JABSCO®

Model 23540-1300

Model: 23540-1300

ROTARY VANE PUMP 24 Vdc

FEATURES

Body:	Cast Iron
Ports:	1" Hose Barb
Vanes:	Bronze
Rotor:	Brass
Shaft:	Steel
Bearings:	Sealed Ball Bearings
Seal:	Lip (Nitrile)
Motor End Bracket:	Aluminum
Motor:	Permanent Magnet
	Continuous Duty - 24 Vdc
Height:	5-3/4" (147 mm)
Length:	8-1/2" (215 mm)
Width:	5" (127 mm)
Weight:	11 lb (5 kg) Approx.
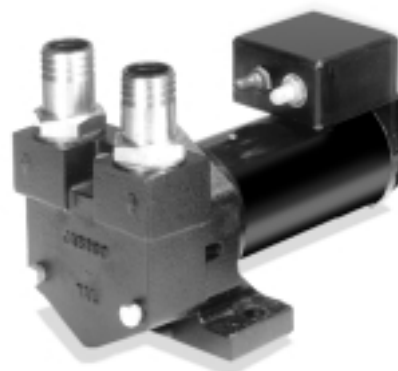
⚠ **WARNING** Explosion hazard. Motor can spark. Explosion & death can occur. Do not use where flammable vapors are present.

⚠ **WARNING** Explosion hazard. Do not pump gasoline, solvents, thinners or other flammable liquids. To do so can cause an explosion resulting in injury or death.

APPLICATION

The JABSCO Rotary Vane pump is ideal for transferring diesel fuel. The brass rotor and bronze vanes are not affected by petroleum products. It is self-priming with a suction lift up to ten feet and can pump against a discharge head of up to 20 feet.

NOTICE: Do not pump water or corrosive fluids. Do not pump oils with a viscosity greater than SAE 10W (400 SSU). Pump and/or motor damage may result.

INSTALLATION

The pump must be mounted in a dry location positioned horizontally. The motor is not waterproof and must not be submerged. SELECTION OF A COOL, VENTILATED location will generally extend pump motor life. The pump-head may be mounted at 60 degree increments on the bearing housing to allow plumbing connections as needed.

PLUMBING CONNECTIONS

Pump's ports are tapped with BSP (British Std. Pipe) threads and fitted with 1" hose barb connectors. Use flexible hose that does not kink when bent and with sufficient wall thickness to prevent collapse when used on suction side of pump. Plumbing should be routed so that some fluid will be retained in pump body to wet the rotor and vanes. Wetting the rotor and vanes aids in priming. Use a strainer on the intake if debris or solids are present in the fluid being pumped. Use JABSCO part no. 18753-0427. ALL plumbing connections must be airtight to enable fast priming.

PERFORMANCE DATA

	TOTAL HEAD		CAPACITY	
PSI	**FEET**	**METRES**	**GPM**	**l/MIN**
2.0	5	1,5	12.2	46
4.0	10	3,0	11.9	45

Table shows approximate Head-Flow for new pump. Performance is based on diesel fuel S.G. 0.85.

ELECTRICAL CONNECTIONS

Connect black wire to negative (–) terminal of battery. The red wire should run to positive (+) terminal of battery. Motor rotation is counter clockwise looking at shaft end of motor. Use proper wire size as determined by wire table elsewhere on this sheet. Should fuse blow or breaker trip, replace with same size fuse or reset breaker after determining reason for blown fuse or breaker trip.

WIRING DIAGRAM
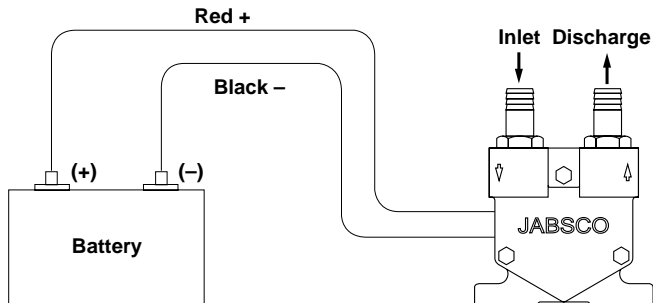
ELECTRICAL SPECIFICATIONS

Model No.	Voltage	Amp Draw	Fuse Size
23540-1300	24 Vdc	7.0	10 Amp

RECOMMENDED MINIMUM WIRE SIZES

Connection Length Between Battery and Motor	12 Vdc
1–10ft (3m)	#16
11–20 ft (6m)	#12
21–30 ft (9m)	#10
(up to 5 m)	(2.5 mm^2)

Above recommendations are for a maximum 3% voltage drop.

