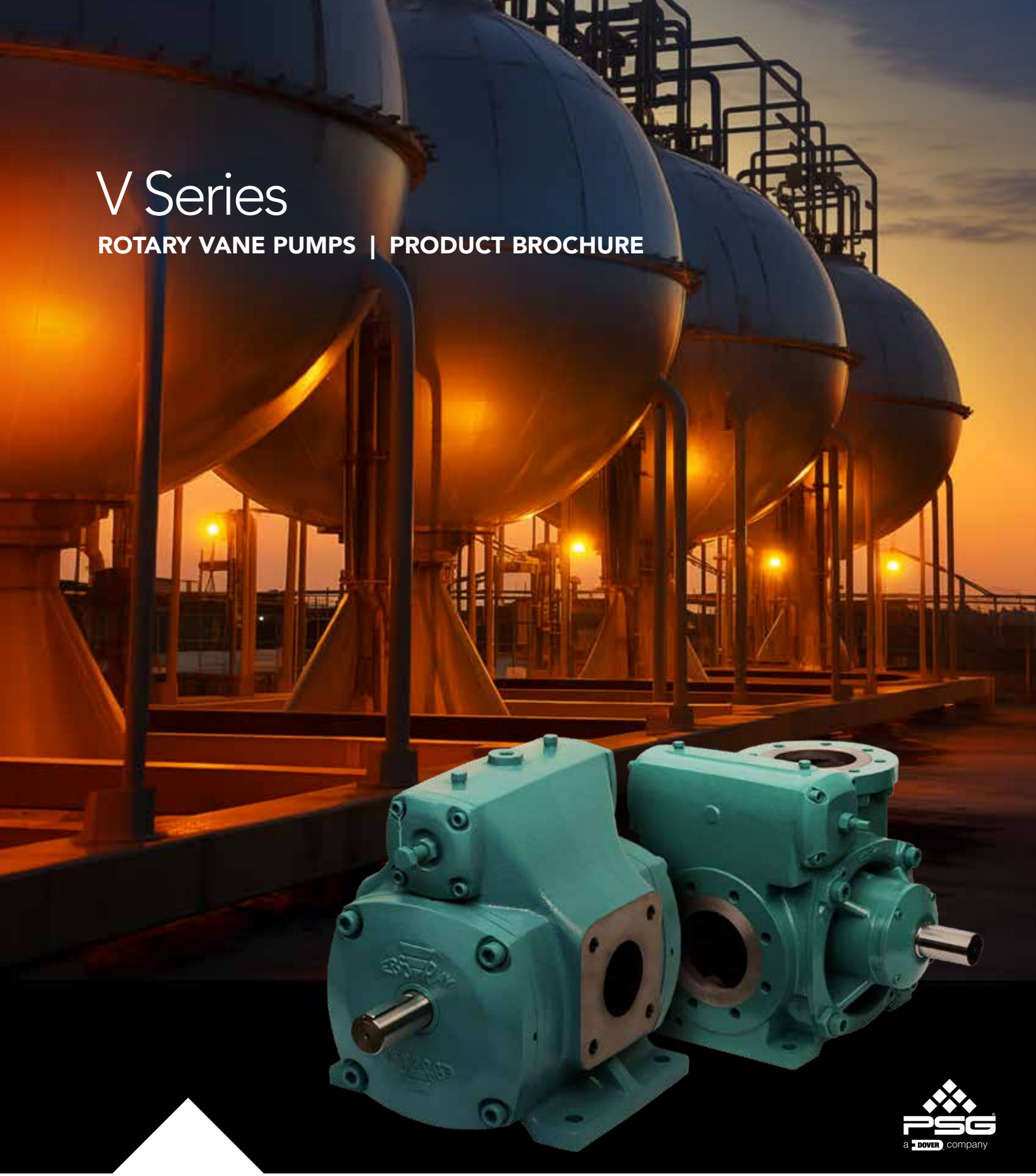
V Series

ROTARY VANE PUMPS | PRODUCT BROCHURE



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Ebsray®

Where Innovation Flows

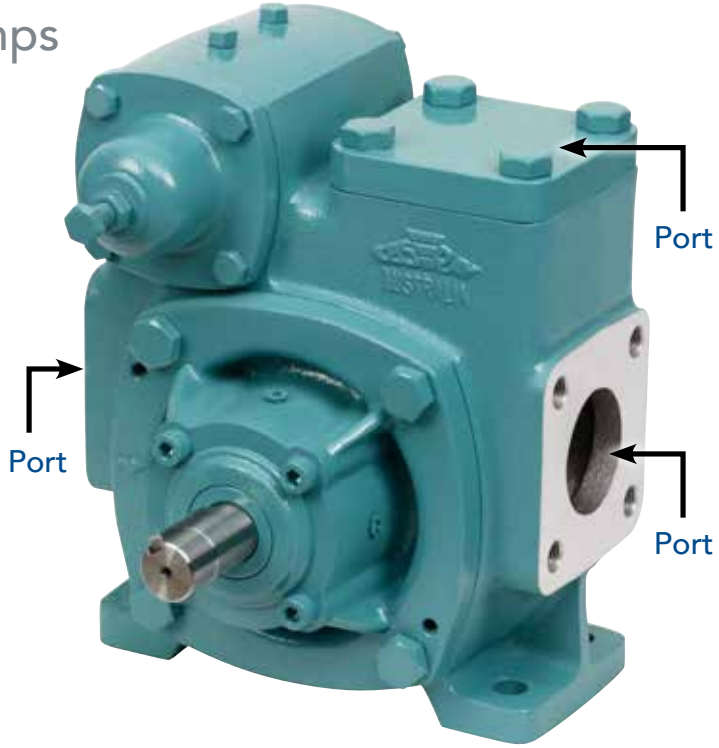
Ebsray® V Series Rotary Vane Pumps are highly efficient and self-priming positive displacement pumps that can handle low- to medium-viscosity lubricating and non-lubricating liquids. They are ideal for transferring fluids such as LPG, propane, butane, DME and other similar fluids. These pumps are designed and built with precision to optimize the advantages of the rotary vane working principle.

INTRODUCTION

Ebsray® V Series | Rotary Vane Pumps

V Series Rotary Vane Pumps are designed to automatically self-compensate for vane wear, ensuring the pump maintains superior vapor handling and operational efficiency throughout its long service life. These pumps offer a smooth output flow, which results in quiet operation. Ebsray Rotary Vane Pumps also come equipped with replaceable wear parts, providing a long-lasting pumping solution. These pumps also possess excellent self-priming capabilities, making them ideal for challenging applications requiring high suction lift and line-stripping capabilities.

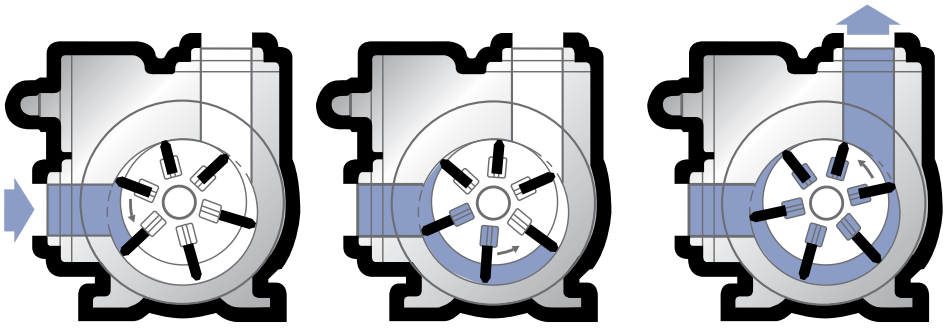
