



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

SPM

Stainless Steel Condensate Recovery Units

TI-P089-38
ST Issue 2



Authorised User No. 00202

Description

The Spirax Sarco series of SPM condensate recovery units are designed to handle hot condensate, which is commonly returned for use as boiler feedwater. The standard SPM series can handle quantities up to 2000 kg/h at 98°C with pump delivery heads up to 30 meters. For higher duties please contact Spirax Sarco. The package comprises: receiver, frame, single pump and prewired control panel.

Receiver

Receivers are manufactured from 304 stainless steel fitted with an adequately sized vent, overflow, drain and inlet having screwed BSP connections. Vessels are leak tested to 0.5 bar. Water level gauges are available as an optional extra.

Pumps

Pumps are constructed from fabricated 304/316 stainless steel and are designed for operation under conditions of low NPSH to handle hot condensate with the minimum of flooded suction. They are directly coupled to TEFC motors having class F insulation (class B temperature rise) motor enclosure rating IP54 minimum.

Pump fitment

The motor and pumps are mounted under the receiver with full size suction inlet pipework. The pump discharge outlet is fitted with a non-return valve. A discharge valve is required for head regulation (customer to supply).

Control

Receivers are fitted with Liquiphant T level control's which provides on/off pump operation. Electrical equipment is suitable for 230 volt, 1 phase, 50 Hz supply (400 volt three phase to special order). Control equipment is installed in a pre-wired IP54 rated metal enclosure. Connections for BMS interface are provided to monitor pump run or tripped condition.

Standards

This product fully complies with the requirements of the European Machinery Directive 98/37/EC, European Low Voltage Directive 73/23/EEC and European Electromagnetic Compatibility Devices Directive 89/336/EEC. This product is not a pressurised vessel and is designed to operate at atmospheric pressure and is therefore outside the scope of the European Pressure Directive 97/23/EC.

Certification

Certification of conformity EN 10204 2.1 are available on request. **Note:** All certification/inspection requirements must be stated at the time of order placement.

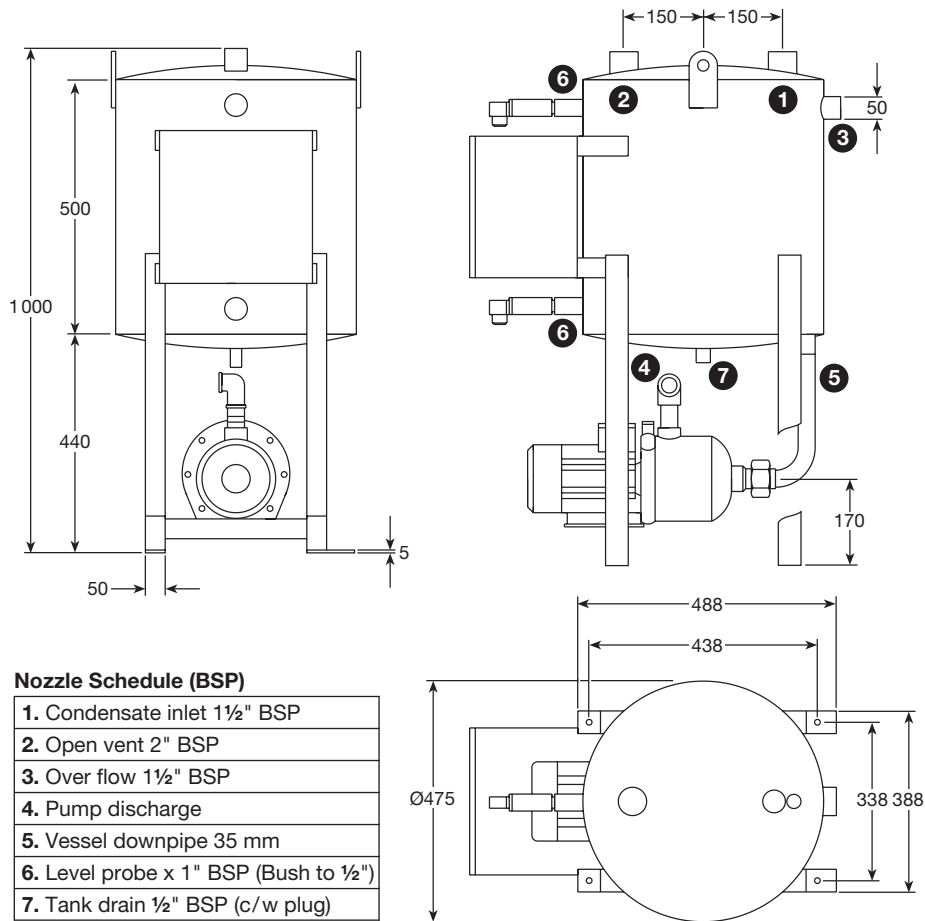
Materials

Part	Material
Receiver	304 stainless steel
Pump casing	304/316 stainless steel
Pump impeller	304/316 stainless steel
Suction pipework	304 stainless steel
Gauge glass	Brass valves, glass sight glass
Discharge pipework	304/316 stainless steel
Check valve	Bronze
Motor casing	304 stainless steel
Panel	Mild steel with polyester powder paint finish
Cable covering	Adaptaflex Pafs 16



Connections and weights

Model	Motor	Vessel inlet	Connections Discharge outlet	Vent	Overflow	Weight (kg)	
						Dry	Wet
SPM202-1	0.55	DN40 BSP	DN25 BSP	DN50 BSP	DN40 BSP	54	184
SPM203-1	0.55	DN40 BSP	DN25 BSP	DN50 BSP	DN40 BSP	54	184



Sizing and selection

Information required for sizing and selection:

1. Average rate at which condensate returns to the receiver in kg/h.
2. Total pumping delivery head, including lift and friction loss in pipe and fittings.

Sizing and selection

For correct selection plot the condensate return rate to be handled against the total head required (static + friction) and select the appropriate unit. If selection is borderline then select the next largest unit.

Selection example: The condensate return rate is known to be 1200 kg/h and the total head required is 25 m. Draw a horizontal line from the known 25m head required until it crosses the vertical line which represents the known 1200kg/h condensate which needs to be handled. For this example the selection would be an SPM203-1 condensate recovery unit.

Typical specification

The condensate recovery unit shall be a Spirax Sarco compact SPM condensate recovery unit type SPM203-1 designed and built to handle 1200 kg/h of condensate against a required head of 25 m.

How to order

Example: 1 off SPM203-1 condensate recovery unit.

