VALMATIC
VALVES & FITTINGS

# DRAIN DELUGE VALVE

**Fig. DLG & DLG-AL**

## Description:

Deluge valves are normally closed valves used in fire installations with open sprinklers.


**Fig. DLG-AL**

**Fig. DLG**

## Operating Principle:

Smoke detectors in the fire installation send a signal to the fire control panel. Control panel sends an electrical opening signal to the Deluge va lve with the signal it receives from the detectors. Deluge valve switches to the fully open position and thanks to the equipment on it, both gives electrical alarm and a mechanical alarm. Extinguishing liquids passing through the deluge valve to the sprinklers in the fire installation disperses.

## Equipment:

- Water Gong
- Pressure Switch
- Pressure Indicators
- Discharge Pilot

## Water Gong:

It is an alarm bell that works with the flow power of the water triggered by the opening of the deluge va lve.
Sprinkler sy stem used to indicate that it is in an alarm state.

## Alarm Pressure Switch:

It is connected to the deluge va lve to provide electrical conta ct at the preset pressure value or the adjustable pressure value.

## Pressure Indicators:

To indicate the pressure at the inlet of the deluge valve used manometer.

## Working Ranges:

**Max working pressure: 16 bar**

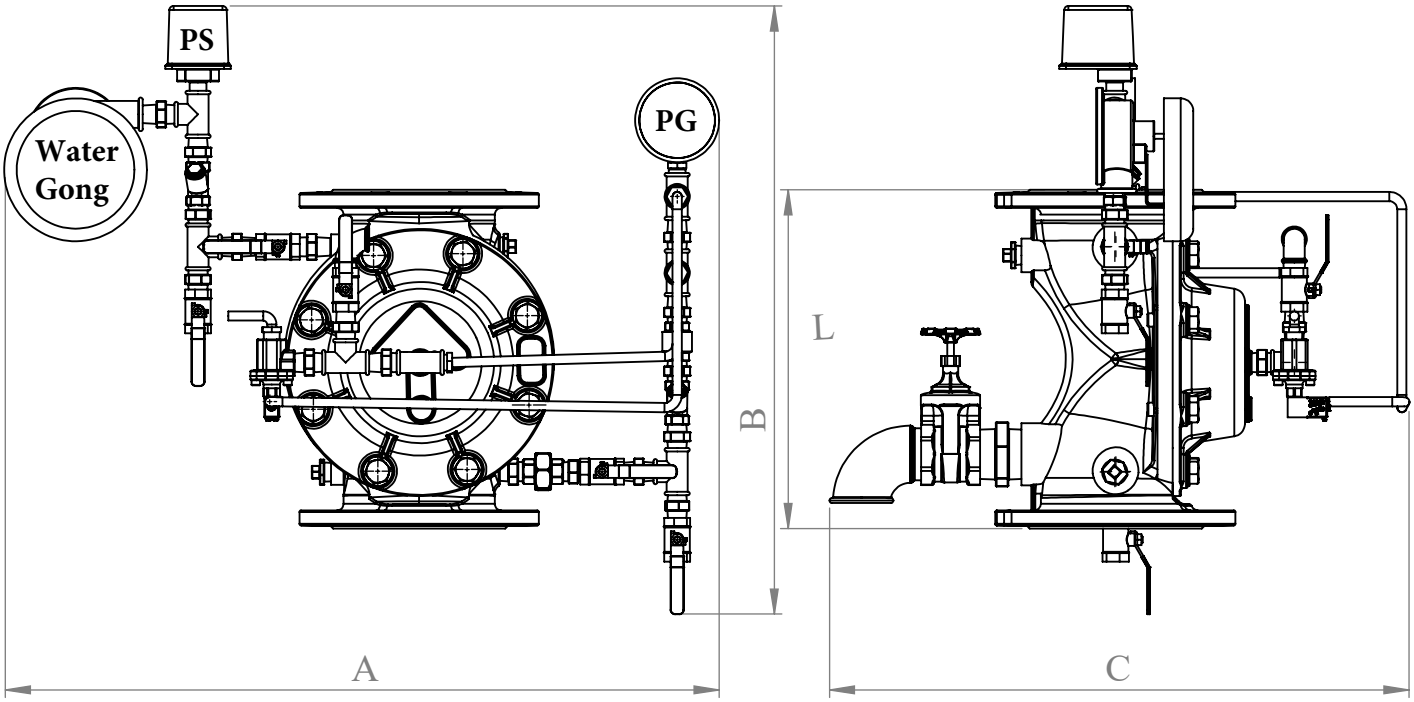
**Max Operating Temp:** 80 °C (176 °F)

