Data Sheet 11.04
Issue C

Deluge Valve
Model A

Product Description

Deluge Valve is known as a system control valve in a deluge system, used for fast application of water in a spray system. Deluge valve protects areas such as power transformer installation, storage tank, conveyor protection and other industrial application etc. With the addition of foaming agent deluge valve can be used to protect aircraft hanger and inflammable liquid fire.

Valve Operation

Deluge valve is a quick release, hydraulically operated diaphragm valve. It has three chambers, isolated from each other by the diaphragm operated clapper and seat seal. While in 'SET' position, water pressure is transmitted through an external bypass check valve and restriction orifice from the system supply side to the top chamber, so that supply pressure in the top chamber acts across the diaphragm operated clapper which holds the seat against the inlet supply pressure because of differential pressure design. On detection of fire the top chamber is vented to atmosphere through the outlet port via opened actuation device(s). The top chamber pressure cannot be replenished through the restricted inlet port, thus it reaches less than half the supply pressure instantaneously and the upward force of the supply pressure lifts the clapper allowing water to enter the system piping network and alarm devices.

Trim Description

a) Basic Trim

The basic trim is required on deluge valve regardless of the release system. It contain those components which are required in all types of installation, such as the main drain valve, priming connection, drip check valve, emergency release valve and pressure gauges.

b) Dry Pilot Trim (Pneumatic Release)

Dry pilot operation uses a pilot line of closed Sprinklers/ QB detectors containing air under pressure, located in the area to be protected. It requires regulated dry air supply with main supply point through restricted orifice. The pilot line is connected directly to the top of POSITIVE DRAIN ACTUATOR (PDA). The bottom of PDA is connected to the top chamber of the deluge valve. When the air pressure drops, due to release of any of the release devices on detection of fire, the diaphragm of PDA is lifted and allows the water to drain. This reduces the water pressure in the top chamber of the deluge valve and when the pressure in the top chamber reaches 50% of the supply pressure, the deluge valve opens. The direct drain of PDA start when the top chamber pressure of deluge valve reaches approximately 0.7 Kg/sq.cm. This positive drain will not permit the deluge valve to close unless the PDA is set manually. The recommended air supply pressure is as per TABLE-1.

Technical Details

Model	A
Nominal Size	50, 80, 100, 150 & 200 DN
Maximum Working Pressure	12 Bar (175 psi)
Threaded Opening	BSPT
Mounting	90° pattern inlet to outlet vertical mounting.
Factory Hydrostatic Test Pressure	24 bar (350 psi)
Flange Connection	ANSI B 16.1 FF #125 (Flange drilling matching to ANSI B 16.5 # 150)
Trim	Galvanized steel with brass valves
Wet Pilot Sprinkler Height Limitation	As per graph in the catalogue.
Net Weight Without Trim	DN 50 - 47 Kg DN 80 - 50 Kg DN 100 - 77 Kg DN 150 - 131 Kg DN 200 - 214 Kg
Finish	Red RAL 3001
Approval	UL listed.
Ordering Informations	Specify : 1. Size of Valve 2. Trim type: Dry Pilot, Wet Pilot, Electric Release, Test & Alarm

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TABLE - 1

Line Water Pressure Kg./ Sq.cm. Maximum	Air Pressure In Detection Line Kg./ Sq.cm.	
	Minimum	Maximum
2	1.2	3.0
4	1.5	3.0
6	2.0	3.5
8	2.5	3.5
10	3.0	3.5
12	3.5	4.0

c) Wet Pilot Trim (Hydraulic Release)

Wet pilot operation uses a pilot line of closed sprinklers containing pressurised water, supplied through the upstream side of the deluge valve, through a restricted orifice. All the release lines are connected to a common release line. Due to release of any one of the release devices, the water pressure in the top chamber of the deluge valve reaches 50% of the supply pressure, the deluge valve opens.

Caution

While using a deluge valve in the wet pilot system the h eight and the length of the wet pilot detection line is to be limited as given in the wet pilot sprinkler height limitation graph.

d) Electric Release Trim

To actuate a deluge valve electrically, a solenoid valve is provided to drain the water from the top chamber of the deluge valve. A pressure switch is provided to activate an electric alarm, to shut down the desired equipment or to give "Tripped" indication to the panel. In addition to this two nos of pressure switchs can be used to monitor "Low air pressure" and "Fire condition" when used in dry pilot air line.

e) Test And Alarm Trim With Sprinkler Alarm

This trim is supplied with the sprinkler alarm bell, which bells on actuation of the deluge valve. A test valve is provided to test the normal operation of the sprinkler alarm bell.

Note: Trim without Test and Alarm trim, without Drain & drip valve can be supplied for which please contact marketing.

Resetting Procedure For The Deluge Valve

(i) Close the upstream side stop valve provided below the deluge valve.

(ii) Open both the drain valves and close them when the flow of water has ceased.

(iii) Inspect and release if required, or close the section of the detection system subjected to "Fire condition".

(iv) In case of dry pilot detection system, open the air supply valve to build-up air pressure as shown in TABLE-1. Open the priming valve fully and press hold the knob of PDA till the water pressure gauge indicate full service line pressure, then release the PDA knob. Open the upstream side of the stop valve provided below the deluge valve. No water should flow into the system, this can be checked by depressing the drip check valve knob.

Caution

(a) Do not close the priming valve, down stream and upstream stop valves, while the system is in service.

(b) The releasing device must be maintained in the open position, when actuated, to prevent the deluge valve from closure.

(c) While using a Deluge valve in the wet pilot system the height and the length of the wet pilot detection line is to be limited as shown in the wet pilot sprinkler limitation graph..

(d) Do not connect the Sprinkler Alarm outlet drain line to close a common drain as it may create back pressure and Sprinkler Alarm may not function.

(e) Deluge valve must have support to absorb sudden opening or closing vibration shock to the piping.

(f) The responsibility of maintenance of the protection system and devices in proper operating condition lies with the owner of the system.

(g) Deluge Valve & its trim shall be maintained at a minimum temperature of 4°C, Heat tracing is not permitted.

(h) Deluge Valve must be used in pressurised system

System Testing Procedure

(i) Keep the upstream side of the stop valve partially open. Open the up stream side of the drain valve, to maintain a minimum pressure of 3 Kg./sq. cm on the upstream side of the deluge valve. To avoid water damage close the system side stop valve. This valve is to be kept in open position after the testing is completed.

(ii) Open the system side drain valve of the deluge valve.

(iii) Let any of the release devices to trip. This will result in a sudden drop of water pressure in the deluge valve top chamber resulting the deluge valve to open. The water flowing through the down stream side drain valve confirms that the deluge valve has actuated, immediately close the upstream side stop valve .

(iv) Once testing is over reset the valve as per procedure given under heading "RESETTING PROCEDURE FOR THE DELUGE VALVE".

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Inspection And Maintenance

All the newly installed system piping network must be flushed properly before placing the deluge valve in service. A qualified and trained person must commission the system. After few initial successful tests an authorised person must be trained to perform inspection and testing of the system. It is recommended to have regular inspection and test run the system as per NFPA guidelines or in accordance with the guideline laid down by the organisation having local jurisdiction.

