67CF SERIES FILTER REGULATOR SHOWN WITH OPTIONAL PRESSURE GAUGE

January 2013

67C Series Instrument Supply Regulators

- Designed for Digital Instrumentation
- Optional Smart Bleed[™] Construction
- Optional Stainless Steel Construction
- Compact and Light Weight
- No Air Loss
- Easy Maintenance
- Optional Integral Filter
- Optional Internal Relief Valve
- Rugged Construction



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Alla

67CF SERIES REGULATOR USED AS A SUPPLY REGULATOR FOR DIGITAL INSTRUMENTATION

> 67CF SERIES REGULATOR USED AS A PILOT SUPPLY REGULATOR FOR THE TYPE 299H PRESSURE REGULATOR

Figure 1. 67C Series Instrument Supply Regulators



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Specifications

The Specifications section gives some general specifications for the 67C Series regulator. A label on the spring case gives the control spring range for a given regulator as it comes from the factory.

Available Constructions	Smart Bleed™ Check Valve Setpoint
See Table 2	6 psi / 0.41 bar differential
Body Size, Inlet, and Outlet Connection Style	Pressure Registration
1/4 NPT	Internal
Construction Materials	Drain Valve and Spring Case Vent Location
See Table 3	Aligned with inlet standard, other positions optional
Maximum Inlet Pressure (Body Rating) ⁽¹⁾	Temperature Capabilities ⁽¹⁾ With Nitrile (NBR)
All except Types 67CS and 67CSR: 250 psig / 17.2 bar Types 67CS and 67CSR: 400 psig / 27.6 bar	Standard Bolting: -20 to 180°F / -29 to 82°C
Outlet Pressure Ranges	Standard Bolting: -20 to 180 F / -29 to 82 C Stainless Steel Bolting: -40 to 180°F / -40 to 82°C
See Table 1	With Fluorocarbon (FKM):
	Polyethylene Filter ⁽⁵⁾ (Standard): 0 to 180°F / -18 to 82°C
Maximum Emergency Outlet Pressure ⁽¹⁾	Polyvinylidene (PVDF), Stainless Steel, or
50 psi / 3.4 bar over outlet pressure setting	Glass Filter (Optional): 0 to 300°F / -18 to 149°C
Flow Capacities	With Silicone (VMQ) ⁽³⁾ Diaphragm and Low
See Table 4	Temperature bolting: -60 to 180°F / -51 to 82°C
Wide-Open Flow Coefficients	With Gauges: -40 to 180°F / -40 to 82°C
Main Valve: C_g : 11.7; C_V : 0.36; C_1 : 32.2	Types 67CF, 67CFR, 67CFS, and 67CFSR
Internal Relief Valve: Cg: 1.45; Cv: 0.045; C1: 32.8	Filter Capabilities
IEC Sizing Coefficients	Free Area: 12 times pipe area
Main Valve: X _T : 0.66; F _L : 0.89; F _D : 0.50	Micron Rating:
Accuracy	Polyethylene Filter ⁽⁵⁾ (Standard): 5 microns
Inlet Sensitivity for Nitrile (NBR) and Silicone (VMQ) Elastomers: Less than 0.2 psig /	Glass Fiber Filter (Optional): 5 microns
14 mbar change in outlet pressure for every 25 psig /	PVDF Filter (Optional): 40 microns
1.7 bar change in inlet pressure	Stainless Steel Filter (Optional): 40 microns
Inlet Sensitivity for Fluorocarbon (FKM) Elastomers:	Options
Less than 0.4 psig / 28 mbar change in outlet pressure	All Types
for every 25 psig / 1.7 bar change in inlet pressure	Handwheel adjusting screw
Repeatability for Nitrile (NBR) and Silicone (VMQ)	Inlet screen
Elastomers: 0.1 psig / 7 mbar ⁽²⁾	 NACE MR0175⁽⁴⁾ or NACE MR0103 construction
Repeatability for Fluorocarbon (FKM) Elastomers:	Panel mount (includes spring case with 1/4 NPT vent,
$0.3 \text{ psig} / 21 \text{ mbar}^{(2)}$	handwheel, and panel mounting nut)
Air Consumption: Testing repeatedly shows no	 Closing cap (available on spring case with 1/4 NPT vent)
discernible leakage	 Fluorocarbon (FKM) elastomers for high temperatures
Types 67CR, 67CSR, 67CFR, and 67CFSR Internal	and/or corrosive chemicals
Relief Performance	Silicone (VMQ) elastomers for cold temperatures
Low capacity for minor seat leakage only, other	Fixed Bleed Restriction
overpressure protection must be provided if inlet	Triple scale outlet pressure gauge (Brass or
pressure can exceed the maximum pressure rating of	Stainless steel)
downstream equipment or exceeds maximum outlet	Stainless steel stem on the valve plug
pressure rating of the regulator.	Tire valve or pipe plug in second outlet
Approximate Weights	Types 67CFR and 67CFSR only
Types 67C, 67CR, 67CF, and 67CFR:	 Smart Bleed internal check valve Large dripwell with manual or automatic drain
1 pound / 0.5 kg	Types 67CF and 67CFR only
Types 67CS and 67CSR:	Stainless steel drain valve
2.5 pounds / 1.1 kg	י טומוווודאא אודע אוזעל
Types 67CFS and 67CFSR:	
4 pounds / 1.8 kg	

