



IFT14

Ball Float Steam Trap with Integral Spiratec Sensor

Description

The IFT14 is an SG iron bodied ball float steam trap having stainless steel working internals, integral Spiratec sensor and automatic air venting facility. It can be supplied with either a WLS1 sensor to detect waterlogging and steam leakage or a SS1 sensor for steam leakage only. The IFT14 is supplied with horizontal connections, having flow from right to left (R – L), and can be simply integrated into all existing Spiratec monitoring systems.

Capsule

The BP99/32 capsule which is used in the FT14 is suitable for use on 150 °C (270 °F) superheat @ 0 bar g (0 psi g) and 50 °C (91 °F) superheat @ 32 bar g (464 psi g).

Standards

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

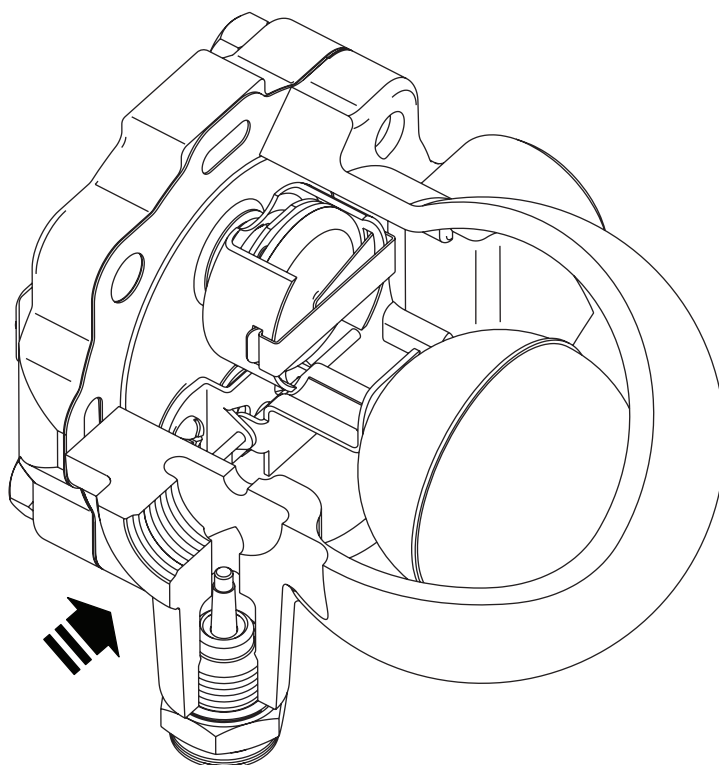
Certification

This product is available with a manufacturers' Typical Test Report.

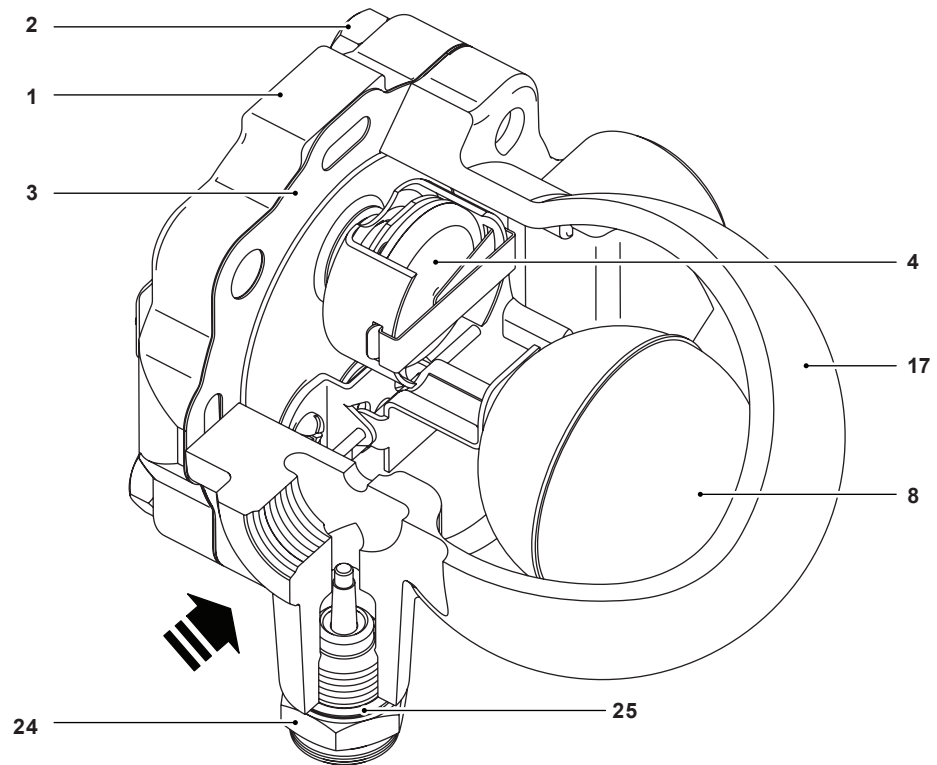
Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

