

# Diaphragm Operated Two-way Valves – Series 434, Steel Body

Bulletin SSIN049 Issue/Rev. 0.1 (12/18)

The **INVALCO Series 434 Valve** can be used in any application that requires a steel bodied flanged valve. This could include high or low pressure separators, treaters, dehydrators, or any other pressure vessel. The Series 434 is perfect for use on offshore vessels.

## Features

- **Hammer Union Construction** – Reduced downtime for repair.
- **Quick Change Trim**– Reduced cost for repair.
- **Steel Bodies** – Meets all application requirements.
- **Nace Adaptable** – Can be modified for use in sour service.

## Standard Specifications

### Body Material

Steel WCB

### End Connections

2" flanges

### Body Cover

Carbon steel, union

### Diaphragm Operator

- Carbon steel, 65 sq. in.
- Nylon reinforced Buna N diaphragm,
- Maximum recommended operating pressure 70 psi
- Maximum containment pressure 100 psi

### Packing

Non-lubricated Buna N

### Maximum Working Pressure

Limited by flange

### Temperature Limits

-20°F to 250°F



## Specifications (continued)

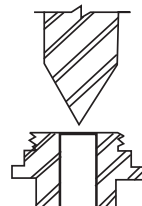
### Stem Material

303 Stainless Steel

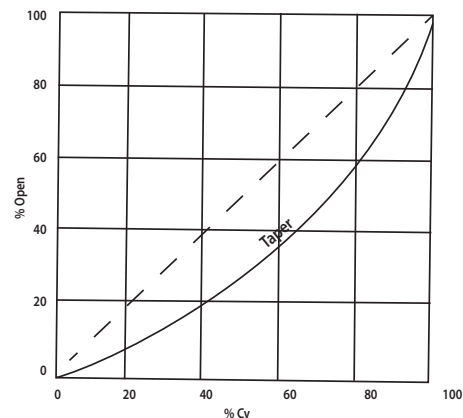
### Plug and Seat Material

See schedule on page 2

## Trim Styles



## Trim Characteristics



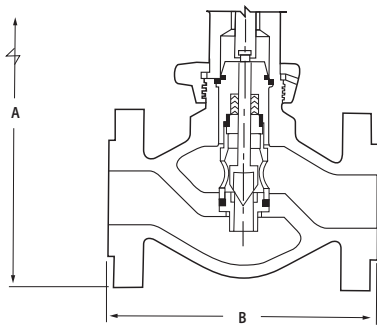
### Notes:

1. Standard topworks is direct action (normally closed).
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.
5. See attached parts list.

## Ordering Information — Globe Body (Flanged)

Size	Model Number	ANSI Flange	Max W.P.	Trim Size	Part Numbers				
					Full Open		Taper		Wt. (lbs)
					Cv	Cg	416 S.S.*	Carbide	
2"	DFG-202-434	150 lb RF	275 psi	1/4"	1.8	52	80008230	80008231	72
				3/8"	4.0	116	80008235	80008236	
				1/2"	6.4	186	80008240	80008241	
				3/4"	14.1	409	80003809	80008250	
				1"	20.5	549	80008253	-----	
2"	DFG-207-434	300 lb RF	720 psi	1/4"	1.8	52	80008254	80008255	83
				3/8"	4.0	116	80008259	80008260	
				1/2"	6.4	186	80008264	80008265	
				3/4"	14.1	409	80008274	80008275	
				1"	20.5	549	80008278	-----	
2"	DFG-214-434	600 lb RF	1440 psi	1/4"	1.8	52	80008279	80003810	89
				3/8"	4.0	116	80008293	80003812	
				1/2"	6.4	186	80008287	80008288	
				3/4"	14.1	409	80008297	80008298	
				1"	20.5	549	80008301	-----	
2"	DFG-214R-434	600 lb RTJ	1440 psi	1/4"	1.8	52	80008302	80008303	89
				3/8"	4.0	116	80008307	80003811	
				1/2"	6.4	186	80008311	80008312	
				3/4"	14.1	409	80008320	80008321	
				1"	20.5	549	80008324	-----	
2"	DFG-236R-434	1500 lb RTJ	3600 psi	1/4"	1.8	52	80008325	80008326	115
				3/8"	4.0	116	80008330	80008331	
				1/2"	6.4	186	80008335	80008336	
				3/4"	14.1	409	80008345	80008346	
				1"	20.5	549	80008349	-----	

