Introduction

Highest Quality: Since 1934, when the Cooper foundry developed the first successful technique to pour 304 stainless steel, we have used our experience and skill to continually refine and improve our product line.

The production of highest quality stainless steel and exotic alloy valves today requires a combination of advanced design engineering, metallurgical science, technical know-how and rigid quality control. Cooper valve patterns have been continually refined, hand-in-hand with foundry technology to produce the finest quality castings—whether they be stainless steel or high alloy steel—available in today's market. All of these requirements are to be found in the day-to-day production of Cooper stainless steel and exotic alloy industrial valves.

Single Source Capability: Texsteam manufactures a complete line of Cooper ball, gate, globe and check valves whether they are small diameter investment castings or large diameter sand castings, sizes ½” to 24”, ANSI Class 150 thru 600, in stainless or high alloy, or special design upon application, one call does it all. Cooper valves are manufactured to the applicable sections of ANSI and API standards and are in use in almost every corrosive application today.

Prompt Delivery: Materials considered “special” elsewhere are standard at Texsteam. Whether you order from stock or need valves built to your individual specifications, you will get the fastest delivery possible.

Consult this catalog carefully for comprehensive information about Cooper valve products. Catalog description of unique Cooper design features will make it easier to determine the correct selection for your specific application.

Complete Alloy Coverage*

304/A744 GR. CF8
304L/A744 GR. CF3
316/A744 GR. CF8M
316L/A744 GR. CF3M
317/A744 GR. CG8M
317L/A744 GR. CG3M
347/A744 GR. CF8C
Alloy 20/A744 GR. CN7M
CD4MCU/A744
Monel/A494 GR. M35-1
Nickel/A494 GR. CZ100
Inconel/A494 GR. CY40-CL 1 & 2
Incoloy 800/A351 CT15C
Hastelloy B/A494 GR. N12MV
Hastelloy C/A494 GR. CW12MW
Titanium/B367-69 GR. C3
Zirconium/B752 GR. 702C & 705C
Avesta-2545MO/A351 CK3MCUN

*Common alloys shown — others available on special order.
Exotic Alloy Industrial Valves

Gate Globe & Check Valves
**COMPLETE ALLOY COVERAGE**

Common alloys shown—others available on special order

<table>
<thead>
<tr>
<th>304</th>
<th>347</th>
<th>Incoloy</th>
</tr>
</thead>
<tbody>
<tr>
<td>304L</td>
<td>Alloy 20</td>
<td>Hastelloy B</td>
</tr>
<tr>
<td>316</td>
<td>Monel</td>
<td>Hastelloy C</td>
</tr>
<tr>
<td>316L</td>
<td>Nickel</td>
<td>Titanium</td>
</tr>
<tr>
<td>317</td>
<td>Inconel</td>
<td>Zirconium</td>
</tr>
</tbody>
</table>

AVESTA 254 SMO® - CK2MCUN

*AVESTA is a registered trademark of Avesta Jernverks AB

**SPECIAL ADVANTAGES**

**Standard Features**

- Stainless steel bolting
- 400 Series stainless steel bushing
- Swing-away packing gland eye bolts
- Extra deep stuffing box
- Teflon** cup and cone packing
- Fully contained Teflon** gasket
- ELC grade bodies on screwed and weld end valves
- Exceptionally high casting quality
- All valves hydrostatically tested to API 598
- All valves serialized—full traceability of materials
- Flexible manufacturing facility—widest choice of special applications
- Cooper valves are manufactured entirely in the U.S.A. to the standards of ANSI, MSS, ASME, and ASTM. Texsteam Inc. is registered ISO 9001.

**VALVE ACCESSORIES**

**Jacketed Valves:**

*(Bolt-on or Full-welded Type)*

Valves can be equipped with a fabricated body jacket through which steam or other heating media can be circulated. This keeps the valve functioning while handling heavy, viscous fluids.

**Stainless Steel Acid Shields:**

Valves installed in an inverted position can be furnished with acid shields to prevent corrosive or hazardous media from affecting surrounding work areas.

**Gear Operators:**

Gate and globe valves can be equipped with bevel gear or chain wheel operators.

**Extended Bonnets or Stems:**

Gate and globe valves can be fitted with a bonnet extension for cryogenic service, or extended stems to permit manual operation when the valve is located out of normal reach.

**Fugitive Emissions:**

Cooper valves can be equipped to prevent the escape of fugitive emissions.

