MODENTIC
API607 FIRE SAFE BALL VALVES

Standards confirm to API607 4th/5th/6th, ISO 10497-5, BS 6755 Part II

FLANGED END FLOATING TYPE SIZE RANGE
1/2”-8” CLASS 150 - 300 CLASS 1500 - 2500
1/2”-4” CLASS 300 - 4000
1/2”-8” CLASS 600 - 1500

SCREWED END SIZE RANGE
1/4”- 4” 2000 - 6000 PSI

VALVES QUALIFIED by CLASS

<table>
<thead>
<tr>
<th>VALVE TESTED by CLASS</th>
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<th>CLASS</th>
<th>PN</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td></td>
<td>150, 300</td>
<td>10, 16, 25, 40</td>
</tr>
<tr>
<td>300</td>
<td></td>
<td>300, 400, 600</td>
<td>40, 63, 100</td>
</tr>
<tr>
<td>400</td>
<td></td>
<td>400, 600, 800</td>
<td>63, 100</td>
</tr>
<tr>
<td>600</td>
<td></td>
<td>600, 800, 900</td>
<td>100, 150</td>
</tr>
<tr>
<td>800</td>
<td></td>
<td>800, 900, 1500</td>
<td>100, 150, 260</td>
</tr>
<tr>
<td>900</td>
<td></td>
<td>900, 1500</td>
<td>150, 260</td>
</tr>
<tr>
<td>1500</td>
<td></td>
<td>1500, 2500</td>
<td>260, 420</td>
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<tr>
<td>2500</td>
<td></td>
<td>2500</td>
<td>420</td>
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</table>

Go to www.modentic.com.tw find out more about our company.

CONTACT US We care about your questions and concerns.

email: md_sales@ms.modentic.com.tw
www.modentic.com.tw
MODENTIC | TAIWAN
## FIRE SAFE APPROVED BALL VALVES

### MD-51FS-150/300

**Design Feature**
- Full Bore
- 3/4” – 6” (DN20 – DN150)
- Blow-out proof stem
- Anti-static design
- ISO 5211 mounting flange
- ANSI B16.10 class 150/300
- ANSI B16.5 class 150/300 RF

<table>
<thead>
<tr>
<th>Body</th>
<th>ASTM A351 Gr.CF8M</th>
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<tbody>
<tr>
<td>Ball / Stem</td>
<td>CF8M / SS 316</td>
</tr>
<tr>
<td>Seat</td>
<td>RTFE (15% glass fiber filled)</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-4 to 356 °F (-20 to 180 °C)</td>
</tr>
</tbody>
</table>

### MD-52FS-150/300

**Design Feature**
- Full Bore
- 1/2” – 6” (DN15 - DN150)
- Blow-out proof stem
- Anti-static design
- ISO 5211 mounting flange
- ANSI B16.10 class 150/300
- ANSI B16.5 Class 150/300 RF

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### MD-82-150/300

**Design Feature**
- Full Bore
- 1/2” – 2-1/2” (DN15 – DN65)
- Blow-out-proof stem design
- Anti-static design
- ISO 5211 mounting flange
- ANSI B16.10 Class 150/300
- ANSI B16.5 Class 150/300 RF

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### MD-82 PN 16/40

**Design Feature**
- Full Bore
- 1/2” – 2” (DN15 – DN200)
- Blow-out-proof stem design
- Anti-static design
- ISO 5211 mounting flange
- DIN 3202 F1/F4/F5
- EN 1092-1 PN 10/16/25/40 RF

<table>
<thead>
<tr>
<th>Body</th>
<th>1.4408</th>
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<tr>
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</table>

### V-255FS • V-255M

**Design Feature**
- ANSI B16.34 class 600 design
- Blow-out proof stem
- Anti-static design
- ISO 5211 mounting flange
- Handle with locking device
- End Connection: Threaded, Socket weld, Butt weld

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<td>Temperature Range</td>
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</tr>
<tr>
<td>Working pressure</td>
<td>1/4”- 1” 2000 psi, 1-1/4”-2” 1500 psi</td>
</tr>
</tbody>
</table>

### V-255FS • Full Bore • 1/4” - 2” (DN8-DN50)
### V-255FSA • Reduced Bore • 1/2” – 2-1/2” (DN15-DN65)
**FIRE SAFE APPROVED BALL VALVES**

