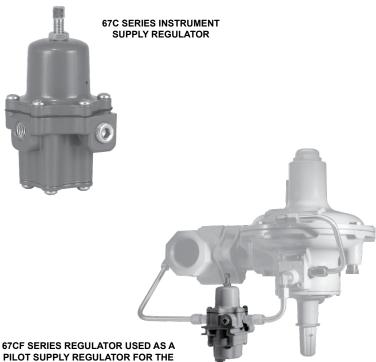
# **67C Series Instrument Supply Regulators**

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





TYPE 299H PRESSURE REGULATOR

Figure 1. 67C Series Instrument Supply Regulators





W7426\_1

### **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**

See Table 2

### Body Size, Inlet and Outlet Connection Style

1/4 NPT

### **Construction Materials**

See Table 3

### Maximum Inlet Pressure (Body Rating)(1)

All except Types 67CS and 67CSR: 250 psig / 17.2 bar Types 67CS and 67CSR: 400 psig / 27.6 bar

**Outlet Pressure Ranges** 

See Table 1

### Maximum Emergency Outlet Pressure(1)

50 psi / 3.4 bar over outlet pressure setting

### **Flow Capacities**

See Table 4

### **Wide-Open Flow Coefficients**

**Main Valve:**  $C_g$ : 11.7;  $C_v$ : 0.36;  $C_1$ : 32.2

Internal Relief Valve:  $C_g$ : 1.45;  $C_v$ : 0.045;  $C_1$ : 32.8

**IEC Sizing Coefficients** 

**Main Valve:**  $X_T$ : 0.66;  $F_L$ : 0.89;  $F_D$ : 0.50

### Inlet Sensitivity for Nitrile (NBR) and

Silicone (VMQ) Elastomers: Less than 0.2 psig / 14 mbar change in outlet pressure for every 25 psig /

1.7 bar change in inlet pressure

### Inlet Sensitivity for Fluorocarbon (FKM) Elastomers:

Less than 0.4 psig / 28 mbar change in outlet pressure for every 25 psig / 1.7 bar change in inlet pressure

Repeatability for Nitrile (NBR) and Silicone (VMQ)

Elastomers: 0.1 psig / 7 mbar<sup>(2)</sup>

### Repeatability for Fluorocarbon (FKM) Elastomers:

0.3 psig / 21 mbar<sup>(2)</sup>

Air Consumption: Testing repeatedly shows no

discernible leakage

### Types 67CR, 67CSR, 67CFR and 67CFSR Internal **Relief Performance**

Low capacity for minor seat leakage only, other overpressure protection must be provided if inlet pressure can exceed the maximum pressure rating of downstream equipment or exceeds maximum outlet pressure rating of the regulator.

### **Approximate Weights**

Types 67C, 67CR, 67CF and 67CFR:

1 lb / 0.5 ka

### Types 67CS and 67CSR:

2.5 lbs / 1.1 kg

### Types 67CFS and 67CFSR:

4 lbs / 1.8 kg

### Smart Bleed™ Check Valve Setpoint

6 psi / 0.41 bar differential

### **Pressure Registration**

Internal

### **Drain Valve and Spring Case Vent Location**

Aligned with inlet standard, other positions optional

### Temperature Capabilities(1)

### With Nitrile (NBR)

Standard Bolting: -20 to 180°F / -29 to 82°C Stainless Steel Bolting: -40 to 180°F / -40 to 82°C

### With Fluorocarbon (FKM):

Polyethylene Filter(5) (standard): 0 to 180°F / -18 to 82°C Polyvinylidene (PVDF), Stainless Steel or Glass Filter (Optional): 0 to 300°F / -18 to 149°C With Silicone (VMQ)(3) Diaphragm and Low Temperature bolting: -60 to 180°F / -51 to 82°C With Gauges: -40 to 180°F / -40 to 82°C

### Types 67CF, 67CFR, 67CFS and 67CFSR

**Filter Capabilities** 

Free Area: 12 times pipe area

Micron Rating:

Polyethylene Filter<sup>(5)</sup> (Standard): 5 microns Glass Fiber Filter (Optional): 5 microns PVDF Filter (Optional): 40 microns

