KBB

FIRE VALVE

- **Non-Electric Safety Valve**
- **Manual Reset**
- **Manual On/Off for Appliance Servicing**
- **Sensor System Fails Safe if Broken**
- **Two Alternative Temperature Settings**
- **Remote Sensing Up To 20m (66ft)**
- **Conforms To BS 5410 Part 1**
- **Approved To OFS E101**
- **Bio Fuel Compatible**

Application

The KBB is designed as a fire safety shut-off valve for use on oil burning equipment. The valve is to be installed in the oil supply pipeline outside the building with the sensor mounted firmly inside the appliance above the burner. The capillary should then be run in a protected position without over-sharp bends particularly near the sensor and valve. The outline detail overleaf illustrates the relative positions of the valve and the sensor in a boiler compartment.

Physical Description

The KBB is a compact valve of corrosion resistant, non-combustible construction and entirely mechanical in operation, requiring no power supply. The sensor is connected to the valve by a capillary, which cannot be detached. The reset button can be found at the base of the valve head and is pressed to reset the valve or if pulled will toggle the valve into the shut-off condition.

Operation

The KBB is a quick acting thermally operated valve with a spring loaded trip mechanism and sealed temperature-sensing system consisting of a bellows, capillary tube and sensor phial. The valve will snap closed when the temperature at the sensor phial exceeds the set value. The valve will remain in the shut-off condition until the appropriate action has been taken to restore normal operating conditions and the reset button has been pressed.

The operation of the fire valve can be verified by using the KBT1000 test unit set to the appropriate temperature. This checks that the operation to shut-off the oil supply pipe takes place and enables a check to be made that the valve can be manually reset once the sensor phial temperature has reduced to normal operating level. The reset button must be pressed firmly to ensure the valve is positively latched in the open position.

The valve can also be shut-off manually by pulling the reset button.

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Technical Specification

Materials

Valve body and head	Brass
Sensor phial and capillary	Copper
Valve seal	Fluoroelastomer

Oil Supply Pipe Connections

1/4” BSP internal taper thread.

Spanner flats at connections 19mm (3/4”)

Capillary Tube

1.5m (5ft), 3m(10ft) & 6m(20ft) using a 124mm long sensor

9m(30ft), 12m(39ft), 16m(53ft) and 20m(66ft) using a 174mm long sensor

Nominal Fuel Flow Rate

Kerosene	56 litres/hour at 1 meter head 85 litres/hour at 2 meters head
Diesel	50 litres/hour at 1 meter head

Nominal Shut-down Temperatures

Oil supply pipe at atmospheric pressure

KBB/C/65	65°C
KBB/C/90	90°C

Oil supply pipe at maximum pressure (10psi)

KBB/C/65	71°C
KBB/C/90	95°C

Weight (approx.)

With 1.5m capillary	340g

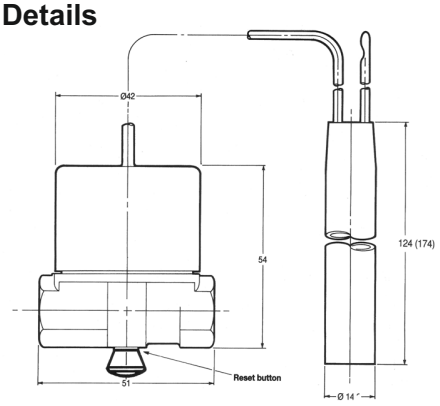
Valve Seat

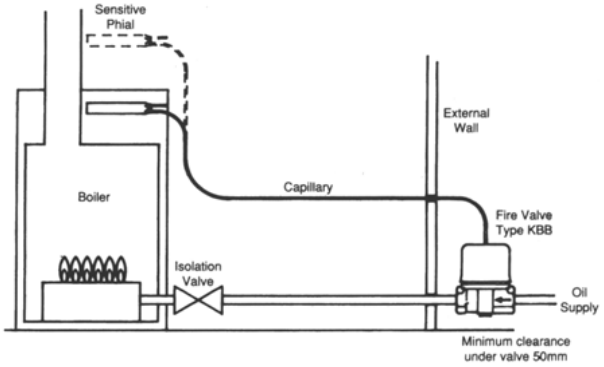
6.4mm (1/4”) diameter

OFTEC Certificate Number

KBB/C/65	0936 120205
KBB/C/90	0936 030306

Outline Details





Ordering Information

Temperature	
65°C	65
90°C	90

KBB/C/ xx/xx

Capillary Length
1.5m (5ft)
3m (10ft)
6m (20ft)
9m (30ft)
12m (39ft)
16m (53ft)
20m (66ft)

KBB/C/90 also available in a 2m length

Distributed by:

01/15

Manufactured by

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