

PARKER AEROSPACE

Fuel pump cartridge/canister

Product data matrix and performance index

Some civilian aircraft utilize 115 VAC (L-N), variable frequency power for fuel system products. The 9C207-1/9C208-3 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 9C207-1/9C208-3 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 9C207-1/9C208-3 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 115 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
- 115 Volt (L-N), variable frequency drive motor
- · Motor is fuel cooled for long life

Contact information

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Model 9C208-3

Characteristic	Value	Pump performance
Model number	9C208-3	Typical model 9C207-1/9C208-3 pump hydraulic performance
Application	Cartridge assembly	at 230 VAC across various frequencies and altitudes
Pumping data		40
Hydraulic element	Single stage, centrifugal	35
Rated flow	16,400 pph at 668 Hz	<u>8</u> 30
Minimum discharge	19.1 psig at 668 Hz	25 25
pressure		ÿ 20
Typical discharge	24.2 psig at sea level, at 668 Hz	e 15
pressure		10 10 10 10 10 10 10 10
Maximum operating	41,000 ft	OSIO 5
altitude		
Qualified fuels	Jet A, TS-1, JP-5, RT	0 5000 10000 15000 20000 25000 30000 350
Temperature range	-40°F to +160°F	
Duty cycle	Continuous	Flow (pph)
Matardata		380 Hz, 30K 400 Hz, SL
Motor data	Variable from AC	502 Hz, 30K
Motor type	Variable freq. AC	642 Hz, 41K 668 Hz, SL
Voltage	115 VAC	671 Hz, 10K
Frequency	380 – 705 Hz	
Current at rated flow	5.2 amps at sea level, at 668 Hz	7
Maximum current	7 amps	,
Dry run capability	Yes	6
EMI filtering Stator thermal protection	No Yes	9 5
Electrical connection		pha
Electrical connection	D38999/21YD97PN	Current (amps/phase)
Geometric assembly data		± 3
Assembly mounting	Into canister	Te
Bypass flow valve	No	ਹੈ 2
Lift capability	Up to 7"	1
Approximate envelope (L x W x H)	16.9" x 5.6" x 7.6"	
Weight (maximum)	11.3 lbs	0
Troight (Hazimann)	11.5 65	0 5000 10000 15000 20000 25000 30000 35000
Model 9C207-1		Flow (pph)
	Value	380 Hz, 30K
Characteristic	Value	400 Hz, SL 502 Hz, 30K
Model number	9C207-1	642 Hz, 41K 668 Hz, SL
Application	Canister assembly	671 Hz, 10K
Geometric assembly data		
Assembly mounting	Spar, wall mount	
nlet port	AS1656-1A32	
Discharge port	AC 40E 2/	



Approximate envelope (L x W x H) 7.9" x 8.3" x 9.7"

Discharge port

Bypass flow valve

Weight (maximum)

Discharge check valve

AS685-24

Yes

No

6.0 lbs