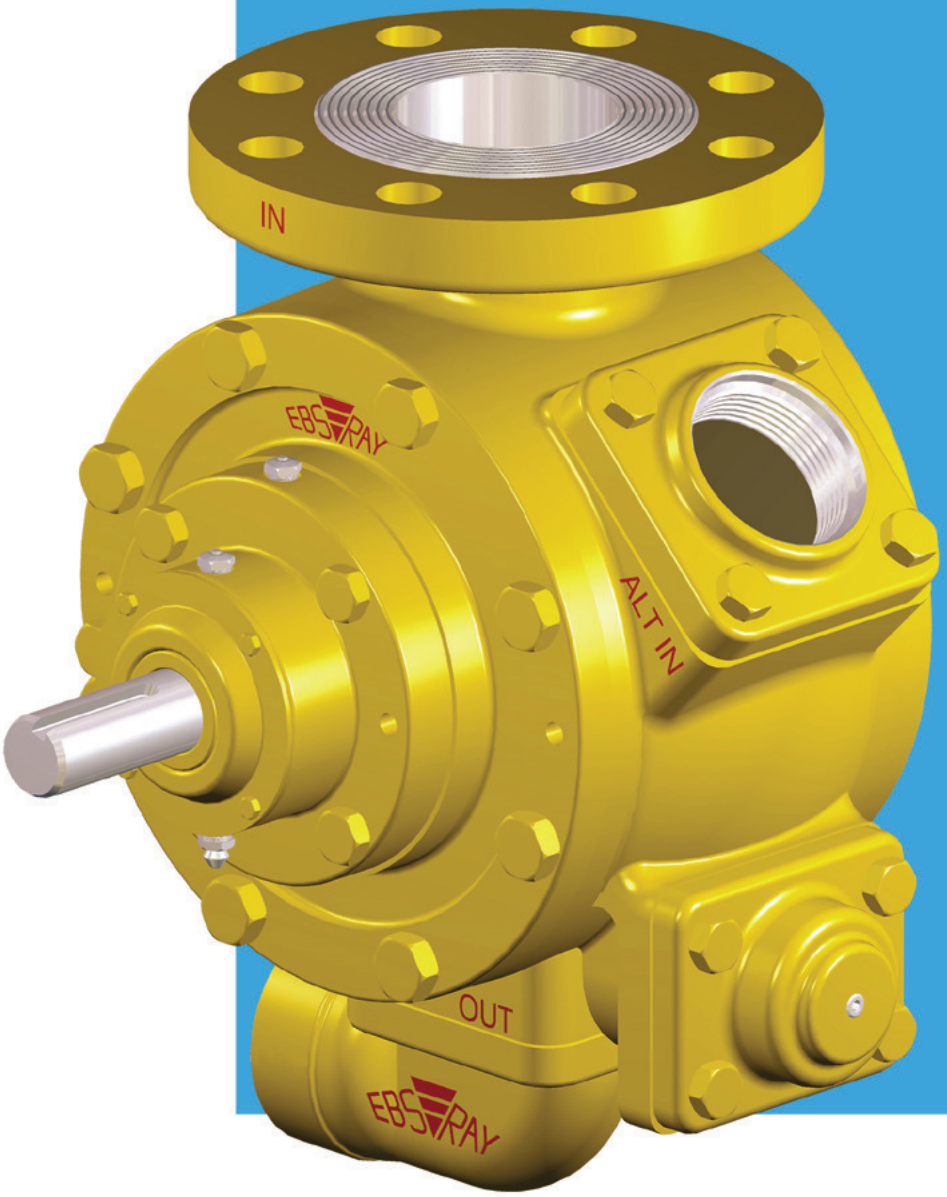
Publication #1642-02

EBSRAY PUMPS



Quality System
Quality Endorsed Company
ISO 9001 Lic 3332
Standards Australia

HEAD OFFICE AND WORKS

V Series

Model V3000

...for LPG Truck Applications

liquipsales NZ LIMITED

EBSRAY AUSTRALIA

V Series Model V3000

Engineered in Australia

The EBSRAY Model V3000 Flange Mounted Rotary Sliding Vane Pump is designed and precision built for efficient handling of LPG, Propane, Butane, DME, Anhydrous Ammonia etc. Foot mounted Model also available.

Interchangeability

Upgrading to the Ebsray V3000 pump from other commonly used pumps is simple. No pipework, drive or mounting modifications are necessary, in some cases the V3000 ***is*** dimensionally interchangeable - you may even retain your existing pump adaptor flanges!

