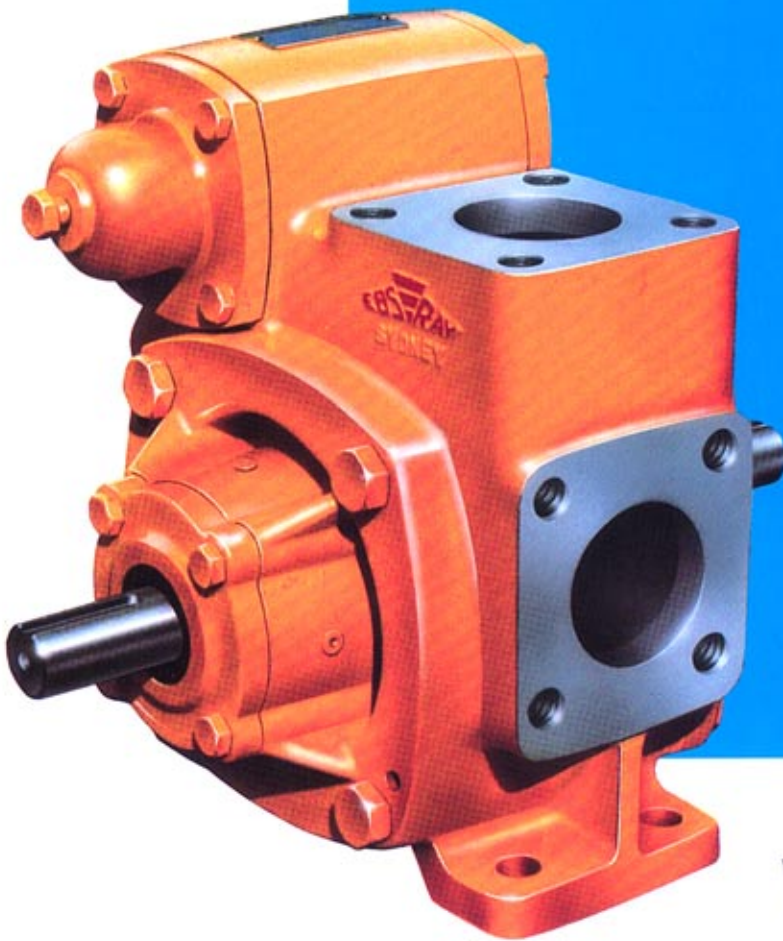


# EBSRAY PUMPS



## *V Series Model V25*

Quality System  
Quality  
Endorsed  
Company  
ISO 9001  
Lic 3332  
Standards Australia  
**HEAD OFFICE AND WORKS**

**EBSRAY**  
AUSTRALIA

# V Series Model V25



Motor Driven Units



Petrol or Diesel Engine Driven Units



Tanker Mounted Pumps



Industrial Applications

Designed and precision built for efficient transfer of a variety of liquids over a wide range of viscosities and having lubricating or non-lubricating characteristics.

## Specifications

Flow	to 600 L/m (10 L/sec)
Differential pressure to	850 kPa
Viscosity range	.5 to 10,000 cSt
Temperatures to	100°C

## Features

- Quiet operation.
- High overall efficiency.
- Low maintenance – long life.
- Internal wearing parts replaceable without removing pump from piping.
- Variable mounting options:
  - Double ended shaft.
  - Direct coupling to synchronous speed electric motors, speed reducers, pto's or engine driven.
  - Facility for close coupled hydraulic motor connection.
  - Belt drives.
  - 90° or 180° porting configurations.
- Lightweight – Robust – Compact.
- Positively actuated vanes.
- Integral adjustable bypass valve.

## Typical Services

- Transport tanker services.
- Petroleum and fuel industries.
- Chemical and pharmaceutical industries.
- Power stations.
- Paint industry.
- Public utilities.
- Edible oil industry.
- Aviation industry.

