WET ALARM CHECK VALVES

C-WAV, Design: TSE

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 80°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

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:

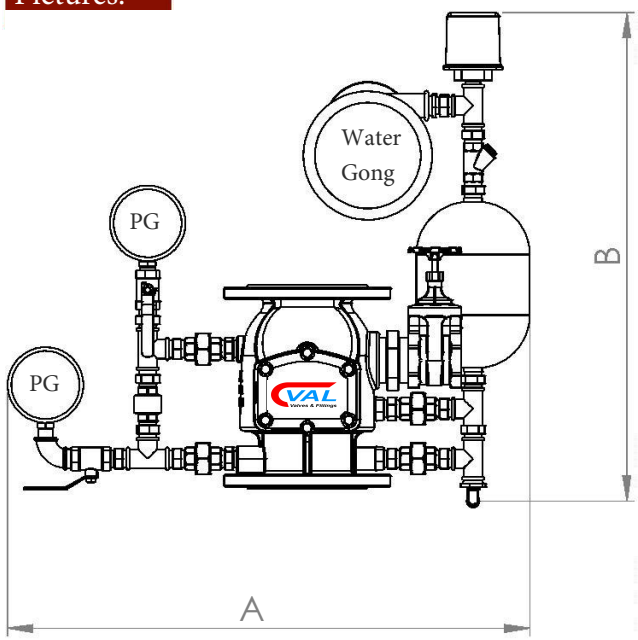
To indicate the pressure at the inlet and outlet of the wet alarm valve used manometers.

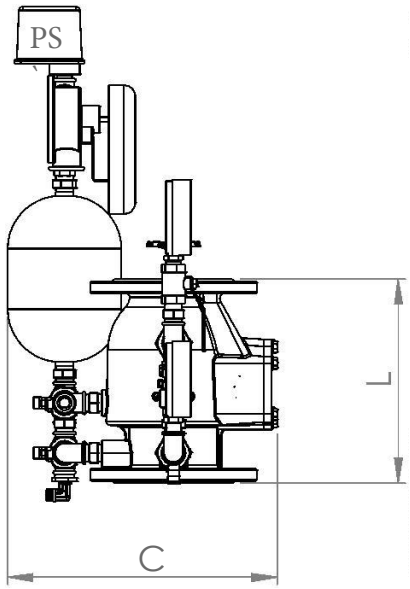
Main Drain Valve:

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.

WET ALARM CHECK VALVES

Pictures:





Dimentions:

DN	A	B	C	L
65	525	530	355	250
80	640	650	380	270
100	640	650	390	330
150	660	650	405	340
200	720	650	430	430

Equipment:

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

- **Installation: Vertical**
- **Max working pressure: 300Psi**
- **Max Operating Temp: 80°C (176°F)**

Flanged EN 1092-2

#	Material Name	Type of Material
1	Body	GGG50
2	Disc	SS304
3	Spring Seat	Polyamide SST
4	Spring	302
5	Cover	GGG50
6	Stem	Stainless steel
7	Bolt	8.8 Coated Steel
8	Lifting Eyebolts	8.8 Coated Steel
9	Nut	8.8 Coated Steel

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

Kv : Valve flow coefficient
Cv : Valve flow coefficient
Q : Flow (m³/h, gpm)

Cv=1,155Kv
ΔP: Pressure Loss(bar, psi)
G: Water=1.0

HYDRAULIC PERFORMANCE

	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
Valve Diameter	2	50	2½	65	3	80	4	100	5	125	6	150	8	200
Kv m³/h@1bar			235		277		287				419		1339	
Cv gmp@1psi			256		286		296				484		1316	