Features

- ✓ Flanged inlet porting - oversized for maximising flow rates at low NPSH conditions.
- ✓ Computer optimised Liner design for anti-cavitation, quiet and pulse-free operation - in hardened Ductile Iron.
- ✓ Pressure retaining elements (Casing, Covers etc.) in Ductile Iron ASTM grade A 395.
- ✓ Vanes in moulded Univane™ material - engineered synthetic composite - for increased service life.
- ✓ Large diameter Pushrods in Unirod™ material - engineered synthetic composite - for positive vane actuation.
- ✓ Heavy duty Double Row Deep Groove Bearings - extended life for PTO, horizontal or vertical mounting.
- ✓ Simple-to-install Mechanical Seal - proven, reliable operation - easy access by removal of Bearing Housing.
- ✓ Reversible Wearplates - ground surfaces, double service life - in toughened Cast Iron.
- ✓ Integral Pressure Relief Valve - quiet operation, low rise, with tamperproof adjustment. 800-1300kPa as standard - other pressure ranges available.
- ✓ Casing 'O' rings for positive sealing.
- ✓ Low maintenance - simple to service - no shims, no special tools required.
- ✓ Increased safety with innovative Seal and Throttle Bush design.
- ✓ Computer optimised design for maximum strength & minimum weight.

Typical Services

Bobtail Tanker Truck duties
Bulk Transport applications
Cylinder filling operations from Tanker Trucks
Bulk transfer and filling operations in Terminals, Depots etc
Emergency Vehicle duties
Portable Tank - load-in, load-out.
Autogas, Industrial, Agricultural, Aerosol Industries

Assured Quality and Performance

EBSRAY's ISO 9001 Quality System assures compliance with the high safety and quality standards demanded by the LPG Industry.
All EBSRAY V3000 pumps are manufactured under strict guidelines and procedures. Quality checks during production guarantee pump integrity and performance in accordance with the specifications.

All Ebsray LPG Pumps are designed and manufactured in Australia and comply with the requirements of Australian Standard AS 1596

Features

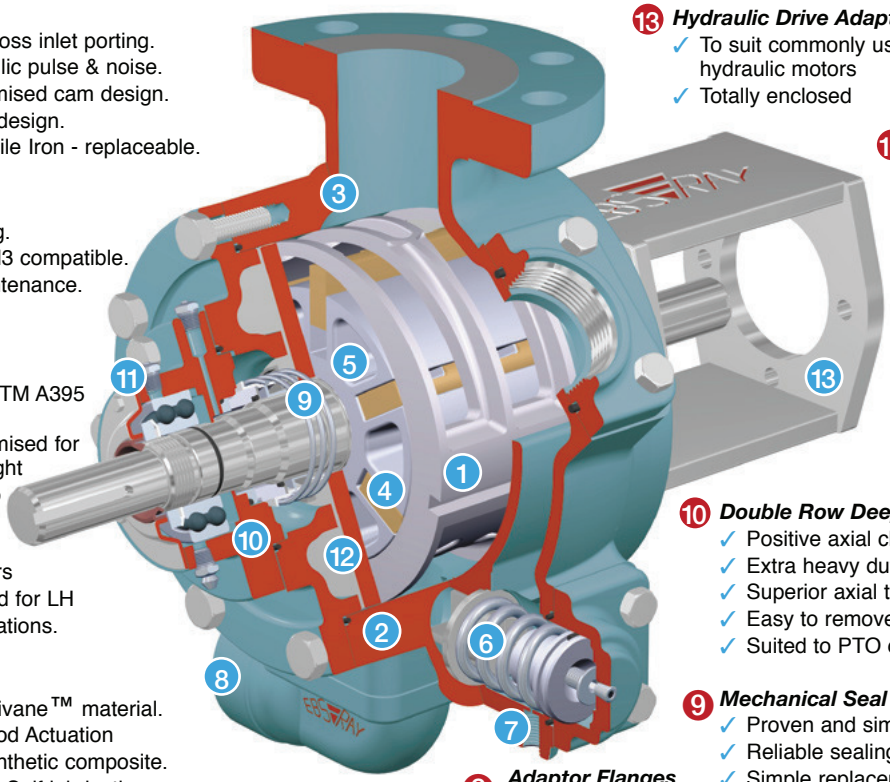
Liner
- ✓ High flow, low loss inlet porting.
- ✓ Minimal hydraulic pulse & noise.
- ✓ Computer optimised cam design.
- ✓ Anti-cavitation design.
- ✓ Hardened Ductile Iron - replaceable.

