 121.1°          | 175            | 12.1  | 415       | 28.6 |  |  |  |
| 275°   | 135.0°          | 170            | 11.7  | 395       | 27.2 |  |  |  |
| 300°   | 148.9°          | 165            | 11.4  | 375       | 25.9 |  |  |  |
| 325°   | 162.8°          | 155            | 10.7  | 355       | 24.5 |  |  |  |
| 350°   | 178.3°          | 150            | 10.3  | 335       | 23.1 |  |  |  |
| 375°   | 190.6°          | 145            | 10.0  | 315       | 21.7 |  |  |  |
| 400°   | 207.8°          | 140            | 9.7   | 290       | 20.0 |  |  |  |
| 425°   | 218.3°          | 130            | 9.0   | 270       | 18.6 |  |  |  |
| 450°   | 232.2°          | 125            | 8.6   | 250       | 17.2 |  |  |  |

<sup>\*</sup> Applies to fittings and flanges manufactured with ASTM A-126 Class B material only.

| Standards and Specifications                             |            |                        |            |              |            |  |  |  |
|--|------------|------------------------|------------|--------------|------------|--|--|--|
| Dimensions Material Galvanizing** Thread Pressure Rating |            |                        |            |              |            |  |  |  |
| CAST IRON FLANGES AND FLANGED FITTINGS                   |            |                        |            |              |            |  |  |  |
| Class 125 (1"-12")                                       | ASME B16.1 | ASTM A- 126 (A) or (B) | ASTM A-153 | ASME B1.20.1 | ASME B16.1 |  |  |  |
| Class 250 (1"-12")                                       | ASME B16.1 | ASTM A- 126 (A) or (B) | ASTM A-153 | ASME B1.20.1 | ASME B16.1 |  |  |  |

<sup>\*\*</sup> ASTM B 633. Type I, SC 4, may be supplied as alternate zinc coating per applicable ASME B16 product standard.