

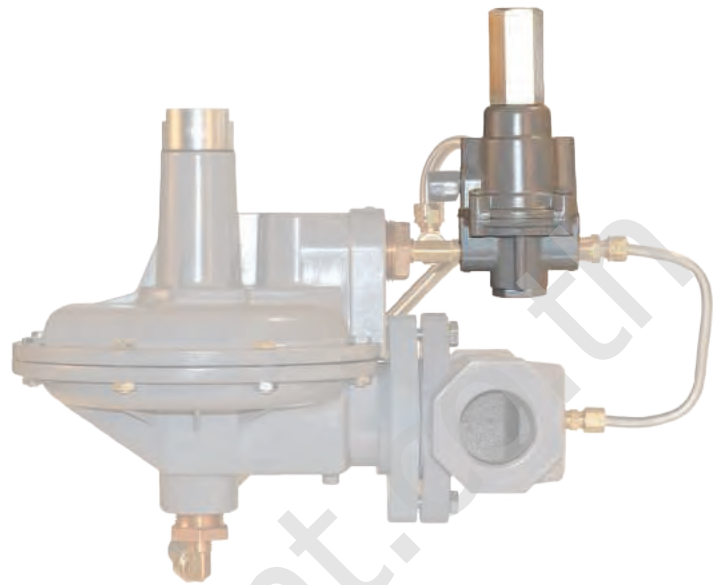
F300 Pressure Regulator

- Minimize Sudden Downstream Load Change
- Wide Pressure Ranges
- P302 has Internal Relief Valve for Overpressure Protection
- Ideal for Fix Factor Billing

The F300 series pilot operated pressure regulator is a manual, direct acting, self-operating, spring loaded, adjustable regulator. The F300 series is used in applications where pressure reduction is required. The regulator will reduce the risk of "shock" from abrupt changes of downstream conditions. This can help prevent safety equipment from shutting an operation down.

Applications

- Compressors
- Gas Engines
- Service Regulators



Materials of Construction

Adjusting Screw	Aluminum
Body	Ductile Iron or WCB Steel
Bonnet	Aluminum
Closing Cap	Aluminum
Diaphragm	Nitrile
Lower Casing	Aluminum
Molded Seat Assembly	Nitrile
Orifice	Aluminum
Flange	Ductile Iron / WCB Steel

F300 Series Maximum Inlet Pressure

Orifice Inches	Range	F300	
		Maximum Inlet Pressure	
		PSIG	BAR
3/16"	Any	125	8.618
1/4"	Any	125	8.618
3/8"	Any	80	5.516
1/2"	Any	60	4.137
3/4"	Any	20	1.379