With sizes ranging from 1.5 to 6 inches, Ebsray Rotary Vane Pumps can achieve flow rates from 30 to 3,750 L/min. Additional design features that help the Ebsray V Series stand out include:



- **Three port design** – with this design feature, most V Series Pumps have the option for 90° or 180° porting, allowing for installation flexibility
- **Clockwise or counterclockwise rotation**
- **Univane** – a chemically inert, wear-resistant plastic vane used to prevent harmful metal-to-metal contact within the pump chamber
- **Easily replaceable wear parts** – vanes, liners, pushrods, wear plates, rotor, shaft, mechanical seals, bearings and O-rings
- **Three different options for bypass or pressure relief valves** – Poppet, Balanced, and PFM (Pressure and Flow Modulation)
- **FKM O-rings** are included as a standard option, while optional Buna-N or PTFE/FFKM materials are also available
- **Variety of pump casing materials** – with some models offering options in aluminum, ductile iron, cast iron or cast steel

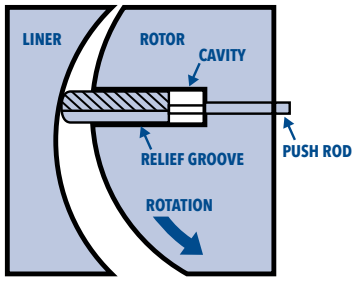
Ebsray® V Series | About Rotary Vane Technology

Utilizing the unique vane design of Ebsray, these positive displacement rotary vane pumps offer the best combination of sustained high-level performance, energy efficiency, trouble-free operation, and low maintenance cost.