(I) Warning

Inspection and testing is to be carried out only by authorised and trained personnel. DO NOT TURN OFF the water supply or close any valve to make repair(s) or test the valve, without placing a roving fire patrol in the area protected by the system. Also inform the local security personnel and central alarm station, so that a false alarm is not signalled. It is recommended to carry out physical inspection of the system at least twice in a week. The inspection should verify that all the control valves are in proper position as per the system requirement and no damage has taken place to any component.

(ii) Normal Condition

(a) All main valves are open and are sealed with tamper proof seal.

(b) Drain valves must be kept closed.

(c) No leak or drip is detected from the drip valve.

(d) All the gauges except the system side water pressure gauge, should show the required pressure.

(e) There should be no leakage in the system.

(iii) Normal Condition Test

(a) The system should be checked for normal condition at least once a month.

(b) Test the sprinkler alarm bell or electric alarm by turning the alarm test valve to the test position. The alarm should sound. This test should be carried out at least once in a week.

(c) Depress the drip valve knob. Significant water accumulation indicates a possible seat leakage.

(d) Conduct the water flow test as per the procedure of system testing at least once in a month.

(iv) Periodic Check

Conduct the water flow test by actuating few of the release devices provided in the system. Clean all strainer(s) and priming line restriction. This test is to be carried out at least once in

six months.

Abnormal Condition

(i) Alarm Fails To Sound

(a) Check for any obstruction in the alarm test line, Ensure that the sprinkler alarm is freely operating.

(b) If an electric alarm is provided, check the electrical circuitry to the alarm.

(ii) False Trips

(a) Check for clogging in priming line, restriction orifice check valve, priming valve & strainer.

(b) Leakage in the release system.

(c) The deluge air panel orifice clogged or low supply pressure.

(iii) Leakage Through The Deluge Valve

(a) Damaged deluge valve seat or obstruction on the seat face by foreign object.

(b) Leakage in release system.

(c) Partly clogged priming line, restriction check valve.

(d) Low air pressure on release system line or leakage in release system.

(e) PDA seat leakage due to seat damage or obstruction on seat face by foreign objects (in dry pilot system only)

(f) Leakage through bypass valve if installed in the system.

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Deluge Valve
Model A

Note

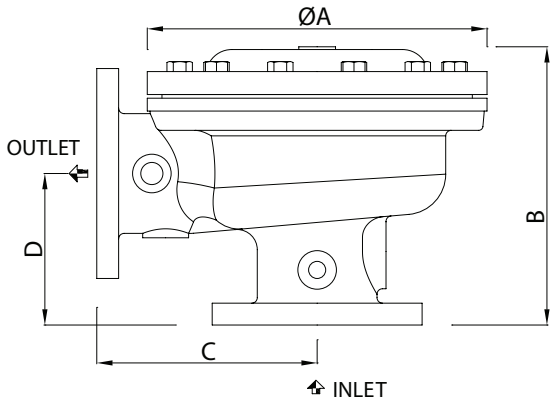
1. UL listing is valid only when Deluge Valve is installed with trim set as per trim drawing.

2. The trip time of deluge valve on of device through detection network, will depend on volume of detection network. If the trip time of deluge valve is more, then it can be substantially reduced by installing check valve in branch of release line in the detection network. The check valve flow shall be towards releasing device.

3. The pneumatic system must have restricted orifice at air or gas supply point. The restriction nozzle are supplied with dry pilot actuation trim.

4. UL Listing is valid only when Listed Solenoid Valve provided for electric operation of the deluge valve is retained in the trim. If any other solenoid valve is used, the deluge valve trip time may be quite high or deluge valve may not trip.

Deluge Valve Model-A Size 50 / 80 / 100 / 150 / 200 DN



Dimensions in mm (Approximate)

Nominal Size of Valve	A	B	C	D
DN 50	316	272	210	135
DN 80	316	272	210	135
DN 100	370	304	240	165
DN 150	464	382	300	200
DN 200	540	455	330	230

Part List

Item	Description	QTY.					Material Specification
		DN 50	DN 80	DN 100	DN 150	DN 200	
1	Housing	1	1	1	1	1	Cast Iron
2	Clapper	1	1	1	1	1	Ductile Iron*
3	Rubber Seat	1	1	1	1	1	Neoprene Rubber
4	Rubber Clamp	1	1	1	1	1	Ductile Iron*
5	Bolt (M10x20)	3	3	4	4	6	Stainless Steel
6	Diaphragm	1	1	1	1	1	Neoprene Rubber
7	Clamp Ring	1	1	1	1	1	Ductile Iron*
8	Cover	1	1	1	1	1	Cast Iron
9	Bolt (M20x70)	-	-	-	14	14	Carbon Steel
	Bolt (M16X60)	-	-	10	-	-	Carbon Steel
	Bolt (M16x55)	12	10	-	-	-	Carbon Steel
10	Bolt (M10x30)	8	8	8	12	12	Stainless Steel
11	Bolt (M20x50)	-	-	-	2	2	Carbon Steel
	Bolt (M16x50)	-	-	2	-	-	Carbon Steel
	Bolt (M16x45)	-	2	-	-	-	Carbon Steel

Note: * Ductile Iron is standard supply, bronze & stainless steel is optional supply.
NA - Parts replacement not available

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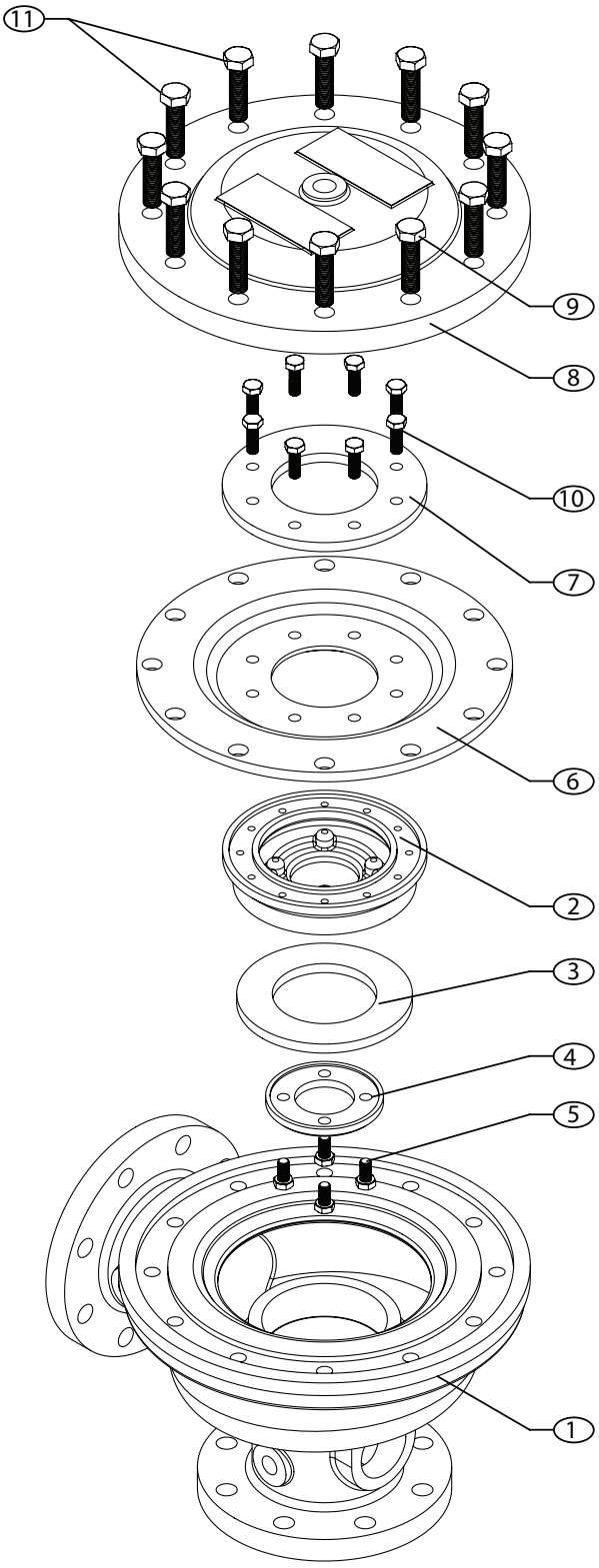
Deluge Valve
Model A

