

3180 Vertical In-line Industrial Process Pumps

Deming Industrial Process pumps offer you a broad line of pumps with a proven, cost saving in-line design. These versatile pumps efficiently handle a wide range of corrosive and non-corrosive liquids from water to hydrocarbons.

Top Pull-Out Simplifies Maintenance

Complete rotating assembly easily removed for inspection without disturbing piping. Full circle register protected by CONFINED GASKET assures permanent alignment.

Dual Purpose Jack Screws

Built-in jack screws simplify removal and protect mechanical seal during disassembly. Packing box cover is held securely in place on adapter after pull-out.

Protected Shaft

One-piece shaft assures sustained positive alignment of complete pump-motor rotating element, eliminates couplings and minimizes shaft deflection. The shaft sleeve is a non-hooked style and is free to expand with temperature variation. It extends through the gland, is keyed to the shaft and is isolated from contact with liquid by sleeve and Teflon® O-ring and flat gaskets.

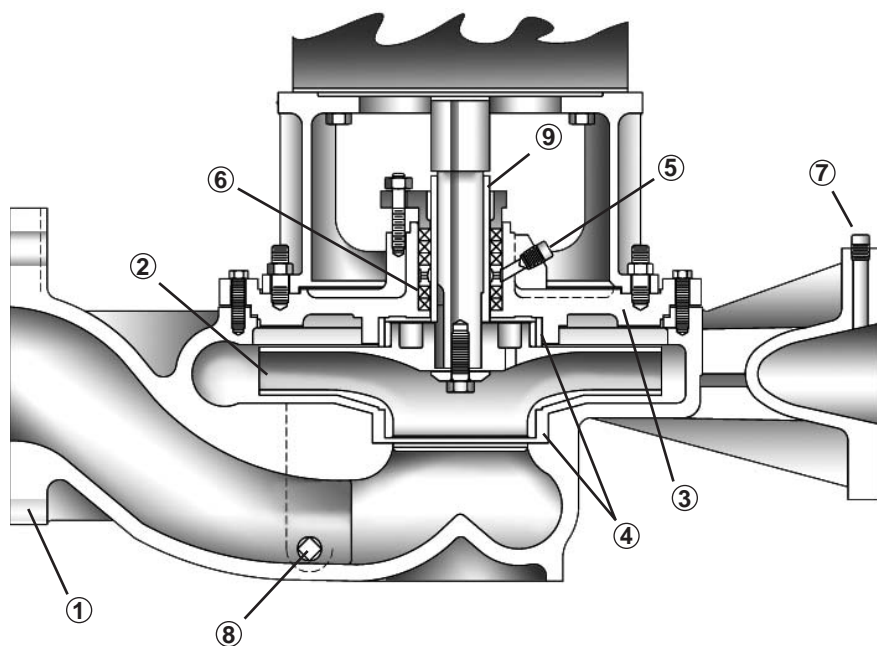
**Capacities to 1000 GPM
Heads to 400 Feet
Temperatures to 350°F
Pressures to 350 psig**

APPLICATIONS:

- Chemical
- Petrochemical, Petroleum, Coal
- Fiber
- Pulp and Paper
- Food and Beverage
- Pharmaceutical Fats and Oils
- Soap
- Paint
- Automotive
- Primary Metal
- Rubber
- Metal
- Fabrication
- Utility



Materials of Construction	
Part No.	Part Material
Casing	CI, DI, 316, 8 BZ
Impeller	8 BZ, CI, 316
Casing Wear Ring	5 BZ, CI, 316
Impeller wear Ring	8 BZ, CI, 316
Packing Box Cover	CI, DI, 316, 8 BZ
Packing	Graphite, Teflon
Shaft Sleeve	416, 316, 5 BZ
Material Specifications	
DI	Cast Ductile Iron - ASTM A395-61 60-45-15
CI	Cast Iron - ASTM A 48-56
8 BZ	Cast Bronze - ASTM A216-WCB
5 BZ	Cast Bronze - ASTM B144-61
416	Wrought Stainless Steel 4151 Type 416
316	Wrought Stainless Steel 4151 Type 316



1. Casing - Flanged suction and discharge on common centerline. Integral one-piece unit suitable for in-line or pedestal mounting. Designed for working pressures up to 350 PSI with 1/8" corrosion allowance. Replaceable wear ring standard. Self-venting case drain is either gasketed or

tapered thread. Flat-faced flanges are ASA 150 lb. standard, 300 lb. optional.

2. Bronze Impeller - Fully enclosed, balanced, one-piece design. Balance chamber provides safe control of stuffing box pressure, and limits axial thrust for long bearing life. Replaceable wear rings assure

high sustained efficiency. The flow passages are contoured for low NPSH requirements, therefore, adjustment is not required. The impeller is keyed to the motor shaft for reliable stability.

3. Packing Box Cover - Unique through-bolt design reduces stress on adapter attachment. A jacketed stuffing box is available and the packed box has 2-bolt plain or quench gland and in-out connections to lantern ring. Sealed box has 4-bolt seal flanges with full 360° register fit protected by confined gasket. Optional sealing variations include single, double, balanced and unbalanced inside seals, throat and throttle bushings, and connections for flushing, cooling, venting, quenching or lubrication. Your Crane representative will recommend sealing systems for your application.

4. Front Wear Rings on all models. Rear Wear Rings on certain models.

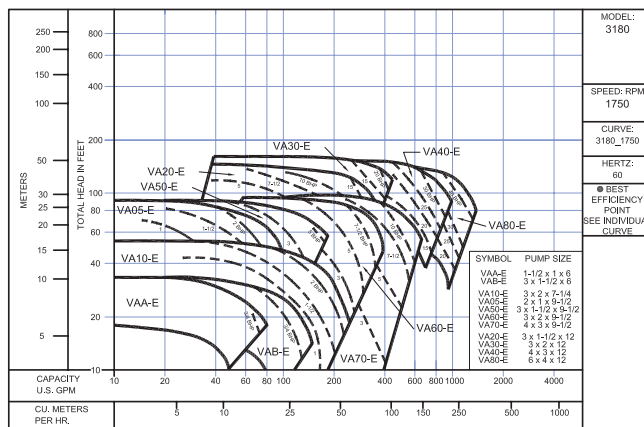
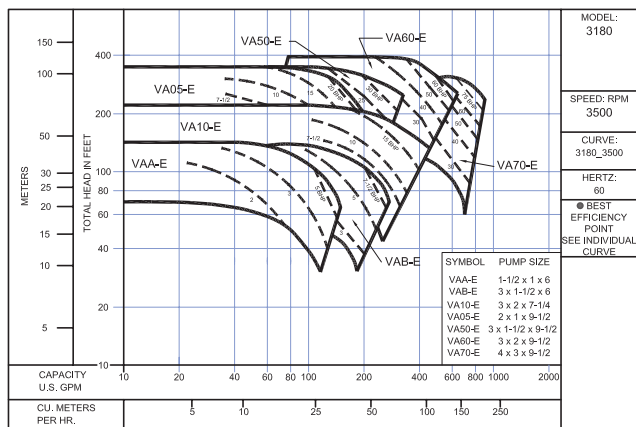
5. Manual Vent Plug - To ensure positive lubrication at start up.

6. Packing Rings

7. Pressure Gauge tappings at suction and discharge flanges.

8. Drain Plug

9. Bronze Motor Shaft Sleeve



CRANE PUMPS & SYSTEMS

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