



# CLA-VAL 134E/D-97e

Deluge Solenoid Control Valve, Equipped with Manual Bypass Valve and Pressure Reducing Feature (for Fire Deluge Service)

## ► Simple, Reliable and Accurate

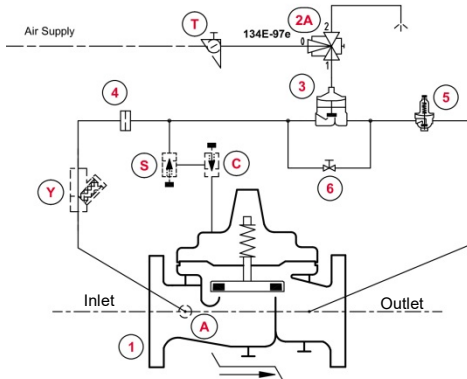
- U.L. Listed
- Fast Acting Solenoid Control
- Reliable Drip Tight Shut-off
- Simple Design, Proven Reliable
- Easy Installation & Maintenance

The CLA-VAL Model 134E/D-97e Solenoid Control Valve is an on-off pneumatic/hydraulic control valve which either opens or closes upon receiving an electrical signal to the solenoid pilot control. This valve consists of a 100G/2100G U.L. listed HYTROL main valve, a three-way solenoid valve, an auxiliary pilot valve and a pressure reducing control valve. This pilot control system applies or relieves pressure from the diaphragm chamber of the main valve. It is furnished either normally open (de-energize solenoid to open) or normally closed (energize solenoid to open). Pressure reducing control is a normally open control that senses main valve outlet pressure changes. Isolation ball valve by-pass solenoid and auxiliary valve.

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



## ► Function



### Schematic Diagram

ITEM	DESCRIPTION
1	Main valve model HYTROL 100GS/2100GS UL listed
2	3-Way Solenoid valve
3	102F/X103 Auxiliary valve
4	X58C-CSA Restriction assembly
5	CRD Pressure reducing control
6	RB-117 Isolation ball valve

### Optional Features

ITEM	DESCRIPTION
A	X46A Flow clean strainer
C	CV One-way flow control (Closing speed)
S	CV One-way flow control (Opening speed)
T	Regulator
Y	X43 Strainer

## ► Specifications

### Size:

Globe or Angle: 3" - 12" flanged  
Other sizes upon request

### End Details:

Ductile iron ANSI B16.42  
Cast steel ANSI B16.5  
Bronze ANSI B16.24  
Stainless steel ANSI B16.5

### Pressure Ratings:

150 class 250 psi max.  
300 class 400 psi max.

**Temperature Range:** Water max.  
180°F / 82°C

### Pressure Adjustment Range:

150 lb. Class: 20-200 psi  
300 lb. Class: 100-300 psi

### Solenoid Control\*:

Standard safe zone execution  
Explosion proof ATEX available

### Voltages:

220/50Hz VAC  
24 and 48 VDC  
Others available at extra cost  
Max. differential operating pressure: 200 psi  
Manual operator available at extra cost  
UL Listed: 3" - 12"

## ► Materials

### Main valve body & cover:

Ductile iron\* - ASTM A536 / EN-GJS-400

Cast steel ASTM A216 Gr.WCB\*

Naval bronze ASTM B61

Nickel aluminum bronze ASTM B148

Super Duplex stainless steel

Stainless steel ASTM A743-CF-8M

### Main Valve Internal Trim:

Bronze / Stainless steel

### Pilot Control System:

Cast bronze ASTM B61

UL listed 3" - 12"

### Rubber Parts:

Buna-N® synthetic rubber

\* Optional material available for Seawater



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### Cover capacity

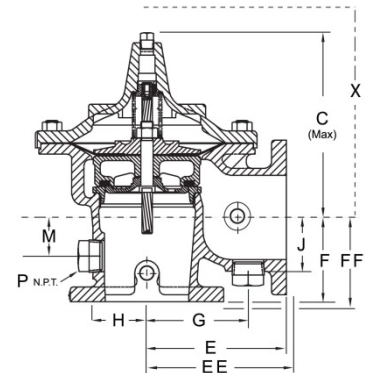
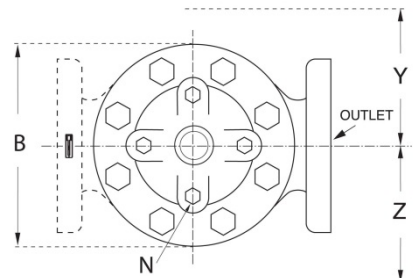
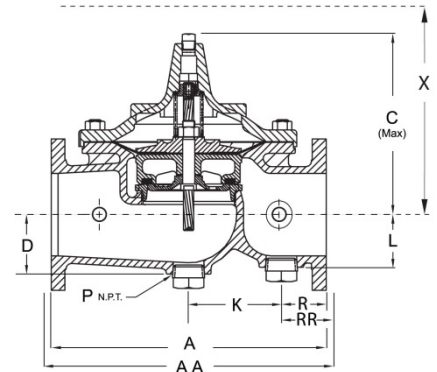
Valve size [inch]	Displacement
3"	0.080 gal
4"	0.169 gal
6"	0.531 gal
8"	1.26 gal
10"	2.51 gal
12"	4.00 gal

### Functional data

Valve size		[Inches]	3	4	6	8	10	12
		[mm]	80	100	150	200	250	300
Cv factor	Globe pattern	[gpm]	115	200	440	770	1725	1725
		[l/s]	27.6	48	105.6	184.8	414	414
	Angle pattern	[gpm]	139	240	541	990	2500	2500
		[l/s]	33.4	58	130	238	600	600

### Dimensions

Valve size [mm]	80	100	150	200	250	300
A 150 ANSI	305	381	508	645	756	864
AA 300 ANSI	337	397	533	670	791	902
B Dia.	232	292	400	508	600	711
C (max.)	208	270	340	406	435	533
D	65	81	110	131	216	239
E 150 ANSI	178	216	254	322	378	432
EE 300 ANSI	-	224	267	350	-	451
F 150 ANSI	102	126	152	203	219	349
FF 300 ANSI	-	134	165	216	-	368
G	121	151	184	216	267	432
H	68	71	99	135	167	178
J	65	71	97	122	148	178
K	178	102	171	432	394	533
L	65	71	97	122	216	239
M	45	61	70	102	108	222
N NPT	1/2"-14	3/4"-14	3/4"-14	1"-11 1/2	1"-11 1/2	1"-11 1/2
P NPT	1/4"-11 1/2	2"-11 1/2"				
R 150 ANSI	64	88	83	106	181	165
RR 300 ANSI	79	96	95	119	198	184
X Pilot System	381	432	737	787	838	889
Y Pilot System	279	305	508	559	610	660
Z Pilot System	279	305	508	559	610	660



### When Ordering, Please Specify

- Catalog Number 134E/D-97e
- Valve size
- Globe or Angle pattern
- Pressure Class
- Threaded, Flanged or Grooved
- Material Desired
- Energized or De-energized to open main valve
- Solenoid Enclosure, Voltage & Hertz
- When vertically installed