

# UL Listed Regulators for Industrial Service

Regulators for use with compressed air and inert gases

Underwriters Laboratories, Inc. listed (file number SA1089) for use with air, argon, carbon dioxide, krypton, neon, nitrogen, xenon. For use with other gases, including oxygen, consult Norgren.

**Non-relieving and relieving models. Relieving models allow reduction of outlet pressure even when the system is dead-ended**

R44

Fluid:

Compressed air, carbon dioxide, inert gases, neutral gases

**NOTE:** Contact Norgren for use with other media.

Maximum pressure:

250 psig (17 bar)

Operating temperature:

-30° to 150°F (-34° to 66°C) \*

\* Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

R83

Fluid:

Air, argon, carbon dioxide, krypton, neon, nitrogen, and xenon. For use with other gases, including oxygen, consult Norgren. Do not use the R83 regulator in beverage dispensing applications. Other Norgren regulators (R81 for soft drink, R82 for beer, R84 for carbonators) are available for use in dispensing systems.

Maximum pressure:

3000 psig (207 bar)

Operating temperature:

-30° to 140°F (-34° to 60°C) \*

\* Fluid must be dry enough to avoid ice formation at temperatures below 35°F (2°C).

Materials

R44

Body and bonnet

R44-100/-200: Aluminum body; acetal plastic bonnet

R44-121/-221: Brass body; acetal plastic bonnet

R44-122/-222: Zinc body; acetal plastic bonnet

R44-133/-233: Brass body; brass bonnet

Valve: Brass/nitrile

Valve seat: Acetal

Elastomers: Nitrile

R83

Body: Brass

Bonnet: Zinc

Cartridge valve: Teflon, brass, stainless steel

Diaphragm: Acetal and nitrile

Seals: Nitrile



## Ordering Information

Models listed have PTF threads, and relieving diaphragm.

Body	Bonnet	Medium	Port PTF	Model	Flow* scfm (dm3/s)	Weight lb (kg)
Aluminum	Plastic	Air, inert gases	1/8"	R44-100-RNKA	10 (4.7)	0.23 (0.11)
			1/4"	R44-200-RNKA	10 (4.7)	0.23 (0.11)
Brass	Plastic	Air, CO <sub>2</sub> , inert gases	1/8"	R44-121-RNKA	10 (4.7)	0.45 (0.21)
			1/4"	R44-221-RNKA	10 (4.7)	0.45 (0.21)
Zinc	Plastic	Air, inert gases	1/8"	R44-122-RNKA	10 (4.7)	0.31 (0.14)
			1/4"	R44-222-RNKA	10 (4.7)	0.31 (0.14)
Brass	Brass	Air, CO <sub>2</sub> , inert gases	1/8"	R44-133-RNKA	10 (4.7)	0.54 (0.25)
			1/4"	R44-233-RNKA	10 (4.7)	0.54 (0.25)

## Alternative Models - R44

R44-★ ★ ★ ★ ★ ★ ★ ★

<b>Port Size</b>	<b>Substitute</b>	<b>Threads</b>	<b>Substitute</b>
1/8"	1	PTF	A
1/4"	2		
<b>Body/Bonnet</b>	<b>Substitute</b>	<b>Outlet Pres Adj Range†</b>	<b>Substitute</b>
Aluminum/Plastic	00	1 to 10 psig (0.1 to 0.7 bar)	A
Brass/Plastic	21	5 to 50 psig (0.3 to 3.5 bar)	E
Zinc/Plastic	22	5 to 100 psig (0.3 to 7 bar)	K
Brass/Brass	33		
		<b>Gauges</b>	<b>Substitute</b>
		With	G
		Without	N
		<b>Diaphragm</b>	<b>Substitute</b>
		Relieving	R
		Non relieving	N

\* Approximate flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and a 15 psig (1 bar) droop from set.  
 † Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Port	Model	Flow * scfm dm3/s()	Weight lb (kg)
1/4"	R83-200-RNLA	11 (5.2)	1.3 (0.59)

