



Data Sheet 7.25

Issue C



Zonecheck

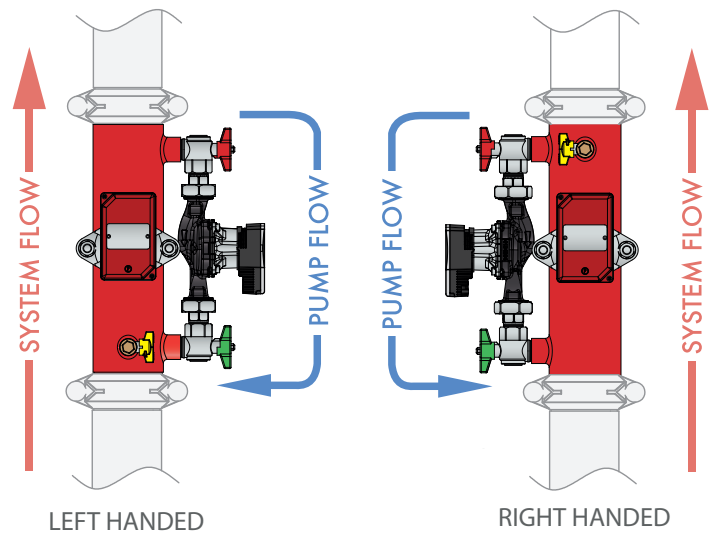
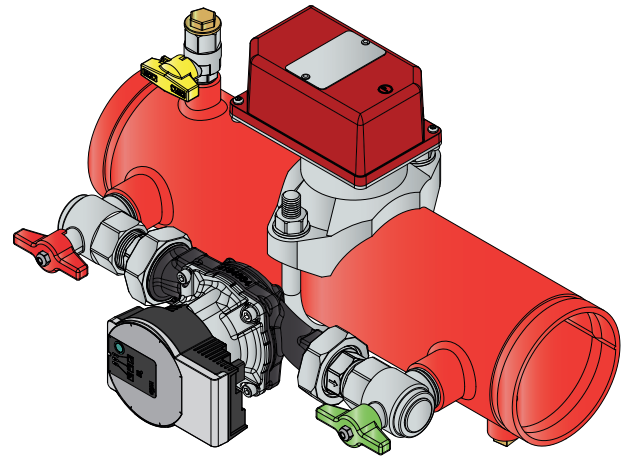
General Description

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). The Key-switch is used to activate the Zonecheck test and indicate flow-switch activation as well as the local valve-status.

Zonecheck is simple and sustainable solution for performing sprinkler system flow-switch tests. Zonecheck does not initiate the fire pump which eases co-ordination and labour whilst also reducing the risk of false alarms.

Specification

Zonecheck	
Maximum Working Pressure	12 bar (175 psi) water
Pipe Diameter	DN50 to DN200 (2" to 8")
Operating Temperature Range	0°C to 49°C (32°F to 120°F)
Approvals	FM, UL, VdS & LPCB
IP Rated	IP54
Flow Switch	
Type	Potter VSR-EU
Contact Ratings	10 A @ 125/250V AC 2.0 A @ 30V DC
IP Rating	IP54
Time Delay	0-30s
Pump	
Type	Wilo Para
Operating Voltage	230V 50Hz
Amps	0.82A
Max Power Rating	75W
IP Rating	IPX4D
Key-switch	
Voltage	230V 50Hz
Internal Consumption	7.5W max
Amps	0.88A
Led Indication	Pump running Flow switch activated Valve fault
Max Key-switch Group Size	25
Max Group Cable Length	300m



Addressable IMM	
Mains Power Supply	120-240 VAC 50/60 Hz - 250w Max
Number of Outputs	1
Type	Relay, Volt free, Single pole, Changeover/Switched main for pump
Max. Voltage/Current	3A Resistive, 230 VAC, 30 VDC, 0.35 power factor
Switched Mains for Pumps	250 VAC - 3A

Manufactured by Project Fire who holds FM Approval, UL Listing, VdS and LPCB Certificates