## Common Liquid Applications

Fuel oils	Transformer oils
Lube oils	Solvents
Distillate	Chemicals
Petrol	Edible oils
Kerosene	Aviation fuels

## Assured Performance

All Ebsray V Series Model V25 pumps are run tested prior to despatch in order to ensure performance in accordance with pump specifications. The high standards of engineering design, manufacturing and testing combine to make our pumps capable of long life and trouble free service.

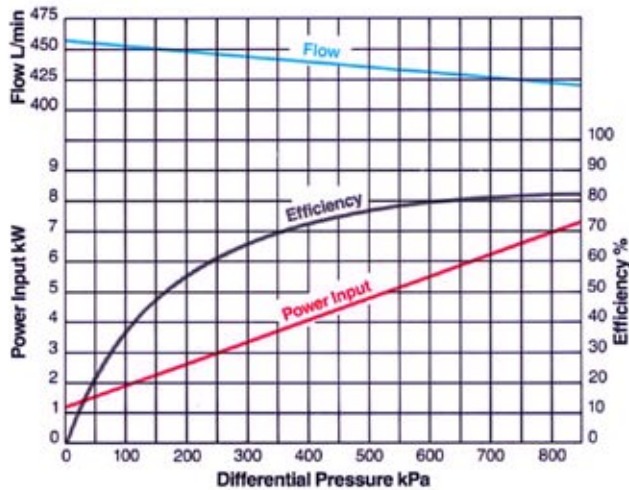
## Special Constructions

Contact EBSRAY or your local representative for advice on alternate arrangements to meet applications not outlined in this catalogue.

**Ebsray Pumps are designed and manufactured in Australia.**

# Performance Data

## Efficiency Graph



## High Pump Efficiency

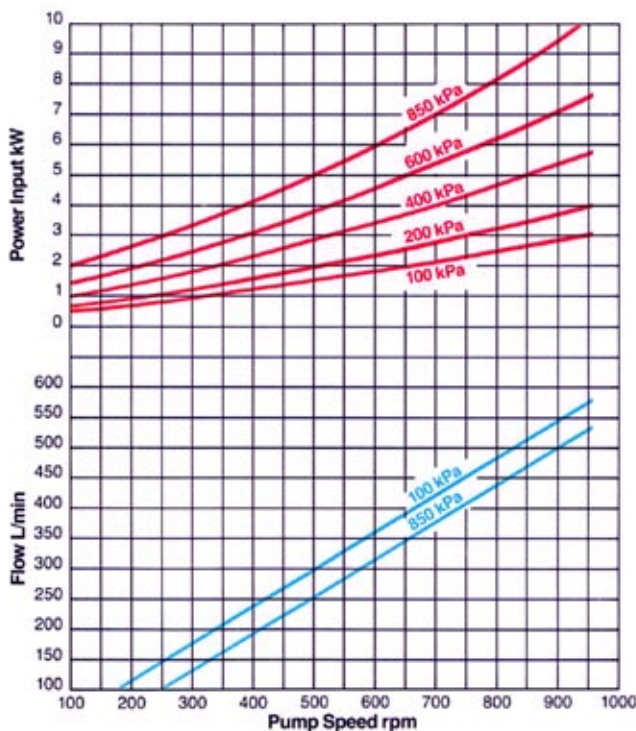
Being of the 'Sliding Vane Principle' all EBSRAY V SERIES pumps will operate efficiently over a wide range of pressures, viscosities and speeds.

A typical illustration is shown in the diagram opposite, and under ideal conditions it is possible to attain higher efficiency than shown here.

