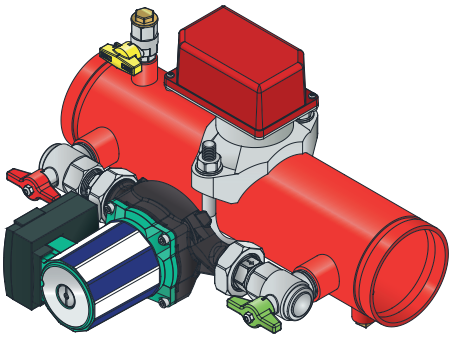
DATA SHEET

ZC-450-DS-11/21-11
US Version

ZONECHECK 450



- Simple, quick & compliant flow-switch testing
- 100% Water Saving
- Remote testing from local key-switch

Overview

Zonecheck solves the problems associated with traditional flow-switch testing by removing the need to discharge water. A Zonecheck unit incorporates an approved flow-switch with a testing pump and circulation loop. When the pump is activated via the local key-switch, water is circulated across the flow-switch at a flow equivalent to one sprinkler head in operation (required by code standards). A successful test will trigger the flow-switch which is wired back to the key-switch to give a pass signal.

An Addressable version of Zonecheck is also available which means testing of flow-switches, along with many other functions such as monitoring of isolation valves can be managed from a central controller unit.

Specification

Zonecheck

Working Pressure (max).....Water, 175 psi (12bar)
Test Pressure (max).....Water, 260 psi (18bar)
Operating Temp Range.....32°F – 120°F (0°C - 49°C)
Pipe Diameter.....2", 2½", 3", 4", 6" & 8" mm (50-200mm)
Approvals.....UL, FM, LPCB and VdS

Flow Switch

Type..... Potter VSR-EU
Contact Rating..... 10A@125/250 VAC
2.0A@ 30VDC
IP Rating..... 54
Time Delay..... 0 - 30s

Pump

Type..... Wilo Top-S
Operating Voltage..... 120v 60Hz
Imax..... 0.93 A
Max Power Rating..... 195 W
IP Rating..... IP43

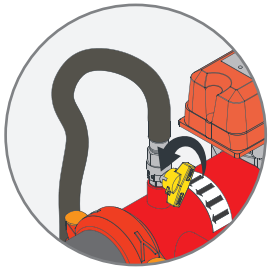
Key-switch

Voltage.....120v 60 Hz
Internal Consumption.....7.5 W Max
Amperage.....0.88 A
Order No.....ZCKYSU
LED Indication.....Pump Running
Flow-switch Activated
Valve Fault (optional)
Max Group Size.....25 Key-switches
Max Group Cable Length.....330 yards (300m)

