



## APT Pump Packages

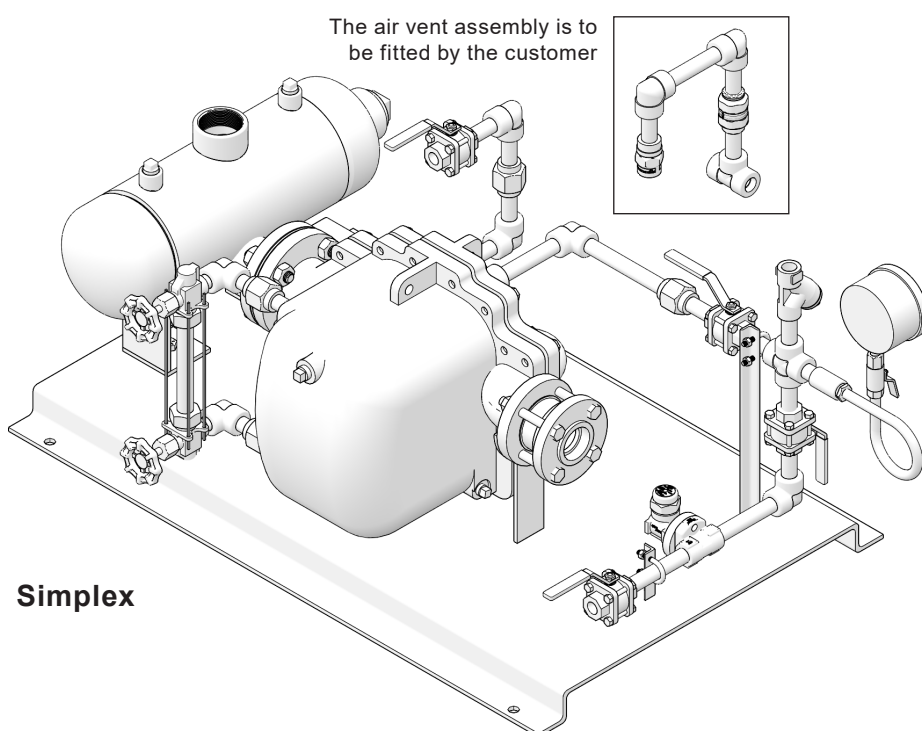
### APT10, APT14, APT14HC and APT14SHC Series

#### 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.



**Simplex**

#### 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

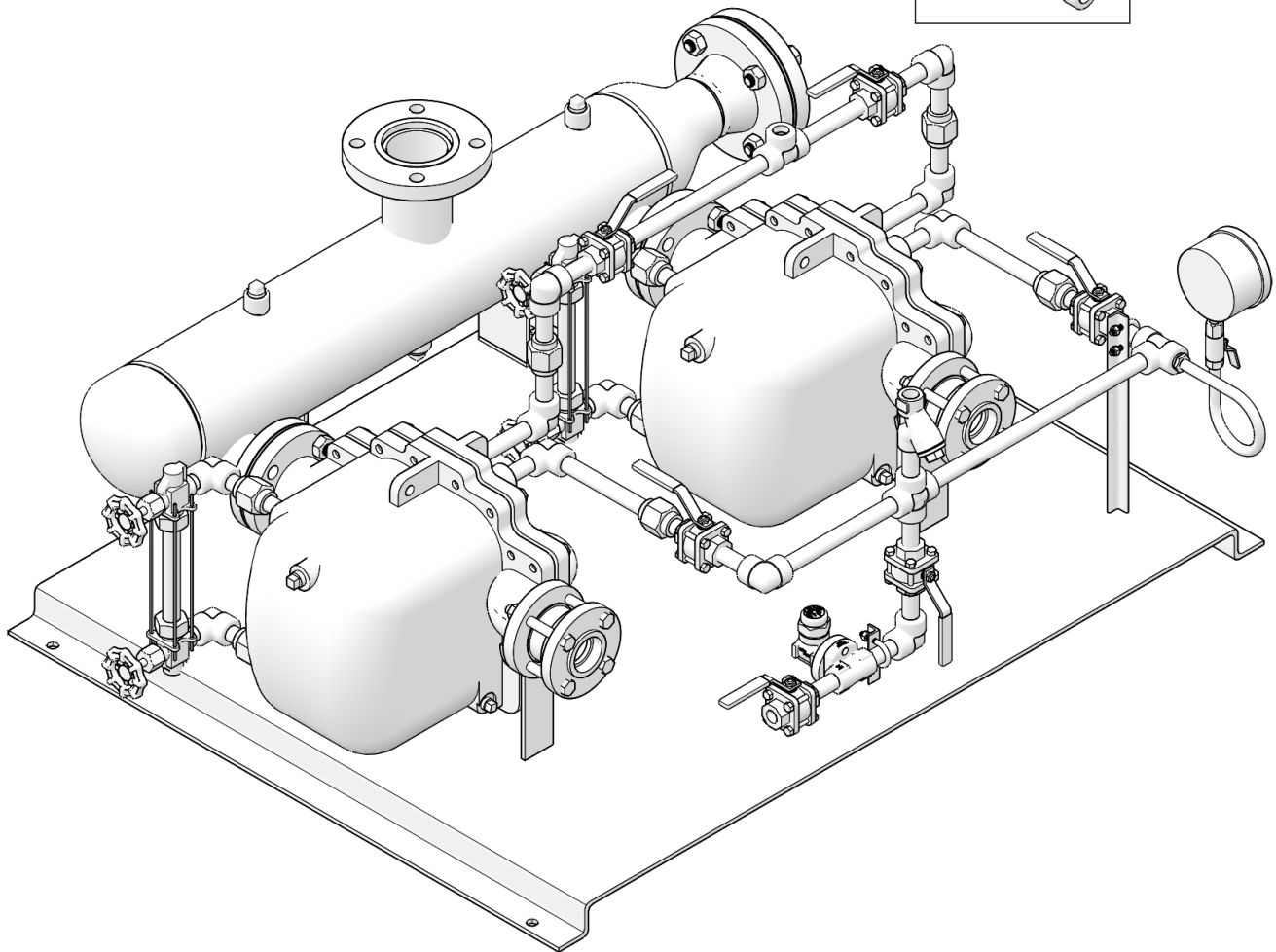
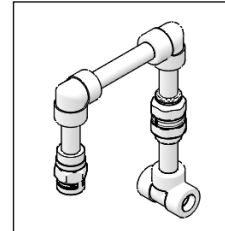
**A duplex example is shown on page 2**