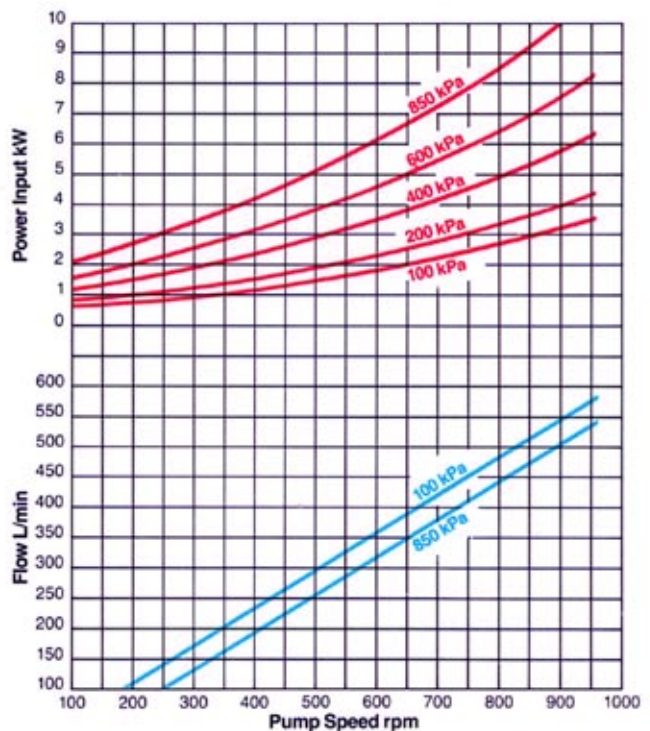
The diagram shows a typical performance of V Series Model V25.

Speed = 720 rpm  
Kinematic Viscosity = 100 cSt

## 1 cSt



## 10 cSt



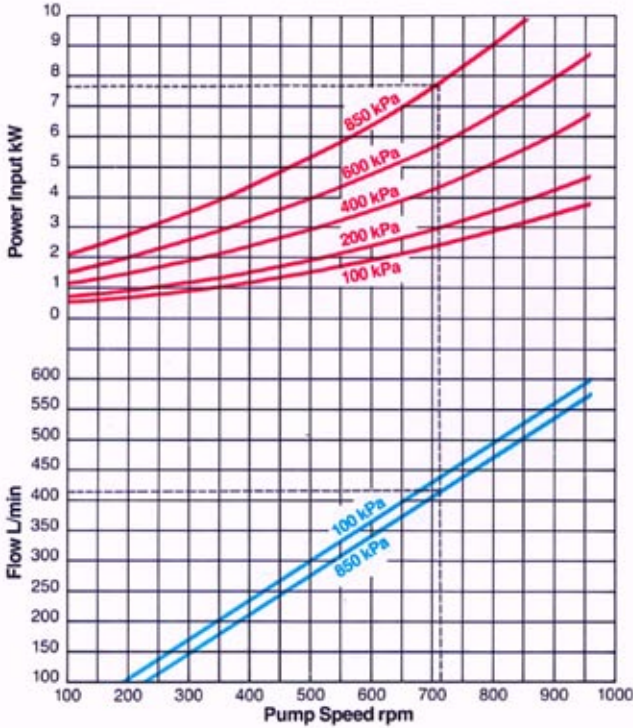
## Using these Graphs

### Example

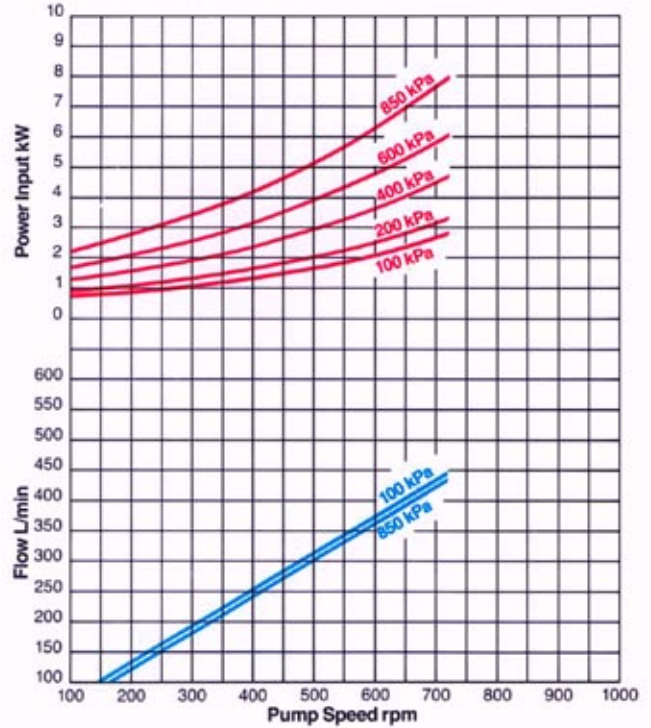
Flow 420 L/min  
Differential Pressure 850 kPa  
Viscosity 100 cSt

