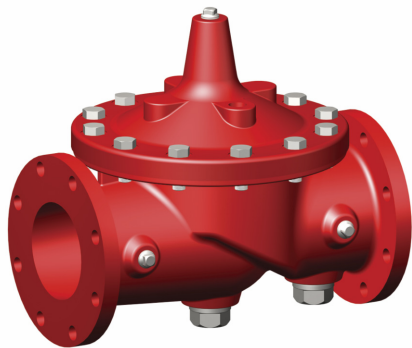




MODELS — 100G/2100G

Deluge Valve



- U.L. Listed / U.L.C. Listed/ABS Approved
- Globe or Angle Pattern
- Proven Reliable Design



Type Approved

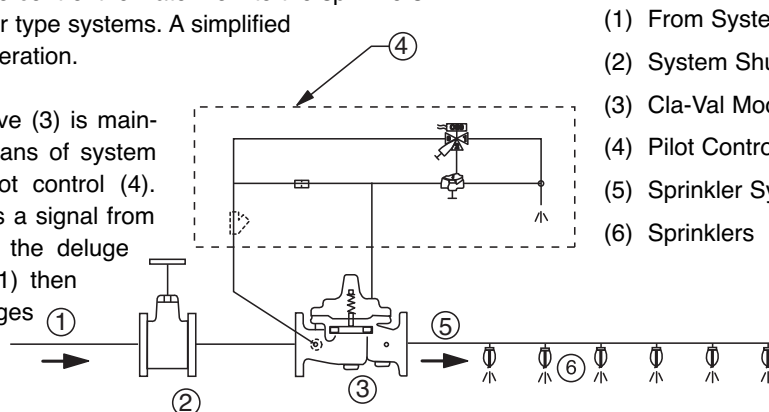
The Cla-Val Model 100G/2100G Deluge Valve is designed for use in controlling water flow to Deluge, Pre-Action, or Foam-Water type fire protection sprinkler systems. This valve is UL Listed in "Special Systems Water Control Valves Class I (VLFT)" for both vertical and horizontal installation applications.

The Model 100G/2100G is a hydraulically-operated, diaphragm-actuated, globe or angle pattern Deluge Valve. It consists of three major components: the body, the cover, and the diaphragm assembly. The only moving part is the diaphragm assembly. Packless construction and simplicity of design assures long service life and dependable low maintenance for this valve. All ferrous parts are fusion epoxy coated internally and externally for added corrosion resistance, along with a Dura-Kleen™ stem.

Typical Application

The Model 100G/2100G is installed to control the water flow to the sprinklers in Deluge, Pre-Action, or Foam-Water type systems. A simplified system is used to illustrate typical operation.

The Model 100G/2100G Deluge Valve (3) is maintained in the closed position by means of system water pressure controlled by a pilot control (4). When the pilot control valve receives a signal from the fire detection system, it allows the deluge valve to open. Firefighting water (1) then enters system piping (5) and discharges from sprinklers (6).



- (1) From System Water Supply
- (2) System Shut-off Valve (Visual Stem)
- (3) Cla-Val Model 100G or 2100G
- (4) Pilot Control System
- (5) Sprinkler System Piping
- (6) Sprinklers

Specifications

Sizes Globe: 3" – 12" • Angle: 3" – 12"

Ductile Iron 150 ANSI B16.42 flanged

Cast Steel 150 ANSI B16.5 flanged

150 class, 250 psi maximum (Ductile Iron)

150 class, 285 psi maximum (All other materials)

300 class, 300 psi maximum (All materials)

Water, to 180°F MAX.