Deluge Valve Model - A Size 50 / 80 / 100 / 150 / 200 DN



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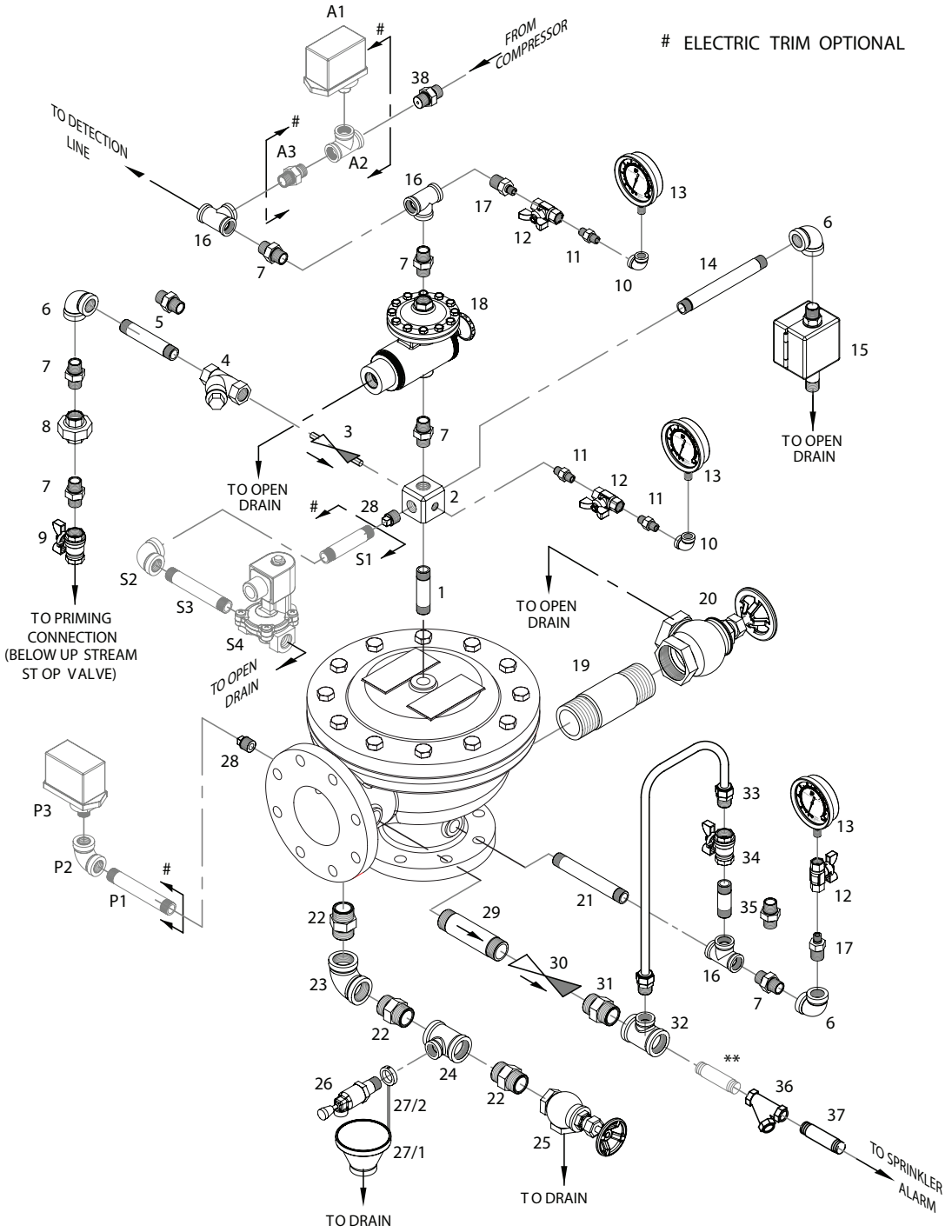
Deluge Valve
Model A

Pneumatic & Electric Release Trim with Test & Alarm Trim for Deluge Valve Model - A



NOTE: WHEN ELECTRIC TRIM IS SUPPLIED THEN SL.NO.28 PLUG NOT REQUIRED.

** TO SUIT AT SITE BY INSTALLER

* SUPPLIED FITTED TOGETHER

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Deluge Valve
Model A

Pneumatic & Electric Release Trim with Test & Alarm Trim for Deluge Valve Model -A

Trim Item			Quantity Per Deluge Valve Size				
No	Description	Size	DN 50	DN 80	DN 100	DN 150	DN 200
1	Pipe Nipple	½" X 80 mm Long	1	1	1	1	1
2	6 Way Manifold	-	1	1	1	1	1
3	NRV with restriction hex nipple	½"	1	1	1	1	1
4	'Y' Type Strainer	½"	1	1	1	1	1
5	Pipe Nipple	½" X 110 mm Long	-	-	-	1	1
5	Hex Nipple	½"	1	1	1	-	-
6	Elbow	½"	3	3	3	3	3
7	Hex Nipple	½"	6	6	6	6	6
8	Union	½"	1	1	1	1	1
9	Ball Valve	½"	1	1	1	1	1
10	Elbow	¼"	2	2	2	2	2
11	Hex Nipple	¼"	3	3	3	3	3
12	Gauge Valve	¼"	3	3	3	3	3
13	Pressure Gauge	¼"	3	3	3	3	3
14	Pipe Nipple	½" X 300 mm Long	-	-	-	-	1
14	Pipe Nipple	½" X255 mm Long	-	-	-	1	-
14	Pipe Nipple	½" X 210 mm Long	-	-	1	-	
14	Pipe Nipple	½" X 180 mm Long	1	1	-	-	-
15	Emergency Release Station	-	1	1	1	1	1
16	Tee	½"	3	3	3	3	3
17	Reducing Hex Nipple	½" X ¼"	2	2	2	2	2
18	Positive Drain Actuator	-	1	1	1	1	1
19	Pipe Nipple	2" X 110 mm Long	-	-	1	1	1
19	Pipe Nipple	1¼" X 110 mm Long	1	1	-	-	-
20	Angle Valve	2"	-	-	1	1	1
20	Angle Valve	1¼"	1	1	-	-	-
21	Pipe Nipple	½" X 150 mm Long	-	-	-	1	1
21	Pipe Nipple	½" X 130 mm Long	1	1	1	-	-
22	Hex Nipple	1"	-	-	3	3	3
22	Hex Nipple	¾"	3	3	-	-	-
23	Elbow	1"	-	-	1	1	1
23	Elbow	¾"	1	1	-	-	-
24	Reducing Tee	1" X ½" X 1"	-	-	1	1	1
24	Reducing Tee	¾" X ½" X ¾"	1	1	-	-	-
25	Angle Valve	1"	-	-	1	1	1
25	Angle Valve	¾"	1	1	-	-	-
26	Drip Valve	½"	1	1	1	1	1
27/1	Funnel	-	1	1	1	1	1
27/2	Funnel Holder	-	1	1	1	1	1
28	Plug	½"	2	2	2	2	2