Stainless Steel Filter (Optional): 40 microns

### **Options**

### **All Types**

- · Handwheel adjusting screw
- · Inlet screen
- NACE MR0175<sup>(4)</sup> or NACE MR0103 construction
- Panel mount (includes spring case with 1/4 NPT vent, handwheel and panel mounting nut)
- Closing cap (available on spring case with 1/4 NPT vent)
- Fluorocarbon (FKM) elastomers for high temperatures and/or corrosive chemicals
- · Silicone (VMQ) elastomers for cold temperatures
- · Fixed Bleed Restriction
- Triple scale outlet pressure gauge (Brass or Stainless steel)
- · Stainless steel stem on the valve plug
- · Tire valve or pipe plug in second outlet

### Types 67CFR and 67CFSR only

- · Smart Bleed internal check valve
- Large dripwell with manual or automatic drain

### Types 67CF and 67CFR only

· Stainless steel drain valve

<sup>1.</sup> 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

Silicone (VMQ) is not compatible with hydrocarbon gas.
 Product complies with the material requirements of NACE MR0175. Environmental limits may apply.

<sup>5.</sup> Do not use in high aromatic hydrocarbon service.

TYPE	OUTLET DDES	SURE RANGE			CONTROL	SPRING DATA					
	OUILETPRES	SORE RANGE	0-1	Matarial	Don't Normalism	Wire D	ameter	Free L	ength.		
	psig	bar	Color	Material	Part Number	In.	mm	ln.	mm		
67C, 67CR, 67CF and 67CFR	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 1.77	38.1 36.2 36.2 36.2 44.9		

### 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<sup>™</sup>—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.

Table 2. Available Constructions

	CONSTRUCTION	FEATURES	OPTION	BODY MATERIAL			
TYPE	With Internal Relief	With Filter	Smart Bleed™ Internal Check Valve Airset	Drain Valve	Fixed Bleed	Aluminum	Stainless Steel
67C						Х	
67CR	Х				Х	Х	
67CS							Х
67CSR	X				X		X
67CF		Х		Х		Х	
67CFR	Х	Х	Х	Х	Х	Х	
67CFS		Х		Х			Х
67CFSR	X	X	X	X	Х		Х

Table 3. Construction Materials

MATERIAL		TYP	E					
WATERIAL	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	r resin					
UPPER SPRING SEAT	Zinc-pla	ted steel	316 Sta	inless steel				
LOWER SPRING SEAT, DIAPHRAGM PLATE	Chromate conversion	on coated Aluminum	316 Stainless steel					
CONTROL SPRING	Plated Steel or	Inconel® (NACE)	Inconel®					
VALVE PLUG	Aluminum stem with Nitrile (NE	Nitrile (NBR) plug, BR) or Fluorocarbon (FKM) plug with Nitrile (NBR) 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 (	n (FKM) or Silicone (VMQ) <sup>(1)</sup>					
SOFT SEAT AND GASKETS		Nitrile (NBR) or Flu	orocarbon (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 316 Stainless ste 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 ste					

### 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.

Inconel® is a marked own by Special Metals Corporation.

### 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.

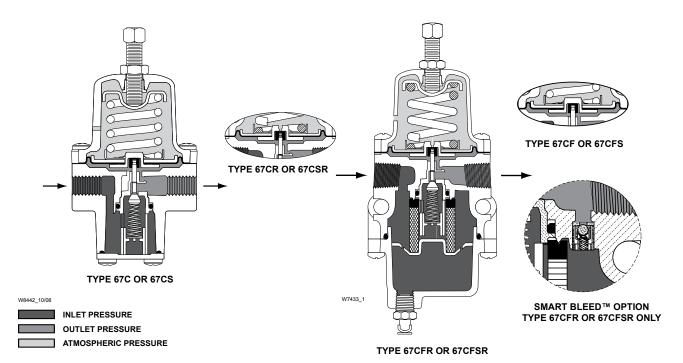


Figure 2. 67C Series Operational Schematics

### 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 but vertical orientation is recommended for 67C Series models with draining features. 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. (Emerson) 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.