Temperature Range **Main Valve Body & Cover:**

- Ductile Iron ASTM A-536* **UL, ULC**
- Cast Steel ASTM A216-WCB* **UL, ULC**
- Nickel Aluminum Bronze ASTM B148 **UL, ULC**
- Naval Bronze ASTM B61 **UL, ULC**
- 316 Stainless Steel - ASTM A743 Grades CF3M and CFM8
- Super Austenitic Stainless Steel - ASTM A351 Grade CK3MCuN (SMO 254)
- Super Duplex Stainless Steel - ASTM A890 Grade 5A (CE3MN)

Main Valve Internal Trim:

Bronze ASTM B61 • Monel QQ-N-281 Class B

Diaphragm and Disc:

Buna-N® synthetic rubber

*Internally & Externally Epoxy Coated

Specifications Seawater Service Option

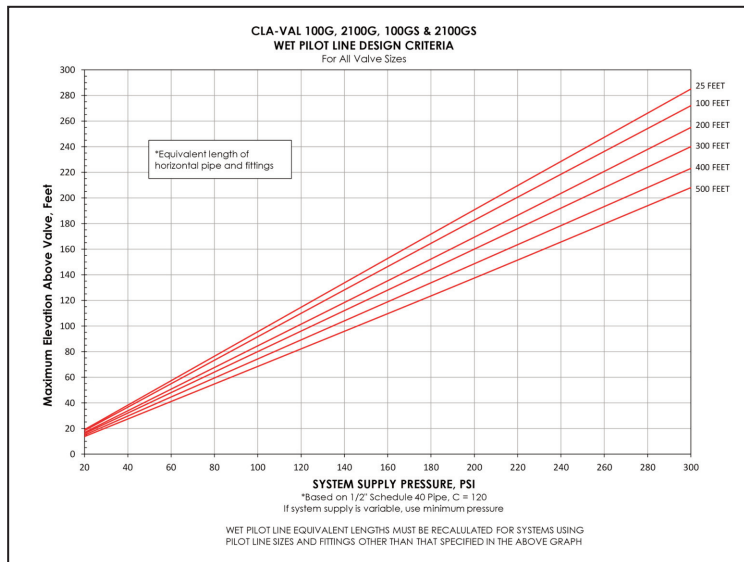
Sizes Globe: 3" - 12" flanged
Angle: 3" - 12" flanged

Consult factory for materials and flange ratings.

When Ordering, Please Specify

1. Model No. 100G or 2100G
2. Size
3. Body and Cover Material
4. Globe or Angle Pattern
5. Pressure Class
6. Internal Trim Material

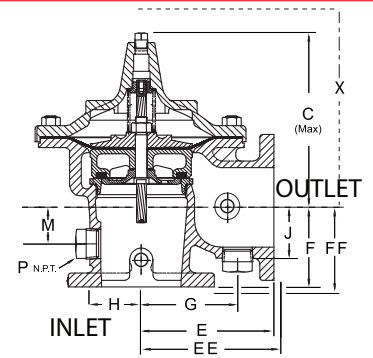
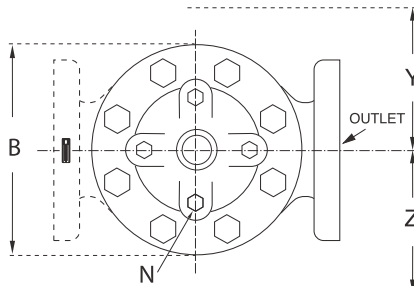
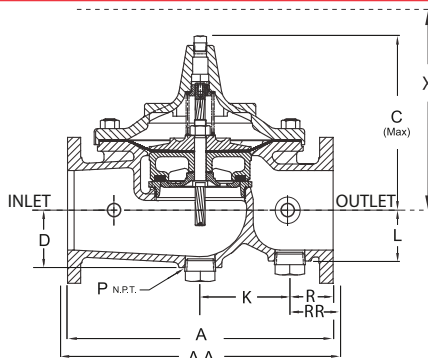
*optional Teflon™ coated seat upon request.



To calculate the maximum wet sprinkler pilot height above the valve, use the graph shown.

Functional Data

Valve Size		Inches	3	4	6	8	10	12
		mm	80	100	150	200	250	300
Cv Factor	Globe Pattern	Gal./Min. (gpm)	115	200	440	770	1245	1725
		Litres/Sec. (l/s)	27.6	48	105.6	184.8	299	414
	Angle Pattern	Gal./Min. (gpm)	139	240	541	990	1575	2500*
		Litres/Sec. (l/s)	33.4	58	130	238	378	600