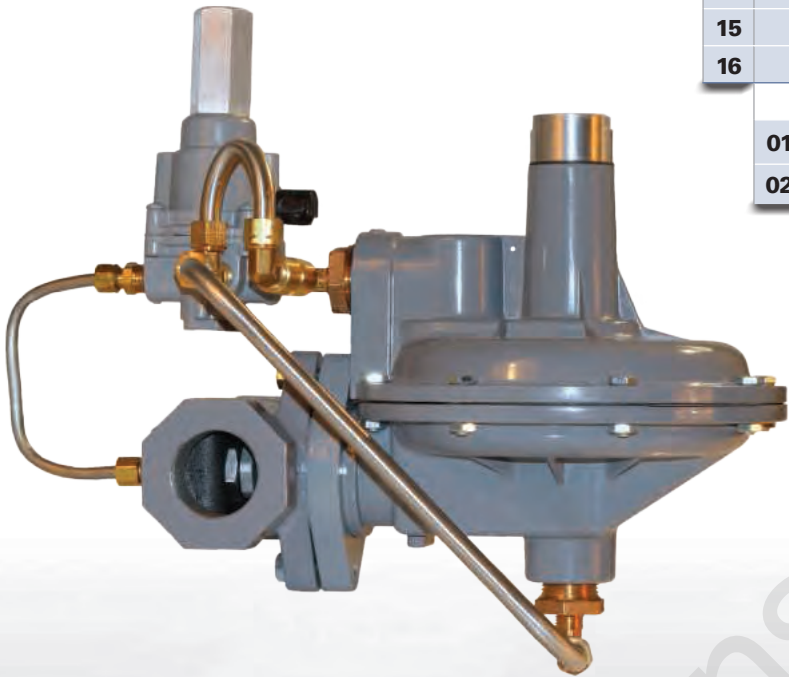
Specifications

Maximum Inlet	See Table 1	
Maximum Emergency Outlet	25 PSIG	
Pressure Ranges	See Table 2	
Port Sizes	1.25 NPT	
	1.5 NPT	
	1.5 NPT x 2 NPT	
	2 NPT	
Orifice Sizes	3/16"	
	1/4"	
	3/8"	
	1/2"	
	3/4"	
End Connections	NPT	
	150 RF Flange	Steel Units Only
	125 FF Flange	Iron Units Only
Temperature Range	-20 °F to 180 °F	
	-29 °C to 82 °C	
Approx. Weight	10 lbs. (4.5 kg)	

F300 Series Range Springs

Table 2					
Model	PL84 Pilot	Spring Ranges		Pilot Spring Color	Pilot Spring Part Number
		PSIG	BAR		
F300	832-036-002	2 - 10 PSIG	0.137 - 0.689	Black	655-000-202
F300	832-036-003	2 - 20 PSIG	0.137 - 1.378	Yellow	655-000-267

F300 Part Matrix

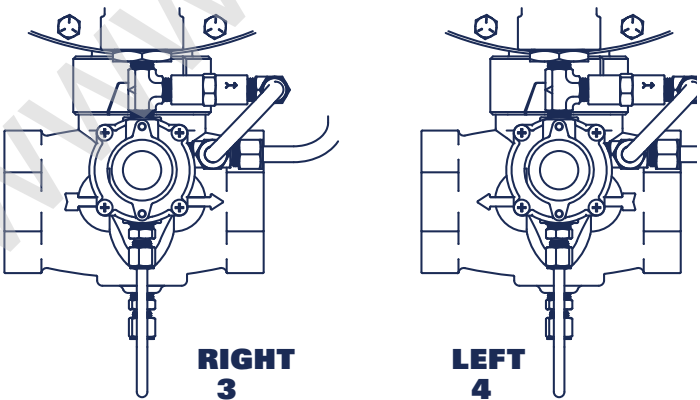


F300 Regulator Rebuild Kits

	Kit Includes	Part Number
F300 Regulator	Diaphragm, Disk Holder, Cap Gasket, O-Ring	971-F30-000

