



Model **100G-UP** ELECTRICALLY ACTUATED HYDRAULIC ON/OFF DELUGE VALVE



- Dual Guided Stem Internal for Reliable Seating
- Replaceable 316 Stainless Steel Seat
- Single Internal Guided Assembly
- Proven Repeat Functionality in Harsh Conditions
- In-Line Maintenance

The Cla-Val Model 100G-UP is an electrically actuated hydraulic on/off deluge valve designed for use in multiple applications.

The 100G-UP can be actuated locally by relieving cover pressure through our EDVR (Emergency Deluge Valve Release) or remotely via solenoid.



Actuation Method

- EDVR Manual Release
- Solenoid Actuation

Optional UL Features

- X101D Valve Position Indicator
- X141 Pressure Gauges
- Pressure Switch Assembly
- X105 Limit Switch

Typical Applications

- Hydraulically Operated Systems
- Foam Applications
- Electrically Actuated Systems
- Automatic Deluge Systems



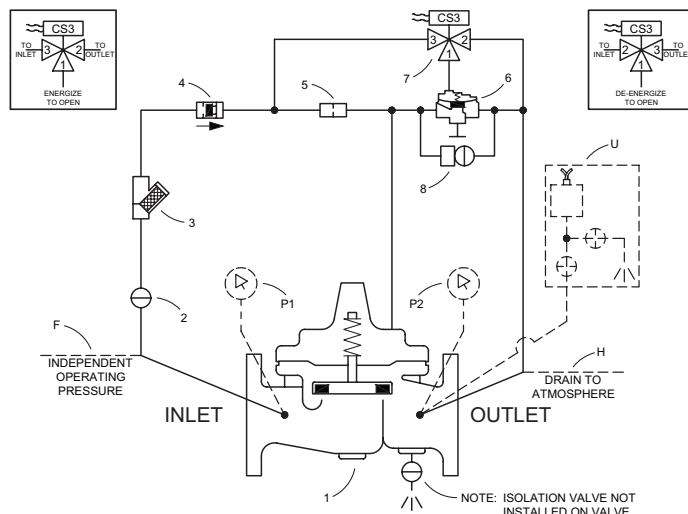
100G-UP Schematic

The Cla-Val Model 100G-UP is an electrically actuated hydraulic/off deluge valve designed for use in multiple applications.

Closed Position: Supply pressure is applied through our Main Valve (1) Inlet Port or Independent Supply Line (F). The supply pressure will pass through our inlet isolation ball valve (2), strainer (3), check valve (4) and restriction orifice (5) before being applied to our Main Valve (1) Cover. Additionally, the supply pressure will pass through our solenoid (7) before applying supply pressure to our auxiliary hytrol cover (6).

Open Position: Main Valve (1) Cover pressure is released through our EDVR (Item 8) which consists of a quarter turn ball valve or via remote actuation via solenoid.

Note: For seawater applications use 100GS/2100GS main valve.



Schematic Diagram	
Item	Description
1	UL Listed Valve
2	Isolation Valve
3	"Y" Strainer
4	Check Valve
5	Restriction Fitting
6	Auxiliary Hytrol
7	Solenoid Control
8	Emergency Deluge Valve Release

Optional Features	
Item	Description
F	Independent Operating Pressure
H	Drain to Atmosphere
P	Pressure Gauge Assembly
U	Pressure Switch Assembly

Specifications

Main Valve Specifications

Approved Sizes

Flanged: 3" - 12"
Grooved: 3" - 8" (3" - 10" Globe)

Pressure Ratings

150 class, 250 psi maximum (Ductile Iron)
150 class, 285 psi maximum (All other materials)
300 class, 300 psi maximum (All materials)

Temperature Range

Water: to 180° F. Max

Fluids

Water

Materials

Main Valve Body & Cover

Standard Epoxy Coated Ductile Iron
ASTM A-536*

Main Valve Trim

Stainless Steel

Pilot Control System

Cast Bronze

Rubber Parts

Buna-N® Synthetic Rubber

Optional Listed Materials for Seawater and Severe Service Applications

- **Nickel Aluminum Bronze (NAB)** ASTM B148 Alloy C95800
- **Monel - QQ-N-288 Comp B** ASTM A494 Grade M30H
- **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)