NOTICE: To prevent motor damage, use only multi-strand copper wire in size recommended. DO NOT use ordinary lamp cord or other substitutes.

NOTICE: No warranty consideration will be given to pumps that are returned without the properly sized fuse and fuse holder supplied with the pump.

OPERATION

Rotary Vane pumps must NOT be run dry, as the pumped liquid is the lubricant for the rotor and vanes. Observe the outlet and shut off pump as soon as liquid stops flowing.

The pump cannot run against a closed outlet such as encountered when using a garden hose type shut-off nozzle. Pressure for normal operation should not exceed 10 feet of head (4.3 PSI). Excessive pressures will cause fuse to blow.

Ambient operating temperature: –22° to +86°F (–30° to +30°C). Higher temperature will reduce motor run time. Diesel flash point approx. 150°F (66°C).
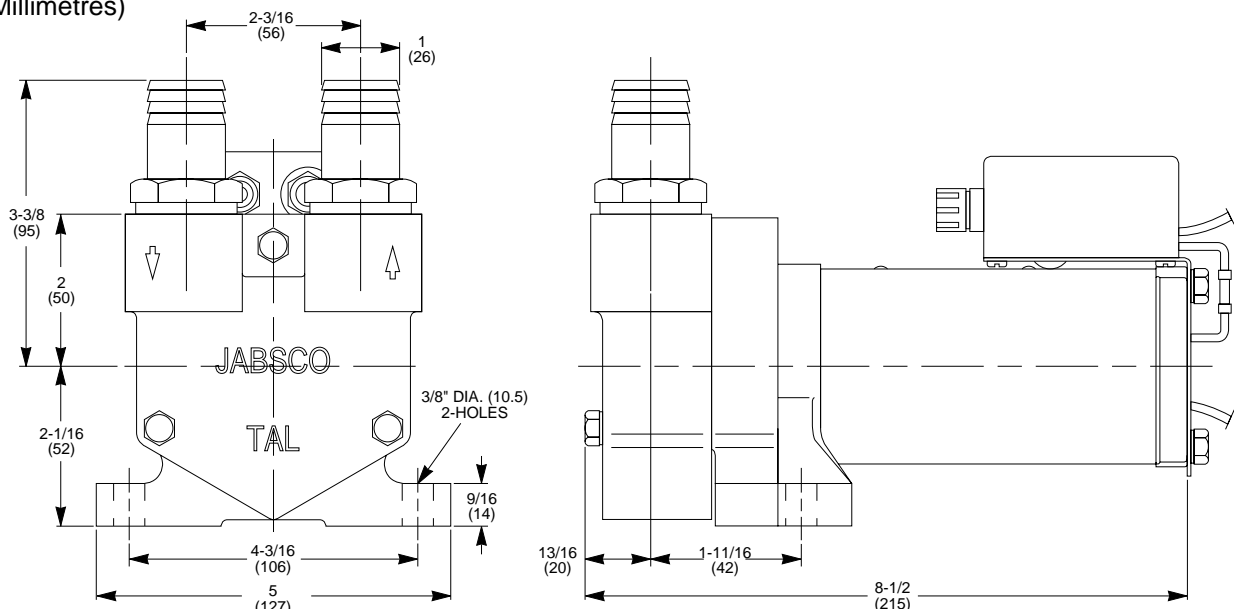
DO NOT OPERATE PUMP ABOVE THIS TEMPERATURE.

MAINTENANCE

Check wires and connections to be sure corrosion is not applying additional resistance to the motor circuit and causing a low voltage condition at the motor. Full voltage should be available to prevent motor damage.

DIMENSIONAL DRAWING
Inches (Millimetres)

For technical advice or service please take your pump into your local pump service center.
To order pump or parts or for pricing please go to the following links :

[Jabsco Pumps Home >>](#)
[Jabsco Pumps stock list >>](#)