 The pressure/temperature limits in this Bulletin and any applicable standard or code limitation should not be exceeded.
 Repeatability is the measure of the regulator's ability to return to setpoint consistently when traveling from steady state to transient to steady state. The pressuremperation mine in an 2 + 1 + 1
 Repeatability is the measure of the regulator's ability to return to setpoint consistently when traveuring
 Silicone (VMQ) is not compatible with hydrocarbon gas.
 Product complies with the material requirements of NACE MR0175. Environmental limits may apply.
 Do not use in high aromatic hydrocarbon service.

			CONTROL SPRING DATA							
TYPE	OUILEI PRES	UTLET PRESSURE RANGES			-	Wire Di	ameter	Free Length		
	psig	bar	Color	Material	Part Number	Inch	mm	Inch	mm	
67C, 67CR,	0 to 20 0 to 35 0 to 60 0 to 125	0 to 1.4 0 to 2.4 0 to 4.1 0 to 8.6	Green stripe Silver Blue stripe Red stripe	Music Wire	GE07809T012 T14059T0012 T14058T0012 T14060T0012	0.135 0.156 0.170 0.207	3.43 3.96 4.32 5.26	1.43 1.43 1.43 1.43	36.2 36.2 36.2 36.2	
67CF, and 67CFR	0 to 35 0 to 60 0 to 125	0 to 2.4 0 to 4.1 0 to 8.6	Silver stripe Blue Red	Inconel®	T14113T0012 T14114T0012 T14115T0012	0.156 0.172 0.207	3.96 4.37 5.26	1.43 1.43 1.43	36.2 36.2 36.2	
67CS, 67CSR, 67CFS, and 67CFSR	0 to 20 0 to 35 0 to 60 0 to 125 0 to 150	0 to 1.3 0 to 2.4 0 to 4.1 0 to 8.6 0 to 10.3	Green Silver stripe Blue Red Black	Inconel®	10C1729X012 T14113T0012 T14114T0012 T14115T0012 10C1730X012	0.135 0.156 0.172 0.207 0.250	3.43 3.96 4.37 5.26 6.35	1.50 1.43 1.43 1.43 1.43 1.77	38.1 36.2 36.2 36.2 44.9	

Table 1. Outlet Pressure Ranges and Control Spring Data

Introduction

The 67C Series regulators are typically used to provide constantly controlled, reduced pressures to pneumatic and electro-pneumatic controllers and other instruments. These direct-operated regulators are suitable for most air or gas applications. Other applications include providing reduced pressures to air chucks, air jets, and spray guns.

Features

- **Compact**—The 67C Series regulators are engineered for outstanding performance in a compact, lightweight package.
- **Panel Mounting**—Panel mount construction includes spring case with 1/4 NPT vent, handwheel adjusting screw, and mounting nut.
- Instrument Supply Regulator—The Types 67CF, 67CFR, 67CFS, and 67CFSR provide a clean air supply to a variety of pneumatic and electro-pneumatic instrumentation.
- **Digital Instrument Supply Regulator**—Designed to meet the accuracy, repeatability, and hysteresis demands of digital instrumentation.
- **Pilot Supply Regulator**—Improves the accuracy of two-path control regulators by reducing inlet sensitivity caused by fluctuating inlet pressures.
- Sour Gas Service Capability—NACE MR0175 and MR0103 compliant construction available.
- Optional Stainless Steel Construction—The Types 67CS, 67CSR, 67CFS, and 67CFSR provide high resistance to corrosion, which is especially beneficial for offshore applications.
- Full Usable Capacity—Fisher[®] regulators are laboratory tested. 100% of the published capacities can be used with confidence.
- Internal Relief—The Types 67CR, 67CSR, 67CFR, and 67CFSR have an internal relief valve with a soft seat

for reliable shutoff with no discernible leakage. These regulators are recommended for conserving plant air.