**Other Options:**

Cooper has the capability of providing a wide range of services beyond those shown in this brochure. These include corrosion evaluation, vacuum test, helium test, special tagging and special hydrostatic testing. Consult factory for assistance.

**ORDERING GUIDELINES**

When placing an order, the following information should be provided:

- Purchase order number
- Quantity
- Size
- Model number
- Material specification
- Packing and gasket material
- Special requirements, such as tagging, cleaning, test reports, etc.

For features or materials not listed in our brochure, provide full description of requirements or consult factory for assistance.

**Replacement or Spare Parts:**

To order replacement or spare parts please supply the following information—complete part number appearing on valve identification plate—and state what parts are needed. Incomplete information will delay processing of your order.

**Documentation (upon request):**

- MTR — mill test reports
- HYDROSTATIC CERTS — per ANSI B16.34 and API 598
- NDE — non-destructive, dye penetrant, X ray
- ALLOY VERIFICATION — alloy analyzer

**Teflon** is a registered trademark of E.I. DuPont de Nemours Company

**COOPER**
Gate valves provide a straight-through passage for the flow of fluids. They are used where unobstructed flow and low pressure drops are needed. Although gate valves are not recommended for throttling service, they are suitable for on/off service in almost all media and are particularly useful in cryogenic or high temperature service.
# Gate Valves

## ANSI Class 150

### Model 101

**1/2 thru 2”**

(Investment Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1 1/2</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>8 3/4</td>
<td>8 3/4</td>
<td>9 1/4</td>
<td>13 3/4</td>
<td>14 3/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>7 7/16</td>
<td>10 11/32</td>
<td>17 1/2</td>
<td>22 1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Socktweld = 101-X; Screwed End = 101-SE

### Model 115

**1/2 thru 2”**

(Investment Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1 1/2</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4 1/2</td>
<td>4 1/2</td>
<td>5</td>
<td>6 1/2</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>B</td>
<td>8 1/2</td>
<td>8 1/2</td>
<td>9 1/2</td>
<td>13 1/2</td>
<td>14 1/2</td>
<td>16 1/2</td>
<td>18 1/2</td>
<td>20 1/2</td>
<td>22 1/2</td>
<td>24 1/2</td>
<td>26 1/2</td>
<td>28 1/2</td>
<td>30 1/2</td>
<td>32 1/2</td>
<td>34 1/2</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3 3/8</td>
<td>3 3/8</td>
<td>4 1/4</td>
<td>5 1/2</td>
<td>6 5/8</td>
<td>7 1/2</td>
<td>9 1/2</td>
<td>11</td>
<td>13 1/2</td>
<td>15</td>
<td>17</td>
<td>19</td>
<td>21</td>
<td>23 1/2</td>
<td>25</td>
<td>27 1/2</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>9 1/2</td>
<td>10 1/2</td>
<td>12 1/4</td>
<td>14 1/2</td>
<td>16 1/2</td>
<td>18 1/2</td>
<td>20 1/2</td>
<td>22 1/2</td>
<td>24 1/2</td>
<td>26 1/2</td>
<td>28 1/2</td>
<td>30 1/2</td>
<td>32 1/2</td>
<td>34 1/2</td>
<td>36 1/2</td>
<td></td>
</tr>
</tbody>
</table>

Raised Face Flange = 115-RF; Flat Face Flange = 115-FF; Ring Joint Face Flange = 115-RJ; Buttweld = 115-BW

### Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

### Specifications:
- Sizes 1/2 thru 2”
- Pressures: ANSI Class 150
- Ends: flanged, threaded, socketweld and buttweld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

*For larger sizes, consult factory.

### Options:
- Exotic alloys
- Renewable disc
- Hardfacing
- Jackets
- Special bolting
- Alloy analyzer test
- Cryogenics
- Flex wedge
- Operators
- Acid shield
- NDT test

---

**COOPER**
Gate Valves ANSI Class 300

Model 3381 ½ thru 2”
(Investment Cast Body)

Model 130 ½ thru 2”
(Investment Cast Body)

Model 130 3 thru 12”*
(Sand Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>¾</th>
<th>1</th>
<th>1 ½</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3½</td>
<td>3½</td>
<td>3½</td>
<td>5½</td>
</tr>
<tr>
<td>B</td>
<td>8½</td>
<td>8½</td>
<td>9¾</td>
<td>13¾</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>27</td>
</tr>
</tbody>
</table>