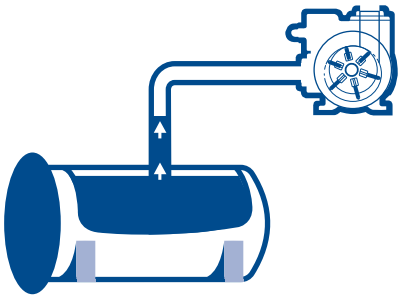
How Ebsray Sliding Vane Pumps Achieve High Efficiency

Ebsray Rotary Vane Pumps use a rotor with sliding vanes that draws the liquid in behind each vane through the inlet port and into the pumping chamber. As the rotor turns, the liquid is transferred between the vanes to the outlet, where it is discharged as the pumping chamber is squeezed down. Each vane provides a positive mechanical push to the liquid before it. Vane contact with the chamber wall is maintained by three forces: (1) centrifugal force from the rotor's rotation, (2) push rods moving between opposing pairs of vanes, and (3) liquid pressure entering through the vane grooves and acting on the rear of the vanes. Each Ebsray Rotary Vane Pump revolution displaces a constant volume of fluid. Variance in pressure has minimal effect. Energy-wasting turbulence and slippage are minimized, and high volumetric efficiency is maintained.



Self-Priming, Dry Run & Other Benefits of Ebsray Rotary Vane Pumps

The Ebsray Rotary Vane Pump design allows the pump to self-adjust for wear and maintain flow rates. This design provides excellent self-priming and dry-run capabilities, as well as sustained performance, trouble-free operation, and low maintenance costs.



- Maintain consistent flow rates throughout the life of the pump due to a unique sliding vane pump design that self-adjusts for wear
- Rotary vane design provides sustained performance and trouble-free operation
- Low maintenance and low life-cycle costs, pumps are renewable and repairable
- Highly efficient, rotary vane pumps require less horsepower than other pumps, meaning spending less on motors initially and less on electricity to power the pump
- Excellent at self-priming, eliminates expensive priming systems
- High suction lift abilities that exceed 7.7 metres (25 feet)

Ebsray® V Series | Rotary Vane Pumps

V15

Ports	1.5" (40 NB)
3-Ported Body	90° or 180° porting
Body	Cast Iron
Flow Rate	30 to 345 L/min
Max Speed	1,450 rpm
Max Differential Pressure	850 kPa

V20

Ports	2" (50 NB)
2-Ported Body	180° porting
Body	Aluminum, Cast Iron, Ductile Iron, Cast Steel
Flow Rate	65 to 400 L/min
Max Speed	960 rpm
Max Differential Pressure	850 kPa

V25

Ports	2.5" (65 NB)
3-Ported Body	90° or 180° porting
Body	Aluminum, Cast Iron
Flow Rate	40 to 575 L/min
Max Speed	960 rpm
Max Differential Pressure	850 kPa

V30

Ports	3" (80 NB)
2-Ported Body	180° porting
Body	Aluminum, Cast Iron, Ductile Iron, Cast Steel
Flow Rate	50 to 900 L/min
Max Speed	960 rpm
Max Differential Pressure	850 kPa

V35

Ports	3.5″ (90 NB)
3-Ported Body	90° or 180° porting
Body	Aluminum, Cast Iron, Ductile Iron, Cast Steel
Flow Rate	50 to 1,200 L/min
Max Speed	900 rpm
Max Differential Pressure	850 kPa

V40

Ports	4″ (100 NB)
3-Ported Body	180° porting
Body	Cast Iron, Ductile Iron, Cast Steel
Flow Rate	30 to 2,000 L/min
Max Speed	720 rpm
Max Differential Pressure	1,100 kPa

