



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

## BPM21L

TI-P124-08  
ST Issue 2

### Carbon Steel

## Balanced Pressure Thermostatic Steam Trap

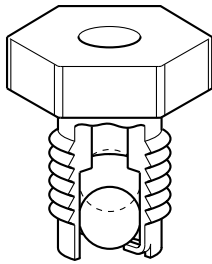
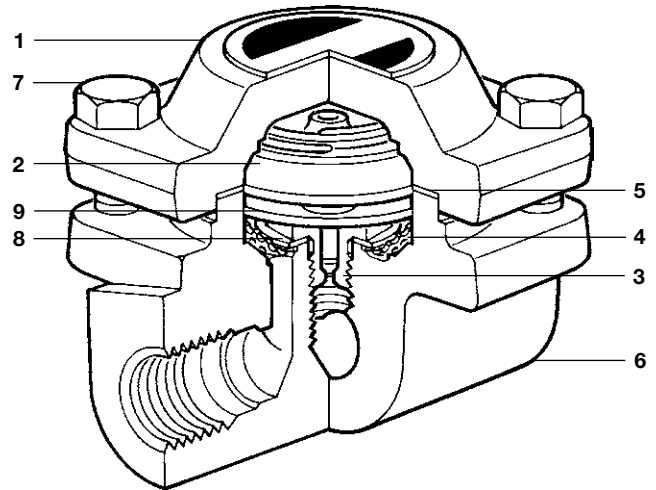
### Description

The BPM21L is a compact, carbon steel, balanced pressure steam trap, having an internal strainer. It is ideally suited for applications where space is important such as OEM machinery.

### Options

**Capsule fill and operation** - As standard, the capsule fitted will operate at approximately 13°C below steam saturation temperature (STD). Alternatively, a near-to-steam capsule (NTS) can be fitted that will operate at approximately 6°C below steam saturation temperature or a sub-cooling capsule (SUB) can be fitted that will operate at approximately 24°C below steam saturation temperature.

**Non-return / check valve** - All versions can be supplied with an integral check valve and are designated **BPM21LCV**.



### Standards

The product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

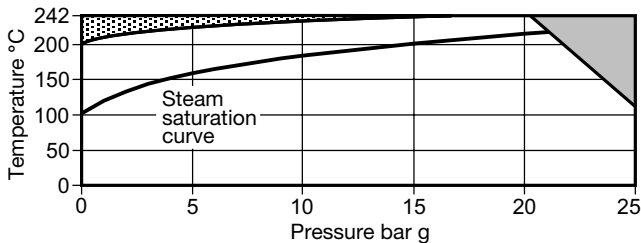
### Certification

The product is available with a manufacturers Typical Test Report.  
**Note:** All certification/inspection requirements must be stated at the time of order placement.

### Sizes and pipe connections

3/8" and 1/2" screwed BSP (BS 21 parallel) or NPT.  
Socket weld ends (1/2" only).

### Pressure/temperature limits (ISO 6552)



- The product **must not** be used in this region.
- The product should not be used in this region or beyond its operating range as damage to the internals may occur.

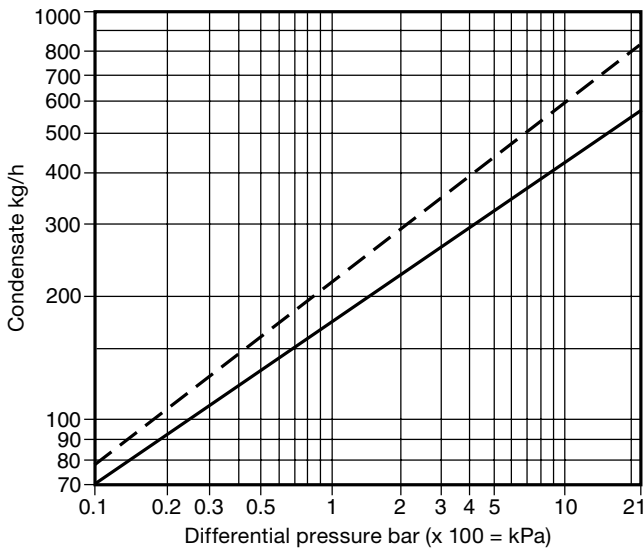
Body design conditions		PN25
PMA	Maximum allowable pressure	25 bar g @ 120°C
TMA	Maximum allowable temperature	242°C @ 20 bar g
Minimum allowable temperature		-10°C
PMO	Maximum operating pressure	21 bar g @ 217°C
TMO	Maximum operating temperature	242°C @ 20 bar g
Minimum operating temperature		0°C
Designed for a maximum cold hydraulic test pressure of 38 bar g		

### Materials

No.	Part	Material	
1	Cover	Steel	1.0460 (C22.8)
2	Capsule	Stainless steel	
3	Valve seat	Stainless steel	
4	Strainer screen	Stainless steel	
5	Cover gasket	Nickel reinforced exfoliated graphite	
6	Body	Steel	1.0460 (C22.8)
7	Cover bolts	Steel M8 x 25 mm BS 1506 - 621 A B7M	
8	Valve seat gasket	Stainless steel	
9	Spacer plate	Stainless steel	
10	Spring	Stainless steel	

