

Zonecheck[®] Residential

Full Bore CPVC RISER

Full Bore CPVC VOID



Zonecheck Residential CPVC

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Zonecheck is a registered product name of Project Fire Products Ltd. European patent No. 0907833.

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Pre-checks

Before you install Zonecheck follow these simple steps :-

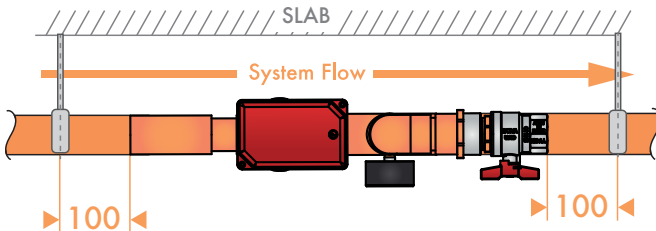
- 1 Open the box and remove all packaging.
- 2 Check you have the correct size manifold/assembly.
- 3 Locate the Mini-switch (or other test device) and store safely.
- 4 Inspect the product to make sure it hasn't been tampered with. If you have any queries please contact your supplier.

Installation

Zonecheck should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.

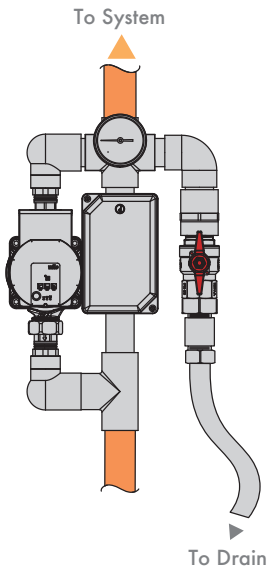
- 1 Contact building management to inform them of the proposed works.
- 2 Isolate and drain down selected zone.
- 3 Orientate the Zonecheck in accordance with the diagrams in this booklet.
- 4 Install the Zonecheck using the industry standard cold solvent welding process for plastic pipework.
- 5 Use approved pipe supports at a maximum of 100 mm from the inlet and outlet of each Zonecheck Residential Void model (see diagram below).
- 6 Fit the Mini-switch (or other test device) to the wall in a suitable location that is easy to reach from floor level.
- 7 Wire the Zonecheck pump to the Mini-switch (or other test device) in accordance with the diagrams in this booklet.
- 8 Wire the flow-switch to a suitable fire-alarm panel/interface.
- 9 Wire the appropriate power supply to the Mini-switch (or other test device).
- 10 Proceed to commissioning instructions.

DO NOT ATTEMPT TO RECONFIGURE. TAMPERING WILL VOID THE WARRANTY.

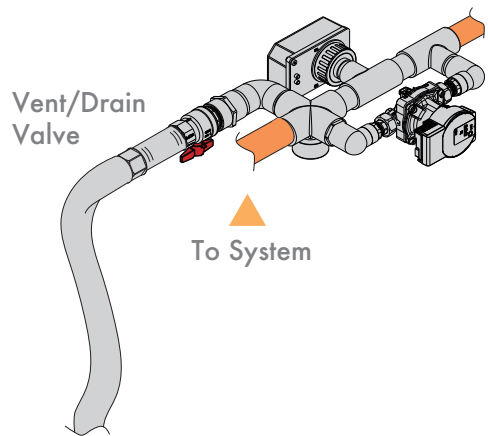


Commissioning

- 1 Contact the responsible person to authorise a flow-switch test.
- 2 Attach a barrel nipple and hosepipe to yellow vent valve on the Zonecheck.
- 3 Carefully open the vent valve on the Zonecheck unit until only water (no air) is being expelled (this can take up to 10 minutes).
- 4 When only water is being expelled (no air) turn the Mini-Switch to TEST to expel any remaining air in the pump cavity.
- 5 Turn the Mini-Switch to STANDBY and close vent valve.
- 6 Now, open the vent valve and discharge water through the hose to drain.
- 7 Check the fire-alarm panel has successfully received the flow-switch activation.
- 8 Close the valve, remove the barrel nipple and hose and replace plug.
- 9 Turn the Mini-Switch to TEST.
- 10 Check the fire-alarm panel has successfully received the flow-switch activation.
- 11 Turn the Mini-Switch to STANDBY.
- 12 Fix operating instructions to wall, preferably next to the Mini-Switch.
- 13 Ensure that the end user is instructed on how to carry out a routine test.
- 14 Fill in & hand over a completion certificate. Make sure that the responsible person has been made aware that the system is back online.



