



## SMC32 and SMC32Y Carbon Steel Bimetallic Steam Traps

### Description

The SMC32 and SMC32Y are carbon steel maintainable bimetallic steam traps with straight connections. The SMC32 has an integral flat strainer screen and the SMC32Y an integral, cylindrical Y-type strainer. All pressure bearing components are produced by TÜV approved suppliers in accordance with AD-Merkblatt WO/TRD 100.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

### Certification

This product is available with certification to EN 1024 3.1.

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

### Sizes and pipe connections

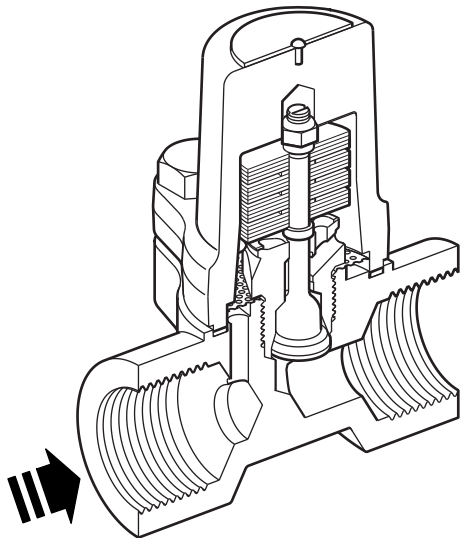
½", ¾", and 1" screwed BSP T Rp (ISO 7-1) or NPT.

½", ¾", and 1" socket weld ends to BS 3799.

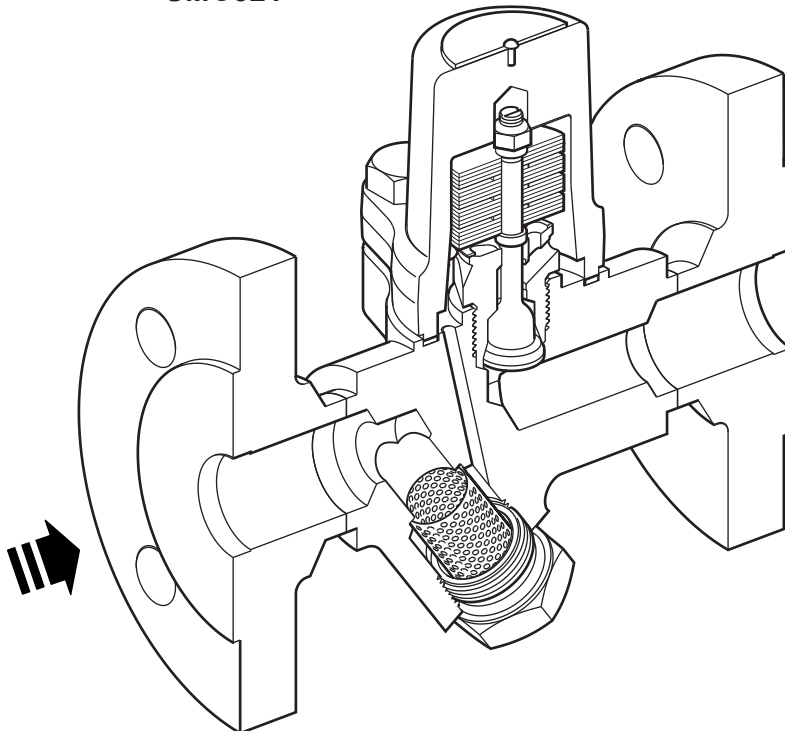
½", ¾", and 1" butt weld ends to EN 12 627.

DN15, DN20 and DN25 standard flange to EN 1092 PN40, ASME B 16.5 Class 150 and 300, JIS/KS 10K and JIS/KS 20 K.

