



TI-P087-20
EMM Issue 7

Spiratec R16C

Automatic Steam Trap Monitor

Description

The Spiratec R16C is an automatic steam trap monitor for up to 16 steam traps. Remotely mounted, it continuously scans electronically up to 16 Spiratec sensors and indicates when steam wastage or waterlogging occurs at any of the traps being monitored.

A sensor is screwed into each sensor chamber or steam trap and is connected by wiring to the R16C which is sited at a convenient point.

When all the steam traps being monitored are working correctly a single green light will be illuminated. If one or more of the steam traps is failing, then the corresponding 'fail' lights (of which there are thirty two) are illuminated and the green light is extinguished.

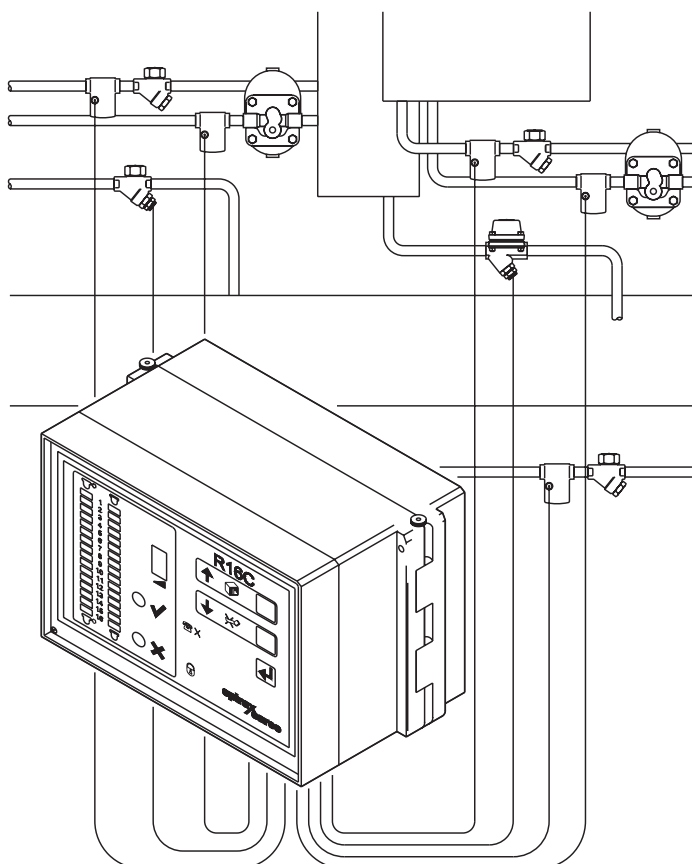
The R16C, which operates continuously, will indicate that either all the traps are operating correctly, or that there is a failure of any particular identified trap or traps. The unit can be interfaced with most computer controlled Building Management Systems, through a pair of volt free contacts, which will open on trap failure.

Available types

R16C steam trap monitor is available as standard for use with low voltage supplies at 24 Vac. The monitor is supplied for wall or panel mounting.

