



Cert. No. LRQ 0963008

ISO 9001

## TCO1 Temperature Cut-out Valve

### Description

The TCO1 is a temperature sensitive device fitted downstream of the steam/water mixing valve on 1/2" and 3/4" hosedown stations. The TCO1 is only suitable for the 1/2" and 3/4" mixing valves. This temperature cut-out valve activates at a temperature of 95°C to limit the discharge of steam in the event of a system fault.

#### Available types:

- Included as standard in the hosedown station kit.
- Available as a retrofit pack supplied with 1" x 3/4" and 1" x 1/2" reducing nipples to enable installation to either 1/2" or 3/4" mixing valves.

**Operation** - The TCO1 is not resettable and the mixing valve and hose must be inspected and serviced before the temperature sensitive element of the TCO1 is replaced.

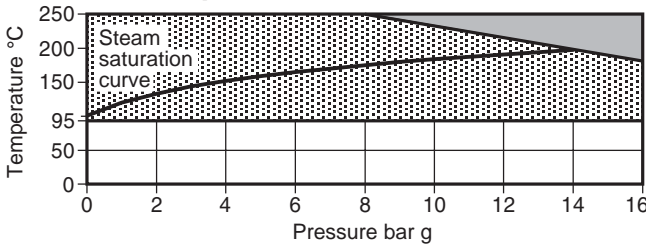
**Standards** - This product fully complies with the requirement of the European Pressure Equipment Directive 97/23/EC and carries the CE mark when so required.

**Certification** - Although certification is not available manufacture of the TCO1 is in accordance with our ISO 9000 Registration.

### Sizes and pipe connections

1" screwed BSP.

### Pressure/temperature limits



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

The product should not be used in this region as it will activate and close the valve.

Body design conditions PN16

PMA - Maximum allowable pressure 16 bar g @ 180°C

TMA - Maximum allowable temperature 250°C @ 8 bar g

Minimum allowable temperature -29°C

PMO - Maximum operating pressure for saturated steam service 14 bar g

TMO - Maximum operating temperature 95°C @ 16 bar g

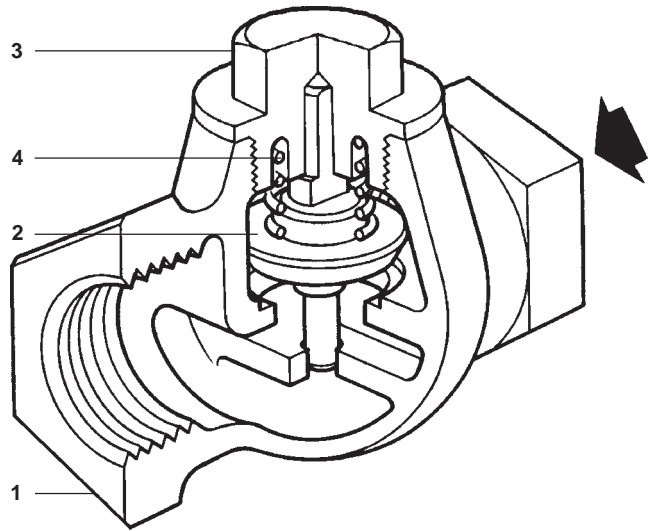
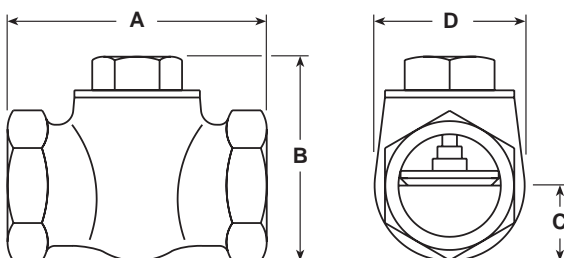
Minimum operating temperature 0°C

Note: For lower operating temperatures consult Spirax Sarco.

Designed for a maximum cold hydraulic test pressure of 28 bar g

### Dimensions / weight (approximate) in mm and kg

Size	A	B	C	D	Weight
1"	86	71	28	56	0.8



### K<sub>v</sub> value

1" = 8.5.

For conversion: C<sub>v</sub> (UK) = K<sub>v</sub> x 0.963 C<sub>v</sub> (US) = K<sub>v</sub> x 1.156

### Materials

No.	Part	Material	
1	Body	Bronze	EN 1982 CC491K
2	Cone	Brass	BS 2874 CZ 114
3	Cap	Brass	EN 12165 CW617N
4	Spring	Stainless steel	BS 2056 EN 58A

### Installation

Install the TCO1 between the hot water outlet of the mixing valve and the equal tee that houses the thermometer.

**Important note:** The TCO1 must be installed with the end marked 'inlet' connected to the mixing valve and the end marked 'outlet' connected to the equal tee. (These markings are stamped onto the hexagon end connections). If the valve is installed in reverse it will never be able to operate.

### How to order

**Example:** 1 off 1/2" retrofit pack for a Spirax Sarco 1/2" hosedown station.

### Spare parts

Spare parts are available as indicated. No other parts are supplied as spares.

#### Available spares

Element set	2, 3, 4
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#### 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 valve.

**Example:** 1 - Element set for a Spirax Sarco 1" TCO1 temperature cut-out valve.