

# Valve and Level Control Series 442, Cast Iron Body

Bulletin SSIN050 Issue/Rev. 0.1 (1/19)

The **INVALCO Diatroller** is a combination liquid level controller and liquid valve. Closed, the force of the weighted rod on top exceeds the liquid pressure under the valve diaphragm. As the liquid level rises in the vessel, the increased head pressure raises the diaphragm, opening the valve.

Gas from the top of pressure vessels is piped to the valve diaphragm's top side to equalize pressure.

## Features and Benefits

- **Quick Change Trim** – Can be changed without taking valve out of the line – reduced downtime.
- **Replaceable Seat** – Reduced overall cost.
- **Weights Can Be Added** – Meets all application demands.
- **Soft Plug** – Assures tight shut-off.

## Applications

The Series 442 Diatroller is perfect for an oil or water dump valve for treaters, free water knockouts, and gun barrels. It can also be used as a discharge valve for salt water disposal systems.

## Standard Specifications

### Body Material

Cast Iron, A-126

### Body Cover Material

Cast Iron, A-126

### End Connections

2" FNPT Threaded; 3", 4" Class 125# FF Flanges.



### Diaphragm Material

Nylon Reinforced Buna N Diaphragm

### Maximum Differential Operating Pressure

125 psi

### Temperature Limits

-20°F to 250°F

### Plug Type

Replaceable, Buna N

### Seat Type

Removable, Cast Iron

### Other Wetted Parts

303 Stainless

### Notes:

1. Cv values are for fully open inner valve.
2. Part numbers applicable only when valve desired is exactly as described above.
3. To order specify Model Number, Part Number.

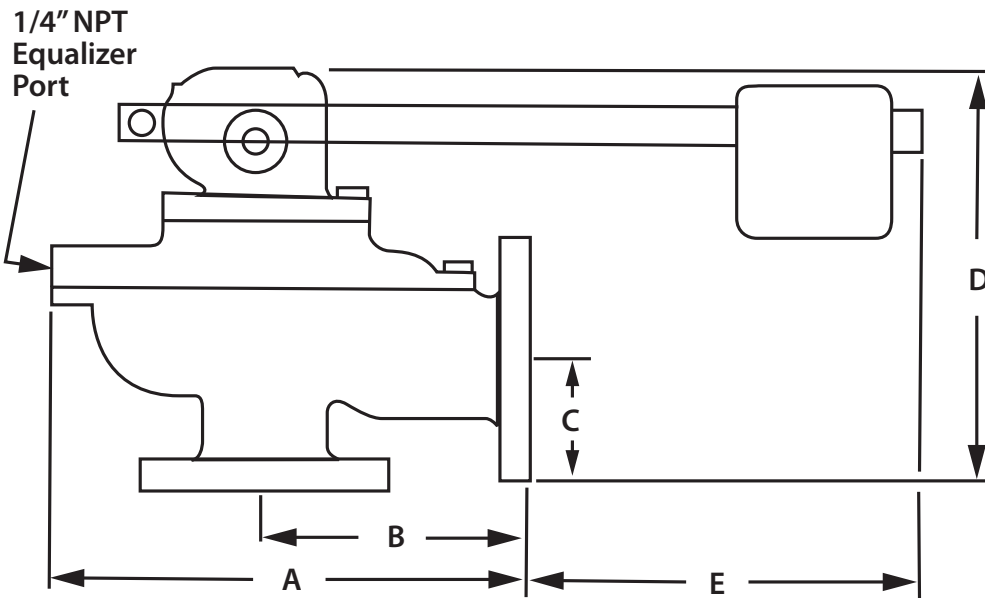
## Ordering Information

Valve			Trim			P/N
Size	Model No.	Connection	Size	Cv	Wt	
2"	LDSA-201-442	Threaded	1-1/2"	44	65	80005504
3"	LDFA-301-442	125 lb. F.F.	2-1/4"	89	130	80005502
4"	LDFA-401-442	125 lb. F.F.	2-1/4"	94	160	80005503

**Price includes:** Lever, Lever Collar, and Weight and Drip Trap. Companion flanges, bolts, and gasket sets are not included.

