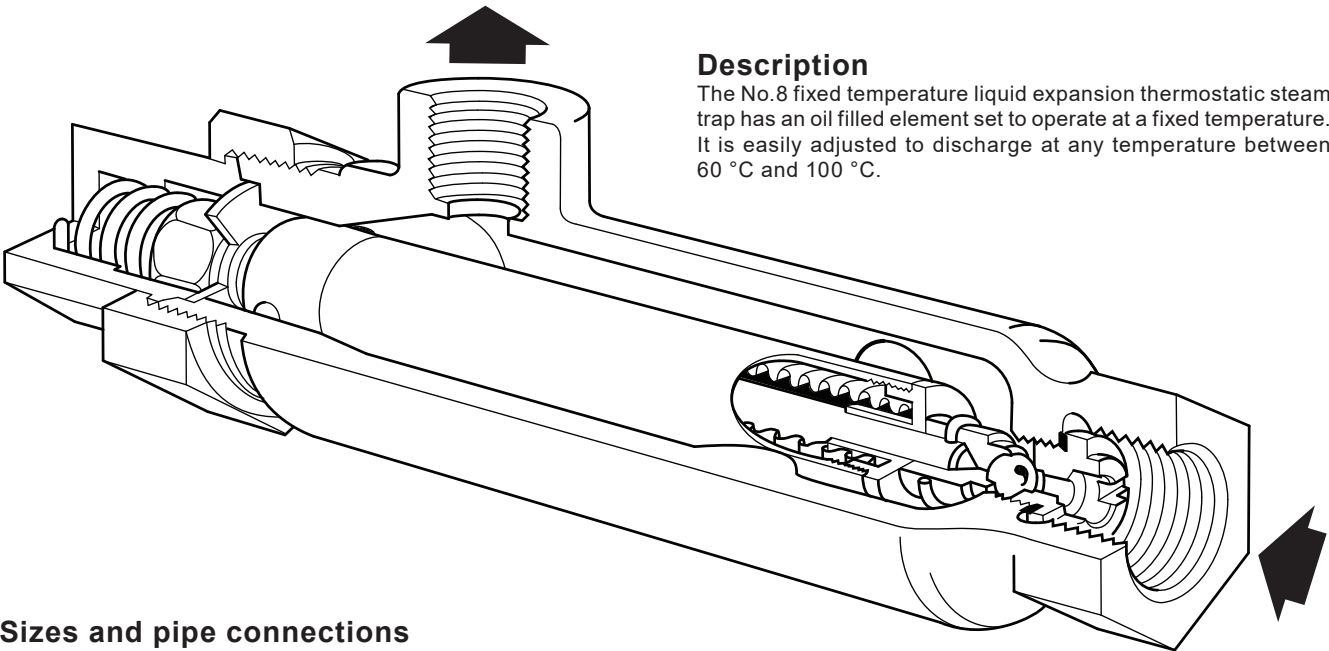


spirax
sarco

TI-P018-01
CMGT Issue 4

No.8

Fixed Temperature Liquid
Expansion Steam Trap



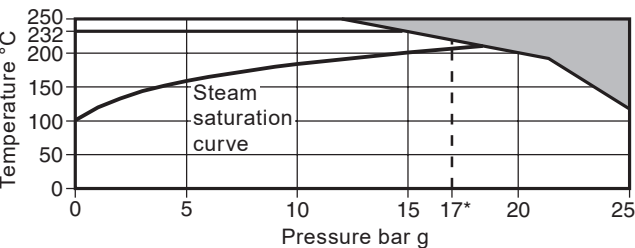
Sizes and pipe connections

½" screwed BSP or NPT.

Certification

The product is available with certification to EN 10204 2.2.
Note: All certification/inspection requirements must be stated at the time of order placement.

Pressure temperature/limits



The product **must not** be used in this region.

