

67C Series High Pressure Regulators



Introduction

The 67C Series is a Underwriters Laboratories (UL) listed high-pressure regulators that meets a variety of applications in liquid or vapor service. The compact body design makes the 67C Series particularly useful in installations with space limitations.

The basic 67C Series regulators come equipped with a wrench or handwheel adjustment (67CW or 67CH Series). The highly accurate 67CD Series eliminates the need for a pressure gauge on portable applications by using calibrated scales on the spring case, allowing visual adjustment of outlet pressure. The non-adjustable 67CN Series provides a tamper-resistant spring case and one of three fixed setpoints: 10, 15, or 20 psi (0,69; 1,0; or 1,4 bar).

The 67C Series carries a UL listing as a high pressure, non-relief regulator. This series contains brass materials that are not compatible with anhydrous ammonia service.

Body Size and End Connection Style

1/4-inch FNPT

Side Outlet Connection Style (Plugged)

1/4-inch threaded NPT; pressure gauge (J500 Series) can be installed

Features

- Compact
- High Stability
- UL Listed
- Durable Powder Paint Coating

Maximum Inlet Pressure (Body Rating)

250 psig (17,2 bar)

Maximum Emergency Outlet Pressure

50 psig (3,4 bar) over outlet pressure

Pressure Registration

Internal

Spring Case Vent Location

Aligned with inlet, other position optional

Flow Coefficient

Wide-Open C_v for Relief Sizing: 11.7

Temperature Capabilities

-20° to 180°F (-29° to 82°C)

Approximate Weights

Type 67CW: 0.7 pound (0,32 kg)

Type 67CH: 1 pound (0,45 kg)

Type 67CD: 0.8 pound (0,36 kg)

Type 67CN: 1.1 pound (0,50 kg)

Option

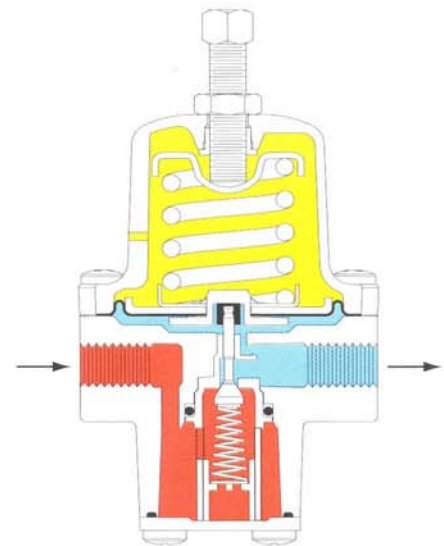
- Outlet Pressure Gauge

Additional Technical Data

For more technical information, contact your local LP-Gas Equipment Distributor or log on to: www.emersonprocess.com/regulators/lp



Figure 1. 67C Series Regulators



- ATMOSPHERIC PRESSURE
- INLET PRESSURE
- OUTLET PRESSURE

WB442

Figure 2. Operational Schematic

Table 1. Available Configurations

TYPE NUMBER	DESCRIPTION
67CW	Basic regulator with wrench adjustment and 4 spring ranges from 3 to 135 psig (0,2 to 9,3 bar) no relief.
67CH	Basic regulator with handwheel adjustments.
67CD	Basic regulator with dial cap adjustments.
67CN	Basic regulator, factory set with no field adjustments.

Table 2. Construction Materials

PART NAME	MATERIAL
Body	Aluminum
Valve Stem	Brass
Spring	Music wire
Valve Plug	Nitrile (NBR)
O-Ring and Soft Seats	Nitrile (NBR)
Diaphragm	Nitrile (NBR) / Nylon (PA)

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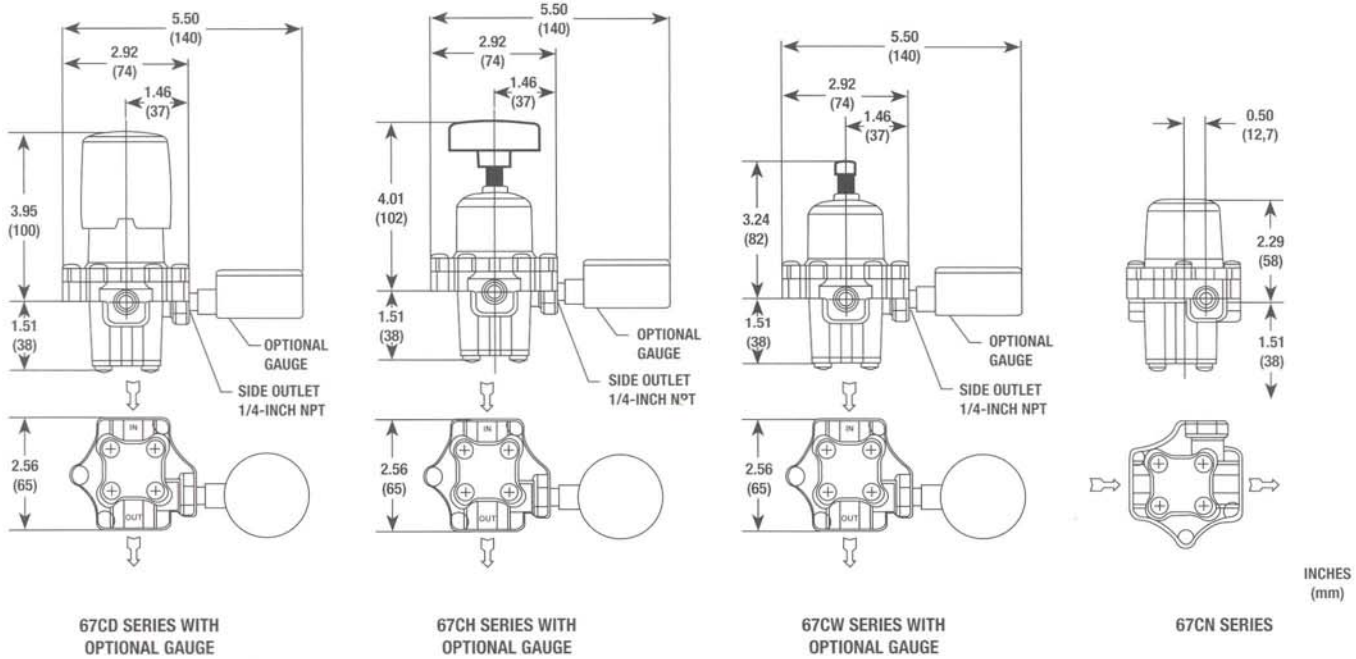


