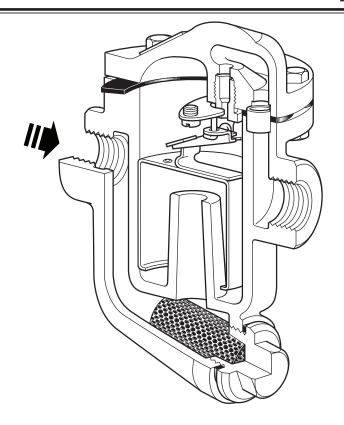
TI-S03-02 CMGT Issue 11

## spirax Sarco

# HM Series Cast Iron Inverted Bucket Steam Traps



#### **Description**

The Spirax Sarco HM Series of cast iron inverted bucket steam traps are designed for installation in horizontal pipework. They are available in screwed connections, with an optional blowdown valve.

#### Sizes and pipe connections

1/2" - HM00, 3/4" - HM10 and 1" - HM12 Screwed BSP T Rp (ISO 7-1) or NPT

#### **Optional extras**

Integral blowdown valve:- The HM Series inverted bucket steam traps can be supplied with integral blowdown valves to remove debris from the inlet strainer. For further details see the relevant Technical Information Sheet.

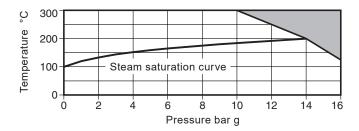
#### **External air vents**

When required, HM Series inverted bucket steam traps can be supplied with separate thermostatic air vents to provide the efficient and quick release of air. Various models, both balanced pressure and bimetallic, are available. Details for the range up to 30 bar g are shown in the relevant sales brochure.

#### **Diffusers**

Where steam traps discharge to atmosphere a diffuser should be fitted to reduce the effect of the blast discharge. The diffuser not only reduces the risk of groundwork erosion and condensate splashback, but also reduces sound pressure levels as well. Available models are detailed in the relevant sales brochure.

#### Pressure/temperature limits

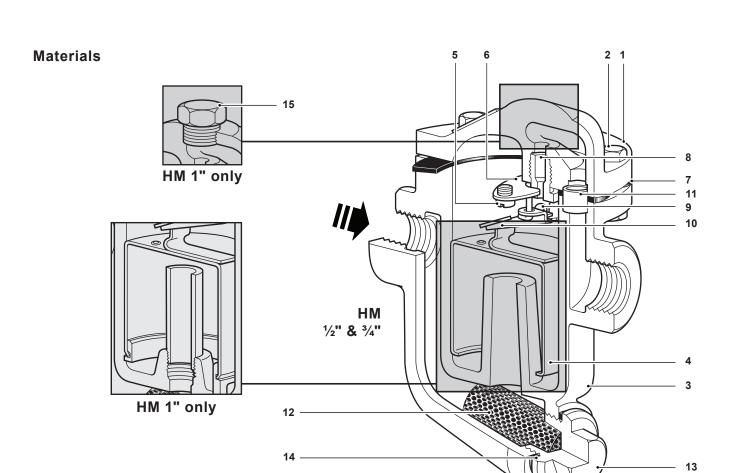


The product **must not** be used in this region.

Body	design conditions	PN16
PMA	Maximum allowable pressure	16 bar g
TMA	Maximum allowable temperature	300 °C
РМО	Maximum operating pressure	16 bar g
ТМО	Maximum operating temperature	300 °C
Desig	ned for a maximum cold hydraulic test pressure of:	24 bar g

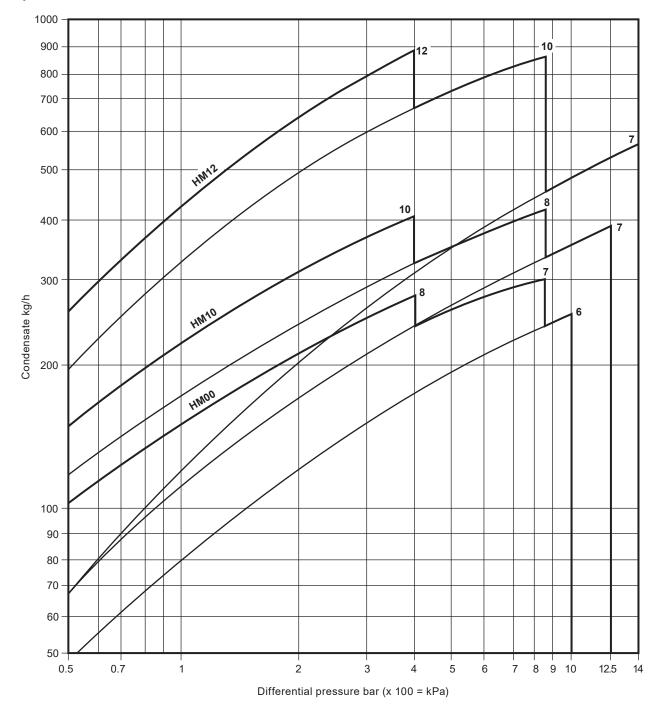
#### $\Delta \text{PMX}$ - Maximum differential pressure

