APV Paraflow Plate Heat Exchangers

FOR SANITARY APPLICATIONS
### APV Plate Heat Exchangers

**For Sanitary Applications**

SPX provides an unmatched range of sanitary plate heat exchangers that feature:

- 3A and FDA compliance
- Optimum run time
- DuoSafety system
- Manual or hydraulic closure
- Designed for ease of inspection and cleaning
- Efficient operation
- Compact size
- Durable construction
- Frame longevity
- Flexible configurations
- High and low-leg designs available

SPX offers innovative plate designs to match your requirements, including:

- Gasket attachment options
  - Glue free
  - Glued: FDA compliant heat cured for optimum bond
- An APV specialist will help you determine which method is most suitable for your specific application.
- Both parallel and, for tougher applications, diagonal flow
- Wide variety of plate configurations available
- Unique design ensures easy cleanability

### Benefit From Our Experience

If you’re in the market for a sanitary plate heat exchanger, look no further than SPX. Throughout our history, we’ve dedicated ourselves to the dairy, food, beverage and pharmaceutical industries. We draw on our extensive knowledge base to customize solutions for your unique application. Whether you are looking to maximize heat recovery, optimize run time or improve product quality, SPX will deliver the latest innovations to help you achieve your process objectives.

SPX provides advanced APV heat transfer solutions for cooling, heating, condensing and evaporation of process fluids - designed to solve heat transfer process challenges in a vast array of industries. They are designed to meet demanding process conditions and to optimize the utilisation of energy. APV heat transfer solutions have proven reliable and highly efficient helping customers worldwide to run their processes safely and economically. Dedicated and specialized SPX staff around the world is committed to design and provide efficient and durable heat transfer solutions to help customers optimize energy utilization and minimize downtime for improved profitability.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CONNECTION DIAMETER</th>
<th>MAX. GPM (LP/H)</th>
<th>MAX. ACTIVE AREA</th>
<th>MAX. HEIGHT</th>
<th>MAX. WIDTH</th>
<th>MAX. LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR1 R-12</td>
<td>1.5” (38.1)</td>
<td>125 (473.18)</td>
<td>0.92 (0.28)</td>
<td>43” (1,092.2)</td>
<td>18” (457.2)</td>
<td>37” (939.8)</td>
</tr>
<tr>
<td>SR11</td>
<td>1.5” (38.1)</td>
<td>125 (473.18)</td>
<td>0.92 (0.28)</td>
<td>37” (939.8)</td>
<td>11” (279.4)</td>
<td>69” (1,752.6)</td>
</tr>
<tr>
<td>VEGA V017 R-14</td>
<td>2.5” (63.5)</td>
<td>300 (1,135.62)</td>
<td>1.85 (0.56)</td>
<td>65” (1,651)</td>
<td>24” (609.6)</td>
<td>76” (1,930.4)</td>
</tr>
<tr>
<td>VEGA V028 R-10</td>
<td>2.5” (63.5)</td>
<td>300 (1,135.62)</td>
<td>2.96 (0.90)</td>
<td>87” (2,209.8)</td>
<td>28” (711.2)</td>
<td>138” (3,505.2)</td>
</tr>
<tr>
<td>VEGA V028 R-16</td>
<td>2.5” (63.5)</td>
<td>300 (1,135.62)</td>
<td>2.96 (0.90)</td>
<td>87” (2,209.8)</td>
<td>29” (736.6)</td>
<td>138” (3,505.2)</td>
</tr>
<tr>
<td>VEGA V028 B-13</td>
<td>2.5” (63.5)</td>
<td>300 (1,135.62)</td>
<td>2.96 (0.90)</td>
<td>93” (2,362.2)</td>
<td>36” (914.4)</td>
<td>168” (4,267.2)</td>
</tr>
<tr>
<td>NRS R-15</td>
<td>4” (101.6)</td>
<td>800 (3,028.33)</td>
<td>5.84 (1.78)</td>
<td>112” (2,844.8)</td>
<td>38” (965.2)</td>
<td>231” (5,867.4)</td>
</tr>
<tr>
<td>NRS1T</td>
<td>4” (101.6)</td>
<td>800 (3,028.33)</td>
<td>5.84 (1.78)</td>
<td>106” (2,692.4)</td>
<td>36” (914.4)</td>
<td>205” (5,207)</td>
</tr>
<tr>
<td>NRS G-15 Quad Drive</td>
<td>4” (101.6)</td>
<td>800 (3,028.33)</td>
<td>5.84 (1.78)</td>
<td>116” (2,946.4)</td>
<td>41” (1,041.4)</td>
<td>348” (8,839.2)</td>
</tr>
<tr>
<td>SR6GLSH</td>
<td>4” (101.6)</td>
<td>800 (3,028.33)</td>
<td>6 (1.83)</td>
<td>91” (2,311.4)</td>
<td>36” (914.4)</td>
<td>142” (3,606.8)</td>
</tr>
</tbody>
</table>
UPGRADE OPTIONS

