

- Pilot regulators are used to control the outlet pressure of a pilot operated regulator (ordered separately)
- The pilot regulator is installed in an accessible location in the compressed air system; pilot operated regulator is installed at any point without regard to accessibility
- 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
- Relief feature allows reduction of downstream pressure when the system is dead-ended



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 Rc taper	B
		ISO G parallel	G

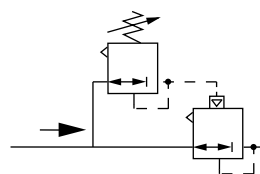
Mounting/Type	Substitute	Outlet Pressure Adjustment Ranges*	Substitute
Remote/R40 Conventional	00	2 to 50 psig (0.1 to 3.5 bar) R40 only	E
Remote/R41 Feedback	04	5 to 125 psig (0.3 to 8.5 bar) R40 only	L
		10 to 250 psig (0.7 to 17 bar)	S

* 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.

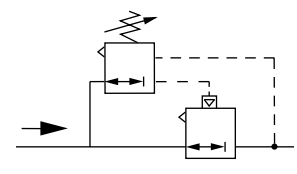
Feedback Pilot Regulator Warning

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

See Section ALE-24 for Accessories



Technical Data

Fluid: Compressed air

Inlet pressure range: 10 psig (0.7 bar) to 450 psig (31 bar) maximum*

* For best performance, inlet pressure should be at least 10 psig (0.7 bar) greater than the desired regulated pressure, but must not exceed the specified 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).

Typical flow with 100 psig (7 bar) inlet pressure, 90 psig (6.3 bar) set pressure and 15 psig (1 bar) droop from from set: 6.4 scfm (3 dm³/s)

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

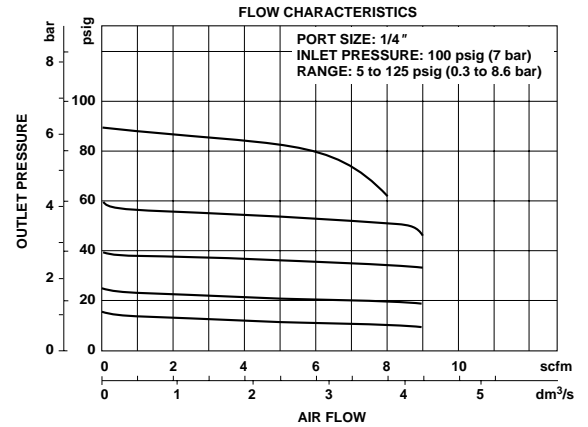
Materials

Body, bonnet: Aluminum

Valve: Teflon

Elastomers: Nitrile

Typical Performance Characteristics



Service Kits

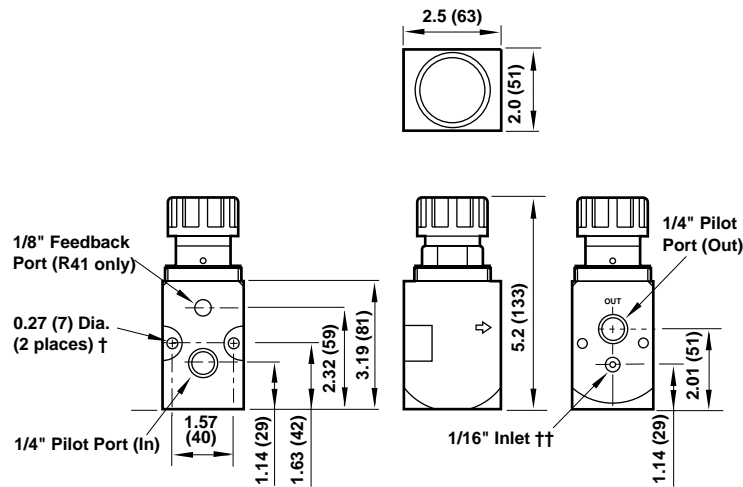
Type	Part number
R40, R41	5945-41

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

All Dimensions in Inches (mm)

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.