½" and ¾" screwed BSP or NPT.



Materials

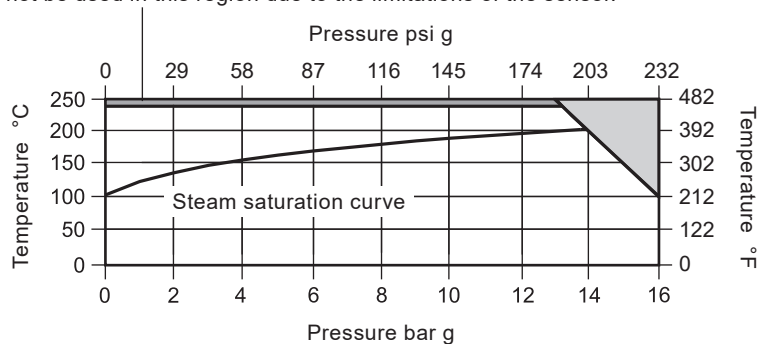


* **Note:** Items 5, 6, 7, 10, 11 and 18 are shown more clearly in spare parts.

No.	Part	Material	
1	Body	SG iron	DIN 1693 GGG 40
2	Cover bolts	Steel	BS 3692 Gr. 8.8
3	Cover gasket	Stainless steel reinforced exfoliated graphite	
4	Cover	SG iron	DIN 1693 GGG 40
5 *	Valve seat	Stainless steel	BS 970 431 S29
6 *	Valve seat gasket	Stainless steel	BS 1449 304 S11
7 *	Pivot frame assembly screws	Stainless steel	BS 6105 CI A2-70
8	Ball float and lever	Stainless steel	BS 1449 304 S16
10 *	Pivot frame	Stainless steel	BS 1449 304 S16
11 *	Pivot pin	Stainless steel	
17	Air vent assembly	Stainless steel	
18 *	Air vent seat gasket	Stainless steel	BS 1449 304 S11
24	Sensor	Stainless steel	BS 1449 304 S16
25	Sensor gasket	Stainless steel	BS 1449 304 S16
27	Blanking plug (not shown)	Steel	

Pressure/temperature limits (ISO 6552)

