

# Smoke & Fire Protection Vent Certified BS EN 13501

# ABOUT THE PYRODUET

The PyroDuet is an Automatic shield from Smoke & Fire spreading through communal ventilation systems. Internal sensors detect smoke, heat and humidity, in the event of smoke or fire the ventilation port is shut down by the Pyro valve, smoke isolation is immediate, in the case of heat from the fire, the valve shuts permanently giving protection from fire and smoke transmission for a minimum of 90 minutes, as FS90S. Certified by EN13501

Tested and approved certification to EN 13501 providing FS90S, giving protection from fire and smoke in temperatures that exceed 1000°C + during the first 90 Minutes of a fire.

The PyroDuet has two mechanical operations of shutting down,

- 1. by Servo Motor
- 2. by Spring
- 1. The servo will operate immediately through electronic sensing of Smoke, rate of rise of temperature, with battery back up
- 2. The Spring will release and shut the valve to close when heat exceeds 70°C

The PyroDuet is a means of compartmentalising the ventilation system from adjoining rooms and any dwellings on the same ventilation run.



SEVEN LAYER FIRE AND SMOKE VALVE

Composite Dynamic Insulation System "PATENT PENDING"

#### SCOPE

For terminal vent devices on ventilation systems, offering an independent automatic smoke and fire protection. Isolating the centralised duct system by providing containment from a localised fire. Applies to Communal Ventilation Systems, covering Individual homes to Tower and Block Complexes, as well as Commercial and industrial Ventilation systems.

## **OPERATION**

Smoke sensor will detect Smoke/Fire then immediately activate the servo controlled valve, shutting off the vent port. The sensing system includes temperature rate of rise as well as a humidity sensor to counter airborne moisture particulate interference.

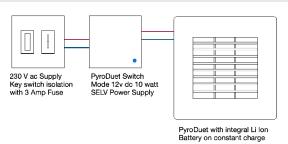
System operation are connectible by a phone App. All electronics sustained by an on-board Li-ion battery that is on a trickle charge, the battery will operate in the case of mains failure for a minimum of 100 minutes. Sprung Mechanical 70°C melt system is a secondary fail safe system.



# **PYRODUET SYSTEM FEATURES**

- 1. Dual Fire and Smoke Protection FS90S.
- 2. Smoke sensor 'integral' Trips Valve shut down
- 3. Temperature Rate of Rise (ROR) detection
- 4. Mains Powered via Remote SELV 12v Power Supply
- 5. Rechargeable Battery back up
- 6. Stainless Construction
- 7. Servo Operated Fire Smoke Valve
- 8. Thermal Fuse 'back up' Fire Smoke Isolation
- 9. Smoke Seal, -20 to 1100°C '90 Minutes'
- 10.7 layer Dynamic Valve seal protect
- 11. App Connectivity
- 12. Humidity compensated smoke detection

Part Number	Description	Contents
PD100 FS90S	Pyro Duet fire smoke isolator	PYRO DUET with 98mm spigot, with Integral intumescent, Thermal Fuse smoke/heat detector & Dynamic Valve Remote intumescent 12V power supply unit with LED indicator
AutoFlow Valve 9l/s	AutoFlow Valve	AutoFlow Pressure Valve, with Adjustable Air Flow Rates (9-19l/s)



#### **PYRODUET INSTALLATION**

The PyroDuet requires all duct work to be cleaned before installation.

#### Electrical

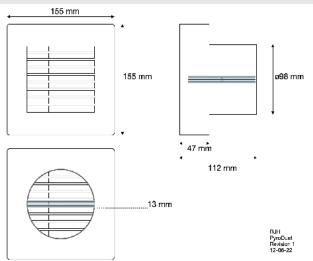
The device is supplied with a remote 12v SELV supply, this fits on to a standard one gang box, this can be connected to the lighting circuit being less than 10 watts maximum, preferably isolation with key switch. It can also be connected directly to the circuit providing that RCD protection exists.

Training is recommended, with certification upon completion for installers. Option available for Commissioning by PyroSafe upon completion of project. For more information please contact our customer support or see our website for product details and a detailed installation guide.

**IMPORTANT**: All ventilation metal to metal connection, use only fire resistant mastic. For air pressure consistency throughout your ventilation systems use AutoFlow Pressure Valve.

Duct work to be cleaned to TR/19 before installation.





### FOR THE SPECIFIER

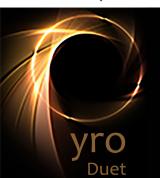
Supply and fit the PyroDuet Part Number "PD100 FS90S" vent terminal device, comprising Dual electromechanical Smoke & Fire Valve shutter assembly, with integral battery back up and mains connected 12v SELV power supply all as FS90S, replacing the existing terminal port, use metal adaptors and backplate as required to suit sizing, use App to Test and Name the device specific to the installed location on completion, all names and date of installation to form part of completion report, testing and installation as manufacturers instruction. Existing ventilation ductwork to be cleaned prior to the start of the installation

#### **Maintenance & Guarantee**

Cleaning and Testing within first 2 years of installation date (units guaranteed for 2 years), this involves wiping over the terminal cover. Removing the front cover and using a vacuum hoover with suitably sized attachment, remove all dust and detritus, clean the inside of the front cover. Connect with the phone App. Confirm shutter operation as well as battery condition.

Repeat as a minimum within every two years. After 5 years we would recommend manufacturers service and at 10 years replacement battery and test smoke sensor.

PyroSafe Ltd reserves the right to alter specifications and withdraw products from sale without notice. T&C @ https://pyrosafevent.com



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