

WILKERSON®

Richland, MI 49083

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Installation & Service Instructions
83-284-000

Coalescing Filter Model M31 with
Variations and Accessories

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⚠ 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, 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 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

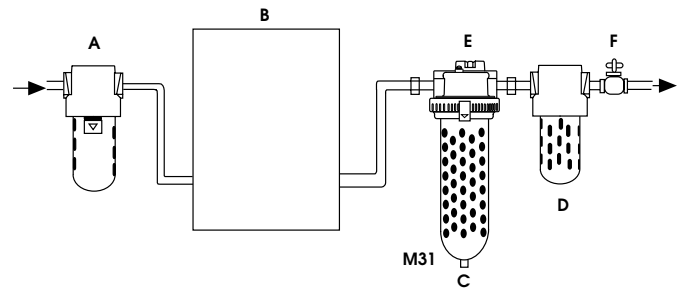
To avoid polycarbonate bowl rupture that can cause personal injury or property damage, do not exceed bowl pressure or temperature ratings. Polycarbonate bowls have a 150 PSIG pressure rating and a maximum temperature rating of 125°F.

INSTALLATION

1. Refer to Warnings and Cautions.
2. Purge downstream air line of oil.
3. Install as close as possible to where regulated air is being used.
4. Install the unit with the air flowing in the direction indicated by the arrow on the body.

5. A drain line with 3/8" or 10mm ID flexible tube connection may be attached to drain port if desired.
6. Maximum inlet pressure and operating temperature ratings are: transparent plastic bowls, 150 psig (10,3 bar) and 125°F (52°C); metal bowls, 150 psig (10,3 bar) and 150°F (66°C).

TYPICAL INSTALLATION (not to scale)



- A. PREFILTER** - It is recommended that a Wilkerson 5-micron-rated prefilter be installed upstream from the coalescer filter to prolong element life.
- B. AIR DRYER** - (Refrigerative or Twin Tower). An air dryer is generally preferred for optimum results, but is optional.
- C. COALESCER FILTER** - Do not touch the filter element once it has been put into service; the slightest pressure on the outer foam cover can easily damage it once it has been used.
- D. AC PAK** - The Type D element is an adsorption type for removing oil vapors. Oil-associated odors, whether petroleum base or synthetic base, and nearly 100% of any removing solid contaminants are removed.
- E. Differential Pressure Indicator** - Maximum recommended pressure drop across coalescer filters is 7 psi (0,5 bar). This can be monitored by installing a Wilkerson differential pressure indicator.
- F. VALVE** - Do not use a valve or shutoff device in conjunction with a coalescer filter that will allow a momentary or surge pressure drop greater than 50 psi (3,4 bar). To avoid high surges which can either ruin the element or momentarily allow downstream contamination, use a slow-opening type valve.

⚠ 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.

