

Series 476, Ductile Body Diaphragm Operated Three-Way Valve

Bulletin SSIN066 Issue/Rev. 0.0 (3/18)

The INVALCO Series 476 Valve is perfect for use in diverting, blending, manifolding, and volume metering service. Its primary use is in LACT service, but it can also be used in other blending applications.

Features

- **Replaceable Seats** – Reduced cost.
- **Grooved or Threaded Bodies** – Meets most application requirements.
- **Direct or Reverse Acting** – More flexibility in applications.
- **Two or Three Position Inner Valve** – Allows for positive shut-off when metering fluids.
- **Nace Adaptable** – Can be used in sour service.

Specifications

Body Material

Ductile, A-395

Body Cover

Carbon Steel

End Connections

2" Grooved or 2" NPT

Diaphragm Operator

Steel, 26 sq. in., nylon reinforced Buna N. Diaphragm:
70 psi maximum recommended operating pressure.
100 psi maximum containment pressure.

General Notes:

- 1 Standard topworks has 20 sq. in. effective area.
- 2 Cv and Cg values are for fully open inner valve.
- 3 Part numbers applicable only when valve desired is exactly as described above.
- 4 To order specify Model Number, Part Number, Trim Description.



Packing

Non-lubricated Buna-N, center bleed, spring loaded.

Temperature Limits

-20°F to 250°F

Stem, Cage and Seats (Removable)

303 Stainless Steel

Valve Plugs

Buna N o-ring

Valve Orifices

1-3/4"

Inner Valve Action

Two or three position

Spring Action

Direct, reverse, or air-operated both directions.

Ordering Information

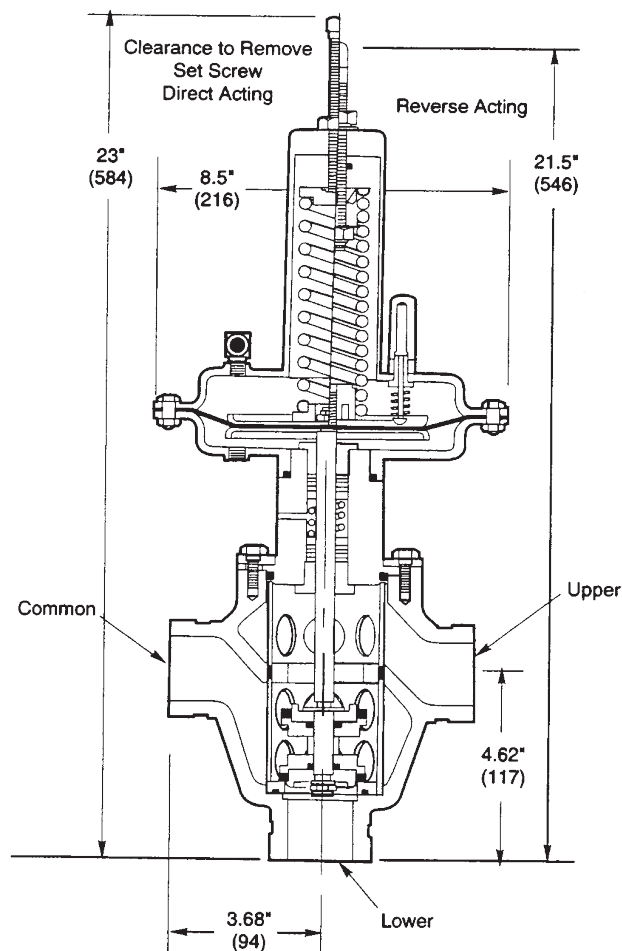
Two-Position Inner Valve							
Size	Model Number	End Connection	Spring Action	Cv Full Open		Part Number	Weight lbs.
				Com/Upper	Com/Lower		
2"	DQY-204-2-476	Grooved	Direct	30	58	80004095	30
2"	DXQY-204-2-476	Grooved	Reverse	30	58	80004096	32
2"	DDQY-204-2-476	Grooved	No Spring	30	58	80004097	27
2"	DSY-204-2-476	Threaded	Direct	30	58	80004156	30
2"	DXSY-204-2-476	Threaded	Reverse	30	58	80004157	32
2"	DDSY-204-2-476	Threaded	No Spring	30	58	80004158	27

Three-Position Inner Valve							
Size	Model Number	End Connection	Spring Action	Cv Full Open		Part Number	Weight lbs.
				Com/Upper	Com/Lower		
2"	DQY-204-3-476	Grooved	Direct	30	58	80004098	30
2"	DXQY-204-3-476	Grooved	Reverse	30	58	80004099	32
2"	DDQY-204-3-476	Grooved	No Spring	30	58	80004100	27
2"	DSY-204-3-476	Threaded	Direct	30	58	80004159	30
2"	DXSY-204-3-476	Threaded	Reverse	30	58	80004160	32
2"	DDSY-204-3-476	Threaded	No Spring	30	58	80004161	27

Reverse spring action denotes normally-open lower port; direct denotes normally-closed lower port.