Materials

Enclosure	ABS
Front panel	Polyester



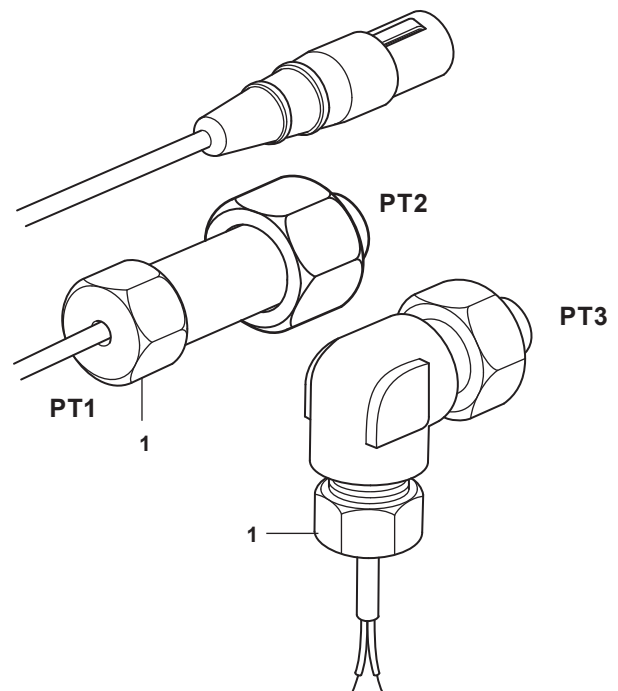
Technical data

Supply voltage		24 Vac \pm 10%
Supply frequency		50 - 60 Hz
Supply current consumption		50 mA
Environmental limits	Operating temperature range	0 °C to 50 °C (32 °F to 122 °F)
	Maximum operating relative humidity	80% up to 31 °C (88 °F) decreasing linearly to 34% at 50 °C (122 °F)
	Maximum altitude	2 000 m (6562 ft) above sea level
Relay rating	Maximum voltage	24 Vac/dc
	Maximum current	0.5 A
	Maximum power	10 W
Enclosure rating		IP65 with correct cable glands (wall mounting unit only)
Electrical connections		Screw terminals

Accessories

Connectors for use with SS1 sensors

- PT1** plug tail with push fit connection.
- PT2** plug tail with screw on connection and straight pattern brass housing.
- PT3** plug tail with screw on connection and angle pattern brass housing.
If cable protection is required, a conduit adaptor can be connected to the M16 conduit thread on the housing after removing the nut (1).
The plug tail is supplied with 1.25 m (4.10 ft) of cable. Any additional cable must be provided by the installer in accordance with the Installation and Maintenance Instructions.
- Note:** The type of cable is not critical, but a lightweight cable with 20 gauge conductors or 7/0.2 (0.22 mm²) multi-strand cable is suitable.



WLS1 combined steam leak and waterlog sensors.

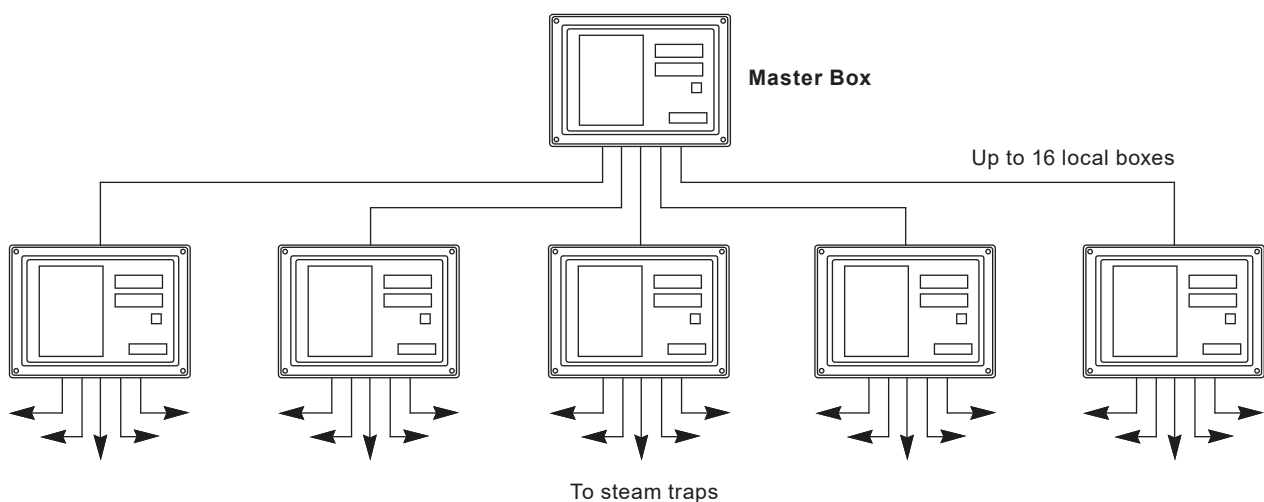
The combined steam leak and waterlog sensor has an integral cable connected to it. This cable is connected via the customers wiring back to the R16C monitor.

