

Priority Demand Valves (WRAS APPROVED)



The SEP Priority Demand Valve (PDV) – brand new for 2021 – acts to **isolate the domestic/ancillary water supply in the event of a fire sprinkler activation**, or in the event of a power loss.

The Requirement

BS9251 – the standard for ‘fire sprinkler systems for domestic and residential occupancies’ – states in broad terms that IF:

- the mains water supply flow rate available to the fire sprinkler system is liable to be affected by domestic water usage (e.g. shower, washing machine etc), THEN
- a valve must be fitted to cut off supply for domestic use in the event of a sprinkler activation.

Two Products – One Solution

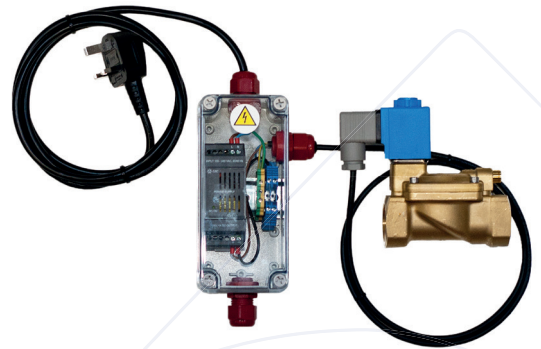
- For pipe sizes from 15mm/1/2" up to 50mm/2" we use a quality solenoid valve with BSP threaded connections.
- For pipe sizes from 65mm/2 1/2" up to 150mm/6" we use an electrically actuated butterfly valve for flanged connections.

The Benefits of our product

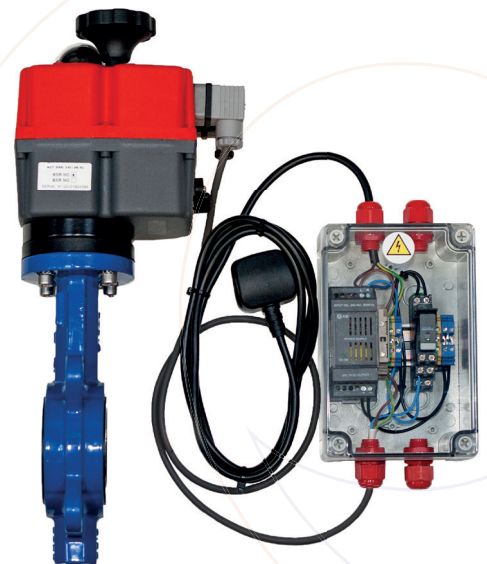
- All valves are WRAS-approved and therefore can be fitted directly to the mains water supply.
- 24-volt solenoid valve coil and control circuits avoid the need for dangerous 240-volt power outside the IP-rated enclosure, in a domestic environment.
- LED indicator to confirm that power is present.
- LED and position indicators on butterfly valve actuator.
- Fail-safe – the valve closes if a signal is received from the sprinkler system flow switch, BUT it will also close in the event of power loss OR flow switch connection is lost, ensuring that the fire sprinkler is always safe.
- High IP rating means more flexibility when positioning the easy-mount enclosure and the valve itself.
- Small enclosure for Solenoid-type (just 170x80x85mm).
- The fail-safe functionality does not preclude the installation of a (restricted/15mm/1/2") bypass around the PDV (complete with lockable and/or monitored isolation valve) to allow the provision of emergency water supplies in the event of a power loss which is not caused by a fire event.

Workings and features

- The flow switch (water flow detector) is connected into the IP-rated enclosure, creating a circuit that maintains the valve in the open position. If the flow switch is activated then the circuit is broken which closes the valve and shuts off the domestic water supply.
- It is strongly recommended that an **approved flow switch** is used with this installation, which gives added benefits of false alarm protection and two sets of contacts, as well as the peace of mind which comes with using proven globally-approved products.
- The unit is provided with a fitted plug for ease; however, this is easily removed, should the preference be to cable directly into a fused spur.



WRAS APPROVED VALVES



FOR DETAILED TECHNICAL INFORMATION, PLEASE SEE OVERLEAF

Technical information

	Solenoid Valve	Butterfly Valve
Sizes available	½"/15mm to 2"/50mm	2.5"/65mm to 6"
Pressure range	0.3-16 bar	0-16 bar
Electrical information – enclosure	230VAC / 24W / ↓1A	230VAC / 24W / ↓1A
Electrical information – valve	24VDC / 15W / ↓1A	230VAC / 36-48W / 0.15-0.2A
Size of enclosure	170x80x85mm	190x120x90mm
IP rating of assembly	Minimum IP65	
Mains cable	3-core x 1mm, length 2m, UK plug fitted	
Valve cable	3-core x 0.5mm, length 2m	3-core x 1mm, length 2m
Solenoid valve sizes (L x W x H) in mm	15mm: 80x52x114 (0.9)	65mm: 46x408 (5.0)
Butterfly valve sizes (L x H) in mm (L indicates flange-flange thickness)	20mm: 90x58x121 (1.1) 25mm: 109x70x135 (1.5) 32mm: 120x82x147 (2.2)	80mm: 46x422 (5.7) 100mm: 52x485 (6.9) 125mm: 56x513 (10.0)
Number in brackets is weight in kg	40mm: 130x95x161 (3.2) 50mm: 162x113x172 (5.0)	150mm: 56x605 (13.1)

Note: Due to availability of specific components, or ongoing design improvements, the technical or design specification may change at any time – if anything is critical then please contact us to confirm prior to ordering.

Options

Valves are available as a non-fail-safe option, by special order, if there is concern about loss of domestic water supply in the event of a power loss; however, these valves will not be able to shut off the domestic supply if there is a fire sprinkler activation during such power loss and therefore may not meet the standard.

Longer cables available, if required, by special order.

Related Products

For domestic/residential fire sprinkler systems, **we also supply:**

- Residential valve sets ('resi risers') complete with approved Potter flow switch (with two sets of contacts – one for the alarm panel, one of which can be used for the valve)
- Approved Potter flow switches
- As a nominated distributor, WRAS-approved and BS9251-compliant booster pump sets manufactured in the UK by global pump specialist Grundfos.