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Deluge Valve
Model A

Pneumatic & Electric Release Trim with Test & Alarm Trim for Deluge Valve Model -A

Trim Item			Quantity Per Deluge Valve Size				
No	Description	Size	DN 50	DN 80	DN 100	DN 150	DN 200
29	Pipe Nipple	¾" X 100 Mm Long	1	1	1	1	1
30	NRV	¾"	1	1	1	1	1
31	Hex Nipple	¾"	1	1	1	1	1
32	Reducing Tee	¾" X ½" X ¾"	1	1	1	1	1
33	Copper Tube Assembly	½"	-	-	-	-	1
33	Copper Tube Assembly	½"	-	-	-	1	-
33	Copper Tube Assembly	½"	-	-	1	-	-
33	Copper Tube Assembly	½"	1	1	-	-	-
34	Ball Valve	½"	1	1	1	1	1
35	Pipe Nipple	½" X 60 mm Long	-	-	-	-	1
35	Hex Nipple	½"	1	1	1	1	-
36	'Y' Type Strainer	¾"	1	1	1	1	1
37	Pipe Nipple	½"	1	1	1	1	1
38	Orifice Nozzle (Air Line)	½"	1	1	1	1	1
Electric Trim For Pressure Switch (Optional)							
P1	Pipe Nipple	½" X 135 mm Long	1	1	1	1	1
P2	Elbow	½"	1	1	1	1	1
P3	Pressure Switch (DV Outlet)	½" (M)	1	1	1	1	1
A1	Pressure Switch (Air Line)	½" (M)	1	1	1	1	1
A2	Tee	½"	1	1	1	1	1
A3	Hex Nipple	½"	1	1	1	1	1
Electric Trim For Solenoid Valve (Optional)							
S1	Pipe Nipple	½" X 130 mm Long	-	-	1	1	1
S1	Pipe Nipple	½" X 135 mm Long	1	1	-	-	-
S2	Elbow	½"	1	1	1	1	1
S3	Pipe Nipple	½" X 180 mm Long	-	-	1	1	1
S3	Pipe Nipple	½" X 135 mm Long	1	1	-	-	-
S4	Solenoid Valve	½" Size, Two Way	1	1	1	1	1

Pressure switch as optional can be provided for "DV actuated" announciation, switch to be mounted at the outlet of deluge valve.
In dry pilot trim additional pressure switch can be provided for low pressure alarm.
@ 2 way solenoid valve with 24VDC/110 VAC/220 VAC for remote actuation

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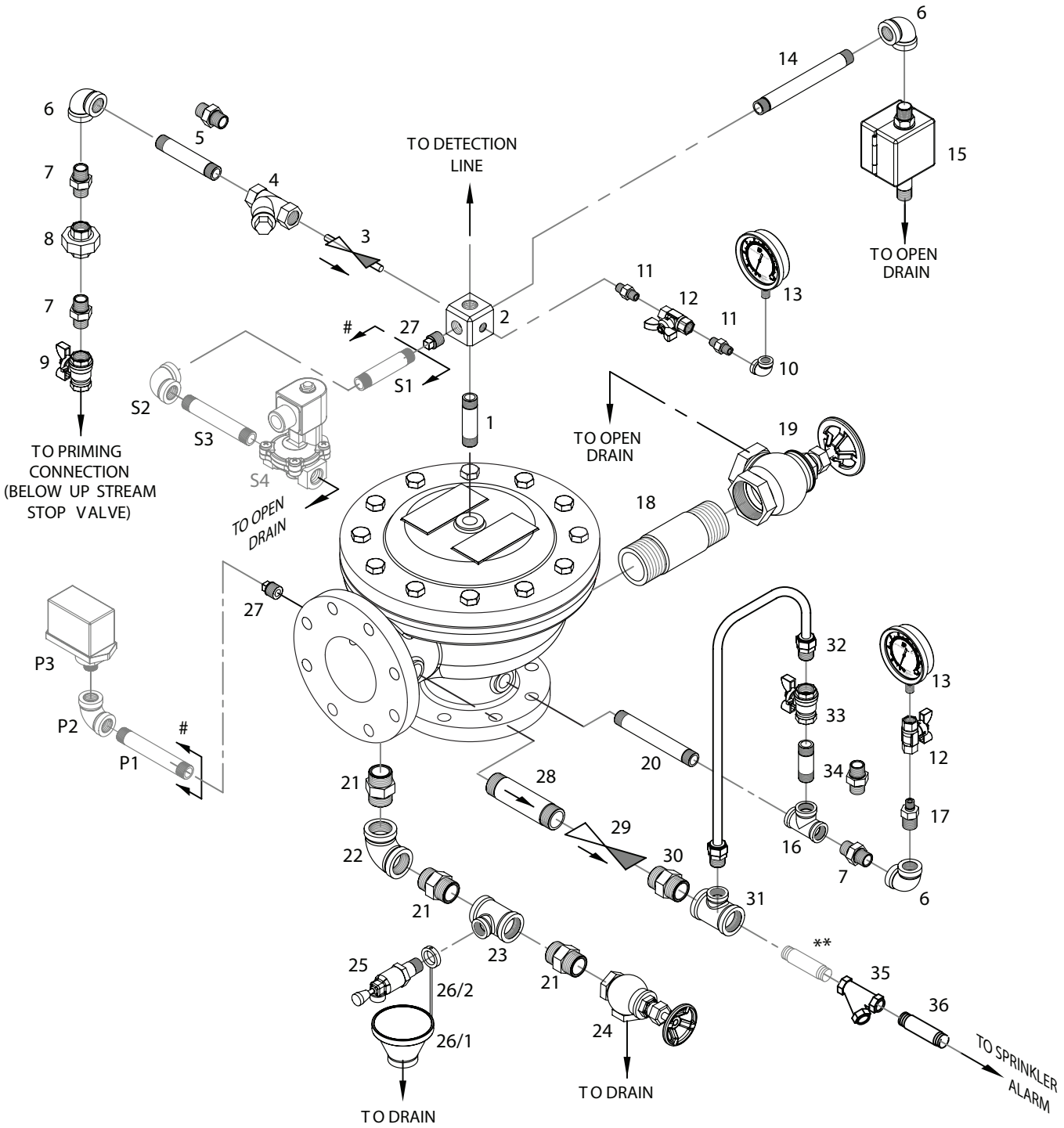
Deluge Valve
Model A

Hydraulic & Electric Release Trim with Test & Alarm Trim for Deluge Valve Model -A



NOTE: WHEN ELECTRIC TRIM IS SUPPLIED THEN SL.NO.28 PLUG NOT REQUIRED.

