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

ENGINEERING DATA SHEET

- 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

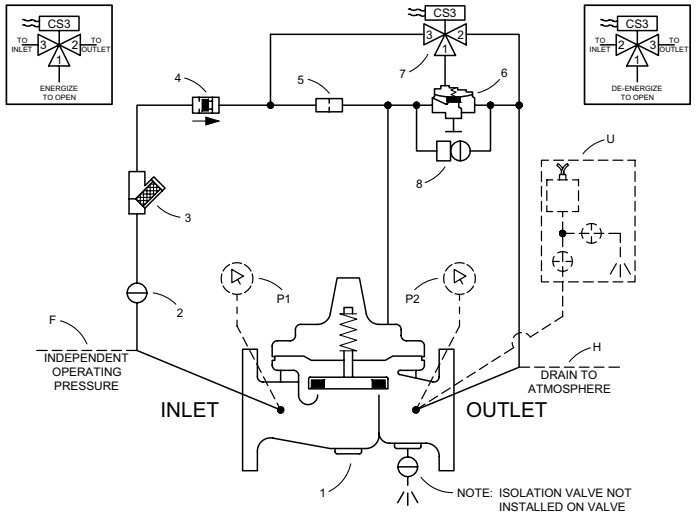
100G-UP Schematic

The Cla-Val Model 100G-UP is an electrically actuated hydraulicon/ 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

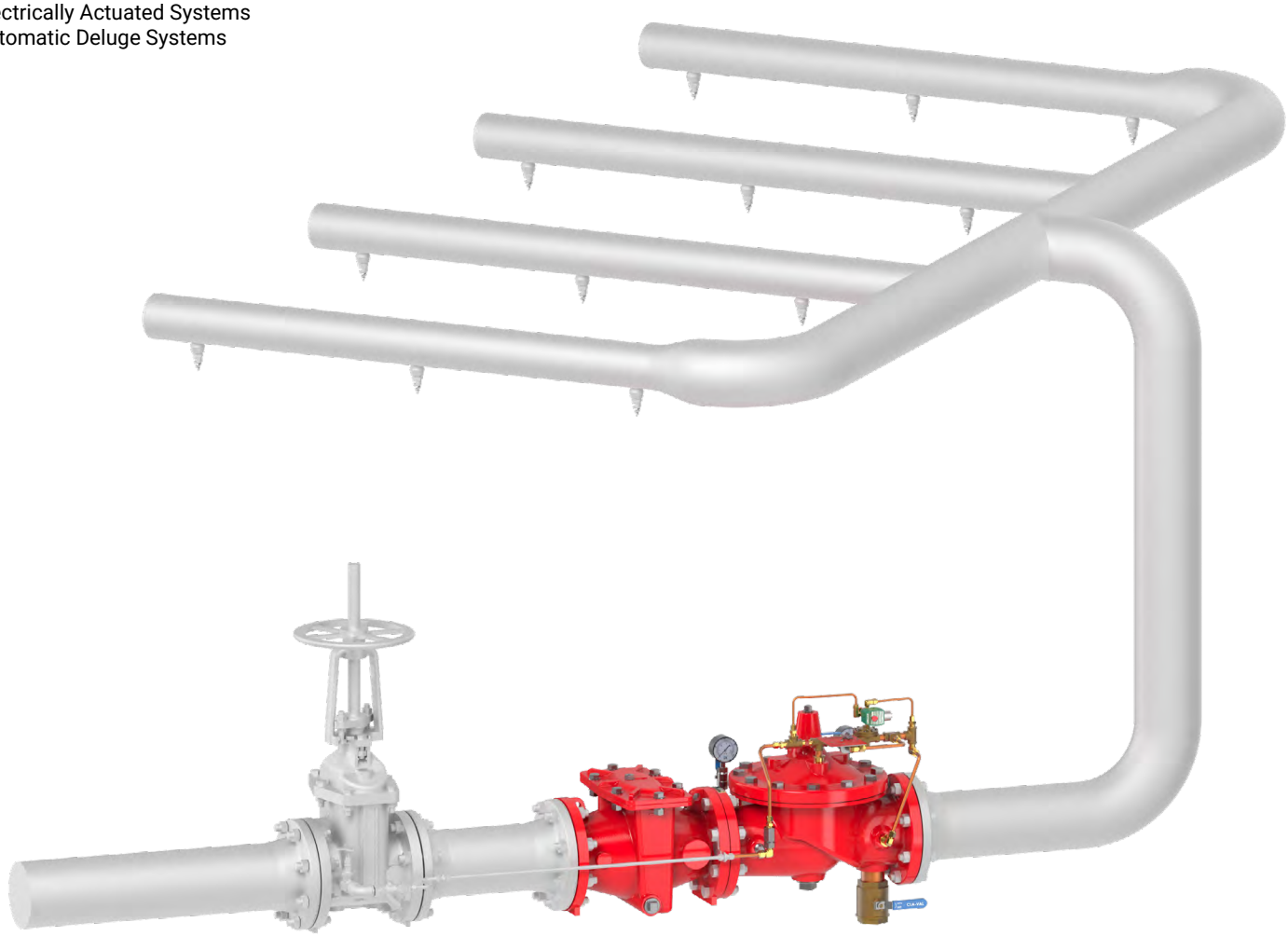
- **Nickel Aluminum Bronze (NAB)** ASTM B148 Alloy C95800
- **Monel - QQ-N-288 Comp B** ASTM A494 Grade M30H
- **316 Stainless Steel** ASTM A743 Grades CF3M and CFM8
- **Super Austenitic Stainless Steel** ASTM A351 Grade CK3MCuN (SMO 254)
- **Super Duplex Stainless Steel** ASTM A890 Grade 5A (CE3MN)

