

Description:



Wet Alarm Valve It is a check valve used to activate electrical and mechanical alarms with water flow from one or more opened sprinklers in wet pipe sprinkler systems. Wet alarm valve is designed for fire installations that do not fall below +4 °C and are not likely to freeze.

Operating Principle:

As long as the water pressure in the sprinkler system is equal to or more than the supply water pressure, the alarm valve is in the closed position.. By opening one or more sprinklers, the wet alarm valve flap opens and water begins to flow into the system and into the retard chamber. When the retard chamber is completely filled with water, the pressure switch and the water alarm gong are activated by the water pressure. After the fire is brought under control, the water flow to the area can be stopped by closing the shut-off valve in the wet alarm valve station of the area where the sprinkler is opened. The following auxiliary equipments are located on the wet alarm valve



Equipment:



- ✓ Retarding Chamber
- ✓ Pressure Indicators
- ✓ Water Gong
- ✓ Main Drain Valve
- ✓ Pressure Switch

Retarding Chamber:

It is a device used with a wet alarm valve to prevent false alarms that may occur due to irregularities and fluctuations in the water inlet pressure.

Water Gong:

It is an alarm bell operating with the flow power of the water triggered by the passage of water from the wet alarm valve. It is mostly used to communicate that the sprinkler system is in alarm state by being installed outside the building.

Alarm Pressure Switch:

It is connected to the alarm valve to provide electrical contact at the preset pressure value or the adjustable pressure value. The pressure switch is used to receive a water flow alarm in each zone.

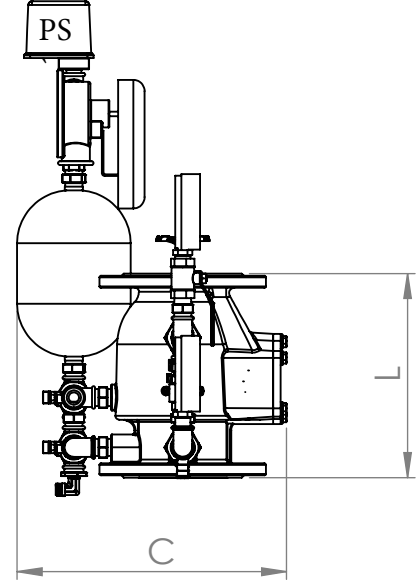
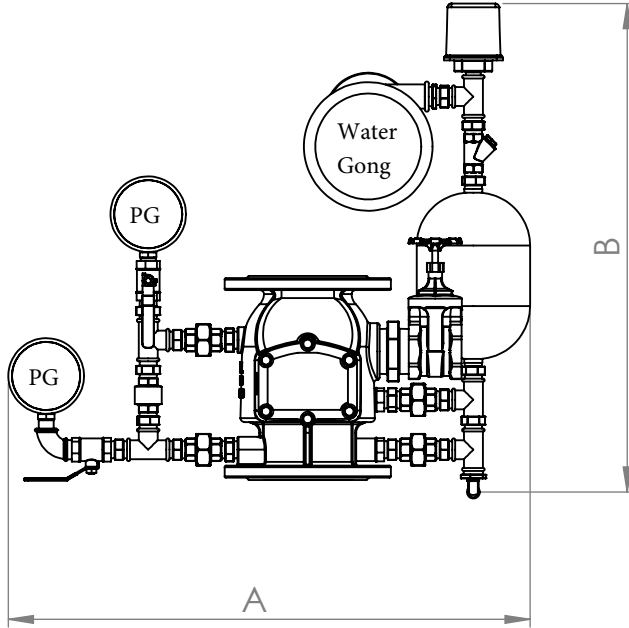
Pressure Indicators:

To indicate the pressure at the inlet and outlet of the wet alarm valve used manometers.

Main Drain Valve:

If the water in the sprinkler zone is to be drained, it can be drained from the main drain valve on the alarm valve after the shut-off valve is closed.

Pictures:



Dimensions:

DN	A	B	C	L
100	640	650	380	270
150	660	650	405	340
200	720	650	430	430

Install: Vertical

Max working pressure: 300 Psi

Max Operating Temp: 80 °C (176 °F)

#	Material Name	Type of Material
1	Body	GGG40
2	Disc	GGG40
3	Spring Seat	Polyamide
4	Spring	SST 302
5	Cover	GGG40
6	Stem	Stainless Steel
7	Bolt	8.8 Coated Steel
8	Lifting Eyebolts	8.8 Coated Steel
9	Nut	8.8 Coated Steel

HYDRAULIC PERFORMANCE

	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm
Valve Diameter	2	50	2½	65	3	80	4	100	5	125	6	150	8	200
Kv m³/h@1bar							187				419		1139	
Cv gpm@1psi							216				484		1316	

$$Kv(Cv)=Q \cdot \sqrt{\frac{G}{\Delta P}}$$

Kv : Valve flow coefficient (flow rate at 1 bar pressure loss m³/h @ 1

Cv : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1

Q : Flow (m³/h, gpm)

Cv=1,155Kv **ΔP**: Pressure Loss(bar, psi) **G**: The specific gravity of water(Water=1.0)