

# Lever-Operated Valves Series 524, Ductile Body

Bulletin SSIN058 Issue/Rev. 0.1 (1/19)

The **INVALCO Series 524 Valve** can be used as oil or water dump valves on separators, treaters, free water knockouts, or similar vessels that require a lever-operated valve.

## Features and Benefits

- **Double Port Design** – Allows for maximum fluid discharge.
- **Soft Seat** – Assures positive shut-off.
- **Angle and Globe Bodies** – Meets most application demands.
- **Nace Adaptable (RNCE available)** – Can be modified for use in sour service.



## Standard Specifications

### Body Material

Ductile Iron A-395

### End Connections

2"-6" ANSI 150# RF Flanges

### Temperature Limits

-20°F to 250°F

### Stem and Plugs

303 Stainless Steel

### Seat Cages and Guides

- 2", 3", and 4" 304 Stainless Steel
- 6" 303 Stainless Steel

### Valve Plugs

- 2", 3", and 4" replaceable Buna
- 6" Fluoroelastomer O-Ring

### Notes:

1. Cv and Cg values are for fully-open inner valve.
2. Part number applicable only when valve is exactly as described above.
3. To order, specify model number and part number.
4. Lever and lever collar furnished with each valve.

## Ordering Information: Globe Body

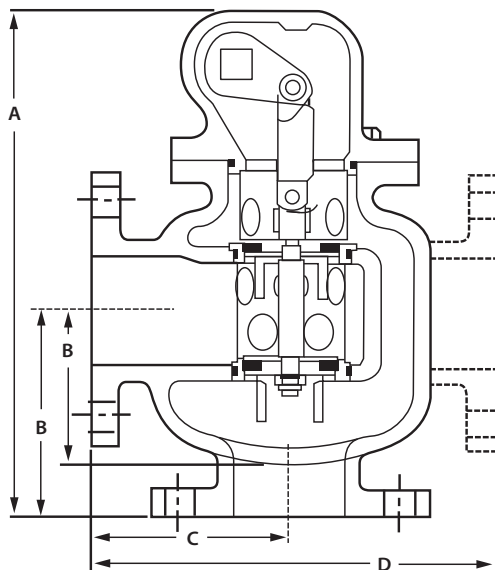
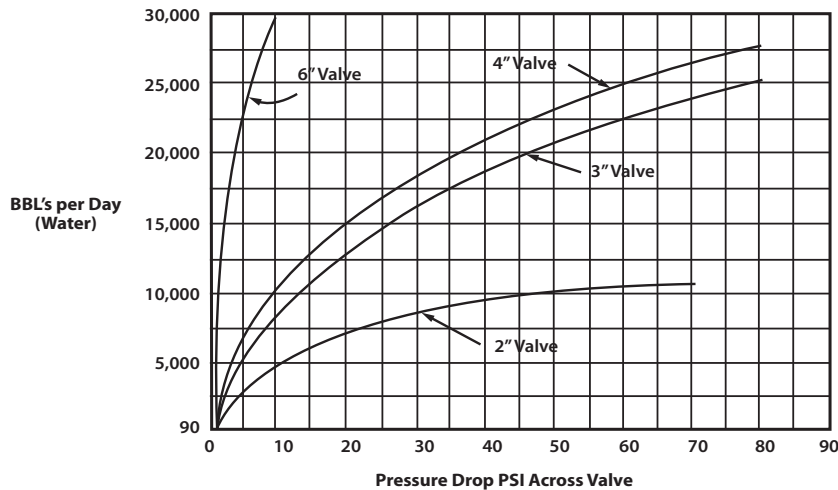
Size	Model No.	Max. W.P.	Trim Size	Cv	Cg	Part No.	Weight (lb)
2"	LSG-203-524	300 psi	1-7/8	44.0	1,452	80005436	32
2"	LFG-201-524	175 psi	1-7/8	44.0	1,452	80005426	34
3"	LFG-301-524		2-5/8	81.6	2,690	80005427	71
4"	LFG-401-524		2-5/8	89.8	2,960	80005428	93
6"	LFG-601-524		4-3/8	550.0	16,500	80005429	150

## Ordering Information: Angle Body

Size	Model No.	Max. W.P.	Trim Size	Cv	Cg	Part No.	Weight (lb)
2"	LSA-203-524	300 psi	1-7/8	44.0	1,452	80005431	32
2"	LFA-201-524	175 psi	1-7/8	44.0	1,452	80005422	34
3"	LFA-301-524		2-5/8	81.6	2,690	80005423	71
4"	LFA-401-524		2-5/8	89.8	2,960	80005424	93
6"	LFA-601-524		4-3/8	550.0	16,500	80005425	150

