



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

ISMC32

TI-P076-11
ST Issue 4

Carbon Steel

Bimetallic Steam Trap with Integral Spiratec Sensor

Description

The ISMC32 is a carbon steel maintainable bimetallic steam trap fitted with an integral Spiratec sensor and straight connections and has an integral cylindrical Y-type strainer.

It can be supplied with a sensor to detect waterlogging and steam leakage (WLS1) or for steam leakage only (SS1).

The ISMC32 can be easily integrated into all existing Spiratec monitoring systems.

All pressure bearing components are produced by TÜV approved suppliers in accordance with AD-Merkblatt WO/TRD100.

Standards

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 stated at the time of order placement.

Sizes and pipe connections

½", ¾", and 1" screwed BSP or NPT.

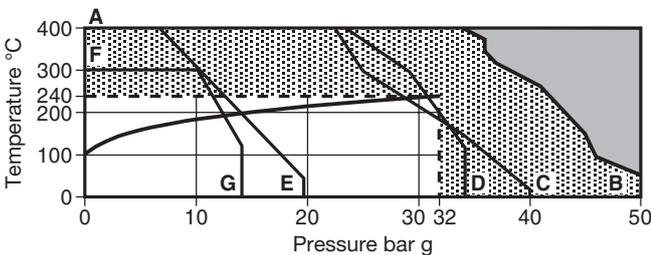
½", ¾", and 1" socket weld ends to BS 3799.

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

DN15, DN20 and DN25 standard flange to EN 1092 PN40.

ANSI B 16.5 Class 150 and 300, JIS/KS 10K and JIS/KS 20K.

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 ANSI 300.

A - C Flanged EN 1092 PN40.

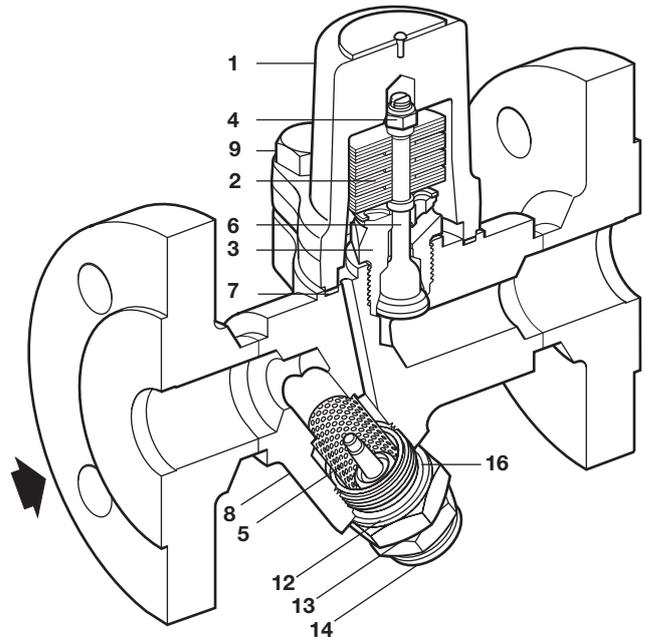
A - D Flanged JIS/KS 20K.

A - E Flanged ANSI 150.

F - G Flanged JIS/KS 10K.

Body design conditions	PN40
PMA Maximum allowable pressure	50 bar g @ 50°C
TMA Maximum allowable temperature	400°C @ 35 bar g
Minimum allowable temperature	-60°C
PMO Maximum operating pressure for saturated steam service	32 bar g
TMO Maximum operating temperature	240°C @ 32 bar g
Minimum operating temperature	0°C

Note: For lower operating temperatures consult Spirax Sarco
Designed for a maximum cold hydraulic test pressure of 75 bar g

