



Cert. No. LRQ 0963008

ISO 9001

spirax/sarco

TD20JF

(Japanese Flanged)

Thermodynamic Steam Trap

TI-P068-44

ST Issue 2

Description

The TD20JF is a low capacity thermodynamic steam trap with Japanese flanges.

Sizes and pipe connections

DN15, DN20 and DN25

Flanged ends to JIS B2238:1996 ratings 10K and 20K

Optional extras

The following items are available as optional extras. If any option is required it must be specified at the time of order placement.

Insulating cover: To prevent the trap being unduly influenced by excessive heat such as when subjected to low outside temperatures, wind, rain, etc.

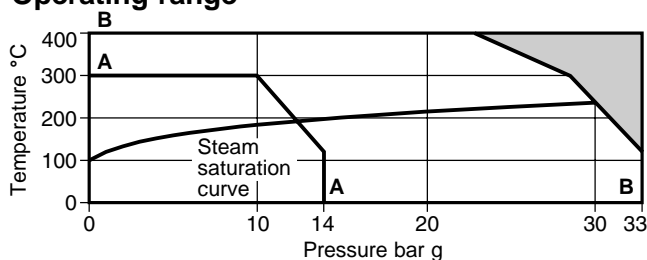
Integral blowdown valve: Strainer cap can be drilled and tapped 1/4" BSP or NPT so that a blowdown cock can be fitted.

Limiting conditions

Body design condition	JIS 20K rating
PMA - Maximum allowable pressure	33 bar g
TMA - Maximum allowable temperature	400°C
PMO - Maximum operating pressure	30 bar g
Designed for a maximum cold hydraulic test pressure of 49 bar g	

Body design condition	JIS 10K rating
PMA - Maximum allowable pressure	14 bar g
TMA - Maximum allowable temperature	400°C
PMO - Maximum operating pressure	11.5 bar g
Designed for a maximum cold hydraulic test pressure of 20 bar g	

Operating range



The product must not be used in this region.

A - A Flanged JIS B2238 10K

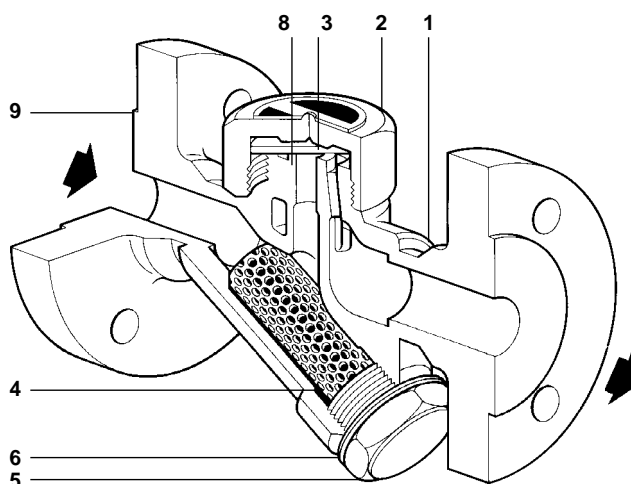
B - B Flanged JIS B2238 20K

PMOB Maximum operating back pressure 80% of upstream pressure

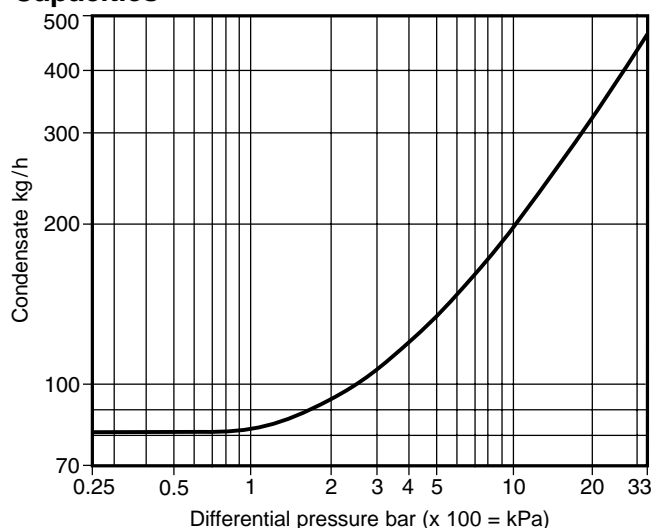
Note: Minimum pressure for satisfactory operating is 0.25 bar g.

Materials

No.	Description	Material
1	Body	Cast steel ASTM A105N
2	Cap	Stainless steel AISI 416
3	Disc	Stainless steel BS 1449 420 S45
4	Strainer screen	Stainless steel AISI 316L
5	Strainer cap	Stainless steel AISI 416
6	Cap gasket	Stainless steel BS 1449 304 S16
7	Insulating cover (Optional extra - shown overleaf)	Aluminium
8	Seat	Stellite
9	Flanges	Forged steel ASTM A105N

