



spirax sarco

FT54

TI-P603-01
ST Issue 3

Cert. No. LRQ 0963008

ISO 9001

Carbon Steel Ball Float Steam Trap with Flanged Connections

Description

The FT54 is a carbon steel ball float steam trap with internal 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 TUV approved foundries. For further information see TI-P603-04.

Available options: FT54H - Horizontal flow. FT54V - Vertical flow.

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 certification to EN 10204 3.1. **Note:** All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

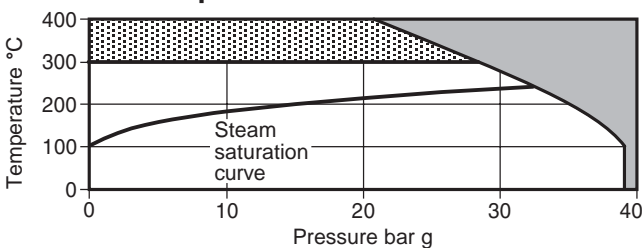
DN15, DN20, DN25, DN40 and DN50.
Standard flange EN 1092 PN40 (formerly DIN 2501).
Face-to-face dimensions to BS EN 26554 Series 1.

Optional extras

Manually adjustable needle valve (designated 'C' on the nomenclature) can be fitted to all versions. This option provides a **steam lock release** feature in addition to the standard air vent.

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

Pressure/temperature limits



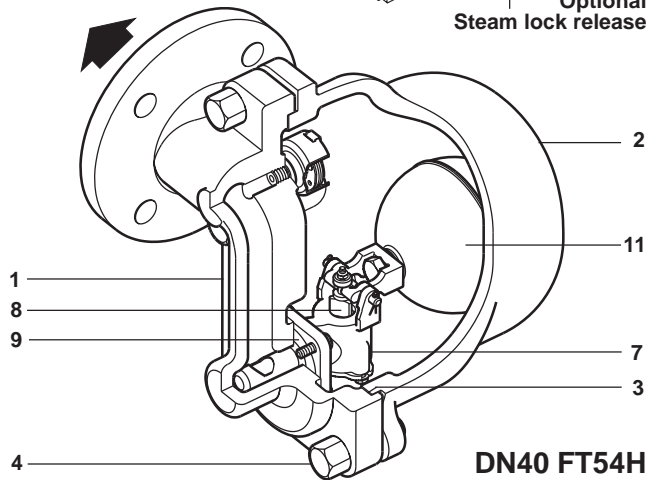
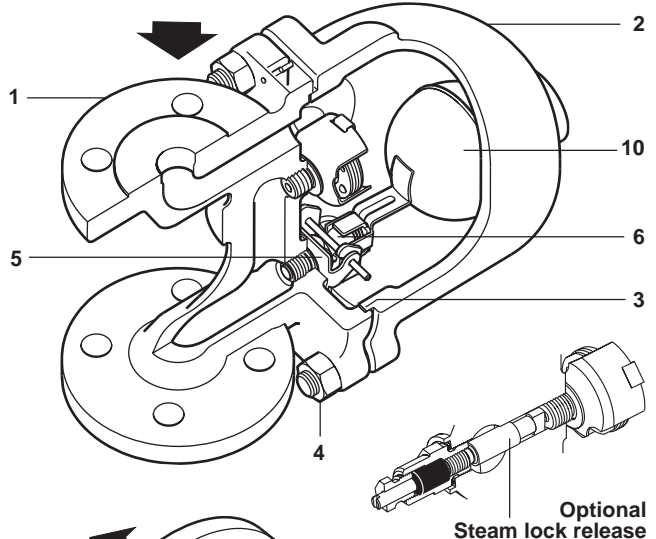
The product **must not** be used in this region.

The product should not be used in this region or beyond its operating range as damage to the internals may occur.

Body design conditions		PN40
PMA	Maximum allowable pressure	40 bar g @ 100°C
TMA	Maximum allowable temperature	400°C @ 21 bar g
Minimum allowable temperature		-10°C
PMO	Maximum operating pressure for saturated steam service	32 bar g
TMO	Maximum operating temperature	300°C @ 27.5 bar g
Minimum operating temperature		0°C
Note: For lower operating temperatures consult Spirax Sarco.		
ΔPMX	Maximum differential pressures	See overleaf
Designed for a maximum cold hydraulic test pressure of 60 bar g		

Caution: The trap in its complete operational form must not be subjected to a pressure of greater than 48 bar otherwise damage to the internal mechanism may result.

DN15 FT54V



Materials

No.	Part	Material	
1	Body	Carbon steel	1.0619+N
2	Cover	Carbon steel	1.0619+N
3	Cover gasket	Reinforced exfoliated graphite	
	Cover bolts FT54H	Steel	24 CrMo 5 (1.7258)
4	Cover studs FT54V	Steel	24 CrMo 5 (1.7258)
	Cover nuts FT54V	Steel	CK 35 (1.1181)
5	Valve seat DN15-DN25	Stainless steel	X 22 CrNi 17 2 (1.4057)
6	Valve DN15-DN25	Stainless steel	X 105 CrMo 17 (1.4125)
7	Valve seat DN40-DN50	Stainless steel	X 22 CrNi 17 2 (1.4057)
8	Valve DN40-DN50	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	Valve seat	Stainless steel	X 22 CrNi 17 2 (1.4057)

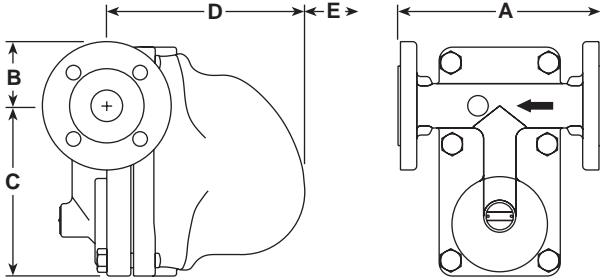
Note: All other internals are manufactured in stainless steel.

