

Diaphragm Operated Two-way Valves – Series 418, Ductile Body and Series 420, Steel Body

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The **Series 418 and Series 420** are ideal for high pressure separators, dehydrators, or any application where it is necessary to control the fluid output.

Features

- **Ductile or Steel Bodies:** Meets all application demands
- **Hammer Union Construction:** Reduced downtime for repair
- **Wide Range of Trim Sizes:** Meets all operating conditions
- **Globe or Angle Body:** Ease of piping
- **NACE Adaptable (RNCE available):** Can be modified for use in sour service



Series 418 Ductile Valve

Specifications

Body Material

- Series 420 Steel WCB
- Series 418 Ductile A-395

End Connections

1" and 2" FNPT

Body Cover

Steel, Union

Diaphragm Operator

- 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

Specifications (continued)

Maximum Working Pressure

See schedule on page 2

Temperature Limits

-20°F to 250°F

Stem Material

303 stainless steel

Plug and Seat

See schedule on Page 2

Notes:

1. Standard topworks is direct action (normally closed) with 65 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.
5. See attached side for parts list.

Ordering Information

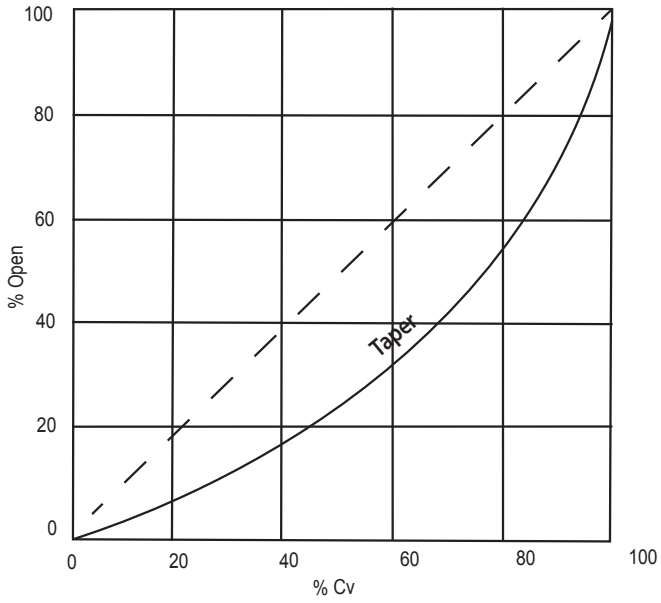
Body Style Material	Size	Model Number	Max W.P.	Trim Size	Full Open		Part Number Taper	Weight
					Cv	Cg	416 S.S.*	
Series 418 Threaded Globe A-395 Globe	1"	DSG-160-418	6000 psi	1/4"	1.8	52	80004316	45
				3/8"	4.0	116	80004320	
				1/2"	6.5	186	80004312	
				**3/4"	14.1	409	80004330	
	2"	DSG-240-418	4000 psi	1/4"	1.8	52	80004416	65
				3/8"	4.0	116	80004441	
				1/2"	6.4	409	80004445	
				3/4"	14.1	549	80004421	
Series 420 Threaded Globe Steel WCB	1"	DSG-160-420	6000 psi	1/4"	1.8	52	80004338	50
				3/8"	4.0	116	80004343	
				1/2"	6.5	186	80004348	
				**3/4"	14.1	409	80004356	
	2"	DSG-260-420	6000 psi	1/4"	1.8	52	80004456	65
				3/8"	4.0	116	80004461	
				1/2"	6.4	409	80004466	
				3/4"	14.1	549	80004476	
Series 420 Threaded Angle Steel WCB	1"	DSA-160-420	6000 psi	1/4"	1.8	52	80004242	45
				3/8"	4.0	116	80004246	
				1/2"	6.5	186	80004207	
				3/4"	14.1	409	80004257	
	2"	DSA-230-420	3000 psi	1/4"	1.8	52	80004270	54
				3/8"	4.0	116	80004275	
				1/2"	6.4	409	80004280	
				3/4"	14.1	549	80004290	
				1"	20.5		80004294	

