TDC46M
Carbon Steel
Thermodynamic Steam Trap with Maintainable Seat

Description

The TDC46M thermodynamic steam trap has been specifically designed for low capacity applications up to 46 bar g.

TDC46M benefits:

- Integral strainer.
- Integral air vent.
- Insulation cap.
- Replaceable seat to ease maintenance.

Available types

Model	Body	Pipeline connections
TDC46M	Carbon steel	Screwed, socket weld

Optional extra
At extra cost a **BDV1** integral blowdown valve can be pre-fitted to the strainer cap, please specify at the time of order placement.

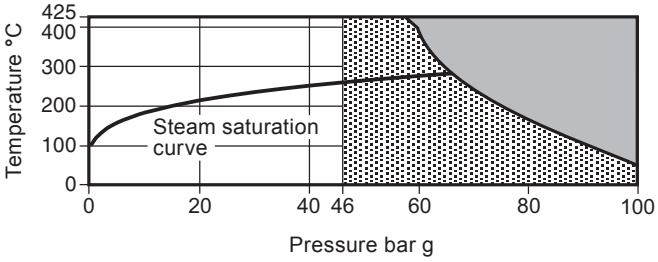
Standard
This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

Certification
This product is available with certification to EN 10204 3.1.
Note: All certification/inspection requirements must be specified at the time of order placement.

Sizes and pipe connections

½", ¾" and 1" screwed BSP or NPT.
½", ¾" and 1" socket weld ends to BS 3799 Class 3000 lb.

Pressure/temperature limits (ISO 6552)



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

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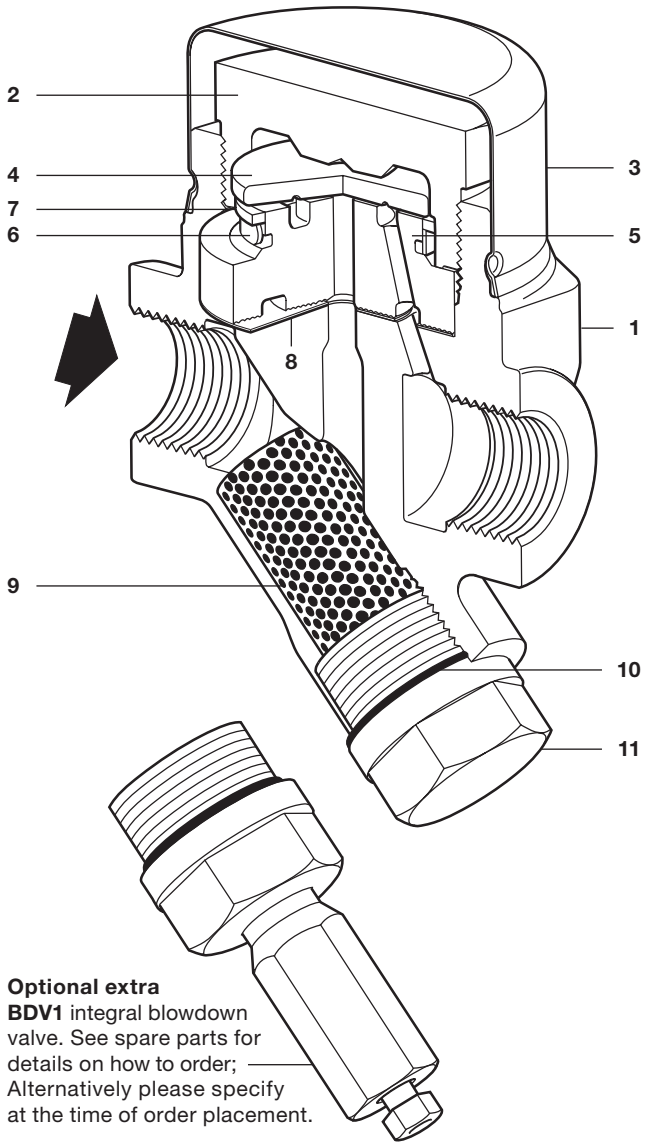
Body design conditions		PN100 and ASME Class 600
PMA	Maximum allowable pressure	100 bar g @ 50°C
TMA	Maximum allowable temperature	425°C @ 57.5 bar g
Minimum allowable temperature		-29°C
PMO	Maximum operating pressure	46 bar g
TMO	Maximum operating temperature	425°C @ 46 bar g
Minimum operating pressure		1.5 bar g
Minimum operating temperature		0°C
Note: For lower operating temperatures consult Spirax Sarco		
PMOB	Maximum operating backpressure is 80% of the upstream pressure	
Designed for a maximum cold hydraulic test pressure of 150 bar g		

