

# OSCILLATING PUMPS





### **OSCILLATING PUMPS**

ITT Flojet oscillating pumps are designed for general consumer, commercial and industrial applications. All models are self-priming double insulated and built to draw low amps for cool operation and can run dry for extended periods of time without damage.



MODEL ET508 SERIES (HB)



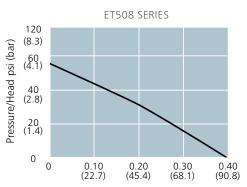


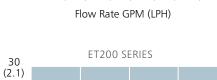
MODEL ET508 SERIES (FNPT)

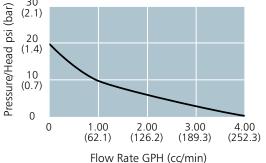
**SPECIFICATIONS** 

MODEL ET200 SERIES

PERFORMANCE







Type of Pump	ET508-HB	ET508-FNPT	ET200	
Temperature	Max. 160° F/71°C	Max. 160° F/71°C	Max. 176° F/80°C	
Open Flow Rate	.40 GPM/90 LPH	.40 GPM/90 LPH	3.8 GPH/240 cc/min.	
Length	5.54" (140.6mm)	4.53" (115.0mm)	2.75" (70mm)	
Width	2.25" (53.6mm)	2.25" (53.6mm)	.87" (22mm)	
Height	2.11" (53.5mm)	2.11" (53.5mm)	1.55" (39.5mm)	
Maximum Pressure	55 PSI/3.8 Bar	55 PSI/3.8 Bar	20 PSI/I.4 Bar	
Self-Priming (up to)	6 (inHg)	6 (inHg)	I.3 (inHg)	
Standard Voltage	115V/60Hz and 230V/50Hz, other voltages available.			
Power Consumption (nominal)	46 Watts	46 Watts	18.5 Watts	
Insulation Class	F (155° C)	F (155° C)	H(180° C)	
Elastomers	EPDM and Viton			
Piston and Spring	Stainless Steel for all models			
Filtering	4/1000 Mesh			
Approvals	pprovals U.L. and CSA Recognized, CE Certifie		E Certified*	

\* Approvals vary within the Product Line. Contact a Flojet Representative for specific model listings, recognitions and certifications.

Includes internal diode (except ET200 which requires an external diode).

### MODELS

MODEL #S	CE	UL	VOLTAGE	CHECK VALVE MTL.	PORT TYPE
ET508-221	YES	NO	115VAC	EPDM	1/4" (6.4mm) Hose Barb
ET508-223	YES	NO	115VAC	EPDM	1/8" (3.2mm) FNPT
ET508-224	YES	NO	115VAC	VITON	1/8" (3.2mm) FNPT
ET508-244	YES	NO	230VAC	VITON	1/8" (3.2mm) FNPT
ET200-021	YES	YES	115VAC	EPDM	.24" (6.1mm) HB X .20" (5.1mm) HB

#### ve for specific model

SECTION NINE | PAGE 149





#### SUBMERSIBLE DIESEL SLIDING VANE PUMPS



## SR060 SUBMERSIBLE DIESEL REFUELLING PUMP WITH INTELLIGENT CONTROL FOR INTERNATIONAL & US MARKETS

#### Flow rate: 13 gpm (60 lpm)

A revolutionary vehicle mounted pumping system to enable construction plant to be refueled with diesel fuel independently, from an adjacent drum, bowser or tank and into the vehicle fuel tank, safely and efficiently. Suitable for plant with tank sizes from 26.4 (100) to 158.5 gallons (600 liters).



## FEATURES

- Faster refuelling 16 gpm (60 lpm)
- Compact easy to install
- Suitable for "Short Radius" and "Zero Swing" machines
- Tolerance of small debris up to .04 in (1.0mm) diameter
- 2 Year Warranty (models fitted with Intelligent controller)
- Quick change for fast repair
- Low maintenance
- Fully sealed electrics, in conformance to IP68

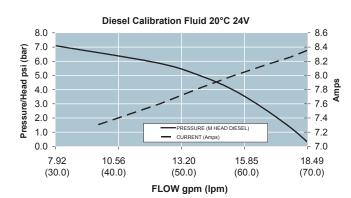
INTELLIGENT CONTROL FEATURES

• Failsafe operation

SPECIFICATIONS

- Will stop when the tank is full
- Will not start until the pump is immersed in the liquid
- Stops when the drum is empty