INSTRUMENT COLOMONIC PRESSURE CO

2-GAUGE PANEL WITH CHANGEOVER VALVE

Figure 3. 670 Series Typical Panel Layouts

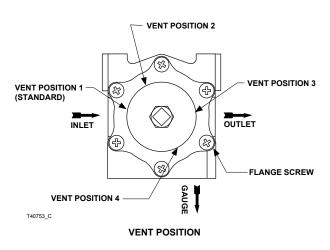


Figure 4. 67C Series Vent and Drain Valve Positions

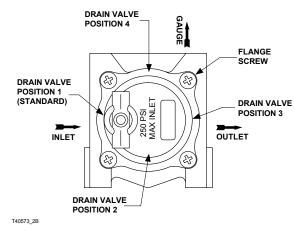
To determine the equivalent capacities for other gases, multiply the table capacity by the following appropriate conversion factor: 1.29 for 0.6 specific gravity natural gas, 0.810 for propane, 0.707 for butane or 1.018 for nitrogen. For gases of other specific gravities, divide the table capacities 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:

$$Q = (P_1)(C_0)$$

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

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



**DRAIN VALVE POSITIONS** 

where,

Q = gas flow rate, SCFH

W0554 1

P<sub>1</sub> = absolute inlet pressure, psia (P<sub>1</sub> gauge + 14.7)

C<sub>g</sub> = gas sizing coefficient G = specific gravity of the gas

T = absolute temperature of gas at inlet, °Rankine

 $C_1$  = flow coefficient ( $C_0 \div C_v$ )

 $\triangle P$  = 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 S	CFH / Nm³/	h OF AIR		
RANGE, SPRING		LET SURE		LET SURE	Types	67C, 67CR	, 67CS and	67CSR	Types 6	7CF, 67CFR	, 67CFS an	d 67CFSR
PART NUMBER	PRES	TRESSORE		TRESSURE		10% Droop		20% Droop		10% Droop		Droop
AND COLOR CODE	psig	bar	psig	bar	SCFH	Nm³/h	SCFH	Nm³/h	SCFH	Nm³/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
			150	10.3	680	18.2	1200	32.2	400	10.7	1600	42.9
			250 400	17.2 27.6 <sup>(1)</sup>	1300 390	34.8 10.5	1900 1850	50.9 50.0	450	12.1	1800	48.2
			50	3.4	310	8.3	460	12.3	350	9.4	500	13.4
0 to 35 psig /			75	5.4	420	11.3	700	18.8	530	14.2	820	22.0
0 to 2.4 bar			100	6.9	620	16.6	940	25.2	750	20.1	1100	29.5
T14059T0012 (Silver)	20	1.4	150	10.3	960	25.7	1450	38.9	1400	37.5	1600	42.9
T14113T0012			250	17.2	1550	41.5	2150	57.6	2550	68.3	2700	72.4
(Silver 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
			75	5.2	590	15.8	850	22.8	640	17.2	820	22.0
	35	2.4	100	6.9	770	20.6	1150	30.8	840	22.5	1100	29.5
	33	2.4	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	1 1	
	35	2.4	100	6.9	560	15.0	900	24.1	700	18.8	1000	
0 to 60 psig /	00		150	10.3	780	20.9	1350	36.2	1050	28.1		730 19.6 1000 26.8 1550 41.5 2600 69.7
0 to 4.1 bar			250 400	17.2 27.6 <sup>(1)</sup>	1450 770	38.9 20.6	2200 2500	59.0 67.0	2000	53.6	2600	69.7
T14058T0012 (Blue stripe)			75	-	520	13.9	720	19.3		13.9	720	19.3
T14114T0012 (Blue)	60	4.1	100	5.2 6.9	750	20.1	1050	28.1	520 770	20.6	1000	26.8
(2.00)			150	10.3	1100	29.5	1700	45.6	1100	29.5	1600	42.9
	00	7.1	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	60	5.5	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 psig /		0.0	400	27.6(1)	400	10.7	1100	29.5				
0 to 10.3 bar <sup>(2)</sup>	135	9.3	250	17.2	970	26.0	1800	48.2	1100	29.5	1800	48.2
10C1730X012 (Black)		0.0	400	27.6(1)	840	22.5	2350	63.0				
	150	10.3	250	17.2	1100	29.5	1850	49.6	1100	29.5	1850	49.6
	150   1	10.0	400	27.6(1)	940	25.2	2500	67.0				

<sup>1.</sup> 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. 2. 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.

