D800
Frame Mounted
And Close Coupled
General Industry
Pumps

Bulletin PS-10-6† (E)
Trouble-Free Operation for General Industry

The D800 Series of pumps has evolved as Flowserve engineers have reacted to the growing need for economical and reliable pumps for general industrial service.

Covering a large flow and head range, the D800 is versatile and reliable. It is available in multiple configurations to suit site requirements and incorporates many proven features to reduce and facilitate maintenance.

Complementary Pump Designs

- SMP standard motor pump
- SMX non-metallic motor pump
- LR between bearing, axially split, double suction pump
- MEN end-suction water pump
- STX formed stainless steel, threaded, end-suction pump
- SFX formed stainless steel, flanged, end-suction pump

Applications

- Water
- Coolants
- Brines
- Solvents
- Light oils
- Light chemicals
- Building trades
- HVAC
- OEM

Operating Parameters

- Flows to 455 m³/h (2000 gpm)
- Heads to 150 m (500 ft)
- Temperatures to 120°C (250°F)
- Pressures to 15 bar (220 psi)

Casing Nozzles conform to ANSI B16.1 specifications with a minimum 125 psi rating. Threaded or flat-face flanged

Complete Mechanical Seal Assembly is pre-set on the pump shaft sleeve to ease assembly and reduce downtime and maintenance. Assures proper alignment and eliminates need to measure and adjust conventional locking collar

Renewable Wear Rings and Shaft Sleeves restore worn operating clearances and extend pump life at minimal cost

Precision Dry-Rabbet Fit with one piece adapter and seal cover ensures positive alignment and reduces maintenance downtime

Top Centerline Discharge Casing has bottom foot for added support and can be provided with tap and plug holes for drain connections

High-Efficiency Closed Impeller with balance holes provides balanced axial hydraulic loading for longer thrust bearing life. No axial adjustment is required for efficient pump operation
D800 is available in three configurations and with a number of options.
- Configuration options
  - Frame mounted (D814)
  - Close coupled (D824)
- Threaded or flat-faced flanges
- Interchangeability between the frame mounted and close coupled configurations
- Liquid end can be mounted to standard bearing housing or directly to NEMA C-face JM (JMV) shaft motor
- Kit program
- Flanged connections available through 200 mm (8 in)
- Stainless steel suction inducer

Materials of Construction

<table>
<thead>
<tr>
<th>Part</th>
<th>Standard Fitted</th>
<th>All Iron Fitted</th>
<th>316 Stainless Steel</th>
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<tr>
<td></td>
<td>D814</td>
<td>D824</td>
<td>D814</td>
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<tr>
<td>Casing</td>
<td>Cast Iron - 25</td>
<td>Steel</td>
<td>316 SS</td>
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<tr>
<td>Case Wear Ring*</td>
<td>Bronze</td>
<td>Synthetic Fibers with Nitrile Binder</td>
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<td>Casing Gasket</td>
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*N/A ring is standard with 9, 12 and 15 inch impellers. Wear ring is optional with all other sizes.

D800 Range Chart

Precision Cast Closed Impeller is statically and hydraulically balanced to reduce power consumption. The impeller is keyed to shaft to provide positive drive and eliminate impeller spin-off. Balancing holes through the impeller hub minimize axial thrust and seal chamber pressure.

**Designed for Reliability and Ease of Maintenance**
- Bell housing mechanical seal cover
- Sealed-for-life bearings
- Pre-set mechanical seal
- Back pull-out design
- One-piece adapter
- Spacer type coupling
- Renewable wear ring
- Renewable shaft sleeve
- Standard NEMA motor on close coupled model
- Keyed impeller

**Versatility and Flexibility**

**Bell Type Mechanical Seal Cover** facilitates flushing and cooling of the seal faces

**Sealed-for-Life Pre-Lubricated Motor Bearings** provide two-year minimum life

**Flexible Spacer Type Coupling** allows pump internals to be removed without disconnecting motor leads or system piping