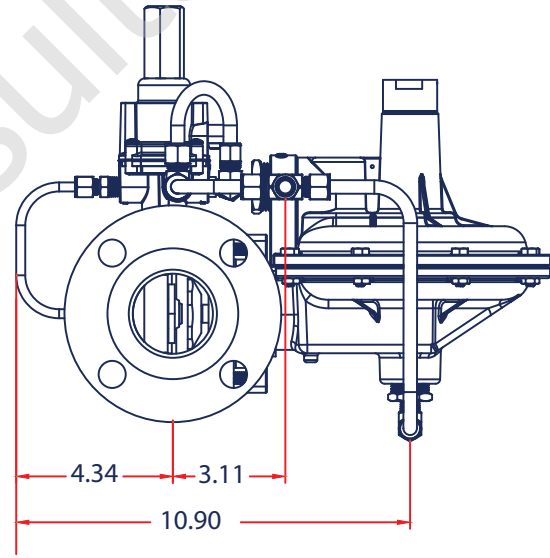
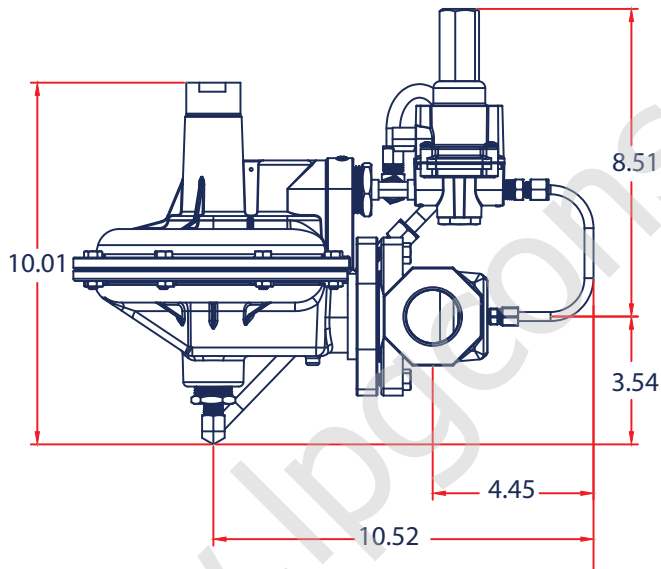
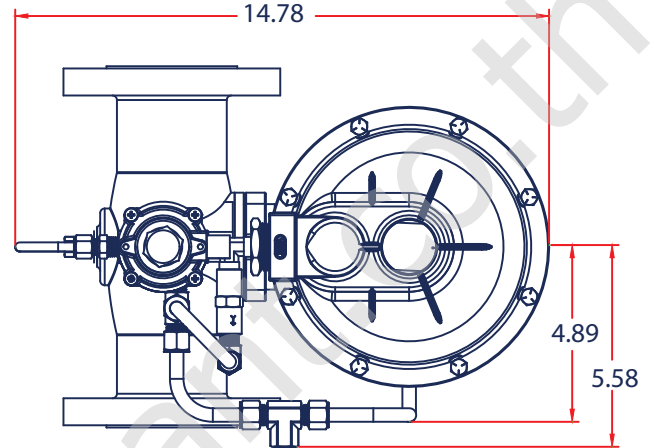
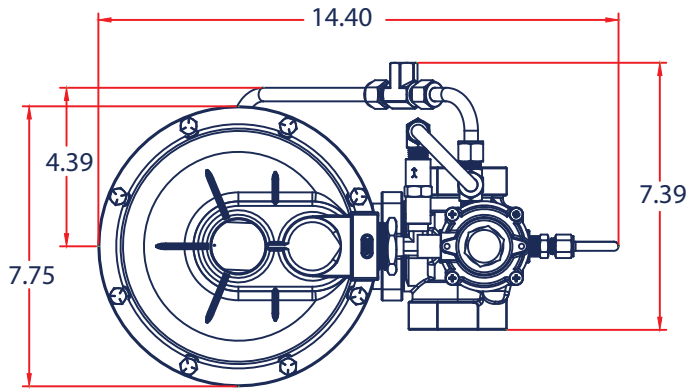
F300					0					Version
	▲	▲▲	▲▲▲	▲	▲	▲	▲	▲		Internal Registration
	D									External Registration
	P									Port Size
		12								1.25 NPT
		14								1.5 NPT
		15								1.5 x 2 NPT
		16								2 NPT
										Spring Range - WC or PSI / mBAR
			010							2 - 10 PSI / 138 - 689
			020							2 - 20 PSI / 138 - 1378
				0						Special Construction
					0					None
					A					150 RF (2" Steel Only)
					E					125 FF (2" Iron Only)
										Orifice
					3					3/16" (Only for P Version)
					4					1/4"
					6					3/8"
					8					1/2"
					B					3/4"
										Port Orientation
						3				Right
						4				Left
										Body Material
						0				Iron
						2				Steel

F200 Body Orientation*



* Port orientation is based on the body's "Out" port location in relation to the top view of the regulator.

F300 Dimensions



F300D flow Capacities in SCFH of 0.6 Specific Natural Gas, **Internal Registration**