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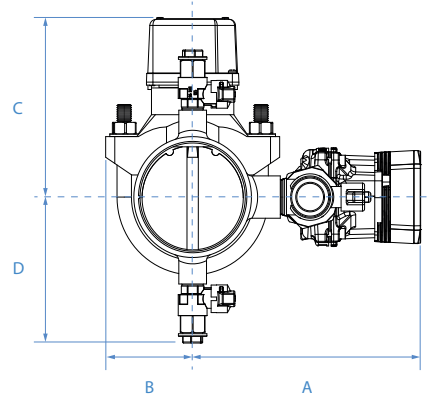
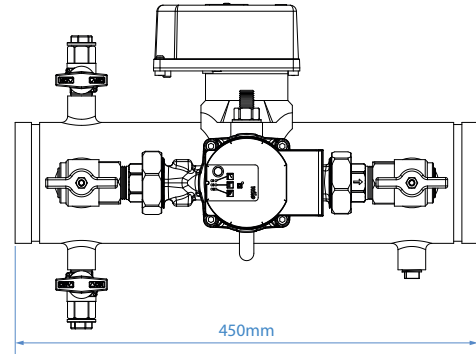
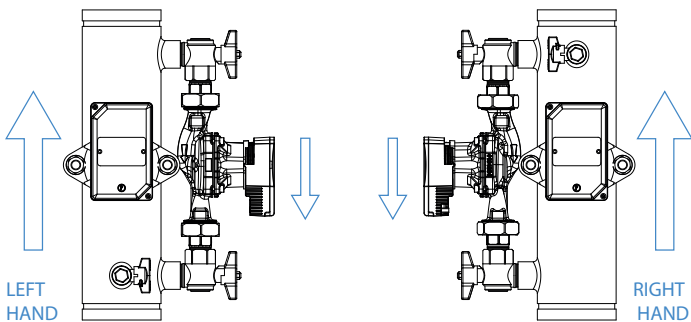
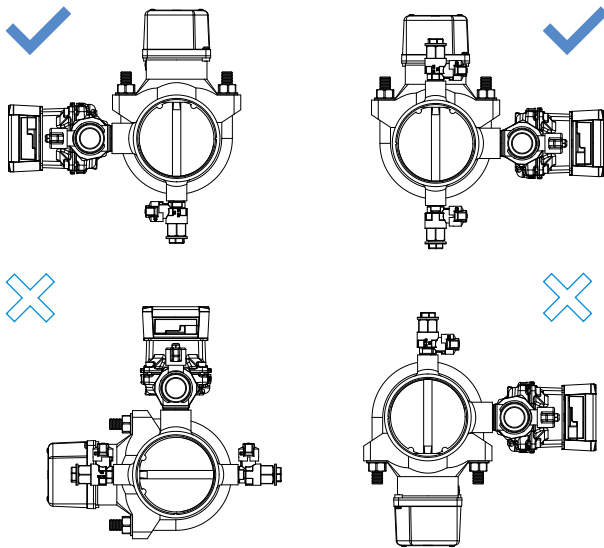
Zonecheck

Installation

Zonecheck can be installed both horizontally and vertically. Please check the directional arrows on the pump casting before installing. Pump flow should be opposite to the sprinkler systems flow.

When installing horizontally the flow-switch must face upwards and can not be installed facing sideways or below the pipe.

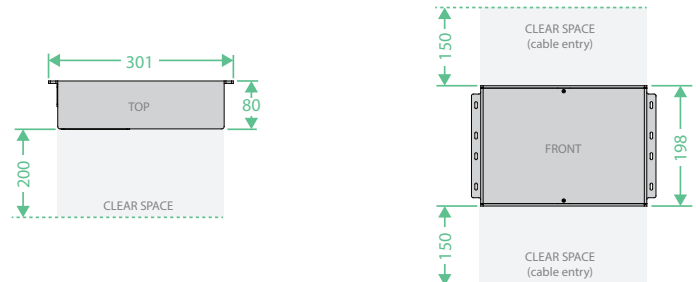
Left hand and right hand models are designed for when Zonecheck is installed along walls and space is limited.