**Note:** \*416 Hardened Stainless Steel

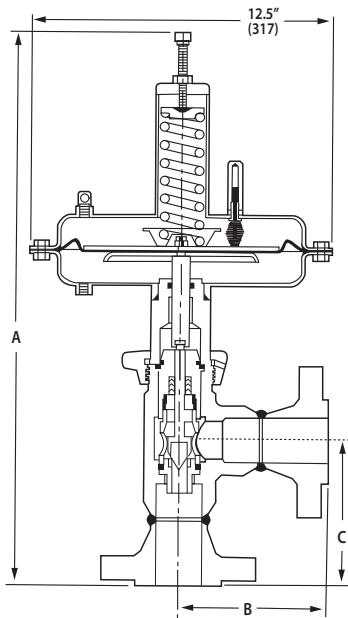


### Dimensions

Pump Model	A	B
DFG-202-434	22.8" (576)	9.6" (244)
DFG-207-434	22.8" (576)	9.6" (244)
DFG-214-434	22.8" (576)	10.1" (256)
DFG-236-434	23" (583)	14.5" (367)
DFG-202R	22.8" (576)	10.1" (256)
DFG-207R	22.8" (576)	10.1" (256)
DFG-214R	22.8" (576)	10.1" (256)
DFG-236R	23" (583)	14.6" (370)

## Ordering Information — Angle Body (Flanged)

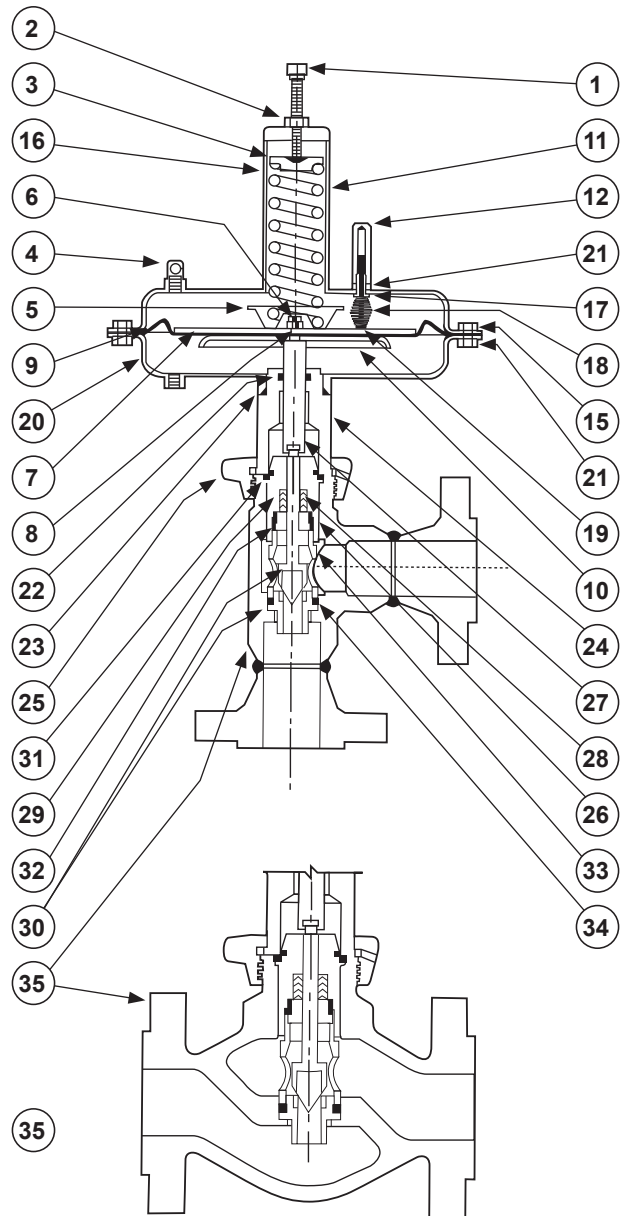
Size	Model Number	ANSI Flange	Max W.P.	Trim Size	Part Numbers				
					Full Open		Taper		Wt. (lbs)
					Cv	Cg	416 S.S.*	Carbide	
2"	DFA-202-434	150 lb RF	275 psi	1/4"	1.8	52	80007971	80007972	72
				3/8"	4.0	116	80007976	80007977	
				1/2"	6.4	186	80008081	80007982	
				3/4"	14.1	409	80003710	80007990	
				1"	20.5	549	80007993	-----	
2"	DFA-207-434	300 lb RF	720 psi	1/4"	1.8	52	80007994	80007995	83
				3/8"	4.0	116	80007999	80003712	
				1/2"	6.4	186	80008003	80008004	
				3/4"	14.1	409	80003711	80008013	
				1"	20.5	549	80008016	-----	
2"	DFA-214-434	600 lb RF	1440 psi	1/4"	1.8	52	80008017	80008018	89
				3/8"	4.0	116	80008022	80003713	
				1/2"	6.4	186	80008026	80008027	
				3/4"	14.1	409	80003714	80008036	
				1"	20.5	549	80008039	-----	
2"	DFA-214R-434	600 lb RTJ	1440 psi	1/4"	1.8	52	80008040	80003716	89
				3/8"	4.0	116	80008044	80003718	
				1/2"	6.4	186	80008048	80008049	
				3/4"	14.1	409	80008057	80008058	
				1"	20.5	549	80008061	-----	



