



Zone Assembly

General Description

The Rapidrop zone assembly is a compact unit that fulfills the requirements of BS5306 (Part 2) and BS EN 12845. It is used where sprinkler systems are divided into zones, typical applications include shop units and high rise buildings. The flow switch will detect water flow as a result of sprinkler head or test valve activation. This signal indicates in which zone the activation has taken place. A signal is also received from the isolation valve when it is fully open and when it starts to close. When required the isolation valve can be closed to isolate the system down stream of the valve.



Working Pressure

Max. Working Pressure 20.7 bar (300 psi)

Note: Components are rated to a maximum working pressure of 20.7 bar (300 psi) as per UL and FM Approvals. For LPCB and VdS Approvals, the components are rated to maximum working pressure of 16 bar (232 psi).

Features

- Butterfly Isolation Valve Model 216 - FM Approval, UL Listed, VdS and CE Certificates
- Water Flow Detector Model: VSR (EU) - FM Approval, UL Listed, LPCB, VdS and CE Certificates
- Easy to install, complete assembled fabricated unit
- Fixed IP67 metal RAL3002, double outlet junction box. Installed on the isolation valve for easy end of line resistor installation
- Pre-wired junction box with terminals connecting to the isolation valve and flow switch (SPDT contacts)
- LPCB Approved fire resistant cable

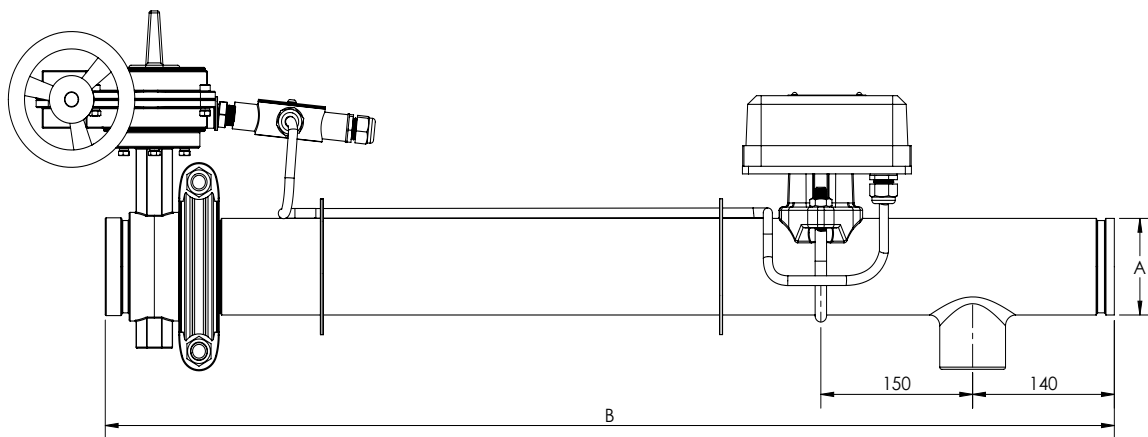
Connections

- Groove to ISO6182/ AWWA C606
- Test & Drain Valve : Rp 1-1/4 (1-1/4" BSPP) for DN50
Rp 2 (2" BSPP) for DN65 - DN200

Dimensions

Sizes		Dimensions(mm)		Weight (Kg)	Product Ordering Code
In	mm	A	B		
2"	DN50	60.3	981	15	RDZA050P216
2.5"	DN65	73.0	997	17	RDZA073P216
2.5"	DN65	76.1	997	17	RDZA065P216
3"	DN80	88.9	997	19	RDZA080P216
4"	DN100	114.3	1016	23	RDZA100P216
6"	DN150	165.1	1048	38	RDZA165P216
6"	DN150	168.3	1048	38	RDZA168P216
8"	DN200	219.1	1033	54	RDZA200P216

Note: Pipe lengths are a specific dimension to ensure correct operation of water flow detector.





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Component Specifications

Butterfly Valve	Rapidrop Fig.216
Butterfly Valve Contact Rating	SPDT (Form C) 16A, ½ HP @ 125/250V AC
Flow Switch	Potter VSR (EU) - FM/UL/LPCB/VdS/CE
Flow Switch Contact Rating	Two sets of SPDT (Form C) 10 A at 125/250 VAC 2 A at 30VDC Resistive 10 mA min. at 24 VDC
Electrical Cable	LPCB Approved fire resistant cable BS 6387:2013 (Cat. C - Resistance to fire 3 hours at 950°C)
Junction Box	Metal IP67, dual entry, double M20 gland outlet RAL3002
Steel Tube	BS EN 10255 Medium Grade Grooved as per ISO6182/ AWWA C606
Finish	Red Oxide Primer. Optional gloss red epoxy powder coating.
Optional Test & Drain Valve	a) 25mm and 32mm UL Listed or 50mm two position drain and test valve, stop valve and sight glass b) 50mm FM Approved three position drain and test valve with sight glass c) 15mm, 25mm, 32mm, 40mm or 50mm brass drain ball valve

Installation, Maintenance & Care

- Choose a suitable location at a height that allows access for installation, adjustment and operation.
- Support the assembly using approved hanging methods and attach with grooved couplings.
- Rapidrop zone assembly requires no regular maintenance however it is advisable to inspect and verify the proper operation of the unit annually or in accordance with the authority having jurisdiction
- A competent person must make all electrical connections.
- Do not handle zone assembly using electrical cables or junction box
- Alterations to Rapidrop products will void any warranty

Notes:

The junction box is supplied fixed but can pivot for easier access. For packaging purposes one M20 gland is supplied separately.

Installation Orientation

Zone Assembly can be installed horizontally or vertically. For horizontal installation the Flow Switch should be on the top or side of the pipe. Do not mount the flow switch on the underside of the pipe. For vertical installation the Flow Switch must be installed with the water flowing upwards.

Wiring Diagram

