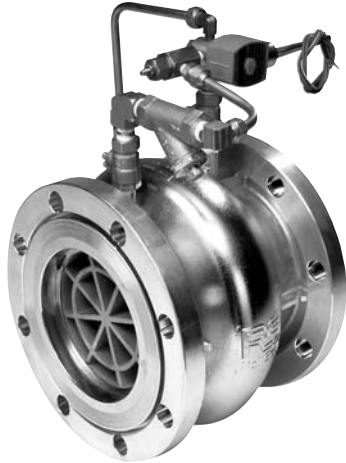




— MODEL — **736-01**

Solenoid Control Valve



- **Fast Acting Solenoid Control**
- **Reliable Drip-Tight Shut-Off**
- **Simple Design, Proven Reliable**
- **Optional Check Feature**
- **Easy Installation & Maintenance**

Description

The Cla-Val Model 736-01 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 Cla-Val Model 100-42 main valve and a three-way solenoid valve which alternately applies pressure to or relieves pressure from the loading chamber of the main valve. It is furnished either normally open (de-energize solenoid to open) or normally closed (energize solenoid to open).

If the check feature option is added and a pressure reversal occurs, the downstream pressure is admitted into the main valve loading chamber and the valve closes to prevent return flow.

Performance Specification

Capacity:	See Technical Data Sheet
C _f Factor:	0.9
Cavitation:	See Technical Data Sheet
Rangeability:	500:1
Bearing Friction:	No friction from slip-type bearings

Design Specification

Sizes:	2, 3, and 6 inch wafer style 6, 8, 10, and 12 inch flanged 6, 8, 10, 12 inch Victaulic® Ends
End Detail Wafer:	Fits ANSI B16.5 class 125, 150, 250, and 300 flanges
End Detail Flanged:	ANSI B16.5 class 150 (fits class 125) or ANSI B16.5 class 300 (fits class 250)
End Detail Victaulic®:	Fits standard steel pipe
Operating Pressure:	720 psi maximum Victaulic® Ends - 300 psi max.
Maximum Differential:	150 psid continuous, 225 psid intermittent*
Reverse Pressure:	125 psid maximum
Temperature Range:	32 to 160 degrees F*
Flange Operating Pressure:	Class 125-175 psi maximum Class 150-275 psi maximum Class 250-300 psi maximum Class 300-720 psi maximum
Victaulic® Ends Rating:	300 psi maximum
Solenoid Enclosure:	NEMA IV Watertight (std) NEMA VII Explosion Proof (available)
Solenoid Voltages:	115, 230, 460 for 50, 60 HZ 6, 12, 24, 120, 240 VDC

*Standard natural rubber 65 durometer in water service.

Temperature range depends on liner material. Higher differential pressure ratings available.

Purchase Specification

The three-way solenoid pilot alternately applies pressure to or exhausts pressure from the loading chamber of the main valve which in turn causes the main valve to open or close.

The control valve shall be constructed of two parts: a stainless steel body, and an elastomeric liner or control element. Minimum rangeability shall be 500:1 based on capacity at flowing pressure conditions. C_f shall be greater than or equal to 0.9. Valve and control system shall be similar in all respects to Cla-Val Model 736-01 as manufactured by Cla-Val, Newport Beach, California.

Material Specification

Body:	316L Stainless Steel
Liner:	Natural Rubber, 65 durometer (standard) Viton, EPDM, Nitrile, Silicone (available)
Liner Retainer:	316 Stainless Steel

Solenoid Pilot

Body:	Brass*
Wetted Parts:	Brass/Stainless Steel*, Buna-N®

Accessories

Shut-off Isolation Valve:	Brass*
Speed Controls:	Brass*
Check Controls:	Brass*
“Y” Strainer:	Bronze*
Control Piping:	Copper*
Control Fittings:	Brass*

*316 stainless steel available

For other than standard ANSI flanges consult factory

Din drilling available on all sizes



736-01 Basic Components

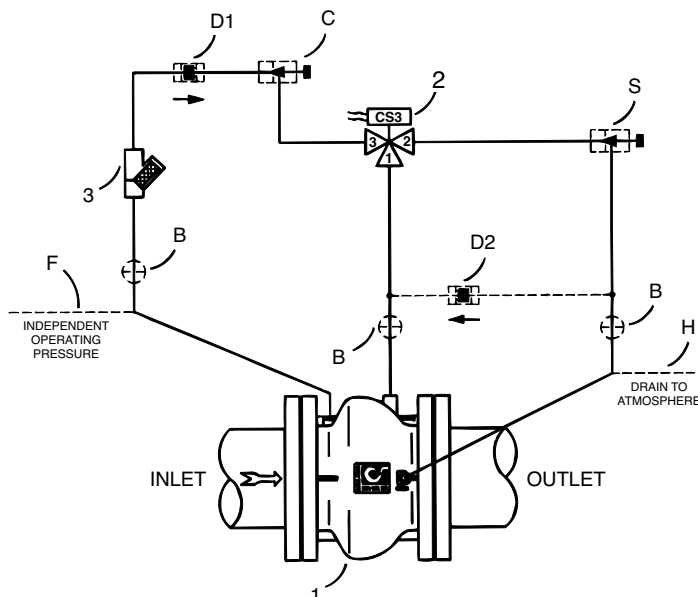
Item	Description
1	100-42 Roll Seal Main Valve
2	CS3 Solenoid Control**
3	X43 "Y" Strainer

