

CLEANCUT® FUEL PUMP

LIQUID HEATING FUELS AND RENEWABLE FUELS TO R100 / B100 PRODUCT SHEET

Beckett



CleanCut PF20322



CleanCut PF20323



CleanCut Two-Stage PF20422

Product Description

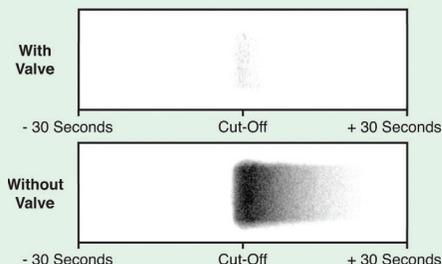
The Beckett family of CleanCut® pumps was developed to combine the benefits of solenoid valve control of fuel to the nozzle and the superior lift capabilities of traditional American pumps. The CleanCut pump has established a reputation as a rugged and reliable component for modern heating systems. Now approved for fuels up to 100% biodiesel (B100) the CleanCut pump continues to set the standard of the industry. The Beckett p/n PF20422 is a two-stage version with increased lift ability for applications where the burner is higher than the fuel supply tank. Note: A GeniSys control with pre-purge programmed or a Beckett PD Timer® will be needed for proper burner operation.

Beckett offers a complete line of fuel units to meet any application to 35 gph firing rate. Please refer to the table on the reverse side of this sheet for all models offered.

Features

- **Cleaner Operation** - The valve operation cuts oil flow almost instantly when power is cut to the solenoid coil, eliminating coasting stops that can cause soot formation on shut-down. The Beckett GeniSys controls or Beckett's PD timer work well with the CleanCut pump to bring the burner up to full speed before light-off. See illustration below.
- **More Reliable** - There are fewer moving parts compared to conventional pumps and fewer troublesome oil fittings to cause problems. In addition, all of the moving parts in the CleanCut pumps have been in use for years in both the US and in Europe.
- **Higher Capacity** - The unique design of the CleanCut pumps deliver up to 4 gallons per hour at 100 psi. (Note that applications above 3 gph will require an additional valve to meet UL requirements.)
- **Reduced Load on Motor** - Reduces load on the motor during start-up.

Shut-Off Valve Comparison



Pump Model Numbers

Beckett Part No.	Manufacturer Part No.	Description
PF20322	A2EA-6527B	Single-Stage 4 GPH 120VAC
PF20323	071N1121	Single-Stage 4 GPH 120VAC
PF20422	B2EA-6550B	Two-Stage 4 GPH 120VAC

120VAC pumps listed. For other voltage options, please refer to the back of this sheet or visit www.beckettcorp.com for more information.

PD Timer

No control change necessary! If the burner does not have a control that supports valve-on-delay (pre purge), Beckett's PD Timer can be used to add this function without changing the control.



Specifications

Nozzle Pressure Range	100-200 PSI
Factory Set Pressure	100 PSI
Capacity	4 GPH @ 100-150 PSI (#1 & #2 Fuel Oil) 3 GPH @ 150-200 PSI (#2 Fuel Oil)
Operating Fluids	#1 & #2 Fuel Oils Meeting ASTM D396 with Biodiesel blends up to 100% (B100). ASTM D975 with Renewable Diesel Blends to R100.*
Inlet/Return Pressures	10 PSI**
Suction Height	One Pipe Supply: 6' Max. Two Pipe Supply: 12' Max. (PF20322 / PF20323) Two Pipe Supply: 17' Max. (Two-Stage PF20422)
Rated Speed	3450 RPM Nominal
Ambient temp.	32°F Min. / 140°F Max.
Electrical Ratings	120 VAC (102V Min. - 132V Max.) 9W Max. 220 / 240 VAC (187V Min. - 264V Max.) 9W Max. 12VDC (10.2V Min. - 16V Max.) 9W Max.
Certification	UL, CUL

* For more information on approved fuels for Beckett burners, please refer to Form 664860.

**System inlet / return pressures must conform to NFPA 31 (3 PSI) as well as any additional Federal, State, or Local codes.

Beckett Pumps for Residential & Commercial Burners

In addition to our popular CleanCut® pumps, Beckett offers a wide variety of B100 rated fuel pumps as OEM standard new, not remanufactured, replacement pumps and parts. Let Beckett be the source for all your pump replacement and service needs.