Notes:

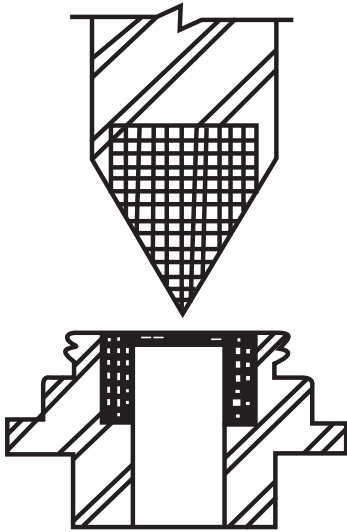
* 416 hardened stainless steel.

** 3/4" trim in 1" valve is limited to 3000 psi max. diff. pressure.

Trim Characteristics



Trim Styles

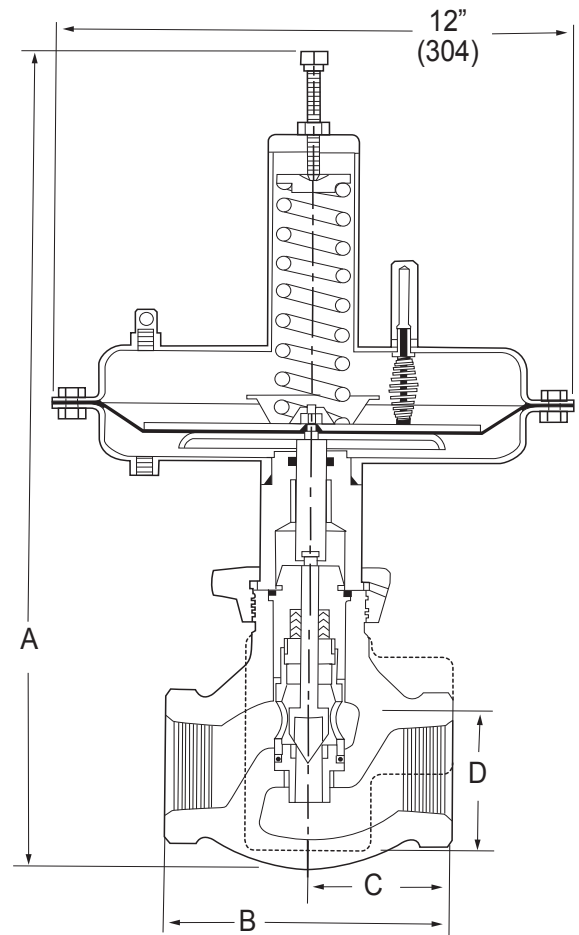


Dimensions -- Inches to the nearest tenth (millimeters to the nearest whole mm), each independently dimensioned from engineering drawings.

