



Cert. No. LRQ 0963008

ISO 9001

spirax/sarco

TI-P680-01
ST Issue 1

APT10-PPU, APT14-PPU and APT14HC-PPU (Closed System) Automatic Pump-trap Packaged Units

Description

The Spirax Sarco APT10-PPU, APT14-PPU and APT14HC-PPU automatic pump-trap packaged units are plug in systems specifically designed to remove condensate from plant under 'stall' conditions. The whole system is capable of handling capacities up to 2800 kg/h pumping and 9000 kg/h trapping, depending on available differential pressure.

Each unit comes with a condensate receiver, motive supply drain trap and ancillaries and a base with adjustable feet for levelling on uneven surfaces.

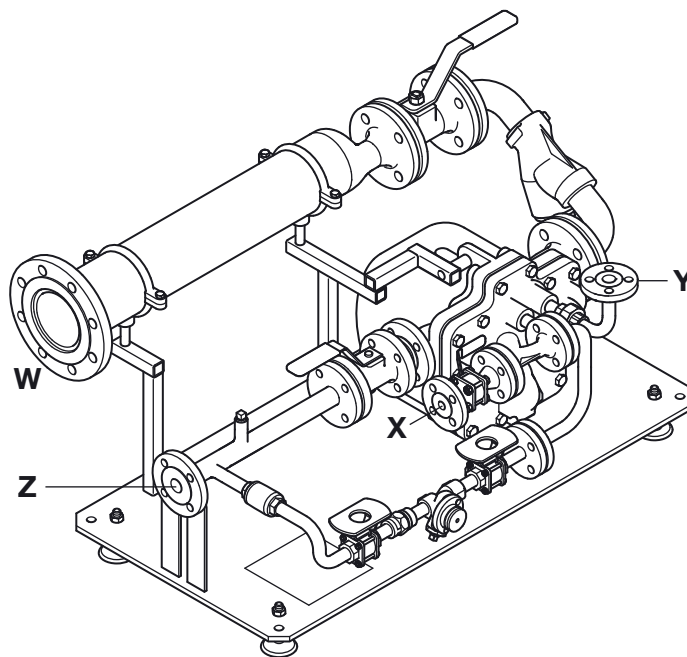
Operated by steam the APT10, APT14 and APT14HC-PPU's meet a wide range of applications. The standard pump-trap is manufactured from SG iron, although electroless nickel plated (ENP) versions are available on request.

Standards

These products fully comply with the requirements of the European Pressure Equipment Directive 97/23/EC and carry the **CE** mark. All welding is in accordance with ASME IX, BS EN 287/288, BS EN part 1-2004 and BS EN ISO 15614 part 1-2004.

Certification

These products are available with a Declaration of Conformity. Other certification is available for individual component parts if required, at extra cost. **Note:** All certification/inspection requirements must be stated at the time of order placement.

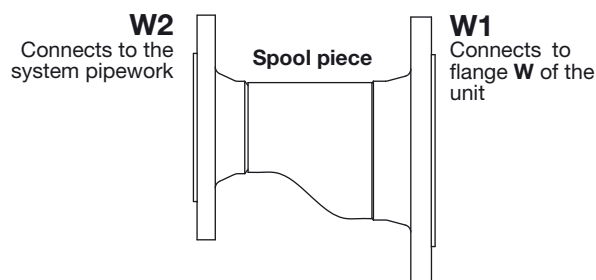


Sizes and pipe connections

Unit size			W Condensate inlet	X Motive supply	Y Exhaust/balance line	Z Condensate outlet
APT10-PPU	DN20 x DN20 (¾" x ¾")	PN16	DN65	DN15	DN15	DN20
APT14-PPU	DN40 x DN25 (1½" x 1")	PN16	DN100	DN15	DN15	DN25
APT14HC-PPU	DN50 x DN40 (2" x 1½")	PN16	DN125	DN15	DN15	DN40

Optional extras

A spool piece is available to connect the receiver to the system pipework.