- Capacities from 3 GPH to 35 GPH
- 2-stage Models
- 2-step Firing Models
- 24V / 120V / 240V AC Solenoid Coil Voltages
- 12V / 24V DC Solenoid Coil Voltages

Replacement Parts and Accessories

Additional pump models and replacement parts listed on the tables below:

Replacement Pumps

RWB Part No.	Description	Previous RWB Part No.	Suntec Part No.	Danfoss Part No.	Where Used / Notes
PF20321U	1 Stage - 3GPH - 120VAC CleanCut - B100	PF10321U	A2EA-6527B	071N1121	1 stage 'Universal' Replacement
PF20322U	1 Stage - 3GPH - 120VAC CleanCut - B100	PF10322U	A2EA-6527B		
PF20323U	1 Stage - 3GPH - 120VAC CleanCut - B100	PF10323U		071N1121	
PF20422U	2 Stage - 3GPH - 120VAC CleanCut - B100	PF10422U	B2EA-6550B		2 Stage
PF203N2U	1 Stage - 3GPH - B100	PF103N2U	A2VA-7116B		No Solenoid Valve
PF20332U	1 Stage - 3GPH - 220VAC CleanCut - B100	PF10332U	A2EA-6527B		
PF20333U	1 Stage - 3GPH - 220VAC CleanCut - B100	PF10333U		071N1123	
PF20342U	1 Stage - 3GPH - 24VDC CleanCut - B100	PF10342U	A2EA-6527B		
PF20372U	1 Stage - 3GPH - 12VDC/24VAC CleanCut B100	PF10372U	A2EA-6527B		
PF20363U	1 Stage - 3GPH 12VDC CleanCut - B100	PF10363U		017N1122	
PF205N2U	1 Stage - 3GPH - 1725RPM - B100	PF105N2U	A1YA-7912B		No Solenoid Valve
PF206N2U	2 Stage - 16GPH - 3450RPM 1/Step - B100	PF106N2U	B2TA-8245B		No Solenoid Valve
PF207N2U	2 Stage - 7GPH - B100	PF107N2U	B2YA-8916B		No Solenoid Valve
PF209N2U	1 Stage - 2.5GPH - 2850RPM - B100	PF109N2U	A2VA-7142B		No Solenoid Valve
PF22122U	2 Stage - 16GPH - 120VAC - 2/Step - B100	PF12122U	B2TA-8851B		
PF22132U	2 Stage - 16GPH - 220VAC - 2/Step - B100	PF12132U	B2TA-8851B		
PF22322BRU	2 Stage - 23GPH - 120VAC - 2/Step w/BAR Kit	PF12322BRU	B2TA-8851B		
PF22322U	2 Stage - 23GPH - 120VAC - 2/Step - B100	PF12322U	B2TA-8852B		
PF224N2BRU	2 Stage - 8GPH - w/BAR Kit	PF124N2BRU	B2TA-8248B		
PF224N2U	2 Stage - 8GPH - B100	PF124N2U	B2TA-8248B		No Solenoid Valve
PF226N2U	1 Stage - 7GPH - B100	PF126N2U	A2YA-7916B		No Solenoid Valve
PF245N2U	35GPH - 3450 / 1725	PF145N2U	J4PAC10038M		
PF812N2U	1 Stage - 2.5GPH - 3450/1725 Waste Oil	21219U	A2RA-7736		Waste Oil Burner Applications

Pump Parts and Accessories

RWB Part No.	Description	Previous RWB Part No.	Suntec Part No.	Danfoss Part No.	Where Used / Notes
21807U	Cordset - 13" Non-Delay				All CleanCut® Pumps
21887U	Cordset - 13" w/ PD Timer				All CC Pumps - 4 Sec time Delay
52585U	CleanCut Pump Instructions & By-Pass Plugs				All CleanCut Pumps
3713824U	Solenoid Coil 120VAC	21755U	3713824		PFx0322
3713798U	Solenoid Coil 240VAC	21756U	3713798		PFx0332
3713823U	Solenoid Coil 12VDC / 24VAC	21754U	3713823		PFx0372
071N0805U	Solenoid Coil 120VAC			071N0805	PFx0323
071N0806U	Solenoid Coil 240VAC			071N0806	PFx0333
071N0807U	Solenoid Coil 12VC			071N0807	PFx0363
21877U	Valve Stem				All PFX03x2 Pumps
S160-14	Cleancut Strainer Kit with Bio gasket	SP105281U			All 1-stage CleanCut Pumps
S197	Danfoss BFPH Strainer Kit	SP150223U			Danfoss Model BFPH Only
S170-1	Suntec 2-Step Pumps - 16/23GPH	SP250402U			Suntec B2TA-8851 / 8852
S190-8-10	Strainer Cover Gasket (10) - Bio gasket to B100	SPG33172BU			PFx03x2 Pumps
S190-7-10	Strainer Cover Gasket (10) - Cork (up to B5)	SPG33112BU			PF1xxx Pumps
S197-5-10	Strainer Cover O-Ring (10) - Viton to B100	SPG33129BU			PFx03x3 Pumps

www.beckettcorp.com

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