#### PERFORMANCE



#### MODELS

MODEL #	CE	DESCRIPTION
SRA060-6115	Yes	15.9 (60 LPM) 24V DC 3m hose intell controller, float switch
SRA060-7115	Yes	15.9 (60 LPM) 24V DC 3.5m hose intell controller, float switch
SRA060-6114	Yes	15.9 (60 LPM) 24V DC 3.5m hose intell controller,
SRA060-6110	Yes	15.9 (60 LPM) 24V DC 3.5m no switch

#### 10 mins on 5 mins off Duty Cycle Nominal 15.85 GPM (60 LPM) Performance ATEX Ex 112GEx nRfrb T4 Salt Mist IEC 60068-2-11:1999: Test Ka Cold bend (hose only) BS EN ISO 4672:1999, Method B Vibration random MIL-PRF-28800F, Paragraph 4.5.5.1.1.1, Test (a) LR Type Specification No. 1 (IEC 60068-2-1:1990: Tests Ab/Ad) Cold operational LR Type Specification No. I (IEC 60068-2-2:1974: Tests Bb/Bd) Dry Heat Vibration Def-Stan 07-55, Part 2, Section 1/1, Test A2, Paragraph 4 (1) a (i), Level 2 BS EN 60529:1992 Ingress protection (IPX8) LR Type Specification No. I Paragraph 14 Temperature cycling ISO 13766 Electromagnetic Compatibility

# GAS WARNING



No pump manufactured by ITT should be used for gasoline or any fluid with a flash point below 100° F (38° C)



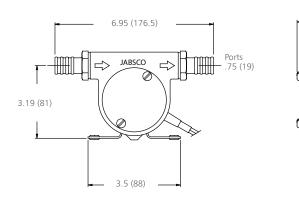


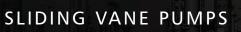
# MODELS

FUEL MASTER 40					
	MODEL #S	CE	DESCRIPTION5		
	50140-0000	Yes	10.6 GPM (40 LPM) 12V DC diesel refuelling pump kit (i and leads)		
	50140-0100	Yes	10.6 GPM (40 LPM) 24V DC diesel refuelling pump kit ( and leads)		
BY-PASS 40					
	MODEL #S	CE	DESCRIPTION		
	50130-1000	Yes	10.6 GPM (40 LPM) 12V DC pump hose ports		
	50130-1100	Yes	10.6 GPM (40 LPM) 12V DC pump hose ports		

#### DIMENSIONAL DRAWING

UNLESS OTHERWISE STATED DIMENSIONS IN [ ] ARE IN MM.







## **DIESEL SLIDING VANE / OIL TRANSFER PUMPS**

# FUEL MASTER 40 & BY-PASS 40 | FOR INTERNATIONAL & US MARKETS

Flow rate: Nominal 9.3 gallons/min (35 Liters/min) at 1500rpm. Self-priming from dry up to 4.9ft (1.5m)

#### APPLICATIONS

- Designed for refueling large diesel powered vehicles [typical tank sizes 100 - 400 gallons (400 - 1500 liters)] from drums
- This pump can be used where high flow rates, heads and superior priming performance is required
- Suitable for mounting to the following equipment: excavators, cranes, road rollers (compactors), pavers, agricultural machines, generators, helicopters
- Suitable for diesel fuel, kerosene, paraffin, hydraulic oils, Oils up to 150 centi Stokes (750 Saybolt Universal) viscosity



#### FEATURES

BY-PASS 40

• Includes integral by-pass for use with a trigger nozzle

- FUELMASTER 40
- Fully assembled diesel refueling kit
- Sits on a standard 40 gallon (205 liter) drum, or can be wall mounted
- Kit includes pump, suction hose, discharge hose, strainer, trigger nozzle, battery leads & clips, and carrying frame
- For rapid, efficient diesel fuel transfer
- Safe and tidy storage when not in use

inc hoses

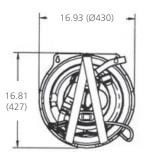
inc hoses

#### SPECIFICATIONS

Body	Aluminium
Rotor	Vectra
Vanes	PTFE filled Ryton
Seal	Nitrile Lip Seal
Voltage	12 or 24 Vdc

6.57 (167 ± 2) -







#### DIESEL SLIDING VANE / OIL TRANSFER PUMPS



## **ROTARY VANE PUMP** | FOR INTERNATIONAL & US MARKETS

The ITT Jabsco reversible rotary vane pump is ideal for transferring diesel fuel. It is self-priming to about three feet and can pump against a discharge head up to twenty feet. With its integral on-off reversing switch, it is ideal for moving fuel between port and starboard fuel tanks. Meets USCG 183.410 & ISO8846 Marine (Ignition Protection).