MAINTENANCE

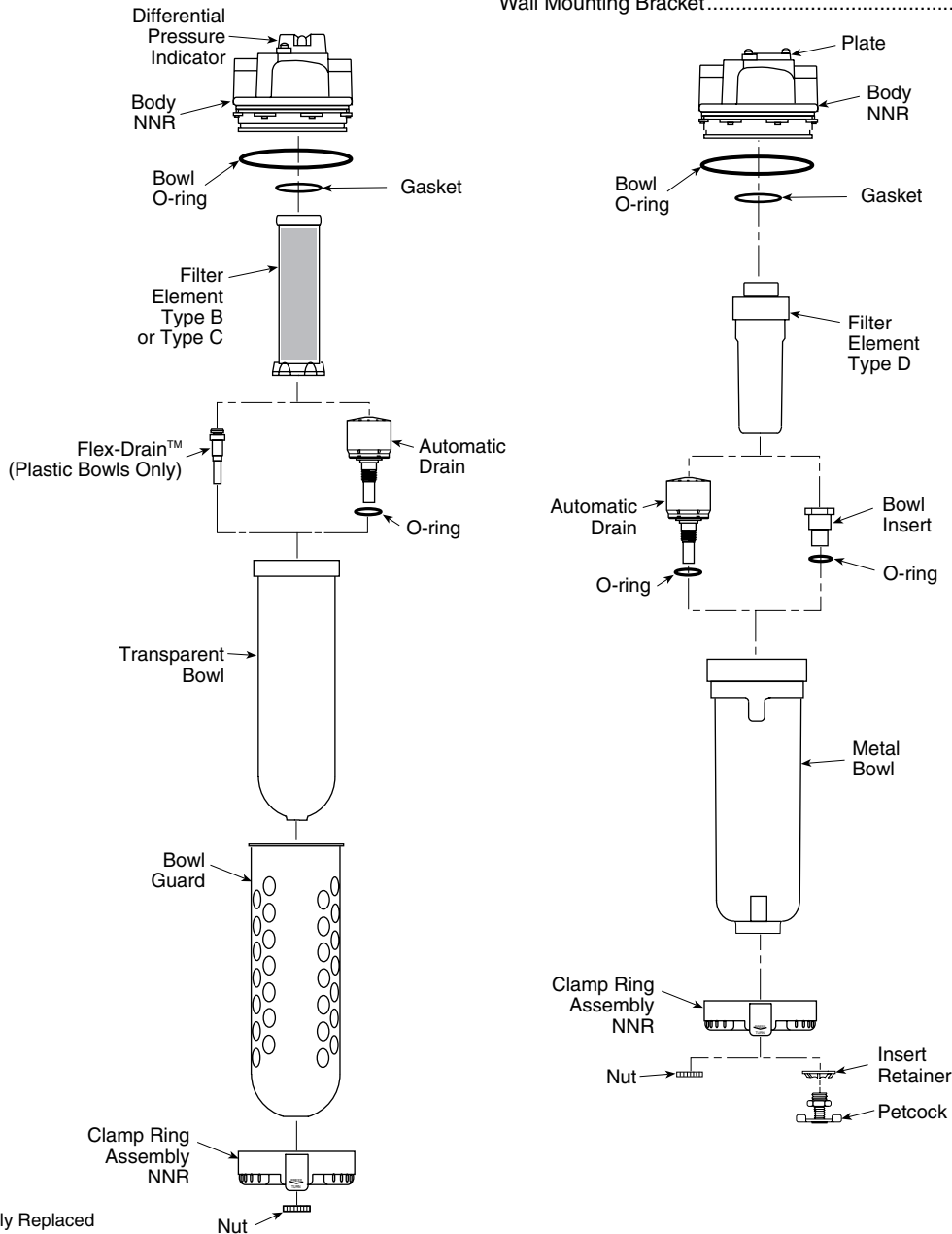
1. The element operates effectively when it is saturated. The element's useful life will end only when the resistance to flow becomes too high or the maximum permissible pressure is reached. The element cannot be cleaned or reused and must be replaced at the end of its useful life.
2. IF THE UNIT HAS A MANUAL DRAIN, drain the unit once every 8 hours.
3. When bowl becomes dirty, replace the bowl or clean by wiping with a dry, clean cloth.
4. Before placing the unit in service, make sure that the bowl and bowl guard are reinstalled, and securely locked in place.

REPAIR KITS AND REPLACEMENT PARTS

| | |
|---|-------------------|
| Bowl O-Ring Kit (Buna-N) -10 per Kit | GRP-95-256 |
| Bowl O-Ring Kit (Fluorocarbon) -10 per Kit | GRP-95-942 |
| Filter Element Repair Kits – | |
| Type D Element Kit..... | MXP-95-522 |
| Type C Element Kit..... | MTP-95-521 |
| Type B Element Kit..... | MSP-95-993 |
| Flex-Drain™..... | FRP-95-610 |
| Automatic Drain (w/ Nitrile Seals)..... | GRP-95-973 |
| Automatic Drain (w/ Fluorocarbon Seals)..... | GRP-95-981 |
| Plastic Bowl Kits – | |
| with Flex-Drain™ w/ Fluorocarbon Seals | GRP-95-940 |
| with Flex-Drain™ w/ Bowl Guard..... | GRP-95-938 |
| with Automatic Drain / Fluorocarbon Seals / Bowl Guard..... | GRP-95-941 |
| Bowl Guard..... | DRP-95-810 |
| Metal Bowl Kits – | |
| with Petcock / Fluorocarbon seals..... | MRP-95-939 |
| Differential Pressure Indicator | DP2-01-000 |

ACCESSORIES

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|----------------------------|-------------------|
| Wall Mounting Bracket..... | GPA-95-946 |
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NRR = Not Normally Replaced