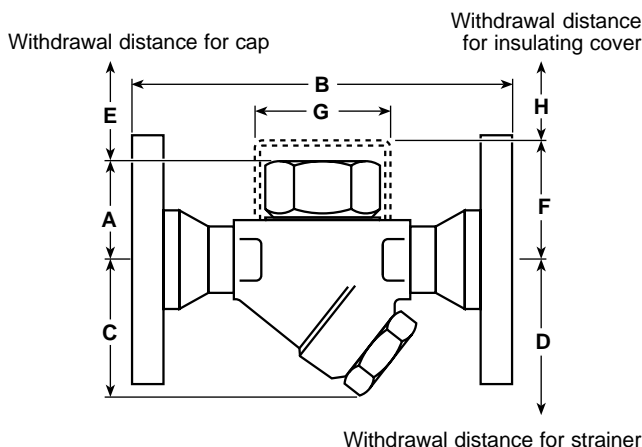


Capacities



Dimensions / weights (approximate) in mm and kg

Size	A	B	C	D	E	F	G	H	Weight
DN15	41	175	55	85	41	57	57	38	2.3
DN20	41	195	55	85	41	57	57	38	3.1
DN25	41	215	55	85	41	57	57	38	4.2



Safety information

Pressure

Before attempting any maintenance of the trap, consider what is or may have been in the pipeline. Ensure that any pressure is isolated upstream and downstream of the trap and safely vented to atmospheric pressure before attempting to maintain the trap. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Suitable isolation valves must be installed to allow for safe maintenance and trap replacement. Consideration should be given to a suitable method for testing the correct operation of the trap. This may be a sight glass or a Spiratec system. Sight glasses must be positioned a minimum of 1 m downstream of any blast-action traps. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Remove all packaging and protective covers and ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved - this will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment are used at all times.

Maintenance

How to service

Remove insulating cover, if fitted, and unscrew the cap using a suitable spanner or socket. Do not use stillsons or a wrench of similar type which may cause distortion of the cap. When reassembling, the disc is normally placed in position with the grooved side in contact with the body seating face. Screw on the cap to the recommend torque setting; no gasket is required but a suitable high temperature anti-seize grease should be applied to the threads.

To clean or replace the strainer

Unscrew the strainer cap using a suitable spanner, withdraw the screen and clean or, if damaged, replace with a new one. To reassemble, insert the screen into the cap, then screw the cap into place. A fine smear of 'Molybdenum Disulphide' grease should be applied to the first few threads. Care should be taken to ensure that the gasket and gasket faces are clean. Tighten to the recommended torque.

Disposal

The 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 DN15 Spirax Sarco TD20JF thermodynamic steam trap with flanged JIS 10K end connections.

Spare parts

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

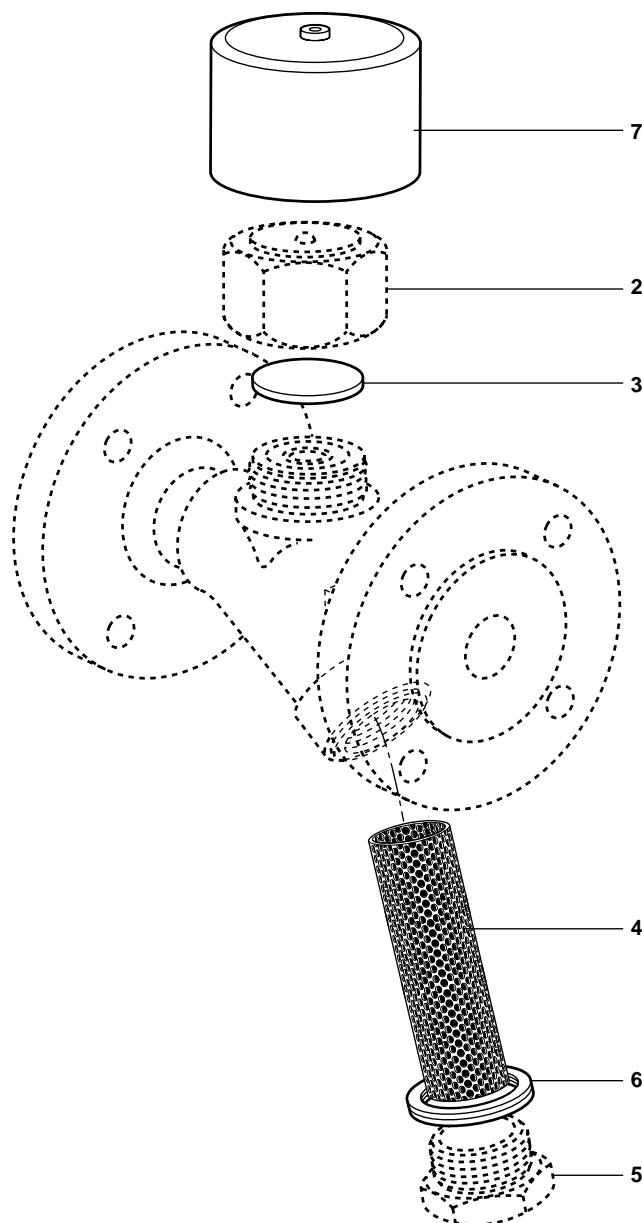
Available spares

Disc (packet of 3)	3
Strainer screen and gasket	4, 6
Cap gasket (packet of 3)	6
Insulating cover	7



How to order spares

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

Example: 1 - Strainer screen and gasket for a DN15 Spirax Sarco TD20JF thermodynamic steam trap.



Recommended tightening torques

Item	 or mm		N m
2	36 A/F		87 - 97
5	32 A/F	M24	120 - 135