

spirax sarco®

HP80, HP100, HP150 and HP210 Series Bimetallic Steam Traps

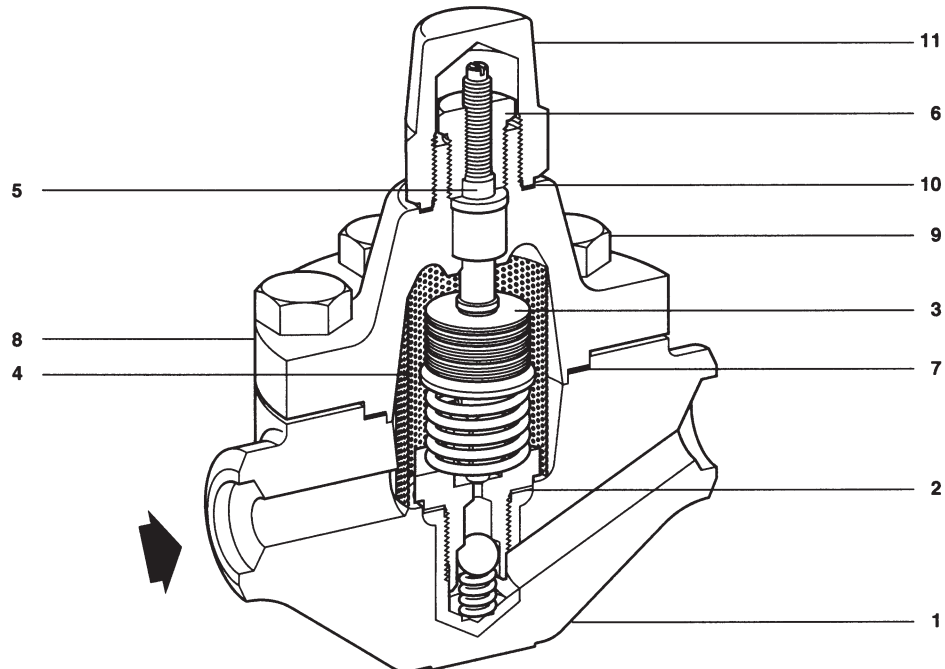
Steam
Traps

Bimetallic

Description

Spirax Sarco's HP80, HP100, HP150 and HP210 bimetallic steam traps are made of forged steel, and designed for draining high pressure, high temperature steam lines and processes.

These steam traps, which are specially designed for HP steam, have a reinforced stainless steel insert within the body and can be repaired inline. They operate with no loss of steam, and quickly drain air, non-condensate gases and large quantities of cold water on start-up. Normally open in the event of failure, they have a check valve, a built-in strainer screen and an external device for adjusting the discharge temperature of the condensate.



Sizes and pipe connections

1/2", 3/4" and 1" socket weld to ANSI B 16.11
or butt weld to ANSI B 16.25

Limiting Conditions

Body design conditions	HP80	PN250, Class 1500
	HP100	to ANSI B 16.24
	HP150	PN420, Class 2500
	HP210	to ANSI B 16.34
PMO - Maximum operating pressure	HP80	1160 psig 80 barg
	HP100	1450 psig 100 barg
	HP150	2175 psig 150 barg
	HP210	3045 psig 210 barg
TMO - Maximum operating temperature	HP80	932°F up to 1160 psig 500°C up to 80 barg
	HP100, HP150, HP210	1058°F up to 3045 psig 570°C up to 210 barg
	HP80	290 psig 20 barg
	HP100	362 psig 25 barg
Minimum operating pressure	HP150	362 psig 25 barg
	HP210	362 psig 25 barg

Δ PMX - The back pressure for correct operation must not exceed 90% of the upstream pressure.

Designed for a maximum cold hydraulic test pressure of:	HP80 and HP100	5628 psig 388 barg
	HP150 and HP210	9367 psig 646 barg

Materials

No.	Part	Material	
1	Body	HP80	Alloy steel ASTM A182 F11
		HP100, 150, 210	Alloy steel ASTM A182 F22
2	Valve seat gasket	Stainless steel	AISI 304
3	Bimetallic element	Stainless steel	
4	Strainer screen	Stainless steel	AISI 304L
5	Gland packing	Graphite (asbestos-free)	
6	Locking gland nut	Stainless steel	
7	Cover gasket	Metal, stainless steel/graphite (asbestos-free)	
8	Cover	HP80	Alloy steel ASTM A182 F11
		HP100, 150, 210	Alloy steel ASTM A182 F22
9	Cover bolt	HP80	Steel ASTM A193 B7
		HP100, 150, 210	Steel ASTM A193 B16
10	Blind nut gasket	Metal, stainless steel/graphite	
11	Blind nut	Steel	ASTM A105

Certification

This product is available with certification to EN 10204 3.1.B
All certificates must be requested at the time of ordering.