Outlet Pressure, Spring Part Number, and Accuracy	Inlet Pressure		NPT 1.5 (DN40) Body Size				NPT 2.0 (DN50) Body Size			
			Orifice Size, Inches				Orifice Size, Inches			
	PSIG	BAR	1/4"	3/8"	1/2"	3/4"	1/4"	3/8"	1/2"	3/4"
2.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	5	0.34	800	2100	3000	5000	750	2000	3000	5000
	10	0.69	1250	3100	4800	6000	1300	3400	5000	8500
	15	1.00	1700	4200	6500	7000	1700	4300	6600	12000
	20	1.38	2000	5000	7500	7000	2100	5200	8300	14000
	30	2.10	2700	6500	9000		2750	6800	10000	
	50	3.45	4000	9000	9500		4000	9500	15000	
	60	4.10	4500	9500	9500		4700	11000	15000	
	80	5.52	5800	9500			6000	12900		
	100	6.90	7000				7000			
	125	8.60	7500				7500			
5.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	10	0.69	1250	3000	4200	7000	1200	3000	4000	700
	15	1.00	1700	4000	6000	7000	1700	4100	6000	10000
	20	1.38	2000	5000	7500	7000	2100	5200	7200	13000
	30	2.10	2700	7000	10000		2750	6500	10000	
	50	3.45	4000	9000	11000		4000	9500	14000	
	60	4.10	4500	10500	11000		4700	11000	16000	
	80	5.52	5800	11500			6000	13000		
	100	6.90	7000				7000			
	125	8.60	7700				8000			
10.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	15	1.00	1400	3000	4600	7500	1300	3200	4000	7600
	20	1.38	1800	4000	6800	7500	1900	4200	6000	10000
	30	2.10	2700	6000	9800		2600	6500	10000	
	50	3.45	4000	9000	11000		4000	9200	15000	
	50	3.45	4000	9000	11000		4000	9200	15000	
	50	3.45	4000	9000	11000		4000	9200	15000	
	100	6.90	7200				7000			
	125	8.60	8500				8300			
15.0 PSI Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	20	1.38	1600	4000	5200	7500	1500	3500	5000	9000
	30	2.10	2600	6000	8500		2700	6000	8500	
	30	2.10	2600	6000	8500		2700	6000	8500	
	60	4.10	4600	10500	12000		4800	10500	17000	
	80	5.52	5900	12000			6000	13000		
	100	6.90	7200				7000			
	125	8.60	8500				8300			
20.0 PSIG Set Pressure XXX-XXX-XXX 20.0 PSI Set Pressure	30	2.10	2200	5500	7500		2400	5500	7500	
	50	3.45	3800	9500	11000		4000	9200	15000	
	60	4.10	4600	10500	13000		4800	10500	17000	
	80	5.52	5900	12000			6000	13000		
	100	6.90	7200				7000			
	125	8.60	8500				8300			

1. Limited due to boost

 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

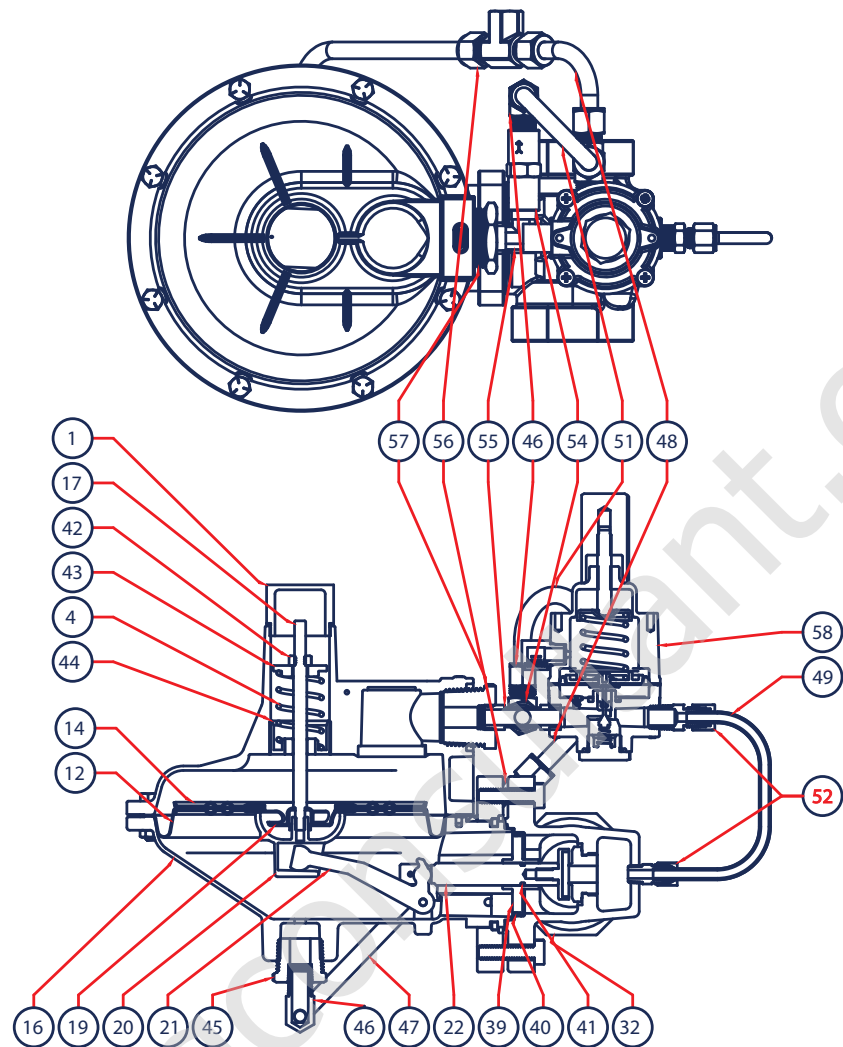
F300P flow Capacities in SCFH of 0.6 Specific Natural Gas, External Registration