Socket weld=3381-X; Screwed End=3381-SE

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>¾</th>
<th>1</th>
<th>1 ½</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5½</td>
<td>6</td>
<td>6½</td>
<td>7½</td>
<td>8½</td>
<td>11½</td>
<td>12</td>
<td>15½</td>
<td>16½</td>
<td>18</td>
</tr>
<tr>
<td>B</td>
<td>8½</td>
<td>8½</td>
<td>9¾</td>
<td>13¾</td>
<td>14¾</td>
<td>22½</td>
<td>26½</td>
<td>34½</td>
<td>46½</td>
<td>55½</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>16</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>D</td>
<td>3½</td>
<td>4¼</td>
<td>4½</td>
<td>6¼</td>
<td>6½</td>
<td>8½</td>
<td>10</td>
<td>12½</td>
<td>15</td>
<td>17½</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>13</td>
<td>16</td>
<td>24</td>
<td>39</td>
<td>53</td>
<td>100</td>
<td>171</td>
<td>305</td>
<td>540</td>
<td>823</td>
</tr>
</tbody>
</table>

Raised Face Flange=130-RF; Flat Face Flange=130-FF; Ring Type Joint Flange=130-RJ; Butt weld=130-BW

Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

Specifications:
- Sizes ½ thru 12”*
- Pressures: ANSI Class 300
- Ends: flanged, threaded, socket weld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

Options:
- Exotic alloys
- Cryogenics
- Renewable disc
- Flex wedge
- Hardfacing
- Operators
- Jackets
- Acid shields
- Special bolting
- NDT test
- Alloy analyzer test

*For larger sizes, consult factory.
**Gate Valves**

**Model 3611**

½ thru 2”

(Investment Cast Body)

Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

Specifications:
- Sizes ½ thru 10”
- Pressures: ANSI Class 600
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

Options:
- Exotic alloys
- Renewable disc
- Hardfacing
- Operators
- Special bolting
- Alloy analyzer test

*For larger sizes, consult factory.

**Model 160**

½ thru 2”

(Investment Cast Body)

Model 160

3 thru 10”

(Sand Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>½</th>
<th>¾</th>
<th>1</th>
<th>1½</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6½</td>
<td>7½</td>
<td>8½</td>
<td>9½</td>
<td>11½</td>
<td>14</td>
<td>17</td>
<td>22</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>B</td>
<td>8½</td>
<td>9½</td>
<td>10½</td>
<td>12</td>
<td>14</td>
<td>17</td>
<td>22</td>
<td>28</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>D</td>
<td>3½</td>
<td>4½</td>
<td>4½</td>
<td>6½</td>
<td>6½</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>16½</td>
<td>20</td>
</tr>
</tbody>
</table>

Weight (lbs.): 17

Raised Face Flange=160-RF; Flat Faced Flange=160-FF; Ring Type Joint Flange=160-RJ; Buttweld=160-BW

COOPER®
Gate Valves  ANSI Class 900

Model 190
1 thru 4"*
(Sand Cast Body)

Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

Specifications:
- Sizes 1 thru 4"
- Pressures: ANSI Class 900
- Ends: flanged and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

Options:
- Exotic alloys
- Renewable disc
- Hardfacing
- Operators
- Jackets
- Acid shields
- Special bolting
- NDT test
- Alloy analyzer test

*For larger sizes, consult factory.

COOPER®
Gate Valves

**Model 1151**

\( \frac{1}{2} \) thru 1" 
\( (\frac{1}{2}, \frac{3}{4} \text{—Investment Cast Body}) 
\( (1\text{—Sand Cast Body}) 

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>( \frac{1}{4} )</th>
<th>( \frac{1}{4} )</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>B</td>
<td>16</td>
<td>16</td>
<td>17 3/4</td>
</tr>
<tr>
<td>C</td>
<td>6</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>33</td>
<td>40</td>
<td>55</td>
</tr>
</tbody>
</table>

Socketweld=1151X; Screwed End=1151SE

**Model 1150**

1 thru 3"
(Sand Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>1</th>
<th>1 1/4</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>12</td>
<td>14 3/4</td>
<td>18 3/4</td>
</tr>
<tr>
<td>B</td>
<td>14</td>
<td>15 3/4</td>
<td>17 3/4</td>
<td>27</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>D</td>
<td>5 3/4</td>
<td>7</td>
<td>8 3/4</td>
<td>10 3/4</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>60</td>
<td>75</td>
<td>150</td>
<td>230</td>
</tr>
</tbody>
</table>