## Pressure Drop

**Note:** Refer to Engineering section for Valve Sizing Charts.



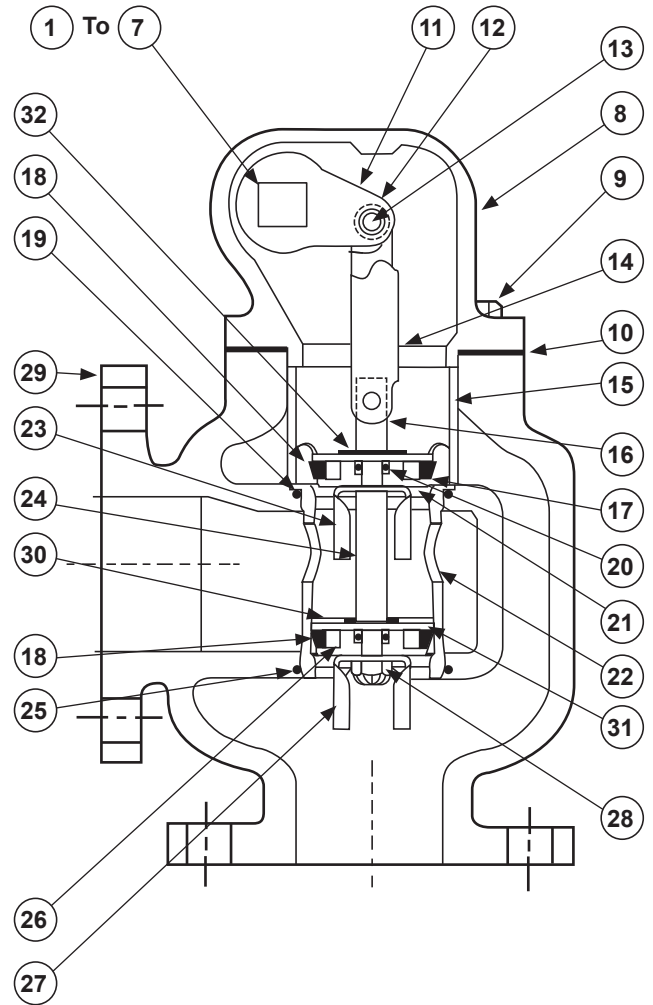
## Dimensions – Inches (mm)

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

Dimensions				
Model	A	B	C	D
LFA-201	11.8" (299)	4.3" (109)	4.0" (101)	----
LFG-201	11.4" (289)	3.4" (86)	----	8.0" (203)
LFA-301	13.9" (352)	5.6" (142)	5.5" (139)	----
LFG-301	12.9" (327)	4.6" (117)	----	11.0" (279)
LFA-401	14.7" (372)	6.4" (162)	7.3" (185)	----
LFG-401	12.8" (324)	4.6" (117)	----	12.8" (324)
LFA-601	18.4" (466)	7.8" (198)	8.3" (210)	----
LFG-601	18.4" (466)	7.8" (198)	----	14.5" (367)
LSA-203	11.5" (291)	4.0" (101)	4.0" (101)	----
LSG-203	12.7" (322)	4.4" (111)	----	11.0" (279)

## Parts List for 2" Valve

Parts				
Item	N	Description	Qty.	Part No.
1		Stuffing Box	1	45001951
2		Lever Stem	1	45001337
3		Lever Collar	1	83208326
4	*	1/8" NPT Zerk	1	45001567
5	*	Gasket	1	67102151
6	*	O-Ring BUN-112-90/BUN-114-90	1	67101408
7		Lever	1	99008337
8		Body Cover	1	45012021
9		Cap Screw	4	65000175
10	*	Cover Gasket	1	45000162
		O-Ring		----
11	+	Upper Hinge		45002437
12	+	Hinge Spacer	1	45002425
13	+	Hinge Pin	2	45002428
14	+	Lower Hinge	1	45002427
15	+	Cage Spacer	1	45002431
16	+	Stem Connector	1	45002426
17	+	Upper Valve Plug	1	45002436
18	+	Seal	2	45002423
19	+	O-Ring BuN-234-90	1	67101530
20	+	O-Ring BUN-112-90	2	67101532
21	+	Seal Retainer	2	45002432
22	+	Seat Cage	1	45016100
23	+	Upper Stem Guide	1	45002434
24	+	Stem	1	45002429
25	+	O-Ring BUN-233-90	1	67101530
26	+	Lower Valve Plug	1	45002436
27	+	Lower Stem Guide	1	45002435
28	+	Flexloc Nut	1	65003075
29		LSG-203-DI	1	45012045
		LSA-203-DI	1	45012044
		Body LFA-201 DI	1	45012015
		Body LFA-301 DI	1	----
		Body LFA-401 DI	1	----
		Body LFG-201 DI	1	45012099
		Body LFG-301 DI	1	----
		Body LFG-401 DI	1	----
30	+	Lower Seal	1	45002424
31	+	Lower Washer	1	45002433
32	+	Lock Washer	1	65004401
33	+	.005" Shim Washer (Not Shown)	6	45012494
34		Plug 1/4" NPT (Not Shown - Globe Body Only)	1	45002595