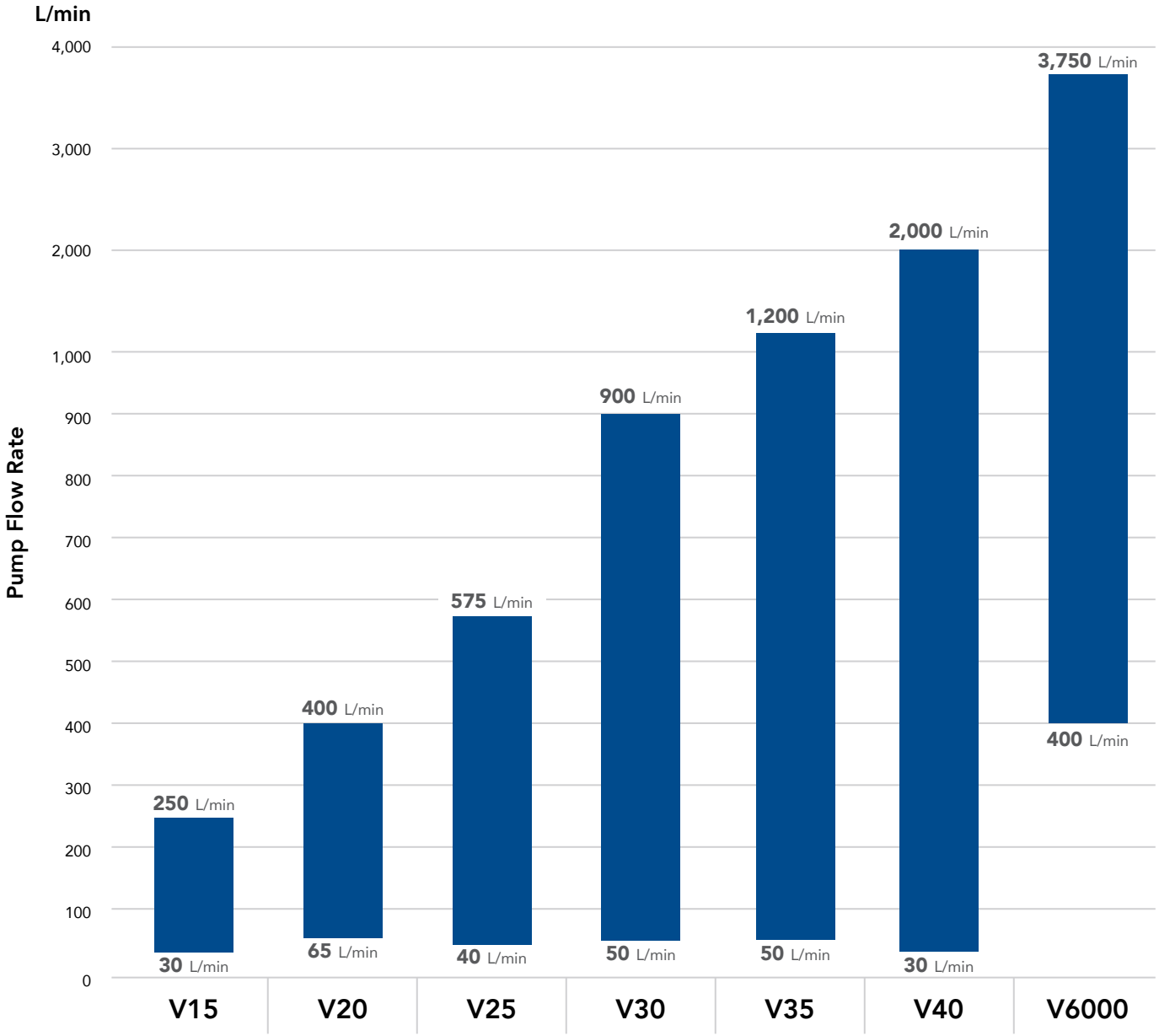
V6000

Ports	6″ (150 NB)
3-Ported Body	180° porting
Body	Cast Iron, Ductile Iron, Cast Steel
Flow Rate	400 to 3,750 L/min
Max Speed	500 rpm
Max Differential Pressure	1,100 kPa

Ebsray® V Series | Breakdown

Model	V15	V20	V25	V30	V35	V40	V6000
Port Size	1.5" (40 NB)	2" (50 NB)	2.5" (65 NB)	3" (80 NB)	3.5" (90 NB)	4" (100 NB)	6" (150 NB)
Max Flow	250 L/min	400 L/min	575 L/min	900 L/min	1,200 L/min	2,000 L/min	3,750 L/min
Min Flow	30 L/min	65 L/min	40 L/min	50 L/min	50 L/min	30 L/min	400 L/min
Max Speed	1,450 rpm	960 rpm	960 rpm	960 rpm	900 rpm	720 rpm	500 rpm
Max DP	850 kPa	850 kPa	850 kPa	850 kPa	850 kPa	1,100 kPa	1,100 kPa
3 Ported Body	X		X		X	X	X
2 Ported Body Only		X		X			
Wear Plates		X		X	X		X
Replaceable Liner	X	X	X	X	X	X	X
Integral Pressure Relief Valve	X	X	X	X	X	X	X
Casing Material							
Aluminium Body		X	X	X	X		
Cast Iron Body	X	X	X	X	X	X	X
A395 Ductile Iron Body		X		X	X	X	X
Cast Steel Body		X		X	X	X	X

Ebsray® V Series | Performance



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