



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

TI-P615-07

ST Issue 3

IFT53 Cast Iron Ball Float Steam Trap with Integral Spiratec Sensor and Flanged Connections

Description

The IFT53 is a cast iron ball float steam trap fitted with an integral Spiratec sensor (SSI) for steam leakage detection and integral thermostatic air vent for the prompt removal of large condensate loads from steam systems. The trap is supplied with integrally flanged connections (for horizontal or vertical installation) and can be maintained without disturbing the pipework. Body and cover are produced by TÜV approved foundries.

Available options: IFT53H - Horizontal flow. IFT53V - Vertical flow.

Sensors are 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 trap) automatic steam trap monitor with PNP/NPN output where appropriate.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC and carries the **CE** mark when so required.

Certification

This product is available with a Typical Test Report.

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

Sizes and pipe connections

DN40 and DN50.

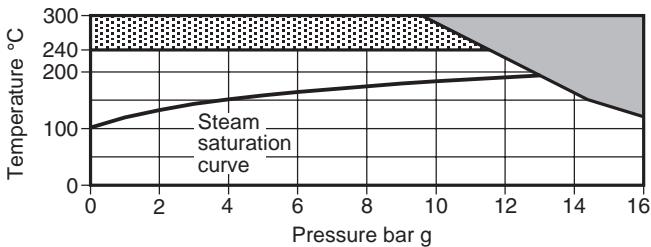
Standard flange EN 1092 PN40 (formerly DIN 2501).

Face-to-face dimensions to BS EN 26554 Series 1.

Optional extras

If requested at the point of order the cover can be drilled and tapped for the purpose of fitting a balance line and drain cock.

Pressure/temperature limits



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

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

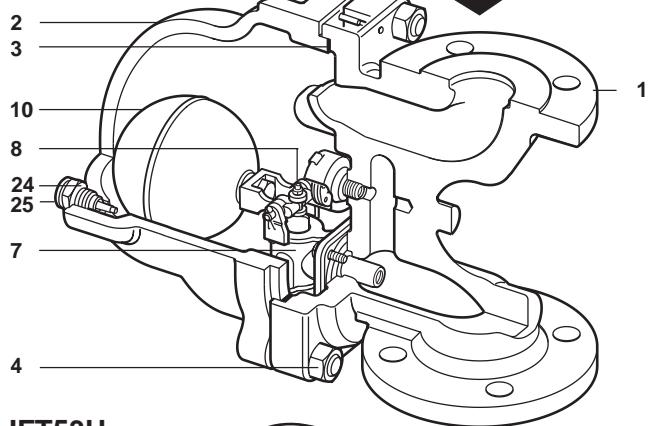
Body design conditions	PN16	
PMA Maximum allowable pressure	16 bar g	@ 120°C
TMA Maximum allowable temperature	300°C	@ 9.5 bar g
Minimum allowable temperature	-10°C	
PMO Maximum operating pressure for saturated steam service	13 bar g	
TMO Maximum operating temperature	240°C	@ 11.5 bar g
Minimum operating temperature	0°C	

Note: For lower operating temperatures consult Spirax Sarco.

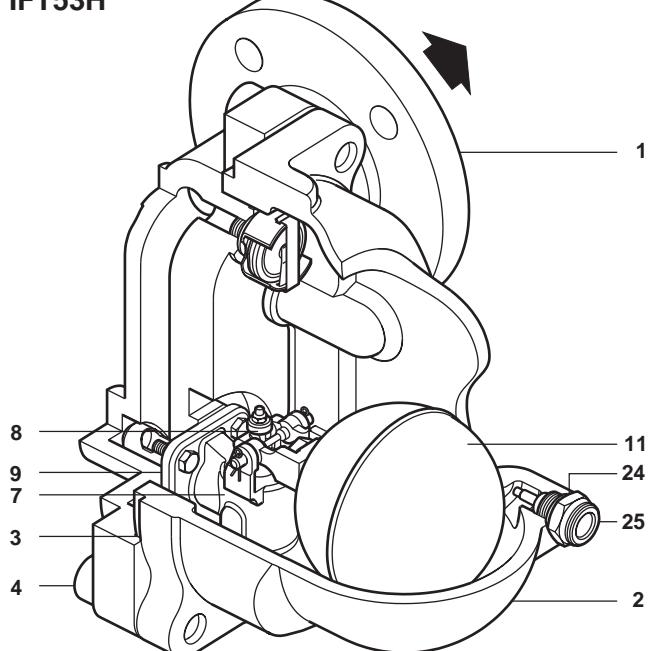
Maximum differential pressure	IFT53H-4.5, IFT53V- 4.5	4.5 bar
ΔPMX differential pressure	IFT53H-10, IFT53V-10	10 bar
	IFT53H-13, IFT53V-13	13 bar