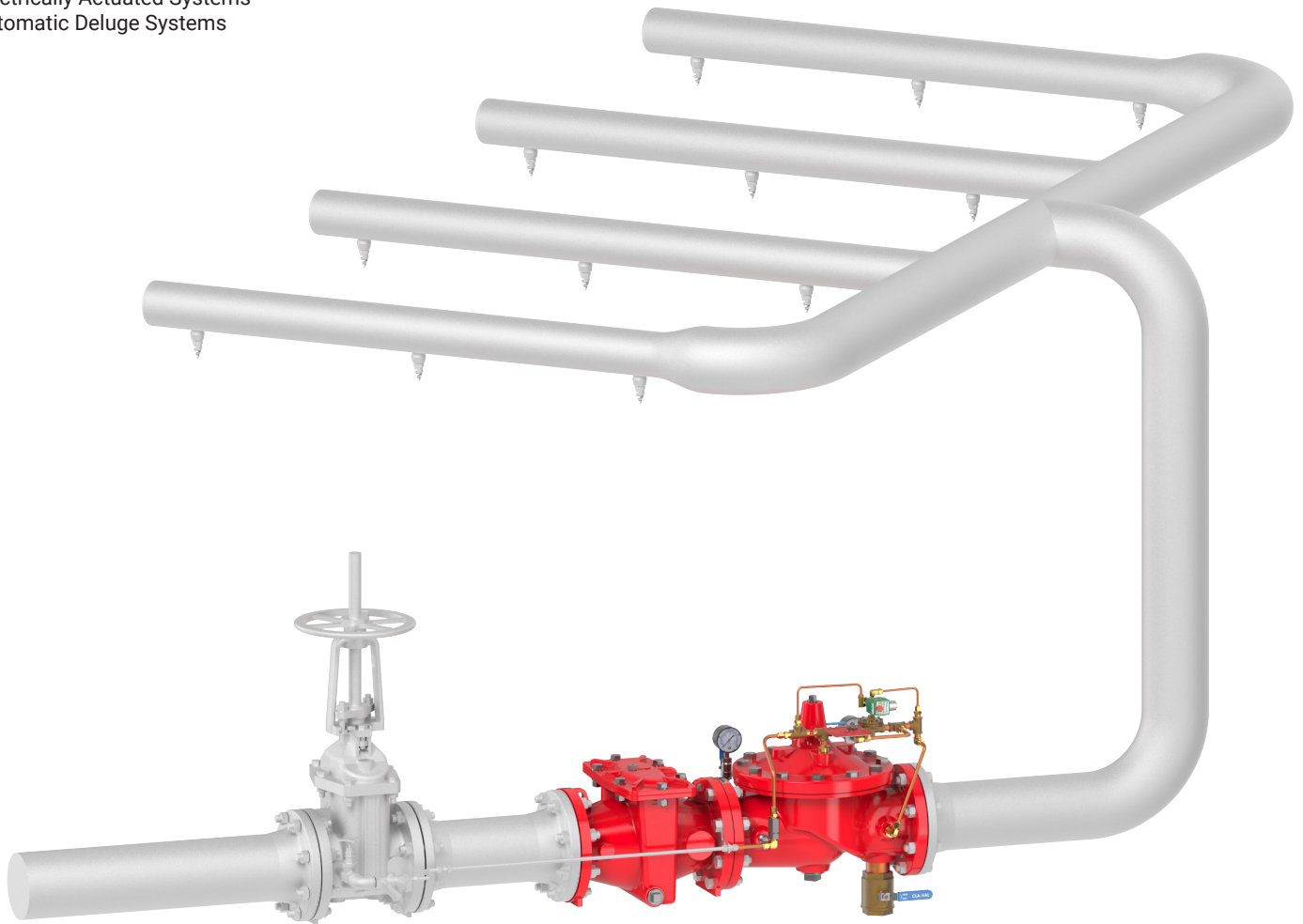
Functional Data

Valve Size		Inches	3	4	6	8	10	12
		mm	80	100	150	200	250	300
C _v 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



Typical Applications

- Hydraulically Operated Systems
- Foam Applications
- Electrically Actuated Systems
- Automatic Deluge Systems



Optional Features



Pressure Gauge



Limit Switch



Position Indicator



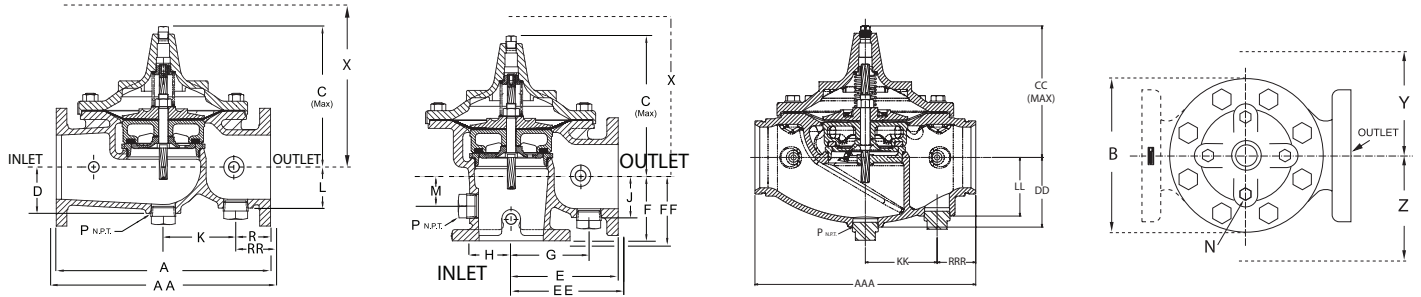
Strainer
(Not UL Listed)



