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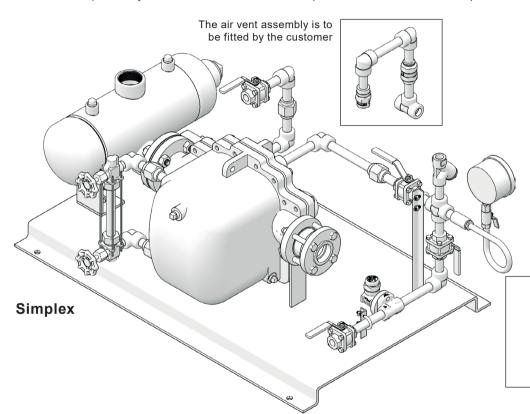
# APT Pump Packages APT10, APT14, APT14HC and APT14SHC Series

#### Description

The compact low profile modular pump/trap system consists of the versatile APT10, APT14, APT14HC and APT14SHC Automatic Pumping Trap pre-piped and mounted on a steel base.

The simplex or duplex modules include a condensate reservoir sized to accommodate the pump cycles.

The module requires only service field connections for complete installation and fast startup.



#### Typical applications

The APT pump/trap modules are used where low profile and high capacity condensate removal is required.

The APT Pump Trap has the features of a conventional F&T trap combined with a pressure powered pump all in one unit.

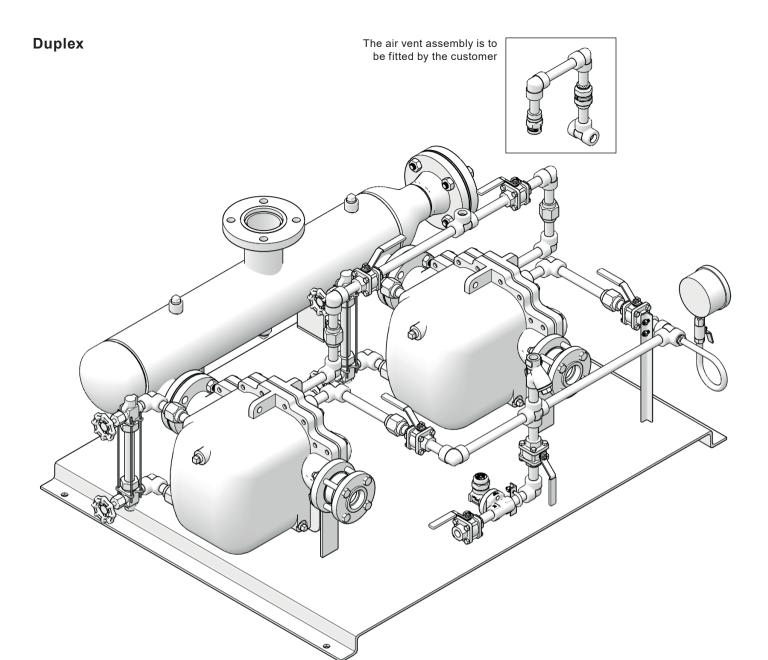
- Air handlers
- Heat exchangers
- Absorption chillers
- Evaporators
- Dryers

A duplex example is shown on page 2

#### Standard features

- Spirax Sarco non-electric APT10, APT14, APT14HC and APT14SHC Automatic Pump Trap
- Simplex or Duplex units
- Motive steam drip station with Spirax Sarco UTD52L trap, isolation valves and air vent
- Hydrotested and coated with SSI industrial enamel
- Fabricated by ASME Section IX certified welders
- Completely assembled modular pumping system on platform steel base with all connections protected for shipping

#### Additional options are available



#### Suggested specifications

- Furnish and install where shown on plans, Spirax Sarco Inc. model SPT10 Pressure powered pump/trap system.
- The system shall be a complete pre-piped factory package requiring only service connections for a fully functional system.
- Electricity shall not be required for system operation

### APT10

- The Pump/Trap shall be constructed of Ductile Iron with an allowable operating pressure of 65 psi g.
- The Pump/Trap shall be a unified system with stainless steel mechanism and no external glands or seals. Individual pump and trap systems will not be acceptable
- The package shall be sized to meet (or exceed) the actual required condensate system load.
- The package shall include a structural steel platform skid and painted with 1 coat enamel.
- 3000# fittings with threaded pipe connections included wherever possible.