Outlet Pressure, Spring Part Number, and Accuracy	Inlet Pressure		NPT 1.5 (DN40) Body Size				
			Orifice Size, Inches				
	PSIG	BAR	3/16"	1/4"	3/8"	1/2"	3/4"
2.0 PSIG Set Pressure XXX-XXX-XXX 2.0 PSI Set Pressure	5	0.34	510	770	1800	2100	4250
	10	0.69	870	1450	3050	4500	8350
	15	1.00	1130	1800	3700	5650	10900
	20	1.38	1280	2150	4900	7600	13500
	30	2.10	1600	2750	6100	9100	
	50	3.45	2350	4100	9000	13500	
	60	4.10	2700	4750	10300	16100	
	80	5.52	3450	6050	12900		
	100	6.90	4300	6900			
	125	8.60	5200	8300			
5.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	10	0.69	650	1300	2550	3200	6500
	15	1.00	900	1500	3300	5250	9600
	20	1.38	1290	2150	4700	7450	12900
	30	2.10	1600	2750	6100	9200	
	50	3.45	2350	4100	9000	13500	
	60	4.10	2700	4750	10300	16100	
	80	5.52	3450	6050	13000		
	100	6.90	4300	6900			
	125	8.60	5200	8300			
10.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	15	1.00	700	1150	2700	4100	7200
	20	1.38	1200	1950	4100	6000	11600
	30	2.10	1600	2750	6100	9200	
	50	3.45	2350	4100	9000	13500	
	60	4.10	2700	4750	10300	16100	
	80	5.52	3450	6050	13000		
	100	6.90	4300	6900			
	125	8.60	5200	8300			
15.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	20	1.38	1030	1650	3050	3800	7700
	30	2.10	1500	2450	5700	7800	
	50	3.45	2350	4100	9000	13500	
	60	4.10	2700	4750	10300	16100	
	80	5.52	3450	6050	13000		
	100	6.90	4300	6900			
	125	8.60	5200	8300			
20.0 PSIG Set Pressure XXX-XXX-XXX 0.5 PSIG Droop	30	2.10	1200	2100	4700	7300	
	50	3.45	2350	4100	9000	13500	
	50	3.45	2350	4100	9000	13500	
	80	5.52	3450	6050	13000		
	100	6.90	4300	6900			
	125	8.60	5200	8300			