Pressure Switch

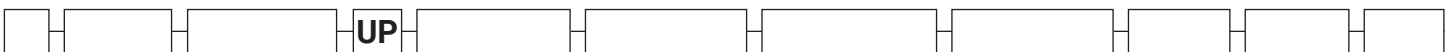


Dimensions



Unit	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
Valve Size	3	80	4	100	6	150	8	200	10	250	12	300
A 150 ANSI	12.00	305	15.00	381	20.00	508	25.38	645	29.75	756	34.00	864
AA 300 ANSI	13.25	337	15.62	397	21.00	533	26.38	670	31.12	791	35.50	902
AAA Grooved	12.50	318	15.00	381	20.00	508	25.38	645	29.75	756	—	—
B Dia.	9.12	232	11.50	292	15.75	400	20.00	508	23.62	600	28.00	711
C Max.	8.19	208	10.62	270	13.38	340	16.00	406	17.12	435	21.00	533
CC Max.	7.50	191	9.94	252	12.13	308	15.00	381	—	—	—	—
D	2.56	65	3.19	81	4.31	110	5.16	131	8.50	216	9.39	239
DD	3.62	92	4.50	114	6.31	160	7.81	198	—	—	—	—
E 150 ANSI	7.00	178	8.50	216	10.00	254	12.69	322	14.88	378	17.00	432
EE 300 ANSI	—	—	8.81	224	10.50	267	13.19	350	—	—	17.75	451
F 150 ANSI	4.00	102	4.97	126	6.00	152	8.00	203	8.62	219	13.75	349
FF 300 ANSI	—	—	5.28	134	6.50	165	8.50	216	—	—	14.50	368
L	2.56	65	2.81	71	3.81	97	4.81	122	8.50	216	9.39	239
LL	3.25	83	4.00	102	5.31	135	7.00	178	—	—	—	—
P NPT	1-1/4 - 11-1/2		2 - 11-1/2		2 - 11-1/2		2 - 11-1/2		2 - 11-1/2		2 - 11-1/2	
R 150 ANSI	2.50	64	3.47	88	3.25	83	4.19	106	7.12	181	6.50	165
RR 300 ANSI	3.12	79	3.78	96	3.75	95	4.69	119	7.81	198	7.25	184
RRR Grooved	2.75	70	2.94	75	3.50	89	5.69	145	—	—	—	—
X Pilot System	15.00	381	17.00	432	29.00	737	31.00	787	33.00	838	35.00	889
Y Pilot System	11.00	279	12.00	305	20.00	508	22.00	559	24.00	610	26.00	660
Z Pilot System	11.00	279	12.00	305	20.00	508	22.00	559	24.00	610	26.00	660

Model Number Codes



Size	Main Valve	Service	Trim	Body	Trim	Pilots	Tubing & Fittings	Elastomer	Flange	Face
3"	100 Globe	G Firewater		D Ductile Iron	S Stainless Steel	B Bronze w/SST	B Copper with Brass Fittings	B Buna	ANSI 150#	RF
4"	2100 Angle	GS Seawater		C Cast Steel	T 316 SS	BM Bronze with Monel Internals	T 316 SS		ANSI 300#	FF
6"		F Foam**(F)**		T 316 SS	M Bronze/Monel	T 316 SS (F)	M Monel		ISO PN10	X Other
8"				N N.A.B.	U Super Duplex	U Super Duplex	U 2507		ISO PN16	
10"				U Super Duplex	X Other	X Other	X Other		ISO PN25	
12"				X Other					V Grooved 300#	



Restriction Orifice	Strainer	Check Valve	Hytrol	Voltage	Solenoid Preference	Main Valve Function	Optional Features
R0 None	S3 X43	0 None	0 None	12 VDC	0 None	EO Energize to Open	F Indep. Operating Pressure
G58 X58C	S4 X44	CC CDC	H1 CDC	24 VDC		DO Deenergize to Open	H Drain to Atmosphere
	S6 X46A	C8 81-01	H1A 81-01	120 VAC			P Pressure Gauge Assembly
	S7 X47A	CS SW200	H2 SW200				U Pressure Switch Assembly
			H2A 102F/X103				PT Pressure Transmitter
							LS Limit Switch
							PI Position Indicator
							TL Test Loop
							ADC Automatic Drip Check
							LPA Low Pressure Actuation
							CLF Controlled Line Fill