Dimensions

Size		A	B	C	D
mm	inch				
DN50	2"	210	66	145	116
DN65	2 1/2"	215	66	155	124
DN80	3"	220	85	165	130
DN100	4"	225	85	170	140
DN150	6"	250	115	195	170
DN200	8"	275	150	225	195

IMM Dimensions



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Zonecheck

Key switch Wiring Diagram

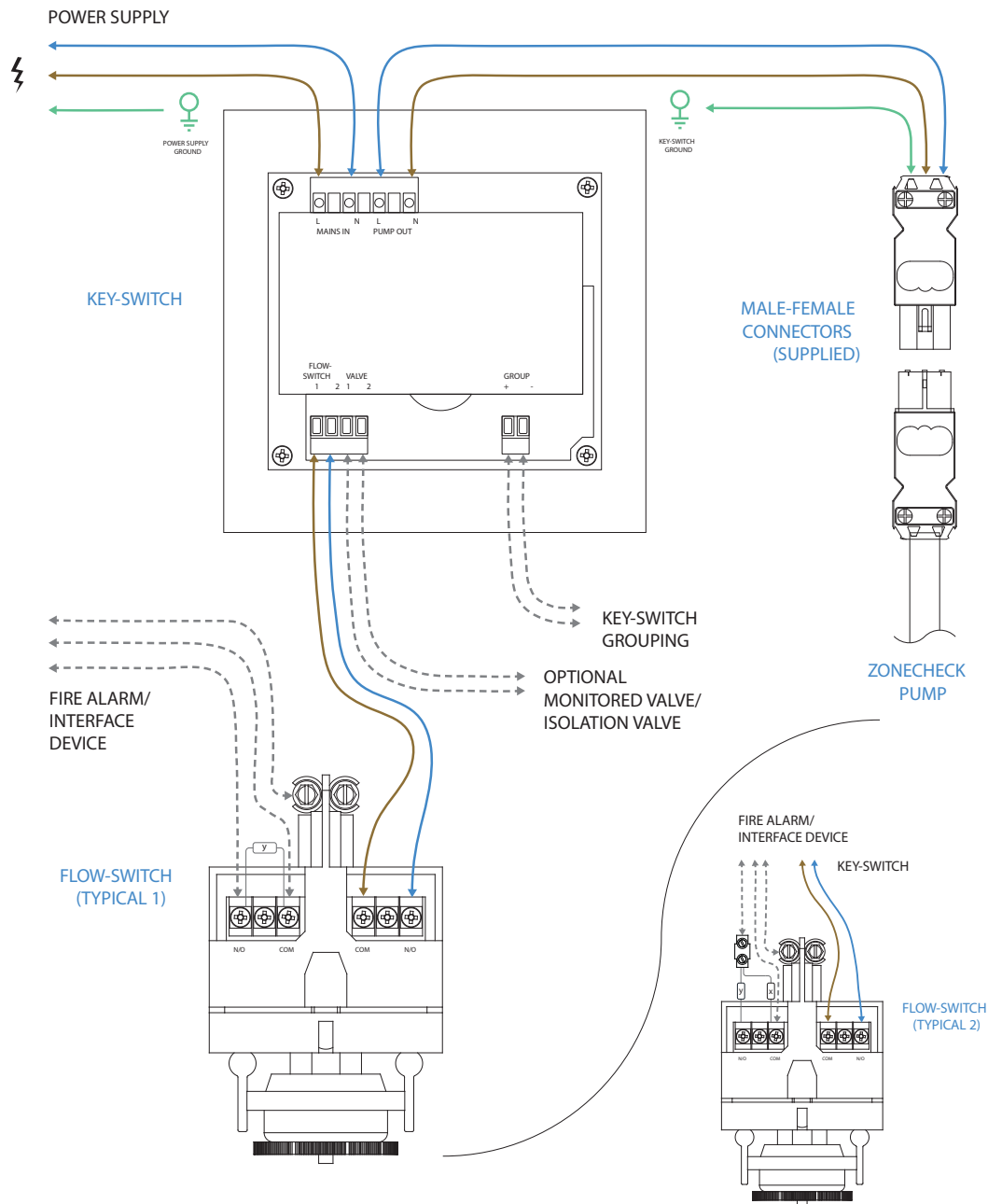
Typical fire-alarm/flow-switch connections (Typical 1/Typical 2). Exact wiring required depends on type of fire panel used. Refer to specific fire-alarm panel instructions for further information/guidance.

Resistors sized according to specific alarm-panel requirements.

