Pneumatic Division

Richland, Michigan 49083 269-629-5000

Installation and Service Instructions: IS-R75

R75 Series

1/4", 3/8", & 1/2" Regulators ISSUED: September, 2006

Supersedes: April, 2006 Doc. #ISR75, ECN #060928, Rev. 3

<u>∕!</u>\WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect media source and depressurize all media lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- · Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, media and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

№ WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

Safety Guide

For more complete information on recommended application guidelines, see the Safety Guide section of Pneumatic Division catalogs or you can download the **Pneumatic Division Safety Guide** at: www.wattsfluidair.com

Introduction

The **QUBE R75 Pressure Regulator** is a specialized control valve which reduces the upstream supply pressure level to a specified constant downstream pressure. Pneumatic equipment that is operated at a higher than recommended pressure levels wastes the energy which generates that pressure, creates a potential safety hazard, and wears prematurely. The QUBE R75 is a balanced poppet, diaphragm style regulator available in either relieving (standard) or non-relieving (K suffix after part number) design. It is recommended that a QUBE F75 or similar filter be installed upstream of the R75 regulator to ensure contaminant free air. Follow these instructions when installing, operating, or servicing the product.

Application Limits

These products are intended for use in general purpose compressed media systems only.

Operating Pressure:

kPa PSIG bar Maximum Inlet Pressure 2068 300 21.0

Ambient Temperature Range:

4°C to 49°C (40°F to 120°F)

Symbols





Relieving Regulator Adjustable

Non-Relieving Regulator Adjustable

Installation

All QUBE components are individually tapped (NPT or BSPP) to allow direct mounting to piping. Also, each QUBE F&L component comes equipped with the necessary screws and O-rings to enable connection to other QUBE components of the same series without the need for pipe nipples or special adaptors. Before installing, blow out pipe line to remove scale and other foreign matter. This unit has DRYSEAL pipe threads; use pipe compound or tape sparingly to male threads only. Install units in pipeline so that flow is with the arrow as indicated on top face of body. Install as near as possible to equipment serviced.

Reduced Pressure Adjustment

To adjust reduced pressure settings, pull knob out and turn knob clockwise to increase pressure setting and counter-clockwise to lower setting. Push knob in to lock adjustment. With relieving-type regulators the reduced pressure follows adjustment of the screw. With non-relieving regulators adjustment for lower reduced pressure will not be obtained until the reduced pressure system is "bled-off" or until air flow starts.

Maintenance - Cleaning

Note: To clean, it is not necessary to remove regulator from line. Refer to drawing as guide in reassembly. If the air supply is kept clean, the regulator should provide long periods of uninterrupted service. Erratic regulator operation or loss of regulation is most always due to dirt in the disc area. To clean, shut off air line pressure and disassemble the regulator. Refer to drawing as a guide to disassembly and subsequent reassembly. Clean parts with household soap and blow out body with compressed air. When reassembling make sure the disc is firmly in place and that the disc stem fits into the center hole of the diaphragm assembly. Tighten bottom plug more than hand tight (40 to 50 inch pounds torque).

Note: This regulator is designed for use with compressed air in industrial applications. For other applications consult factory before use.

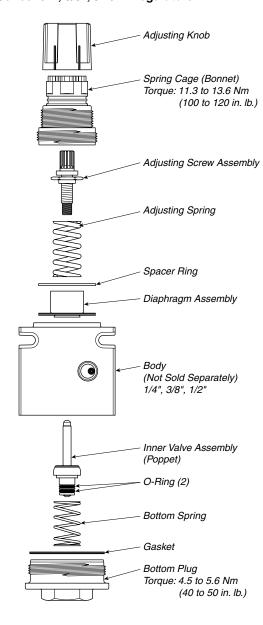
/ WARNING

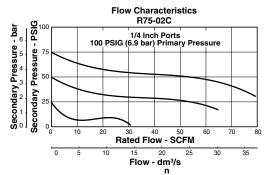
FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

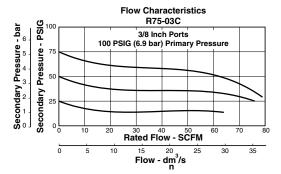
This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.







Service Kits / Parts Available

Description	R75, 1/4", 3/8", & 1/2"
Adjusting Knob (in Kit CKR75)	R35-0545P
Spring Cage (in Kit CKR75)	R75-0151P
Spring Cage Kit	CKR75
Tamperproof (Not Shown)	CKR75T
Adjusting Screw Assembly (in Kit CKR75)	SAR55-0532
Adjusting Spring "A" Range (0 – 25 PSI) "B" Range (0 – 60 PSI) "C" Range (0 – 125 PSI)	SPR-53 SPR-54 SPR-55
Spacer Ring (in Repair Kit)	R55-0081
Diaphragm Assembly Relieving (in Kit RKR75) Non-Relieving (in Kit RKR75K)	SAR75-0201 SAR75-0202
Inner Valve Assembly (in Repair Kit)	SAR75-0371
O-Ring (2 each) (in Repair Kit Only)	604Y101
Bottom Spring	SPR 391-1
Gasket (in Kit BPK75)	GSK-F55-1011
Bottom Plug (in Kit BPK75)	R55-0021P
Repair Kit Relieving Non-Relieving	RKR75 RKR75K

Accessories

Gauge:	
0 to 60 PSI (0 to 4 bar)	K4515N18060
0 to 160 PSI (0 to 11 bar)	K4515N18160
Panel Mount Nut: "P" *	
Acetal Plastic	R05X51
Aluminum	R05X51-A
Wall Mount Bracket	SAR55Y57

^{*} Requires 1-1/4" hole (1-3/16-18 UNEF-2B)

Standard Features

- Push/Pull Locking Adjustment Knob.
- Reduced Pressure Ranges Available:

"A": = 0 - 25 PSI

"B": = 0 - 60 PSI

"C": = 0 - 125 PSI

- Supply Pressure: 300 PSIG (21 bar) Maximum
- Temperature Range: 4°C to 49°C (40°F to 120°F)
- · Body Material: Zinc
- Diaphragm Material: Buna-N

Relieving (standard) or

Non-Relieving ("K" suffix on part number)

- Innervalve: Brass w/Buna-N O-Rings
- Bottom Plug and Spring Cage: Glass Filled Acetal
- Weight: = 0.65 lbs. per unit

18.7 lbs. per 24-unit master pack