Select the 100 cSt graph. Trace 420 L/min horizontally to its point of intersection with 850 kPa FLOW curve. Read required pump speed directly below, i.e. 710 rpm. Transfer vertically upwards to point of intersection with 850 kPa POWER INPUT curve. Read off required power input, i.e. 7.8 kW. Motor selection 9 or 11 kW at indicated speed or direct coupled to 720 rpm synchronous motor. (Recheck power input at synchronous speed if required.)

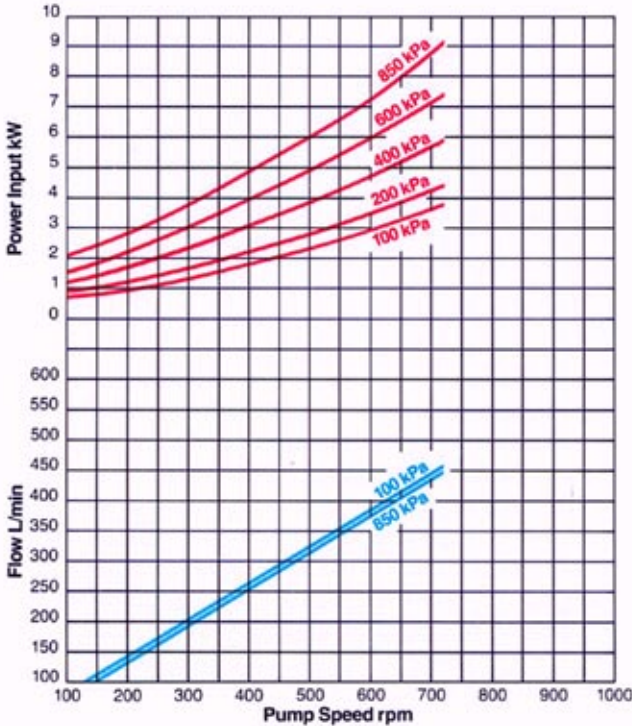
### 100 cSt



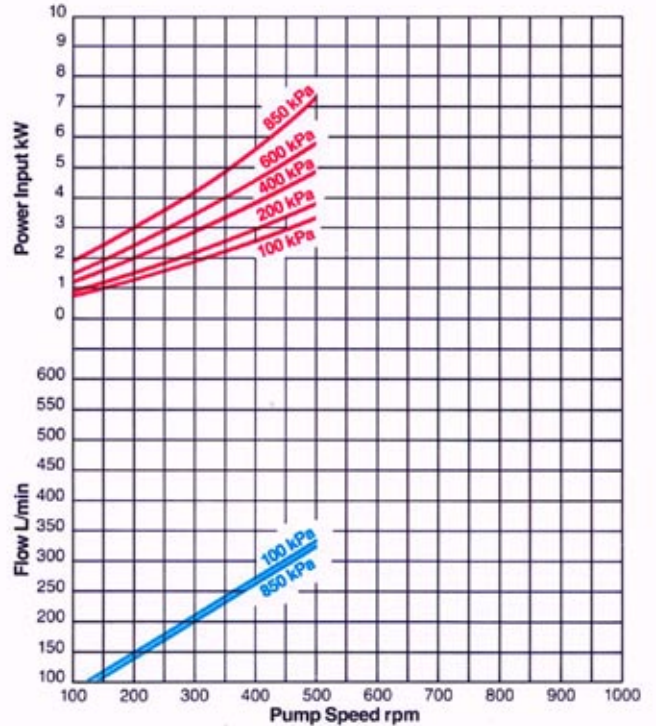
### 500 cSt



### 1500 cSt



### 3000 cSt



### Notes

1. POWER INPUT (kW) specified is measured under precisely controlled