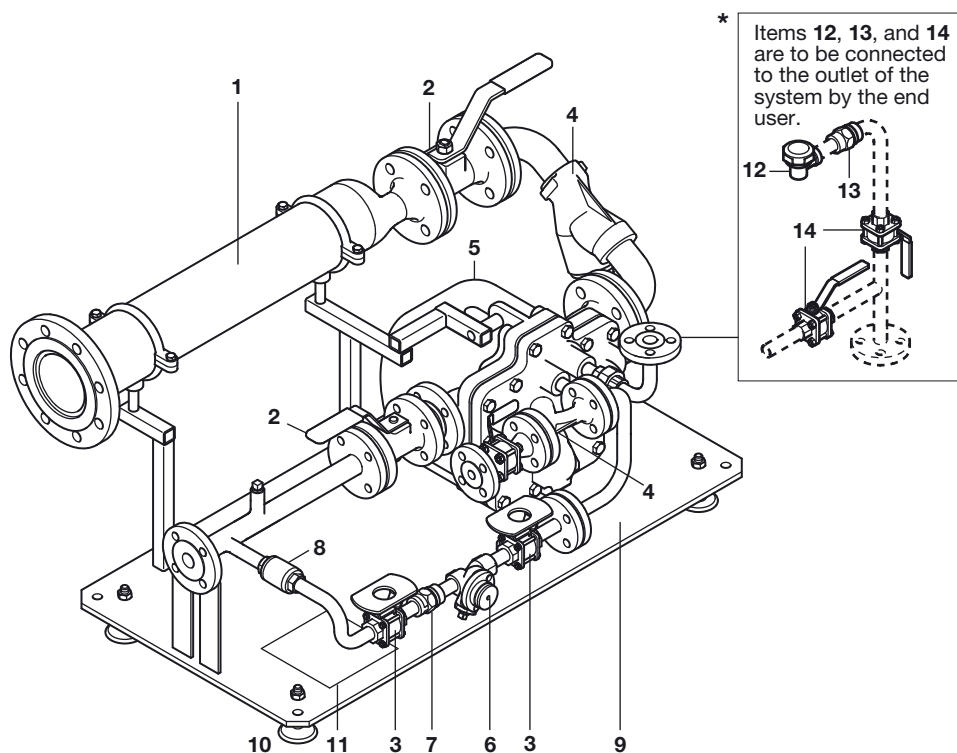
Limiting conditions

Unit design conditions	APT10	PN10
	APT14 and APT14HC	PN16
Maximum motive inlet pressure (steam)	APT10	4.5 bar g
	APT14 and APT14HC	13.8 bar g
Maximum operating pressure	APT10	4.5 bar g
	APT14 and APT14HC	13.8 bar g
Maximum backpressure	APT10	4 bar g
	APT14 and APT14HC	5 bar g
Maximum operating temperature	APT10	155°C
	APT14 and APT14HC	198°C
Minimum operating temperature		0°C
Designed for a maximum cold hydraulic test pressure of:	APT10	15 bar g
	APT14 and APT14HC	24 bar g

Note: For operating temperatures above or below those stated contact Spirax Sarco.

Capacities

Sizing of the pump-trap is dependent on motive pressure, backpressure (lift, return system pressure and frictional losses) and process conditions. For accurate sizing for the application please contact Spirax Sarco.



Materials

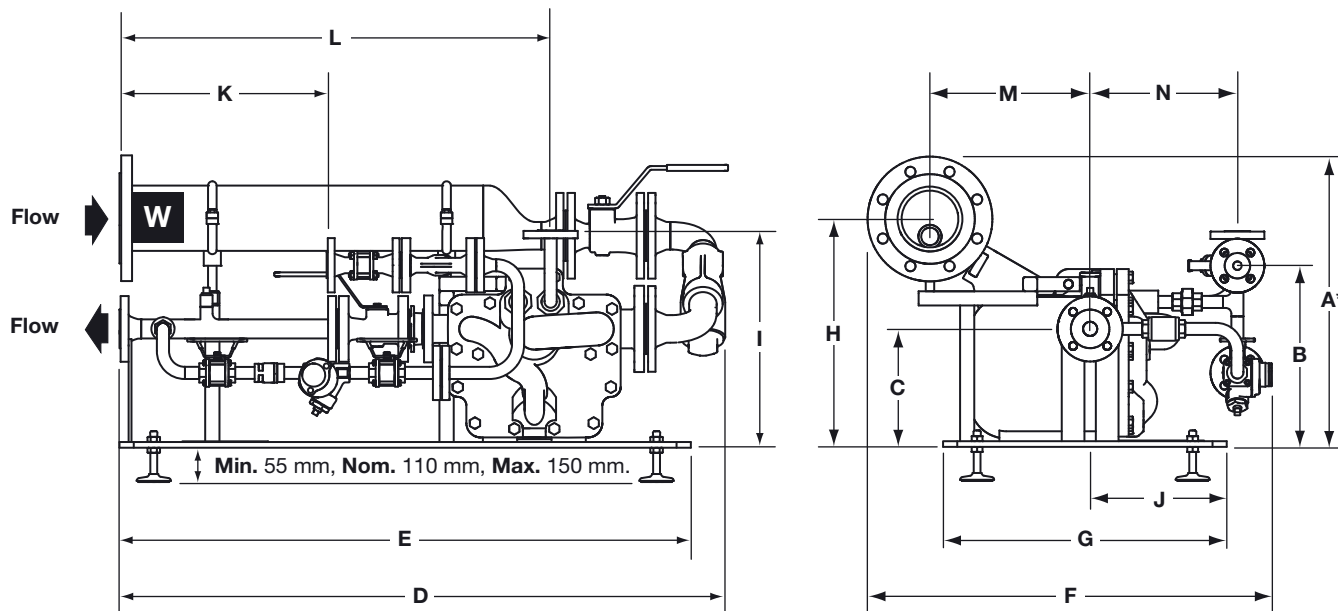
No.	Part	Material
1	Receiver	Carbon steel
2	Ball valves DN20 to DN50 (¾" to 2")	Steel (PTFE seals)
3	Ball valves DN15 (½")	Steel (PTFE seals)
4	Strainer DN15 to DN50 (½" to 2")	SG iron
5	Pump-trap	SG iron
6	Swivel connector and steam trap	Stainless steel
7	Check valve	Stainless steel
8	Diffuser	Stainless steel
9	Base and supporting frame	Carbon steel
10	Feet (Adjustable)	Stainless steel
11	Name-plate	Stainless steel
* 12	Air vent	Brass
* 13	Check valve	Stainless steel
* 14	Ball valve DN15 (½")	Stainless steel