SPECIFICATIONS		
Body	Bronze	
Rotor	Vectra	
Vanes	Ryton	
Seal	Lip Type, Nitrile	
Motor	12V DC Permanent magnet Type, Intermittent Duty, Fully Enclosed, Stainless Steel Shaft	
Ports	1/2" (12.7mm) NPT Internal Pipe Threads, 1" (25mm) External Hose Barb	
Height	3-3/8" (86mm)	
Length	8-5/8" (219mm)	
Width	4-3/4" (l21mm)	
Weight	5-1/2 lbs (2.5 kg)	

#### MODEL

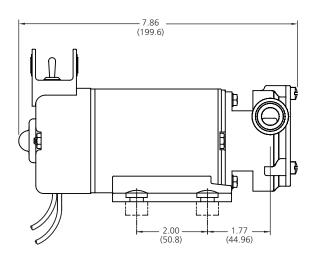
MODEL #S	CE	DESCRIPTION
18680-0920	Yes	6.08 GPM (23 LPM) 12V DC pump 1/2" (12.7mm) NPT
18680-0940	Yes	6.08 GPM (23 LPM) 24V DC pump I/2" (12.7mm) NPT
18680-1000	Yes	6.08 GPM (23 LPM) 12V DC pump 1/2" (12.7mm) NPT Reversible
Note: 18680-1000 is reversible, the others are not.		

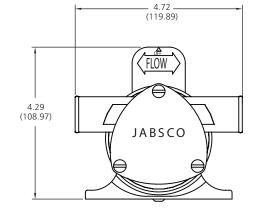


MODEL		
MODEL #S	CE	DESCRIPTION
23590-2010	Yes	6.86 GPM (26 LPM) 12V DC pump
23590-2110	Yes	6.86 GPM (26 LPM) 24V DC pump

#### DIMENSIONAL DRAWING

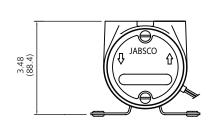
UNLESS OTHERWISE STATED DIMENSIONS IN [] ARE IN MM.

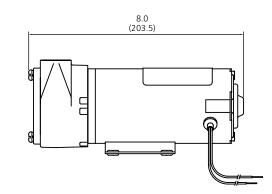




#### DIMENSIONAL DRAWING

UNLESS OTHERWISE STATED DIMENSIONS IN [] ARE IN MM.







# **DIESEL SLIDING VANE / OIL TRANSFER PUMPS**

# HYDRAULIC OIL TRANSFER PUMP | FOR INTERNATIONAL & US MARKETS



#### APPLICATIONS

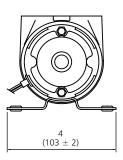
- General transfer duties
- Pumping of hydraulic systems on vehicles in construction and forestry industries



- Self priming up to 5.91 feet (1.8 meters)
- Maximum differential pressure 21.76 psi (1.5 bar)
- Maximum flow 6.87 gpm (26 lpm) @ 7 psi (0.5 bar) differential pressure
- Suitable for hydraulic oil, etc up to 150 cSt
- Full range of installation accessories

#### SPECIFICATIONS

Body	Aluminium	
Rotor	Sintered Iron	
Vanes	PTFE Filled Ryton	
Seal	Nitrile Lip Seal	
Shaft	Stainless Steel	
Port Type	1/2" (12.7mm) BSP Note: 3/4"(19mm) hose minimum recommended size	
Voltage	12 or 24 Vdc	
Motor	Permanent magnet, corrosion resistant IP44 protected	
Temperature Range	-4 to $+104^{\circ}$ F (-20 to $+40^{\circ}$ C)	
Duty	30 mins @ $+68^{\circ}F$ (20°C) 7.3 psi (0.5 bar) differential pressure 15 mins @ $+68^{\circ}F$ (20°C) 14.5 psi (1.0 bar) differential pressure	





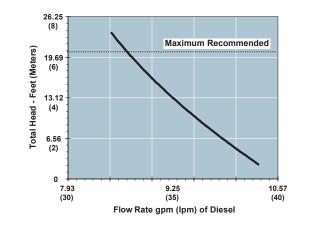
#### DIESEL SLIDING VANE / OIL TRANSFER PUMPS

# 35L DIESEL REFUELLING PUMP | FOR INTERNATIONAL & US MARKETS

Flow rate: 9 gallons/min (35 Liters/min). Self-priming from dry up to 2.4m (7.8ft)

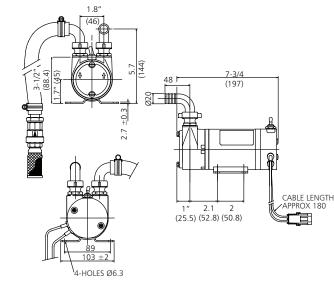


### PERFORMANCE



#### DIMENSIONAL DRAWING

UNLESS OTHERWISE STATED DIMENSIONS IN [ ] ARE IN MM.