RISER

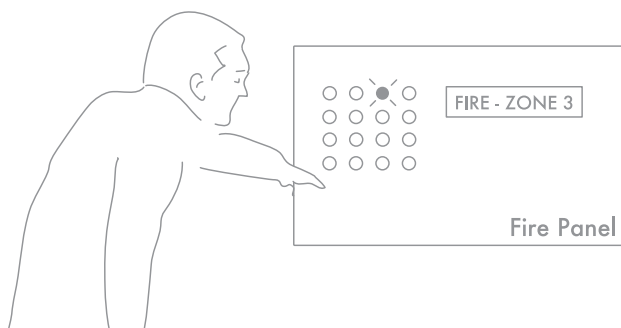
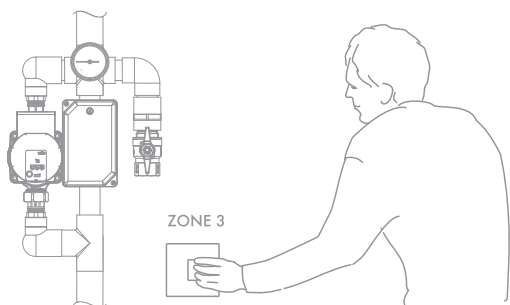


VOID

Testing

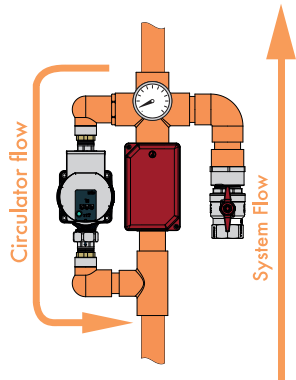
Testing Zonecheck with Mini-switch

- 1 Insert the fish-key into the Mini-Switch and push down to TEST.
- 2 When the flow-switch operates, the corresponding alarm at the fire-alarm panel will activate (please wait for up to 90 seconds for the flow-switch to operate).
- 3 Push fish-key to the STANDBY position and remove the fish-key.