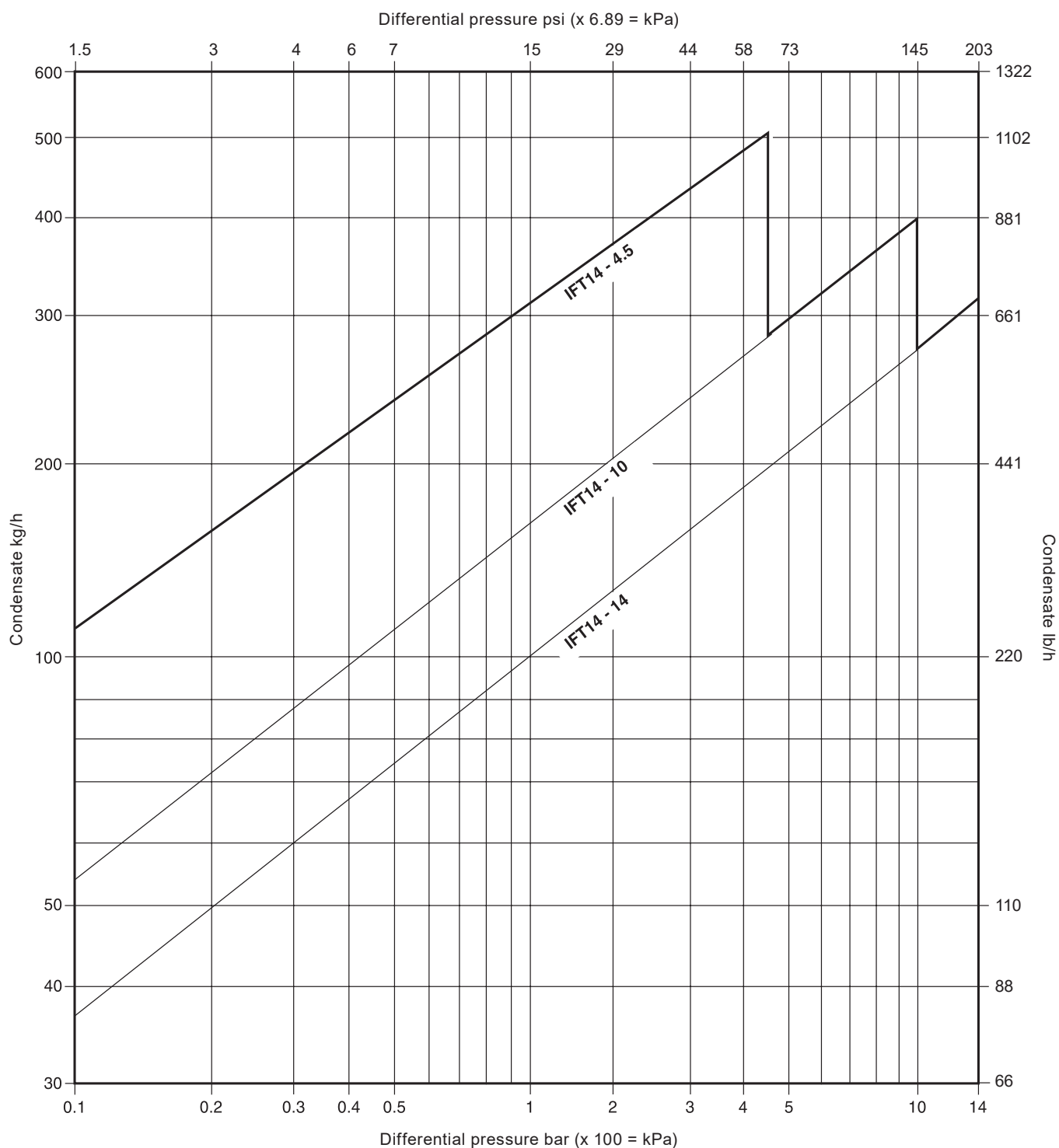
The product should not be used in this region due to the limitations of the sensor.



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

Body design conditions			PN16	
PMA	Maximum allowable pressure	16 bar g @ 100 °C	232 psi g @ 212 °F	
TMA	Maximum allowable temperature	250 °C @ 13 bar g	482 °F @ 188 psi g	
Minimum allowable temperature		-10 °C	14 °F	
PMO	Maximum operating pressure for saturated steam service	14 bar g	203 psi g	
TMO	Maximum operating temperature	240 °C @ 13 bar g	464 °F @ 188 psi g	
Minimum operating temperature		0 °C	32 °F	
ΔPMX	Maximum differential pressure	IFT14-4.5	4.5 bar	65 psi
		IFT14-10	10 bar	145 psi
		IFT14-14	14 bar	203 psi
Designed for a maximum cold hydraulic test pressure of:		24 bar g	348 psi g	