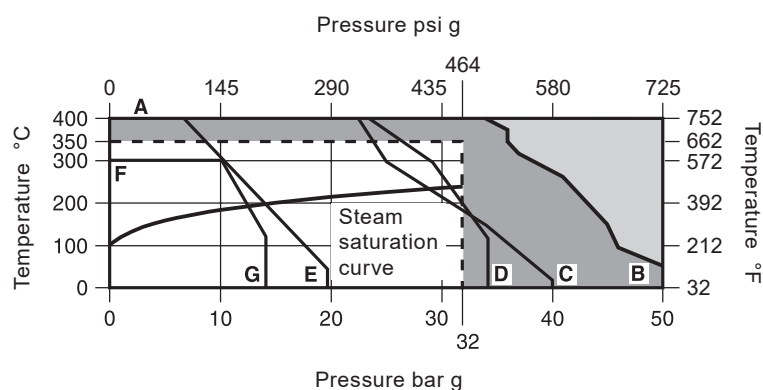
**SMC32**



**SMC32Y**



## Pressure / temperature limits (ISO 6552)



 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.

**A - B** Screwed, socket weld, butt weld and flanged ASME 300.

**A - C** Flanged EN 1092 PN40.

**A - D** Flanged JIS/KS 20K.

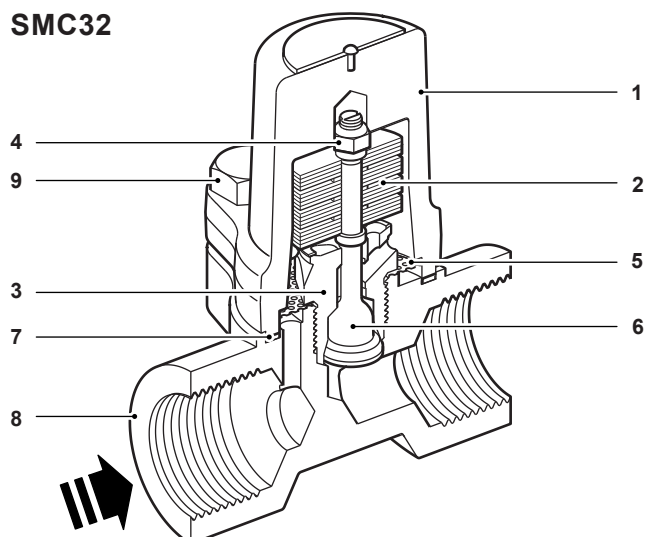
**A - E** Flanged ASME 150.

**F - G** Flanged JIS/KS 10K.

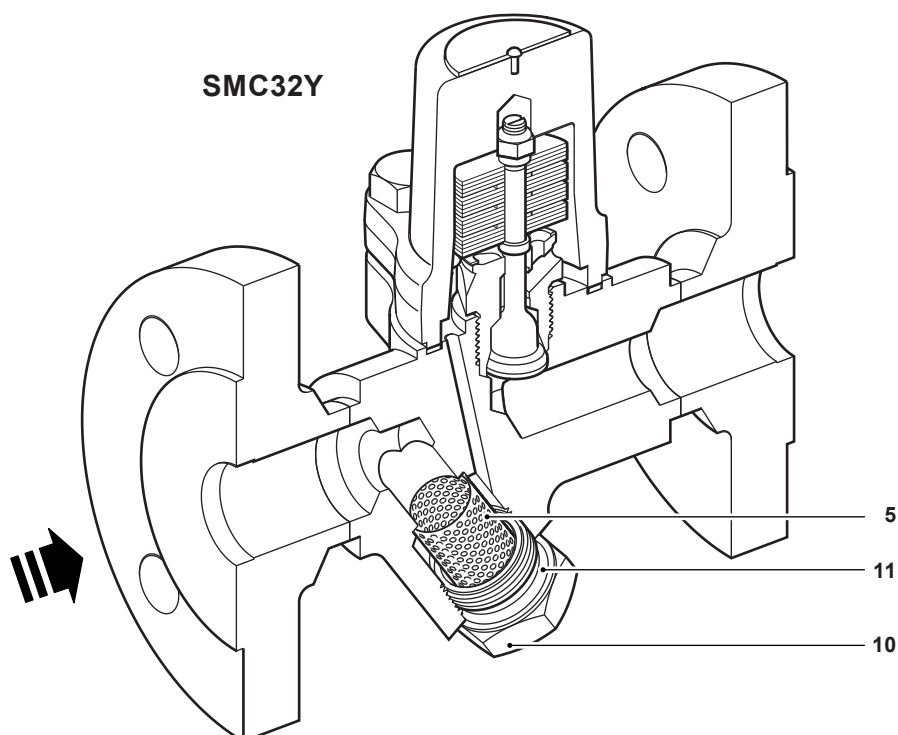
Body design conditions		ASME 300	
PMA	Maximum allowable pressure	50 bar g @ 50 °C	725 psi g @ 122 °F
TMA	Maximum allowable temperature	400 °C @ 35 bar g	752 °F @ 507 psi g
Minimum allowable temperature		-60 °C	-76 °F
PMO	Maximum operating pressure for saturated steam service	32 bar g	464 psi g
TMO	Maximum operating temperature	350 °C @ 32 bar g	662 °F @ 464 psi g
Minimum operating temperature		0 °C	32 °F
<b>Note:</b> For lower operating temperatures consult Spirax Sarco			
Product is safe for use under full vacuum conditions			
Designed for a maximum cold hydraulic test pressure of:		75 bar g	1087 psi g

