**FIGURE 710 SERIES**

**RXSO BRONZE**

**SIZES 1/2" - 2"**

PRESSURES to 400 psig at 400°F

- Special Teflon® seat, making bubble-tight seals possible to over 90% of set pressures per spec API 527; not applicable to steam.
- Adjustable blowdown ring
- PED certified
- Cleaned and packaged for use in O₂ service in compliance with the CGA specification G-4.1
- Additional cleaning specifications:
  - 4WPI-SW70003
  - ES.660.503
  - GS-38
  - GS-40

**APPLICATION DATA**

- Especially recommended where noxious or expensive liquids or gases place a premium on seal quality.
- Stationary Cryogenic storage tanks
- Dual Safety relief systems
- Overpressure relief of tanks, pipelines, vessels, pumps
- Air and gas compressors
- Corrosive industrial applications

**APPLICABLE CODES**

- V-4301 (Cryogenic Non-Oxygen)
- V-4401 (Oxygen)
- API 527
- CRN 0G0591.9C
- CSA S-1.2 and S-1.3.
- ASME sec.VIII, “UV”
- AD-Merkblatt A2
- PED
- Large and Extra Large Capacity (Consult factory for flow rates)
- BSP threads are available on most sizes
- Large and Extra Large Capacity (Consult factory for flow rates)
- Valve Service - Position 8
  - A = Air/Gas Sect. VIII
  - E = Air / Gas PED
  - Z = Other

**OPTIONS**

- Lever operation
- Test Reports available

**DIMENSIONS** inches (mm) AND WEIGHTS pounds (kg)

<table>
<thead>
<tr>
<th>Inlet</th>
<th>Orifice</th>
<th>Outlet</th>
<th>Part #</th>
<th>Max Psi</th>
<th>Dimensions A</th>
<th>B</th>
<th>C</th>
<th>Dimensions A</th>
<th>B</th>
<th>C</th>
<th>Dimensions A</th>
<th>B</th>
<th>C</th>
<th>Wt.</th>
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<td>400</td>
<td>(150) (65)</td>
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<td>(34)</td>
<td>(91)</td>
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<td>1%</td>
<td>(34)</td>
<td>(91)</td>
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**CODE SELECTION CHART**

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<th>Model</th>
<th>Cap</th>
<th>Orifice</th>
<th>Inlet Size</th>
<th>Outlet Size</th>
<th>Valve Service</th>
<th>Set Pressure</th>
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<td>D</td>
<td>3</td>
<td>0</td>
<td>A</td>
<td>E</td>
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<tr>
<td>715</td>
<td>B</td>
<td>D</td>
<td>3</td>
<td>0</td>
<td>A</td>
<td>E</td>
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</table>

**NOTE:**
1. 715 (PED) Valve Combinations are the same as the 710's listed above.
2. For open lever, replace “N” in model number with “E”.

---

**Model -**
- Position 1, 2 & 3
- 710 = Bronze ASME w/O₂ Cleaning
- 715 = Bronze PED w/O₂ Cleaning

**Cap -**
- Position 4
- N = Plain Cap
- E = Open Lever

**Orifice -**
- Position 5
- A
- B
- C
- D
- E

**Inlet Size -**
- Position 6
- A = ½
- B = ¾
- C = 1½
- D = 1¼
- E = 2

**Outlet Size -**
- Position 7
- A = ½
- B = ¾
- C = 1½
- D = 1¼
- E = 2

---

**Value Service -**
- Position 8
- A = Air/Gas Sect. VIII
- E = Air / Gas PED
- Z = Other

**Set Pressure -**
- Position 9, 10 & 11

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**- 242 -**
**FIGURE 710 SERIES**  
**RXSO BRONZE**

**SPECIFICATION**

The valve shall meet the ASME Section VIII code for air and gas services. It shall be “UV” National Board Certified. The valve shall have an adjustable blowdown ring. The valve shall have a Teflon(r) seat and conform to API 527. The valve shall be cleaned and packaged for use in Oxygen service in compliance with CGA specification G-4.1. The spring shall be of stainless steel.

**MATERIALS OF CONSTRUCTION**

- Shell: Cast Bronze, ASME SB-62  
- Base: Forged Brass, Alloy C37700  
- Trim: Copper Alloy  
- Spring: Stainless Steel 17-7 PH ASTM, A-313, Type 631

**MODELS**

- 710 - Bronze ASME w/O₂ cleaning  
- 715 - Bronze PED w/O₂ cleaning

**AIR CAPACITY TABLE**

Discharge capacities in cubic feet per minute of air at 10% or 3 PSI, whichever is greater, overpressure. (SCFM) Ambient

<table>
<thead>
<tr>
<th>Inlet Sizes Inches</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1-1/4</th>
<th>1-1/2</th>
<th>3/4</th>
<th>1</th>
<th>1-1/4</th>
<th>1-1/2</th>
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<tbody>
<tr>
<td></td>
<td>1/2</td>
<td>3/4</td>
<td>1</td>
<td>1-1/4</td>
<td>1-1/2</td>
<td>3/4</td>
<td>1</td>
<td>1-1/4</td>
<td>1-1/2</td>
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<tr>
<td>Outlet Sizes</td>
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<td>1-1/4</td>
<td>1-1/2</td>
<td>2</td>
<td>3/4</td>
<td>1</td>
<td>1-1/4</td>
<td>1-1/2</td>
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<tr>
<td>Seat Diameter</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Flow Area</td>
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<td>1.250</td>
<td>1.500</td>
<td>2.000</td>
<td>0.750</td>
<td>1.000</td>
<td>1.250</td>
<td>1.500</td>
</tr>
<tr>
<td>Set Pressure</td>
<td>0.118</td>
<td>0.204</td>
<td>0.326</td>
<td>0.424</td>
<td>0.628</td>
<td>0.118</td>
<td>0.204</td>
<td>0.326</td>
<td>0.424</td>
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<tbody>
<tr>
<td></td>
<td>1/2</td>
<td>3/4</td>
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<td>1-1/4</td>
<td>1-1/2</td>
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<td>1-1/2</td>
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<tr>
<td>Seat Diameter</td>
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<tr>
<td>Flow Area</td>
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<td>Set Pressure</td>
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