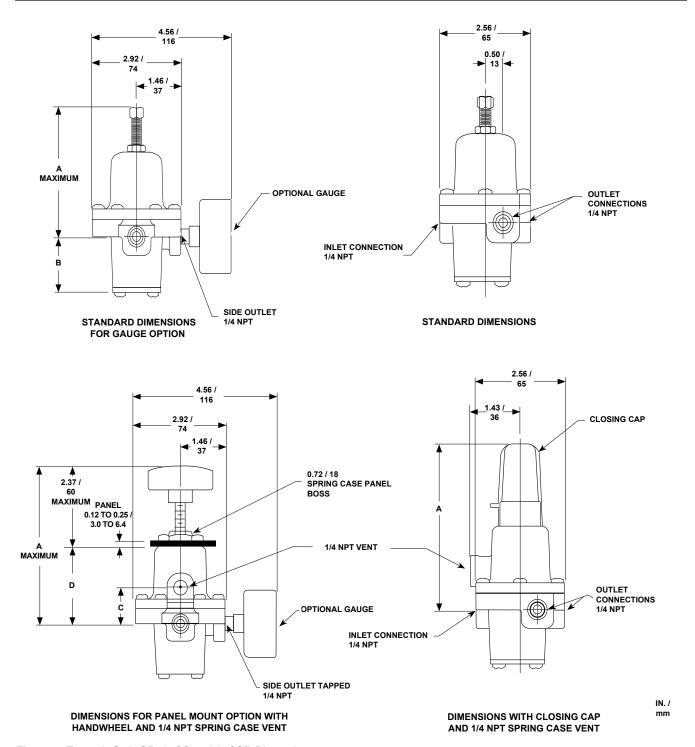


Figure 5. Types 67C, 67CR, 67CS and 67CSR Dimensions

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

	s	TANDARD	DIMENSIO	N	DIMENSI	ON WITH IG CAP	PANEL	. MOUNT O	PTION WIT	H HANDWI	HEEL DIME	NSION				
TYPE	Α		E	3	ļ ,	A C		A A C		Α		A		0	D	
	ln.	mm	ln.	mm	ln.	mm	ln.	mm	ln.	mm	ln.	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				