*TAYFUR SU SİSTEMLERİ*
*adress: Karacaoğlan Mah. 6172 Sk. No:19/A Işıkkent Bornova / İZMİR.*

VALMATIC
VALVES & FITTINGS

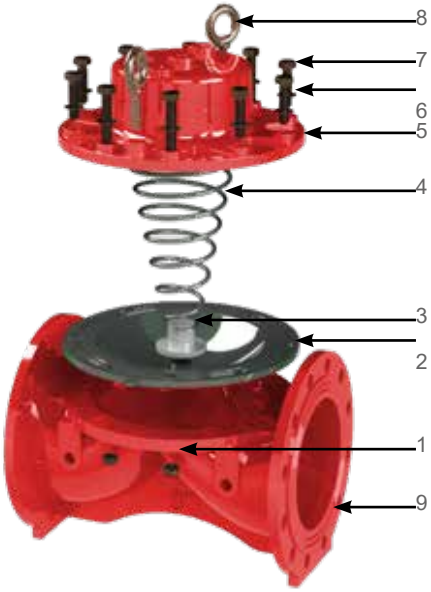
# DRAIN DELUGE VALVE

## Pictures:




## Diamentions:

| DN | A | B | C | L |
|---|---|---|---|---|
| 50 | 720 | 590 | 320 | 200 |
| 65 | 730 | 590 | 350 | 214 |
| 80 | 760 | 590 | 490 | 288 |
| 100 | 780 | 590 | 490 | 305 |
| 125 | 800 | 680 | 620 | 369 |
| 150 | 850 | 720 | 680 | 403 |
| 200 | 875 | 745 | 720 | 494 |




Flanged

| # | Material Name | Type of Material |
|---|---|---|
| 1 | Body | GGG40 |
| 2 | Diaphragm | Natural Rubber |
| 3 | Spring Seat | Polyamide |
| 4 | Spring | SST 302 |
| 5 | Cover | GGG40 |
| 6 | Washer | 8.8 Coated Steel |
| 7 | Bolt | 8.8 Coated Steel |
| 8 | Lifting Eyebolts | 8.8 Coated Steel |
| 9 | Nut | 8.8 Coated Steel |

*TAYFUR SU SİSTEMLERİ*
*adress: Karacaoğlan Mah. 6172 Sk. No:19/A Işıkkent Bornova / İZMİR.*

VALMATIC
VALVES & FITTINGS

# DRAIN DELUGE VALVE

Flow rate

## Technical Specifications

| | | |
|---|---|---|
| Operating Pressure | Standard | 0,7 - 16 bar (10 - 240 psi) |
| | Low Pressure Range | 0,5 - 10 bar (7,5 - 160 psi) |
| | High Pressure Range | 0,7 - 25 bar (10 - 360 psi) |
| Temperature | Minimum Operating Temp. | - 10 °C (14 °F) DIN 2401/2 |
| | Maximum Operating Temp. | 80 °C (176 °F) DIN 2401/2 |
| Connection | Flanged | EN 1092-2, ISO 7005 - 2 |
| | Threaded | ISO (BSP) , ANSI (NPT) |
| Covering | Standard | Epoxy |
| | Optional | Polyester |
| Hydraulic Connections | standard | Reinforced Nylon (Air Brake) Hydraulic Tube SAE J 844 |
| | Optional | Copper DIN1057 |
| Actuator Type | With Single Control Chamber \| Aperture With Diaphragm | |