#### 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**

The air vent assembly is to be fitted by the customer



## 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
- The Pump/Trap shall be constructed of Ductile Iron with an allowable operating pressure of 65 psi g (4.48 bar 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.

## APT10

## Suggested specifications (continued)

### APT14

- Furnish and install where shown on plans, Spirax Sarco Inc. model SPT4/DPT4 - 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
- The Pump/Trap shall be constructed of Ductile Iron with an allowable working pressure of no less than 200 psi g (13.8 bar 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.

### APT14HC

- Furnish and install where shown on plans, Spirax Sarco Inc. model SPT4HC/DPT4HC- 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
- The Pump/Trap shall be constructed of Ductile Iron with an allowable working pressure of no less than 200 psi g (13.8 bar 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.

### APT14SHC

- Furnish and install where shown on plans, Spirax Sarco Inc. model SPT4SHC- 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
- The Pump/Trap shall be constructed of Ductile Iron with an allowable working pressure of no less than 200 psi g (13.8 bar 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 socket weld pipe connections included wherever possible.
- Valves greater than 1" to be carbon steel ANSI 150 flanged. Valves smaller than 1" to be 800# forged steel socket weld.

## Typical construction

<b>APT10</b>	<b>Model</b>	<b>SPT10</b>
	PMO – Motive pressure	65 psi g (4.48 bar g)
	Design pressure (PMA)	145 psi g @ 392°F (10 bar g @ 200 °C)
	Design temperature (TMA)	392 °F (200 °C)
	Capacity range *	Trap mode - max 2022 lb/hr (917 kg/hr) Pump mode - max 1420 lb/hr (644 kg/hr)
	Hydrotest pressure	100 psi g (6.89 bar g)
	Construction materials	Receiver vessel - Fabricated steel APT 10-4.5 - See SSI Technical sheets TI-P612-28 Valves - NPT Threaded Carbon Steel Ball Valves Piping: 2" and under Sch 80 >2" Sch 40
	Dimensions and weight	See SSI sales drawings
<b>APT14</b>	<b>Model</b>	<b>SPT4/DPT4</b>
	PMO	200 psi g (13.8 bar g)
	Design pressure (PMA)	232 psi g @ 248 °F (111 bar g @ 120 °C)
	Design temperature (TMA)	482 °F (250 °C)
	Capacity range **	Trap mode - max 8800 lb/hr (3992 kg/hr) Pump mode - max 2420 lb/hr (1098 kg/hr)
	Hydrotest pressure	300 psi g (20.7 bar g)
	Construction materials	Receiver vessel - Fabricated steel APT14 - See SSI Technical sheets TI-P612-02 Valves - NPT Threaded Carbon Steel Ball Valves Piping: 2" and under Sch 80 >2" Sch 40
	Dimensions and weight	See SSI sales drawings
<b>APT14HC</b>	<b>Model</b>	<b>SPT4HC/DPT4HC</b>
	PMO	200 psi g (13.8 bar g)
	Design pressure (PMA)	232 psig @ 248 °F (111 bar g @ 120 °C)
	Design temperature (TMA)	482 °F (250 °C)
	Capacity range **	Trap mode - max 19,800 lb/hr (8981 kg/hr) Pump mode - max 6160 lb/hr (2794 kg/hr)
	Hydrotest pressure	300 psi g (20.7 bar g)
	Construction materials	Receiver vessel - Fabricated steel APT 14HC - See SSI Technical sheets TI-P612-02 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)

<b>APT14SHC</b>	<b>Model</b>	<b>SPT4SHC</b>
	PMO	200 psi g (13.8 bar g)
	Design pressure (PMA)	232 psi g @ 248 °F (111 bar g @ 120 °C)
	Design temperature (TMA)	482 °F (250 °C)
	Capacity range **	Trap mode - max 19,800 lb/hr (8981 kg/hr) Pump mode - max 6160 lb/hr (2794 kg/hr)
	Hydrotest pressure	300 psi g (20.7 bar g)
	Construction materials	Receiver vessel - Fabricated steel APT 14HC - See SSI Technical sheets TI-P612-02 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

\*Based on 39" installation head, 65 psi g (29.5 bar g) motive steam, 21 psi g (9.53 bar g) back pressure.

\*\*Based on 39" installation head, 73 psi g (33.1 bar g) motive steam, 15 psi g (6.80 bar g) back pressure.

## Capacity

For sizing data, see APT Selection and capacity chart TI-S27-02-US.