Valve Size (in.)	3	4	6	8	10	12
A 150 ANSI	12.00	15.00	20.00	25.38	29.75	—
AA 300 ANSI	13.25	15.62	21.00	26.38	31.12	34.00
B Dia.	9.12	11.50	15.75	20.00	23.62	35.50
C Max.	8.19	10.62	13.38	16.00	17.12	—
D	2.56	3.19	4.31	5.16	8.50	28.00
E 150 ANSI	7.00	8.50	10.00	12.69	14.88	20.88
EE 300 ANSI	--	8.81	10.50	13.19	--	—
F 150 ANSI	4.00	4.97	6.00	8.00	8.62	—
FF 300 ANSI	--	5.28	6.50	8.50	--	17.00
G	4.75	5.94	7.25	8.50	10.50	17.75
H	2.69	2.81	3.88	5.31	6.56	—
J	2.56	2.81	3.81	4.81	5.81	10.75
K	7.00	4.03	6.75	17.00	15.50	—
L	2.56	2.81	3.81	4.81	8.50	9.50
M	1.75	2.41	2.75	4.00	4.24	10.25
N NPT	1/2 - 14	3/4 - 14	3/4 - 14	1 - 11-1/2	1 - 11-1/2	—
P NPT	1-1/4 - 11-1/2	2 - 11-1/2				
R 150 ANSI	2.50	3.47	3.25	4.19	7.12	14.50
RR 300 ANSI	3.12	3.78	3.75	4.69	7.81	—
X Pilot System	15.00	17.00	29.00	31.00	33.00	1
Y Pilot System	11.00	12.00	20.00	22.00	24.00	1.25
Z Pilot System	11.00	12.00	20.00	22.00	24.00	1

Valve Size (mm)	80	100	150	200	250	300
A 150 ANSI	305	381	508	645	756	—
AA 300 ANSI	337	397	533	670	791	864
B Dia.	232	292	400	508	600	902
C Max.	208	270	340	406	435	—
D	65	81	110	131	216	711
E 150 ANSI	178	216	254	322	378	530
EE 300 ANSI	--	224	267	350	--	—
F 150 ANSI	102	126	152	203	219	—
FF 300 ANSI	--	134	165	216	--	432
G	121	151	184	216	267	451
H	68	71	99	135	167	—
J	65	71	97	122	148	273
K	178	102	171	432	394	—
L	65	71	97	122	216	241
M	45	61	70	102	108	260
N NPT	1/2 - 14	3/4 - 14	3/4 - 14	1 - 11-1/2	1 - 11-1/2	—
P NPT	1-1/4 - 11-1/2	2 - 11-1/2				
R 150 ANSI	64	88	83	106	181	368
RR 300 ANSI	79	96	95	119	198	—
X Pilot System	381	432	737	787	838	1
Y Pilot System	279	305	508	559	610	1.25
Z Pilot System	279	305	508	559	610	1



E-100G&2100G (R-03/2016)

CLA-VAL

1701 Placentia Avenue • Costa Mesa CA 92627

800-942-6326 • Fax: 949-548-5441 • Web Site: cla-val.com • E-mail: info@cla-val.com

CLA-VAL CANADA
4687 Christie Drive
Beamsville, Ontario
Canada L0R 1B4
Phone: 905-563-4963
Fax: 905-563-4040
E-mail: sales@cla-val.ca

CLA-VAL EUROPE
Chemin des Mésanges 1
CH-1032 Romanell/
Lausanne, Switzerland
Phone: 41-21-643-15-55
Fax: 41-21-643-15-50
E-mail: cla-val@cla-val.ch

CLA-VAL UK
Dainton House, Goods Station Road
Tunbridge Wells
Kent TN1 2 DH England
Phone: 44-1892-514-400
Fax: 44-1892-543-423
E-mail: info@cla-val.co.uk

CLA-VAL FRANCE
Porte du Grand Lyon 1
ZAC du Champ du Pérrier
France - 01700 Neyron
Phone: 33-4-72-25-92-93
Fax: 33-4-72-25-04-17
E-mail: cla-val@cla-val.fr

CLA-VAL PACIFIC
45 Kennaway Road
Woolston, Christchurch, 8023
New Zealand
Phone: 64-39644860
www.cla-valpacific.com
E-mail: info@cla-valpacific.com

©COPYRIGHT CLA-VAL 2016 Printed in USA Specifications subject to change without notice.