testing conditions of speed, kinematic viscosity and differential pressure. Any variation in these parameters will alter POWER INPUT. Therefore adequate allowances must be made over and above POWER INPUTS indicated for losses due to drives, couplings, gearboxes, etc., as well as margins for variables such as viscosity change or bypass valve overpressure when

determining power required.

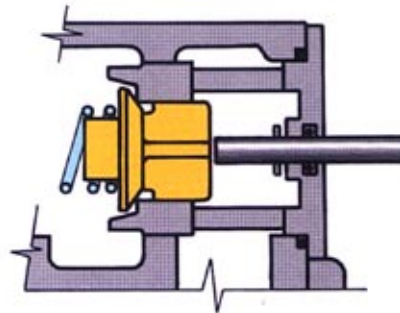
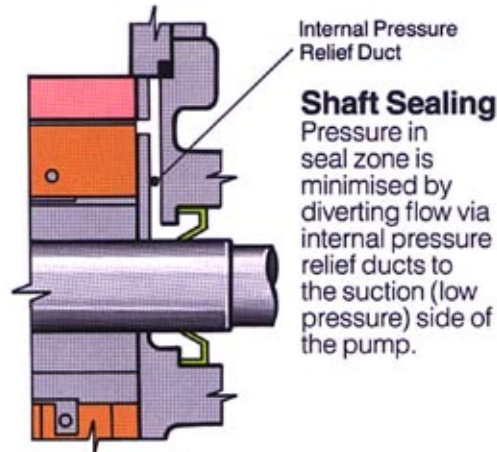
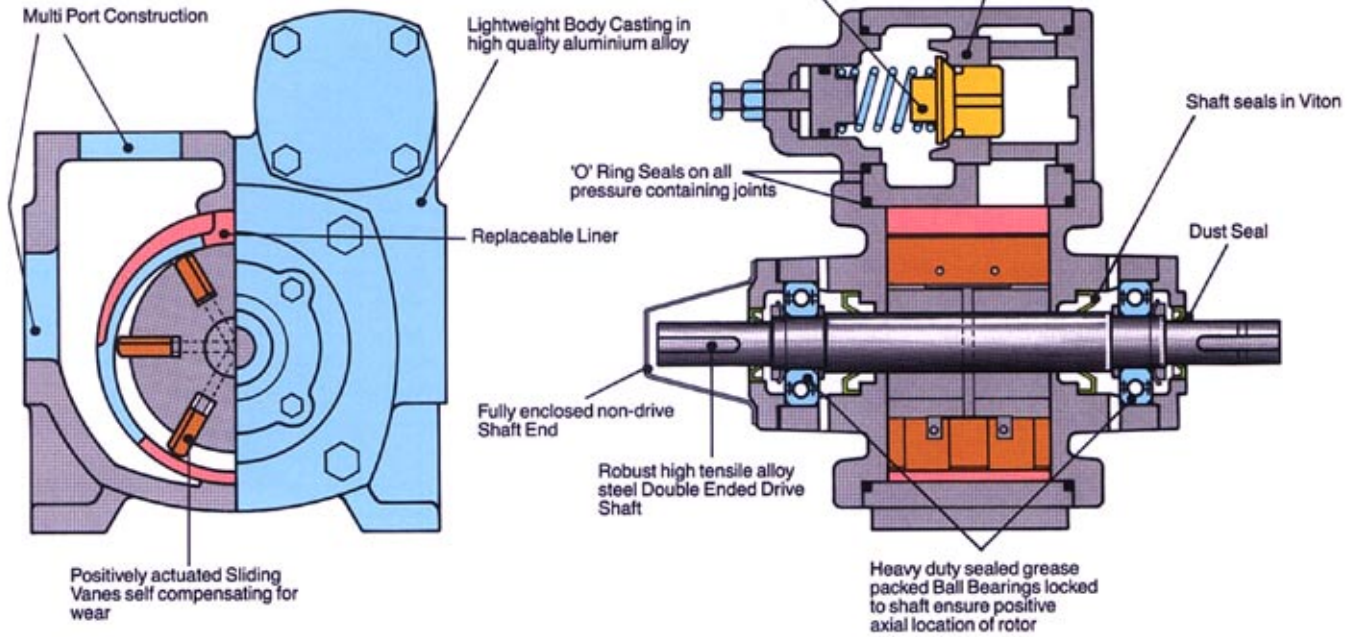
2. SPEED (Rev/min) specified is the safe recommendation which the pump can attain when delivering full flow at the stated viscosity. Refer performance graphs.

