Ball Type Duplex Basket Strainer

Model 53BTX

- Sizes 3/4" to 4"
- Iron, bronze, carbon steel or stainless steel
- Threaded or flanged

Unique diverter cartridge assures leak-tight isolation of basket chamber during cleaning.

A double sealing system on the upper and lower stems guards against any possible leakage. If service becomes necessary, just remove four bolts and the cartridge slides right out the top of the strainer body.

Features
- Dynamic sealing design for long life
- Easy-to-operate lever handle—no gear box required
- Unique seat and seal design requires no adjustments
- Teflon® seats for longer service life
- Foot pads for rock solid installation
- Double-stem O-rings for positive sealing
- Easy to access body vent valve
- Drain plugs in each basket cover
- Piston seal strainer basket cover
- Easy access for diverter cartridge removal
- 316 stainless steel ball design
- American Bureau of Shipping (ABS) Type Approved for ship designers, builders and owners

Teflon® and Viton® are registered trademarks of E. I. du Pont de Nemours and company. MONEL® is a registered trademark of Special Metals Corporation group of Companies. HASTELLOY® is a registered trademark of Haynes International Inc.

Continuous operation
The Eaton Model 53BTX duplex basket strainer can operate continuously, eliminating the need to shut down processes for cleaning of strainers. When the first basket is full, a unique flow diverter cartridge shifts flow to a second basket to permit removal and cleaning with no interruption to operations.

Draining this chamber is easy; the cover lifts and swings clear of the chamber opening with no special tools required. The unique flow diverter cartridge prevents fluid bypass into the out-of-service chamber. It features a dynamic sealing system that ensures exceptionally long seat life and positive sealing. Manual internal or external ball support adjustments are not necessary.

Easy basket servicing
One drain plug is on each side of the housing. Additionally, an easy to access vent valve is in the cover. Standard foot mounting pads ensure a rock solid installation no matter where the strainer operates.

Available options include:
- Differential pressure gauges, with or without switches
- Magnetic separators installed in the strainer basket for removing fine ferrous particulate matter from the process media

Size and material
The compact, low-profile Model 53BTX fits into spaces ordinary strainers may not, yet it still uses full-size strainer baskets with a low-pressure drop performance. Eaton offers basket openings from 3/4" down to 45 microns. Type 316 stainless steel is standard and MONEL® or HASTELLOY® C materials are optional.
Model 53BTX Ball Type Duplex Basket Strainer

**Selection table**

<table>
<thead>
<tr>
<th>Size</th>
<th>Body &amp; cartridge material</th>
<th>End connection</th>
<th>Seat/Seal</th>
<th>Diverter balls</th>
<th>Pressure rating @ 150°F (65°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>¾&quot;</td>
<td>Iron</td>
<td>Threaded</td>
<td>TFE/Buna-N*</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>Bronze</td>
<td>Threaded</td>
<td>TFE/Buna-N*</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>Carbon steel</td>
<td>Threaded</td>
<td>TFE/Buna-N*</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
</tr>
<tr>
<td>⅜&quot;</td>
<td>Stainless steel</td>
<td>Threaded</td>
<td>TFE/Viton®</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
</tr>
<tr>
<td>1&quot;</td>
<td>Iron Flanged 125#</td>
<td>TFE/Buna-N*</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>Bronze Flanged 150#</td>
<td>TFE/Buna-N*</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>Carbon steel Flanged 150#</td>
<td>TFE/Buna-N*</td>
<td>Stainless steel</td>
<td>200 psi (13.8 bar)</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>Stainless steel Flanged 150#</td>
<td>TFE/Viton Stainless steel</td>
<td>200 psi (13.8 bar)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Viton standard for SS31, optional for iron, bronze and carbon steel.


<table>
<thead>
<tr>
<th>Size</th>
<th>Value</th>
<th>Size</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>⅜&quot;</td>
<td>13.8</td>
<td>2&quot;</td>
<td>42.2</td>
</tr>
<tr>
<td>1&quot;</td>
<td>13</td>
<td>2-1/2&quot;</td>
<td>65.0</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>18</td>
<td>3&quot;</td>
<td>110.0</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>25</td>
<td>4&quot;</td>
<td>175.0</td>
</tr>
</tbody>
</table>

* For water with clean, perforated basket.

**Dimensions (in/mm)**

- **Pipe size**: AF, AT, C, E, F, G, H, J, K, L
- **Weight**: Iron threaded (lb/kg), Flanged (lb/kg), Bronze threaded (lb/kg), Carbon & SS threaded (lb/kg)

**Dimensions and weigts are for reference only. Contact Eaton for certified drawings.**

- Pressure equalizing valve and piping standard on 4" Model 53BTX duplex strainers.

---

**For more information, please email us at filtration@eaton.com or visit www.eaton.com/filtration**

© 2014 Eaton. All rights reserved. All trademarks and registered trademarks are the property of their respective owners. All information and recommendations appearing in this brochure concerning the use of products described herein are based on tests believed to be reliable. However, it is the user’s responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Eaton as to the effects of such use or the results to be obtained. Eaton assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.