Frames
The innovative NR5 Quad Drive and Vega V028 Binary Drive PHE’s can now be supplied for manual plate pack compression. This gives the opportunity of a lower initial investment. Effortless upgrade to automatic opening and closing is possible even while the process is running.

Plates
The novel NR5 plates will fit in all installed R5 frames to enhance for example energy recovery in regenerators. The ER5 Freeflow plates fit in all R5 or NR5 frames for an improved handling of products with suspended solids. The novel Vega V017 plate fits in all SR2 frames and features enhanced process runtime capability relative to the SR2 plates.

SPX OFFERS INNOVATIVE PLATE DESIGNS TO MATCH YOUR REQUIREMENTS, INCLUDING:

ER5 FreeFlow Plate
The ER5 is tailored for processing liquids with suspended material. With 90% fewer contact points than standard plates, the ER5 provides clear passage of products with less risk of pulp or fiber hang-up. ER5 fits all R5 and NR5 frames.

NR5 EasyFlow Plate
The plate design of the NR5 EasyFlow is quite unique. Classic diagonal flow with naturally superior distribution means an increase in heat transfer and a reduction in CIP time. The plates equipped with Easyclip gaskets allow rapid replacement without glue and the ConerLock interlocking system secures correct plate alignment adding resistance against plate damage. Contact points per area are always looked upon with great interest - especially by manufacturers of products containing fibers/solids. Again, the NR5 stands out. Only 174 contact points/ft² versus 400+ on traditional hygienic plates. EasyFlow plates fit into all R5 frames and vice versa.

Vega EasyFlow Plate (V017 and V028)
The Vega is ideally suited for a broad range of food processing duties where there is a tendency for the product to foul the heated surface or where large temperature induced viscosity changes are likely to occur. Vega V017 EasyFlow plates fit all SR2 frames.

Typical sanitary product applications

- Baby food
- Beer
- Broth/gravies
- Cream
- Culture media
- Evaporated milk
- Formula
- Ice cream mix
- Juices
- Juice concentrates
- Margarine
- Sauces
- Soft drinks
- Soy milk
- Sterile water
- Table syrup
- Tea
- Tomato products
- Vegetable oil
- Whey
- Wine
- Milk
- Yogurt

START BENEFITING TODAY
APV plate heat exchangers offer all the benefits you need to improve your process profitability.

- Multiple duties in a single frame
- Highly efficient design maximizes regeneration during heating and cooling
- Computer aided design tools that allow configurations to optimize process run-time

SPX’s experienced engineers will work with you every step of the way, from system design to implementation, to ensure you get the solution that best meets the needs of your process.

To learn more about how SPX can help you improve the profitability of your process, call us today.
Global locations

**SPX FLOW TECHNOLOGY**
1200 West Ash Street
PO. Box 1718
Goldsboro, NC 27533-1718
USA
T: +1 (919) 735-4570
F: +1 (919) 731-5498
E-mail: answers.us@spx.com

**SPX FLOW TECHNOLOGY**
Platinvej 8
6000 Kolding
Denmark
T: +45 70 278 444
F: +45 70 278 445
E-mail: apv.emea.heat@spx.com

**SPX FLOW TECHNOLOGY**
666 Fengjin Road,
Xidu Industrial Park,
Fengxian,
PR. China.
Tel:  +86 21 67158181
Fax:  +86 21 67158282

---

**ABOUT SPX**
Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader. For more information, please visit www.spx.com.

**SPX FLOW TECHNOLOGY**
105 CrossPoint Parkway
Getzville, NY 14068 USA
P: +1 (800) 462-6893
F: +1 (716) 692-1715
E: answers.us@spx.com

SPX reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit www.spx.com.

The green "*" is a trademark of SPX Corporation, Inc.

ISSUED 12/2012    1103-01-08-2008-US
COPYRIGHT © 2012 SPX Corporation