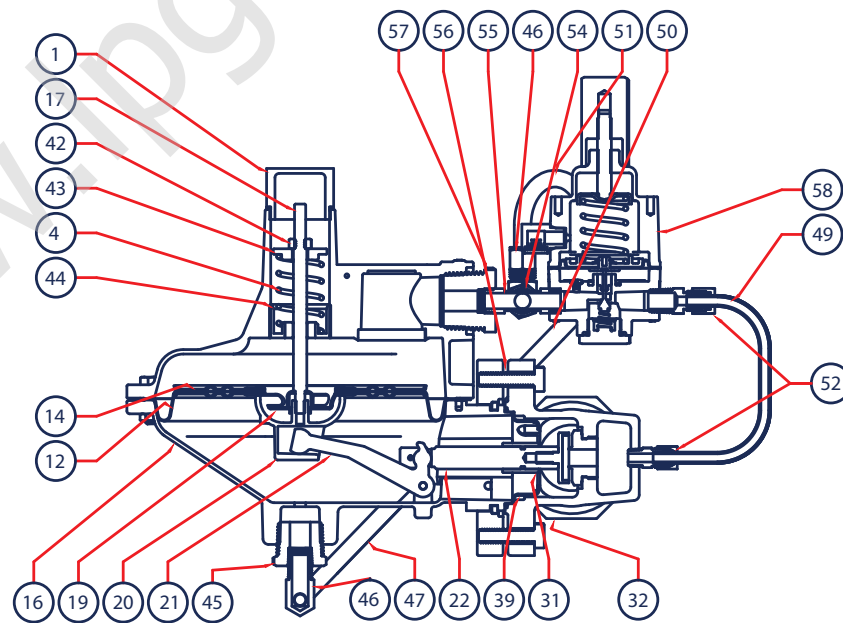
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 - Shaded areas show where maximum operating inlet pressure for a given port diameter is exceeded.

F300P



F300D



Item	Description	Qty.	Part Number
1	Closing Cap	1	610-111-000
4	Closing Spring	1	655-808-000
12	Diaphragm	1	618-111-000
14	Diaphragm Plate	2	638-091-000
16	Lower Casing - Aluminum	1	629-259-001
17	Stem	1	689-035-000
19	Diaphragm relief	1	650-199-000
20	Pusher Post, F300	1	637-340-002
21	Lever - Plated Steel - F300	1	703-012-001
22	Valve Stem - F300	1	651-107-001
28	Throat Baffle (F300D Only)	1	686-007-000
31	Stem Guide (F300D Only)	1	626-122-000
32	Body, 1-1/4 NPT	1	664-576-002
	Body, 1-1/2 NPT		664-576-003
	Body, 2" NPT - Iron		664-443-000
	Body, 2" NPT - Steel		664-443-001
	Body, 1-1/2 x 2" NPT - Iron		664-441-000
	Body, 1-1/2 x 2" NPT - Steel		664-441-001
	CL 125FF 2" - Iron		664-444-000
	CL 150RF 2" - Steel		664-444-001
34	Bonnet O Version	1	604-274-000
37	Body Adaptor - 2" Only	1	654-199-000
38	O-Ring - Body Adapter - 2" Only	1	649-000-152
39	Throat Block (F300P Only)	1	653-064-000
40	O-Ring - Throat Block (F300P Only)	1	649-392-000
41	O-Ring - Valve Stem (F300P Only)	1	649-269-005
42	Stem Nut	1	634-000-054
43	Spring Guide	1	626-130-000
44	Spring Seat	1	650-219-000
45	Lower Casing Bushing 3/4 x 1/4	1	622-076-000
46	Elbow 1/4 x 3/8	2	622-061-000
47	Sensing Tubing F300P Long End	1	660-149-000
48	Sensing Tubing F300P Short End	1	660-150-000
49	Pilot Supply Tubing	1	660-151-000
50	Sensing Tubing F300D	1	660-152-000
51	Relief Valve Tubing	1	660-124-000
52	Straight 1/4 X 1/4 Fitting	2	622-045-000
53	Right Angle Tee 1/4 X 3/8 X 3/8	1	622-074-000
54	Relief Valve	1	678-061-000
55	Tee M1/4 X M1/4 X M1/4	1	622-077-000
56	In-Line Tee F1/4 x 3/8 x 3/8 (F200P Only)	1	622-078-000
57	Bonnet Bushing 1 X 1/4	1	622-075-000
58	PL84 Pilot 2-10 PSI	1	832-036-002
	PL84 Pilot 2-20 PSI		832-036-003