Raised Face=1150RF; Flat Face=1150FF; Ring Joint=1150RT; Butt weld=1150BW

**Features:**
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

**Specifications:**
- Sizes \( \frac{1}{2} \) thru 3"
- Pressures: ANSI Class 1500
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

**Options:**
- Exotic alloys
- Renewable disc
- Hardfacing
- Jackets
- Special bolting
- Alloy analyzer test
- Cryogenics
- Flex wedge
- Operators
- Acid shields
- NDT test

*For larger sizes, consult factory.*
Cryogenic Valves

Cryogenic Swing Check Valves

Cryogenic swing check valves are available in ANSI pressure classes 150, 300 and 600 with bolted cover and metal or renewable disc.

CLASS 150: Flanged or butt weld \( \frac{3}{4} \) thru 12".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

CLASS 300: Flanged or butt weld \( \frac{3}{4} \) thru 10".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

CLASS 600: Flanged or butt weld \( \frac{3}{4} \) thru 6".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

"Sizes available thru 42". Consult factory.

Cryogenic Gate Valves

Cryogenic gate valves are available in ANSI pressure classes 150, 300 and 600 with OS&Y extended bolted bonnet and flex or solid wedge disc, or renewable disc.

CLASS 150: Flanged or butt weld \( \frac{3}{4} \) thru 24".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

CLASS 300: Flanged or butt weld \( \frac{3}{4} \) thru 12".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

CLASS 600: Flanged or butt weld \( \frac{3}{4} \) thru 10".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

"For larger sizes, consult factory.

Cryogenic Globe Valves

Cryogenic globe valves are available in ANSI pressure classes 150, 300 and 600 with OS&Y extended bolted bonnet and metal plug or renewable disc.

CLASS 150: Flanged or butt weld \( \frac{3}{4} \) thru 8".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

CLASS 300: Flanged or butt weld \( \frac{3}{4} \) thru 6".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

CLASS 600: Flanged or butt weld \( \frac{3}{4} \) thru 6".
Threaded, socket weld, NPS \( \frac{1}{2} \) thru 2".

---

Extended Bonnet Dimensions for Gate and Globe Valves

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Valve Size (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>( \frac{3}{8} )</td>
</tr>
<tr>
<td>150</td>
<td>10</td>
</tr>
<tr>
<td>300</td>
<td>10</td>
</tr>
<tr>
<td>600</td>
<td>10</td>
</tr>
</tbody>
</table>

"E" Dimension shown below is standard minimum length in inches

OPTIONS:
- Renewable disc with Teflon* insert good to -100°C.
- Renewable disc with KEL-F** insert good to -325°C.
- Pressure relief vent hole.

* Teflon is a registered trademark of E.I. DuPont.
** KEL-F is a registered trademark of 3M Company.

COOPER®

9
**Globe Valves**

**ANSI Class 150**

### Model 11

**2 1/2 thru 2”**

*(Investment Cast Body)*

### Model 215

**1 1/2 thru 2”**

*(Investment Cast Body)*

### Model 215

**1 1/2 thru 8”**

*(Sand Cast Body)*

---

#### Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

#### Specifications:
- Sizes 1/2 thru 8”*
- Pressures: ANSI Class 150
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

#### Options:
- Exotic alloys
- Renewable disc
- Hardfacing
- Jackets
- Special bolting
- Cryogenics
- Operators
- Acid shields
- Alloy analyzer test

*For larger sizes, consult factory.

---

**COOPER®**

10
Globe Valves

ANSI Class 300

Model 4301

½ thru 2”

(Investment Cast Body)

Model 230

½ thru 2”

(Investment Cast Body)

