

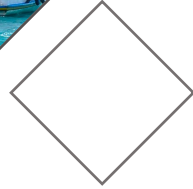


Boat / Yacht Automatic Fire Suppression Systems



HANGZHOU PRI-SAFETY FIRE TECHNOLOGY CO.,LTD.

www.chinafiresafety.com



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01

Product Advantages

PRI-SAFETY

Product Advantage. — (Pneumatic Valve)



Product Advantage. — (Solenoid Valve)



02

Parameters

PRI-SAFETY

Parameters.

PRI-SAFETY Boat/Yacht Automatic Fire Suppression Systems	
Brand Name	PRI-SAFETY
Capacity	6L, 9L, 12L, 20L, 25L, 50L, support customize size
Agent	FM200, Novec 1230, FE-36, Dry Powder, or 3% AFFF Foam
Working Pressure	14Bar
Testing Pressure	27Bar
Cylinder Material	St12 red painting Or Stainless Steel
Certificate	CE Certificate
System Activated Temperature	≥140°C

Note:

If use for engine rooms, different agent can be used, such as FM200, Novec 1230, FE-36 or Foam 3% AFFF. What's more, different systems are with different discharging tubes and nozzles.

03

Principle to Activate

PRI-SAFETY

Principle to activate.

- ◆ Step1: Detection tube ruptures to a hole when temp reach to 140 degree, and release pressure through the hole.(Or pushing the manual button on the detection tube,then the pressure releasing first from detection tube,before rupturing to a hole.)
- ◆ Step2: The resulting drop in pressure causes the head valve to be activated. At the same time the fire alarm is activated.
- ◆ Step3: Valve open and agent discharge through the discharge tube to the spray nozzles.
- ◆ Step4: Agent covering the area and suppressing the fire rapidly and thoroughly.
- ◆ This system activation is totally automatic and independent of electricity.

04

Product Drawing

PRI-SAFETY

Product Activated Principle.

①. Temperature Sensor Model/Solenoid Valve

Step 1

There is 3 temperature sensor installed in the engine room, temperature sensor feedback the the temperature to the control panel. The control panel can indicate the temperature at anytime. The control panel was installed in the driver room, driver can see the temperature at anytime.

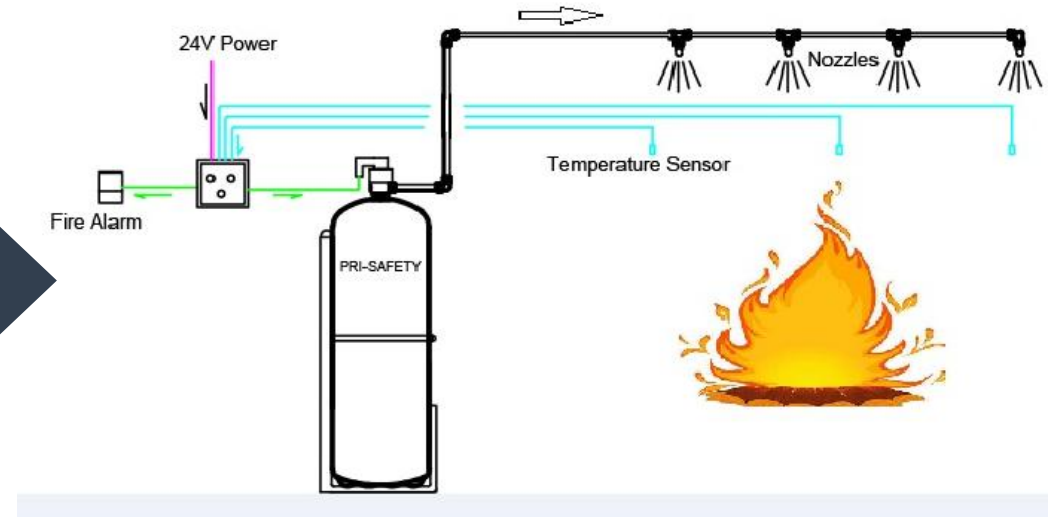
Step 2

Once the Temperature of engine room increase to 100°C, the control panel will activate the fire alarm. Driver will stop and check the situation. If necessary, driver will push the manual button on the control panel to activate the system.

