

D800N high-efficiency REDA ESP pump

Improve lift, efficiency, and reliability in oil wells

Target production rate:
250 to 1,150 bbl/d at 60 Hz
[33 to 152 m³/d at 50 Hz]

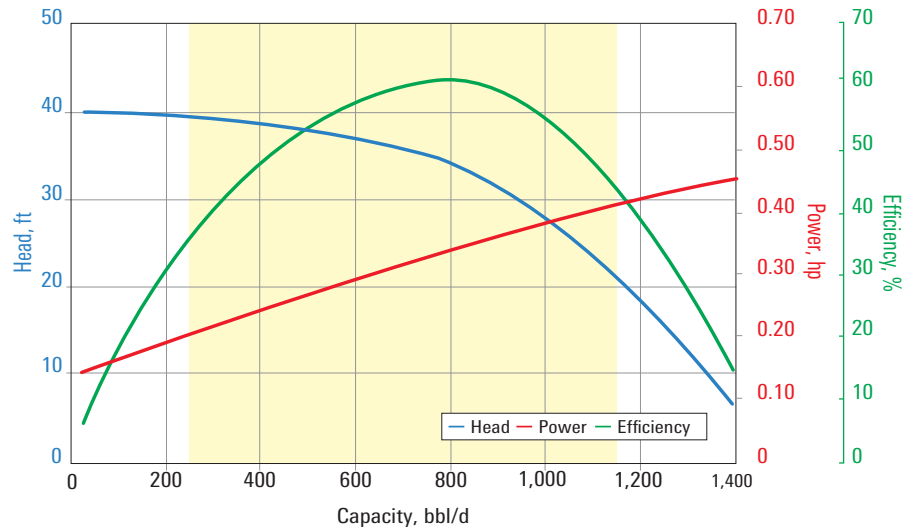
Casing diameter:
5½ in or larger

Benefits

- Reduces power consumption with high-efficiency design
- Improves reliability and extends system run life in abrasive applications

Features

- Application flexibility to accommodate production rates from 250 to 1,150 bbl/d at 60 Hz [33 to 152 m³/d at 50 Hz]
- Compression pump with factory shimming
- Optimized hydraulic designs based on computational fluid dynamics (CFD)
- High-strength MONEL® and INCONEL® shafts
- Patented abrasion-resistant bearing configuration for reliability in sandy wells and other demanding applications
- Compliant-mounted radial bearing systems that minimize vibration and wear
- Availability of corrosion-resistant coatings and stainless steel construction for wells with H₂S, CO₂, or other corrosive elements
- Availability of thermally compensated pumps that enable high-temperature operations



D800N pump curve for 60 Hz with $sg = 1$.

D800N Pump Specifications

Best efficiency point (BEP)

| | |
|--|--------------|
| Flow rate, bbl/d at 60 Hz [m ³ /d at 50 Hz] | 790 [104.6] |
| Head per stage, ft at 60 Hz [m at 50 Hz] | 34.69 [7.35] |
| Required power, hp at 60 Hz [hp at 50 Hz] | 0.33 [0.19] |
| Efficiency, % | 61.06 |

General

| | |
|--|--|
| OD, in [mm] | 3.87 [98.3] or 4.00 [101.6] |
| Stage geometry | Radial flow |
| Stage metallurgy | Ni-Resist®, 5530 alloy |
| Housing metallurgy | Carbon steel, Redalloy* premium alloy |
| Shaft diameter, in [mm] | 0.68 [17] |
| Shaft material and rating at 60 Hz, hp | INCONEL 718, 180 |
| Shaft radial support options | ES, [†] ARZ [†] |
| Pump construction | Enhanced compression design, factory-shimmed |

[†] Enhanced stability option with tungsten carbide bushing.

[†] ARZ abrasion-resistant zirconia bearing, tungsten carbide bushing, and sleeve.

All specifications are subject to change without notice.

Additional information

Factory-shimmed high-strength shafts increase pump reliability. Factory shimming enables precise shaft setting to match REDA* Maximus* install-ready ESP motors and protectors and reduce installation time by at least 60%.

The patented ARZ abrasion-resistant tungsten carbide bearings and compression-ring construction provide advanced radial stability even in the most challenging conditions, minimizing vibration, ensuring smooth operation, and reducing wear. The compliant-mounted bearings repeatedly show less wear in tests and actual field performance over a wide range of well conditions as compared with alternative bearing materials.