## Materials

### SMC32

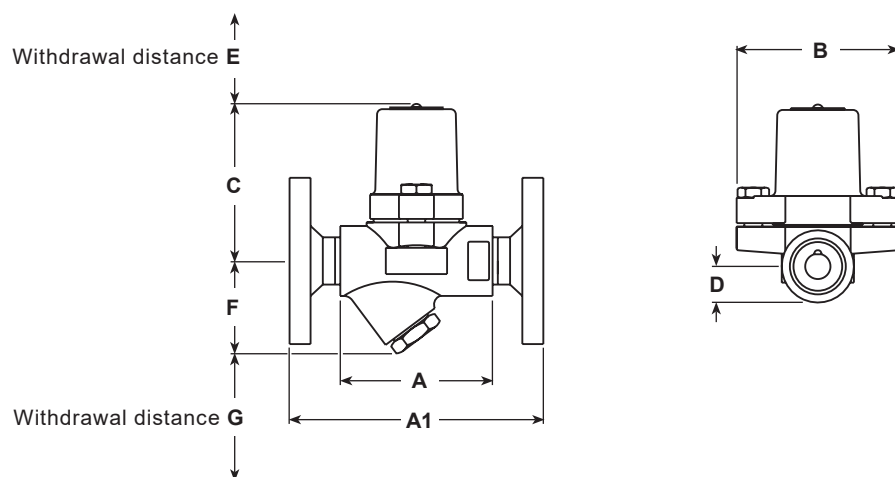


### SMC32Y



No.	Part	Material	
1	Cover	Carbon steel	DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
2	Bimetallic element	Corrosion resistant bimetal and stainless steel	Rau Type H46
3	Valve seat	Stainless steel	BS 970 431 S29
4	Locking nut	Stainless steel	
5	Strainer screen	Stainless steel	AIS 304
6	Valve	Stainless steel	
7	Cover gasket	Stainless steel reinforced exfoliated graphite	
8	Body/flanges	Carbon steel	DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
9	Cover bolts	Stainless steel (M10 x 30)	A2 70
10	Strainer cap	Carbon steel	DIN 17243 C22.B (W/S 1.0460) ASTM A105N
11	Strainer cap gasket	Stainless steel	BS 1449 304 S16