(x) = fire/alarm resistor (usually 1Ω)

(y) = end of line resistor (usually 470Ω)

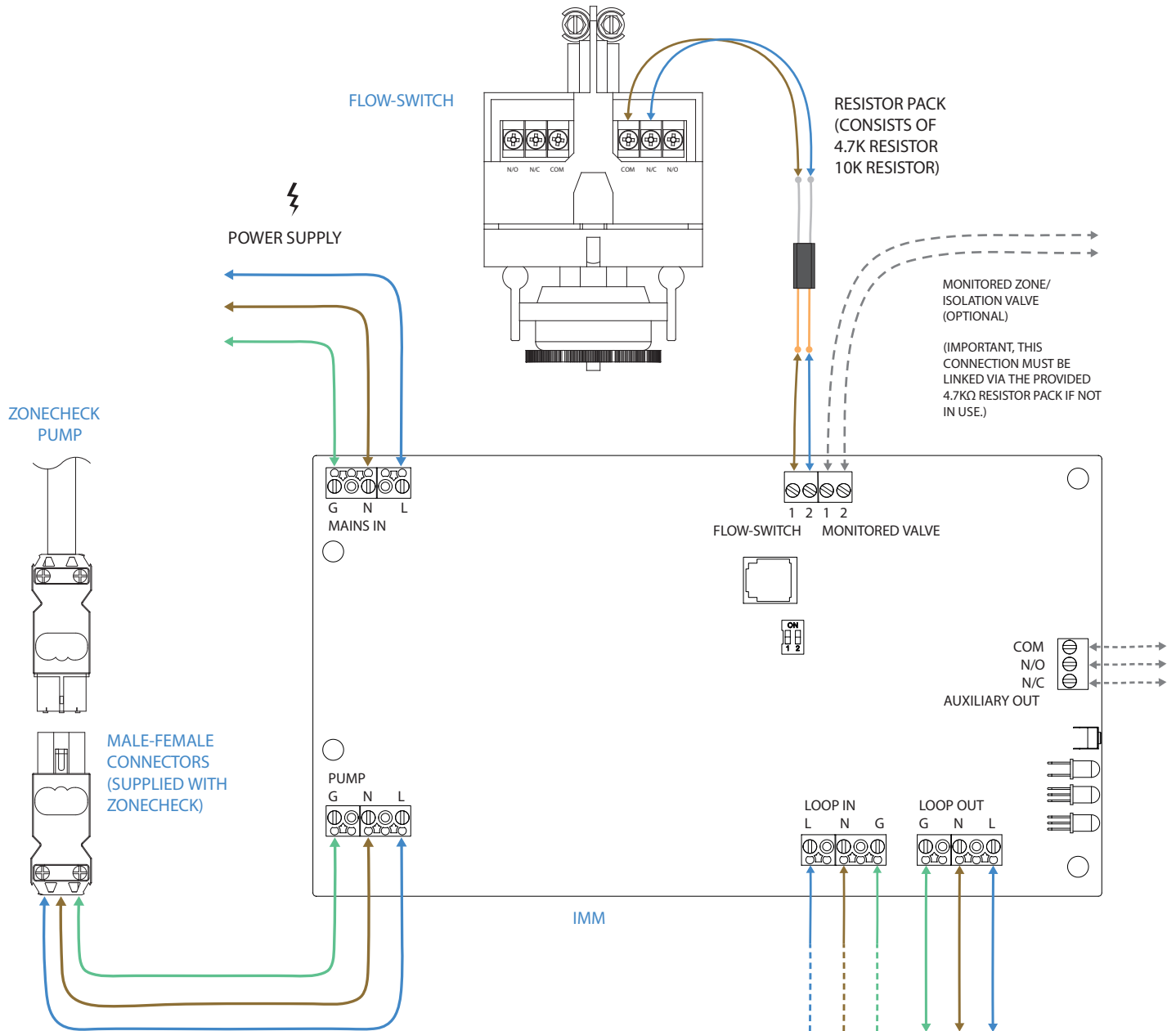
Up to 25 Zonechecks can be tested simultaneously when the Zonecheck units are wired in parallel via 'group' by turning the master key-switch to 'Group Test'.