Step 3

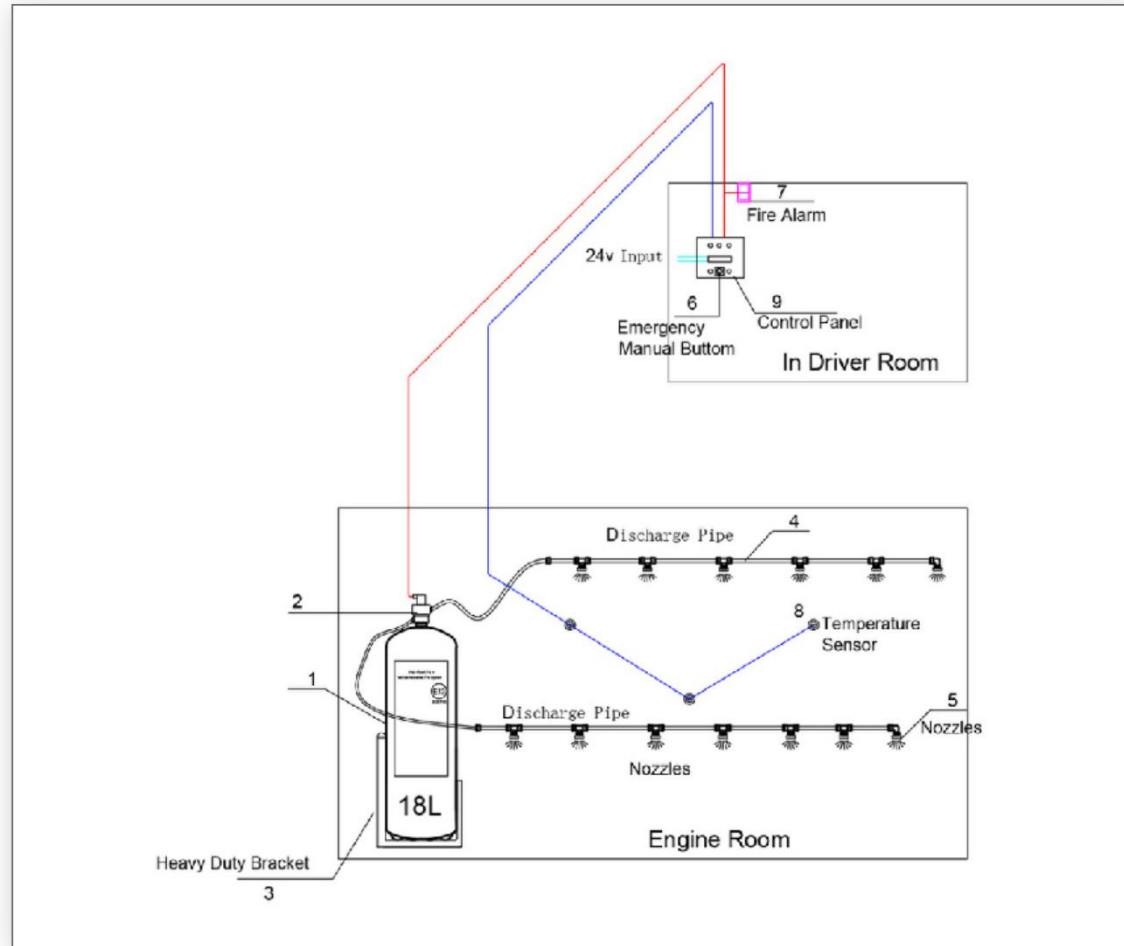
Once the temperature still increasing, and reach to 140°C, the temperature sensor feedback the signal to control panel, the control panel will activate the solenoid Valve, the solenoid Valve open and discharge agent to extinguish fire.

• DRAWING FOR REFERENCE



The temperature sensor send temperature signal to control panel, the control panel can indicate the temperature at anytime, once temperature reach 100 °C, the fire alarm was activated. Once the temperature reach 140°C, control panel will send signal to electric valve to open it. Then the agent was discharged from discharge tube and nozzles. On the control panel, there is a manual button and test button, reset button, in Emergency pushing the manual button can activate the fire system too.