Dimensions

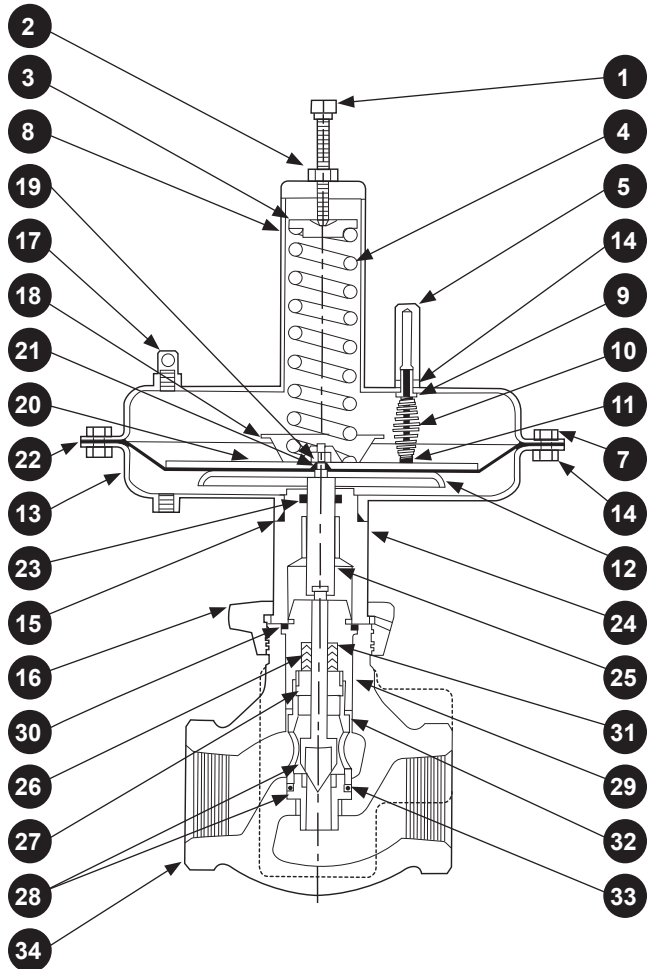
Model Number	A	B	C	D
DSG-160-420	21.6" (548)	7" (177)	--	--
DSG-260-420	21.6" (548)	7" (177)	--	--
DSA-160-420	20.8" (526)	--	2" (51)	2.6" (66)
DSA-230-420	21" (532)	--	3.5" (89)	3.5" (89)

Dimensions



Parts

Item	N	Description	Qty.	Part No.	
				1" Valve	2" Valve
1		Screw 1/2-13 x 3" SQHSS	1	65000525	65000525
2		Nut 1/2-13 Hex Jam	1	65008551	65008551
3		Upper Spring Rest	1	45001858	45001858
4	*	Spring	1	45008406	45008406
5	*	Sight Glass	1	45004223	45004223
7		Screw 3/8-16 x 7/8" HHCS	16	65003440	65003440
8		Upper Diaphragm Case	1	48004020	48004020
9		Bushing	1	45003129	45003129
10		Spring	1	45004315	45004315
11		Travel Indicator	1	45003502	45003502
12		Lower Diaphragm Plate	1	45001789	45001789
13		Lower Diaphragm Case	1	48003459	48003459
14		Nut 3/8-16 Hex	17	65001966	65001966
15	*	O-Ring BUN-225-90	1	67101299	67101299
16		Hammer Nut	1	45001862	45001862
17		1/4" Bleeder Filter	1	45002612	45002612
18		Travel Stop	1	45002343	45002343
19		Nut 3/8-24 Flexloc	1	65001401	65001401
20		Upper Diaphragm Plate	1	45002776	45002776
21	*	O-Ring BUN-011-90	1	67101725	67101725
22	*	Diaphragm	1	45003460	45003460
23	*	O-Ring BUN-210-90	1	67101263	67101263
24		Yoke	1	48001860	48001860
25		Upper Stem	1	45001861	45001861
26	*	Packing 3/8"x7/8" Reg.	5	45002061	45002061
27		Packing Follower	1	45001963	45002024
28	@	Stem, Plug, and Seat	1	See	SSIV029
29		Stuffing Box	1	45001952	45003101
30	@	O-Ring BUN-224-90	1	67101870	67101870
31	*	Packing 3/8"x7/8" Flaot	1	45002060	45002060
32		Seat Cage	1	45001865	45002025
33	*@	O-Ring (BUN-216-90) 7", (BUN-221-90) 2"	1	67101873	67102145
34		Body DSG-160-418 Ductile	1	45002178	--
		Body DSG-240-418 Ductile	1	--	45002401
		Body DSA-160-420 Steel	1	45001867	--
		Body DSG-160-420 Steel	1	45011979	--
		Body DSA-230-420 Steel	1	--	45008600
		Body DSA-260-420 Steel	1	--	45005577



Parts Key

- * Recommended spare parts. See trim set group in process.
- @ 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.