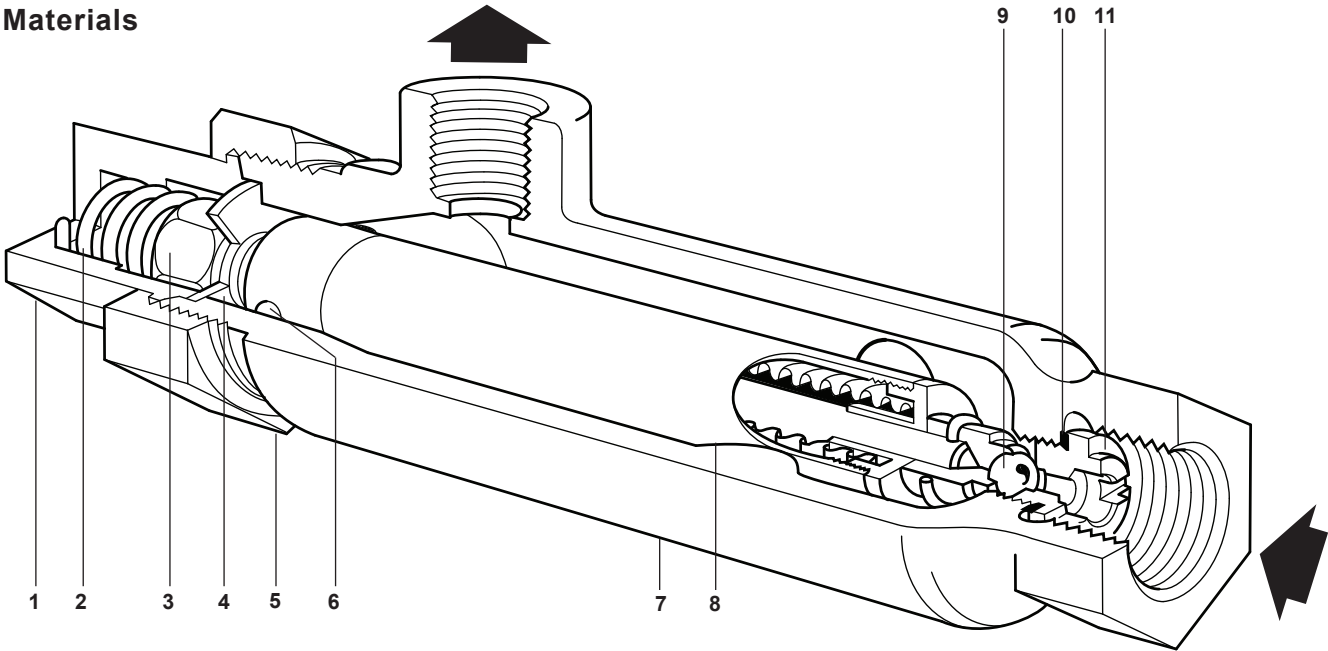
*PMO Maximum operating pressure recommended for saturated steam (17 bar g)

Body design conditions		PN25
PMA	Maximum allowable pressure	25 bar g
TMA	Maximum allowable temperature	250 °C
PMO	Maximum operating pressure	17 bar g
TMO	Maximum operating temperature	232 °C
Designed for a maximum cold hydraulic test pressure of		38 bar g

Steam traps

Fixed temperature discharge

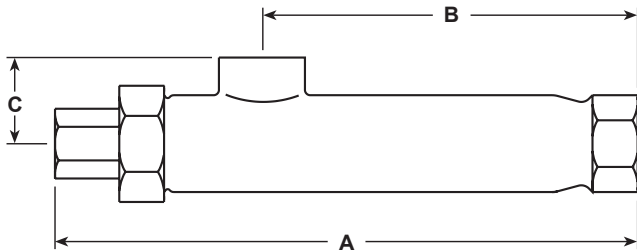
Materials



No.	Part	Material	
1	Adjustment nut	Brass	BS EN 12165 CW 617N
2	Overload spring	Stainless steel	BS 970 302 S31
3	Element nut	Brass	BS EN 12165 CW 617N
4	Washer	Brass	BS 2870 CZ 108
5	Adjustment lock-nut	Brass	BS EN 12165 CW 617N
6	Guide screw	Brass	BS 2872 CZ 108
7	Body	Gunmetal	BS EN CC 491K
8	Element	Brass	
9	Valve head	Stainless steel	AISI 440B
10	Valve seat gasket	Copper	BS 2870 C102
11	Valve seat	Stainless steel	BS 970 431 S29

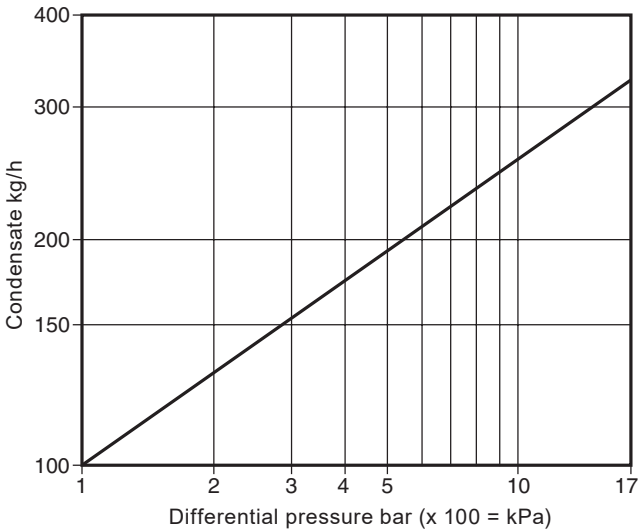
Dimensions/weights (approximate) in mm and kg

Size	A	B	C	Weight
½"	215	137	32	1.2



Capacities

The capacity graph shown is based on a trap with the adjustment 3 turns open and handling condensate at 80 °C.