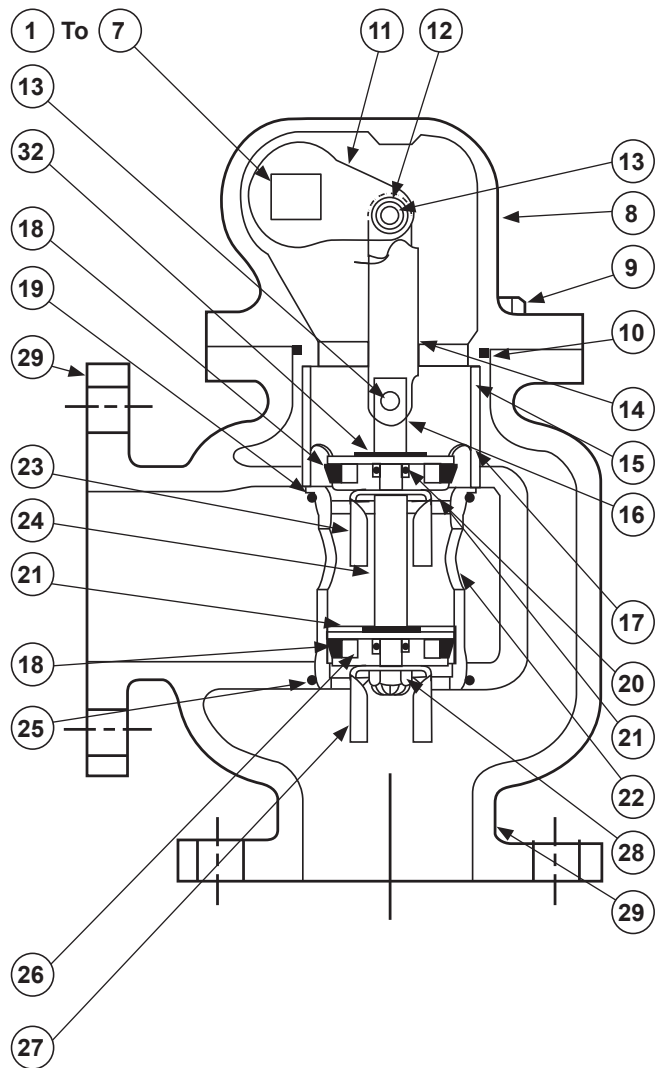
### Parts Key

\* Recommended spare parts.

+ These items included in trim assemblies 83000108, 83000109.

## Parts List for 3" and 4" Valve

Parts				
Item	N	Description	Qty.	Part No.
1		Stuffing Box	1	45001358
2		Lever Stem	1	45001367
3		Lever Collar	1	83208326
4	*	1/8" NPT Zerk	1	45001537
5	*	Gasket	1	45000044
6	*	O-Ring BUN-112-90/BUN-114-90	1	67101304
7		Lever	1	99008337
8		Body Cover	1	45012022
9		Cap Screw	4	65000176
10	*	Cover Gasket	1	----
		O-Ring		67102334
11	+	Upper Hinge		45003381
12	+	Hinge Spacer	1	45003382
13	+	Hinge Pin	2	45003387
14	+	Lower Hinge	1	45003383
15	+	Cage Spacer	1	45003389
16	+	Stem Connector	1	45003388
17	+	Upper Valve Plug	1	45003390
18	+	Seal	2	45003359
19	+	O-Ring BuN-234-90	1	67101736
20	+	O-Ring BUN-112-90	2	67101408
21	+	Seal Retainer	2	45003392
22	+	Seat Cage	1	45016102
23	+	Upper Stem Guide	1	45003384
24	+	Stem	1	45003385
25	+	O-Ring BUN-233-90	1	67102331
26	+	Lower Valve Plug	1	45003395
27	+	Lower Stem Guide	1	45003386
28	+	Flexloc Nut	1	65003402
29		LSG-203-DI	1	----
		LSA-203-DI	1	----
		Body LFA-201 DI	1	----
		Body LFA-301 DI	1	45012016
		Body LFA-401 DI	1	45012017
		Body LFG-201 DI	1	----
		Body LFG-301 DI	1	45012100
		Body LFG-401 DI	1	45012101
30	+	Lower Seal	1	----
31	+	Lower Washer	1	----
32	+	Lock Washer	1	65005389
33	+	.005" Shim Washer (Not Shown)	6	45012496
34		Plug 1/4" NPT (Not Shown - Globe Body Only)	1	45002595

