**S11000N** high-efficiency REDA ESP pump

Improve lift, efficiency, and reliability in oil wells

- **Target production rate:** 9,500 to 16,500 bbl/d at 60 Hz [1,259 to 2,186 m³/d at 50 Hz]
- **Casing diameter:** 7 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 9,500 to 16,500 bbl/d at 60 Hz [1,259 to 2,186 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

**S11000N Pump Specifications**

**Best efficiency point (BEP)**
- Flow rate, bbl/d at 60 Hz [m³/d at 50 Hz]: 11,590 [1,535.6]
- Head per stage, ft at 60 Hz [m at 50 Hz]: 55.54 [11.76]
- Required power, hp at 60 Hz [hp at 50 Hz]: 6.33 [3.67]
- Efficiency, %: 74.84

**General**
- OD, in [mm]: 5.38 [136]
- Stage geometry: Mixed flow
- Stage metallurgy: Ni-Resist®, 5530 alloy
- Housing metallurgy: Carbon steel, Redalloy® high-nickel alloy
- Shaft diameter, in [mm]: 1.18 [30]
- Shaft material, rating at 60 Hz, hp: INCONEL 718, 1,223
- Shaft radial support options: ES,† ARZ,‡ FBH§
- Pump construction: Enhanced compression design, factory-shimmed

† Enhanced stability option with tungsten carbide bushing.
‡ ARZ abrasion-resistant zirconia bearing, tungsten carbide bushing, and sleeve.
§ Full bearing housing.

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 reduced 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.

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