Spring Loaded Detector Check Valves
Sizes 3", 4", 6", 8" and 10"

Features

APPLICATIONS: For installation in commercial fire lines, or any water supply system to detect leakage or unauthorized use. Designed for horizontal or vertical installation.

CONFORMANCE TO STANDARDS: UL, ULC listed; FM approved; NSF-61 Compliant.

DESCRIPTION: HERSEY Model EDC IV Check Valves consist of a spring loaded main check valve (available with optional trim kit and bypass meter). The Model EDC IV prevents water from re-entering the potable water system, while detecting leaks in the fire sprinkler system or unauthorized use of sprinkler system water when the optional separate EDC4 bypass is installed. All operating parts of the spring and clapper mechanism are attached to the cover for easy removal and maintenance. For safety, full spring tension is not achieved until the cover is bolted to the body. Spring mechanism provides for low headloss during fire conditions.

The separate standardized bypass is comprised of a shut off valve and swing check with the appropriate 5/8" X 3/4" bypass meter meter ordered as separate line items. Call Mueller Systems customer service for additional information related to bypasses and meter choices. The mainline valve and check on the bypass prevent loss of water from the system. Closing the inlet shutoff valve permits in-line servicing of the bypass meter while the mainline remains in service.

Solid state remote reading systems are available for all meters offered with the Model EDC IV (See Reading Systems Section).

OPERATION: With the mainline valve held closed by the spring, any low flow will be directed through the bypass and measured by the bypass meter. When the pressure loss through the bypass is approximately 2.0 PSI, the mainline valve opens automatically, allowing unrestricted flow.

END CONNECTIONS: Flange x Flange in all sizes.
**Performance**

**Head Loss – 3” & 4”**

![Graph showing Head Loss for 3” & 4”](image)

**Head Loss – 6”**

![Graph showing Head Loss for 6”](image)

**Head Loss – 8”**

![Graph showing Head Loss for 8”](image)

**Head Loss – 10”**

![Graph showing Head Loss for 10”](image)

**NOTE:** Performance curves are typical only and NOT a guarantee of performance.

---

**Dimensions**

CF and DF refer to Flanged; CG and DG refer to Grooved

<table>
<thead>
<tr>
<th>Valve Size</th>
<th>3&quot;</th>
<th>4&quot;</th>
<th>6&quot;</th>
<th>8&quot;</th>
<th>10&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flanged Ends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>15.00</td>
<td>15.00</td>
<td>21.00</td>
<td>25.00</td>
<td>28.75</td>
</tr>
<tr>
<td>B</td>
<td>11.00</td>
<td>11.00</td>
<td>16.00</td>
<td>19.62</td>
<td>22.69</td>
</tr>
<tr>
<td>CF</td>
<td>12.94</td>
<td>13.31</td>
<td>17.25</td>
<td>21.00</td>
<td>25.62</td>
</tr>
<tr>
<td>DF</td>
<td>7.50</td>
<td>9.00</td>
<td>11.00</td>
<td>13.50</td>
<td>16.00</td>
</tr>
<tr>
<td>E</td>
<td>.75 NPT</td>
<td>.75 NPT</td>
<td>.75NPT</td>
<td>.75NPT</td>
<td>1.5NPT</td>
</tr>
<tr>
<td>F</td>
<td>5.25</td>
<td>5.25</td>
<td>8.00</td>
<td>11.50</td>
<td>18.00</td>
</tr>
<tr>
<td>G</td>
<td>8.56</td>
<td>8.56</td>
<td>9.69</td>
<td>11.00</td>
<td>16.50</td>
</tr>
<tr>
<td>H</td>
<td>14.90</td>
<td>15.12</td>
<td>17.25</td>
<td>20.31</td>
<td>30.25</td>
</tr>
<tr>
<td>Weight</td>
<td>70.00</td>
<td>79.25</td>
<td>166.50</td>
<td>318.00</td>
<td>501.00</td>
</tr>
</tbody>
</table>

---

**Model EDC IV**

Spring Loaded Detector Check Valves
Sizes 3”, 4”, 6”, 8” and 10”
Model EDCIV

Spring Loaded Detector Check Valves
Sizes 3", 4", 6", 8" and 10"