Size		ΔPMX - Maximum differential pressure bar						
		4	8.5	10	12.5	14		
	1/2"	HM00/8	HM00/7	HM00/6	-	-		
Screwed	3/4"	HM10/10	HM10/8	-	HM10/7	-		
	1"	HM12/12	HM12/10	-	-	HM12/7		



No.	Part		Material	
1	Cover		Cast Iron	DIN 1691 GG 20
	Cover bolts	1/2", 3/4"	Steel	BS 3692 Gr.10
2	Cover nuts	1/2", 3/4"	Steel	BS 3692 Gr.10.9
2	Cover bolts	1"	Steel	BS 3692 Gr. 8.8
	Cover nuts	1"	Steel	BS 692 Gr. 8
3	Body		Cast iron	DIN 1691 GG 20
4	Bucket		Stainless steel	BS 1449 304 S16
5	Valve guide plate screw		Stainless steel M4.5 x 10	BS 4183 18/8
6	Valve guide plate		Stainless steel	BS 1449 304 S11
7	Cover gasket		Reinforced exfoliated graphite	
8	Valve seat		Stainless steel	AISI 431
9	Valve		Stainless steel	AISI 440B
10	Valve lever		Stainless steel	BS 1449 321 S31
	Famula	HM00/10	Stainless steel	BS 970 321 S31
11	Ferrule	HM12	Stainless steel	BS 3605 (CFS) 304 S14
12	Strainer screen	HM00	Stainless steel	ASTM A240 316L
13	Chaines	½" and ¾"	SG iron	DIN 1693 GGG 40
	Strainer cap	1"	Cast iron	DIN 1691 GG 25
14	Strainer gasket		Reinforced exfoliated graphite	
15	Plug		Stainless steel	BS 970 416-537

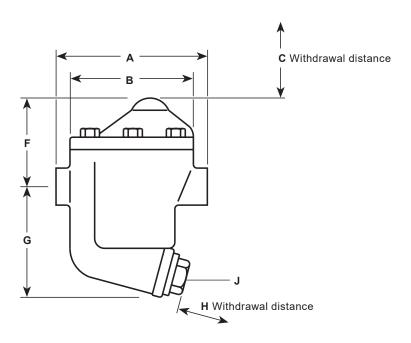
#### **Capacities**



Note: Traps should be selected for the most appropriate working pressure differential and not on the basis of load.

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

Size		Α	В	С	F	G	н	J	Weight
DN15	1/2"	120	100	100	73.5	89	65	M28	2.6
DN20	3/4"	120	100	140	94.5	107	65	M28	3.2
DN25	1"	180	160	160	145.0	120	85	M32	8.8



**Safety information, installation and maintenance**For full safety information and installation and maintenance instructions see IM-S03-11.

#### **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 3/4" HM10/7 inverted bucket steam trap with screwed BSP T Rp (ISO 7-1) connections.

#### **Spare parts**

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

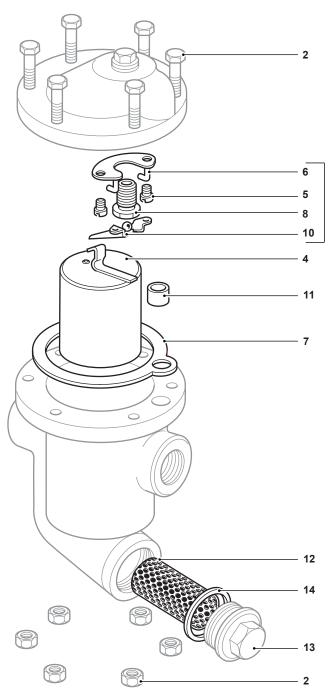
#### Available spares

Valve and seat assembly	5 (2 off), 6, 8, 10
Bucket	4
Cover gasket and ferrule (packet of 3 each)	7, 11
Strainer screen	12
Strainer screen gasket (packet of 3 each)	14

#### How to order spares

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

**Example:** 1 - Valve and seat assembly for a Spirax Sarco ½" HM00/7 inverted bucket steam trap.



### Valve seat assembly

#### Recommended tightening torques

Item	Part	© m	N m	
2	1/2", 3/4"		M6 x 25	15 - 16
	1"		M12 x 45	85 - 95
8	1/2", 3/4"	13		50 - 55
0	1"	17		80 - 88
13	1/2", 3/4"	22	M28	90 - 100
	1"	27	M32	125 - 145