



TYPE R04

# MINIATURE REGULATOR

1/8" & 1/4"  
FOR COMPRESSED AIR SERVICE



## APPLICATION

Used in compressed air applications where accurate pressure control is required; where one or more secondary outlet ports are needed. Very popular in applications where attractive panel mount with nonrising adjusting knob is desired.

## SPECIFICATIONS

PIPE SIZE: 1/8", 1/4" (NPT)

PISTON TYPE

RELIEVING OR NONRELIEVING

GAUGE PORTS: Two Full Flow 1/8" Standard

PRIMARY PRESSURE: Up to 400 psig

SECONDARY (Regulated) PRESSURE RANGES\*:

2-100 psig (Standard)

1- 50 psig (Optional)

1- 10 psig (Optional)

TEMPERATURE RANGES: 32° F. to 150° F. (Plastic Bonnet)  
32° F. to 175° F. (Brass Bonnet)

\*Can be adjusted to 0.

## FEATURES

- Unusually compact -- only 2-11/16" high.
- Reliable pressure regulation at flows up to 15 scfm.
- "Snap-action" lock on nonrising adjusting knob is standard.
- Relieving feature permits the regulated pressure to be reduced even under dead end conditions and also prevents build-up of excessive pressure in the system.
- Quality design and construction. Oil resisting valve seal. Aluminum or optional brass body.

## ORDER TABLE

### FOR RELIEVING REGULATORS

| Pipe Size | PSIG Range | STANDARD - 0-100 PSIG |                |
|-----------|------------|-----------------------|----------------|
|           |            | With Gauge            | Less Gauge     |
| 1/8"      | 1- 50      | R04-100-RGE-AU        | R04-100-RNE-AU |
|           | 1-100      | R04-100-RGK-AU        | R04-100-RNK-AU |
| 1/4"      | 1- 50      | R04-200-RGE-AU        | R04-200-RNE-AU |
|           | 1-100      | R04-200-RGK-AU        | R04-200-RNK-AU |

For nonrelieving models substitute "N" for "R" in the 7th position. To order brass body, insert "21" in the 5th and 6th positions of the model number.

To order both brass body and bonnet, insert "22" in the 5th and 6th positions of the model number.

### ACCESSORIES

| Item Description  | Ordered with Regulator | Ordered Separately |
|---|------------------------|--------------------|
| Panel Mounting Nut (Plastic Bonnet)   | 18-025-002             | 2962-89            |
| Panel Mounting Nut (Brass Bonnet)   | 18-003-037             | 18-003-037         |
| Wall Mounting & Panel Nut (Plastic)   | 18-025-003             | 13-025-003         |
| Wall Mounting & Panel Nut (Brass)   | 18-001-020             | 18-001-021         |
| Gauge, 1/8" center-back connection<br>1-1/2" black metal case, plastic crystal. |                        |                    |
| 0- 30 psig  | (See above Table)      | 18-013-214         |
| 0- 60 psig  |                        | 18-013-211         |
| 0-160 psig  |                        | 18-013-212         |
| Tamper-proof Wire   | -----                  | 2117-01            |

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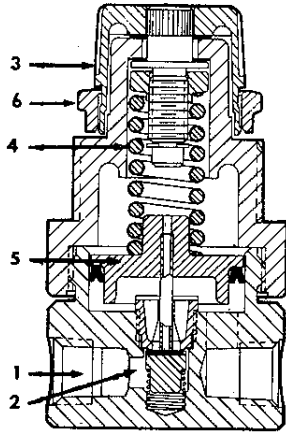
## OPERATION

Primary air enters inlet port (1) and is prevented from passing through regulator by the combined forces of primary air and the valve spring holding valve (2) against seat.

