

## Series HM Inverted Bucket Steam Trap

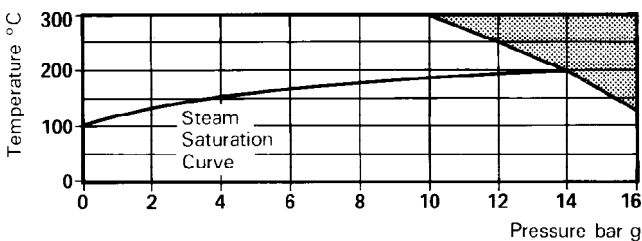
### Description

HM maintainable cast iron inverted bucket steam trap with in-line connections

### Limiting conditions

Maximum operating conditions depend upon orifice size.  
Maximum body design conditions — PN16  
PMA — max. allowable pressure 16 bar g  
TMA — max. allowable temperature 300°C  
Cold hydraulic test 24 bar g

### Operating range



The product must not be used in this region

						Δ PMX — max. differential pressure	
Screwed		Flanged		Screwed		Flanged	
				bar		bar	
				HM12/7	HM123/7	14	
				HM10/7	HM103/7	12.5	
HM00/6	HM003/6					10	
HM00/7	HM003/7	HM10/8	HM103/8	HM12/10	HM123/10	8.5	
HM00/8	HM003/8	HM10/10	HM103/10	HM12/12	HM123/12	4	

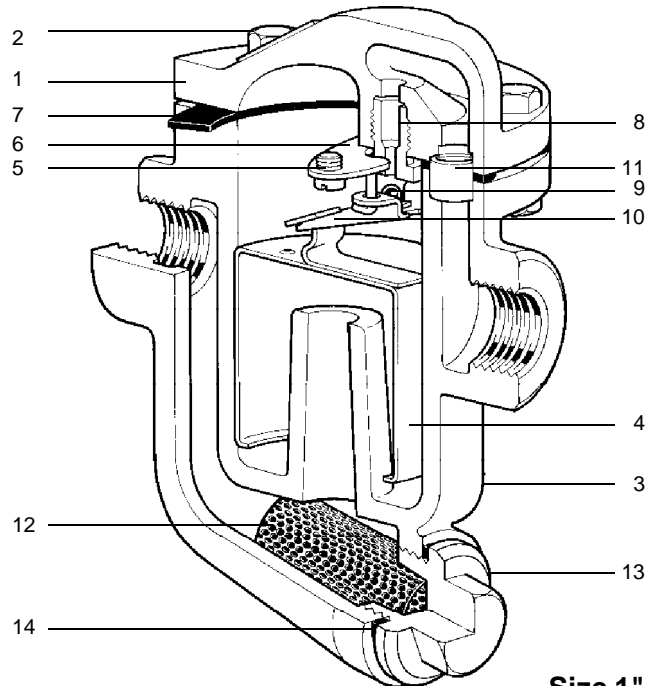
### Sizes and pipe connections

½" — HM00, ¾" — HM10 and 1" — HM12  
Screwed BSP or NPT  
DN 15 — HM003, DN 20 — HM103 and DN 25 — HM123.  
Standard flange: BS 4504 and DIN PN16

