

Model 13C1-1



PARKER AEROSPACE

Fuel boost pump

Product data matrix and performance index

Many civilian and military aircraft utilize 28 VDC power for fuel system products. The 13C1 Series pumps can supply pressurized fuel from the main tank(s) directly to the engine or APU as a boost function or can supply pressurized fuel for tank to tank transfers. Extensive qualification testing has been completed, and the 13C1 Series pumps have 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 28 VDC power system.

Product attributes and benefits

- Integral assembly, mounted internal to aircraft fuel tank
- Single inlet utilizing a centrifugal impeller
- 28 volt brushless DC drive system (motor & controller)
- Voltage range is from 18 VDC to 32 VDC
- Motor and controller are fuel cooled for long life

Contact information

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Characteristic	Value	Pump performance
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Model number	13C1-1
Application	Fuel boost pump

Pumping data

Hydraulic element	Single stage, centrifugal
Rated flow	9000 pph
Minimum discharge pressure	27 psig
Typical discharge pressure	30 psig at SL
Maximum operating altitude	40,000 ft
Qualified fuels	JP-8, JP-4
Temperature range	-65°F to +135°F
Duty cycle	Continuous

Motor data

Motor type	Brushless DC
Voltage	28 VDC
Current at rated flow	21 amps at SL
Maximum current	30 amps
Dry run capability	Yes
EMI filtering	Yes
Stator Thermal protection	Yes
Electrical connection	D38999/26WE6PN

Geometric assembly data

Assembly mounting	Submerged, wall mount
Inlet port	#8 mesh, screened inlet
Discharge port	MS33786-24
Discharge check valve	No
Bypass flow valve	Yes
Lift capability	No
Approximate envelope (L x W x H)	6.1" x 6.9" x 8.4"
Weight (maximum)	8.5 lbs

Typical model 13C1-1 pump performance curve at 28 VDC for room temperature JP-8 at sea level

