

## PRODUCT DATA SHEET

Model 9C222-1, 9C205-2



## PARKER AEROSPACE

# Fuel pump cartridge/canister

### Product data matrix and performance index

Some civilian aircraft utilize 230 VAC (L-N), variable frequency power for fuel system products. The 9C205-2/9C222-1 pump utilizes a two piece (cartridge/canister) assembly that allows for the main pumping element (cartridge) to be removed and replaced during service without performing additional maintenance on the fuel tank, such as draining the fuel from the tank to gain access to the pump. The 9C205-2/9C222-1 is spar mounted on the side of the fuel tank and utilizes a liquid ring assembly to “lift” fuel through an inlet snorkel.

Extensive qualification testing has been completed, and the 9C205-2/9C222-1 pump assembly has shown excellent field reliability. The combination of certification testing and field experience provides a low risk, cost effective solution for fuel pump applications utilizing a 230 VAC, variable frequency power system.

### Product attributes and benefits

- Two piece assembly (cartridge/canister), mounted to the vertical spar of the aircraft fuel tank
- Single inlet utilizing a centrifugal impeller
- 230 Volt (L-N), variable frequency drive motor
- Motor is fuel cooled for long life

### Contact information

#### Bill Heilman

bill.heilman@parker.com  
(440) 284-6284

**Parker Hannifin Corporation**  
Parker Aerospace  
**Fluid Systems Division**  
711 Taylor Street  
Elyria OH 44035

# Fuel pump cartridge/canister

Product data matrix and performance index

## Model 9C222-1

Characteristic	Value	Pump performance
----------------	-------	------------------

Model number	9C222-1
Application	Cartridge assembly

### Pumping data

Hydraulic element	Two stage, centrifugal
Rated flow	36,960 pph
Minimum discharge pressure	13.8 psig
Typical discharge pressure	19 psig at sea level, at 750 Hz
Maximum operating altitude	43,100 ft
Qualified fuels	Jet A, TS-1, JP-5, RT
Temperature range	-40°F to +131°F
Duty cycle	Continuous

### Motor data

Motor type	Variable freq. AC
Voltage	192 – 260 VAC
Frequency	350 – 750 Hz
Current at rated flow	8.6 amps at sea level, at 750 Hz
Maximum current	11 amps at 750 Hz
Dry run capability	Yes
EMI filtering	No
Stator thermal protection	Yes
Electrical connection	EN2997Y01404MV

### Geometric assembly data

Assembly mounting	Into canister
Bypass flow valve	Yes
Lift capability	Up to 7"
Approximate envelope (L x W x H)	16" x 6.2" x 5.5"
Weight (maximum)	16.5 lbs

## Model 9C205-2

Characteristic	Value
----------------	-------

Model number	9C205-2
Application	Canister assembly

### Geometric assembly data

Assembly mounting	Spar, wall mount
Inlet port	4 bolt custom flange
Discharge port	4 bolt custom flange
Discharge check valve	Yes
Bypass flow valve	Yes
Approximate envelope (L x W x H)	13.3" x 9" x 12.2"
Weight (maximum)	10.7 lbs

Typical model 9C205-2/9C222-1 pump performance at 230 VAC across various frequencies for room temperature Jet A at sea level