Single Bottle Temperature Sensor



• Main Component

System Tank with Bracket



Electrical Head Valve

Discharge Pipe



Nozzles



Fire Alarm



Temperature Sensor



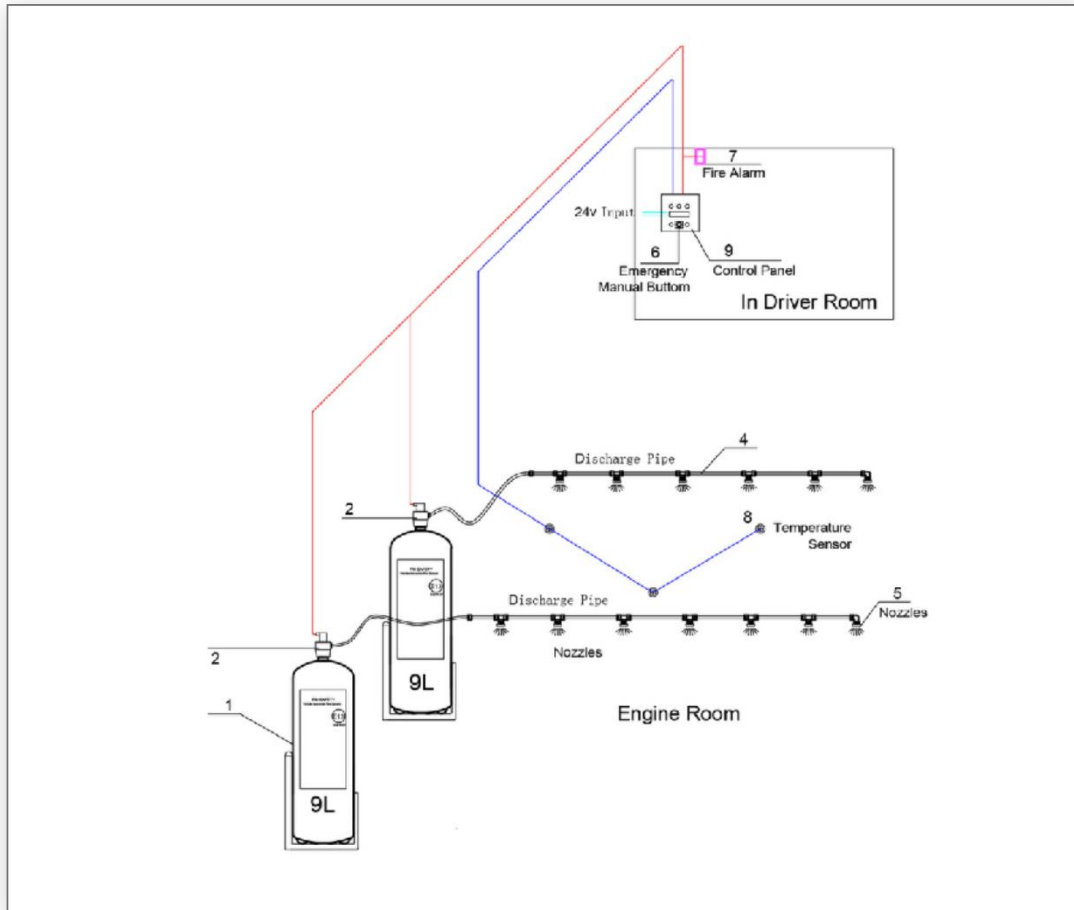
Control Panel



Fittings



- 2~3 Bottle
Temperature Sensor



- Main Component

System Tank with Bracket



Electrical Head Valve



Discharge Pipe

Nozzles



Fire Alarm



Temperature Sensor



Control Panel



Fittings



Product Activated Principle.

②. Detection Tube Model/Pneumatic Valve

Step 1

Detection Tube ruptures to hole when temperature reach 140°C , and release pressure through the hole.(Or pushing the manual button of detection tube,pressure releasing from themanual button.

