

R40, R41

R40 Conventional Pilot Regulator, and R41 Feedback Pilot Regulator

1/4" Port Size

Pilot regulators are used to control the outlet pressure of a pilot operated regulator (ordered separately)

R41 can be close coupled to a 2" R18 pilot regulator

Conventional pilot regulator provides good pressure regulation, rapid response to changing flow demands, and excellent stability.

Feedback pilot regulator provides superior pressure regulation under changing flow demands where changes in flow demand are not sudden or cyclic.

Constant bleed feature provides maximum sensitivity to system changes



Technical data

Fluid:

Compressed air, neutral gases

NOTE: Contact Norgren for use with other media.

Inlet pressure range:

10 psig (0.7 bar) to 450 psig (31 bar) maximum

Operating temperature:

0° to 175°F (-20° to 80°C) **

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

Maximum bleed rate at 50 psig (3.5 bar) outlet pressure:

0.25 scfm (0.12 dm³/s)†

†Maximum bleed rate occurs under dead-end (no flow) conditions.

Pilot ports:

1/4" PTF, ISO G, or ISO Rc

R41 feedback port: 1/8" PTF, ISO G, or ISO Rc

Materials

Body, bonnet: Aluminum

Valve: Teflon

Elastomers: Nitrile

Ordering Information

Models listed are relieving with constant bleed, 10 to 250 psig (0.7 to 17 bar) outlet pressure adjustment range *, PTF ports.

| Port Size | Type | Model | Flow† scfm (dm ³ /s) | Weight lb (kg) |
|-----------|--------------------|----------------|---------------------------------|----------------|
| 1/4" | Conventional Pilot | R40-200-BNSA | 6.4 (3) | 1.66 (0.75) |
| 1/4" | Feedback Pilot | R41-204-BNSA†† | 6.4 (3) | 1.66 (0.75) |

† Typical flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from set.

†† Do not use the R41 feedback pilot regulator to control outlet pressures at or less than 100 psig (7 bar). Use the 11-104 feedback pilot regulator at those pressures.

Alternative Models

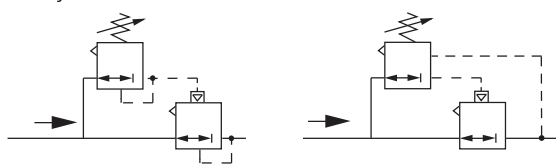
| Type | Substitute | Threads | Substitute |
|-------------------------|------------|---|------------|
| R40 Conventional | 40 | PTF | A |
| R41 Feedback | 41 | ISO G parallel | G |
| Mounting/Type | Substitute | Outlet Pressure Adjustment Ranges* | Substitute |
| Remote/R40 Conventional | 00 | 2 to 50 psig (0.1 to 3.5 bar) R40 only | E |
| Remote/R41 Feedback | 04 | 5 to 125 psig (0.3 to 8.5 bar) R40 only | L |
| | | 10 to 250 psig (0.7 to 17 bar) | S |

* 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.

Feedback Pilot Regulator Warning

The feedback line must sense the pilot operated regulator outlet pressure and must be connected before turning on the air supply. If the feedback line is not connected, the pilot operated regulator outlet pressure will rapidly increase to the inlet pressure when the adjusting knob on the pilot regulator is turned clockwise.

ISO Symbols



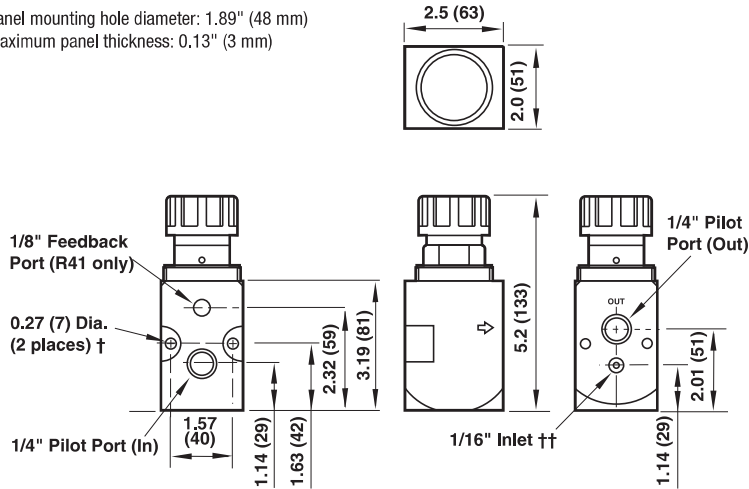
R40 Conventional Pilot Regulator with Pilot Operated Regulator

R41 Feedback Pilot Regulator with Pilot Operated Regulator

R40, R41

R40 Conventional Pilot Regulator, and R41 Feedback Pilot Regulator 1/4" Port Size

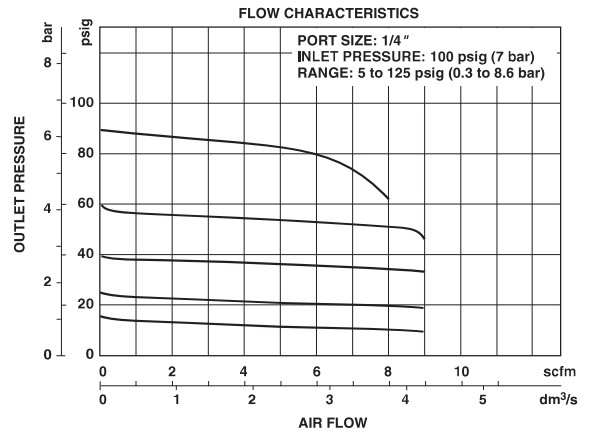
Panel mounting hole diameter: 1.89" (48 mm)
Maximum panel thickness: 0.13" (3 mm)



† Mounting holes for subbase mounting.
†† Air inlet for subbase mounting.

Dimensions in inches (mm)

Typical Performance Characteristics



Service Kits

| Type | Part number |
|----------|-------------|
| R40, R41 | 5945-41 |

Service kit contains diaphragm, valve spring, guide bushing, valve, valve spring, filter screen, and all o-rings.