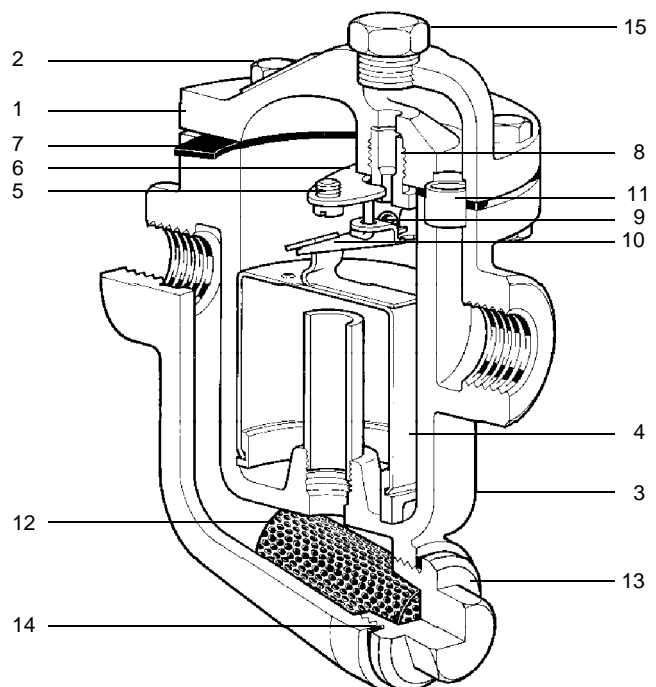
### Materials

No.	Part	Material	
1	Cover	Cast Iron	DIN 1691 GG 20
2	Cover Bolts ½", ¾"	Steel	BS 3692 Gr.10
	Cover Nuts ½", ¾"	Steel	BS 3692 Gr.10.9
	Cover Bolts 1"	Steel	BS 3692 Gr.8.8
	Cover Nuts 1"	Steel	BS 3692 Gr.8
3	Body	Cast Iron	DIN 1691 GG 20
4	Bucket	Stainless Steel	BS 1449 304 S16
5	Valve Guide Plate	Stainless Steel	BS 4183 18/8
	Screw	M4.5 x 10	
6	Valve Guide Plate	Stainless Steel	BS 1449 304 S11
7	Cover Gasket	Reinforced Exfoliated Graphite	
8	Valve Seat	Stainless Steel	AISI 440B
9	Valve	Stainless Steel	AISI 440B
10	Valve Lever	Stainless Steel	BS 1449 321 S31
11	Ferrule HM00/10	Stainless Steel	BS 970 321 S31
	HM12	Stainless Steel	BS 3605 (CFS) 304 S14
12	StrainerScreen HM00	Stainless Steel	ASTM A240 316L
13	Strainer Cap ½", ¾"	Cast Iron	DIN 1691 GG 20
	1"	SG Iron	DIN 1693 GGG40
14	Strainer Gasket	Reinforced Exfoliated Graphite	
15	Plug	Stainless Steel	BS 970 416-537

### Sizes ½" & ¾"



### Size 1"



### How to specify

¾" HM10/7 Spirax Sarco Steam Trap with screwed BSP connections.

### Capacities

See TI-P072-02 (TIS 2.406) for capacities

## Dimensions (approximate) in millimetres

Size/ DN	A	A1	B	C	F	G	H	J	Weight
½" - 15	120	210	100	100	67	89	65	M28	2.6 kg
¾" - 20	120	210	100	140	88	107	65	M28	3.2 kg
1" - 25	180	230	160	160	145	120	85	M32	8.8 kg

## Installation

The trap must be installed with the body upright so that the bucket is rising and falling vertically. The inlet and outlet connections should be in a horizontal plane, with the trap installed below the drain point so that a water seal can be maintained around the open end of the bucket.

## Spare parts

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

### AVAILABLE SPARE

Valve and Seat Assembly	10,8,6 (2 off) 5
Bucket	4
Cover Gasket & Ferrule	(pkt of 3 each) 7,11
Strainer Screen	12
Strainer Screen Gasket	(pkt of 3 each) 14
Set of Cover Bolts & Nuts	(set of 6) 2

## How to Order

Always order spares by using the description given in the column headed Available Spare and stating the size and series of the trap.

Example: 1 — Valve and Seat Assembly for ½" Spirax Sarco Steam Trap Series HM00/7.

## How to Fit Valve and Seat Assembly

Isolate trap, remove cover by undoing cover nuts. Unhook the bucket from the valve lever. Remove the valve seat. Remove the valve guide plate by undoing the two screws. Screw in new valve seat, using a little jointing paste on the threads and making sure the joint faces are clean. Fix new valve guide plate in position by new screws which are supplied, hook new valve lever over pins on valve guide plate and centralise valve to the orifice and tighten screws.

## Note

Due to adoption of metric threads the spares for the HM series, other than buckets, are not interchangeable with the spares for the previous H series.

## Recommended tightening torques

Item No.	mm or	Nm	Size
2	M6 x 25	15-16	½", ¾"
2	M12 x 45	85-95	1"
8	13	50-55	½", ¾"
8	13	80-88	1"
13	22 M28	90-100	½", ¾"
13	27 M32	125-145	1"