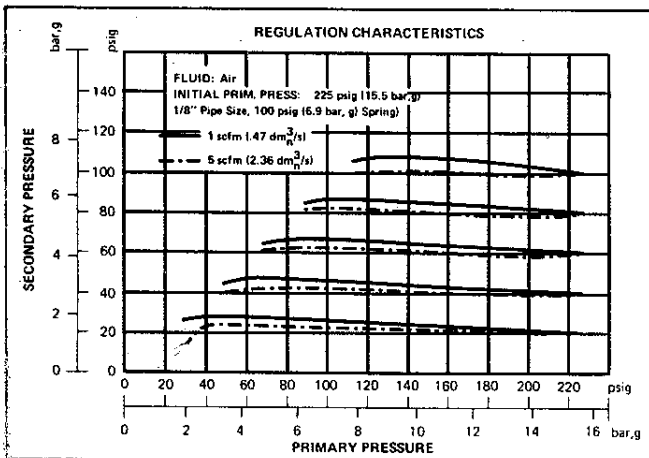
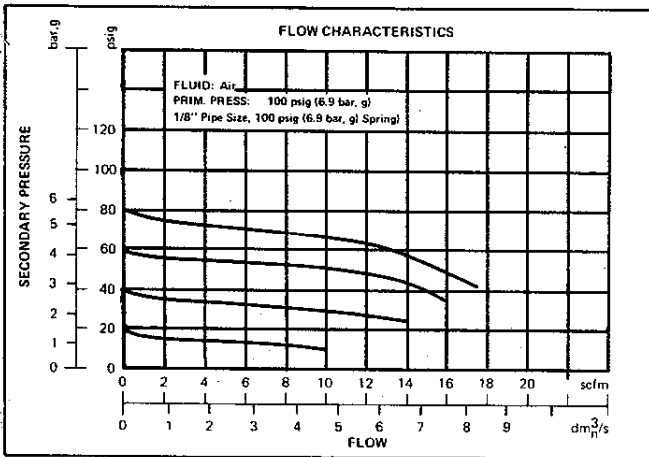
When the adjusting knob (3) is turned clockwise, the mainspring (4) exerts force against the piston (5) causing the piston to move the valve downward away from the seat, allowing air to flow past seat to secondary side of regulator. Air continues to flow until secondary pressure overcomes force exerted on piston by mainspring. At this point, piston moves upward, compressing spring and allowing valve to reseat and stop air flow.

The regulator shown is a relieving type and should a secondary overpressure occur, the piston moves upward allowing secondary air to flow through tube into bonnet and escape to the atmosphere, reducing the possibility of damage to downstream equipment.

The red "snap-action" lock on the adjustment knob (6) is pushed downward to lock the adjustment. The lock must be released by pulling up before further pressure adjustment can be made.



## PERFORMANCE CHARACTERISTICS



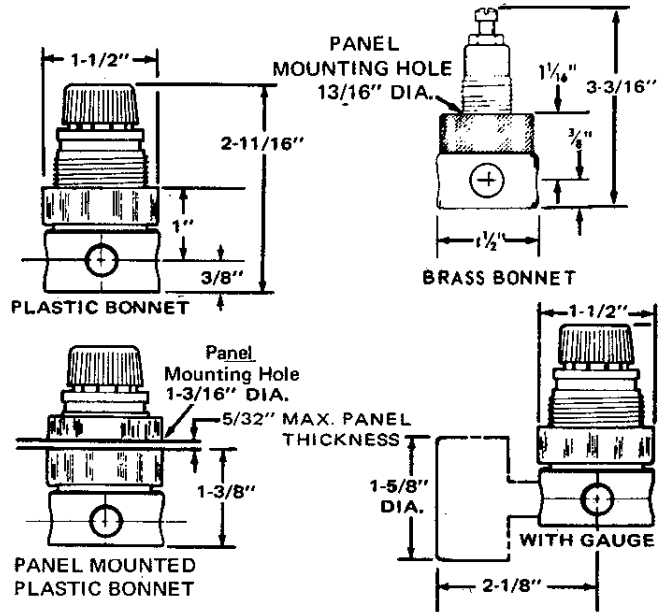
## CAUTION

**DO NOT USE WHERE PRESSURE OR TEMPERATURE MAY EXCEED SPECIFIED MAXIMUM OPERATING CONDITIONS. USE WITH GASES OTHER THAN COMPRESSED AIR IS NOT RECOMMENDED.**

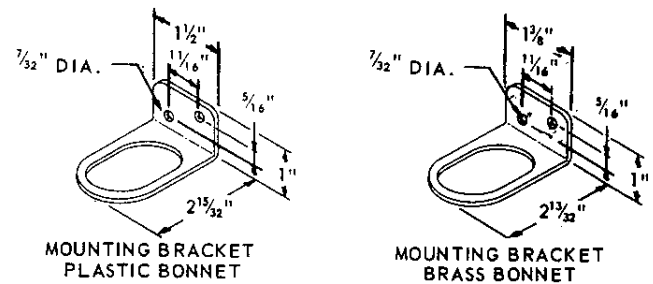
## PARTS

|                         |       |         |
|-------------------------|-------|---------|
| REPAIR KITS             |       |         |
| R04 Non-relieving model | ..... | 2961-01 |
| R04 Relieving model     | ..... | 2961-02 |

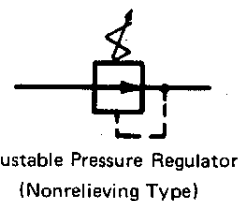
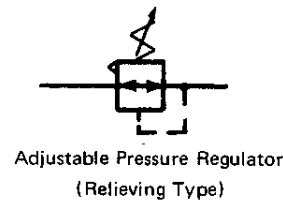
## DIMENSIONS



## MOUNTING BRACKET DIMENSIONS



## GRAPHIC SYMBOLS



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