DATA SHEET | TECHNICAL

ZONECHECK*450*

green product

VdS   FM APPROVED   UL   LPCB
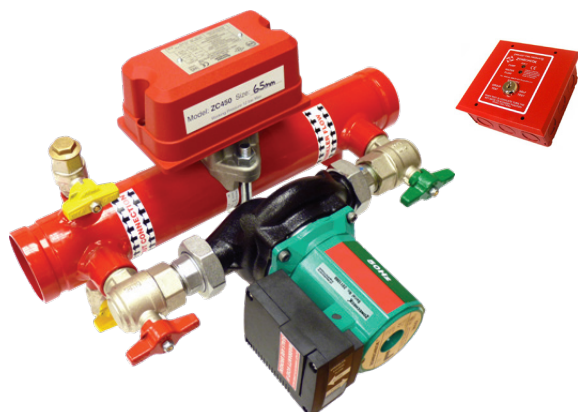
✔ 100% Water saving

✔ Simplicity of testing

✔ Massive cost savings

Overview

Zonecheck is a remote flow-switch testing device. It works by using a closed loop system that re-circulates water to simulate sprinkler head operation and tests the flow-switch without discharging water.

Specification

Zonecheck
Working pressure rating...................... max 15 bar (water)
Compatible pipe...................................... 2″, 2½″, 3″, 4″, 6″
Connections.. Roll groove (both ends)
Installation... Horizontal *or* Vertical

Flow-switch
Triggering flow-rate............................. 30-57 Litres/minute
Enclosure rating..................................... IP54
Conduit entrances................................ Ø22.2 mm
Contact ratings...................................... 10 A @ 125/250V AC
                                                              2.5 A @24V DC
Operating temperature range........... 0-68°C (32-155°F)

Pump
Approvals.. LPCB, UL, FM and VdS
Operating Voltage................................ 240v 50Hz
Full Load Current.................................. 0.88
Power Rating.. 185 watts
IP Rating.. IP43
WP Rating.. 175 psi

Key-switch
Operating voltage................................ Single-phase 240V-50Hz
Key switch operation modes.............. Self-test: Wired locally;
                                                              Group test: Interconnected
Key-switch LED Operation.................. Ready state: No LED
Test Initiation.. **PUMP** LED (green)
Flow Switch Activation........................ **WATER FLOW** LED (green)
Full Load Current.................................. 0.88 amps
Power Input (P1).................................... 185 watts
Rated Power (P2).................................... 90 watts
Capacitor... 400 VDB

Ordering information

Part code	Pipe size mm *(in″)*	Approx Weight (Kg)	
ZC450-50RH	50 (2″)	11.5	
ZC450-65RH	65 (2½″)	12	
ZC450-80RH	80 (3″)	13	
ZC450-100RH	100 (4″)	15	*Right-hand version (standard)*
ZC450-150RH	150 (6″)	18	
ZC450-50LH	50 (2″)	11.5	
ZC450-65LH	65 (2½″)	12	
ZC450-80LH	80 (3″)	13	
ZC450-100LH	100 (4″)	15	*Left-hand version*
ZC450-150LH	150 (6″)	18	