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Addressable IMM Wiring Diagram



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Zonecheck

Addressable Wiring Diagram

Intelligent Flow-switch Testing

The intelligent nature of the IMM's mean that they do much more than just relay information regarding flow-switch operation and its exact location within the building. The IMM has additional capabilities that include the ability to monitor the local zone isolation valve and the local 'mains' supply. Further to this, the IMM has the capability for an auxiliary out connection, which could be used as part of a wider fire protection strategy (for example – to open local smoke vents or close fire doors in a given zone).

The addressable system is designed to manage a sprinkler system more effectively, for example when a monitored valve is closed a fault alert is indicated. At this point only authorised personnel can access the pin-protected controller to mute the audible alarm (for up to 4 hours). After this period, the alarm will activate again so that the system will be managed in strict compliance with the applicable life safety codes.

The system also includes an 'autorun' feature where each Zonecheck pump is run for two seconds every week to reduce the risk of seizing. In short, flow-switch testing is just the start – Zonecheck Addressable forms the basis for an all-encompassing, flexible and intelligent fire risk management and detection system.

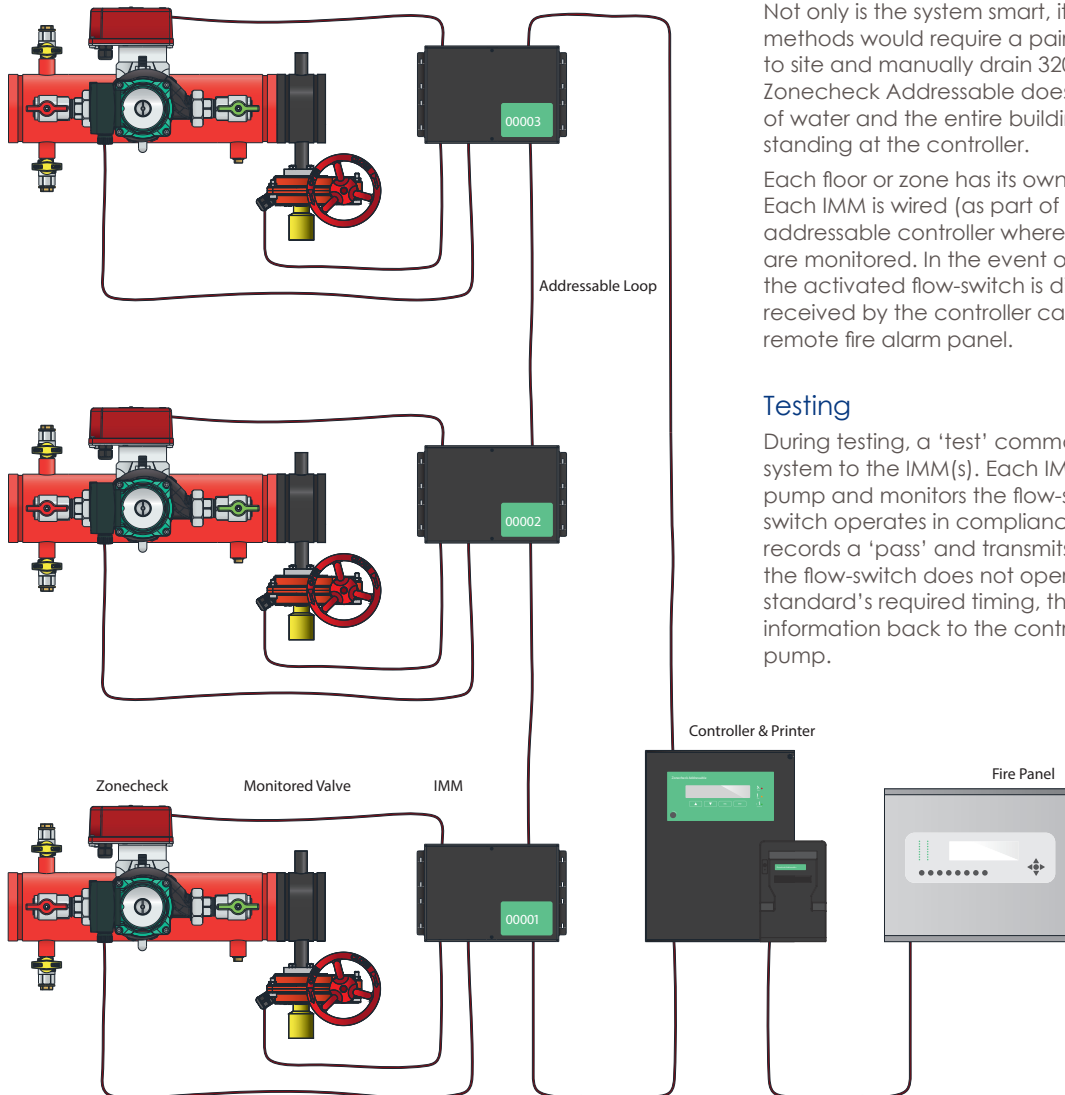
Green Testing

Not only is the system smart, it is also green. Traditional testing methods would require a pair of fully trained engineers to travel to site and manually drain 320 litres of water for every flowswitch. Zonecheck Addressable does all of this without wasting a drop of water and the entire building can be tested by an individual standing at the controller.