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



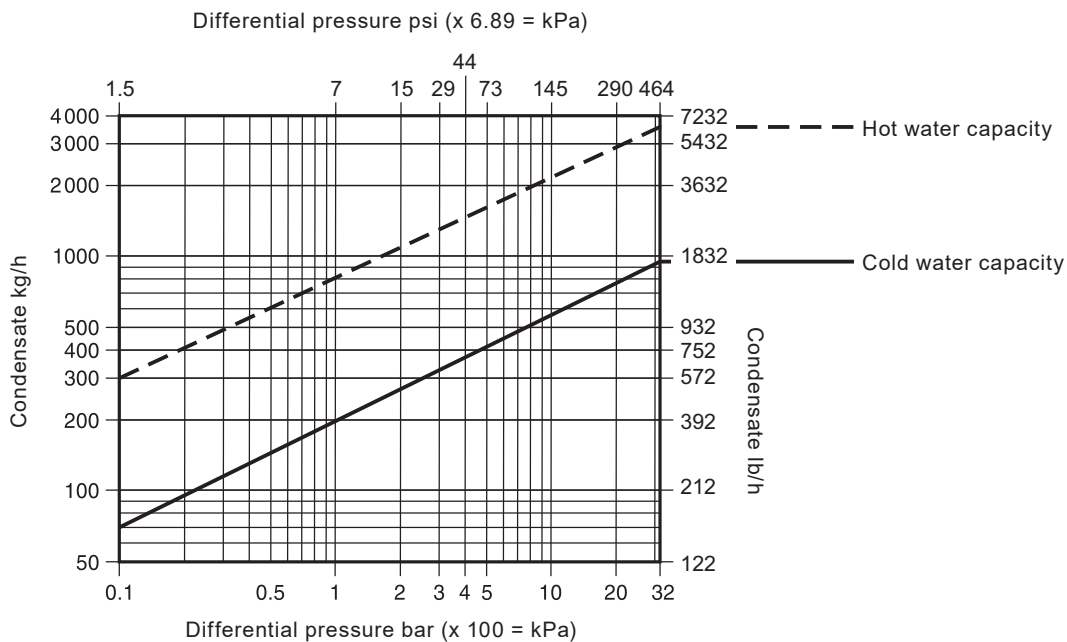
### SMC32

Size	A	A1	B	C	D	E	F	G	Weight	
									Scrd/SW/BW	Flgd
½" DN15	95 (3.74)	150 (5.9)	94 (3.7)	92 (3.6)	17 (0.66)	51 (2.0)			1.7 (3.74)	3.1 (6.83)
¾" DN20					19 (0.74)					3.7 (8.15)
1" DN25					23 (0.90)					4.4 (9.7)

### SMC32Y

Size	A	A1	B	C	D	E	F	G	Weight	
									Scrd/SW/BW	Flgd
½" DN15	95 (3.74)	150 (5.9)	94 (3.7)	92 (3.6)		51 (2.0)	54 (2.12)	28 (1.10)	1.7 (3.74)	3.1 (6.83)
¾" DN20										3.7 (8.15)
1" DN25									1.8 (3.96)	4.4 (9.7)

## Capacities



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P076-09) supplied with the product.

### Installation note:

The SMC32 and SMC32Y are designed for installation in any position, horizontal or vertical.

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.

Increased backpressure will reduce the temperature of condensate discharge. For further information consult Spirax Sarco.

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

### Disposal

These products are recyclable. No ecological hazard is anticipated with the disposal of these products, providing due care is taken.

## How to order

**Example:** 1 off Spirax Sarco ½" SMC32 carbon steel bodied maintainable bimetallic steam trap with an integral strainer screen and screwed BSP T Rp (ISO 7-1) connections.