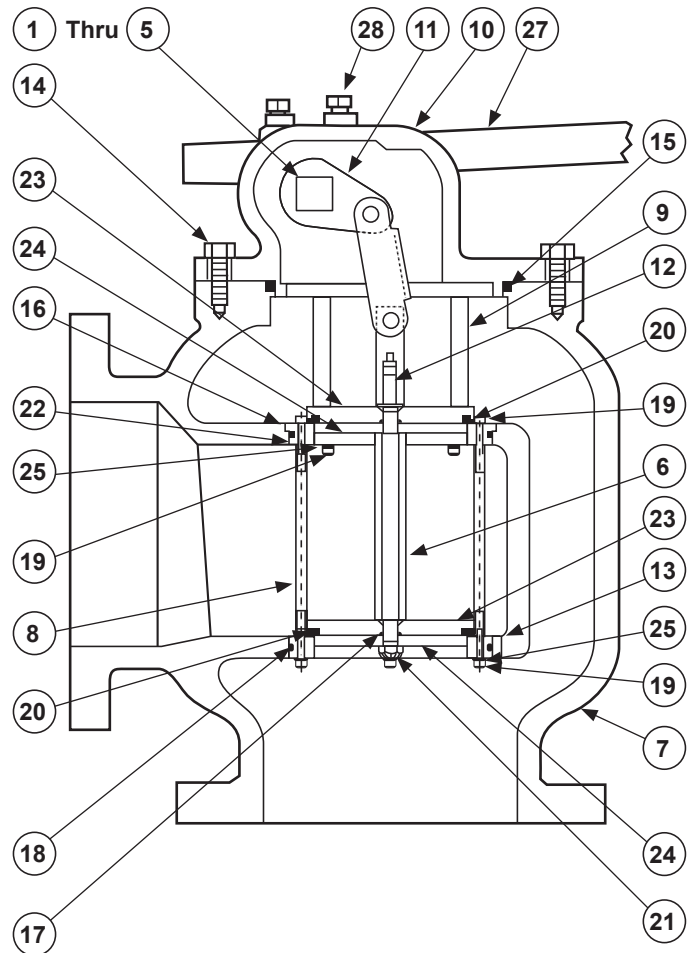


### Parts Key

- \* Recommended spare parts.
- + These items included in trim assemblies 83000108, 83000109.

## Parts List for 6" Valve

Parts				
Item	N	Description	Qty.	Part No.
1	*	O-Ring BUN-114-90	1	67101304
2	*	1/8" NPT Zerk	1	45001567
3		Lever Stem	1	45012650
4	*	Gasket	1	45000044
5		Stuffing Box	1	45001358
6		Stem	1	45006272
7		Body (Angle)	1	45012567
		Body (Globe)	1	45014487
8		Seat Spacer	4	45006274
9		Hold-down Pin	4	45006275
10		Cover	1	45002566
11	*	Hinge Assembly	1	48011838
12		Washer 3/8 Tooth Lock	1	65004401
13	*	Lower Seat Ring	1	45006268
14		Screw 1/2-12x1-1/4 HHCS	8	45000176
15	*	O-Ring BUN-437-90	1	67106179
16	*	O-Ring BUN-254-90	1	67106178
17	*	O-Ring BUN-110-90	2	67101532
18	*	O-Ring BUN-253-90	1	67106465
19		Screw 1/4-20x7/8 SHCS	12	65006180
20	*	O-Ring VIT-346-75	2	67306345
21		Nut 3/8-24 Flexlock	1	65003075
22	*	Upper Seat Ring	1	45006269
23	*	Plug Body	2	45006270
24	*	Plug Washer	2	45006271
25		Washer 1/4 Tooth Lock	8	65004363
27		Lever Stem	1	99008337
28		Collar	1	83208326
29		Plug 2" NPT Globe Only (Not Shown)	1	45011095



**Parts Key**  
\* Recommended spare parts.

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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