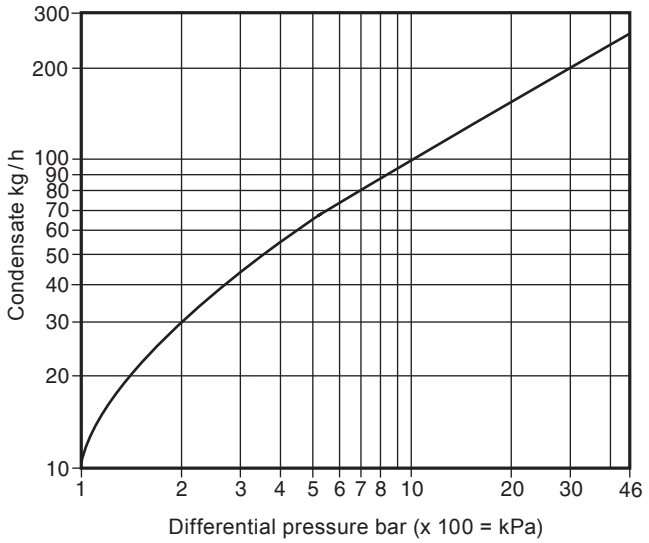


Optional extra
BDV1 integral blowdown valve. See spare parts for details on how to order; Alternatively please specify at the time of order placement.

Materials

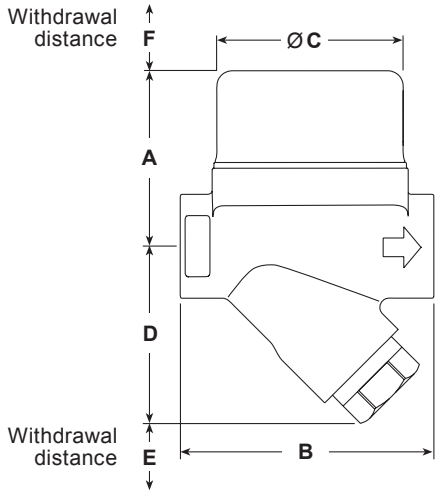
No.	Part	Material	
1	Body	Carbon steel	1.0619+N / ASTM A216 WCB
2	Top cap	Stainless steel	1.4301 / ASTM A479 304
3	Insulating cover	Stainless steel	EN 10088-1 1.4301
4	Disc	Hardened steel	1.2379
5	Seat	Hardened steel	1.2379
6	Bimetal ring	Bimetal	
7	Support	Stainless steel	AISI 304
8	Seat gasket	Graphite foil	
9	Strainer screen	Stainless steel	ASTM A748 316L
10	Strainer cap gasket	Stainless steel	AISI 304
11	Strainer cap	Stainless Steel	1.4308/ASTM A351 CF8

Capacities



Dimensions / weights (approximate) in mm and kg

Size	A	B		Ø C	D	E	F	Weights	
		Screwed	Socket weld					Screwed	Socket weld
½" DN15	58	78	92	61	59	40	30	1.38	1.49
¾" DN20	61	95	92	61	63	40	30	1.64	1.64
1" DN25	65	95	92	61	67	40	30	1.90	1.90



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P187-05) supplied with the product.

