



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 (45 °F), but as the temperature of the water cools to 2 °C (36 °F) the trap opens, discharging any water in the pipe.

Standards

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

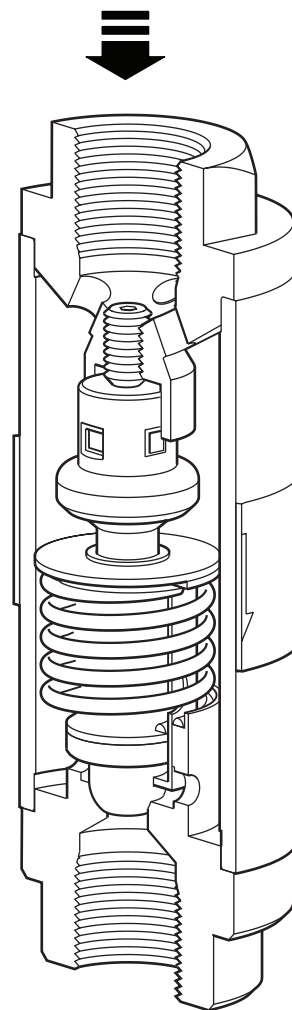
Certification

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

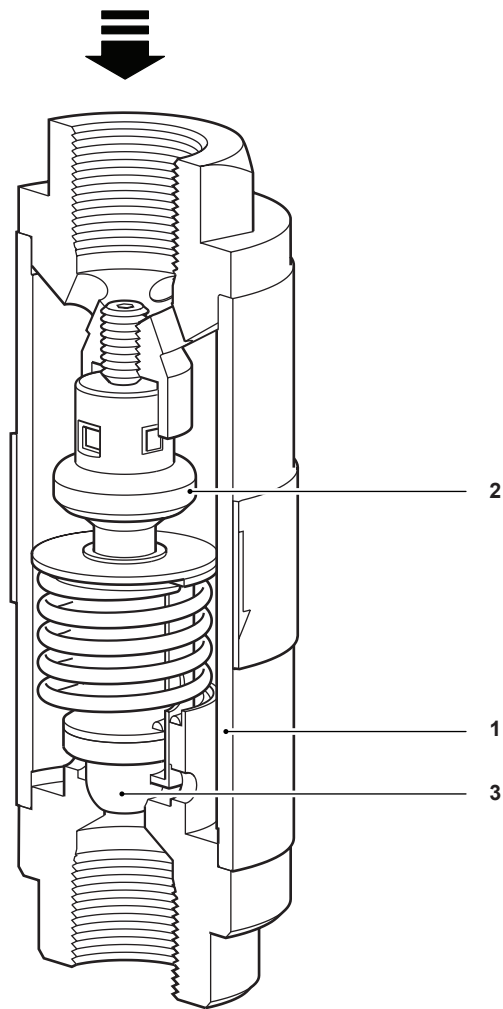


Limiting conditions

Body design conditions		PN50, Class 300 to ANSI B 16.34	
PMA	Maximum allowable pressure	41.4 bar g	600 psi g
TMA	Maximum allowable temperature	450 °C	842 °F
PMO	Maximum operating pressure	10 bar g	145 psi g
TMO	Maximum operating temperature	70 °C	158 °F
Minimum operating pressure for satisfactory operation is:		0.1 bar g	1.5 psi 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	899 psi g

Note: The trap seat is completely open at a water circuit temperature of 2 °C (36 °F) and closed at 7 °C (45 °F).

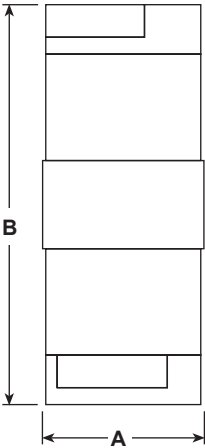
Materials



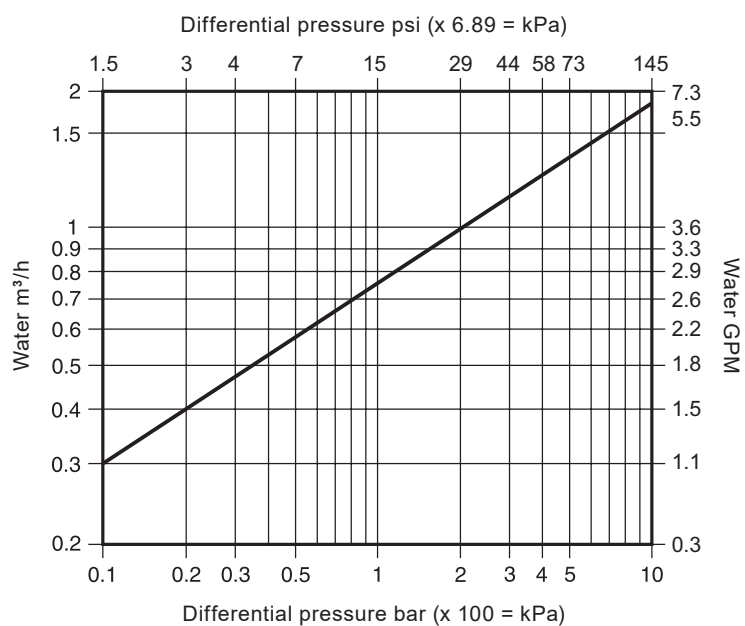
No.	Part	Material
1	Body	Stainless steel AISI 316L
2	Thermostat	Brass
3	Valve head	PTFE
	Internal parts	Stainless steel

Dimensions/weights (approximate) in mm (inches) and kg (lbs)

Size	Connections	A	B	Weight
DN15 (1/2")	BSP, NPT	42.4 (1.7)	110 (4.3)	0.65 (1.4)
DN20 (3/4")	BSP, NPT		115 (4.5)	0.70 (1.5)



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.