Dimensions			
Pump Model	A	B	C
DFA-202-434	21.6" (548)	5.9" (150)	5.9" (150)
DFA-207-434	21.6" (548)	6.2" (157)	6.2" (157)
DFA-214-434	21.6" (548)	6.6" (166)	6.8" (166)
DFA-214R	21.6" (548)	6.6" (166)	6.6" (166)

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

Parts				
Item	N	Description	Qty.	Part No.
1		Screw 1/2-13x3 SQHSS	1	65000525
2		Nut 1/2-13 Hex Jam	1	65008551
3		Upper Spring Rest	1	45001858
4		1/4" Bleeder Filter	1	45002612
5		Travel Stop	1	45002343
6		Nut 3/8-24 Flexloc	1	65001401
7		Upper Diaphragm Plate	1	45002776
8	*	O-Ring BUN-011-90	1	67101725
9	*	Diaphragm	1	45003460
10		Lower Diaphragm Plate	1	45001789
11		Spring	1	45008406
12	*	Sight Glass	1	45004223
15		Screw 3/8-16x7/8 HHCS	16	65003440
16		Upper Diaphragm Case	1	48004020
17		Bushing	1	45003129
18		Spring	1	45004315
19		Travel Indicator	1	45003502
20		Lower Diaphragm Case	1	48003459
21		Nut 3/8-16 Hex	17	65001966
22	*	O-Ring BUN-210-90	1	67101263
23	*	O-Ring BUN-225-90	1	67101299
24		Yoke	1	48001860
25		Hammer Nut	1	45001862
26		Stuffing Box	1	45003101
27		Upper Stem	1	45001861
28	*	Packing 3/8"x7/8" Flat	5	45002060
29	*	Packing 3/8"x7/8" Reg.	1	45002061
30	@	Stem, Plug and Seat	1	pg. 2
31	*@	O-Ring BUN-224-90	1	67101870
32		Packing Follower	1	45002024
33		Seat Cage	1	45002025
34	*@	O-Ring BUN-221-90	1	67102145
35		Body DFA-202	1	48010067
		Body DFA-207	1	48010066
		Body DFA-214	1	45009711
		Body DFA-214R	1	48009710
		Body DFG-202	1	45011994
		Body DFG-207	1	45012140
		Body DFG-214	1	45003315
		Body DFG-214R	1	45003468
	Body DFG-236R	1	48012454	



## Parts Key

\*Recommended spare parts.

@ Included with trim sets.

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.