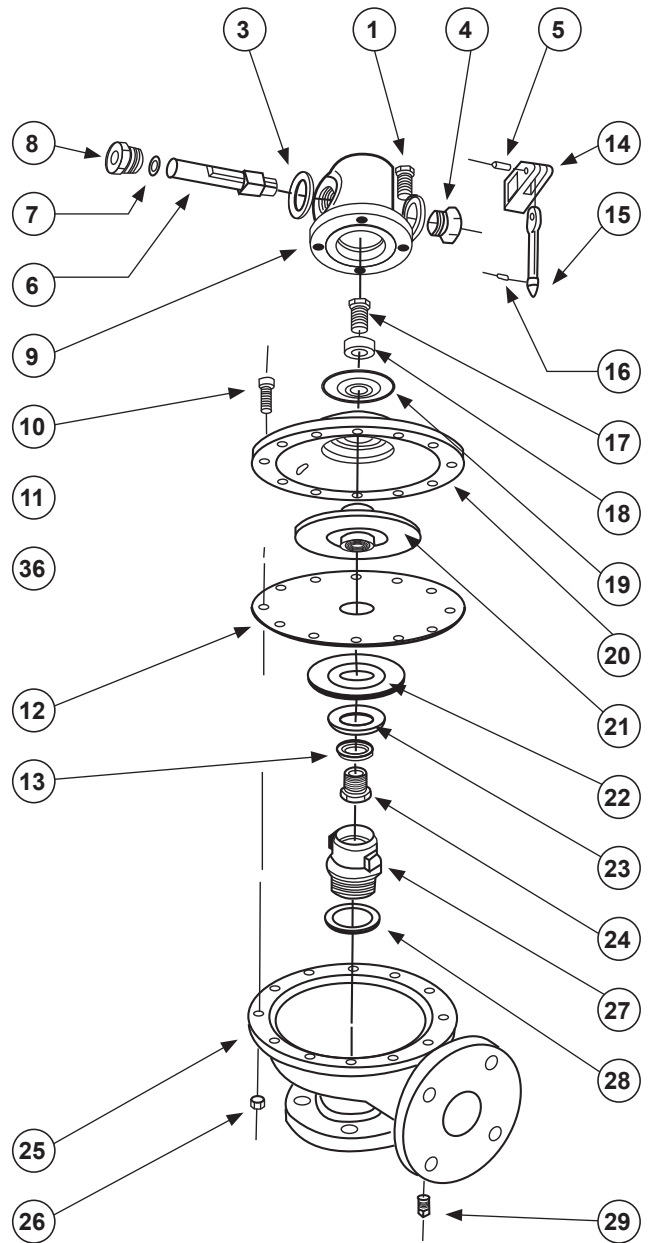
## Dimensions – Inches (mm)

Dimensions					
Model	A	B	C	C	C
LDSA-201	10.6" (268)	5.9" (149)	3.0" (76)	10.4" (263)	7.9" (200)
LDFA-301	13.9" (352)	8.0" (203)	4.3" (109)	13.5" (342)	17.4" (441)
LDFA-401	14.9" (377)	9.0" (228)	4.8" (122)	14.5" (367)	16.4" (415)



**Dimensions** – Inches to the nearest tenth (millimeters to the nearest whole mm), each independently dimensioned from engineering drawings.

Parts					
Item	N	Description	Qty.	LDSA-201	
				LDSA-201	LDAFA-301
1		Screw 1/2-13x1-1/4 HHCS	4	----	65000176
		Screw 3/8-16x1 HHCS	4	65000175	----
3	*	Stuffing Box Gasket	2	45013360	45013386
4		Bushing	1	45001815	45002123
5	*	Hinge Pin	1	79002880	79015295
6		Stuffing Box Stem	1	45001816	45002125
7		O-Ring; 2" BUN-114-90, 3"-BUN-210-90	1	67101304	67101263
8		Stuffing Box	1	45001818	45002124
9		Body Cover Head	1	45001810	45002111
10		Screw 3/8-16x1-1/4 HHCS	10/14	65002346	65002346
11		Screw 3/8-16x3/4 HHCS	2	----	65001869
12	*	Diaphragm	1	45001813	45002109
13		Retaining Washer	1	45001823	45002121
14	*	Upper Hinge	1	45001817	45002114
15		Valve Stem	1	45001822	45002116
16	*	Lift Pin	1	45002214	45002119
17	*	Diaphragm Screw	1	45001820	45002117
18		Diaphragm Retainer	1	45001819	45002118
19	*	Molded Diaphragm	1	45001877	45002032
20		Diaphragm Cover	1	45001809	45002110
21		Upper Diaphragm Plate	1	45001814	45002108
22		Lower Diaphragm Plate	1	45001812	45002112
23	*	Neoprene Insert	1	45001824	45002120
24		Equalizing Plug	1	45001821	45001821
25		Valve Body 2" Screwed	1	45005770	----
		Valve Body 3" Flanged	1	----	45002107
		Valve Body 4" Flanged	1	----	45002352
26		Nut 3/8-16 Hex	10/14	65001966	65001966
27		Seat	1	45001811	45002113
28	*	Seat Gasket	1	45002345	45001224
29		Drain Plug 1/4" NPT	1	45002595	45002595
30	#	Weight	1	83201825	83202348
31	#	Screw 3/8-16x1-1/2 SQHSS for Wt.	1	65006056	65006056
32	#	Lever	1	99008337	99008338
33	#	Lever Collar	1	83208326	83208328
34	#	1/4x1-1/2" XH Galvanized Nipple	1	45006875	45006875
35	#	Drip Trap	1	80000502	80000502
36		Screw 3/8-16x7/8 HHCS	2	65003440	----



### Parts Key

\*Recommended spare parts.

# Not shown.

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

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