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Deluge Valve
Model A

Hydraulic & Electric Release Trim with Test & Alarm Trim for Deluge Valve Model -A

Trim Item			Quantity Per Deluge Valve Size				
No	Description	Size	DN 50	DN 80	DN 100	DN 150	DN
1	Pipe Nipple	½" X 80 mm Long	1	1	1	1	1
2	6 Way Manifold	-	1	1	1	1	1
3	NRV with Restriction Hex Nipple	-	1	1	1	1	1
4	'Y' Type Strainer	½"	1	1	1	1	1
5	Pipe Nipple	½" X 110 mm Long	-	-	-	1	1
5	Hex Nipple	½"	1	1	1	-	-
6	Elbow	½"	3	3	3	3	3
7	Hex Nipple	½"	3	3	3	3	3
8	Union	½"	1	1	1	1	1
9	Ball Valve	½"	1	1	1	1	1
10	Elbow	¼"	1	1	1	1	1
11	Hex Nipple	¼"	2	2	2	2	2
12	Gauge Valve	¼"	2	2	2	2	2
13	Pressure Gauge	¼"	2	2	2	2	2
14	Pipe Nipple	½" X 300 mm Long	-	-	-	-	1
14	Pipe Nipple	½" X 255 mm Long	-	-	-	1	-
14	Pipe Nipple	½" X 210 mm Long	-	-	1	-	-
14	Pipe Nipple	½" X 180 mm Long	1	1	-	-	-
15	Emergency Release Station	-	1	1	1	1	1
16	Tee	½"	1	1	1	1	1
17	Reducing Hex Nipple	½" X ¼"	1	1	1	1	1
18	Pipe Nipple	2" X 110 mm Long	-	-	1	1	1
18	Pipe Nipple	1¼" X 110 mm Long	1	1	-	-	-
19	Angle Valve	2"	-	-	1	1	1
19	Angle Valve	1¼"	1	1	-	-	-
20	Pipe Nipple	½" X 150 mm Long	-	-	-	1	1
20	Pipe Nipple	½" X 130 mm Long	1	1	1	-	-
21	Hex Nipple	1"	-	-	3	3	3
21	Hex Nipple	¾"	3	3	-	-	-
22	Elbow	1"	-	-	1	1	1
22	Elbow	¾"	1	1	-	-	-
23	Reducing Tee	1" X ½" X 1"	-	-	1	1	1
23	Reducing Tee	¾" X ½" X ¾"	1	1	-	-	-
24	Angle Valve	1"	-	-	1	1	1
24	Angle Valve	¾"	1	1	-	-	-
25	Drip Valve	½"	1	1	1	1	1
26/1	Funnel	-	1	1	1	1	1
26/2	Funnel Holder	-	1	1	1	1	1
27	Plug	½"	2	2	2	2	2

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Deluge Valve
Model A

Hydraulic & Electric Release Trim with Test & Alarm Trim for Deluge Valve Model -A

Trim Item			Quantity Per Deluge Valve Size				
No	Description	Size	DN 50	DN 80	DN 100	DN 150	DN 200
28	Pipe Nipple	¾" X 100 mm Long	1	1	1	1	1
29	NRV	¾"	1	1	1	1	1
30	Hex Nipple	¾"	1	1	1	1	1
31	Reducing Tee	¾" X ½" X ¾"	1	1	1	1	1
32	Copper Tube Assembly	½"	-	-	-	-	1
32	Copper Tube Assembly	½"	-	-	-	1	-
32	Copper Tube Assembly	½"	-	-	1	-	-
32	Copper Tube Assembly	½"	1	1	-	-	-
33	Ball Valve	½"	1	1	1	1	1
34	Pipe Nipple	½" X 60 mm Long	-	-	-	-	1
34	Hex Nipple	½"	1	1	1	1	-
35	'Y' Type Strainer	¾"	1	1	1	1	1
36	Pipe Nipple	$^{3}/_{4}$" X 80 mm Long	1	1	1	1	1
Electric Trim For Pressure Switch (Optional)							
P1	Pipe Nipple	½" X 135 mm Long	1	1	1	1	1
P2	Elbow	½"	1	1	1	1	1
P3	Pressure Switch *	½" (M)	1	1	1	1	1
Electric Trim For Solenoid Valve (Optional)							
S1	Pipe Nipple	½" X 130 mm Long	-	-	1	1	1
S1	Pipe Nipple	½" X 135 mm Long	1	1	-	-	-
S2	Elbow	½"	1	1	1	1	1
S3	Pipe Nipple	½" X 180 mm Long	-	-	1	1	1
S3	Pipe Nipple	½" X 135 mm Long	1	1	-	-	-
S4	Solenoid Valve	½" Size, Two Way	1	1	1	1	1

Pressure switch as optional can be provided for "DV actuated" announciation. Pressure switch to be mounted at the outlet of deluge valve.

@ 2 way solenoid valve with 24VDC/110 VAC/220 VAC for remote actuation

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Deluge Valve
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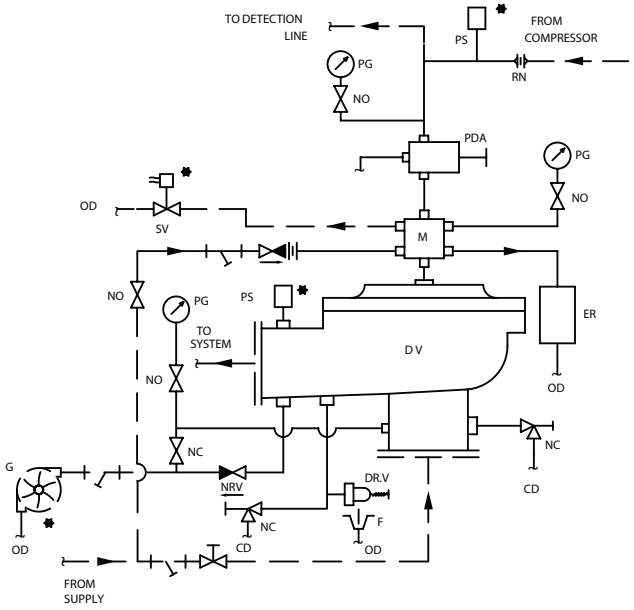
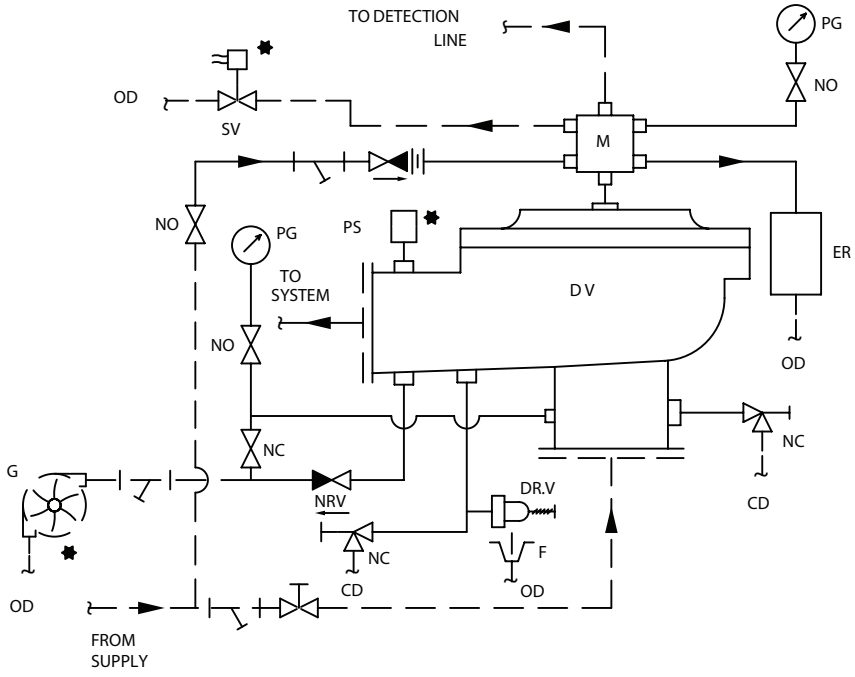
Electric & Pneumatic Release Trim - Schematic Deluge Valve Model - A Size 50 / 80 / 100 / 150 / 200 DN