- Smart Bleed [™]—Opens to exhaust downstream pressure when inlet pressure drops below outlet pressure. Recommended for dead-end service.
- Integral Filter—The Types 67CF, 67CFR, 67CFS, and 67CFSR have an integral filter ensuring clean downstream air supply.
- Ease of Maintenance—No special tools required to perform maintenance, and all maintenance can be performed with the regulator in the line. Filter elements are easily replaced. The one-piece valve plug cartridge allows easy inspection and replacement.
- Rugged Construction—The 67C Series regulators are engineered for longer service life with minimal maintenance requirements.
- Second Outlet—Body side outlet for pressure gauge or other uses.
- **Powder Paint Coating**—Types 67C, 67CR, 67CF, and 67CFR are powder paint coated, offering impact, abrasion, and corrosion resistance. Stainless steel regulators (Types 67CS, 67CSR, 67CFS, and 67CFSR) are not painted.
- Corrosion Resistant Fasteners—Bolting and adjusting screw are double zinc-chromated for enhanced corrosion resistance. Optional stainless steel bolting and adjusting screw are also available.

Principle of Operation (Figure 2)

Downstream pressure is registered internally on the lower side of the diaphragm. When the downstream pressure is at or above the set pressure, the valve plug is held against the orifice and there is no flow through the regulator. When demand increases, downstream pressure drops slightly allowing the spring to extend, moving the stem down and the valve plug away from the orifice. This allows flow through the regulator.

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Table 2. Available Constructions

	CONSTRUCTION	FEATURES	OPTIONAL FEATURES BODY MATERI						
TYPE	With Internal Relief	ernal Relief With Filter Smart Bleed™ Internal Check Valve Airset Drain Valve Fixed Bl		Drain Valvo Eivod Blood Aluminum		With Filtor Drain Valvo Eivod Blood		Aluminum	Stainless Steel
67C						х			
67CR	Х				Х	х			
67CS							x		
67CSR	Х				Х		x		
67CF		Х		Х		х			
67CFR	Х	Х	Х	Х	Х	х			
67CFS		Х		Х			X		
67CFSR	Х	Х	Х	Х	Х		Х		

Table 3. Construction Materials

MATERIALS		TYI	PE					
MATERIALS	67C and 67CR	67CF and 67CFR	67CS and 67CSR	67CFS and 67CFSR				
BODY AND SPRING CASE	Aluminum (AST	M B85/Alloy 380)	CF8M/CF3M Stainless steel					
BOTTOM PLATE	316 Stainless steel		316 Stainless steel					
PUSHER POST AND VALVE CARTRIDGE		Polyeste	er resin					
UPPER SPRING SEAT	Zinc-pla	ted steel	316 S	tainless steel				
LOWER SPRING SEAT, DIAPHRAGM PLATE	Chromate conversion	on coated Aluminum	316 S	tainless steel				
CONTROL SPRING	Plated Steel or I	nconel® (NACE)	I	nconel®				
VALVE PLUG	Brass stem with N Aluminum stem with Nitrile (NB or Stainless steel stem	R) or Fluorocarbon (FKM) plug,	 M) plug, 316 Stainless steel stem with Nitrile (NBR) or Fluorocarbon (FKM) plug 					
VALVE SPRING	Stainless steel or	Inconel® (NACE)	Inconel®					
DIAPHRAGM AND O-RINGS		Nitrile (NBR), Fluorocarbon	(FKM), or Silicone (VMQ) ⁽¹⁾					
SOFT SEAT AND GASKETS		Nitrile (NBR) or Flu	Fluorocarbon (FKM)					
BOLTING, ADJUSTING SCREW, LOCKNUT	Zinc-plated steel	or Stainless steel	Stainless steel					
HANDWHEEL		Zinc-plated steel screw	with resin handwheel					
FILTER RETAINER		Plated Steel		316 Stainless steel				
FILTER ELEMENT		Polyethylene, Glass fiber, Stainless steel, or PVDF (Plastic)		Polyethylene, Glass fiber, 316 Stainless steel, or PVDF (Plastic)				
DRAIN VALVE		Brass or Stainless steel		316 Stainless steel or 18-8 Stainless steel				
DRIPWELL		Aluminum (ASTM B85/Alloy 380)	CF8M/CF3M Stainless stee					

Inconel[®] is a marked own by Special Metals Corporation.

Internal Relief (Types 67CR, 67CSR, 67CFR, and 67CFSR)

If for some reason, outside of normal operating conditions, the downstream pressure exceeds the setpoint of the regulator, the force created by the downstream pressure will lift the diaphragm until the diaphragm is lifted off the relief seat. This allows flow through the token relief. The relief valve on the Type 67CR, 67CSR, 67CFR, or 67CFSR is an elastomer plug that prevents leakage of air from the downstream to atmosphere during normal operation, thereby conserving plant air.

Smart Bleed Airset

In some cases, it is desired to exhaust downstream pressure if inlet pressure is lost or drops below the setpoint of the regulator. For example, if the regulator is installed on equipment that at times has no flow demand but is expected to backflow on loss of inlet pressure. The Type 67CFR or 67CFSR can be ordered with the Smart Bleed option which includes an internal check valve for this application. During operation, if inlet pressure is lost, or decreases below the setpoint of the regulator, the downstream pressure will back flow upstream through the regulator and check valve. This option eliminates the need for a fixed bleed downstream of the regulator, thereby conserving plant air.