2 Casing `O' Rings
- ✓ Positive sealing.
- ✓ LPG, DME, NH3 compatible.
- ✓ Simplified maintenance.

3 Casing
- ✓ Robust design
- ✓ Ductile Iron ASTM A395 material
- ✓ Computer optimised for strength & weight
- ✓ Easy access to mounting bolts
- ✓ All metric high tensile fasteners
- ✓ Reversible build for LH or RH configurations.

4 Vanes
- ✓ Moulded in Univane™ material.
- ✓ Positive Pushrod Actuation
- ✓ Engineered synthetic composite.
- ✓ High strength - Self lubricating.
- ✓ Hydraulically optimised.

5 Rotor/Shaft
- ✓ Single/double ended robust shaft.
- ✓ Axially located.
- ✓ Positive end clearance control.
- ✓ Hardened bearing journals.
- ✓ Hardened Ductile Iron rotor



13 Hydraulic Drive Adaptors
- ✓ To suit commonly used hydraulic motors
- ✓ Totally enclosed

12 Wearplates
- ✓ Precision ground.
- ✓ Reversible for double service life.
- ✓ Toughened Cast Iron.

11 Greasers
- ✓ Simple access.
- ✓ Trouble-free bearing lubrication.
- ✓ Pressure relieved.

10 Double Row Deep Groove Bearings
- ✓ Positive axial clearance control.
- ✓ Extra heavy duty.
- ✓ Superior axial thrust load capabilities.
- ✓ Easy to remove or replace.
- ✓ Suited to PTO drives,vertical mounting etc.

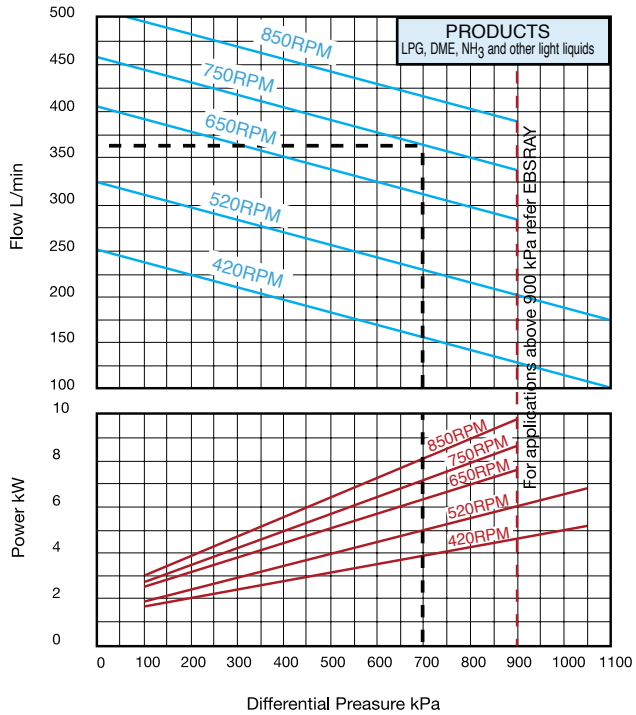
9 Mechanical Seal
- ✓ Proven and simple design.
- ✓ Reliable sealing.
- ✓ Simple replacement via Bearing Housing.

8 Adaptor Flanges
- ✓ 'O' ring sealed.
- ✓ Weldable Steel - Straight or Elbow configuration.
- ✓ Dual function - Slip weld and NPT screwed.
- ✓ Interchangeable with some other commonly used pumps.

6 Pressure Relief Valve
- ✓ Fully adjustable within spring range.
- ✓ High flow, low pressure rise.
- ✓ Smooth, chatter-free operation.
- ✓ Tamper-proof sealing arrangement.

7 Gauge Tappings
- ✓ Inlet and Discharge tappings - NPT.
- ✓ Machined 1.4 mm (No 54) orifice.
- ✓ Easily accessible.
- ✓ Highly visible gauge placement.

Performance



Example:

Speed ..... 750 RPM
Differential Pressure ..... 700 kPa
Flow ..... 360 L/min
Input Power ..... 7.1 kW

Approximate LPG Flow Rates attainable when adequate NPSH is available. Other factors such as product mix/composition, temperature, etc. may also affect performances.
For higher flow rates, refer to EBSRAY.