Pump — System

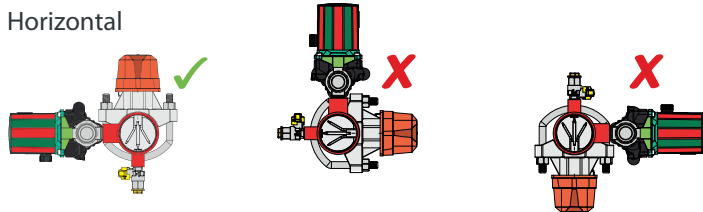Left handed

Pump — System

Right handed
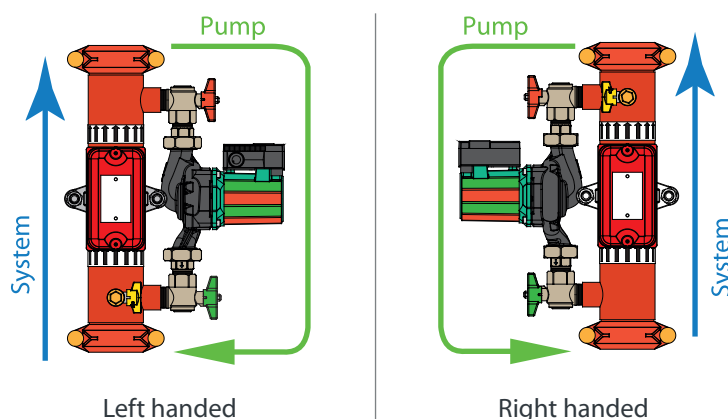
Installation

Zonecheck® connects into a wet-pipe sprinkler system using two grooved couplings (not included). When fitted correctly, the red and green stripes on the pump are always horizontal. On horizontal runs, the flow-switch must always be on the top of the pipe. For vertical flow applications, only mount Zonecheck where up-flow conditions exist.
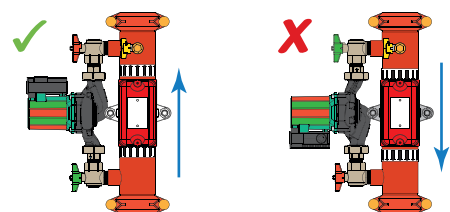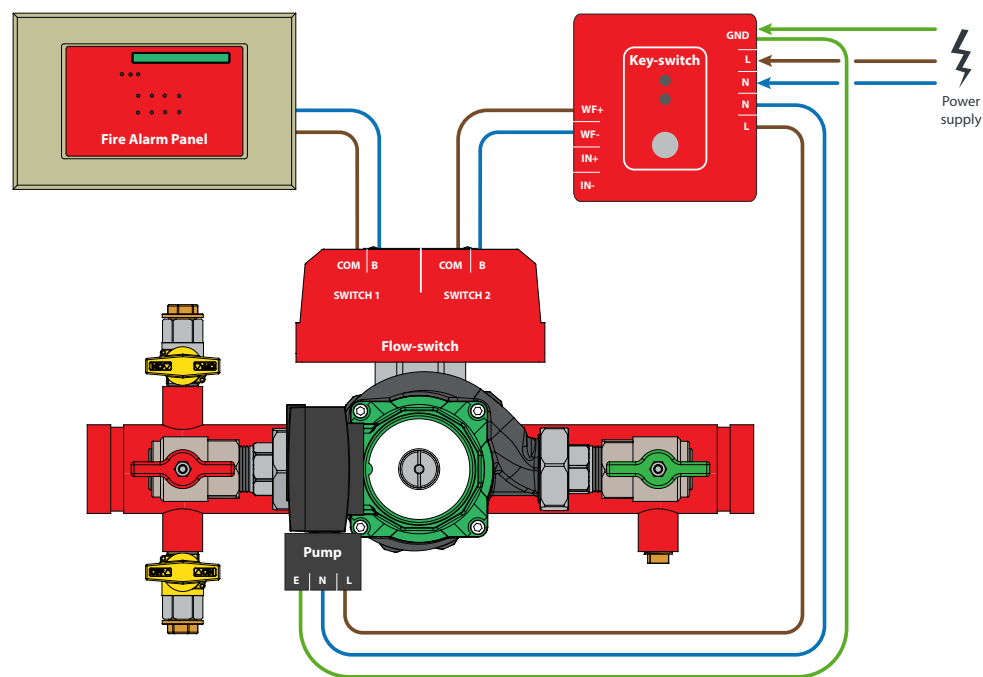
Dimensions

450 (17" ¾)
225 (8" ⅞)   225 (8" ⅞)
240 (9" ½)
400 (15" ¾)
CLEAR SPACE
PUMP ACCESS
PLAN VIEW
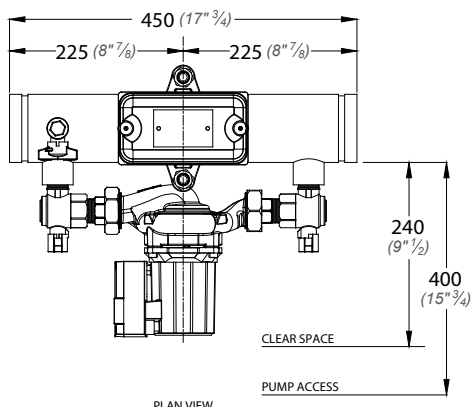
Horizontal

Riser

Wiring

Fire Alarm Panel

Key-switch
GND
L
N
N
L
WF+
WF-
IN+
IN-
Power supply

COM | B   COM | B
SWITCH 1   SWITCH 2
Flow-switch

Pump
E | N | L

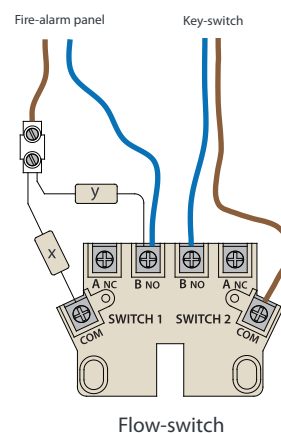## Flow-switch wiring

Typical fire-alarm/flow-switch connection*. Refer to specific fire-alarm panel instructions for information.

x = fire/alarm resistor (usually 1Ω)
y = end of line resistor (usually 470Ω)

Fire-alarm panel   Key-switch

y

x

A NC | B NO | B NO | A NC
SWITCH 1   SWITCH 2
COM   COM

Flow-switch

*Typical arrangement only

Venting

Zonecheck will not work properly if air is trapped within the unit. Follow these simple steps to vent trapped air.

1. Notify building management of your actions.
2. Isolate alarms & main fire pump.
3. Have a suitable container or drain ready to catch any water.
4. Remove the vent plug from the uppermost yellow vent-valve on the Zonecheck®.
5. Attach a suitable connector & hose pipe to the uppermost yellow vent-valve on the Zonecheck®.
6. Carefully crack open the yellow vent-valve.
7. Keep yellow vent-valve open until all air is expelled and only water is coming from the vent (may take up to 10 minutes).
8. Shut the yellow vent-valve.
9. Remove the connector & hose pipe.
10. Carefully re-insert and tighten the vent plug.
11. Don't forget to contact building management & let them know when you have finished testing.
12. Where applicable, re-establish the alarms and main fire pump.