|          | <ul> <li>Furnish and install where shown on plans, Spirax Sarco Inc. model SPT4/DPT4 - Pressure powered pump/<br/>trap system.</li> </ul>  |  |  |
|----------|--|--|--|
|          | <ul> <li>The system shall be a complete pre-piped factory package requiring only service connections for a fully<br/>functional system.</li> </ul>   |  |  |
|          | Electricity shall not be required for system operation   |  |  |
| APT14    | - The Pump/Trap shall be constructed of Ductile Iron with an allowable working pressure of no less than 200 psi g.   |  |  |
|          | <ul> <li>The Pump/Trap shall be a unified system with stainless steel mechanism and no external glands or seals.</li> <li>Individual pump and trap systems will not be acceptable</li> </ul> |  |  |
|          | The package shall be sized to meet (or exceed) the actual required condensate system load.   |  |  |
|          | The package shall include a structural steel platform skid and painted with 1 coat enamel.   |  |  |
|          | - 3000# fittings with threaded pipe connections included wherever possible.  |  |  |
| АРТ14НС  | <ul> <li>Furnish and install where shown on plans, Spirax Sarco Inc. model SPT4HC/DPT4HC- Pressure powered pump/<br/>trap system.</li> </ul>   |  |  |
|          | <ul> <li>The system shall be a complete pre-piped factory package requiring only service connections for a fully<br/>functional system.</li> </ul>   |  |  |
|          | - Electricity shall not be required for system operation   |  |  |
|          | - The Pump/Trap shall be constructed of Ductile Iron with an allowable working pressure of no less than 200 psi g.   |  |  |
|          | <ul> <li>The Pump/Trap shall be a unified system with stainless steel mechanism and no external glands or seals.</li> <li>Individual pump and trap systems will not be acceptable</li> </ul> |  |  |
|          | The package shall be sized to meet (or exceed) the actual required condensate system load.   |  |  |
|          | The package shall include a structural steel platform skid and painted with 1 coat enamel.   |  |  |
|          | - 3000# fittings with threaded pipe connections included wherever possible.  |  |  |
| APT14SHC | <ul> <li>Furnish and install where shown on plans, Spirax Sarco Inc. model SPT4SHC- Pressure powered pump/<br/>trap system.</li> </ul>   |  |  |
|          | <ul> <li>The system shall be a complete pre-piped factory package requiring only service connections for a fully<br/>functional system.</li> </ul>   |  |  |
|          | Electricity shall not be required for system operation   |  |  |
|          | - The Pump/Trap shall be constructed of Ductile Iron with an allowable working pressure of no less than 200 ps   |  |  |
|          | <ul> <li>The Pump/Trap shall be a unified system with stainless steel mechanism and no external glands or seals.</li> <li>Individual pump and trap systems will not be acceptable</li> </ul> |  |  |
|          | - The package shall be sized to meet (or exceed) the actual required condensate system load.   |  |  |
|          | The package shall include a structural steel platform skid and painted with 1 coat enamel.   |  |  |
|          | - 3000# fittings with socket weld pipe connections included wherever possible.   |  |  |
|          | <ul> <li>Valves greater than 1" to be carbon steel ANSI 150 flanged. Valves smaller than 1" to be 800# forged steel socket weld.</li> </ul>  |  |  |

# **Typical construction**

| APT10   | Model                    | SPT10   |
|---------|--------------------------|---|
|         | PMO – Motive pressure    | 65 psi g  |
|         | Design pressure (PMA)    | 145 psi g @ 392°F   |
|         | Design temperature (TMA) | 392 °F  |
|         | Capacity range *         | Trap mode - max 2022 lb/hr<br>Pump mode - max 1420 lb/hr  |
|         | Hydrotest pressure       | 100 psi g   |
|         | Construction materials   | Receiver vessel - Fabricated steel APT 10-4.5 - See SSI Technical sheets TI-5-2301-US Valves - NPT Threaded Carbon Steel Ball Valves Piping: 2" and under Sch 80 >2" Sch 40 |
|         | Dimensions and weight    | See SSI sales drawings  |
| APT14   | Model                    | SPT4/DPT4   |
|         | PMO                      | 200 psi g   |
|         | Design pressure (PMA)    | 232 psig @ 248 °F   |
|         | Design temperature (TMA) | 482 °F  |
|         | Capacity range **        | Trap mode - max 8800 lb/hr<br>Pump mode - max 2420 lb/hr  |
|         | Hydrotest pressure       | 300 psi g   |
|         | Construction materials   | Receiver vessel - Fabricated steel APT14 - See SSI Technical sheets TI-5-228-US Valves - NPT Threaded Carbon Steel Ball Valves Piping: 2" and under Sch 80 >2" Sch 40       |
|         | Dimensions and weight    | See SSI sales drawings  |
| APT14HC | Model                    | SPT4HC/DPT4HC   |
|         | PMO                      | 200 psi g   |
|         | Design pressure (PMA)    | 232 psig @ 248 °F   |
|         | Design temperature (TMA) | 482 °F  |
|         | Capacity range **        | Trap mode - max 19,800 lb/hr<br>Pump mode - max 6160 lb/hr  |
|         | Hydrotest pressure       | 300 psi g   |
|         | Construction materials   | Receiver vessel - Fabricated steel APT 14HC - See SSI Technical sheets TI-5-228-US Valves - NPT Threaded Carbon Steel Ball Valves Piping: 2" and under Sch 80 >2" Sch 40    |
|         | Dimensions and weight    | See SSI sales drawings  |

## Typical construction (continued)

|          | Model                    | SPT4SHC   |
|----------|--------------------------|---|
| APT14SHC | PMO                      | 200 psi g   |
|          | Design pressure (PMA)    | 232 psig @ 248 °F   |
|          | Design temperature (TMA) | 482 °F  |
|          | Capacity range **        | Trap mode - max 19,800 lb/hr<br>Pump mode - max 6160 lb/hr  |
|          | Hydrotest pressure       | 300 psi g   |
|          | Construction materials   | Receiver vessel - Fabricated steel APT 14HC - See SSI Technical sheets TI-5-228-US Valves - ANSI 150 Carbon steel gate valves, 800# forged steel gate valves Piping: 2" and under Sch 80 >2" Sch 40 |
|          | Dimensions and weight    | See SSI sales drawings  |

<sup>\*</sup>Based on 39" installation head, 65 psi g motive steam, 21 psi g back pressure. \*\*Based on 39" installation head, 73 psi g motive steam, 15 psi g back pressure.

**Capacity**For sizing data, see APT Selection and capacity chart TI-5-204-1-US.