Steam traps

Fixed temperature discharge

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P018-02) supplied with the product.
The trap should be installed with the inlet below the equipment being drained. The outlet should always be above the trap.

Adjustment

The position of the valve head relative to the seat and, therefore, the operating temperature, can be altered by turning the adjustment which serves one end of the element.

How to order

Example: 1 off ½" BSP Spirax Sarco No.8 fixed temperature liquid expansion steam trap.

Spare parts

The spare parts available are shown in heavy outline.
Parts drawn in a grey line are not supplied as spares.

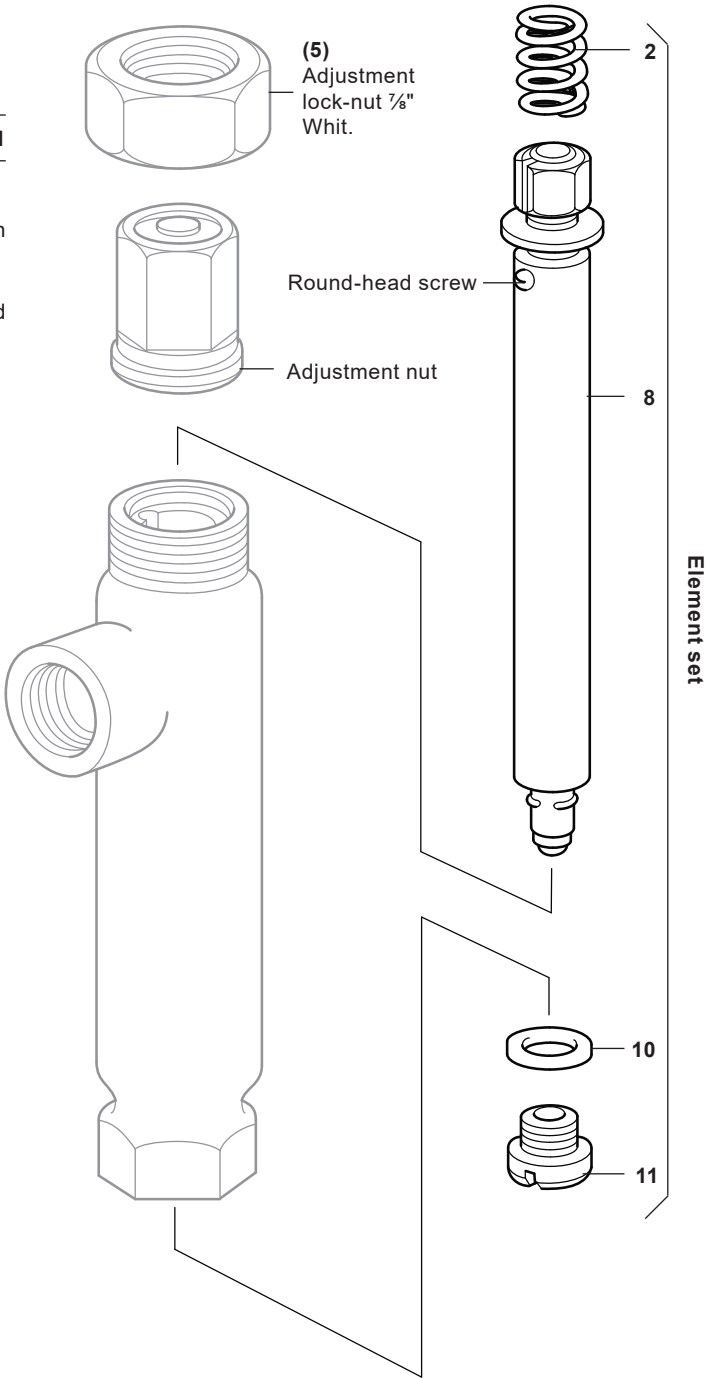
Available spares

Element set	2, 8, 10, 11
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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 - Element set for a ½" Spirax Sarco No.8 fixed temperature liquid expansion steam trap.