Designed for a maximum cold hydraulic test pressure of 24 bar g

IFT53V



IFT53H



Materials

No.	Part	Material
1	Body	Cast iron EN-GJL-250
2	Cover	Cast iron EN-GJL-250
3	Cover gasket	Reinforced exfoliated graphite
	Cover bolts IFT53H	Steel 24 CrMo 5 (1.7258)
4	Cover studs IFT53V	Steel 24 CrMo 5 (1.7258)
	Cover nuts IFT53V	CK 35 (1.1181)
7	Valve seat	Stainless steel X 22 CrNi 17 2 (1.4057)
8	Valve	Stainless steel X 22 CrNi 17 2 (1.4057)
9	Main valve gasket	Exfoliated graphite
10	Ball float	Stainless steel X 5 CrNi 18 10 (1.4301)
11	Ball float	Stainless steel X 5 CrNi 18 10 (1.4301)
24	Sensor gasket	Stainless steel BS 1449 304 S16
25	Sensor	Stainless steel BS 1449 304 S16

Note: All other internals are manufactured in stainless steel.

Dimensions/weights (approximate) in mm and kg

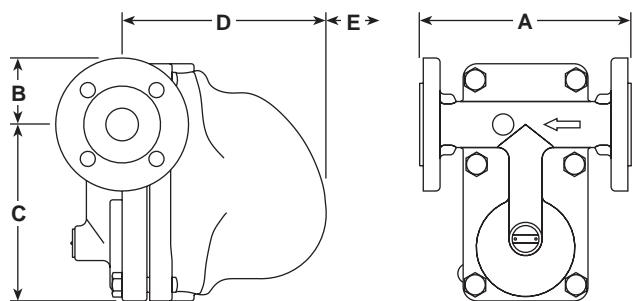
IFT53H

Size	A	B	C	D	E	Weight
DN40	230	75.5	192	208	168	27.0
DN50	230	83.0	192	208	168	28.0

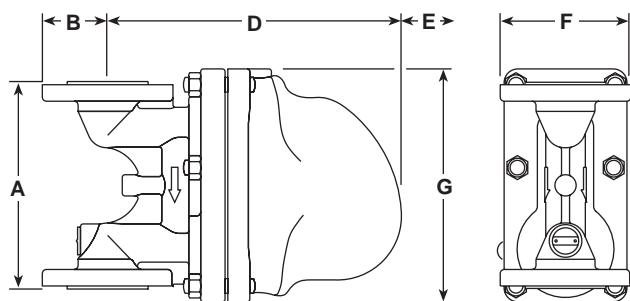
IFT53V

Size	A	B	D	E	F	G	Weight
DN40	230	75.5	312	168	151	255	29.0
DN50	230	83.0	312	168	166	255	30.0

IFT53H

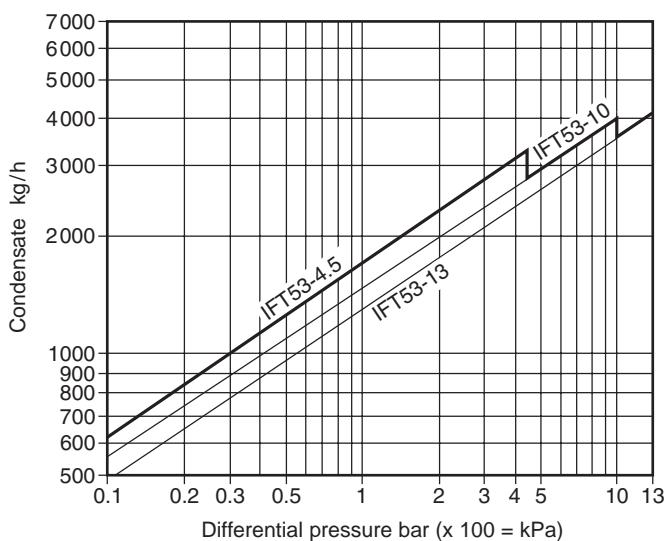


IFT53V



Capacities (in accordance with ISO 7842)

Note: Capacities shown are based on boiling hot condensate.



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

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. The table below gives the minimum additional cold water capacities from the air vent.

Minimum additional cold water capacities from the air vent (kg/h):

Pressure (bar)	0.5	1	2	3	4.5	8	10	13
DN40 and DN50	460	680	900	1080	1300	1700	1900	2150

How to order

Example: 1 off Spirax Sarco DN40 IFT53H-4.5 ball float steam trap with cast iron body and cover having an integral sensor (SS1) to identify steam leakage. Flanged connections to EN 1092 PN16. Trap to be fitted with the optional balance and drain connections.

Spare parts

See TI-P615-08 for the relevant information.