Model 230

3 thru 6”*

(Sand Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>½</th>
<th>¾</th>
<th>1</th>
<th>1 ½</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3 ½</td>
<td>3 ¼</td>
<td>4 ¼</td>
<td>5 ½</td>
<td>5 ¼</td>
</tr>
<tr>
<td>B</td>
<td>8 ¼</td>
<td>8 ½</td>
<td>9 ¼</td>
<td>13 ¼</td>
<td>14 ¼</td>
</tr>
<tr>
<td>C</td>
<td>4 ¼</td>
<td>4 ½</td>
<td>4 ½</td>
<td>8</td>
<td>8 ¼</td>
</tr>
</tbody>
</table>

| Weight (lbs.) | 8  | 12 | 15 | 25  | 38  |

Socketweld=4301-X; Screwed End=4301-SE

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>½</th>
<th>¾</th>
<th>1</th>
<th>1 ½</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>B</td>
<td>8 ½</td>
<td>8 ½</td>
<td>9 ¼</td>
<td>13 ¼</td>
<td>14</td>
<td>19</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>C</td>
<td>4 ¼</td>
<td>4 ½</td>
<td>4 ½</td>
<td>6</td>
<td>6 ½</td>
<td>8</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>D</td>
<td>3 ½</td>
<td>4 ¼</td>
<td>4 ½</td>
<td>6 ¼</td>
<td>8</td>
<td>12</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

| Weight (lbs.) | 13 | 17 | 25 | 36 | 54 | 92 | 147 | 280 |

Raised Face Flange=230 RF; Flat Faced Flange=230 FF; Ring Type Joint Flange=230-RJ; Butt weld=230 BW

Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

Specifications:
- Sizes ½ thru 6”*
- Pressures: ANSI Class 300
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

Options:
- Exotic alloys
- Cryogenics
- Renewable disc
- Operators
- Hardfacing
- Acid shields
- Jackets
- Alloy analyzer test
- Special bolting

“For larger sizes, consult factory.”
Globe Valves

Model 4601

½ thru 2"

(Investment Cast Body)

Model 260

½ thru 2"

(Investment Cast Body)

Model 260

3 thru 6”*

(Sand Cast Body)

Features:
- OS&Y
- Bolted bonnet
- Solid wedge
- TFE gasket
- Rising stem
- Integral seat
- TFE packing
- SS bolting

Specifications:
- Sizes ½ thru 6**
- Pressures: ANSI Class 600
- Ends: flanged, threaded, socketweld and buttweld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

Options:
- Exotic alloys
- Renewable disc
- Hardfacing
- Jackets
- Special bolting
- Cryogenics
- Operators
- Acid shields
- Alloy analyzer test

*For larger sizes, consult factory.
**P.O.A.—consult factory.

COOPER®
The purpose of a check valve is to prevent the reversal of flow in a flow line. It is suitable for most media and temperature ranges.

- Stainless steel bolting
- Fully enclosed TFE gasket
- High quality castings

**Parts Description**
1. Body
2. Cover
3. Disc
4. Disc jam nut
5. Hinge
6. Hinge pin
7. Cover bolts
8. Cover nuts
9. Gasket

**Model 2001**

½ thru 2” (Investment Cast Body)

**Model 315**

½ thru 2” (Investment Cast Body)

3 thru 12”* (Sand Cast Body)

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>¾</th>
<th>1</th>
<th>1 ½</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>¾</td>
<td>1</td>
<td>1 ½</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>¾</td>
<td>1</td>
<td>1 ½</td>
<td>2</td>
</tr>
<tr>
<td>Weight (lbs.)</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
</tbody>
</table>

Socketweld=2001-X; Screwed End=2001-SE

**Features:**
- Swing type check
- Bolted cover
- TFE gasket
- Integral seat
- SS bolting

**Specifications:**
- Sizes ½ thru 12”
- Pressures: ANSI Class 150
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

**Options:**
- Exotic alloys
- Lift check
- Renewable disc
- Hardfacing
- Jackets
- Special bolting
- Special NDT test
- Alloy analyzer test

*Raised Face Flange=315-RF; Flat Faced Flange=315-FF; Ring Type Joint Flange=315-RJ; Butt weld=315-BW

Sizes available thru 42”. Consult factory.
Check Valves  ANSI Class 300

Model 2301 ½ thru 2”  (Investment Cast Body)

Model 330 ½ thru 2”  (Investment Cast Body)

Model 330 3 thru 10”*  (Sand Cast Body)

Size (in.)  ½  ¾  1  1½  2
A  3  3  3  3  3
B  3  3  3  3  3
Weight (lbs.)  9  9  10  25  33

Size (in.)  ½  ¾  1  1½  2  3  4  6  8  10
A  6  7  8  9  10  12  14  17  21  24
B  3  3  3  3  4  5  6  7  11  10
C  3  4  4  4  6  6  8  10  12  15
Weight (lbs.)  16  18  21  30  60  115  185  230  620  800