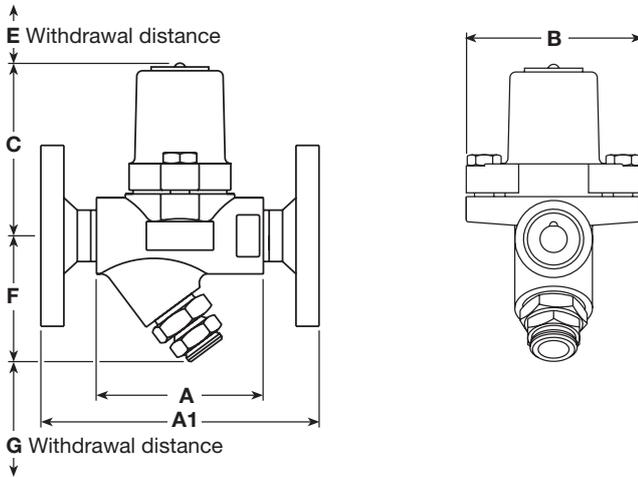


Materials

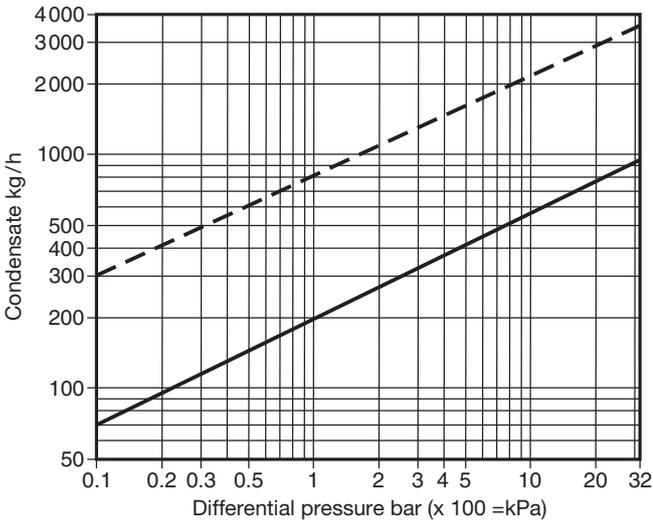
No.	Part	Material
1	Cover	Carbon steel DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
2	Bimetallic element	Corrosion resistant bimetal (Rau Type H46) and stainless steel
3	Valve seat	Stainless steel BS 970 431 S29
4	Locking nut	Stainless steel
5	Strainer screen	Stainless steel AISI 304
6	Valve	Stainless steel
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
12	Sensor adaptor	Stainless steel BS 970 416 S37
13	Sensor gasket	Stainless steel BS 1449 304 S16
14	Sensor	Stainless steel BS 1449 304 S16
15	Blanking plug (not shown)	Steel
16	Adaptor gasket	Stainless steel BS 1449 304 S16

Dimensions/weights (approximate) in mm and kg

Size	A	A1	B	C	E	F	G	Weight	
								Scrd/SW/BW	Flgd
½" DN15	95	150	94	92	51	63	28	1.95	3.35
¾" DN20	95	150	94	92	51	64	28	1.95	4.05
1" DN25	95	160	94	92	51	66	28	2.05	4.75



Capacities



Hot water capacity ——— Cold water capacity - - - - -

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-F01-30) supplied with the product.

Installation note:

The ISMC32 is designed for installation with the bimetal element in a horizontal plane with the 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.

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 Spirax Sarco ½" ISMC32 carbon steel bodied maintainable bimetallic steam trap having screwed BSP connections.

The trap will be supplied with an integral sensor to identify waterlogging and steam wastage (WLS1 sensor) or for steam leakage only (SS1 sensor). Sensors to be 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 traps) automatic steam trap monitor or R1C (single trap) automatic steam trap monitor with PNP/NPN output where appropriate.

Spare parts

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

Available spares

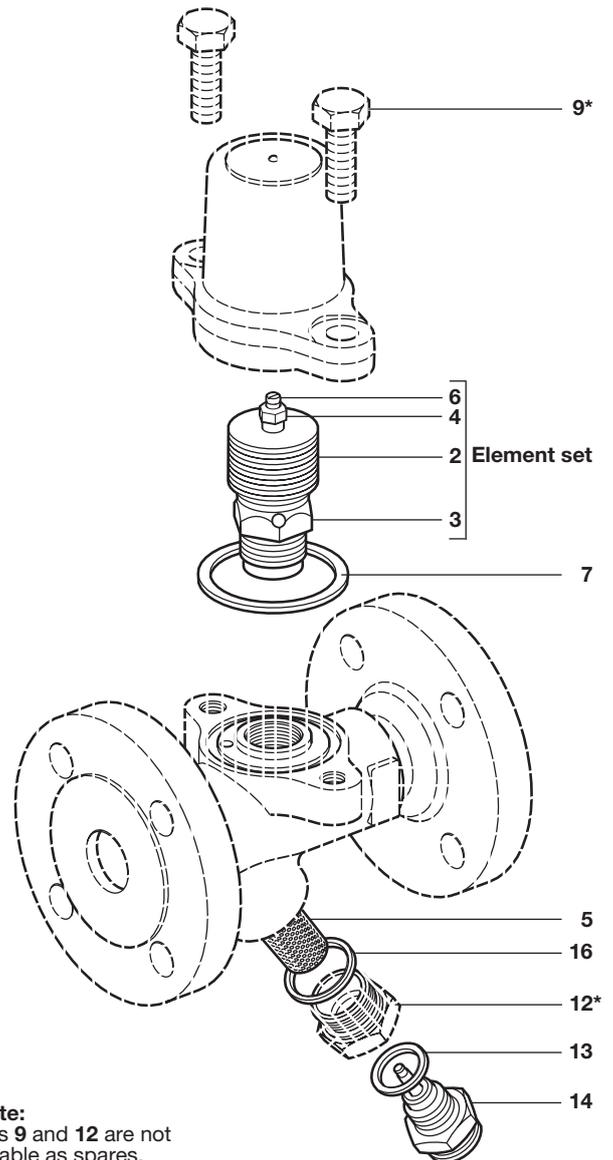
Element set	2, 3, 4, 6
Strainer screen Y-type cylindrical (1 off)	5
Set of cover gaskets (packet of 3)	7
Sensor and sensor gasket	13, 14
Adaptor gasket (packet of 3)	16

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 DN25 ISMC32 bimetallic steam trap with integral Spiratec sensor.



* Note:

Items 9 and 12 are not available as spares.

Recommended tightening torques

Item	Part	mm	N m
3	Valve seat	24 A/F	115 - 125
9	Cover bolts	16 A/F M10 x 30	23 - 27
12	Sensor adaptor	27 A/F	120 - 135
14	Sensor	24 A/F	50 - 56