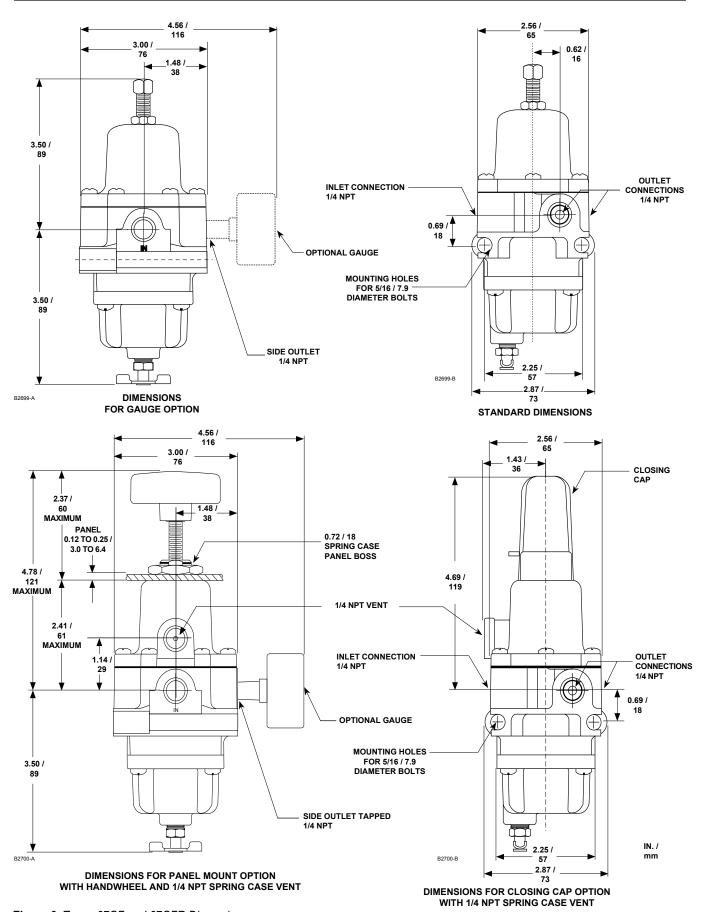


Figure 6. Types 67CF and 67CFR Dimensions

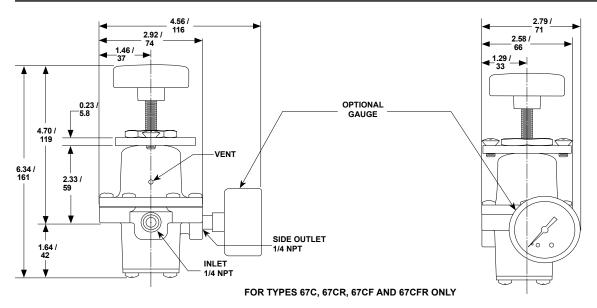


Figure 7. Dimensions for 3-Hole Panel Mount Option With Handwheel and 1/4 NPT Spring Case Vent

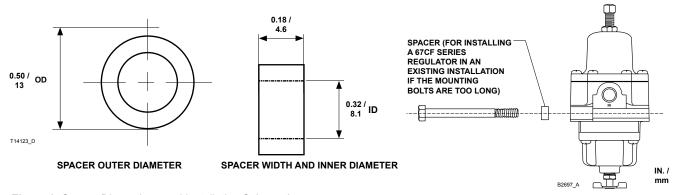


Figure 8. Spacer Dimensions and Installation Schematic

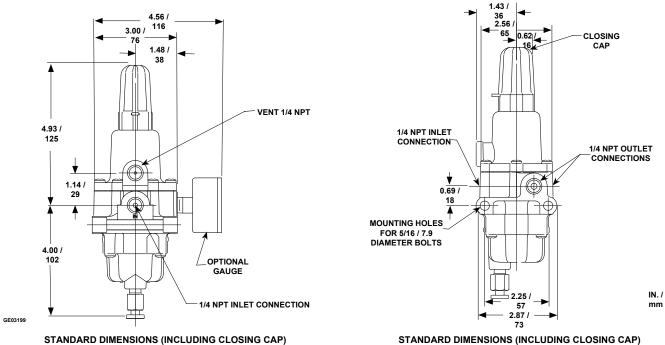


Figure 9. Types 67CFS and 67CFSR Dimensions

STANDARD DIMENSIONS (INCLUDING CLOSING CAP)

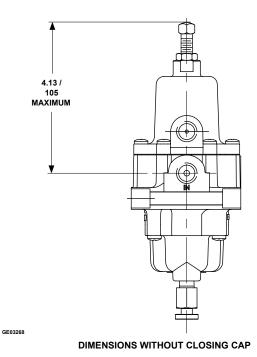


Figure 9. Types 67CFS and 67CFSR Dimensions (continued)

# 2.37/60 MAXIMUM PANEL 0.12 TO 0.25/ 2.65/ 3.0 TO 6.4 IN./

DIMENSIONS FOR PANEL MOUNT OPTION WITH HANDWHEEL

### **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***  □ 0 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)***

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) <sup>(1)</sup> ☐ Yes (not available with gauge)**
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
Line Size
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 (P <sub>1max</sub> )
Minimum Inlet Pressure (P <sub>1min</sub> )
Downstream Pressure Setting(s) (P <sub>2</sub> )
Maximum Flow (Q <sub>max</sub> )
Performance Required:
Accuracy Requirements?
Need for Extremely Fast Response?
Other Requirements:

Webadmin.Regulators@emerson.com	-
	(10)

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