3. Pump performance may be affected by NPSH available. This should be verified for each application.

4. For parameters outside those printed above contact EBSRAY or representative for details.

# Features

## Design features promote high efficiency and long life

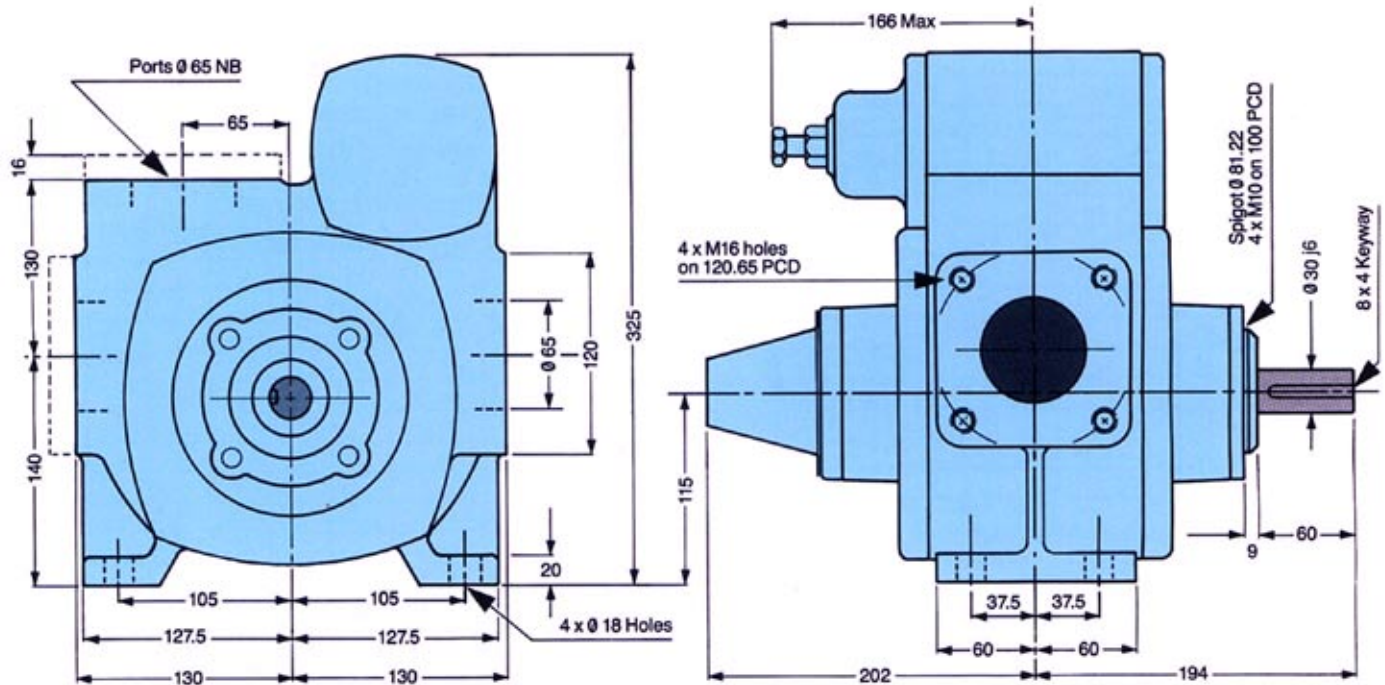


**Optional FPC Valve**  
Ebsray's Flow and Pressure Control (FPC) Valve allows manual unloading of the system pressure and also reduction of output flow without the need for reduction in pump speed. This feature enables the V25 to be used for bulk liquid transfer (high flow) as well as drum filling (low flow) aircraft refueling, hose reel deliveries, etc., without the need for expensive speed reducers.

### Optional Mechanical Seal

Mechanical seals in a variety of materials are available where unusual suction or system pressure conditions exist. Also where product compatibility necessitates their use.

# Dimensions



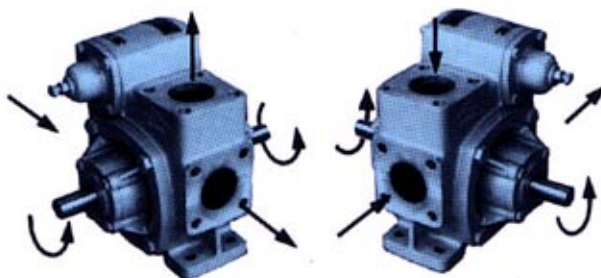
## Materials of Construction

BODY:	ALUMINIUM ALLOY
LINER:	CAST IRON
ROTOR:	CAST IRON
SHAFT:	HIGH TENSILE STEEL
VANES:	SYNTHETIC
BEARING HOUSING:	CAST IRON

Pump Weight 41.5kg (Type 63)  