## Alternative Models - R83

R83-200-★ N ★ A

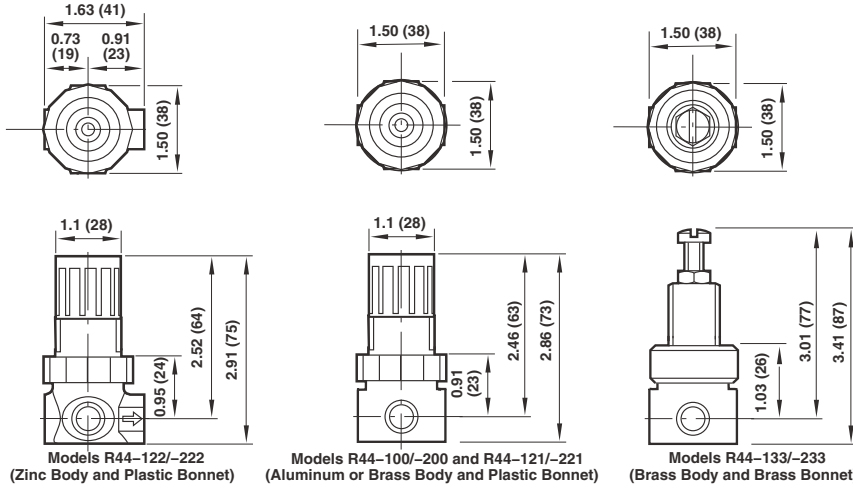
<b>Diaphragm</b>	<b>Substitute</b>	<b>Outlet Pres Adj Ranges †</b>	<b>Substitute</b>
Relieving	R	2 to 50 psig (0.1 to 3.5 bar)	E
Non relieving	N	5 to 125 psig (0.3 to 8.5 bar)	L
		10 to 175 psig (0.7 to 12 bar)	N

\* Approximate flow with 1000 psig (69 bar) inlet pressure, 60 psig (4 bar) set pressure and a 5 psig (0.35 bar) droop from set.  
 † Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

# UL Listed Regulators for Industrial Service

Regulators for use with compressed air and inert gases

## R44

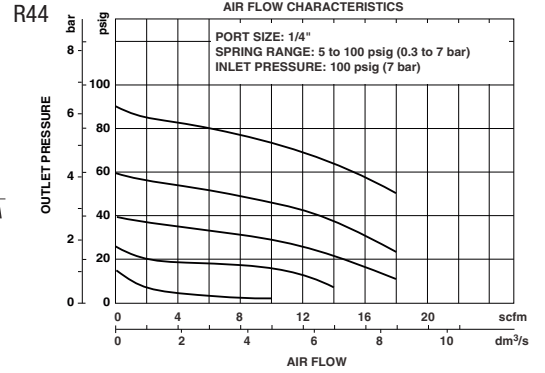


Panel mounting hole diameter:

Models with plastic bonnet: 1.19" (30 mm)

Models with brass bonnet: 0.81" (21 mm)

Maximum panel thickness: 0.25" (6 mm)

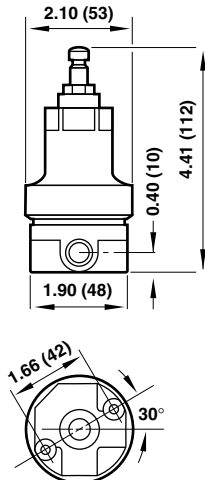


### R44 Service Kits

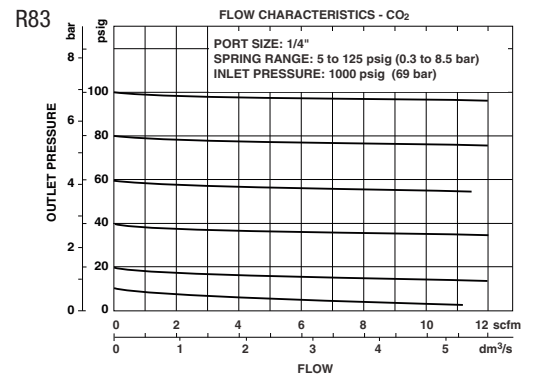
Item	Type	Part number
Service kit	Relieving	3407-02
	Non relieving	3407-01

Service kit includes slip ring, diaphragm, standard valve seat with seal, valve, valve spring.

## R83



**Mounting Holes (2 Places)**  
 0.18" (4.6mm) dia. by 0.39 (10mm) deep.  
 Use 10-32 thread forming screws.



### R83 Service Kits

Item	Type	Part number
Service kits	Diaphragm, relieving	570-51
	Diaphragm, non relieving	570-10
Valve cartridge		5086-55

Valve cartridge includes the sealed cartridge and cartridge o-ring.