



# — MODEL — 134-BP

## Solenoid Operated and Pressure Reducing Control Deluge Valve

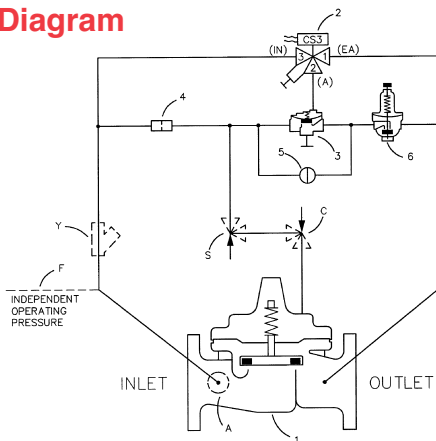


Please note that the UL and ULC Listings apply to the 100G/2100G Hytrol Main Valve only.

- UL Listed / ULC Listed - 100G and 2100G Main Valves
- Fast Acting Solenoid Control
- Reliable Drip Tight Shut-off
- Simple Design, Proven Reliable
- Easy Installation & Maintenance
- Precise Downstream Pressure Control

The Cla-Val Model 134-BP Solenoid Operated and Pressure Reducing Control Deluge Valve is an on-off control valve that either opens or closes upon receiving an electrical signal to the solenoid pilot control as well as regulates downstream pressure using the CRD Pressure Reducing Pilot. This valve consists of an UL/ULC Listed 100G/2100G Hytrol Main Valve, a three-way solenoid valve and an auxiliary pilot valve and the CRD Pressure Reducing Pilot Control. This pilot control system alternately applies pressure to/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 (energized solenoid to open).

### Schematic Diagram



### Item Description

- |   |                                       |
|---|---------------------------------------|
| 1 | 100G/2100G Hytrol Main Valve - UL/ULC |
| 2 | CS3XM Solenoid Control                |
| 3 | 100-01 Auxiliary Hytrol               |
| 4 | X58C Restriction Assembly             |
| 5 | CK2 Cock (Solenoid Bypass)            |
| 6 | CRD Pressure Reducing Pilot Control   |



### Specification

- SIZES** Globe: 3" - 10" flanged  
Angle: 3" - 10" flanged
- END DETAILS** Ductile Iron 150 ANSI B16.42 flanged  
Cast Steel 150 ANSI B16.5 flanged
- PRESSURE RATINGS** 150 class, 250 psi maximum (Ductile Iron)  
150 class, 285 psi maximum (Cast Steel)  
300 class, 400 psi maximum
- TEMPERATURE RANGE** Water: to 180° F. Max
- CRD SPRING RANGE** 15 - 75 psi • 30 - 300 psi

### Functional Data

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

### MATERIALS

#### Main valve body & cover

- Ductile Iron ASTM A-536\*
- Cast Steel ASTM A216-WCB\*
- Naval Bronze ASTM B61
- Nickel Aluminum Bronze ASTM B148 C95800
- Super Duplex Stainless Steel ASTM A890 GR5A
- Stainless Steel ASTM A743-CF-8M

#### Main valve trim:

- Bronze / Monel

#### Tubeing & Fittings

- 316 SST, Monel, or 2507 SDS

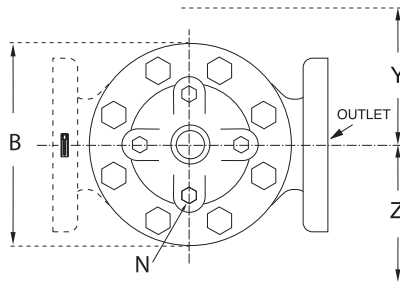
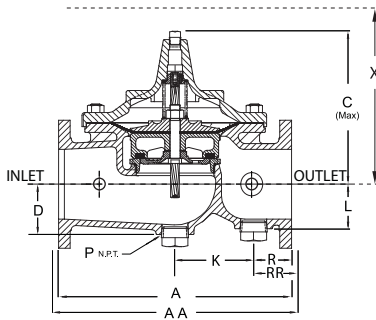
#### Pilot control system:

- Cast Bronze ASTM B61
- UL Listed 3" - 10"

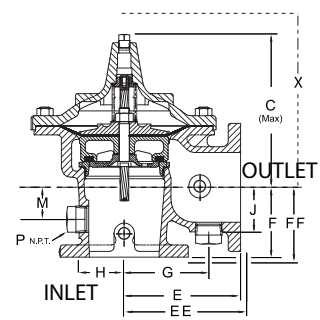
### Cover Capacity

Valve Size	Displacement
3"	.080 gal
4"	.169 gal
6"	.531 gal
8"	1.26 gal
10"	2.51 gal