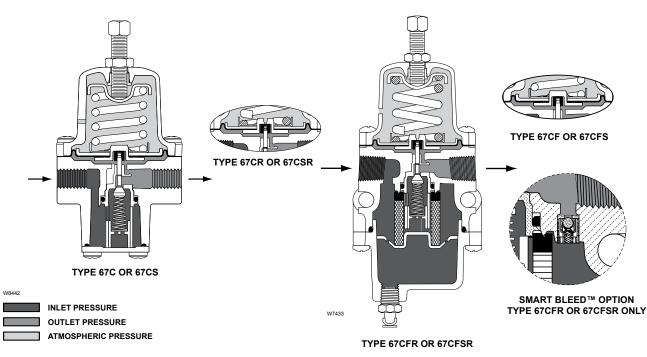


Figure 2. 67C Series Operational Schematics

Note

During normal operation the check valve's metal to metal seat allows limited flow through the regulator from the inlet to outlet, even when there is no downstream demand. To prevent downstream pressure buildup, the smart bleed option is only available with the internal relief version of the 67C Series.

Installation

The 67C Series regulators may be installed in any position. Spring case vents must be protected against the entrance of rain, snow, debris, or any other foreign material that might plug the vent openings. The inlet connection is marked "In" and the two outlet connections are marked "Out". If a pressure gauge is not installed in one outlet connection, plug the unused connection. See Figures 5 to 9 for dimensions.

Emerson Process Management Regulator Technologies, Inc. (Regulator Technologies) provides an instruction manual with every regulator shipped. Refer to this for complete installation, operation, and maintenance instructions. Included is a complete listing of individual parts and recommended spare parts.

Overpressure Protection

The 67C Series regulators have maximum outlet pressure ratings that are lower than their maximum inlet pressure ratings. A pressure-relieving or pressure-limiting device is needed if inlet pressure can exceed the maximum outlet pressure rating. Types 67CR, 67CSR, 67CFR, and 67CFSR regulators have a low capacity internal relief valve for minor seat leakage only. Other overpressure protection must be provided if the maximum inlet pressure can exceed the maximum pressure rating of the downstream equipment or exceeds maximum outlet pressure rating of the Type 67CR, 67CSR, 67CFR, or 67CFSR regulator.

Overpressuring any portion of a regulator or associated equipment may cause leakage, parts damage, or personal injury due to bursting of pressure-containing parts or explosion of accumulated gas. Regulator operation within ratings does not preclude the possibility of damage from external sources or from debris in the pipeline. A regulator should be inspected for damage periodically and after any overpressure condition.

Refer to the Capacity Information section and the Wide-Open Flow Coefficients for Relief Valve Sizing in the Specifications section on page 2 to determine the required relief valve capacity.

Capacity Information

Table 4 shows the air regulating capacities of the 67C Series regulators at selected inlet pressures and outlet pressure settings. Flows are shown in SCFH (at 60°F and 14.7 psia) and in Nm³/h (at 0°C and 1.01325 bar) of air.

Note

The 67C Series regulators may be sized for 100% flow using capacities as shown in Table 4. It is not necessary to reduce published capacities.

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Figure 3. 670 Series Typical Panel Layouts

(27)

(†)

VENT POSITION 1

INLET

VENT POSITION 4

(STANDARD)

B2699 C

VENT POSITION 2

(4

(£3)

OUTLET

(53

53

VENT POSITION

GAUGE



VENT POSITION 3

FLANGE SCREW

CHANGEOVER VALVE

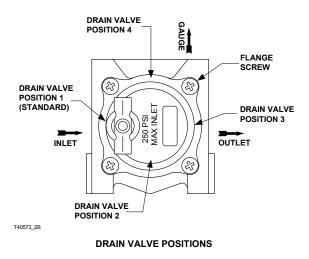


Figure 4. 67C Series Vent and Drain Valve Positions

To determine the equivalent capacities for other gases, multiply the table capacity by the following appropriate conversion factor: 1.29 for 0.6 specific gravity natural gas, 0.810 for propane, 0.707 for butane, or 1.018 for nitrogen. For gases of other specific gravities, divide the table capacities by the square root of the appropriate specific gravity. To find wide-open flow capacities for relief sizing at any inlet pressure, perform one of the following procedures. Then, if necessary, convert using the factors provided above.