Installation note:

The TDC46M is designed for installation with the disc in a horizontal plane with the insulating cover at the top.

It is recommended that a non-return valve is fitted when discharging condensate into return lines where backpressure is experienced. It is also recommended that a diffuser is fitted when discharging to atmosphere.

For ease and maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

How to order

Example: 1 off Spirax Sarco ½" TDC46M thermodynamic steam trap having screwed BSP connections.

Spare parts

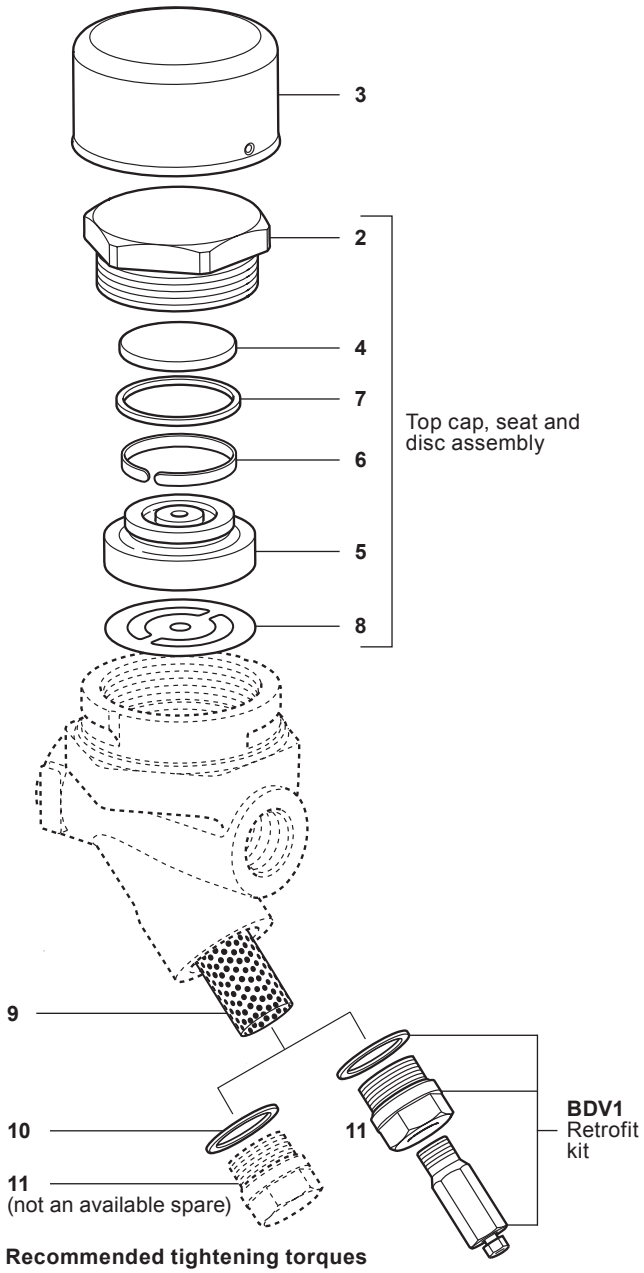
The spare parts available are shown in solid outline. Parts drawn in broken line are not supplied as spares.

Available spares	
Insulating cover	**3**
Top cap, seat and disc assembly	**2**, **4**, **5**, **6**, **7**, **8**
Strainer screen and gasket	**9**, **10**
Set of gaskets (packet of 3 sets)	**8**, **10**
BDV1 blowdown valve retrofit kit	

How to order spares

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

Example: 1 off Top cap, seat and disc assembly for a Spirax Sarco ½" TDC46M thermodynamic steam trap.



Recommended tightening torques

(for suitably lubricated threads)

Item	Part	mm	N m
2	Top cap	50 A/F	250 - 275
11	Strainer cap	24 A/F	105 - 110