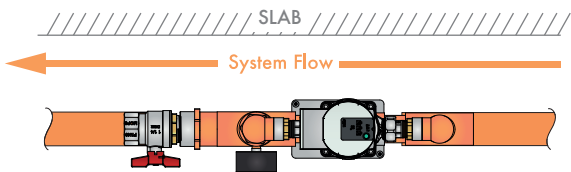
Orientation

RISER

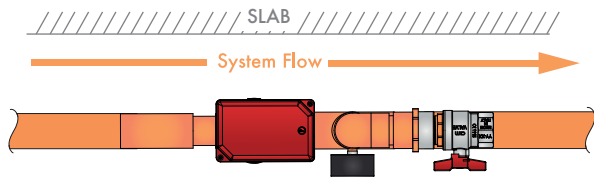


Front View

VOID



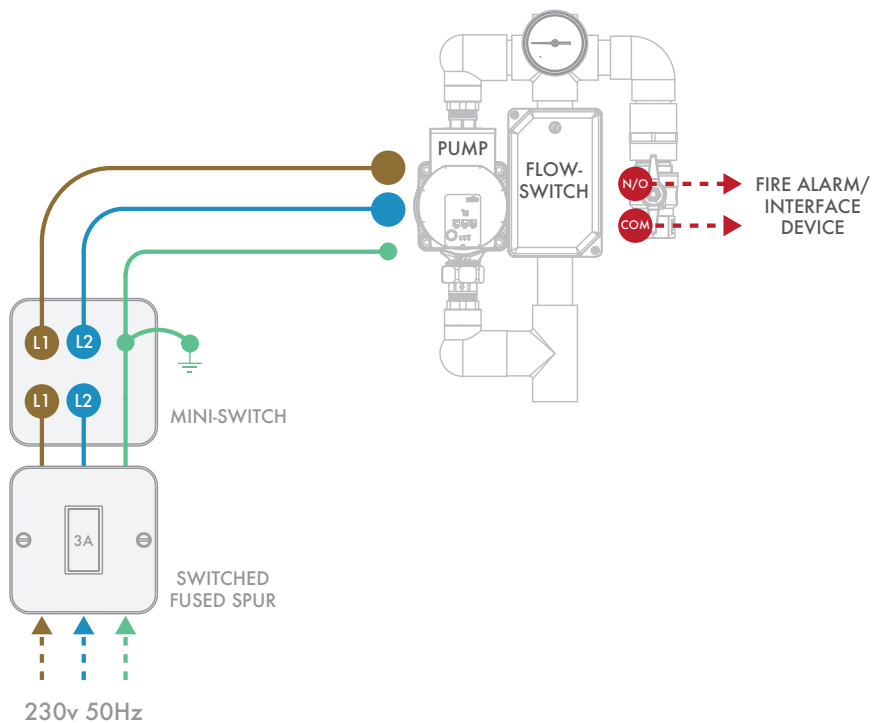
'Pump View'



'Flow-switch View'

Mini-switch Wiring

Zonecheck should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.

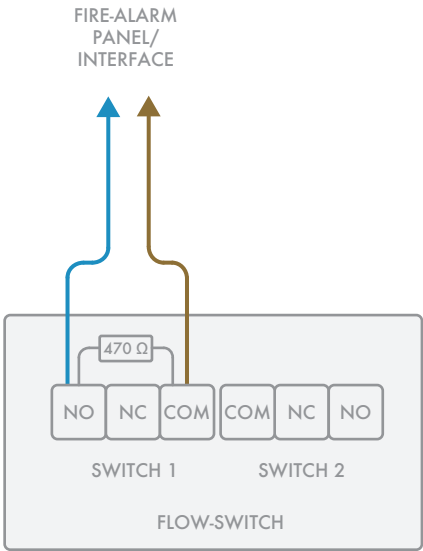


Flow-switch Wiring

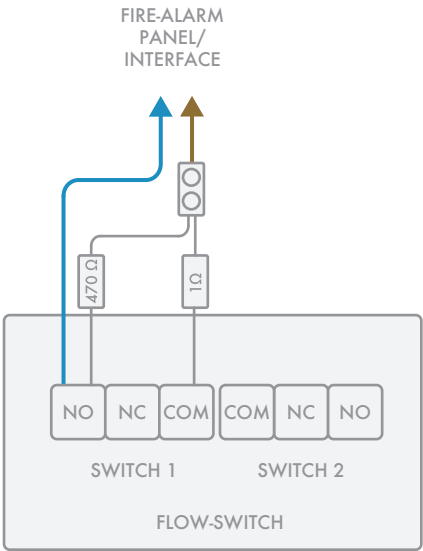
Zonecheck should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.

The following diagrams show typical fire-alarm/interface connections for flow-switch end-of-line resistors. The wiring setup depends on the make and model of the fire panel used. Always refer to your specific fire-alarm panel instructions for more information.

Typical Setup 1

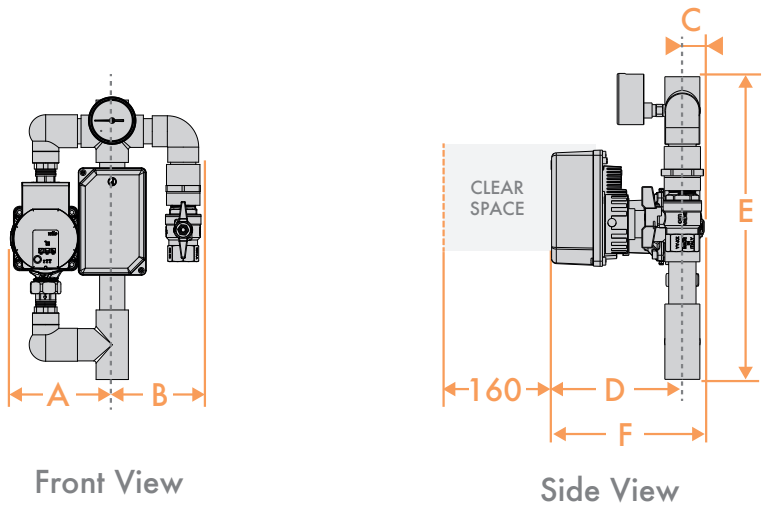


Typical Setup 2



DIAGRAMS SHOW TYPICAL APPLICATIONS ONLY. ALWAYS REFER TO FIRE-ALARM INSTRUCTIONS.

