

DATA SHEET

ZC-450-DS-07/18-09

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.

Zonecheck

Approvals..... LPCB, UL, FM and VdS

Zonecheck Pump

Operating Voltage.....240v 50Hz

Full Load Current.....0.93 A

Power Rating.....195 watts

IP Rating.....IP43

WP Rating.....12 bar (175 psi)

Flow-switch (Potter VSREU or System Sensor VFDE)

Contact Rating.....10A @ 125/250 AC

Triggering Flow Rate.....30-57 L/m

Static Pressure Rating.....17.25 bar (250 psi)

Operating Temperature..... 1°C – 68°C (32°F – 120°F)

Enclosure rating..... IP54

Key-switch

Mains Power Supply..... Recommended 3A switched fused spur

Operating voltage..... Single-phase 220V-50Hz

Internal Consumption.....7.5W maximum

LED indicator

Ready state.....No LED

Test initiation..... Pump LED (green)

Flow switch activation..... Water Flow LED (green)

Operating modes.....Self test: Wired locally

Group test: Interconnected

Dimensions (WxHxD)..... 134x134x61

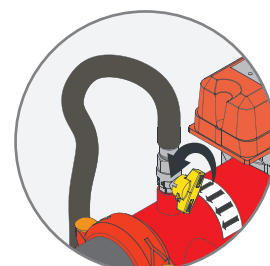
Weight (unboxed)..... <1Kg

Mounting..... Flush mounting

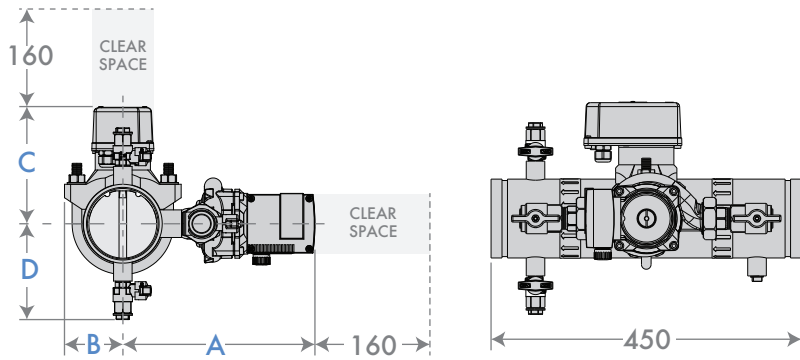
Venting

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

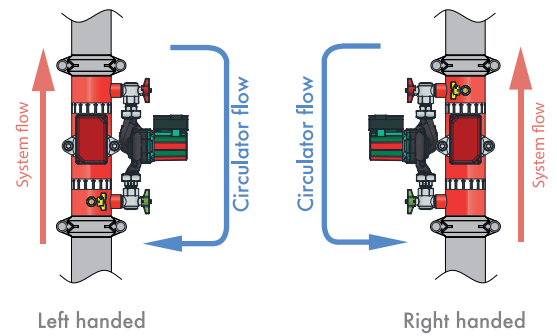


Part Code	Øin	Ømm	A	B	C	D	Weight (Kg)
ZC450-50RH	2"	50	256	58	145	116	14.0
ZC450-65RH	2½"	65	264	58	155	124	14.2
ZC450-80RH	3"	80	271	66	165	130	15.3
ZC450-100RH	4"	100	283	86	170	140	17.1
ZC450-150RH	6"	150	309	113	200	168	22.1
ZC450-200RH	8"	200	336	148	235	195	28

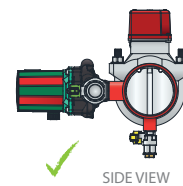
[Left hand - LH - models available on request]

Orientation

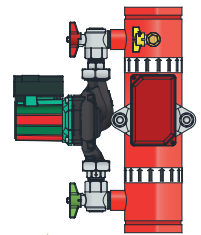
View from above



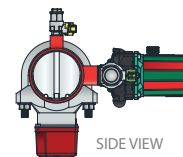
Installation



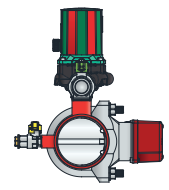
SIDE VIEW



PLAN VIEW

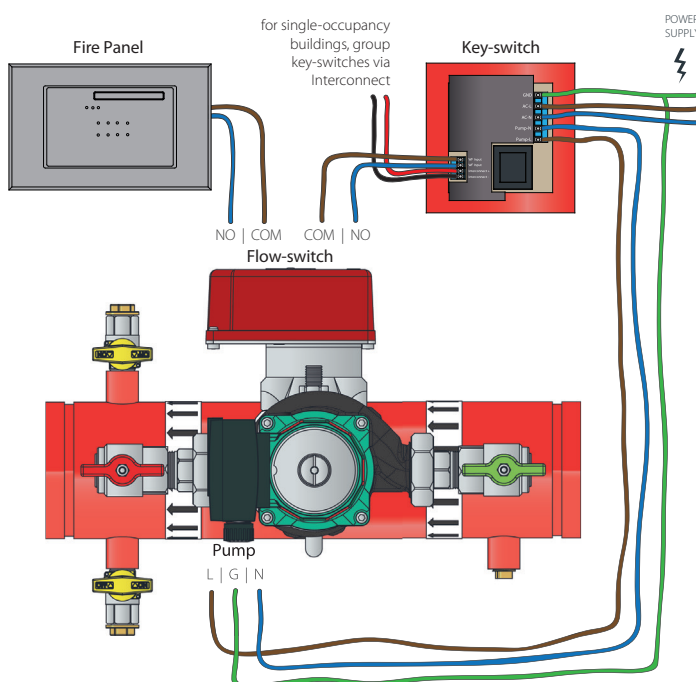


Flow-switch on underside of pipe



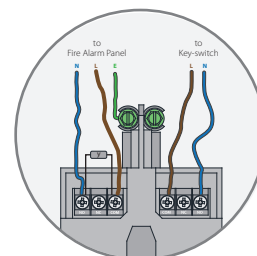
Pump not horizontal

Wiring

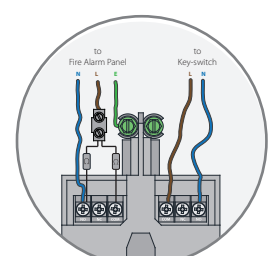


Typical fire-alarm/flow-switch connections. Exact wiring required depends on type of fire panel used. Refer to specific fire-alarm panel instructions for information/guidance.

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



TYPICAL 1



TYPICAL 2