### V-755FS

**API 607 6th / ISO 10497-5 / BS 6755 Part II**

**Design Feature**
- ANSI B16.34 Class 600 design
- Blow-out-proof stem design
- Anti-static design
- ISO 5211 mounting flange
- Forged Steel components
- Handle with locking device
- End Connection: Threaded, Socket weld, Butt weld

**Body**
- ASTM A105 / F316

**Ball / Stem**
- SS 316

**Seat**
- RTFE (15% glass fiber filled)

**Working pressure**
- 1500 psi  (PN 100)

**Temperature Range**
- -4 to 356 °F (-20 to 180 °C)

- **V-755FS** • Full Bore • 1/2” – 2” (DN15-DN50)
- **V-755FSA** • Reduced Bore • 1/2” – 2” (DN15-DN50)

### HPV-43FS

**API 607 6th / ISO 10497-5 / BS 6755 Part II**

**Design Feature**
- ANSI B16.34 Class 2500 design
- Blow-out proof stem
- Anti-static design
- ISO 5211 mounting flange
- ANSI B16.10 Class 1500/2500
- ANSI B16.5 Class 1500/2500 RTJ

**Body**
- AISI1025 / AISI316 ( bar material )

**Ball / Stem**
- CF8M / 17-4PH

**Seat**
- Delrin / Peek

**Temperature Range**
- -4 to 176°F (-20 to 80 °C) for Delrin
- -4 to 500°F (-20 to 260 °C) for PEEK

- **HPV-43FS-1500** • Full Bore • 1/2” – 2” (DN15-DN50)
- **HPV-43FSA** • Reduced Bore • 1/2” – 2” (DN15-DN50)

### HPV-40FS

**API 607 5th / ISO 10497-5 / BS 6755 Part II**

**Design Feature**
- ANSI B16.34 Class 1500 design
- Blow-out proof stem
- Anti-static design
- ISO 5211 mounting flange
- End Connection: Threaded, Socket weld, Butt weld

**Body**
- ASTM A105 / F316

**Ball / Stem**
- SS 316

**Seat**
- RTFE (15% glass fiber filled)

**Working pressure**
- 1500 psi  (PN 100)

**Temperature Range**
- -4 to 356 °F (-20 to 180 °C)

- **HPV-40FS** • 3600 Psi • Full Bore • 1/4” – 2” (DN8 - DN50)
- **HPV-40FSA** • 3600 Psi • Reduced Bore • 1/4” – 2” (DN8 - DN50)

### HPV-41FS

**API 607 6th / ISO 10497-5 / BS 6755 Part II**

**Design Feature**
- ANSI B16.34 Class 2500 design
- Blow-out proof stem
- Anti-static design
- ISO 5211 mounting flange
- End Connection: Threaded, Socket weld, Butt weld

**Body**
- AISI1025 / AISI316 ( bar material )

**Ball / Stem**
- CF8M / 17-4PH

**Seat**
- Delrin / Peek

**Temperature Range**
- -4 to 176°F (-20 to 80 °C) for Delrin
- -4 to 500°F (-20 to 260 °C) for PEEK

- **HPV-41FS** • 6000 Psi • Full Bore • 1/4” – 2” (DN8 - DN50)
- **HPV-41FSA** • 6000 Psi • Reduced Bore • 1/4” – 2” (DN8 - DN50)
The purpose

During fire hazard, overheated pipeline or similar situation, the valve should be closed to prevent or hinder the flammable fluid (liquid, gas or gases formed from liquid phase) from passing for a given period of time. Where any leakage occurs, the leakage rate should be controlled at an allowable quantity.

Design

Seats/Ball interface the seat is designed with a lip which secures the metal to metal seating once the soft seal insert is melting down. Valves become trunnion mounted and as such at low pressure, the contact seat/ball is helped by springs. When working at high pressure, the pressure keeps the upstream seat in contact with the ball. To avoid external leakage, all sealing areas (body seal, stem packing) or a secondary sealing system, mostly graphite must be provided for this purpose.

Industry Applied

Chemical, Petrochemical, Oil & Gas, paraffin/ Kerosene, Emergency cut-off valves

Medium / fluid

Flammable gas, liquid, chemical products, solvent, fuel material, hot coal