* **Please note:** Items 12, 13 and 14 are provided loose. It is intended that the end user provides the pipework and connects these components correctly - see Section 3 'Installation' of the Installation and Maintenance Instructions (IM-P680-02) supplied with the unit.

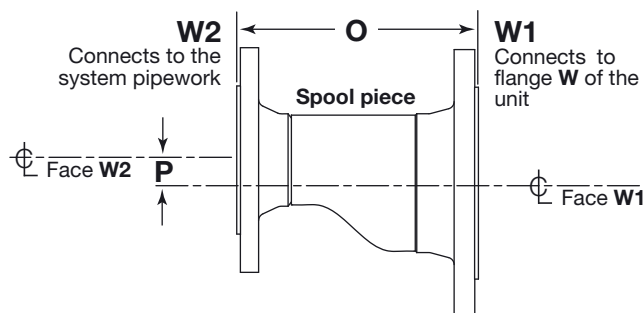
APT - Dimensions/weights (approximate) in mm and kg

Unit size	A*	B	C	D	E	F	G	H	I	J	K	L	M	N	Weight
DN20 x DN20 ($\frac{3}{4}$ " x $\frac{3}{4}$ ")	486	283	83	1000	1000	530	500	393	408	80	318	795	357	11	100
DN40 x DN25 ($1\frac{1}{2}$ " x 1")	512	319	208	1060	1000	712	500	402	380	240	363	755	282	260	160
DN50 x DN40 (2" x $1\frac{1}{2}$ ")	600	403	208	1167	1000	785	500	474	405	240	397	789	321	279	210

* **Please note:** The adjustable feet may be removed to achieve the minimum height (A).

**Spool piece - Dimensions** (approximate) in mm

Unit size	W1	W2	O	P
DN20 x DN20	DN65	DN25	173	20
		DN40	176	13
		DN50	180	7
DN40 x DN25	DN100	DN40	196	31
		DN50	201	26
		DN65	199	19
		DN80	204	12
DN50 x DN40	DN125	DN50	227	41
		DN65	227	33
		DN80	232	24
		DN100	234	13

**Safety information, Installation and maintenance**

For full details see the Installation and Maintenance Instructions supplied with the unit.

For full details of the individual component products see separate Installation and Maintenance Instructions also supplied with the unit.

Spare parts

Either refer to the individual component product Technical Information sheets (TI) or Installation and Maintenance Instructions (IM) supplied with the unit, for availability of spare parts.

How to specify

Spirax Sarco APT14-PPU (APT10-PPU or APT14HC-PPU) closed system automatic pump-trap packaged unit, operated by steam up to 13.8 bar g (4.5 bar g for the APT10-PPU). The complete system shall be supplied with PED markings, with all welding in accordance with BS EN 287/288.

The whole system shall be supplied with adjustable feet for levelling on uneven surfaces.

How to order example

1 off Spirax Sarco DN40 x DN25 APT14-PPU (closed system) automatic pump-trap packaged unit with flanged PN16 external connections plus the optional DN100 x DN40 spool piece.