Capacities

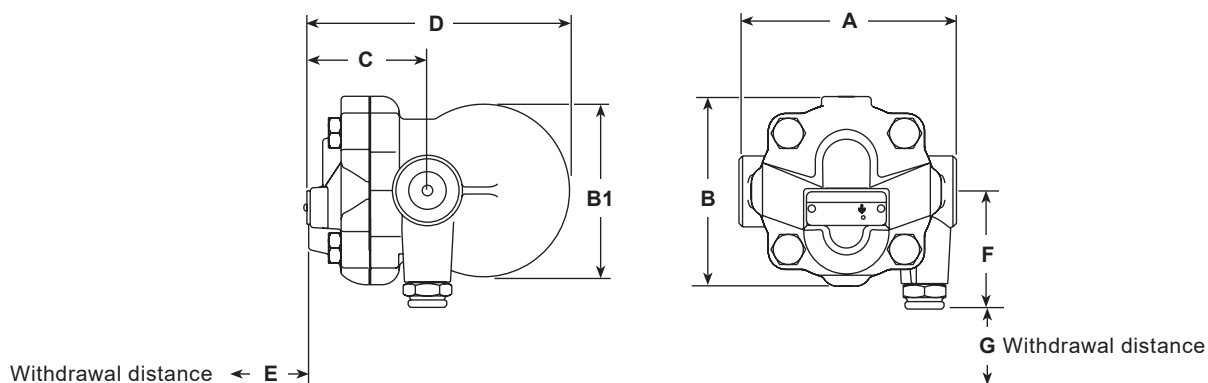


Additional cold water capacities from the thermostatic air vent under start-up conditions

Capacities shown above are based on condensate at saturation temperature. When discharging sub-cooled condensate the air vent provides extra capacity. Under start-up conditions when the condensate is cold the internal thermostatic air vent will be open and provides additional capacity to the main valve. On the IFT14-4.5 units, this will provide a minimum of 50% increased capacity above the hot condensate figures shown. On the IFT14-10 and IFT14-14 units there will be a minimum increase of 100% on the published capacity. The following table gives the minimum additional cold water capacities from the air vent.

ΔP (bar)	0.5 (7)	1 (15)	2 (29)	3 (44)	4.5 (65)	7 (101)	10 (145)	14 (203)
Minimum additional cold water capacity (kg/h)								
½" and ¾"	70 (154)	140 (309)	250 (551)	380 (838)	560 (1235)	870 (1918)	1130 (2491)	1500 (3307)

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



Size	A	B	B1	C	D	E	F	G	Weight
1/2"	122.5	107	96	67	147	105	66	33	2.9
3/4"	(4.8)	(4.2)	(3.8)	(2.6)	(5.8)	(4.1)	(2.6)	(1.3)	(6.4)

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-F01-30) supplied with the product.

Installation note:

The IFT14 must be installed with the direction of flow as indicated on the body, and with the float arm in a horizontal plain so that it rises and falls vertically. It is recommended that a strainer, with a screen having 0.8 mm perforations, is installed upstream of the unit to ensure adequate removal of dirt from the steam system.

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 1/2" IFT14-4.5 ball float steam trap with screwed BSP connections having either an integral sensor to identify waterlogging and steam wastage (WLSI sensor) or for steam leakage only (SSI sensor). Sensors to be compatible with Spiratec indicators, automatic monitors and test points:

- R1 (single trap) remote test point,
- R12 (12 trap) remote test point,
- Type 30 hand held indicator,
- R16C (16 traps) automatic steam trap monitor with PNP/NPN output where appropriate.