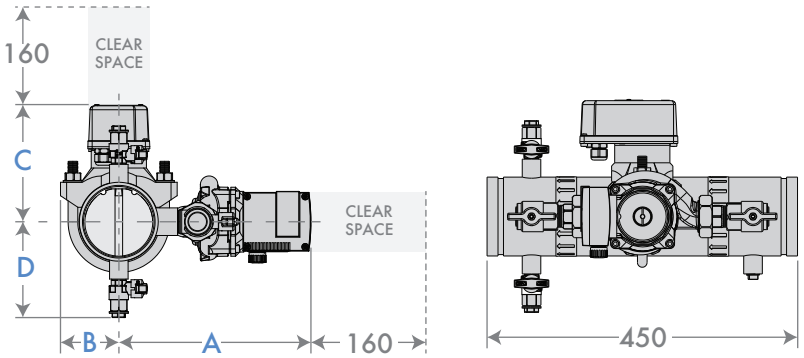
Venting

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



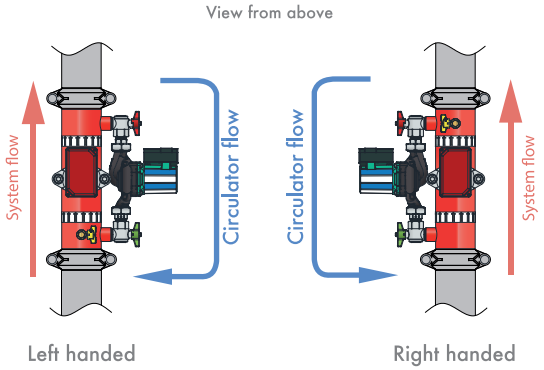
Zonecheck Dimensions



Ømm (in)	A mm (in)	B mm (in)	C mm (in)	D mm (in)	Weight kg (lb)
50 (2″)	256 (10″)	58 (2.3″)	145 (5.7″)	116 (4.6″)	14.0 (31)
65 (2½″)	264 (10.4)	58 (2.3)	155 (6.1)	124 (4.9)	14.2 (32)
80 (3″)	271 (10.7″)	66 (2.6″)	165 (6.5″)	130 (5.1″)	15.3 (34)
100 (4″)	283 (11.1″)	86 (3.4″)	170 (6.7″)	140 (5.5″)	17.1 (38)
150 (6″)	309 (12.2″)	113 (4.5″)	200 (7.9″)	168 (6.6″)	22.1 (49)
200 (8″)	336 (13.2″)	148 (5.8″)	235 (9.3″)	195 (7.7″)	28.0 (62)

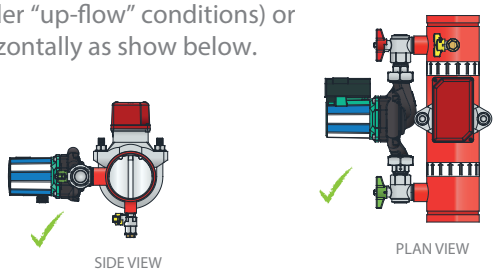
[Left hand - LH - models available on request]

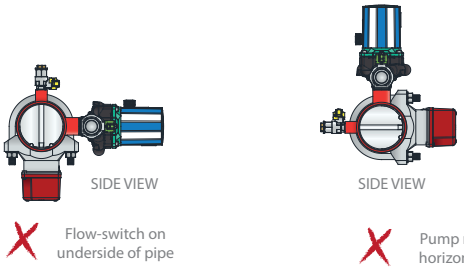
Orientation



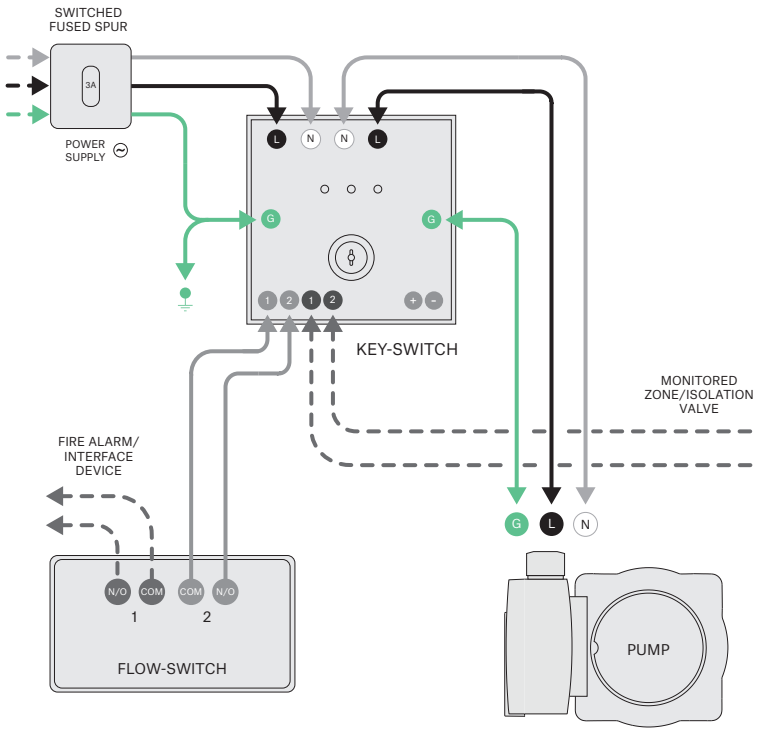
Installation

Zonecheck can be installed vertically (under "up-flow" conditions) or horizontally as show below.



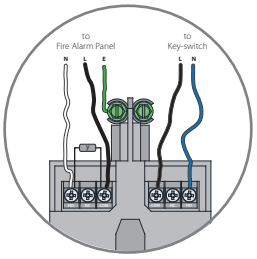


Wiring

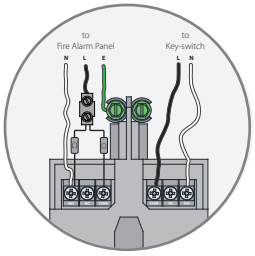


Typical fire-alarm/flow-switch connections. Exact wiring required depends on type of fire panel used. Refer to specific fire-alarm panel instructions for information/guidance.

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



TYPICAL 1



TYPICAL 2