Pneumatic Division

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Installation & Service Instructions IS-B20

QIX® Filter / Regulators Type B20 / B21

ISSUED: October, 2005

Doc. #ISB20, ECN #050998, Rev. 1

MARNING

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

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air 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, air 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.

Introduction

A unique feature of the QIX® series is the option of changing pipe size to accommodate 1/4" through 1" sizes. To change insert (prior to installation), simply remove both insert pins and pull insert in direction away from pin hole. Install new (size) insert or universal combination insert (for combination unit) ensuring O-ring is in place and insert is firmly seated prior to insert of pins. Follow these instructions when installing, operating, or servicing the product.

Application Limits

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

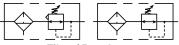
Maximum Recommended Pressure Drop:

	kPa	PSIG	bar
Particulate Filter	70	10	0.7
Operating Pressure Maximum	kPa	PSIG	bar
Metal Bowl	1723	250	17
Metal Bowl with Auto Drain	1207	175	12
Metal Bowl with Piston Drain	1207	175	12

Operating Temperature Range

Metal Bowl4°C to 66°C (40°F to 150°F)Metal Bowl with Auto Drain4°C to 52°C (40°F to 125°F)Metal Bowl with Piston Drain4°C to 52°C (40°F to 125°F)

Symbols



Filter / Regulator

Installation

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 as near as possible to equipment serviced. Filter / regulator must be installed with bowl in a vertical position.

Adjustment

To unlock adjustment, push knob (in) to forward most position. Turn knob clockwise to increase the reduced pressure or regulated pressure, and counter-clockwise to lower pressure. With relieving type regulators, the reduced pressure will not be obtained until the reduced pressure is "bled-off" or until airflow starts.

To lock adjustment, simply pull knob to rearward position. If tamperproof adjustment is required, remove knob completely.

Maintenance - Cleaning

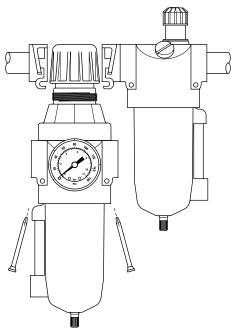
To clean, it is not necessary to remove the filter / regulator from the line. Refer to drawing as a guide in reassembly.

To maintain maximum filtering efficiency, and to avoid excessive pressure drop, the filter must be kept clean. Turn drain valve clockwise to remove liquid accumulation before it reaches level of lower baffle. A visible coating of dirt or condensate on filter element, or excessive pressure drop, indicates cleaning is necessary.

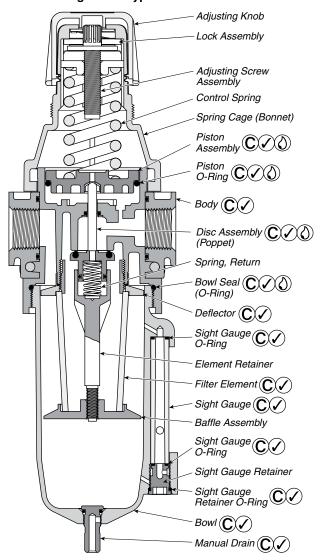
If the air supply is kept fairly clean, the regulator should provide long periods of uninterrupted service. Erratic regulator operation, or loss of regulation, is usually due to dirt in the disc area. To clean, shut off air line pressure, vent pressure and disassemble the filter / regulator. When reassembling, make sure the disc stem fits into center hole of piston assembly.

CAUTION: METAL BOWL WITH SIGHT GAUGE MUST BE CLEANED WITH HOUSEHOLD SOAP ONLY.

For servicing or replacement, depressurize the unit first and then simply remove insert retaining pins and remove unit from air line as shown below.



See other side for Service Kits / Parts Available.



- Lightly grease with provided lubricant.
- Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.
- C Clean with lint-free cloth.

! CAUTION

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and di-ester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.

Bowl guards are recommended for added protection of polycarbonate bowls where chemical attack may occur.

Service Kits / Parts Available

Description	Kit Number
Spring Cage and Knob Kit	CKR20A
(Lock Assembly, Adjusting Screw,	
Adjusting Nut, Knob, Spring Cage)	
Spring Cage / T-Handle Kit	CKR21Y
(Spring Cage, T-Handle Assembly,	
Lock Nut, Spring Button)	
Repair Kit	
(Piston Assembly and Disc Assembly)	
Relieving	RKR20A/M1
Non-Relieving	RKR20KA/M1
Element Replacement Kit	
5 Micron Element	EKF20VA
40 Micron Element	EKF20A
Sight Gauge Repair Kit	RKB605WB
(Sight Gauge, Sight Gauge O-Ring,	
Indicator Float, Sight Gauge Retainer,	
Retainer O-Ring)	
Bowl, Replacement Kit w/Drain Cock	BKF21WA
(Bowl and Sight Gauge, Bowl O-Ring)	
Internal Auto Drain Repair Kit	RK602MD/M4
(Lever Pin, Disc Assembly, Float Assembly,	
Vee Seal, Strainer, O-Ring)	
Piston Drain Kit	4212
(Piston, Drain Cock Complete Assembly	
including Strainer and O-Ring)	

Accessories

Description	Kit Number	
Wall Mount Kit	MK20-0100	

Extra (Pipe Port) Insert Kits and Combination Unit Interface Insert

Pipe Port Size	Kit Number
1/4"	IK20Y
3/8"	IK20X
1/2"	IK20A
3/4"	IK20B
1"	IK20C
Combination	IK20CC

Note: Kit includes two pipe port inserts. "O" rings and pins.

Filter / Regulator Types

- Type B20 / B21 (Relieving)
- Type B20K / B21K (Non-Relieving)

⚠ 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.

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