Electric & Hydraulic Release Trim - Schematic Deluge Valve Model - A Size 50 / 80 / 100 / 150 / 200 DN



ABBREVIATION & SYMBOLS

⋈	VALVE	⩤	ANGLE VALVE	PS	PRESSURE SWITCH	DR.V	DRIP VALVE
NR	NON RETURN VALVE	DV	DELUGE VALVE	⋈	STOP VALVE	F	FUNNEL
ER	EMERGENCY RELEASE BOX	✸	OPTIONAL	CD	COMMON DRAIN	---	BY USER
M	SIX WAY MANIFOLD	G	SPRINKLER ALARM	⋈	NRV WITH RESTRICTION HEX NIPPLE	OD	OPEN DRAIN
RN	RESTRICTION NOZZLE	PG	PRESSURE SWITCH	SV	SOLENOID VALVE	⋈	STRAINER
PDA	POSSITIVE DRAIN ACTUATOR	NO	NORMALLY OPEN	NC	NORMALLY CLOSED	CV	CHECK VALVE

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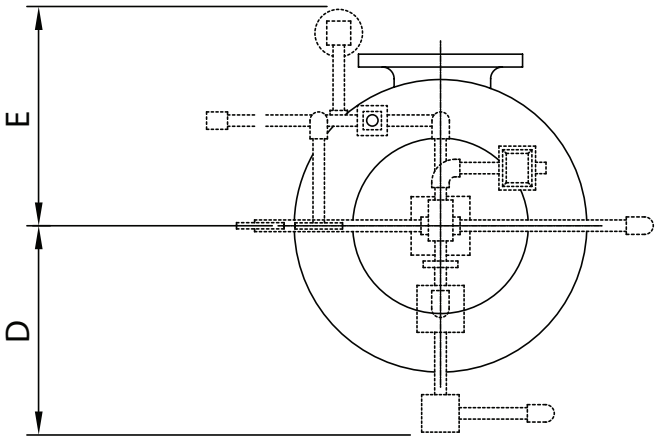
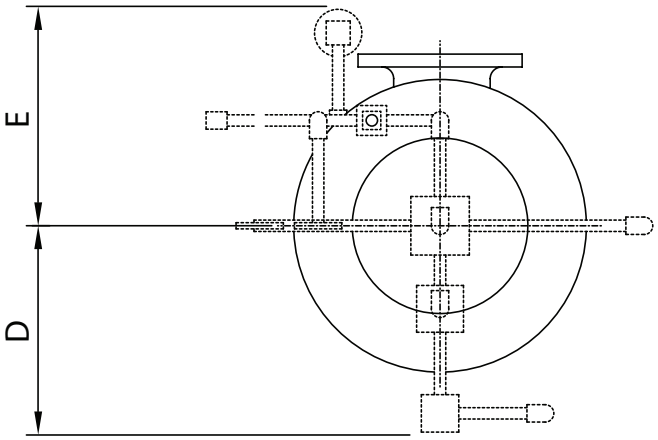
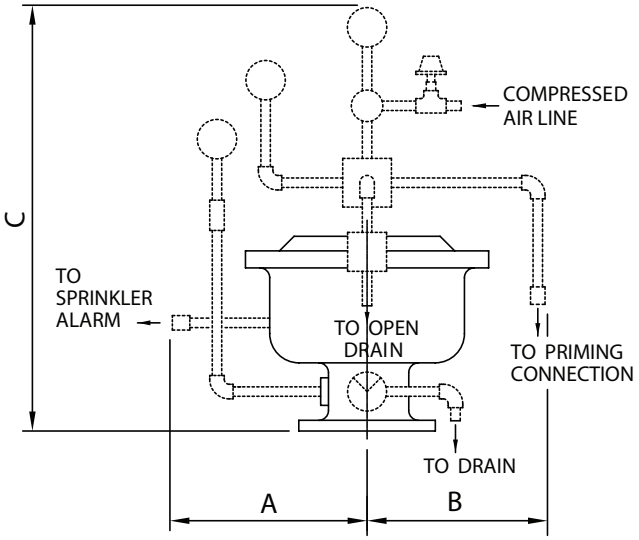
Deluge Valve
Model A

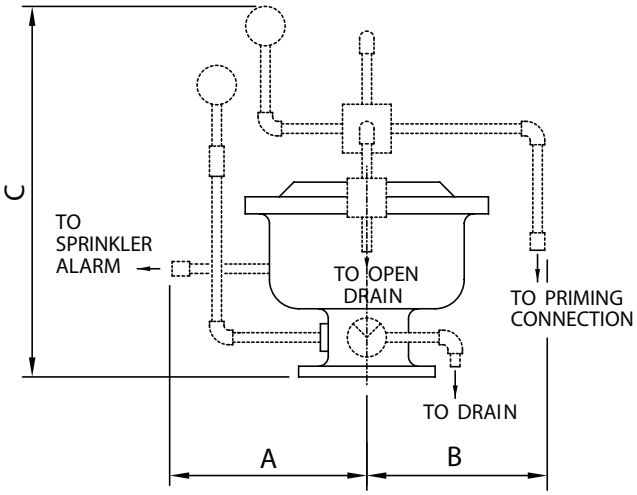
Pneumatic and Electric Release Trim



Hydraulic and Electric Release Trim







Installation Measurements in mm (approx.)

Size	DN 50	DN 80	DN 100	DN 150	DN 200
A	350	350	370	370	390
B	450	450	450	500	525
C	930	930	950	1025	1050
D	450	450	450	500	510
E	410	410	420	480	500

Installation Measurements in mm (approx.)

Size	DN 50	DN 80	DN 100	DN 150	DN 200
A	350	350	370	370	390
B	450	450	450	500	525
C	700	700	750	800	875
D	450	450	450	500	510
E	410	410	420	480	500

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Deluge Valve
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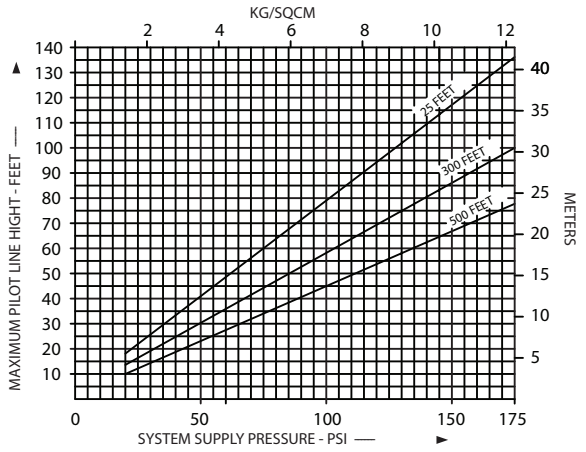
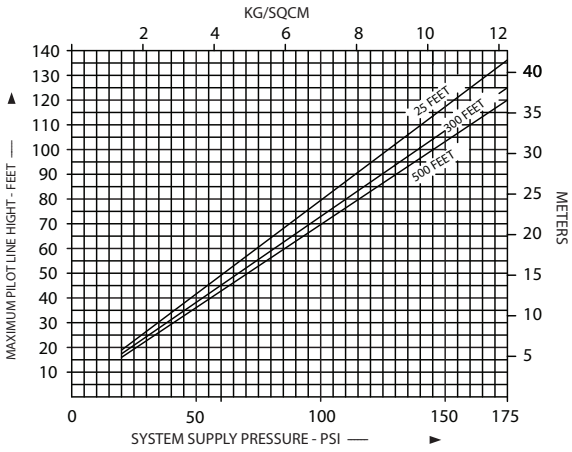
Wet Pilot Sprinkler Height Limitation of DN 200