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

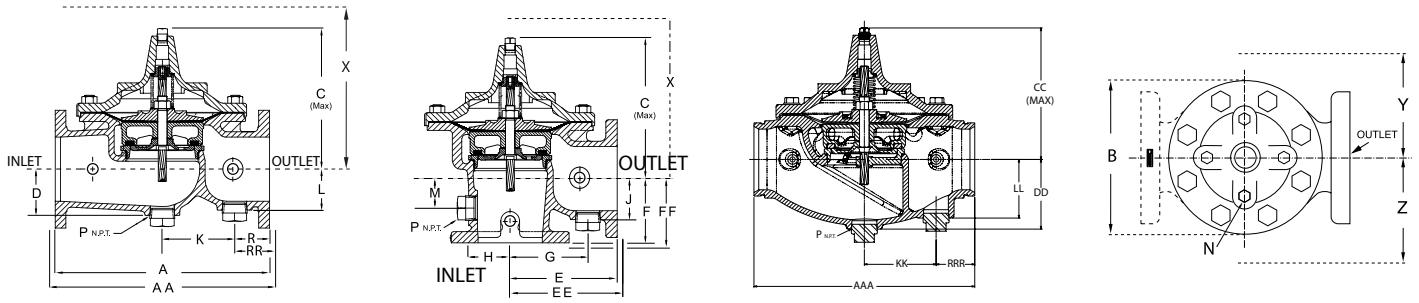
Limit Switch

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

[ ] – [ ] – [ ] **UP** [ ] – [ ] – [ ] – [ ] – [ ] – [ ] – [ ] – [ ]

Size
3"
4"
6"
8"
10"
12"

Main Valve	
100	Globe
2100	Angle

Service	
G	Firewater
GS	Seawater
F	Foam**(F)**

Trim

Body	
D	Ductile Iron
C	Cast Steel
T	316 SS
N	N.A.B.
U	Super Duplex
X	Other

Trim	
S	Stainless Steel
T	316 SS
M	Bronze/Monel
U	Super Duplex
X	Other

Pilots	
B	Bronze w/SST
BM	Bronze with Monel Internals
T	316 SS (F)
M	Monel
U	Super Duplex
X	Other

Tubing & Fittings	
B	Copper with Brass Fittings
T	316 SS
M	Monel
U	2507
X	Other

Elastomer	
B	Buna

Flange
ANSI 150#
ANSI 300#
ISO PN10
ISO PN16
ISO PN25
V Grooved 300#

Face	
RF	
FF	
X	Other

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Restriction Orifice	
R0	None
R58	X58C

Strainer			
S3	X43		
S4	X44		
S6	X46A		
S7	X47A		

Check Valve	
0	None
CC	CDC
C8	81-01
CS	SW200

Hytrol	
0	None
H1	CDC
H1A	81-01
H2	SW200
H2A	102F/X103

Voltage
12 VDC
24 VDC
120 VAC

Solenoid Preference	
0	None

Main Valve Function	
EO	Energize to Open
DO	Deenergize to Open

Optional Features	
F	Indep. Operating Pressure
H	Drain to Atmosphere
P	Pressure Gauge Assembly
U	Pressure Switch Assembly
PT	Pressure Transmitter
LS	Limit Switch
PI	Position Indicator
TL	Test Loop
ADC	Automatic Drip Check
LPA	Low Pressure Actuation
CLF	Controlled Line Fill