

Type	Mounting	Bleed Type	Spring (Outlet Pressure Range) †	Thread Form
40...R40 Conventional Pilot	00...R40, In line mounted	B...Constant bleed **	E...0,3 to 3,5 bar (5 to 50 psig) (R40 only)	A....PTF
41...R41 Feedback Pilot *	04...R41, In line mounted	R....Non-bleed	L...0,3 to 8,5 bar (5 to 125 psig) (R40 only)	B....ISO Rc taper
	05...R40, Integrally mounted to the R18 regulator		S...0,7 to 17 bar (10 to 250 psig)	G....ISO G parallel
	06...R41, Integrally mounted to the R18 regulator			

\* The R41 feedback pilot regulator is only available as a constant bleed (**B** in 7th position) with a 17 bar (250 psig) spring (**S** in 9th position) e.g., R41-2xx-**BNSx**.

\*\* The constant bleed feature, which provides maximum sensitivity to system changes, allows a very small amount of air to constantly escape to atmosphere.

† 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.

### TECHNICAL DATA

Fluid: Compressed air

Inlet pressure range: 0,7 bar (10 psig) to 31 bar (450 psig) maximum\*

\* For best performance, inlet pressure should be at least 0,7 bar (10 psig) greater than the desired regulated pressure, but must not exceed the specified maximum.

Operating temperature: -20° to +80°C (0° to +175°F) \*\*

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

Typical flow with 7 bar (100 psig) inlet pressure, 6,3 bar (90 psig) set pressure and 1 bar (15 psig) drop from set: 3 dm³/s (6.4 scfm)

Maximum bleed rate at 3,5 bar (50 psig) outlet pressure: 0,12 dm³/s (0.25 scfm) †

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

Main 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

### REPLACEMENT ITEMS

R40, R41 service kit

(items circled in exploded view).....5945-41

Tamper resistant seal wire .....2117-01

### PANEL MOUNTING DIMENSIONS

Panel mounting hole diameter: 48 mm (1.89")

Panel thickness: 2 to 3 mm (0.06" to 0.13")

### INSTALLATION (Applications where the Norgren R40 or R41 will be used as a pilot regulator with Norgren pilot operated regulators)

See instructions shipped with the Norgren pilot operated regulator.

### INSTALLATION (Applications where the R40 will be used as a pressure regulator in low flow or dead-end service)

- Shut off air pressure. Install regulator in air line -
  - upstream of lubricators and cycling valves,
  - as close as possible to the device being serviced.
  - at any angle.
- Connect piping to proper ports using pipe thread sealant on male threads only. The **IN** and **OUT** ports are marked on the regulator body. Do not allow sealant to enter interior of regulator.
- Install a Norgren general purpose filter upstream of the regulator.

### ADJUSTMENT

- Before applying inlet pressure to regulator, turn knob adjustment counterclockwise to remove all force on regulating spring.
- Apply inlet pressure, then turn adjustment clockwise to increase and counterclockwise to decrease 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.
- Push locking on knob IN to lock pressure setting. Pull locking OUT to release. Install tamper resistant wire (see **Replacement Items**) to make setting tamper resistant.

### DISASSEMBLY

- Regulator can be disassembled without removal from air line.
- Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
- Turn knob adjustment (1) fully counterclockwise to remove all force on regulating spring (2).
- Disassemble in general accordance with the item numbers on exploded view. Use a 7/8" socket to remove guide plug (8). When items 1 thru 10 have been removed, cover bonnet bore in body (15) with a clean cloth, then direct a jet of air into the **IN** port to force out valve seat (11), o-ring (12), valve (13), and spring (14). Catch seat, o-ring, valve, and spring in cloth placed over bore in body.

### CLEANING

- Clean parts with warm water and soap. Do not submerge knob type bonnets (1) in solution, as lubricant will be removed.
- Rinse and dry parts. Blow out internal passages in body (15) with clean, dry compressed air.
- Inspect parts. Replace those found to be damaged.

### ASSEMBLY

- Lubricate o-rings and outer surface of tube (6) with a light coat of good quality o-ring grease.
- Lubricate threads on bonnet (1) and guide plug (8) with a small amount of anti-seize compound.
- Assemble the unit as shown on the exploded view.
- Torque Table
 

Item	Torque
1 (Bonnet)	46 to 54 Nm (34 to 40 ft-lb)
8 (Guide plug)	3,4 to 5,6 Nm (30 to 50 in-lb)

### WARNING

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under **Technical Data**.

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 personnel or property, the gauge should be calibrated before initial installation and at regular intervals during use.

Before using these products with fluids other than air, for non industrial applications, or for life-support systems consult Norgren.