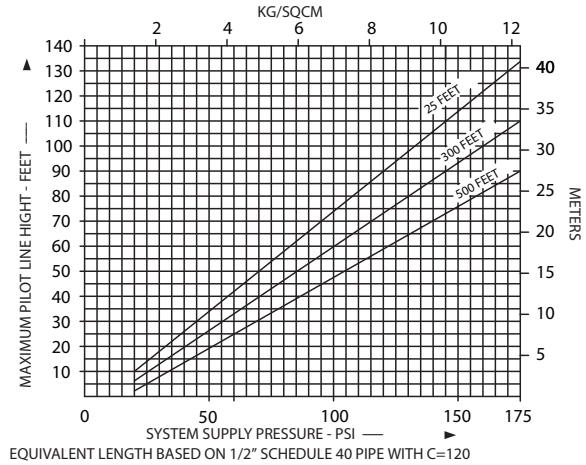


EQUIVALENT LENGTH BASED ON 1/2" SCHEDULE 40 PIPE WITH C=120

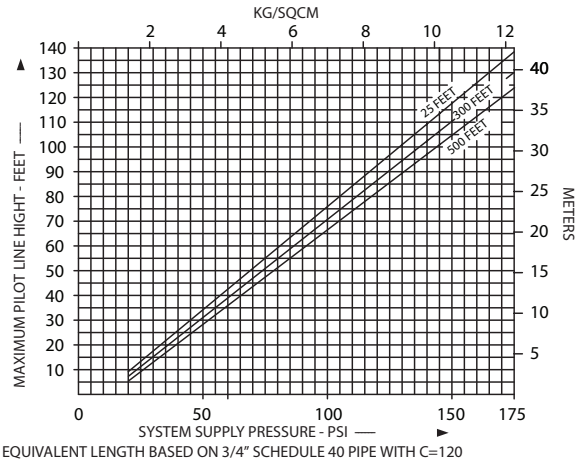


EQUIVALENT LENGTH BASED ON 3/4" SCHEDULE 40 PIPE WITH C=120

Wet Pilot Sprinkler Height Limitation of DN 150

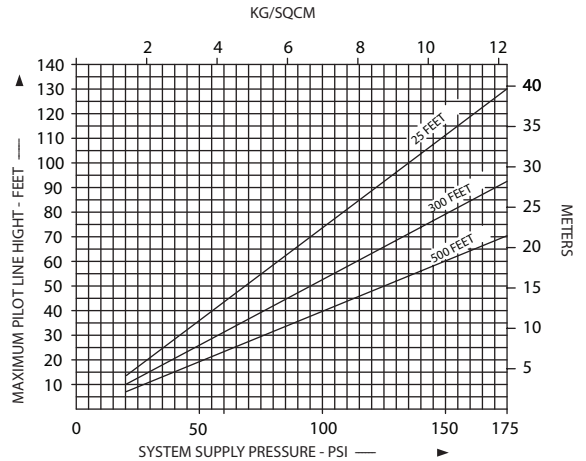


EQUIVALENT LENGTH BASED ON 1/2" SCHEDULE 40 PIPE WITH C=120

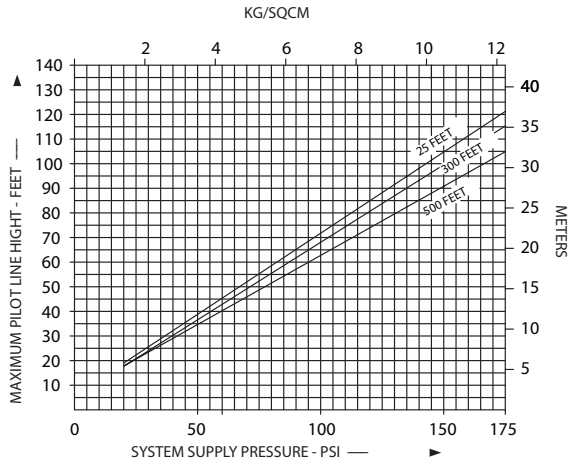


EQUIVALENT LENGTH BASED ON 3/4" SCHEDULE 40 PIPE WITH C=120

Wet Pilot Sprinkler Height Limitation of DN 100



EQUIVALENT LENGTH BASED ON 1/2" SCHEDULE 40 PIPE WITH C=120



EQUIVALENT LENGTH BASED ON 3/4" SCHEDULE 40 PIPE WITH C=120

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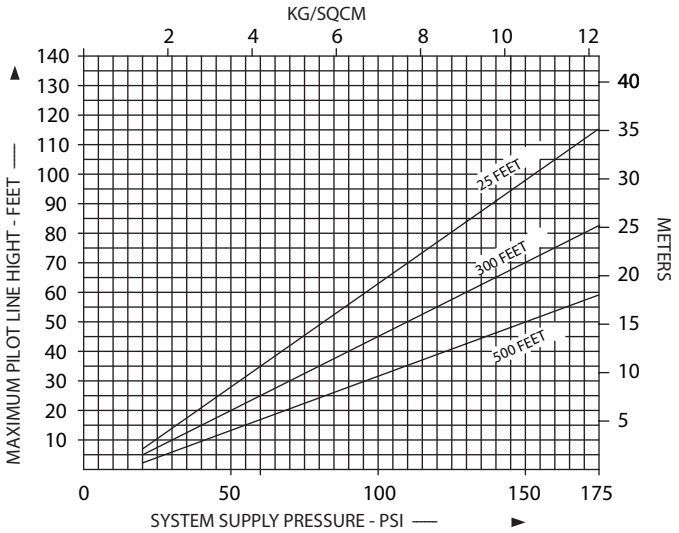
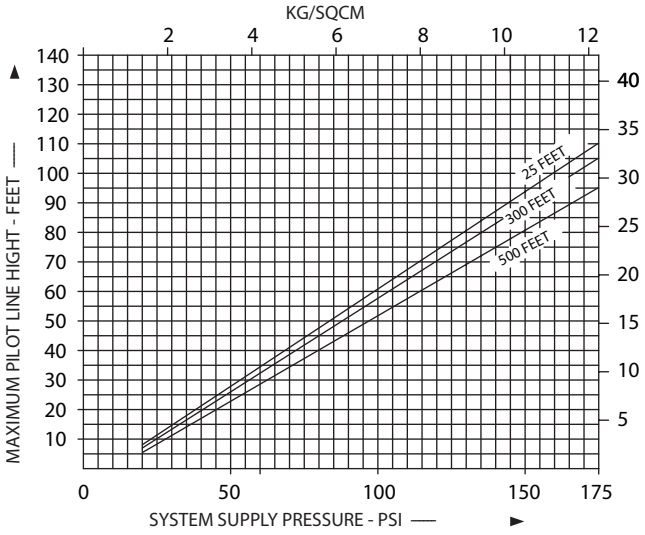
Deluge Valve
Model A

