D1150N high-efficiency REDA ESP pump

Improve lift, efficiency, and reliability in oil wells

**Target production rate:**
400 to 1,650 bbl/d at 60 Hz
[53 to 219 m³/d at 50 Hz]

**Casing diameter:**
4½ 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 400 to 1,650 bbl/d at 60 Hz [53 to 219 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

**D1150N pump curve for 60 Hz with sg = 1.**

### D1150N Pump Specifications

<table>
<thead>
<tr>
<th>Best efficiency point (BEP)</th>
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<tbody>
<tr>
<td>Flow rate, bbl/d at 60 Hz [m³/d at 50 Hz]</td>
<td>1,100 [145.7]</td>
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<tr>
<td>Head per stage, ft at 60 Hz [m at 50 Hz]</td>
<td>36.91 [7.82]</td>
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<tr>
<td>Required power, hp at 60 Hz [hp at 50 Hz]</td>
<td>0.49 [0.28]</td>
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<tr>
<td>Efficiency, %</td>
<td>61.03</td>
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**General**

| OD, in [mm] | 3.87 [98.3] |
| 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, 240 |

**Pump construction**
Enhanced compression design, factory-shimmed

1 Enhanced stability option with tungsten carbide bushing.
2 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.

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