

# Aquacon® ACO Fuel Monitors

El 1583 7th Edition Qualified Aviation Fuel Monitors. Remove Water and Dirt from Jet Fuel and Avgas



## Features

- Free and emulsified water removal to less than 5 ppm
- 1/2 micron particle removal
- Provides protection against “slugs” of water
- Pressure increase signals need for cartridge change
- Use with existing filter housings
- Improved configuration to help reduce risk of super absorbent polymer (SAP) migration downstream



## Contact Information:

Parker Hannifin Corporation  
**Aerospace Filtration Division**  
1210 Garden of the Gods Road  
Colorado Springs, CO 80907

phone 719 531 5855  
fax 719 531 5690  
vfsales@parker.com

[www.velcon.com](http://www.velcon.com) | [www.parker.com](http://www.parker.com)

## Description

Patented **Aquacon**® Filter Cartridges have a unique high-capacity inner absorbent medium which removes all free and emulsified water from hydrocarbon fuels down to less than 5 ppm in the effluent. Absorbed water is chemically locked into this medium.

When a cartridge reaches its water holding capacity, its accordion pleats swell and cause an increase in the differential pressure which signals the operator to change the cartridge.

Solid contaminants are removed by the cartridge's particulate filter media layers. The pleated accordion

style design provides a large surface area for maximum dirt holding capacity. Models are offered for particle filtration down to 1/2 micron size with 98% plus efficiency. Performance is not affected by the presence of common surface active agents.

Compact **Aquacon** Cartridges are quick and easy to install. Models are available to fit most existing standard housings. Refer to Cartridge Selection Table on reverse side.

Use Form VEL1846 for cartridge changeout recommendations at flow rates less than rated flow.



ENGINEERING YOUR SUCCESS.

# ACO Cartridge Selection Table

| Model Number | Micron Ratings (µm) | Inside DIA (in) | Outside DIA (in) | Length (in) | Collapse Pressure (psi) | Max. Flow Rate (USGPM) | Interchange Information                           |
|--------------|---------------------|-----------------|------------------|-------------|-------------------------|------------------------|---|
| ACO-21001R   | 0.5                 | 1 1/32          | 2 5/8            | 9 3/4       | 60                      | 15                     | Fits VF-31E Housing                               |
| ACO-31001R   | 0.5                 | 1 1/16          | 3                | 9 3/4       | 75                      | 20                     | Fits Purolator Vessel PR-172-3                    |
| ACO-40801R   | 0.5                 | 1 3/4           | 4                | 8           | 100                     | 13                     | Rellumit Replacement                              |
| ACO-41201R   | 0.5                 | 1 3/4           | 4                | 12 1/4      | 100                     | 20                     | Replaces Facet C-707; Purolator Vessel PAG-50     |
| ACO-41601R   | 0.5                 | 1 3/4           | 4                | 15 13/16    | 100                     | 27                     | Rellumit Replacement                              |
| ACO-41801R   | 0.5                 | 1 3/4           | 4                | 18          | 100                     | 30                     | Replaces Facet C-706 and Keene BP-419, BP-518     |
| ACO-41901R   | 0.5                 | 1 3/4           | 4                | 19 7/8      | 175                     | 32                     | Rellumit Replacement                              |
| ACO-51201R   | 0.5                 | 1 7/8           | 5 5/8            | 12 1/4      | 75                      | 50                     | Fits VF-61 Housing                                |
| ACO-512P3R   | 0.3                 | 1 7/8           | 5 5/8            | 12 1/4      | 75                      | 50                     | Fits VF-61 Housing                                |
| ACO-60801R   | 0.5                 | 3 1/2           | 6                | 8 1/4       | 100                     | 30                     | Omeco 6" x 8" Replacement                         |
| ACO-60901R   | 0.5                 | 1 1/2           | 6                | 9 11/16     | 100                     | 36                     | Fits Fram/Facet VFCS-21 (Element CC-21-7); VF-609 |
| ACO-609P3R   | 0.3                 | 1 1/2           | 6                | 9 9/16      | 100                     | 36                     | Fits Fram/Facet VFCS-21 (Element CC-21-7); VF-609 |
| ACO-61201R   | 0.5                 | 1 1/2           | 6                | 13 3/4      | 100                     | 48                     | Fits Fram/Facet VFCS-22 (Element CC-22-7)         |
| ACO-61401R   | 0.5                 | 3 1/2           | 6                | 14 1/2      | 175                     | 58                     | Qualified to EI 1583 7th Edition                  |
| ACO-62201RTB | 0.5                 | 3 1/2           | 6                | 22          | 175                     | 88                     | Qualified to EI 1583 7th Edition                  |
| ACO-62901R   | 0.5                 | 3 1/2           | 6                | 28 3/4      | 175                     | 115                    | Qualified to EI 1583 7th Edition                  |
| ACO-63301R   | 0.5                 | 3 1/2           | 6                | 33 1/4      | 175                     | 133                    | Qualified to EI 1583 7th Edition                  |
| ACO-64401R   | 0.5                 | 3 1/2           | 6                | 43 1/4      | 175                     | 173                    | Qualified to EI 1583 7th Edition                  |
| ACO-64401RTB | 0.5                 | 3 1/2           | 6                | 44          | 175                     | 176                    | Qualified to EI 1583 7th Edition                  |
| ACO-71801R   | 0.5                 | 2 1/2           | 6 1/4            | 18          | 75                      | 65                     | Fits VF-71E Housing                               |

## Technical Information

1. Max. operating temp.: 250°F (121.1°C)
2. Micron ratings are nominal at 98%+ efficiency
3. **Aquacon** Cartridges can significantly reduce flow when loaded with water or dirt. Appropriate precautions should be taken in applications where fuel flow must be maintained or where surge conditions can occur.
4. Replace the cartridge if the differential pressure exceeds 15 psid. For service life information, please refer to Operating Procedure VEL1839 or consult your company fuel handling procedures.
5. Typical water holding capacity for ACO-61401R is 700-800 ml.
6. All ACO 6 inch diameter filters are qualified to EI1583 7th Edition. Other diameters are based off of the 6 inch design and filter performance will have similar results.

**NOTE:** 1/2 micron rated **Aquacon**® Cartridges are recommended for use with jet fuel and avgas. Effluent fuel quality meets requirements for EI 1583 7th Edition.

**CAUTION:** DO NOT USE WITH PRE-MIXED FUELS CONTAINING ANTI-ICING ADDITIVES (FSII)