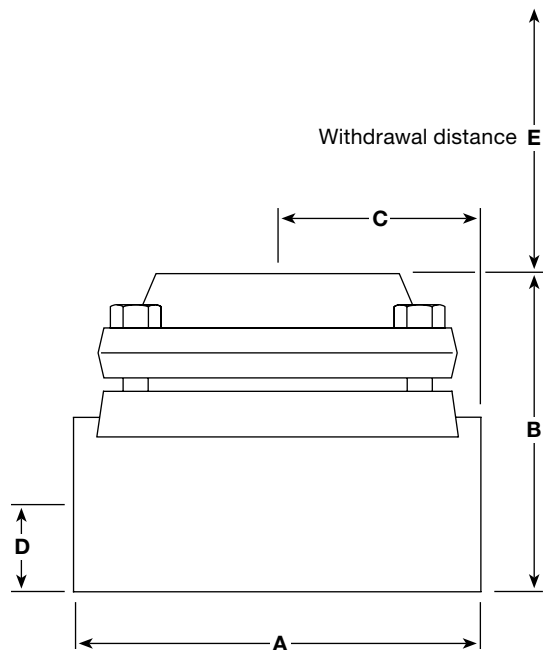
Local regulations may restrict the use of this product to below the conditions quoted.  
In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

## Capacities



## Dimensions / weights (approximate) in mm and kg

Size	A	B	C	D	E	Weight
3/8"	70	62	35	15	20	0.9
1/2"	70	62	35	15	20	0.9



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P124-09) supplied with the product.

### Installation note:

The trap is designed for installation with the capsule in a horizontal plane and the cover at the top, preferably with a drop leg immediately preceding the trap. Installation in a vertical plane is also acceptable. When welding the trap into the pipeline, there is no need to remove the capsule, providing the welding is done by the electric arc method. Suitable isolation valves must be installed to allow for safe maintenance and trap replacement.

### Disposal:

This product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

## How to order

**Example:** 1 off Spirax Sarco 1/2" BPM21L balanced pressure thermostatic steam trap having screwed BSP connections. The unit is to be supplied with a steel body with internal strainer screen and STD capsule for operation approximately 13°C below steam saturation temperature.

## Spare parts

The spare parts available are shown in solid outline. Parts drawn in broken line are not supplied as spares.

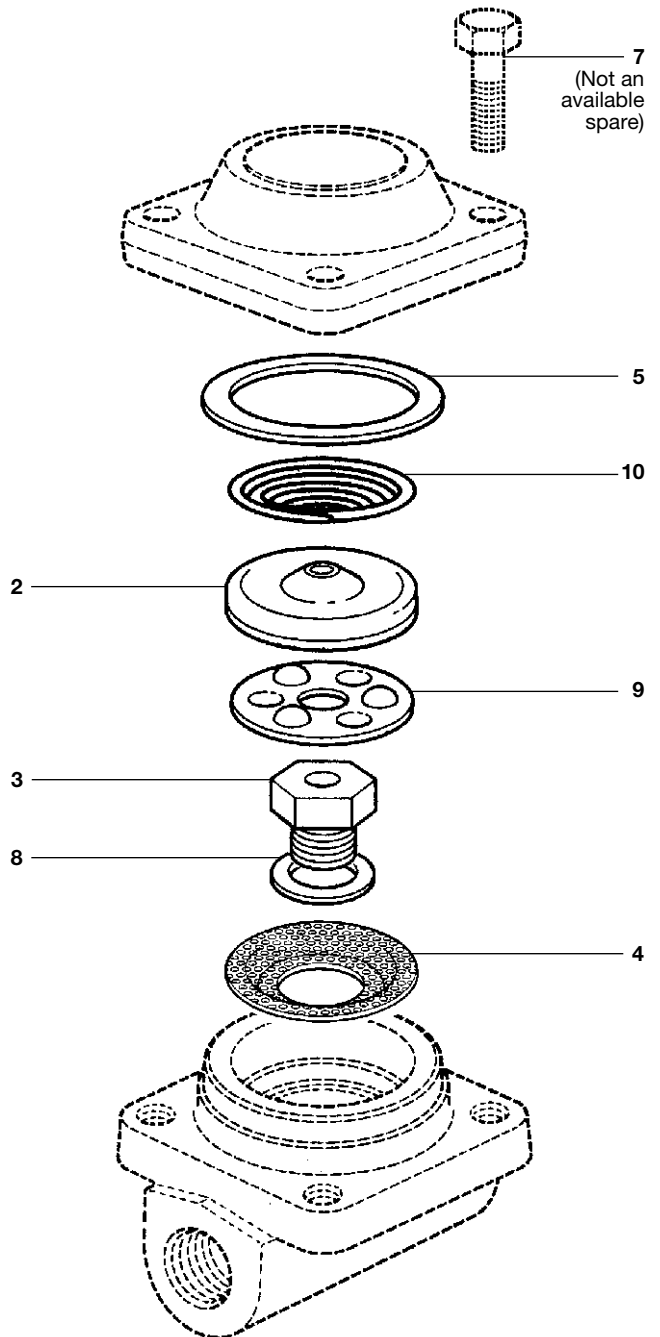
### Available spares

Capsule and seat assembly set	2, 3, 5, 8, 9, 10
Gasket set	5, 8
Strainer screen (packet of 3)	4

### How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of trap.

**Example:** 1 off Capsule and seat assembly for Spirax Sarco 1/2" BPM21L balanced pressure thermostatic steam trap having STD fill operation at 13°C below steam saturation temperature.



## Recommended tightening torques

Item	Part	Diagram	or mm	Nm
3	Valve seat		17 A / F	50 - 55
7	Cover bolts		M8 x 25	14 - 18