Step 2

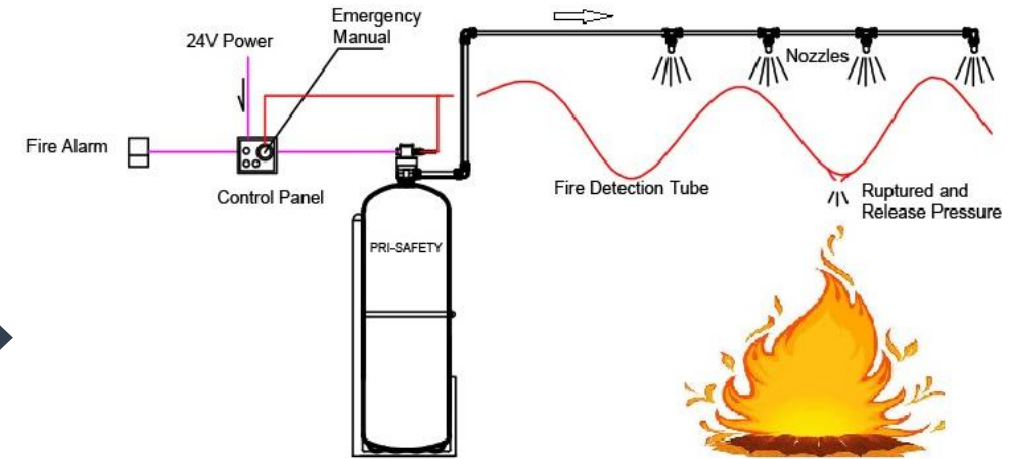
The resulting drop in pressure causes the head valve to be activated. At the same time the fire arlar was activated. Valve was opened and agent was discharged through the discharge tubing to the nozzles.

Step 3

Agent covering the area and suppressing the fire quickly and thoroughly.

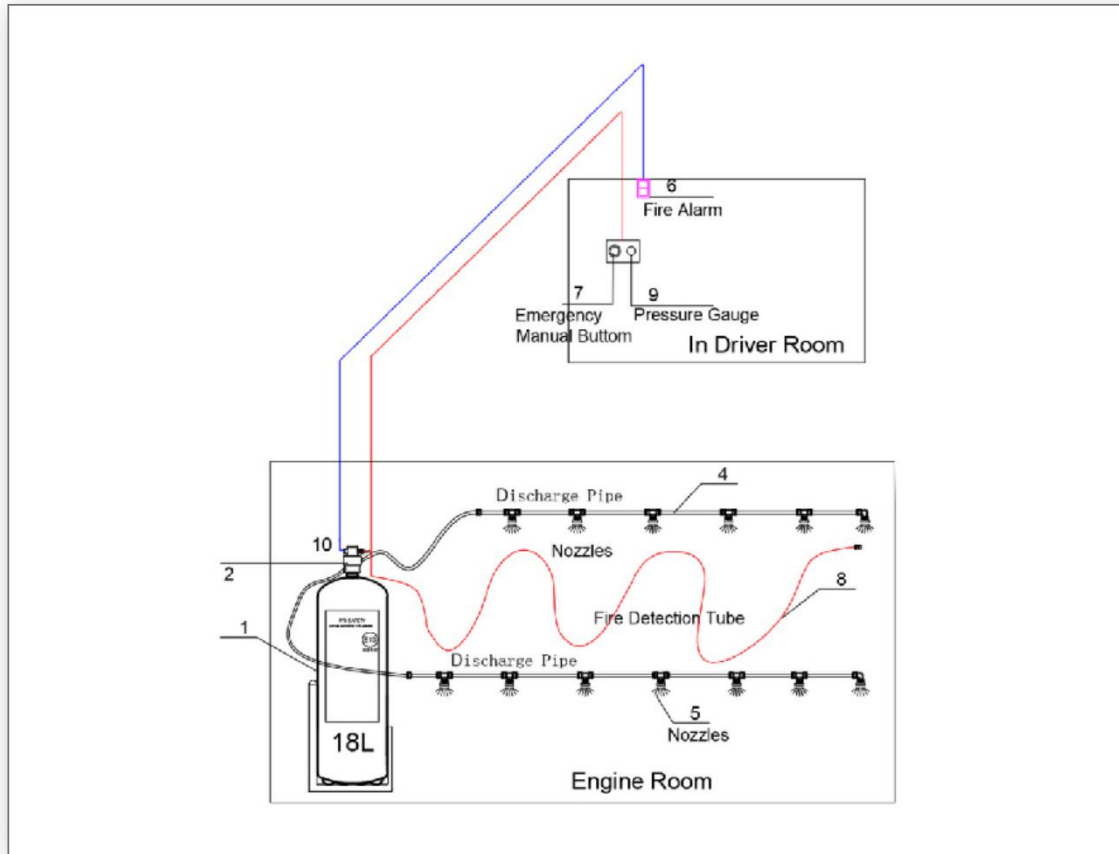
This system is totally automatic and is totally independent of electricity.

