

# WILKERSON®

Richland, MI 49083

Tel: (269) 629-5000

Installation & Service Instructions  
83-716-000

Filter Model F43  
with Variations and Accessories

ISSUED: February, 2007  
Supersedes: October, 1996

Doc. #83716000, EN# 061219, Rev. 2

## 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 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.

## CAUTION

Polycarbonate bowls and sight domes, 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 and sight domes 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 diester 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 occasionally occur.

## WARNING

To avoid polycarbonate bowl rupture that can cause personal injury or property damage, do not exceed bowl pressure or temperature ratings. Polycarbonate bowls have a 150 PSIG pressure rating and a maximum temperature rating of 125°F.

## 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.wilkersoncorp.com](http://www.wilkersoncorp.com)

## INSTALLATION

1. Refer to WARNINGS and CAUTIONS.
2. Purge downstream air line of oil.
3. Install the unit with the air flowing in the direction indicated by the arrow on the body and / or the DP2 indicator.
4. The drain line connection is dependent on the type of drain that is selected. The internal auto float drain has a 3/8" male connection. The external drains require the 1/2" NPT or (BSP) drain plate and a 1/2" NPT or (BSP) pipe nipple to connect the drain to the filter. The X01, X02 and XB3 series of drains have a 1/8" NPT (BSP) female port to connect a drain line to pipe away contaminants.
5. Maximum inlet pressure and operating temperature ratings are: units with DP2 150 psig (10,3 bar) 150°F (66°C); units without DP2: 300 psig (20 bar) 150°F (66°C).

## MAINTENANCE

1. TO CLEAN OR REPLACE FILTER ELEMENT: Shut off air supply and reduce pressure in the unit to zero, remove the 8 screws from the filterhousing, unscrew the filter support and remove filter element.
  - a. IF THE UNIT HAS A RIGID FILTER ELEMENT: remove and clean periodically by tapping on a hard surface, and blowing off with air blow gun. Torque element support to 8 ±1 FT.-LB. when replacing element. Element should be cleaned/replaced when the DP2 pressure indicator is completely red or when the DP3 reads 7 psi (0,5 bar).
2. IF THE UNIT HAS A MANUAL DRAIN, DRAIN THE UNIT ONCE EVERY 8 HOURS MINIMUM. If the unit is equipped with an external automatic drain clean the screen on top of the drain. Clean screen by blowing it off with an air blow gun.
3. When the bowl becomes dirty, clean by wiping with dry, clean cloth.
4. Before placing the unit in service, make sure that the bowl is properly reinstalled, and securely bolted in place using the noted torque specifications.

## 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.**

## REPAIR KITS AND REPLACEMENT PARTS

- Filter Element Kit (F43)  
 (includes filter element, o-ring / gasket)..... FRP-95-508
- Drain Plate Kits:  
 Drain Plate 9/16 diameter (use with internal automatic mechanical float drain no. GRP-95-981)..... GRP-95-391  
 Drain Plate (1/2 NPT) ..... GRP-95-393  
 Drain Plate (1/2 BSP) ..... GRP-95-395
- Bowl O-ring Kit..... GRP-95-290
- Differential Pressure Indicator (Standard) ..... DP2-01-001
- Differential Pressure Removal Cap Kit ..... GRP-95-022
- Internal Drains:  
 Automatic Mechanical Drain (Fluorocarbon Seals) ..... GRP-95-981
- Manual Override for Auto Drain  
 (GRP-95-981) NPT Body Threads..... GRP-96-001  
 (GRP-96-981) BSPP-G Body Threads ..... GRP-96-101
- External Drain  
 External Automatic Mechanical Drain..... X01-04-000  
 External Automatic Mechanical Drain..... X02-04-F00  
 External Automatic Mechanical Drain..... XB3-04-000

## AUTOMATIC ELECTRIC DRAIN VALVE

Model Number Kit	Port Size	Orifice Size	Electrical	Operating Pressure	
				Min.	Max.
X20-02-EE00	1/4" NPT	7/16"	115 VAC/1Ph/50-60Hz	2 psig	300 psig
X20-02-ED00	1/4" NPT	7/16"	230 VAC/1PH/50-60Hz	2 psig	300 psig
X20-02-EC00	1/4" NPT	7/16"	24 VDC	5 psig	300 psig
X20-04-EE00	1/2" NPT	7/16"	115 VAC/1Ph/50-60Hz	2 psig	300 psig
X20-04-ED00	1/2" NPT	7/16"	230 VAC/1PH/50-60Hz	2 psig	300 psig
X20-04-EC00	1/2" NPT	7/16"	24 VDC	5 psig	300 psig