 Pump Packed in Triwall Carton. 53kg.  
 584 x 483 x 564 mm.  
 Configuration Shown. V5/V6

**NOTE:** All specifications are typical only and subject to revision without notice. Certified data available on request.

## V25 Porting/Drive Configurations

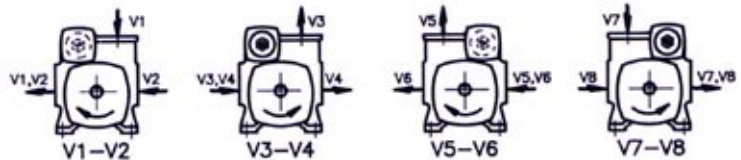


V3, V4, V5, V6

V1, V2, V7, V8

## Multi Porting/Drive Configurations

Unique pump design allows great versatility of mounting options. Double ended drive shaft enables pump to be oriented to suit direction of rotation of PTO. Three ports permit pump to be set up as either 180° or 90° configuration. Only two standard assemblies of pump are required to fulfil all possible mounting configurations. V3, V4, V5 and V6 are the preferred types.



## DISTRIBUTED BY:

## EBS-RAY PUMPS PTY. LIMITED

ACN 000 061 003  
 Head Office and Works  
 628 Pittwater Road  
 Brookvale NSW 2100 Australia  
 Telephone (61 2) 9905 0234  
 Fax (61 2) 9938 3825  
 www.ebsraypumps.com.au

ABN 52 000 061 003  
 Branch Office Victoria  
 Phone (03) 9706 7263  
 Fax (03) 9706 7312  
 Branch Office Queensland  
 Phone (07) 3260 7411  
 Fax (07) 3260 7422