Wet Pilot Sprinkler Height Limitation of DN 80

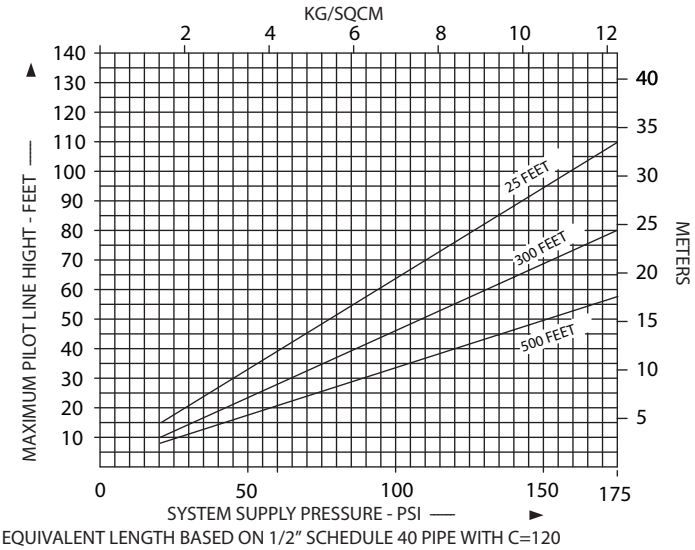


EQUIVALENT LENGTH BASED ON 1/2" SCHEDULE 40 PIPE WITH C=120

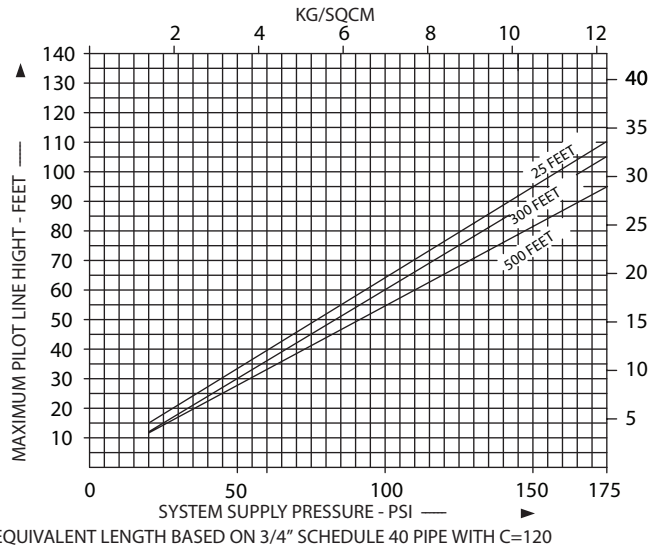


EQUIVALENT LENGTH BASED ON 3/4" SCHEDULE 40 PIPE WITH C=120

Wet Pilot Sprinkler Height Limitation of DN 50



EQUIVALENT LENGTH BASED ON 1/2" SCHEDULE 40 PIPE WITH C=120



EQUIVALENT LENGTH BASED ON 3/4" SCHEDULE 40 PIPE WITH C=120

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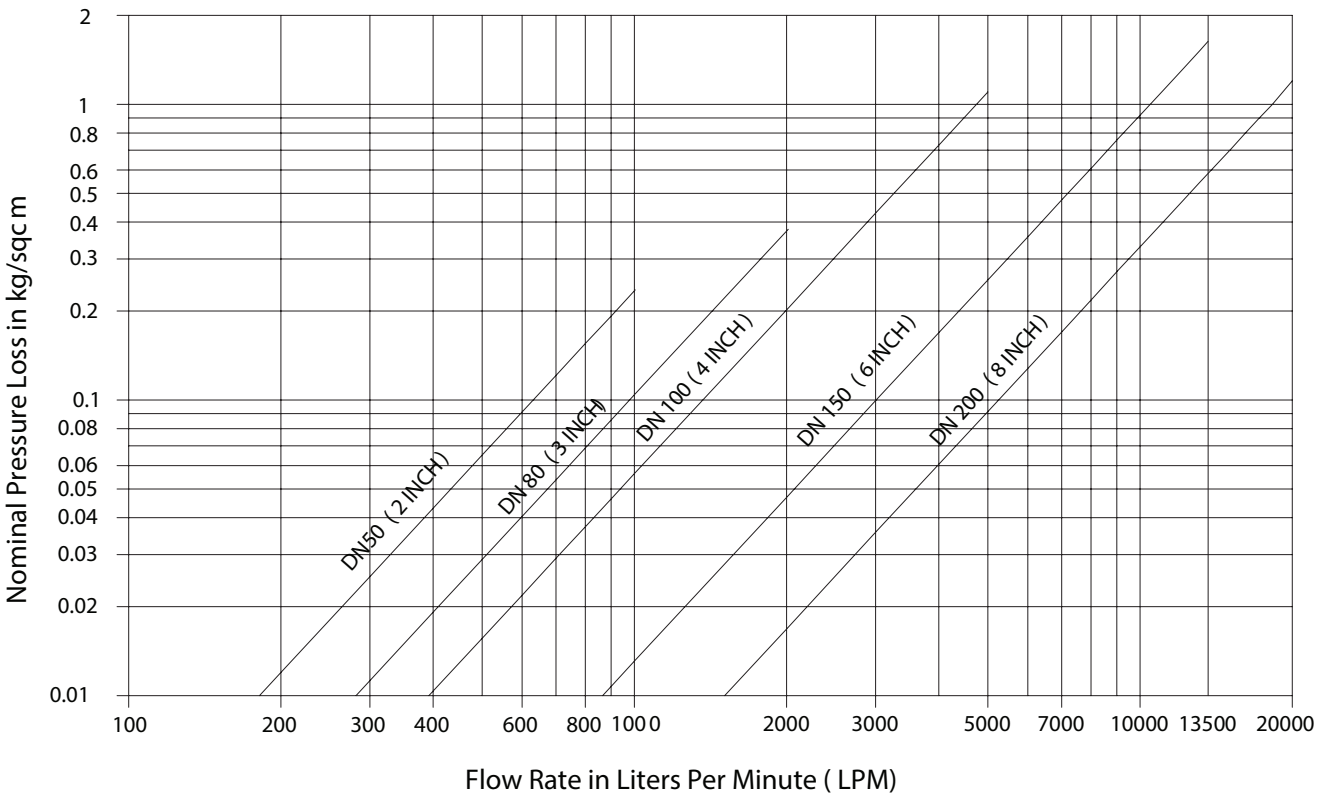
Deluge Valve
Model A

Nominal Pressure Loss vs Flow - Deluge Valve (Model-A)



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Products supplied by Rapidrop (RD). are warranted against defects in material and workmanship for a period of Two (2) years from the date of shipment. RD's obligation under this warranty is limited to replace or repair the products or its parts, which are shown to RD's examination to be in a defective condition attributable to RD. No warranty is given for products or components which have been subject, to misuse, improper installation, corrosion, wear and tear, improper storage, modification or repaired. If the defect attributable to RD cannot be rectified by repair or replacement, then RD may elect to refund the purchase price of the equipment in complete discharge of its obligation under this Limited Warranty.

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