For critical pressure drops (absolute outlet pressure equal to or less than one-half of absolute inlet pressure), use the following formula:

$$\mathsf{Q}=(\mathsf{P}_1)(\mathsf{C}_g)$$

For pressure drops lower than critical (absolute outlet pressure greater than one-half of absolute inlet pressure), use the following formula:

$$Q = \sqrt{\frac{520}{GT}} C_g P_1 SIN \left(\frac{3417}{C_1} \sqrt{\frac{\triangle P}{P_1}} \right) DEG$$

where,

- Q = gas flow rate, SCFH
- P_1 = absolute inlet pressure, psia (P_1 gauge + 14.7)
- C_q = gas sizing coefficient
- G = specific gravity of the gas
- T = absolute temperature of gas at inlet, °Rankine
- C_1 = flow coefficient ($C_g \div C_v$)
- $\triangle P$ = pressure drop across the regulator, psi

Then, if capacity is desired in normal cubic meters per hour (at 0°C and 1.01325 bar), multiply SCFH by 0.0268.

670 Series Panel-Mounted Loading Regulators (Figure 3)

The 670 Series panel-mounted loading regulators are compact, rugged units used primarily for manually loading pressure-balanced gas regulators and providing manual control for diaphragm actuator control valves. Applications include remote control of gas pressure to burners in refineries, power plants, and various process furnaces.

Table 4. 67C Series Flow Capacities

OUTLET PRESSURE							CAPAC	ITIES IN SO	CFH / Nm ³ /	h of Air		
RANGE, SPRING		SURE		LET SURE	Types	67C, 67CR,	67CS, and	67CSR	Types 67	CF, 67CFR	67CFS, ar	nd 67CFSF
PART NUMBER	FREG	JUKE	FRES	JUKE	10%	Droop	20% I	Droop	10% Droop		20% Droop	
AND COLOR CODE	psig	bar	psig	bar	SCFH	Nm ³ /h	SCFH	Nm ³ /h	SCFH	Nm ³ /h	SCFH	Nm³/h
			50	3.4	250	6.7	430	11.5	250	6.7	430	11.5
			75	5.2	340	9.1	610	16.3	300	8.0	690	18.5
	15	1.0	100	6.9	430	11.5	800	21.4	330	8.8	1000	26.8
	15	1.0	150	10.3	680	18.2	1200	32.2	400	10.7	1600	42.9
			250	17.2	1300	34.8	1900	50.9	450	12.1	1800	48.2
			400	27.6 ⁽¹⁾	390	10.5	1850	50.0				
0 to 35 psig /			50	3.4	310	8.3	460	12.3	350	9.4	500	13.4
0 to 2.4 bar			75	5.2	420	11.3	700	18.8	530	14.2	820	22.0
T14059T0012 (Silver)	20	1.4	100	6.9	620	16.6	940	25.2	750	20.1	1100	29.5
T14113T0012	20	1.4	150	10.3	960	25.7	1450	38.9	1400	37.5	1600	42.9
(Silver stripe)			250	17.2	1550	41.5	2150	57.6	2550	68.3	2700	72.4
(Oliver stripe)			400	27.6 ⁽¹⁾	1200	32.2	2750	73.7				
			50	3.4	390	10.5	490	13.1	390	10.4	500	13.4
		2.4	75	5.2	590	15.8	850	22.8	640	17.2	820	22.0
	35		100	6.9	770	20.6	1150	30.8	840	22.5	1100	29.5
	55	2.7	150	10.3	1200	32.2	1750	46.9	1450	38.9	1650	42.9
			250	17.2	2200	58.9	2700	72.4	2450	65.7	2700	72.4
			400	27.6(1)	2850	76.4	3450	92.5				
			50	3.4	310	8.3	440	11.8	330	8.8	470	12.6
			75	5.2	440	11.8	670	18.0	500	13.4	730	19.6
	35	2.4	100	6.9	560	15.0	900	24.1	700	18.8	1000	26.8
0 to 60 psig /	00	2.7	150	10.3	780	20.9	1350	36.2	1050	28.1	1550	41.5
0 to 4.1 bar			250	17.2	1450	38.9	2200	59.0	2000	53.6	2600	69.7
T14058T0012			400	27.6 ⁽¹⁾	770	20.6	2500	67.0				
(Blue stripe)			75	5.2	520	13.9	720	19.3	520	13.9	720	19.3
T14114T0012 (Blue)		4.1	100	6.9	750	20.1	1050	28.1	770	20.6	1000	26.8
	60		150	10.3	1100	29.5	1700	45.6	1100	29.5	1600	42.9
			250	17.2	2050	54.9	2850	76.4	2450	65.7	2750	73.7
			400	27.6 ⁽¹⁾	3200	85.8	4300	115				
			100	6.9	500	13.4	800	21.4	530	14.2	780	20.9
0 to 125 psig /	80	5.5	150	10.3	750	20.1	1200	32.2	780	20.9	1200	32.2
0 to 8.6 bar			250	17.2	1200	32.2	2050	54.9	1250	33.5	2200	59.0
T14060T0012			400	27.6 ⁽¹⁾	910	24.4	3700	99.2				
(Red stripe)			150	10.3	900	24.1	1250	33.5	900	24.1	1150	30.8
T14115T0012 (Red)	125	8.6	250	17.2	1560	41.8	2450	65.7	1650	44.2	2450	65.7
			400	27.6 ⁽¹⁾	2200	59.0	4350	117				
	80	5.5	250	17.2	550	14.7	1200	32.2	550	14.7	1200	32.2
0 to 150 main /		0.0	400	27.6 ⁽¹⁾	400	10.7	1100	29.5				
0 to 150 psig / 0 to 10.3 bar ⁽²⁾	135	9.3	250	17.2	970	26.0	1800	48.2	1100	29.5	1800	48.2
10C1730X012 (Black)	155	9.5	400	27.6 ⁽¹⁾	840	22.5	2350	63.0				
(DIGOR)	150	10.2	250	17.2	1100	29.5	1850	49.6	1100	29.5	1850	49.6
	150	10.3	400	27.6(1)	940	25.2	2500	67.0				