#### APPLICATIONS

- Designed for refuelling small sizes diesel powered vehicles [typical tank sizes up to 50 gallons (200 liters)] from drums
- Suitable for mounting to the following equipment: excavators, cranes, road rollers (compactors), pavers, agricultural machines, generators, helicopters
- Suitable for diesel fuel, kerosene, paraffin, hydraulic oils, oils up to 150 centi Stokes (750 Saybolt Universal) viscosity
- 12 volt connection

#### FEATURES

- High head capability 19 feet (6 meters)
- Self priming up to 9 feet (2.8 meters)
- Vibration tested
- IP55 protected motor
- Full range of installation accessories
- Customized kits for OEM customers
- ISO8846 Marine (Ignition Protected)

#### SPECIFICATIONS

Body	Aluminium
Rotor	Vectra
Vanes	PTFE Filled Ryton
Seal	Nitrile Lip Seal
Shaft	Steel
Port Type	1/2" BSP or 3/4" (19mm) hose adaptors
Voltage	12 or 24 Vdc
Motor	Permanent magnet, corrosion resistant IP55 protected
Temperature Range	-22 to +104 °F (-30 to +40 °C )
Duty	25 mins @ + 104°F (40°C)

#### MODELS

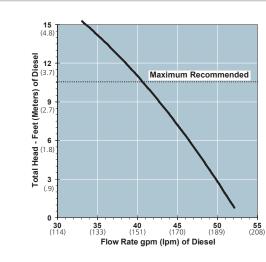
MODEL #S	CE	DESCRIPTION
23870-2200	Yes	9.2 GPM (35 LPM) 12V DC 1/2" (12.7 mm)BSP ports, switch and fuse
23870-2300	Yes	9.2 GPM (35 LPM) 24V DC 1/2" (12.7 mm) BSP ports, switch and fuse
23870-1200	Yes	9.2 GPM (35 LPM) 12V DC 3/4"(19 mm) hose ports, switch and fuse
23870-1300	Yes	9.2 GPM (35 LPM) 24V DC 3/4" (19 mm) hose ports, switch and fuse



50L DIESEL REFUELLING PUMP | FOR INTERNATIONAL & US MARKETS Flow rate: 13 gallons/min (50 liters/min) Self-priming from dry up to 9.6ft (3.0m)

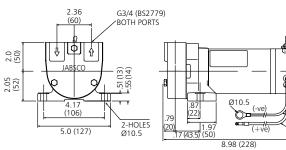


PERFORMANCE

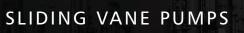


#### DIMENSIONAL DRAWING

UNLESS OTHERWISE STATED DIMENSIONS IN [] ARE IN MM.



SECTION TEN | PAGE 156





## **DIESEL SLIDING VANE / OIL TRANSFER PUMPS**

#### APPLICATIONS

- Designed for refuelling small sizes diesel powered vehicles [typical tank sizes up to 130 gallons (500 liters)] from drums
- Suitable for mounting to the following equipment: excavators, cranes, road rollers (compactors), pavers, agricultural machines, generators, helicopters
- Suitable for diesel fuel, kerosene, paraffin, hydraulic oils, oils
- up to 150 centi stokes (750 saybolt universal) viscosity
- 12 volt connection



## FEATURES

- High head capability 32 feet (10 meters)
- Self priming up to 9.6 feet (3 meters)
- Continuously rated
- Vibration tested
- IP55 protected motor
- 24V version with thermal cut-out protection
- Full range of installation accessories
- Customized kits for OEM customers
- ISO8846 marine (Ignition protection)
- Auto shut off available