## HYDRAULIC PERFORMANCE

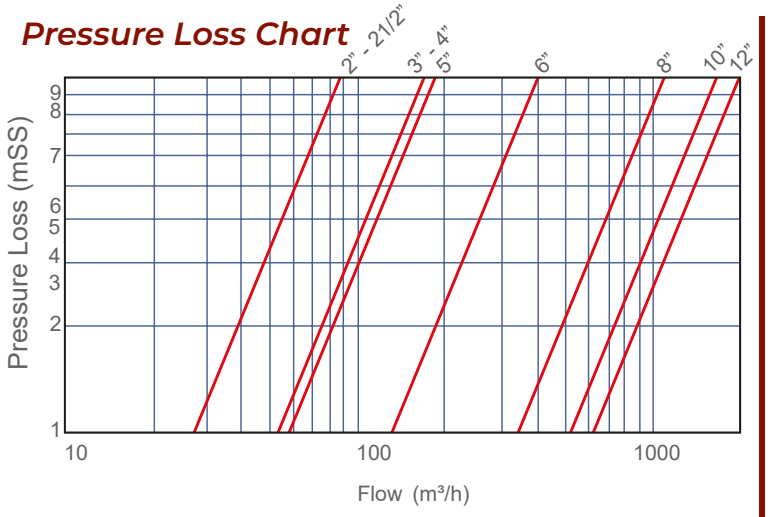
| | inch | cm | inch | cm | inch | cm | inch | cm | inch | cm | inch | cm | inch | cm | inch | cm | inch | cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valve Diameter | 2 | 50 | 2½ | 65 | 3 | 80 | 4 | 100 | 5 | 125 | 6 | 150 | 8 | 200 | 10 | 250 | 12 | 300 |
| Kv m³/h@1bar | 88 | | 88 | | 174 | | 187 | | 187 | | 419 | | 1139 | | 1698 | | 2276 | |
| Cv gmp@1psi | 102 | | 102 | | 201 | | 216 | | 216 | | 484 | | 1316 | | 1961 | | 2629 | |

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

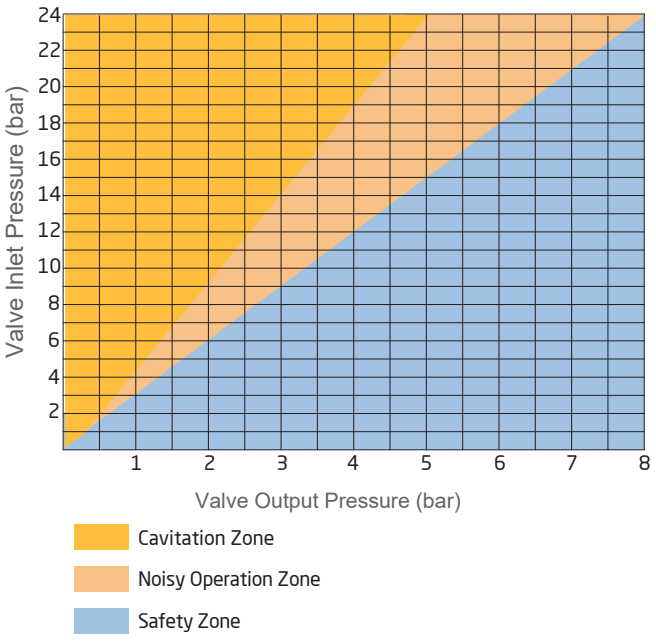
**Kv** : Valve flow coefficient ( flow rate at 1 bar pressure loss m³/h @ 1
**Cv** : Valve flow coefficient (flow in pressure loss of 1 psi GPM @ 1
**Q** : Flow (m³/h, gpm)

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

## Pressure Loss Chart




## Cavitation Chart





*TAYFUR SU SİSTEMLERİ*
*adress: Karacaoğlan Mah. 6172 Sk. No:19/A Işıkkent Bornova / İZMİR.*