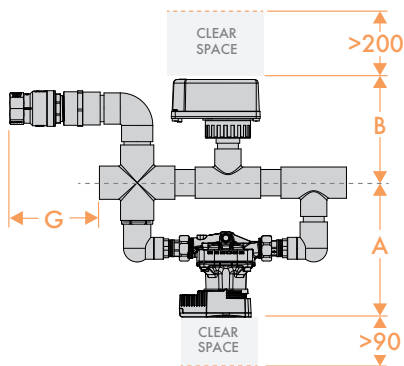
RISER Dimensions



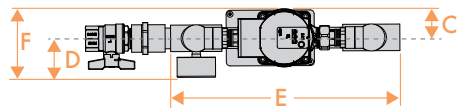
| in | Ø | Part Code | A | B | C | D | E | F |
|-----|----|---------------|-----|-----|----|-----|-----|-----|
| 1" | 25 | ZC-RESPR-25FB | 134 | 120 | 30 | 163 | 370 | 190 |
| 1¼" | 32 | ZC-RESPR-32FB | 155 | 150 | 30 | 165 | 395 | 195 |
| 1½" | 40 | ZC-RESPR-40FB | 165 | 175 | 35 | 168 | 405 | 205 |
| 2" | 50 | ZC-RESPR-50FB | 175 | 200 | 45 | 170 | 420 | 215 |

Please note: Dimensions are ±5 mm.