Dimensions/weights (approximate) in mm and kg

FT54H

Size	A	B	C	D	E	Weight
DN15	150	48	126	151	119	7.5
DN20	150	53	126	151	119	8.0
DN25	160	58	126	151	119	8.5
DN40	230	75.5	192	208	168	27.0
DN50	230	83	192	208	168	28.0

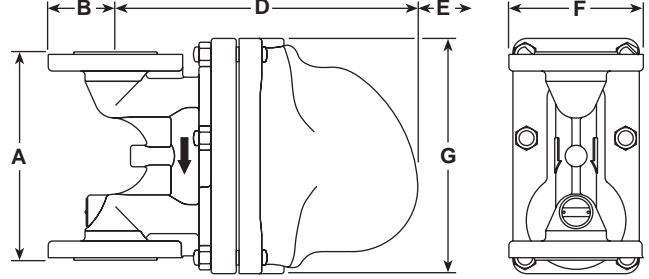
FT54H DN15 - DN50



FT54V

Size	A	B	D	E	F	G	Weight
DN15	150	48	214	119	96	175	7.5
DN20	150	53	214	119	106	175	8.0
DN25	160	58	221	119	116	175	8.5
DN40	230	75.5	312	168	151	255	29.0
DN50	230	83	312	168	166	255	30.0

FT54V DN15 - DN50



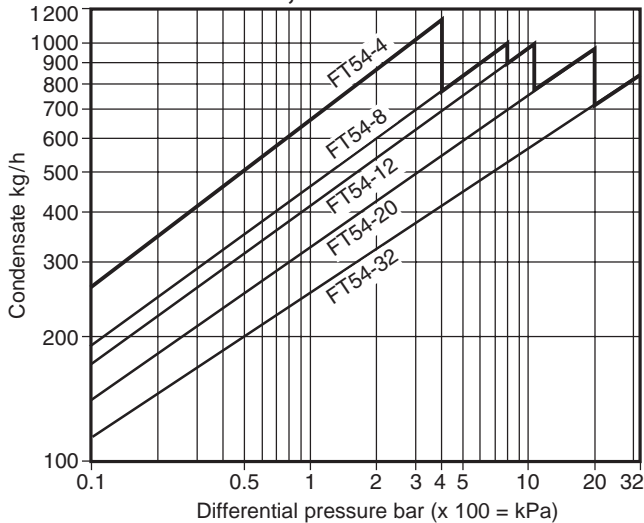
ΔPMX - Maximum differential pressures

Size and model	FT54H-4	FT54H-4.5	FT54H-8	FT54H-10	FT54H-12	FT54H-20	FT54H-28	FT54H-32
	FT54V-4	FT54V-4.5	FT54V-8	FT54V-10	FT54V-12	FT54V-20	FT54V-28	FT54V-32
DN15, DN20 and DN25	4 bar	-	8 bar	-	12 bar	20 bar	-	32 bar
DN40 and DN50	-	4.5 bar	-	10 bar	-	-	28 bar	-

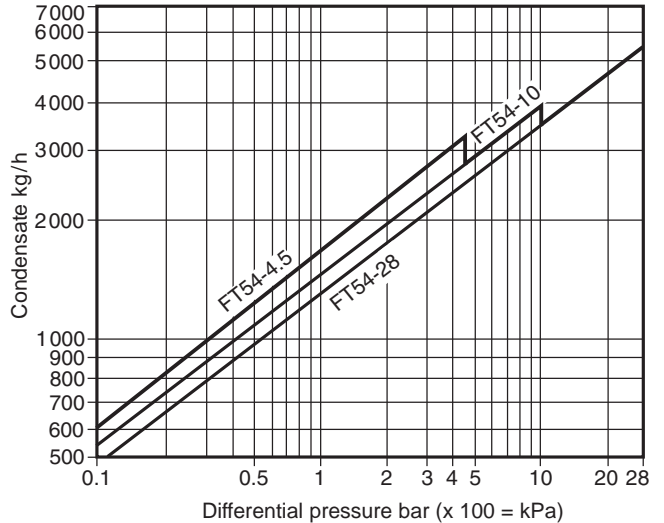
Capacities (in accordance with ISO 7842)

Capacities shown are based on boiling hot condensate.

DN15, DN20 and DN25



DN40 and DN50



Additional cold water capacities from 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	4.5	8	10	12	16	20	28	32
DN15, DN20 and DN25	460	680	900	1080	1250	-	1700	-	2000	2250	2550	-	3000
DN40 and DN50	460	680	900	1080	-	1300	1700	1900	-	2250	2550	2900	-

How to order

Example: 1 off Spirax Sarco DN40 FT54H-4.5 ball float steam trap with carbon steel body and cover. Flanged connections to EN 1092 PN40. Trap to be fitted with the optional balance and drain connections.

Note: If the product has the optional steam lock release fitted the nomenclature would be FT54-4.5-C.

Spare parts See TI-P603-04 for relevant information.