# SPECIFICATIONS

Body	Cast Iron	
Rotor	Sintered Iron	
Vanes	Sintered Bronze	
Seal	Nitrile Lip Seal	
Shaft	Steel	
Port Type	3/4" BSP or 25mm (1") hose adaptors	
Voltage	12 or 24 Vdc	
Motor	Permanent magnet, corrosion resistant IP55 protected	
Temperature Range	-22 to +104 °F (-30 to +40 °C)	
Duty	Continuously rated up to 10 feet (3 metres), total head of diesel fuel at 104°F (40°C)	

#### MODELS

MODEL #S	CE	DESCRIPTION		
VR050-2022	Yes	13.2 gpm (50 lpm) 12V DC 3/4" BSP ports, switch & fuse		
VR050-2120	Yes	13.2 gpm (50 lpm) 24V DC 3/4" BSP ports		
VR050-2122	Yes	13.2 gpm (50 lpm) 24V DC 3/4" BSP ports, switch and fuse		
VR050-1120	Yes	13.2 gpm (50 lpm) 24V DC 1"(25mm) hose ports		
VR050-1022	Yes	13.2 gpm (50 lpm) 12V DC 1''(25mm) hose ports, switch & fuse		
VR050-1122	Yes	13.2 gpm (50 lpm) 24V DC 1''(25mm) hose ports, switch & fuse		
VR050-1123	Yes	13.2 gpm (50 lpm) 24V DC 1''(25mm) hose ports, auto shut off		
VR050-B013	Yes	13.2 gpm (50 lpm) 24V DC 1''(25mm) hose ports, switch & fuse, bypass		



ABLE LENGTH CABLE LENGTH



#### DIESEL SLIDING VANE / OIL TRANSFER PUMPS



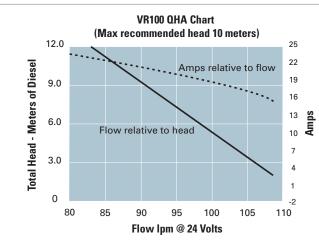
### **100L DIESEL REFUELLING PUMP** | FOR INTERNATIONAL & US MARKETS Flow rate: 28 gallons/min (105 liters/min) Self-priming from dry up to 7.8ft (2.4m)



#### MODELS

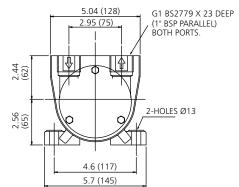
MODEL #S	CE	DESCRIPTION
VR100-2120	Yes	26.4 GPM (100 LPM) 24V DC I" (25.4 mm) BSP ports
VR100-2120V	Yes	26.4 GPM (100 LPM) 24V DC I" (25.4 mm) BSP ports for Bio-Diesel
VR100-1120	Yes	26.4 GPM (100 LPM) 24V DC 1¼" (32mm) hose ports,
VR100-1122	Yes	26.4 GPM (100 LPM) 24V DC 11/4 " (32mm) hose ports, switch & circuit breaker
VR100-1123	Yes	26.4 GPM (100 LPM) 24V DC 11/4 $$ (32mm) hose ports, auto shut off

#### PERFORMANCE



#### DIMENSIONAL DRAWING

UNLESS OTHERWISE STATED DIMENSIONS IN [ ] ARE IN MM.



# APPLICATIONS

- Designed for refuelling large diesel powered vehicles [typical tank sizes 100 400 gallons (400 1500 liters)] from drums
- This pump can be used where high flow rates, heads and superior priming performance is required
- Suitable for mounting to the following equipment: excavators, cranes, road rollers (compactors), pavers, agricultural machines, generators, helicopters
- Suitable for diesel fuel, kerosene, paraffin, hydraulic oils, oils up to 150 centi stokes (750 saybolt universal) viscosity

#### FEATURES

- Faster refuelling 105 liters/minute (28GPM)
- High head capability 10 metres (33 feet)
- Self priming up to 4 metres (12 feet)
- 45 min duty
- Thermal overload protected
- Vibration tested
- IP55 protected motor
- Full range of installation accessories
- Customized kits for OEM customers

### SPECIFICATIONS

Temperature Range	$-22^{\circ}F$ to $+122^{\circ}F$ ( $-30^{\circ}C$ to $+50^{\circ}C$ )
Pump Body	Cast Iron
Rotor	Sintered Iron
Vanes	Sintered Bronze
Shaft	Stainless Steel
Seal	Nitrile Lip Seal (Viton - 2120V)
Ports	Vertical I " BSP or 1¼" (32mm) hose adaptors
Motor	24v DC permanent magnet, thermal overload & IP55 protected
Duty	20 mins rated at 14.1 ft (4.3 m), total head of diesel fuel at 68°F (20°C)