Installation

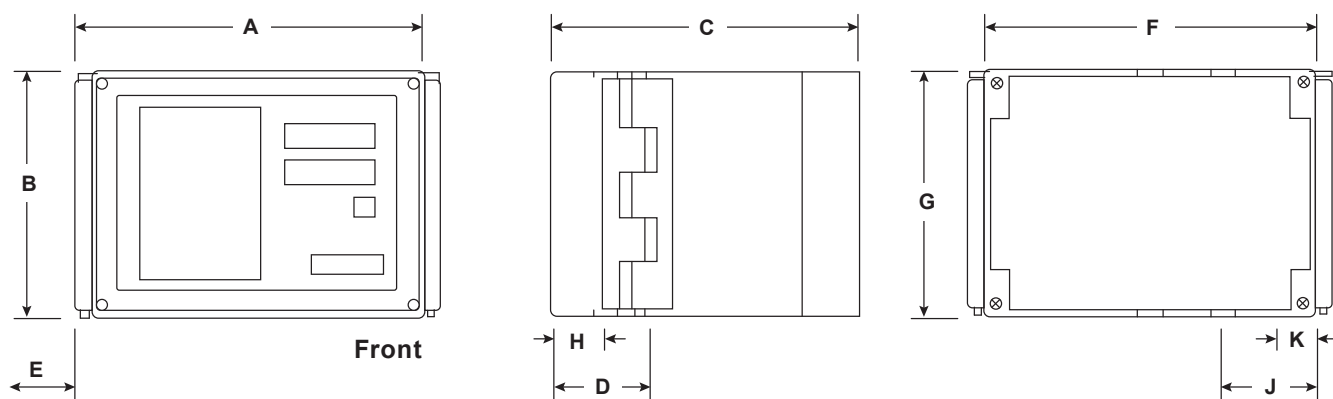
WARNING: This document does not give sufficient information to install the R16C safely. For further information see the Installation and Maintenance Instructions provided with the product (see IM-P087-22).

Use as master box

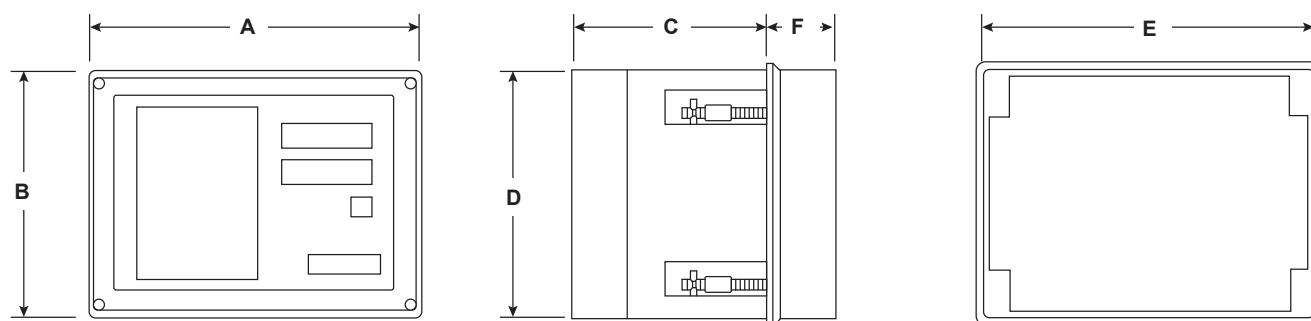
The R16C can be installed on a cascade basis. One 'master' box will monitor up to 16 x R16C 'local' boxes. A red light on the master box will indicate which 'local' box is registering a leaking trap. Inspection of that local box will then identify the specific trap which is failing.



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



	A	B	C	D	E	F	G	H	J	K	Weight
Wall mounting	201 (7.91)	138 (5.43)	169 (6.65)	50 (1.97)	130 (5.12)	170 (6.69)	100 (3.94)	30 (1.18)	92 (3.62)	52 (2.05)	1.80 (3.97)



	A	B	C	D	E	F	Weight
Panel mounting	192 (7.56)	145 (5.71)	105 (4.13)	140 (5.51)	186 (7.32)	40 (1.57)	1.53 (3.37)