VOID Dimensions



Plan View



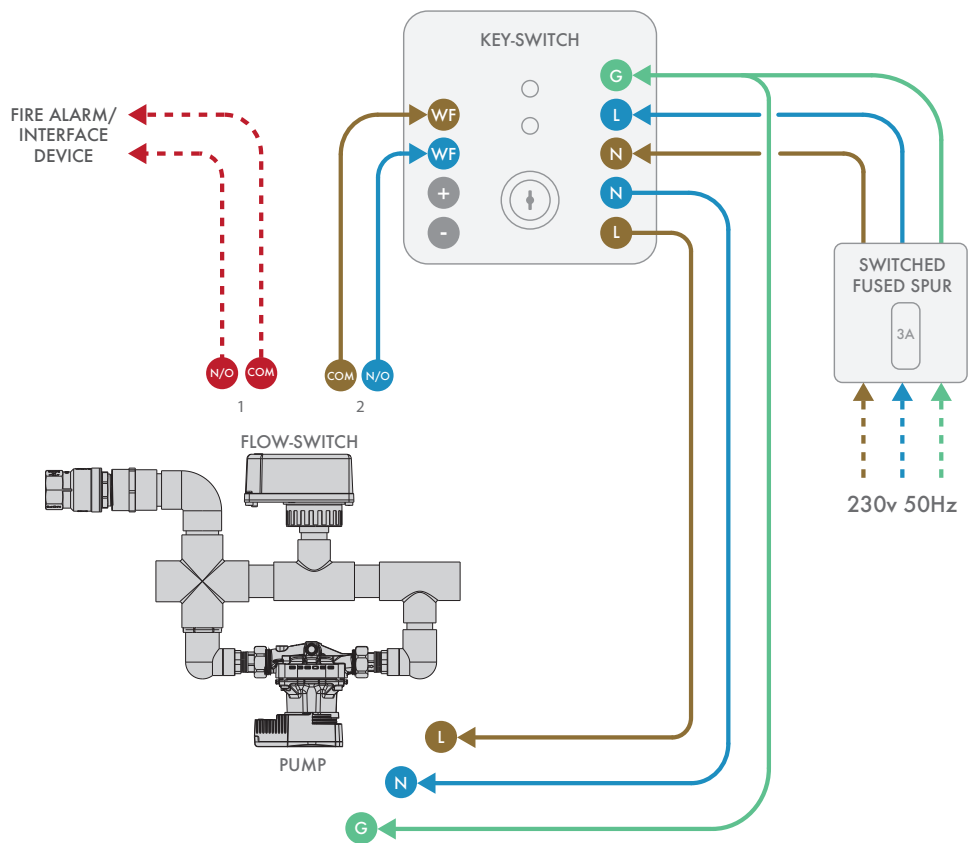
Front View

| in | Ø | Part Code | A | B | C | D | E | F | G |
|-----|----|---------------|-----|-----|----|----|-----|-----|-----|
| 1" | 25 | ZC-RESPV-25FB | 200 | 163 | 50 | 63 | 370 | 110 | 150 |
| 1¼" | 32 | ZC-RESPV-32FB | 215 | 165 | 50 | 70 | 395 | 112 | 160 |
| 1½" | 40 | ZC-RESPV-40FB | 225 | 175 | 50 | 75 | 405 | 120 | 185 |
| 2" | 50 | ZC-RESPV-50FB | 240 | 215 | 50 | 80 | 420 | 130 | 215 |

Please note: Dimensions are ±5 mm. Key-switch and IMM variations available on request.

Key-switch Installation

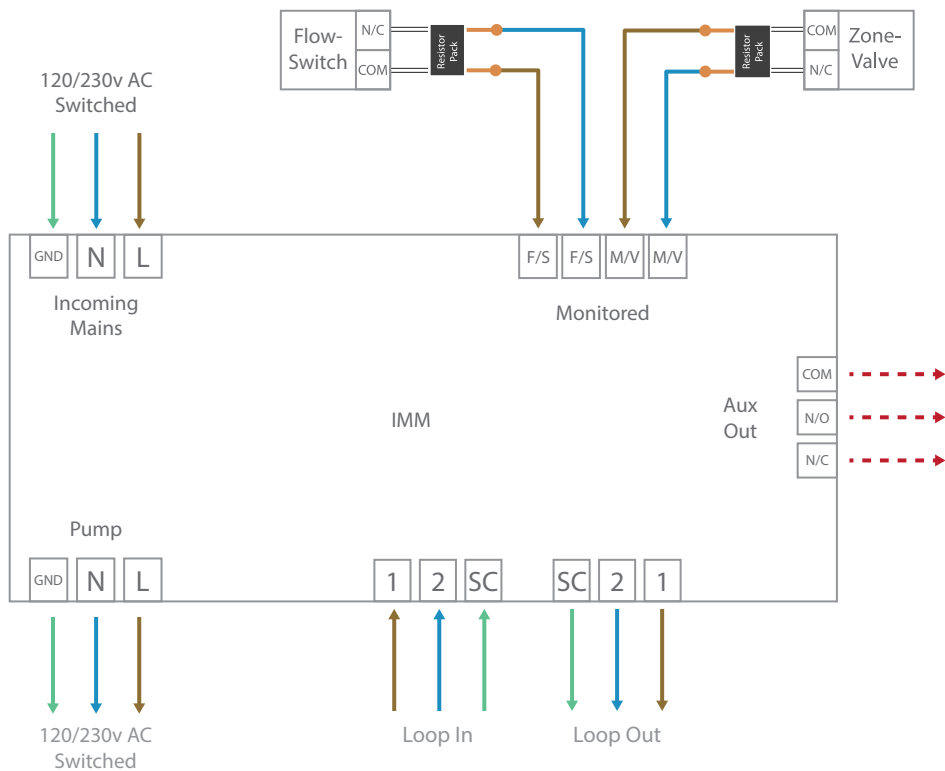
Zonecheck Residential is also compatible with Key-switch to allow for group testing and local flow-switch indication. Use the following wiring diagram only when using Key-switch.



NOTE: WIRING DIAGRAM IS FOR KEY-SWITCH ONLY.