Optional Features

Item	Description
B	CK2 (Isolation Valve)
C	CNA Needle Valve (Closing)*
D	Check Valves (125 psid max. reverse pressure)
F	Independent Operating Pressure
H	Atmospheric Drain
S	CNA Needle Valve (Opening)*

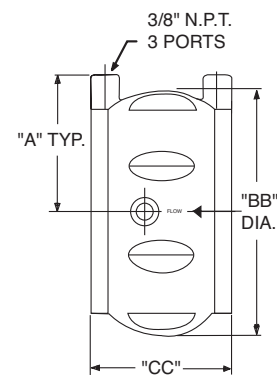
* The opening & closing speed controls (optional) on this valve should always be open at least ¼ turn off their seats.

** Solenoid requires operating voltage, enclosure type, and normally open or normally closed main valve.

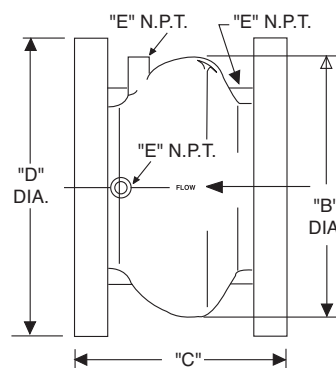


Dimensions (100-42 Main Valve)

Valve Size (Inches)	2	3	4	6	8	10	12
A	2 7/8	3 3/8	4 1/2	5 1/4	--	--	--
B	--	--	--	10 1/2	14 1/2	18	21 1/2
BB	4 7/8	5 7/8	7 7/8	9 1/2	--	--	--
C	--	--	--	9	11	13	15 1/4
CC	2 1/2	3 1/4	4	5 1/2	--	--	--
D (ANSI 150)	--	--	--	11	13 1/2	16	19
D (ANSI 300)	--	--	--	12 1/2	15	17 1/2	20 1/2
E (Ports) NPT	--	--	--	3/8	3/8	1/2	1/2
Approx. Wt. (150 lbs.)	4	7 1/2	14	58	115	190	290
Approx. Wt. (300 lbs.)	4	7 1/2	14	87	155	250	375
Max. Continuous Flow (gpm)	224	469	794	1787	3177	4964	7148
Valve Size (mm for ANSI)	50	80	100	150	200	250	300
A	73	90	105	133	--	--	--
B	--	--	--	276	356	457	549
BB	111	149	187	249	--	--	--
C	--	--	--	229	279	330	387
CC	64	83	102	140	--	--	--
D (ANSI 150)	--	--	--	279	343	406	483
D (ANSI 300)	--	--	--	318	381	445	521
E (Ports) NPT	--	--	--	3/8	3/8	1/2	1/2
Approx. kg. (150 lbs.)	1.81	3.63	6.35	30	54.43	89	151.5
Approx. kg. (150 lbs.) with Studs & Nuts	2.72	4.54	10	--	--	--	--
Approx. kg. (300 lbs.)	1.81	3.63	6.35	41.73	72.57	116.57	191
Approx. kg. (300 lbs.) with Studs & Nuts	5	6.35	11.8	--	--	--	--
Max. Continuous Flow (l/s.)	14	30	50	113	200	301	451



2", 3", 4" and 6" Wafer Style



6", 8", 10" and 12" Flanged Style



NSF Approved 2" thru 12"

When Ordering Please Specify:

- Catalog No. 736-01
- Valve Size
- Fluid Being Handled
- Fluid Temperature Range
- Inlet Pressure Range
- Outlet Pressure Range
- Maximum Differential Pressure
- Minimum Differential Pressure
- Maximum Flow Rate
- Voltage & NO, NC (Main Valve)



E-736-01 (R-3/2011)

CLA-VAL

PO Box 1325 Newport Beach CA 92659-0325
Phone: 949-722-4800 • Fax: 949-548-5441

CLA-VAL CANADA

4687 Christie Drive
Beamsville, Ontario
Canada L0R 1B4
Phone: 905-563-4963
Fax: 905-563-4040

CLA-VAL EUROPE

Chemin des Mesanges 1
CH-1032 Romanel/
Lausanne, Switzerland
Phone: 41-21-643-15-55
Fax: 41-21-643-15-50

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