Each floor or zone has its own Zonecheck, IMM and zone valve. Each IMM is wired (as part of a looped system) back to the addressable controller where all of the Zonechecks in the loop are monitored. In the event of a fire or fault, the exact location of the activated flow-switch is displayed on screen. The information received by the controller can then be relayed to a building's remote fire alarm panel.

Testing

During testing, a 'test' command is transmitted via the looped system to the IMM(s). Each IMM operates its local Zonecheck pump and monitors the flow-switch operating time. If the flow-switch operates in compliance with code standards, the IMM records a 'pass' and transmits the result back to the controller. If the flow-switch does not operate, or operates outside of the code standard's required timing, the IMM records a 'fail', relays the information back to the controller and automatically turns off the pump.

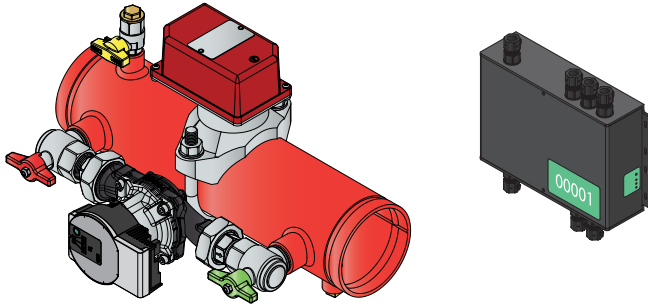


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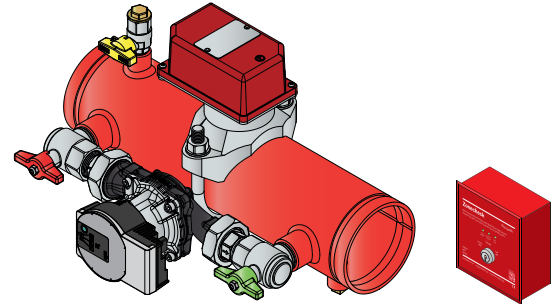


Zonecheck

Addressable Zonecheck



Zonecheck with Key switch



Ordering Codes

Size		Description	Weight (kg)	Ordering Code
mm	in			
DN50	2"	Right Handed	14.0	RDZCAD050R
DN65	2 1/2"	Right Handed	14.2	RDZCAD065R
DN80	3"	Right Handed	15.3	RDZCAD080R
DN100	4"	Right Handed	17.1	RDZCAD100R
DN150	6"	Right Handed	22.1	RDZCAD150R (UK)
DN150	6"	Right Handed	22.1	RDZCAD168R (EU)
DN200	8"	Right Handed	28	RDZCAD200R
Addressable IMM - Intelligent Monitoring Module				RDZC-IMM
Addressable Controller				RDZC-CONTROLLER
Addressable SCADA Controller				RDZC-CONTRSCADA

Note: Left handed versions available on request

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DN80	3"	Right Handed	15.3	RDZC080R
DN100	4"	Right Handed	17.1	RDZC100R
DN150	6"	Right Handed	22.1	RDZC150R (UK)
DN150	6"	Right Handed	22.1	RDZC168R (EU)
DN200	8"	Right Handed	28	RDZC200R
Key switch (spare)				RDZC-KYSE

Note: Left handed versions available on request

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