## Spare parts

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

### Available spares

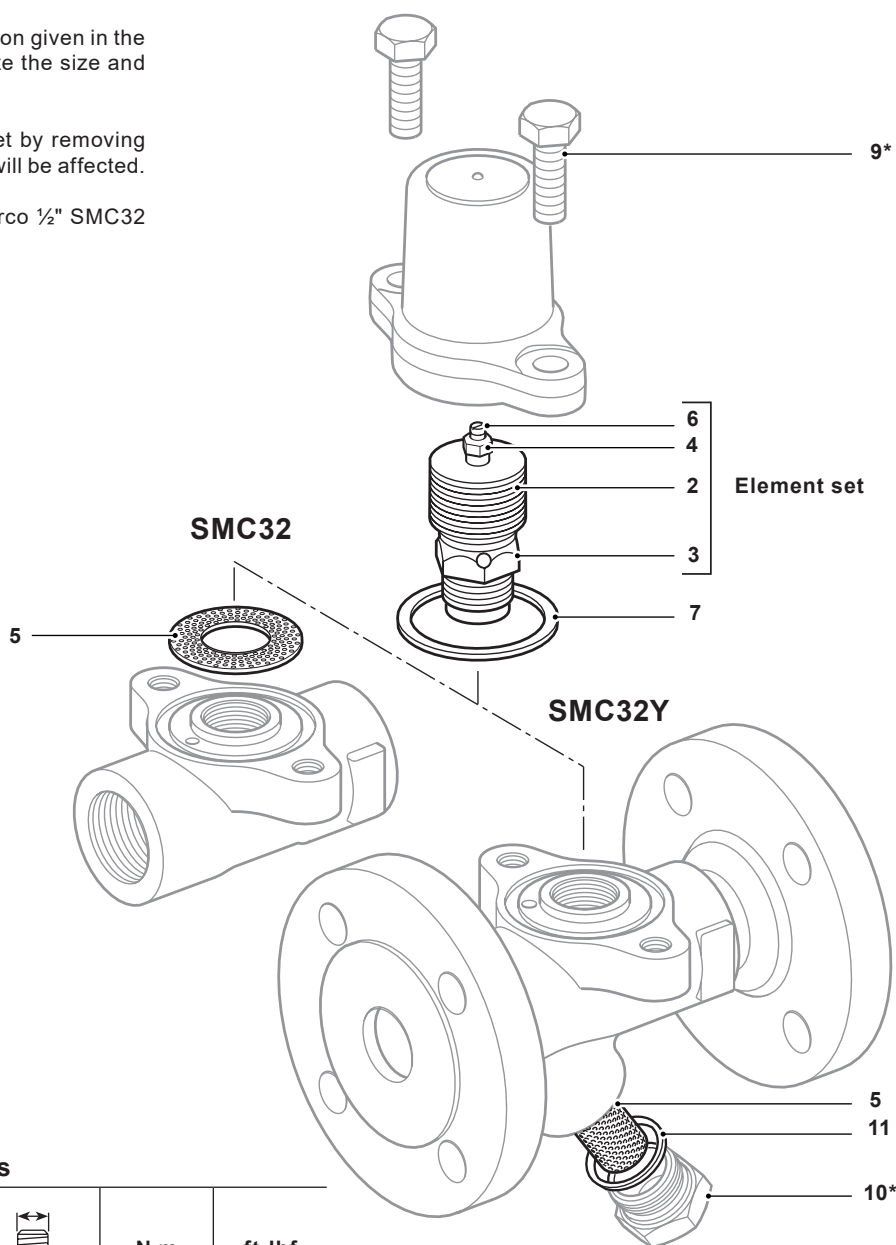
Element set			2, 3, 4, 6
Strainer screen	SMC32	(3 off)	5
Strainer screen and gasket	SMC32Y	(1 off)	5, 11
Set of cover gaskets		(packet of 3)	7
Strainer cap gasket		(packet of 3)	11

### 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.

Warning: Do not dismantle the element set by removing the locking nut (4) or the setting of the trap will be affected.

**Example:** 1 - Element set for a Spirax Sarco ½" SMC32 bimetallic steam trap.



### Recommended tightening torques

Item	Part	 or mm		N m	ft-lbf
3	Valve seat	24 A/F		115 - 125	85-92
9	Cover bolts	16 A/F	10 x 30	23 - 27	17-20
10	Strainer cap	27 A/F		120 - 135	89-100

\* **Note:** Items 9 and 10 are not available as spares.