100G (Globe)



2100G (Angle)



Valve Size (in)	3	4	6	8	10
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
B Dia.	9.12	11.50	15.75	20.00	23.62
C Max.	8.19	10.62	13.28	16.00	17.12
D	2.56	3.19	4.31	5.16	8.50
E 150 ANSI	7.00	8.50	10.00	12.69	14.88
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	--
G	4.75	5.94	7.25	8.50	10.50
H	2.69	2.81	3.88	5.31	6.56
J	2.56	2.81	3.81	4.81	5.81
K	7.00	4.03	6.75	17.00	15.50
L	2.56	2.81	3.81	4.81	8.50
M	1.75	2.41	2.75	4.00	4.24
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 1/1/2"			
R 150 ANSI	2.50	3.47	3.25	4.19	7.12
RR 150 ANSI	3.12	3.78	3.75	4.69	7.81
X Pilot System	15.00	17.00	29.00	31.00	33.00
Y Pilot System	11.00	12.00	20.00	22.00	24.00
Z Pilot System	11.00	12.00	20.00	22.00	24.00

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

**Pilot System Specifications**

**Temperature Range**

Water: to 180°F

**Fluids**

Air, water, light oils

**Rubber Parts**

Buna-N® Synthetic Rubber

**Solenoid Control\***

Body:

Brass ASTM B283

Enclosure:

NEMA Type 1, 2, 3, 3S, 4, 4X general purpose watertight

NEMA Type 6, 6P, 7, 9 watertight

Explosion Proof available at extra cost

**Voltages:**

110, 220 -50Hz AC

24, 120, 240, 480 -60Hz AC

6, 12, 24, 120, 240 - DC

Others available at extra cost

**Max. operating pressure differential: 200 psi**

**Coil:**

Insulation Molded Class F

Watts AC	6
AC Volt Amps Inrush	30
AC Volt Amps Holding	16
Watts DC	10.6

Manual operator available at extra cost.

**UL/ULC Listed: 3" - 10"**

\*Optional material available for Seawater Service

**When Ordering, Please Specify**

1. Catalog No. 134-BP
2. Valve Size
3. Pattern - Globe or Angle
4. Pressure Class
5. Threaded, Flanged or Grooved
6. Material Desired
7. Energized or De-energized to Open Main Valve
8. Solenoid Enclosure, Voltage & Hertz
9. When Vertically Installed



E-134-BP (R-07/2017)

**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 Romanel/  
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 Périer  
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



— MODEL — **134-05**

# Solenoid Operated Deluge Valve



- **UL Listed / ULC Listed Main Valves - 3 - 12 inch sizes\***
- **Fast Acting Solenoid Control**
- **Reliable Drip Tight Shut-off**
- **Simple Design, Proven Reliable**
- **Easy Installation & Maintenance**

The Cla-Val Model 134-05 Solenoid Control Valve is an on-off control valve which either opens or closes upon receiving an electrical signal to the solenoid pilot control. This valve consists of a 100G/2100G UL/ULC Listed Hytrol Main Valve, a three-way solenoid valve and an auxiliary pilot valve. This pilot control system alternately applies pressure to/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).

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

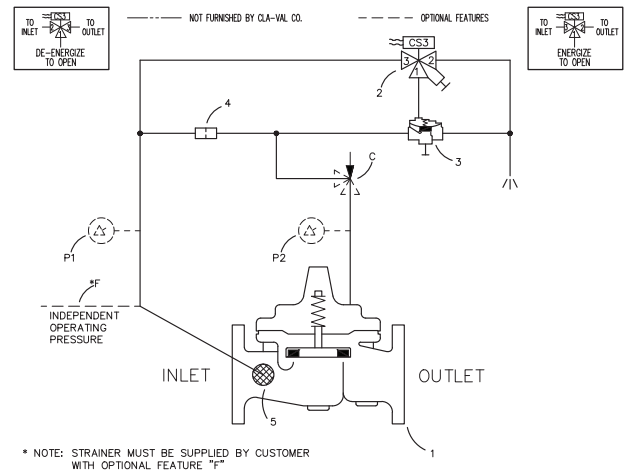
Please note that the UL and ULC Listings apply to the 100G/2100G Hytrol Main Valve equipped with the trim configuration of Model 134-05