Inlet pressures above 250 psig / 17.2 bar with a maximum of 400 psig / 27.6 bar are only available on Types 67CS and 67CSR
 Available for Types 67CS, 67CSR, 67CFS, and 67CFSR only.

Three basic panels are available within the product line, each having one 67C Series pressure regulator connected to one or two gauges and a changeover valve.

A single gauge typically shows loading pressure to the control valve. For more information, see Bulletin 62.3:670.

NACE Universal Compliance

Optional materials are available for applications handling sour gases. These constructions comply with the recommendations of NACE International sour service standards.

The manufacturing processes and materials used by Emerson assure that all products specified for sour gas service comply with the chemical, physical, and metallurgical requirements of NACE MR0175 and/or NACE MR0103. Customers have the responsibility to specify correct materials. Environmental limitations may apply and shall be determined by the user.

Ordering Information

When ordering, complete the Ordering Guide on pages 11 and 12. Refer to the Specifications section on page 2. Review the description to the right of each specification and the information in each referenced table or figure. Specify your choice whenever a selection is offered.

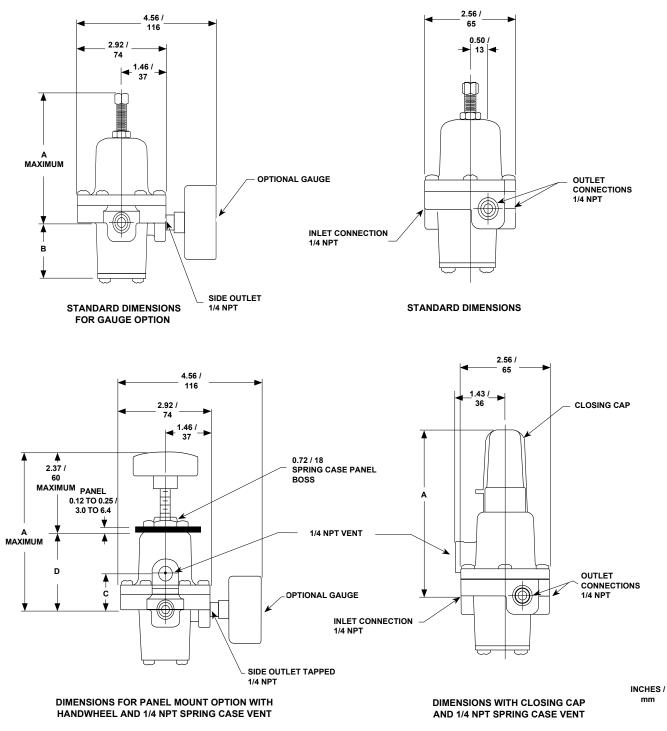


Figure 5. Types 67C, 67CR, 67CS, and 67CSR Dimensions

Table 5. Types 67C, 67CR, 67CS, and 67CSR Dimensions

	ST	ANDARD	DIMENSION	IS	DIMENSI		PANEL	MOUNT OF				NSIONS
TYPE	4	4	E	3	ļ 4	۱	A C		D			
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
67C and 67CR	3.50	89	1.51	38	4.60	117	4.69	119	1.08	27	2.33	59
67CS and 67CSR	4.13	105	1.62	41	4.93	125	5.00	127	1.14	29	2.65	67

