**Description**

The APV Sirius® is a new, high-capacity plate heat exchanger for large-scale process or seawater cooling, for example in large-scale power plants, oil & gas processing facilities, and petrochemical process plants.

Extremely high cooling capacity, high thermal efficiency and flexible design options combine to deliver a highly efficient and cost-effective solution with reduced capital investment and service costs.

The new APV Sirius® range is the first of a longer line of new high-capacity plate heat exchanger offerings to meet the need for high cooling capacity and thermal efficiency in large flow applications.

**Application**

The APV Sirius® is designed for very large flow applications and is used for process handling and/or utility site cooling services, typically cooling of secondary circuit cooling water – both freshwater and seawater – from approx. 40°C to 30 °C (86°F to 104°F).

**Product features and benefits**

The flexible design options include four plate sizes, one plate design and three plate patterns and various plate widths, thus meeting most customer requirements for large flow and high cooling and heating capacity. APV Sirius® high-capacity plate heat exchangers offer a number of important benefits including:

**Highest cooling capacity**

The APV Sirius® has the largest practically installed heat transfer area per m² for a given duty. High cooling capacity and a porthole size Ø>500 mm enabling high flow rates with minimum pressure loss mean that the APV Sirius® offers the highest cooling capacity on the market.

**Huge power, small footprints**

High cooling capacity enables customers to reduce capital investment, installation and service and maintenance costs by employing fewer plate heat exchangers for a given cooling application.

**Flexible configuration**

A flexible and cost-effective design with various combinations of plate sizes, design, and patterns means that the APV Sirius® can be optimized to meet the vast majority of technical customer requirements with regard to flow, pressure and thermal parameters using a minimum of material.

**High thermal efficiency**

High thermal efficiency is achieved by a combination of several features. Minimum pressure loss, as well as special plate and connection designs, ensures optimum distribution of media across the plate to provide high heat transfer efficiency and less fouling build-up, thus extending service frequency.

**Maximum service efficiency and workplace safety**

Service tools including compression tool and a specially designed hoist kit enable easy and safe dismantling of the APV Sirius® heat exchanger. This ensures maximum service efficiency and workplace safety.

The APV Sirius® also employs the special “Bubble lock” plate alignment system for easy and correct re-assembly of the plate pack.
**APV Sirius®**

### Technical Specifications

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<thead>
<tr>
<th></th>
<th>S190</th>
<th>S280</th>
<th>S330</th>
<th>S380</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Height (mm)</strong></td>
<td>3081</td>
<td>3725</td>
<td>4070</td>
<td>4415</td>
</tr>
<tr>
<td><strong>Width (mm)</strong></td>
<td>1446 MM</td>
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<tr>
<td><strong>Porthole</strong></td>
<td>500 MM</td>
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</table>

#### Technical Specifications

- **Plate Material:** AISI 316L, Titanium
- **Gasket Material:** NBR PER, EPDM PER
- **Design Pressure:** 10 BAR, 16 BAR, 150 PSI
- **Design Temperature:** Max. 150°C, 302°F
- **Max. Design Pressure:** 16 BAR, 232 PSI
- **Approvals:** PED, ASME