Recommended tightening torques

Item	 or mm		N m
5	1 5/16 A/F		80 - 85
11		1/2" UNF	30 - 35



TI-P670-02
CMGT Issue 3

Bydrain

Frost Protection Liquid Expansion Trap

Description

The Spirax Sarco bydrain frost protection liquid expansion trap is made of stainless steel. It has been specifically designed for protecting water systems from frost damage. This fixed temperature discharge trap continuously monitors the water temperature in the pipes; the trap is firmly closed at 7 °C, but as the temperature of the water cools to 2 °C the trap opens, discharging any water in the pipe.

Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED).

Certification

This product is available with certification to EN 10204 3.1.B.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

½" and ¾" screwed BSP or NPT

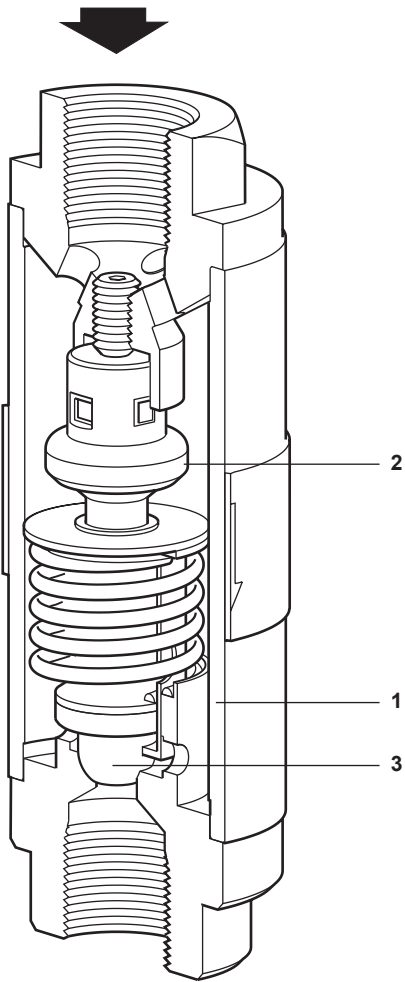
Limiting conditions

Body design conditions		PN50, Class 300 to ANSI B 16.34
PMA	Maximum allowable pressure	41.4 bar g
TMA	Maximum allowable temperature	450 °C
PMO	Maximum operating pressure	10 bar g
TMO	Maximum operating temperature	70 °C
Minimum operating pressure for satisfactory operation is:		0.1 bar g
ΔPMX	The backpressure for correct operation must not exceed 90% of the upstream pressure.	
Designed for a maximum cold hydraulic test pressure of:		62 bar g

Note: The trap seat is completely open at a water circuit temperature of 2 °C and closed at 7 °C.

Materials

No.	Part	Material
1	Body	Stainless steel AISI 316L
2	Thermostat	Brass
3	Valve head	PTFE
	Internal parts	Stainless steel



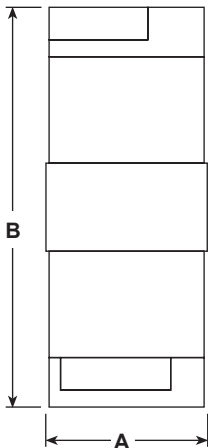
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Steam traps

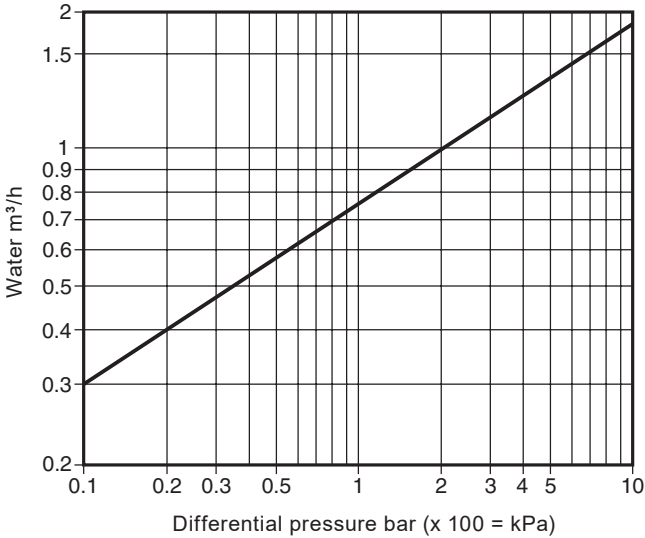
Fixed temperature discharge

Dimensions/weights (approximate) in mm and kg

Size	Connections	A	B	Weight
½"	BSP, NPT	42.4	110	0.65
¾"	BSP, NPT	42.4	115	0.70



Capacities



Safety information, installation and maintenance
For full details see the Installation and Maintenance Instructions (IM-P670-01) supplied with the product.

How to order
Example: 1 off Spirax Sarco ½" bydrain frost protection liquid expansion trap with screwed NPT end connections.