Spare parts

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

Available spares

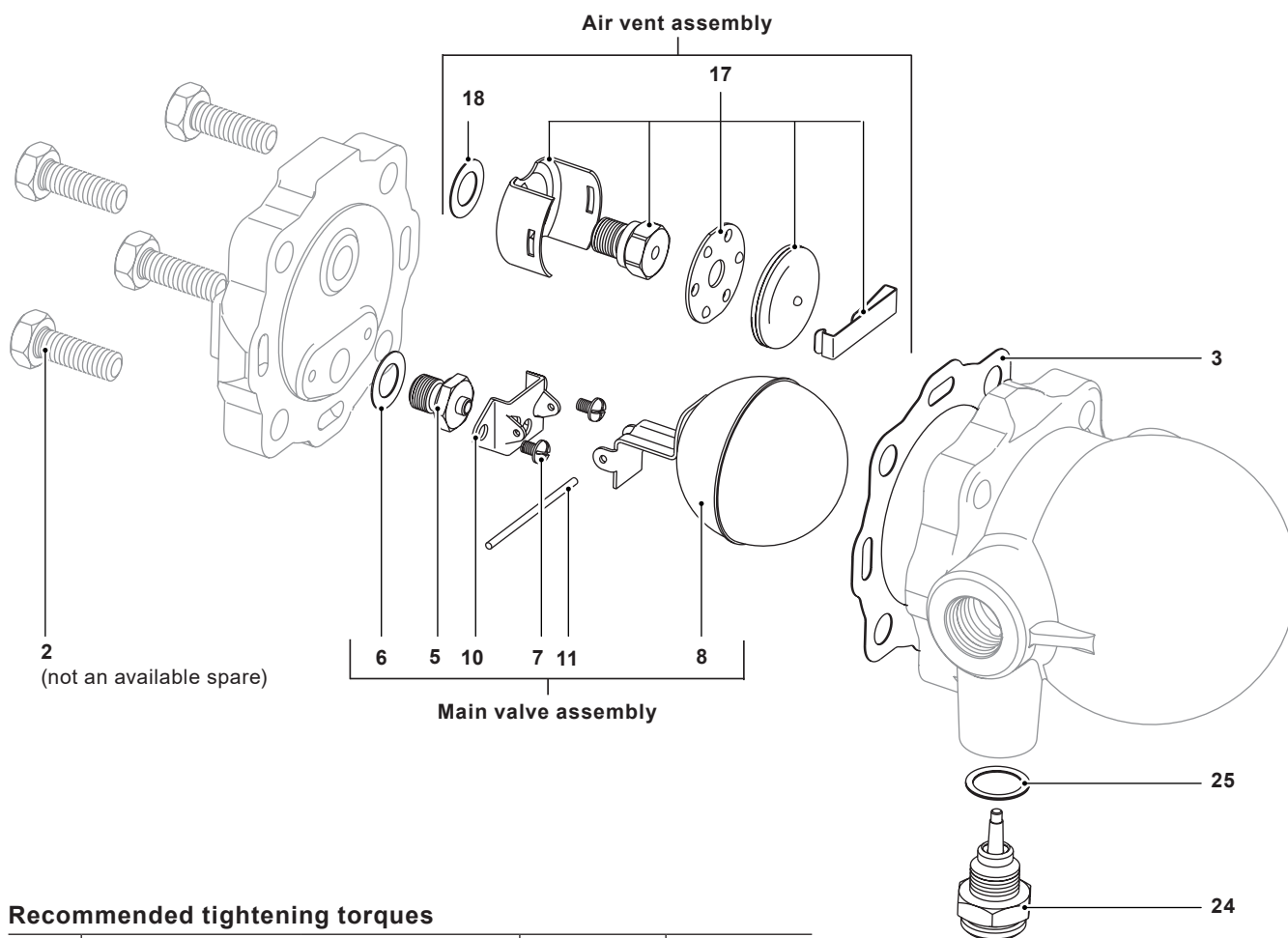
Main valve assembly with float	3, 5, 6, 7 (2 off), 8, 10, 11
Air vent assembly	3, 17, 18
Cover gasket (packet of 3)	3
Sensor and sensor gasket	24, 25

How to order spares



Always order spare parts by using the description given in the column headed 'Available spares' and state the size, Model no. and pressure rating of the trap.

Example: 1 - Main valve assembly for a Spirax Sarco ½" IFT14-4.5 ball float steam trap with integral Spiratec sensor.

Note: The pressure range is either 4.5, 10 or 14 bar.



Recommended tightening torques

Item		or mm		N m	ft lbf
2	17 A/F	M10 x 30		45 - 55	33 - 41
5	17 A/F			50 - 55	37 - 41
7	Pozidrive	M4 x 6		2.5 - 3.0	1.8 - 2.2
17	17 A/F			50 - 55	37 - 41
24	24 A/F			50 - 55	37 - 41