Dimensions

Inches (mm)



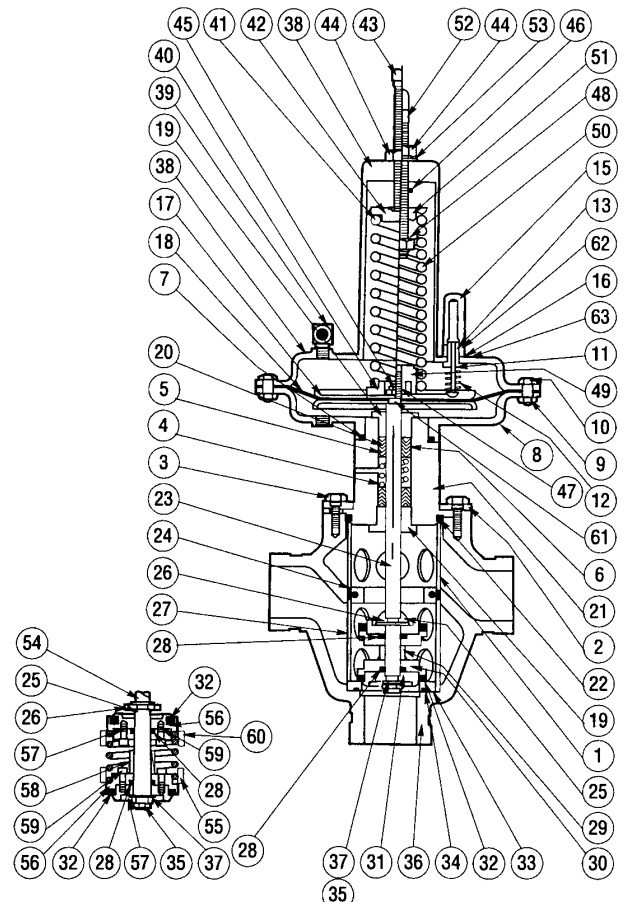
Note: Dimensions -- Inches to the nearest tenth (millimeters to the nearest whole mm), each independently dimensioned from respective engineering drawings..

Parts				
Item	N	Description	Qty.	Part No.
1	*	Upper Cage	1	45004749
2		Clamp Ring	1	45003128
3		Screw 3/8-16 x 7/8 SHCS	4	65003440
4	*	Packing Spring	1	45004776
5	*	Packing Washer	2	45001937
6	*	Packing 1/2" x 1" Regular	5	45001947
7	*	O-Ring BUN-225-90	1	67101299
8		Lower Diaphragm Case	1	45004018
9		Nut 5/16-18 Hex	12	65002100
10		Screw 5/16-18 x 3/4 HHCS	12	65002073
11		Travel Indicator Pin	1	45004272
12		Travel Indicator Spring	1	45004315
13		Travel Indicator Bushing	1	45003129
15	*	Sight Glass	1	45004223
16		Nut 3/8-16 Hex Jam	1	65008477
17		Diaphragm Plate	2	45003466
18	*	Diaphragm	1	45003465
19		Packing Nut	2	45001939
20	*	Packing 1/2" x 1" Flat	2	45001948
21		Body Cover	1	45004775
22		O-Ring BUN-230-90	2	67101540
23		Stem (2 Position Trim)	1	45004748
24		Upper Seat	1	45002836
25		Lock Ring	1	45004167
26		Lock Ring Retainer	1	45004168
27		Lower Cage	1	45004212
28		O-Ring BUN-112-90	2	67101408
29		Plug Spacer (2-Position Trim)	1	45005580
30		Plug Body (2-Position Trim)	2	45005579
31		Plug Follower (2-Position Trim)	2	45005578
32		O-Ring BUN-325-90	2	67101985
33		Lower Seat	1	45002837
34		O-Ring BUN-225-90	1	67101299
35		Nut 3/8-24 Flexloc	1	65003075
36		Body 2" Grooved	1	45012011
37		Body 2" Threaded	1	45012066
37		Washer 3/8 Flat	1	65004234
38		Upper Diaphragm Case (Direct & Reverse Acting)	1	48004018
		Upper Diaphragm Case (Double Acting)	1	45008809
39		1/4" Bleeder Filter	1	45002612
40		Lower Spring Rest (Direct Acting)	1	45001859
41	*	Spring (Direct Acting)	1	45002044
42		Upper Spring Rest (Direct Acting)	1	45001858
43		Screw 1/2-13x4 SQHSS (Direct Acting Only)	1	65015571
44		Nut 1/2-13 Hex Jam	1	65008551
45		Nut 3/8-24 Flexloc	1	65001401

* Recommended spare parts.

Parts				
Item	N	Description	Qty.	Part No.
46	*	O-Ring BUN-111-90 (Reverse Acting)	1	67102260
47		Washer 3/8 Lock (Reverse Acting)	1	65002393
48		Washer Flat 1/2 (Reverse Acting)	1	65008238
49		Lower Spring Rest (Reverse Acting)	1	45006557
50	*	Packing Washer	1	45006552
51		Upper Spring Rest (Reverse Acting)	1	45006556
52		Adjusting Screw (Reverse Acting)	1	48006553
53	*	Tank Seal Washer (Reverse Acting)	1	45003285
54	*	Nut 5/16-18 Hex	1	45004747
55	*	Spring (3 Position Trim)	1	45005065
56		Plug Body (3 Position Trim)	2	45005587
57		Plug Follower (3 Position Trim)	2	45005588
58		Plug Spacer (3 Position Trim)	1	45005675
59		Screw 10 x 1/2 SLPH w /Seal	6	65005773
60		Trim Spring Rest (3-Position Trim)	2	45011832
61		O-Ring BUN-011-90	1	67101725
62	*	Gasket, Travel Ind. (Reverse Acting)	1	45003133
63	*	Thread Seal (Reverse Acting)	1	45007129

* 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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