# Regulators



**Engine Starting Systems** 

## **Rated Operating Conditions**

• Inlet Pressure: 10 to 450 psig (0.7 to 31 bar)

• Maximum Outlet Pressure: 250 psig (17.2 bar)

• Temperature: 0° to 175°F (-18° to 79°C) - With dewpoint less than air temperature below 35°F (2°C)

• Air Consumption: 2200 scfm @ 150 psi

### **Specifications**

• Fluid: Compressed Air

• Type: Standard: Relieving Optional: Nonrelieving

Main: 1-1/2" or 2" PTF Gauge: 1/4" PTF • Ports:

Exhaust (Relieving models only): 3/4" PTF

• Outlet Pressure Adjustment Ranges\*:

Standard: 5 to 125 psig (.3 to 8.6 bar) Optional: 2 to 50 psig (.1 to 3.5 bar) Optional: 10 to 250 psig (.7 to 17.2 bar)

• Threads: Use SMB-441 sealant on threads of air line fittings. Apply sealant evenly to threads only. Excessive sealant may interfere with valve operation.

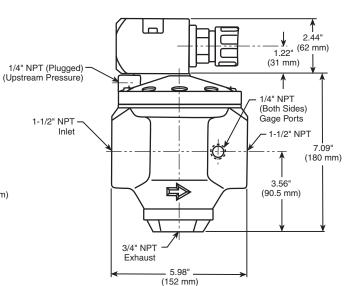


#### Regulators

#### **IR Part** Number **Description** NR-24-8 Pilot Operated Regulator with Integral Pilot NR24-TK1 NR-24-8 Tune Up Kit

## 5.44 (Ø138 mm) 2.00" (51 mm) 3.19" (81 mm) 1/4" NPT (Plugged)

## NR-24-8 DIMENS



<sup>\*</sup> Outlet pressure adjustment ranges are not minimum or maximum outlet préssure limits. Regulators can be adjusted to zero psig outlet pressure and, generally, to pressures in excess of those specified. The use of these regulators to control pressures outside of the specified ranges is not recommended.

## **Regulators**

## **Pilot Regulator Constant Bleed Feature**

The constant bleed feature helps to minimize drop in the outlet pressure when a flow demand is initially placed on the regulator. A very small amount of pilot outlet air continuously escapes to atmosphere. This keeps the pilot valve slightly open to replace the air lost to atmosphere through the constant bleed. Since the valve is always partially open, the pressure drop is minimized when demand is initially increased from no flow to some higher flow. This constant escape of air from the pilot regulator vent is normal and does not indicate a faulty regulator.

### Installation

- 1. Install a compressed air filter upstream of regulator.
- In systems with a cyclic demand, install regulator upstream of cycling control valves.
- 3. System piping should be same size as regulator ports.
- 4. Install regulator as close as possible to the device being serviced. Regulator can be installed at any angle.
- Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of regulator. Air flow must be in same direction as arrow on slave regulator body.
- 6. If desired, connect an outlet pressure gauge to one of the gauge ports. Gauge ports can also be used as additional outlets. Plug unused gauge ports.
- To reduce noise and protect internal ports, install a muffler (part number M8006A) in the exhaust port (marked "EXH") of relieving type regulators.

## Adiustment

- Before turning on system pressure, turn pilot regulator adjusting knob counterclockwise until all load is removed from regulating spring.
- 2. Turn on system pressure.
- 3. Turn pilot regulator adjusting knob clockwise until the desired outlet pressure is reached.
- 4. To avoid minor readjustment after making a change in pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce to some pressure less than that desired, then bring up to the desired pressure.
- 5. Push lockring on adjusting knob downward to lock pressure setting. To release, pull lockring upward.

#### **Warning**

These regulators are intended for use in industrial compressed air systems only. Do not use these regulators where pressure or temperature can exceed rated operating conditions.

If outlet pressure in excess of the regulator pressure setting could cause downstream equipment to rupture or malfunction, install a pressure relief device downstream of the regulator. The relief pressure and flow capacity of the relief device must satisfy system requirements.

The accuracy of the indication of pressure gauges can change, both during shipment (despite care in packaging) and during the service life. If a pressure gauge is to be used with these products and if inaccurate indications may be hazardous to personal property, the gauge should be calibrated before initial installation and at regular intervals during use. For gauge standards refer to ANSI 840, 1-1974.

These products are not designed for use with fluids other than air, for nonindustrial applications, or for life support systems.

#### **Installation Warning**

Do not plug exhaust port in bottom plug of relieving type regulators, as the relief feature will become inoperative.

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