PRODUCT FAMILY 20 VDC Pruchloss Fuel

28 VDC Brushless Fuel Pump

Parker Aerospace, FSD-Elyria has a long history of supplying fuel pumps to the civilian and military aviation markets. Many civilian and military aircraft utilize a 28 VDC system to power the products in the fuel system. These pumps supply pressurized fuel from the main tank(s) directly to an engine or auxiliary power unit (boost function) or move fuel to another fuel tank on the aircraft (transfer function). The product catalog covers numerous mounting arrangements from in-line (external to the fuel tank) to submerged and skin mounted (internal to the fuel tank). Extensive qualification testing has been completed on these products. This past testing, combined with operational field experience means that these pumps can provide a low-risk, cost-effective solution for fuel systems utilizing 28 VDC power.



Model 14C1 family In-line mounting

Product Features

The products in the 28 VDC Brushless Product Family provide the capability to meet a wide array of fuel system demands. Some of the key features that provide versatility are as follows:

Mounting configuration

- Single assembly, line mounted external to the aircraft fuel tank
- · Single assembly, mounted internal to the aircraft fuel tank on the wall
- Two-piece, cartridge/canister assembly that mounts on the bottom of the fuel tank (enables cartridge removal and replacement without draining the fuel tank)

Hydraulic elements

Centrifugal impeller

Motor drive

- · 28 VDC, brushless DC drive motor controlled by an electronic controller
- Motor designs are operational from 18 VDC to 32 VDC
- Motor and controller are fuel cooled for long life

Specifications

Attributes	Values
Flow range	0 to 11,000 pph
Discharge pressure range	10 to 34 psi
Required input range	200 to 600 watts
Fluid temperature range	-65°F to +135°F
Ambient temperature range	-65°F to +185°F
Assembly weight	8 to 9 pounds
Duty cycle	Intermittent to continuous

Applications

Pumps from the 28 VDC brushless product family are used on the following aircraft:

- Embraer Legacy 450/500
- Northrop Grumman Global Hawk

Contact Information

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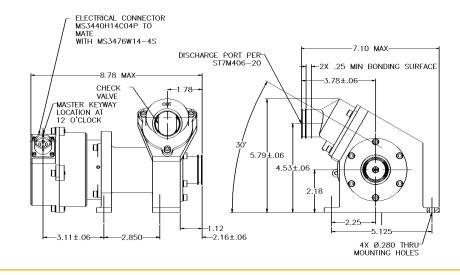
PRODUCT FAMILY

28 VDC Brushless Fuel Pump

Model 14C1 family

In-line mounting

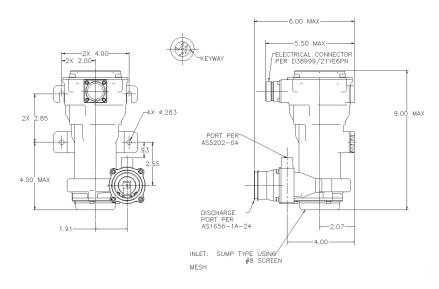




Model 13C1 family

Submerged mounting



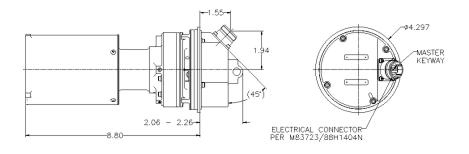


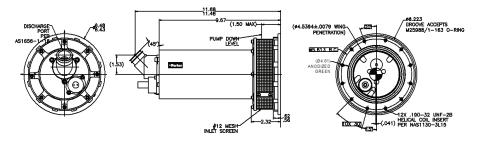
Model 11C12 / 11C13 family

Cartridge/canister skin mounting
The following pump model is compliant to



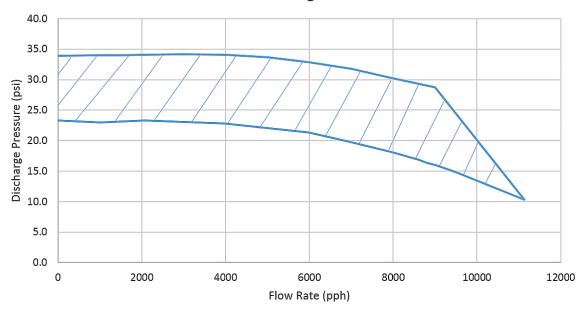




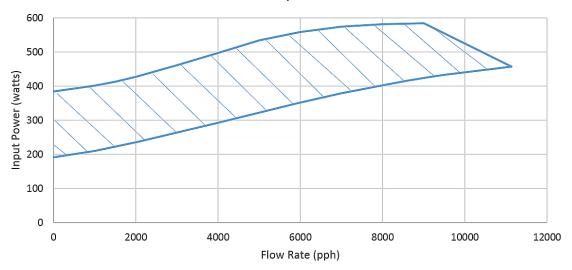


Product range curves for fuel flow versus discharge pressure and fuel flow versus input power

28VDC Brushless Pump Flow vs. Discharge Pressure



28 VDC Brushless Pump Flow vs. Input Power



If the required flow, discharge pressure, and input power fit within the crosshatched areas, then a product already exists that may fit the new application. Any pressure requirements below the cross-hatched region will also be satisfied.

Contact Information

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