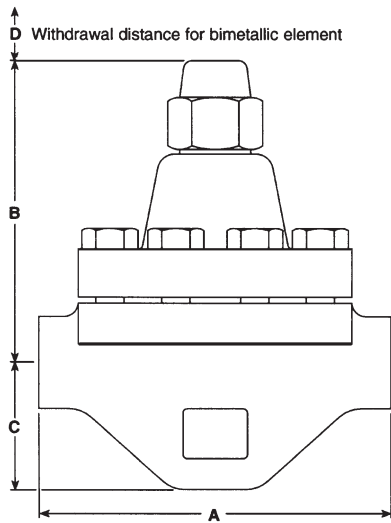
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-P623-06 US 01.02

HP80, HP100, HP150 and HP210 Series Bimetallic Steam Traps

Dimensions/weights (approximate) in mm and kg



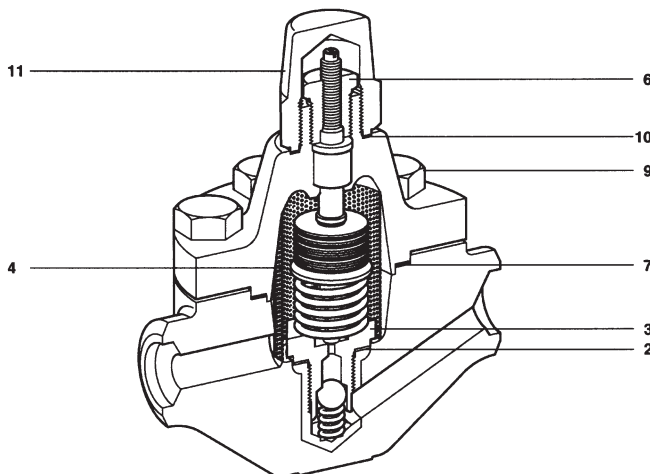
Size	A	B	C	D	Weight	
HP80	1/2"	6.3" 160	5.4" 138	2.3" 58	5.9" 150	21 lb. 9.5
	3/4"	6.3" 160	5.4" 138	2.3" 58	5.9" 150	21 lb. 9.5
	1"	6.3" 160	5.4" 138	2.3" 58	5.9" 150	21 lb. 9.5
HP100	1/2"	6.3" 160	5.7" 145	2.3" 58	5.9" 150	23 lb. 10.5
	3/4"	6.3" 160	5.7" 145	2.3" 58	5.9" 150	23 lb. 10.5
	1"	6.3" 160	5.7" 145	2.3" 58	5.9" 150	23 lb. 10.5
HP150	1/2"	8.3" 210	6.6" 168	2.4" 61	5.9" 150	25.4 lb. 11.5
HP210	3/4"	8.3" 210	6.6" 168	2.4" 61	5.9" 150	25.4 lb. 11.5
	1"	8.3" 210	6.6" 168	2.4" 61	5.9" 150	25.4 lb. 11.5

Installation and maintenance

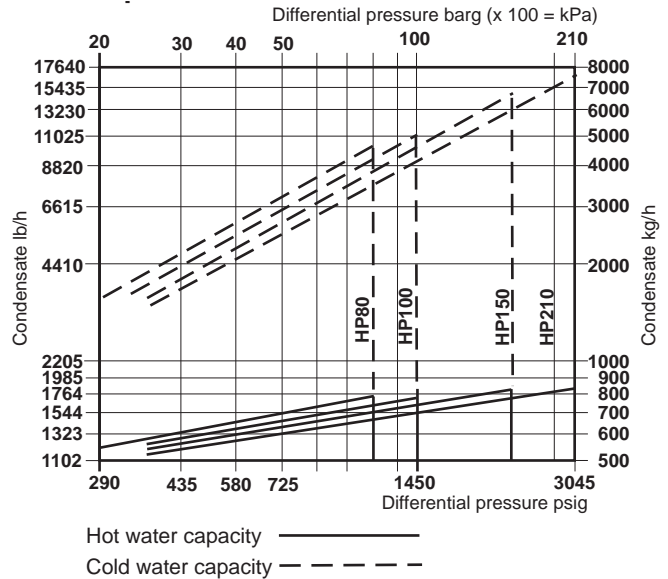
Full Installation and Maintenance Instructions (Inclusive of operation and fault finding) are supplied with the product, see IMI

How to order

Example: 1 off 1/2" Spirax Sarco HP80 bimetallic steam trap with socket weld end connections.



Capacities



Spare Parts

The spare parts available are detailed below. No other parts are supplied as spares.

Available spare


Bimetallic assembly kit 2, 3, 4, 7, 10

How to order spares

Always order spares by using the description given in the column headed 'Available spare' and state the size and model of the bimetallic steam trap.

Example: 1 — Bimetallic assembly kit for a 1" Spirax Sarco HP80 bimetallic steam trap.

Recommended tightening torques

Item	 in mm	Ft. / Lbs.
3	36 A/F	88.51
6	21 A/F	
HP80	24 A/F	88.51
HP100	24 A/F	118
HP150, HP210	30 A/F	147.5
HP80, HP100	41 A/F	59
HP150, HP210	55 A/F	103.2