Figure 3. Dimensions

Ordering Guide

Ordering Information				
ADJUSTMENT STYLE AND TYPE NUMBER		OUTLET PRESSURE SETTING, PSIG (bar)	SPRING RANGE, PSIG (bar)	BODY AND END CONNECTION SIZE
Wrench	Handwheel	----	----	1/4-inch FNPT
67CW-683	67CH-751	15 (1.0)	3 to 20 (0.2 to 1.4)	
67CW-684	67CH-743	20 (1.4)	3 to 35 (0.2 to 2.4)	
67CW-685	67CH-742	40 (2.8)	30 to 60 (2.1 to 4.1)	
67CW-701	67CH-741	50 (3.4)	50 to 135 (3.4 to 9.3)	
Dial Cap		----	----	
	67CD-100	15 (1.0)	5 to 20 (0.3 to 1.4)	
	67CD-102	40 (2.8)	20 to 50 (1.4 to 3.4)	
	67CD-103	50 (3.4)	40 to 100 (2.8 to 6.9)	
Non-Adjustable		----	----	
	67CN-106	10 (0.7)	Non-Adjustable	
	67CN-104	15 (1.0)		
	67CN-105	20 (1.4)		

To order, refer to the Ordering Information table above and specify the type number that satisfies your requirement. Then, contact or visit your local LP-Gas Equipment Distributor for availability.

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Table 3. Spring Ranges and Factory Setpoints

SPRING RANGE, PSIG (bar) ⁽¹⁾	SPRING COLOR CODE	SPRING PART NUMBER	TYPE AND FACTORY SETPOINT, PSIG (bar)	
			Types 67CW, 67CD, and 67CH	Type 67CN
3 to 20 (0,2 to 1,4)	Green Stripe	GE07809T012	15 (1,0)	N/A
5 to 35 (0,3 to 2,4)	Silver	T14059T0012	20 (1,4)	10, 15, or 20 psi (0,69; 1,0; or 20 bar)
20 to 50 (1,4 to 3,4)	Blue Stripe	T14058T0012	40 (2,8) Type 67CD only	N/A
30 to 60 (2,1 to 4,1)	Blue Stripe	T14058T0012	40 (2,8) Types 67CW and 67CH only	N/A
35 to 100 (2,4 to 6,9)	Red Stripe	T14060T0012	50 (3,4) Type 67CD only	N/A
35 to 135 (2,4 to 9,3)	Red Stripe	T14060T0012	50 (3,4) Types 67CW and 67CH only	N/A

1. All springs can be backed off to 0 psig (0 bar) except Type 67CN. However, for the highest capacity and most control, use the lowest spring that can be adjusted to the required setpoint.

Table 4. Capacities⁽¹⁾⁽²⁾

OUTLET PRESSURE SETTING, SPRING RANGE	INLET PRESSURE	CAPACITIES IN BTU/hr (SCMH) PROPANE
Type 67CW or 67CH		
15 psig (1,0 bar) setting 3 to 20 psig (0,2 to 1,4 bar)	35 psig (2,4 bar)	675 000 (7,60)
20 psig (1,4 bar) setting 5 to 35 psig (0,3 to 2,4 bar)	40 psig (2,8 bar)	750 000 (8,44)
40 psig (2,8 bar) setting 30 to 60 psig (2,1 to 4,1 bar)	60 psig (4,1 bar)	1 200 000 (13,5)
50 psig (3,4 bar) setting 35 to 135 psig (2,4 to 9,3 bar)	70 psig (4,8 bar)	1 000 000 (11,3)
Type 67CD		
15 psig (1,0 bar) setting 5 to 20 psig (0,3 to 1,4 bar)	35 psig (2,4 bar)	675 000 (7,60)
40 psig (2,8 bar) setting 20 to 50 psig (1,4 to 3,4 bar)	60 psig (4,1 bar)	1 200 000 (13,5)
50 psig (3,4 bar) setting 35 to 100 psig (2,4 to 6,9 bar)	70 psig (4,8 bar)	1 000 000 (11,3)
Type 67CN		
10 psig (0,7 bar) Non-adjustable	30 psig (2,1 bar)	400 000 (4,50)
15 psig (1,0 bar) Non-adjustable	35 psig (2,4 bar)	600 000 (6,75)
20 psig (1,4 bar) Non-adjustable	40 psig (2,8 bar)	750 000 (8,44)

1. Capacities are based on inlet pressure 20 psig (1,4 bar) greater than outlet with 20% droop.
2. Metric conversion is based on 2516 BTU/ft³ of gas at 60°F (16°C).