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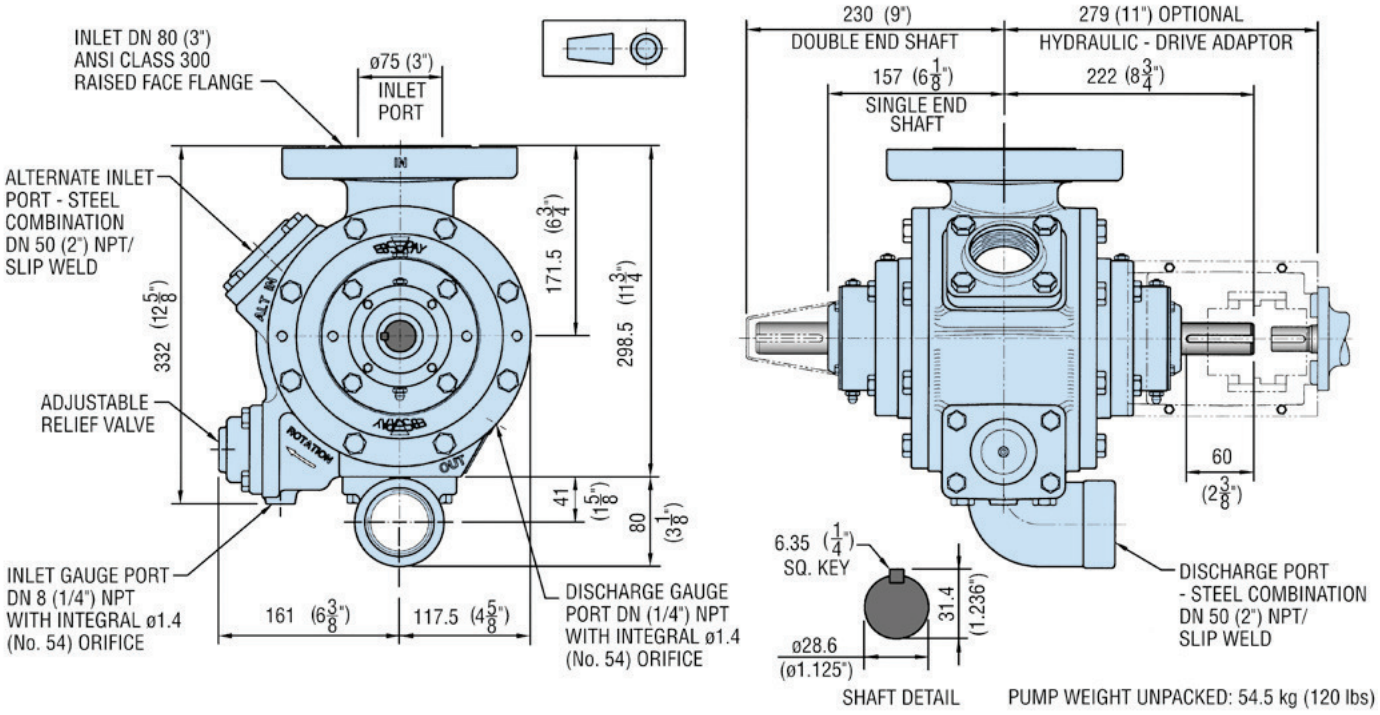
Dimensions *(For Foot mounted Model, refer EBSRAY)*

Model V3000 Pump



Materials/Specifications

Materials of Construction

Casing	Ductile Iron ASTM A395
Adaptor Flanges	Steel - (weldable grade)
Liner	Hardened Ductile Iron
Wear Plates	Toughened Cast Iron
Rotor/Shaft	Hardened Ductile Iron/Alloy Steel
Vanes	Univane™ Synthetic Composite
Pushrods	Unirod™ Synthetic Composite
Bypass Valve	Cast Iron
Mechanical Seals	Carbon/Cast Iron
Elastomers	Nitrile - (Viton optional)

Warranty

All Ebsray manufactured pumps and equipment are warranted for a full 12 months against faulty workmanship and/or materials. Refer to Ebsray or Factory Appointed Representative.

Specifications

Max Flow	515 L/min
Max Differential Pressure	1,050 kPa
Max Working Pressure	2,400 kPa
Max Pump Speed	850 RPM
Hydrostatic Test Pressure	7,000 kPa
Port sizes (Inlet)	3" ANSI Class 300 Raised Face Flange
(Discharge)	2" dual function NPT Screwed/Slip Weld Adaptor Flange - Straight or Elbow Configuration
(Alternate Inlet)	As per Discharge Port

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

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Quality System ISO 9001 Lic 3332 Standards Australia
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PRINTED IN AUSTRALIA EXPORT PUBLICATION

Publication # 1642-02