• DRAWING FOR REFERENCE



Inside the Pneumatic valve there is a piston, it divide the valve cavity to 2 parts. The upper cavity connect to detection tube, the lower cavity connect to bottle. The pressure of the 2 side of the piston is same. During the fire, Once the detection tube detected fire and ruptured one hole to release the pressure. Then the pressure of 2 side of the piston happen different, the piston was moved to up, and the outlet port of the valve was opened, and agent was discharged from the pipe and nozzles. At the same time, the pressure switch send final to fire alarm, the fire alarm was activated. On the control panel, there is a manual button and test button, reset button. In emergency Pushing the manual button can activate the fire system too.

Single Bottle Temperature Sensor



• Main Component

System Tank with Bracket



Automatic Valve



Discharge Pipe



Nozzles



Emergency Manual Button



Fire Alarm



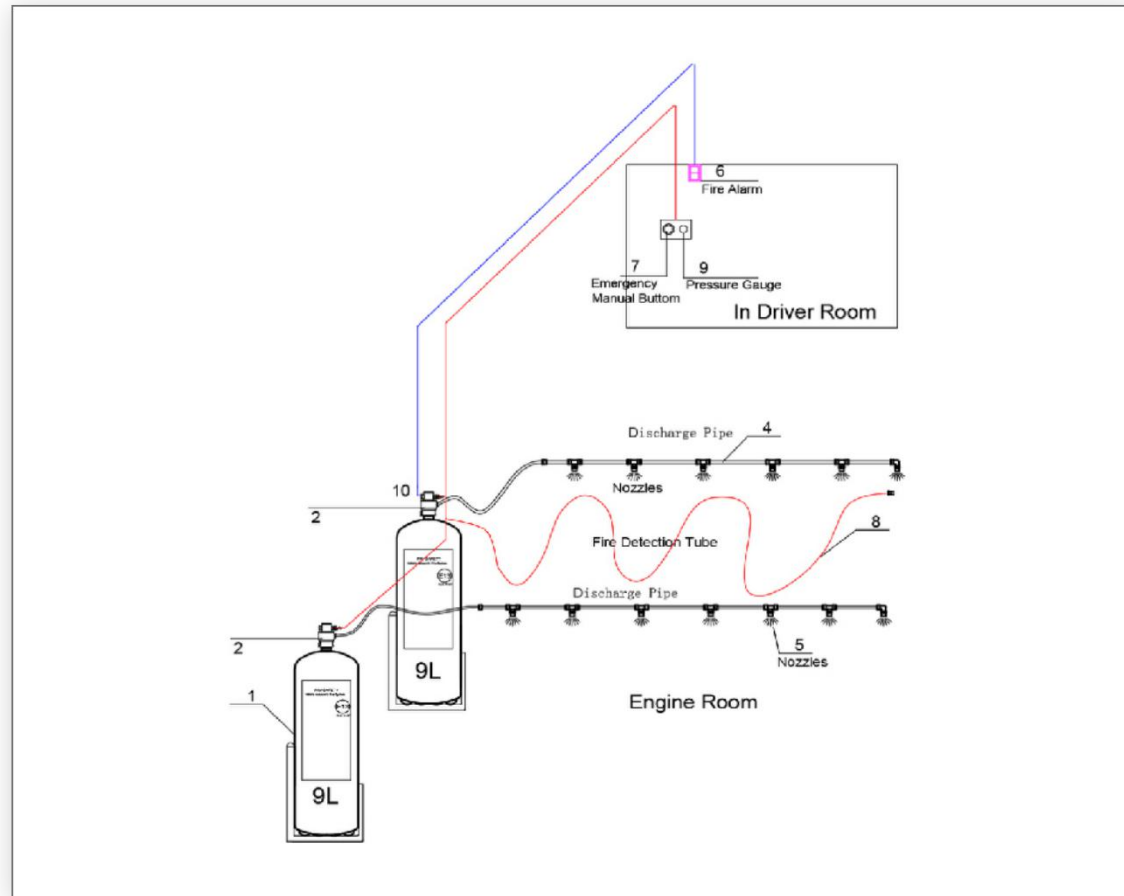
Fire Detection Tube



Fittings



- 2~3 Bottle
Temperature Sensor



- Main Component

System Tank with Bracket



Automatic Valve



Discharge Pipe



Nozzles



Emergency Manual Button



Fire Alarm



Fire Detection Tube



Fittings



05

Application

PRI-SAFETY

Yacht/Boat Fire Systems Application.









