ACI Aquacon® Aviation Fuel Filter Monitor Cartridges

Remove Water and Dirt from Jet Fuel and Avgas Inside-to-Out Flow Cartridges



FEATURES

- Free and emulsified water removal to less than 5 ppm
- 1/2 micron particulate removal
- Provide protection against "slugs" of water
- Pressure increase signals need for cartridge change
- Not affected by surface active agents*
- Replace existing coalescers in into-plane filter separator vessels
- Inside-to-out flow pattern

DESCRIPTION

Patented* **Aquacon®** Filter Cartridges have a unique high-capacity inner filter media 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 two particulate filter media layers. The pleated accordion style design provides a large surface area for maximum dirt holding capacity. Performance is not affected by the presence of common surface active agents.

The Parker Velcon ACI openend and threaded-base *Aquacon®* Cartridges have been qualified to EI 1583, the "Energy Institute Specifications and Qualification Procedures for Aviation Fuel Filter Monitors with Absorbent Type Elements."

The ACI-6xx01P open-end and ACI-6xx01PTB threaded base *Aquacon* elements are intended to be installed in the final filter/separator vessel in place of coalescers for more protection against dirt and water downstream.

CARTRIDGE SELECTION TABLE

Model Number	O. D. in.	Length in.	End-Cap Type	Maximum Flow Rate (USGPM)	Interchange Information
ACI-61401P	6	14 ½	3 ½" ID Open- Ends	58	CC-N18, CA14-3, CA14-9
ACI-61401PTB	6	14	Screw Base/ Blind	56	CC-N18SB, CA14-3SB, CA14-9SB
ACI-62201P	6	22 1/4	3 ½" ID Open- Ends	89	CC-K2, CC-K28, CA22-3, CA22-9
ACI-62201PTB	6	22	Screw Base/ Blind	88	CC-K28SB, CA22-3SB, CA22-9SB
ACI-62901P	6	28 ¾	3 ½" ID Open- Ends	115	CC-N28, CA28-3, CA28-9
ACI-62901PTB	6	27 15/16	Screw Base/ Blind	111	CC-N28SB, CA28-3SB, CA28-9SB
ACI-63301P	6	33 1/4	3 ½" ID Open- Ends	133	CC-K38, CA33-3, CA33-9
ACI-63301PTB	6	33	Screw Base/ Blind	132	CC-K38SB, CA33-3SB, CA33-9SB Has NSN: 4330-01-439-2314
ACI-63301FP	6	33 %	2" ID Open- Ends	133	Faudi F. 1-842 (1.066.020)
ACI-63801P	6	38 1/4	3 ½" ID Open- Ends	153	CC-K38-1, CA38-3, CA38-9
ACI-63801PTB	6	38	Screw Base/ Blind	152	CC-K38SB-1, CA38-3SB, CA38-9SB
ACI-64401P	6	43 1/4	3 ½" ID Open- Ends	173	CC-N38, CA43-3 CA43-9
ACI-64401PTB	6	44	Screw Base/ Blind	176	CC-N38SB, CA43-3SB, CA43-9SB
ACI-65601P	6	57	3 ½" ID Open- Ends	228	CC-N48, CA56-3, CA56-9
ACI-65601PTB	6	56 1/16	Screw Base/ Blind	224	CC-N48SB, CA56-3SB, CA56-9SB

 $^{1\} Overall\ length\ does\ not\ include\ the\ 1''\ bolt\ for\ the\ ACI-6xx01PTB\ threaded\ base\ ACI's.$

Note: Drain vessels equipped with the ACI Aquacon* Cartridges on a daily basis from an upstream drain to ensure upstream water is removed to prolong element life.

TECHNICAL INFORMATION

- 1. Maximum exposure temperature is 160°F.
- 2. Cartridges are rated at 1/2 micron nominal 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 25 psid. For service life information, please refer to Operating Procedure # 1839 or consult your company fuel handling procedures.
- 5. ACI burst strength exceeds 175 psid. If F/S vessel coalescer deckplate or manifold is not certified to
- 15 bar (220 psi) strength, a differential pressure limiting device, set from 25 30 psid, should be installed on the filter/separator vessel.
- 6. Typical water holding capacity for ACI-61401P: 900 ml.

CAUTION: DO NOT USE WITH PRE-MIXED FUELS CONTAINING ANTI-ICING ADDITIVES.