IMM Installation

Zonecheck Residential is also compatible with Addressable IMMs to allow for automated, soft testing and record keeping. Use the following wiring diagram only when using IMMs.



NOTE: WIRING DIAGRAM IS FOR IMM ONLY.

Specifications

Zonecheck Residential

| | |
|------------------------------|---------------------------------|
| Working Pressure Rating..... | Water, 10 bar (145 psi) maximum |
| Pipe Diameter..... | 25, 32, 40 & 50 mm (1-2") |
| Pipe and Fittings..... | Spears Flame Guard |

Pump

| | |
|------------------------|-----------------|
| Operating Voltage..... | 1~230v 50/60 Hz |
| Imax..... | 0.66 A |
| Max Power Rating..... | 75 W |
| IP Rating..... | IPX4D |

Flow-switch

| | |
|---------------------------|--|
| Type..... | VSR-SG |
| Contact Rating..... | 10A@125/250 VAC; 2.0Amps @ 30 VDC 10mAmps min. at 24 VDC |
| IP Rating..... | IP54 |
| Triggering Flow Rate..... | 15-38 l/min (UL) |

Mini-switch

| | |
|---------------|----------|
| Model..... | ZCKYSR |
| Key Type..... | Fish Key |

Troubleshooting

Zonecheck should be troubleshooted by a competent fire sprinkler installer and wiring checked by a qualified electrician.

| | |
|--|--|
| <p>Pump fails to start.</p> | <p>Isolate the power then check the Mini-switch wiring against the wiring diagram. Confirm the power supply has been connected properly.</p> |
| <p>Flow-switch fails to operate.</p> | <ol style="list-style-type: none">1. Check Zonecheck has been installed facing the correct way.2. Remove the plastic lid from the flow-switch, push and hold the trigger with your finger for 30 seconds. If the fire alarm operates see below. If not check the wiring against the diagram. |
| <p>Pump runs hot & does not operate the flow-switch.</p> | <p>Pump is airlocked.</p> <ol style="list-style-type: none">1. Attach hosepipe to drain valve on Zonecheck and route to drain.2. Insert the fish-key into the Mini-Switch and push down to TEST.3. Carefully open the drain valve on the Zonecheck unit to remove the air, allow water to drain to make sure all air is bled from the unit (this may take up to 10 minutes).4. Insert the fish-key into the Mini-Switch and push up to STANDBY.5. Close vent valve and replace plug. |

Important Information

- Zonecheck should be installed by a competent fire sprinkler installer and wired up by a qualified electrician.
- Ensure Zonecheck is installed both mechanically and electrically commissioned and tested prior to leaving site.
- Ensure protection to Zonecheck is employed whenever there is an extended period from installation to commissioning.
- Do not run the pump dry.
- Fix operating instruction to wall, preferably next to Mini-Switch.
- Each Zonecheck is factory assembled and tested. Do not attempt to reconfigure. Tampering will void the warranty.
- Maximum working pressure - 10 bar (140 psi).
- Use Zonecheck flow-switch testers in wet-pipe systems only. Do not use in dry pipe, deluge, or pre-action systems.
- Only activate the Zonecheck Mini-Switch when the sprinkler system is full.
- The pump direction-of-flow arrow faces the opposite direction to the system flow.

1 Year Warranty

Project Fire Products warrants its enclosed Zonecheck flow-switch tester to be free from defects in materials and workmanship under normal use and service for a period of one year from date of manufacture. Project Fire Products makes no other express warranty for this flow-switch tester. No agent, representative, dealer or employee of the company has the authority to increase or alter the obligations or limitations of this warranty. The company's obligation of this warranty shall be limited to the repair or replacement of any part of the flow switch tester, which is found to be defective in materials or workmanship under normal use and service during the one-year period commencing with the date of manufacture. After phoning Project Fire's number, 01889-271-271 for a return authorisation number, send defective units postage prepaid to Project Fire, Pasturefields Industrial Estate, Pasturefields Lane, Hixon, Staffs, ST18 0PH. Please include a note describing the malfunction and suspected cause of failure. The company shall not be obligated to repair or replace units, which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the company be liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied whatsoever, even if the loss or damage is caused by the company's negligence or fault.



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