### Schematic Diagram

Item	Description
1	100G/2100G UL/ULC Listed Hytrol Main Valve
2	CS3 Solenoid Control
3	100-01 Hytrol Pilot Valve
4	X58C Restriction Orifice
5	X46A Flow Clean Strainer

### Optional Features

Item	Description
C	CV Flow Control (closing)
F	Independent Operating Pressure
P	X141 Pressure Gauge



### Specifications

<b>SIZES</b>	Globe: 3" - 12" flanged Globe: 3" - 8" grooved Angle: 3" - 12" flanged
<b>END DETAILS</b>	Ductile Iron 150 ANSI B16.42 flanged Ductile Iron 300 grooved Cast Steel 150 ANSI B16.5 flanged
<b>PRESSURE RATINGS</b>	150 class, 250 psi maximum (Ductile Iron) 150 class, 285 psi maximum (All other materials) 300 class, 300 psi maximum (All materials)
<b>TEMPERATURE RANGE</b>	Water: to 180° F. Max

### Materials

#### Main valve body & cover:

Ductile Iron ASTM A-536\*  
Cast Steel ASTM A216-WCB\*  
Naval Bronze ASTM B61  
Nickel Aluminum Bronze ASTM B148  
Super Duplex Stainless Steel  
Stainless Steel ASTM A743-CF-8M

#### Main valve trim:

Bronze / Stainless Steel

#### Pilot control system:

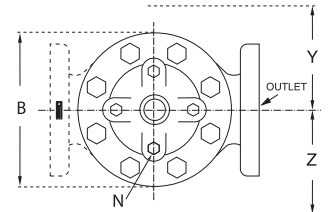
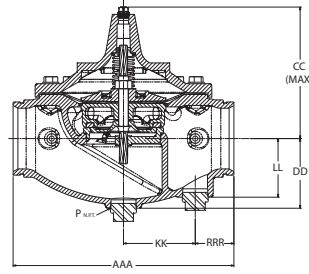
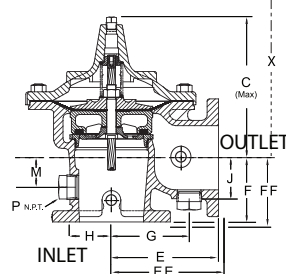
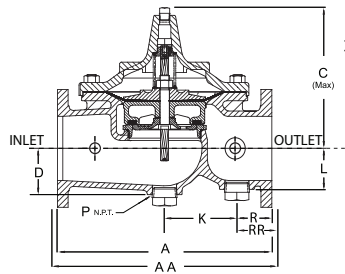
Cast Bronze ASTM B62  
UL /ULC Listed 3" - 12"

### Cover Capacity

Valve Size	Displacement
3"	.080 gal
4"	.169 gal
6"	.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	
C <sub>V</sub> Factor	Globe Pattern	Gal./Min. (gpm)	115	200	440	770	1245	1725
	Angle Pattern	Litres/Sec. (l/s)	27.6	48	105.6	184.8	299	414
C <sub>V</sub> Factor	Globe Pattern	Gal./Min. (gpm)	139	240	541	990	1575	2500*
	Angle Pattern	Litres/Sec. (l/s)	33.4	58	130	238	378	600