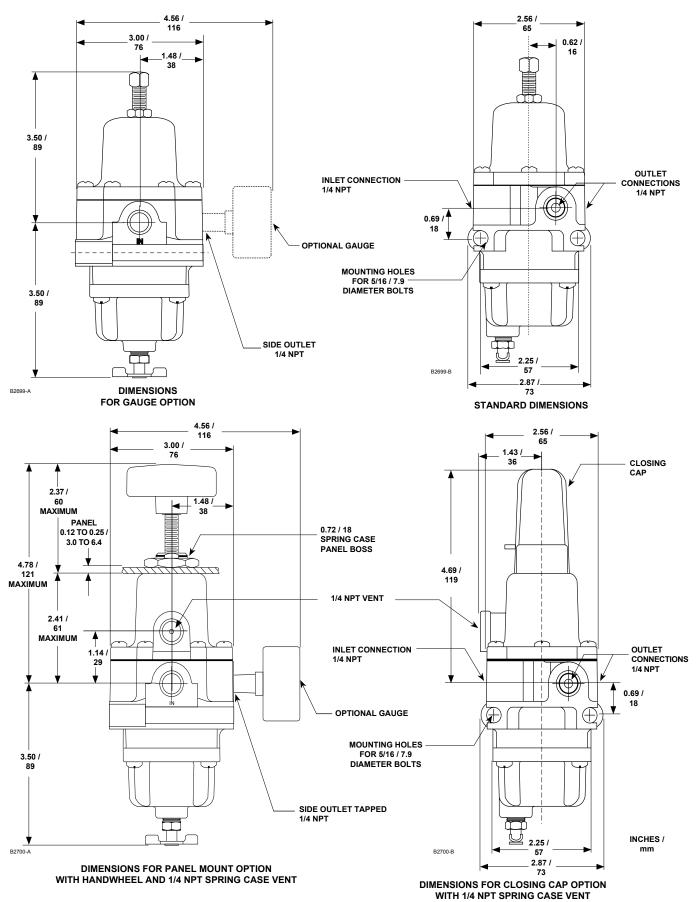


Figure 6. Types 67CF and 67CFR Dimensions

Bulletin 71.1:67C

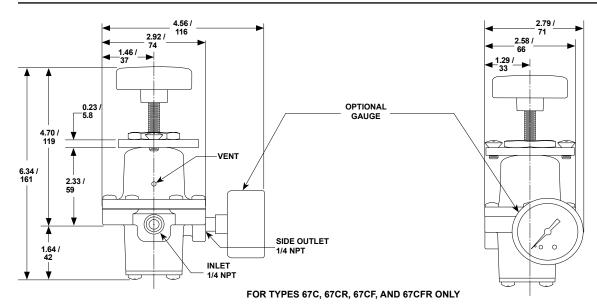
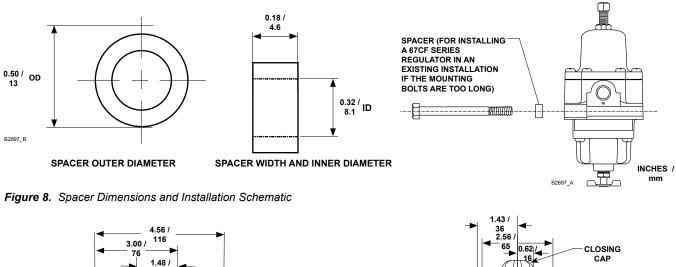
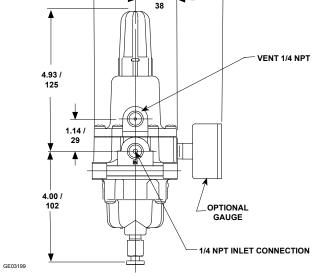
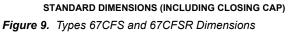
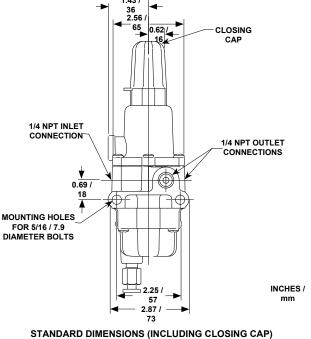


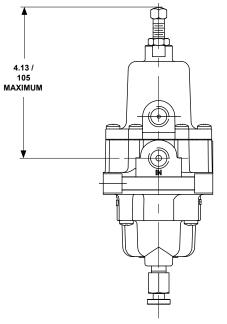
Figure 7. Dimensions for 3-Hole Panel Mount Option With Handwheel and 1/4 NPT Spring Case Vent











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DIMENSIONS WITHOUT CLOSING CAP

Figure 9. Types 67CFS and 67CFSR Dimensions (continued)

Ordering Guide

Type (Select One)

- □ 67C (Aluminum without internal relief)***
- □ 67CR (Aluminum with internal relief)***
- □ 67CS (Stainless steel without internal relief)***
- □ 67CSR (Stainless steel with internal relief)***
- □ 67CF (Aluminum with filter and without internal relief)***
- □ 67CFR (Aluminum with filter and internal relief)***
- □ 67CFS (Stainless steel with filter and without internal relief)***
- □ 67CFSR (Stainless steel with filter and internal relief)***

Quantity (Specify)

Spring Case Style (Select One)