Parts Less Bypass Meter

Model EDC IV Parts
## Model EDC IV Parts

### Ref. No. | Description | 3" Model | 4" Model | 6" Model | 8" Model | 10" Model
--- | --- | --- | --- | --- | --- | ---
1 | Body - Flange x Flange with Epoxy | N/A | N/A | N/A | N/A | N/A
   | Body - Flange x Flange with Red Paint | N/A | N/A | N/A | N/A | N/A
2 | Cover - with Epoxy | N/A | N/A | N/A | N/A | N/A
   | Cover - with Red Paint | N/A | N/A | N/A | N/A | N/A
3 | Cover O-ring | AS7612 | AS7612 | AS7613 | AS7614 | AS7615
4 | Nylon Washer | 59073 (2) | 59073 (2) | 59073 (2) | 59073 (2) | 59073 (2)
5 | Vent Screw | 59003 | 59003 | 59003 | 59003 | 59003
6 | Eye Bolt | AS7733 | AS7733 | AS7731 | AS7731 | AS7731
7 | Cover Bracket | B7868 | B7868 | C5736 | C5726 | C5749
8 | Cover Bracket Cap Screw | AS7621 (3) | AS7621 (3) | AS7622 (3) | AS7623 (3) | AS7623 (3)
9 | Cover Bracket Spring Lock Washer | AS7651 (3) | AS7651 (3) | AS7653 (3) | AS7654 (3) | AS7654 (3)
10A | Pin | A127241 | A127241 | A127041 | A127011 (2) | A127201
10B | Pin | - | - | - | - | A127202
11A | Retaining Ring | AS7681 (8) | AS7681 (8) | AS7682 (10) | AS7683 (10) | AS7684 (6)
11B | Retaining Ring | - | - | - | - | AS7683 (4)
12 | Groove Pin | AS7641 (2) | AS7641 (2) | AS7642 (2) | AS7643 (2) | AS7643 (2)
13 | Cap Screw | AS4822 (5) | AS4822 (5) | AS48226 (8) | AS48227 (8) | AS48229 (10)
14 | Seat | B7939 | B7939 | B7942 | B7944 | B8018
15A | Clapper Only | B78661 | B78661 | B78861 | C57281 | C57471
15B | Clapper Assembly (includes Clapper, Links, Spring Assembly, Cover Bracket, Swing Arm,Tube, Bar and Screws, Nuts, Pins) | E20843 | E20843 | E20153 | E20093 | E20213
16 | Clapper Hex. Nut | AS7631 | AS7631 | AS7632 | AS7633 | AS7634
17 | Clapper Spring Lock Washer | AS7651 | AS7651 | AS7655 | AS7656 | AS7657
18 | Bar Nut | - | - | A12738 | A12742 | A12723
19 | Lower Link | B79221 (2) | B79221 (2) | B78831 (2) | B78791 (2) | B78991 (2)
20A | Pin | A12724 | A12724 | A127042 | A127012 | A127203
20B | Pin | A12722 | A12722 | - | - | -
21 | Bypass Plug | 103131005 (4) | 103131005 (4) | 103131005 (4) | 103131005 (4) | 103131008 (4)
22 | Spring Assembly | B7871 (2) | B7871 (2) | B7891 (2) | B7880 (2) | B7902 (2)
23 | Tube | - | - | A12736 | A12741 | A12777
24 | Bar | - | - | A12737 | A12740 | A12722
25 | Bar Screw | - | - | AS7624 | AS7625 | AS7627
26A | Bar Screw Lock Washer | - | - | AS7855 | AS7653 | AS7654
26B | Bar Screw Flat Washer | - | - | AS7792 | N/A | AS7794
27 | Upper Link | B79223 (2) | B79223 (2) | B78832 (2) | B78792 (2) | B78992 (2)
28 | Swing Arm | C5712 | C5712 | C5737 | C5725 | C5749

©2016, Mueller Systems, LLC. All rights reserved. Mueller Systems, LLC is a Mueller Water Products, Inc. company. All trademarks referenced herein are the property of Mueller Water Products, Inc., or an affiliate, unless specified otherwise.

REV 10/27/2016