Valve Size (in.)	3	4	6	8	10	12	Valve Size (mm)	80	100	150	200	250	300
<b>A 150 ANSI</b>	12.00	15.00	20.00	25.38	29.75	34.00	<b>A 150 ANSI</b>	305	381	508	645	756	864
<b>AA 300 ANSI</b>	13.25	15.62	21.00	26.38	31.12	35.50	<b>AA 300 ANSI</b>	337	397	533	670	791	902
<b>AAA Grooved</b>	12.50	15.00	20.00	25.38	—	—	<b>AAA Grooved</b>	318	381	508	645	—	—
<b>B Dia.</b>	9.12	11.50	15.75	20.00	23.62	28.00	<b>B Dia.</b>	232	292	400	508	600	711
<b>C Max.</b>	8.19	10.62	13.38	16.00	17.12	21.00	<b>C Max.</b>	208	270	340	406	435	533
<b>CC Max.</b>	7.50	9.94	12.13	15.00	—	—	<b>CC Max.</b>	191	252	308	381	—	—
<b>D</b>	2.56	3.19	4.31	5.16	8.50	9.39	<b>D</b>	65	81	110	131	216	239
<b>DD</b>	3.62	4.50	6.31	7.81	—	—	<b>DD</b>	92	114	160	198	—	—
<b>E 150 ANSI</b>	7.00	8.50	10.00	12.69	14.88	17.00	<b>E 150 ANSI</b>	178	216	254	322	378	432
<b>EE 300 ANSI</b>	—	8.81	10.50	13.19	—	17.75	<b>EE 300 ANSI</b>	—	224	267	350	—	451
<b>F 150 ANSI</b>	4.00	4.97	6.00	8.00	8.62	13.75	<b>F 150 ANSI</b>	102	126	152	203	219	349
<b>FF 300 ANSI</b>	—	5.28	6.50	8.50	—	14.50	<b>FF 300 ANSI</b>	—	134	165	216	—	368
<b>G</b>	4.75	5.94	7.25	8.50	10.50	17.00	<b>G</b>	121	151	184	216	267	432
<b>H</b>	2.69	2.81	3.88	5.31	6.56	7.00	<b>H</b>	68	71	99	135	167	178
<b>J</b>	2.56	2.81	3.81	4.81	5.81	7.00	<b>J</b>	65	71	97	122	148	178
<b>K</b>	7.00	4.03	6.75	17.00	15.50	21.00	<b>K</b>	178	102	171	432	394	533
<b>KK</b>	3.50	4.56	6.50	7.00	—	—	<b>KK</b>	89	116	165	178	—	—
<b>L</b>	2.56	2.81	3.81	4.81	8.50	9.39	<b>L</b>	65	71	97	122	216	239
<b>LL</b>	3.25	4.00	5.31	7.00	—	—	<b>LL</b>	83	102	135	178	—	—
<b>M</b>	1.75	2.41	2.75	4.00	4.24	8.75	<b>M</b>	45	61	70	102	108	222
<b>N NPT</b>	1/2 - 14	3/4 - 14	3/4 - 14	1 - 11-1/2	1 - 11-1/2	1 - 11-1/2	<b>N NPT</b>	1/2 - 14	3/4 - 14	3/4 - 14	1 - 11-1/2	1 - 11-1/2	1 - 11-1/2
<b>P NPT</b>	1-1/4 - 11-1/2	2 - 11-1/2					<b>P NPT</b>	1-1/4 - 11-1/2	2 - 11-1/2				
<b>R 150 ANSI</b>	2.50	3.47	3.25	4.19	7.12	6.50	<b>R 150 ANSI</b>	64	88	83	106	181	165
<b>RR 300 ANSI</b>	3.12	3.78	3.75	4.69	7.81	7.25	<b>RR 300 ANSI</b>	79	96	95	119	198	184
<b>RRR Grooved</b>	2.75	2.94	3.50	5.69	—	—	<b>RRR Grooved</b>	70	75	89	145	—	—
<b>X Pilot System</b>	15.00	17.00	29.00	31.00	33.00	35.00	<b>X Pilot System</b>	381	432	737	787	838	889
<b>Y Pilot System</b>	11.00	12.00	20.00	22.00	24.00	26.00	<b>Y Pilot System</b>	279	305	508	559	610	660
<b>Z Pilot System</b>	11.00	12.00	20.00	22.00	24.00	26.00	<b>Z Pilot System</b>	279	305	508	559	610	660

### Pilot System Specifications

#### Temperature Range

Water: to 180°F

#### Fluids

Air, water, light oils

#### Rubber Parts

Buna-N® Synthetic Rubber

#### Solenoid Control\*

Body:

Brass ASTM B283

Enclosure:

NEMA Type 1, 2, 3, 3S, 4, 4X general purpose watertight

NEMA Type 6, 6P, 7, 9 watertight

Explosion Proof available at extra cost

Voltages:

110, 220 -50Hz AC

24, 120, 240, 480 - 60Hz AC

6, 12, 24, 120, 240 - DC

Others available at extra cost

Max. operating pressure differential: 200 psi

Coil:

Insulation molded Class F

Watts AC 6

AC Volt Amps Inrush 30

AC Volt Amps Holding 16

Watts DC 10.6

Solenoid Manual operator included.

UL / ULC Listed 100G/2100G

Hytrol Main Valve: 3" - 12"

\*Optional material available for Seawater Service

### When Ordering, Please Specify

- Catalog No. 134-05
- Valve Size
- Pattern - Globe or Angle
- Pressure Class
- Threaded, Flanged or Grooved
- Material Desired
- Energized or De-energized to Open Main Valve
- Solenoid Enclosure, Voltage & Hertz
- When Vertically Installed