Socketweld=2301-X; Screwed End=2301-SE

Raised Face Flange=330-RF; Flat Faced Flange=330-FF; Ring Type Joint Flange=330-RJ; Butt weld=330-BW

Features:
- Swing type check
- Bolted cover
- TFE gasket
- Integral seat
- SS bolting

Specifications:
- Sizes ½ thru 10”*
- Pressures: ANSI Class 300
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

Options:
- Exotic alloys
- Lift check
- Renewable disc
- Hardfacing
- Jackets
- Special bolting
- Special NDT test
- Alloy analyzer test

*For larger sizes, consult factory.
Check Valves

Model 2601

\( \frac{1}{2} \) thru 2"

(Investment Cast Body)

Model 360

\( \frac{1}{2} \) thru 2"

(Investment Cast Body)

Model 360

3 thru 6"

(Sand Cast Body)

Features:
- Swing type check
- Bolted cover
- TFE gasket
- Integral seat
- SS bolting

Specifications:
- Sizes \( \frac{1}{2} \) thru 6"
- Pressures: ANSI Class 600
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 & B16.10

Options:
- Exotic alloys
- Renewable disc
- Jackets
- Special NDT test
- Lift check
- Hardfacing
- Special bolting
- Alloy analyzer test

*For larger sizes, consult factory.
**P.O.A.—consult factory.
# Lift Checks

## ANSI Class 150
### Models LC 2001
<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>A</th>
<th>B</th>
<th>1</th>
<th>1 1/2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>5 1/2</td>
<td>5 1/2</td>
</tr>
<tr>
<td>B</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>5 1/2</td>
<td>5 1/2</td>
</tr>
</tbody>
</table>

**Socketweld=2001-X; Screwed=2001-SE**

### LC 315
<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4 1/2</td>
<td>4 1/2</td>
<td>5</td>
<td>6 1/2</td>
</tr>
<tr>
<td>B</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>5 1/2</td>
</tr>
<tr>
<td>C</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Raised Face Flanged=315 RF; Flat Face Flanged=315 FF; Ring Joint Face Flanged=315 RTJ; Butt weld=315 BW**

## ANSI Class 300
### Models LC 2301
<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>A</th>
<th>B</th>
<th>1</th>
<th>1 1/2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>5 1/2</td>
<td>5 1/2</td>
</tr>
<tr>
<td>B</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>5 1/2</td>
<td></td>
</tr>
</tbody>
</table>

**Socketweld=2301-X; Screwed=2301-SE**

### LC 330
<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9 1/2</td>
</tr>
<tr>
<td>B</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4</td>
<td>5 1/2</td>
</tr>
<tr>
<td>C</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>4 1/2</td>
<td>6 1/2</td>
</tr>
</tbody>
</table>

**Raised Face Flanged=330 RF; Flat Face Flanged=330 FF; Ring Joint Face Flanged=330 RTJ; Butt weld=330 BW**

### LC 360
<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6 1/2</td>
<td>7 1/2</td>
<td>8 1/2</td>
<td>9 1/2</td>
</tr>
<tr>
<td>B</td>
<td>3 1/2</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>6 1/2</td>
</tr>
<tr>
<td>C</td>
<td>3 1/2</td>
<td>4 1/2</td>
<td>4 1/2</td>
<td>6 1/2</td>
</tr>
</tbody>
</table>

**Raised Face Flanged=360 RF; Flat Face Flanged=360 FF; Ring Joint Face Flanged=360 RTJ; Butt weld=360 BW**

## Features:
- Inconel X-750 spring
- Bolted cover
- Integral seat
- Teflon gasket
- SS bolting

## Specifications:
- Sizes 1/2 thru 2 in.
- Pressures: ANSI Class 150–600.
- Ends: flanged, threaded, socketweld and butt weld
- Materials: cast SS and exotic alloy
- Design: ANSI B16.34 and B16.10

## Options:
- Exotic alloys
- Renewable disc
- Hardfacing
- Jackets
- Special NDT test
- Alloy analyzer test
- Special bolting

Cooper lift checks are supplied with an Inconel X-750 spring for extra strength and corrosion resistance. Cooper lift checks have a low differential pressure seal with a cracking pressure of 5 to 10 PSI. They can be supplied with a renewable disc with Teflon insert good for -100°F or KEL-F insert good for -325°F.