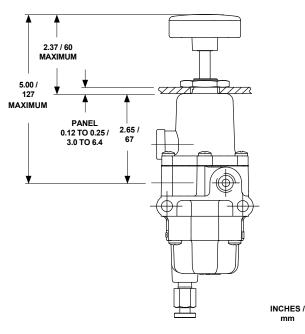
- □ Drilled hole vent (Types 67C, 67CR, 67CF, and 67CFR **standard**)***
- □ 1/4 NPT vent (Types 67CS, 67CSR, 67CFS, and 67CFSR **standard**)***
- □ Single hole panel mount***
- 3-hole panel mount (Types 67C, 67CR, 67CF, and 67CFR only)***

Adjusting Screw (Select One)

- □ Square head (Types 67C, 67CR, 67CF, and 67CFR standard)***
- Square head with closing cap (Types 67CS, 67CSR, 67CFS, and 67CFSR standard)***
- □ Handwheel***

Outlet Pressure Range (Select One)

- □ 0 to 20 psig / 0 to 1.4 bar***
- O to 35 psig / 0 to 2.4 bar***
- □ 0 to 60 psig / 0 to 4.1 bar***
- □ 0 to 125 psig / 0 to 8.6 bar***
- □ 0 to 150 psig / 0 to 10.3 bar (Types 67CS, 67CSR, 67CFS, and 67CFSR only)***



DIMENSIONS FOR PANEL MOUNT OPTION WITH HANDWHEEL

Diaphragm, O-Rings, and Valve Plug (Select One)

- Nitrile (NBR) (standard)***
- □ Fluorocarbon (FKM)**
- Silicone (VMQ) diaphragm, O-rings, and Nitrile (NBR) valve plug*

Filter Material (Select One)

- □ Polyethylene (5 microns) (standard)***
- □ Glass (5 microns)***
- □ PVDF (Plastic) (40 microns)***
- □ Stainless steel (40 microns)***

Dripwell

- Standard
- Large capacity with manual drain valve
- □ Large capacity with automatic drain valve, Nitrile (NBR)
- Large capacity with automatic drain valve, Fluorocarbon (FKM)

Drain Valve (for Manual Drain Only) (Select One)

- □ Brass (Types 67CF and 67CFR standard)***
- □ Stainless steel (Types 67CFS and 67CFSR standard)***

Drain Valve Location (for Standard Dripwell Only)

- (Select One)
- Position 1 Aligned with inlet (standard)***
- □ Position 2
- □ Position 3
- Position 4

Spring Case Vent Location (Select One)

- □ Position 1 Aligned with inlet (standard)***
- Position 2
- □ Position 3

Position 4

Fixed Bleed for Type 67CR, 67CSR, 67CFR, or 67CFSR (Optional)

□ Yes**

Ordering Guide (continued)

Smart Bleed™ Internal Check Valve Airset for Types 67CFR and 67CFSR (Optional)

□ Yes**

Second Outlet (Select One)

- □ Open (Types 67C, 67CR, 67CF, and 67CFR standard)***
- Plugged with pipe plug (Types 67CS, 67CSR, 67CFS, and 67CFSR standard)***
- □ Tire Valve***
- □ Pressure Gauge (see below)

Triple Scale Pressure Gauge (Optional)

□ Brass Gauge or □ Stainless Steel Gauge

- □ 0 to 30 psig / 0 to 0.2 MPa / 0 to 2.1 bar***
- □ 0 to 60 psig / 0 to 0.4 MPa / 0 to 4.1 bar***
- □ 0 to 160 psig / 0 to 1.1 MPa / 0 to 11.0 bar***

NACE MR0175 Construction (Optional)⁽¹⁾

 \Box Yes (not available with gauge)**

1. Product complies with the material requirements of NACE MR0175. Environmental limits may apply.

	Regulators Quick Order Guide								
* * *	Readily Available for Shipment								
* *	Allow Additional Time for Shipment								
*	Special Order, Constructed from Non-Stocked Parts. Consult your local Sales Office for Availability.								
Availability of the product being ordered is determined by the component with the longest shipping time for the requested construction.									

NACE MR0103 Construction (Optional) □ Yes (not available with gauge)**

Replacement Parts Kit (Optional)

□ Yes, send one replacement parts kit to match this order.

Specification Worksheet Application (Please designate units):
Specific Use
Gas Type and Specific Gravity
Gas Temperature
Does the Application Require Overpressure Protection?
☐ Yes ☐ No If yes, which is preferred:
Relief Valve Monitor Regulator
Shutoff Device
Is overpressure protection equipment selection assistance desired?
Pressure (Please designate units):
Maximum Inlet Pressure (P1max)
Minimum Inlet Pressure (P _{1min})
Downstream Pressure Setting(s) (P ₂)
Maximum Flow (Q _{max})
Performance Required:
Accuracy Requirements?
Need for Extremely Fast Response?
Other Requirements:

Industrial Regulators

Natural Gas Technologies

TESCOM

For further information visit www.fisherregulators.com

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