Centrilift Performance Series 400P60ER pump

Increase uptime and lower total cost of ownership with rugged ESP equipment

Performance series pump

The Performance Series pump line from Baker Hughes offers industry-leading technology for a wide variety of pumping applications, providing operators the lowest total cost of ownership by extending electrical submersible pumping (ESP) system run life. The Performance Series pump was developed to solve some of the toughest pump-related problems, including, but not limited to, lost production due to short pump run life, high operating cost associated with less-efficient pumps, and excessive ESP changeout with changing in-flow characteristics.

The Baker Hughes Performance Series pump designs maximize vane openings, optimize flow paths, and include patented particle swirl suppression technology as the first line of defense against abrasive downhole environments. The extra wide vane openings help prevent plugging from sand as well as lower erosional velocities of abrasive fluids.

The patented particle swirl suppression ribs in the diffusers reduce sand cutting damage in the stages and reduce the potential for housing perforations.

Improves pump design

The **Performance Series 400P60ER pump** is an extended range version of the 400P60 pump. With the extended range design, the maximum flow rate at 60 Hz increases from 6,800 to 8,200 bbl/d, which enables the operators to maximize the production rate in a highly productive well with smaller casing/liner inner diameter (ID). In addition, the patented abrasion-resistant module design used in this pump improves the abrasion-resistant ability and reliability of the pump.

To learn more about the Performance Series 400P60ER pump, please contact your Baker Hughes representative or visit bakerhughes.com.

Applications

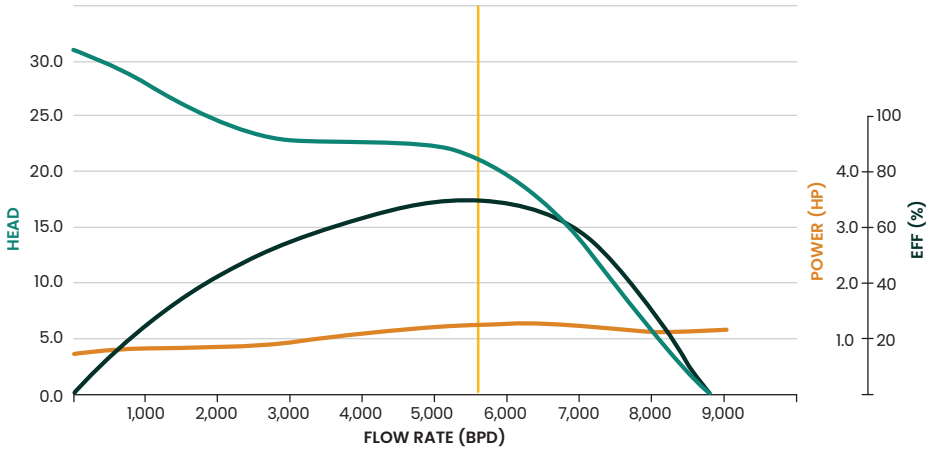
- Conventional oil and gas fields
- Wells with high flow rate and small casing/liner ID
- High gas volume fraction (GVF)
- High solid content
- Horizontal or deviated wells

Benefits

- Patented thrust protection design enhances upthrust and downthrust protection
- Offers unmatched high flow rate with smaller diameter pump
- Excellent solid and gas handling capability
- Exceptional hydraulic performance ensures high pump efficiency, reduces power consumption and OPEX

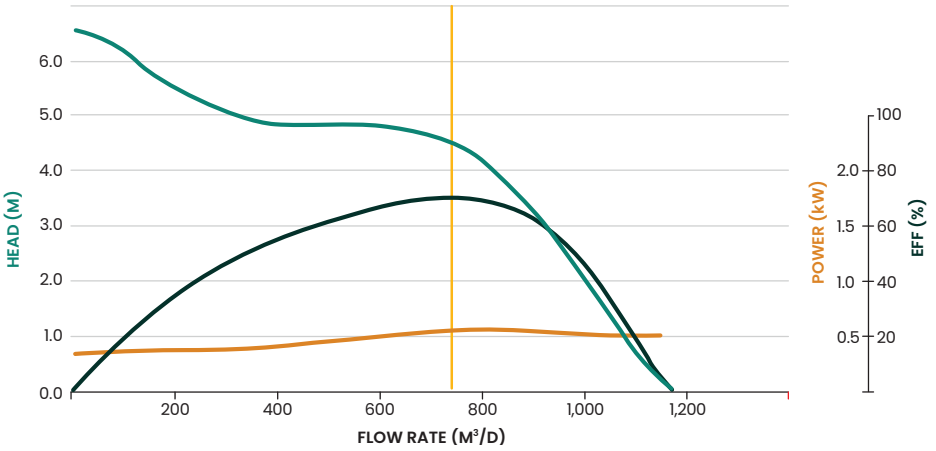
Specifications	
Series	400
Outer diameter (OD), in. (mm)	4.00 (101.6)
Standard stage allow	Ni-Resist®
Stage geometry	Mixed-flow
Flow range, bbl/d @ 60 Hz (m^3/d at 50 Hz)	1,800 to 8,200 (238 to 1,086)
Best efficiency point (BEP) flow rate bbl/d @ 60 Hz (m^3/d @ 50 Hz)	5,600 (742)
Head per stage @ BEP, ft @ 60 Hz (m @ 50 Hz)	21.5 (4.55)
Power per stage @ BEP, bhp (kW at 50 Hz)	1.31 (0.55)
Efficiency at BEP, %	68
Burst pressure, psi (kPa)	5,627 (38,797)
Standard housing alloys	Carbon steel
Standard shaft alloys	Inconel®
Shaft diameter, in. (mm)	0.875 (22.225)
Abrasion-resistant options	Stabilized severe duty (SSD)
Radial and axial bearing materials	Tungsten carbide

One stage @ 60 Hz 3,500 rpm
Specific gravity = 1.0



BEP data			
Q = 5,600 bbl/d	H = 21.5 ft	P = 1.31 hp	E = 68%

One stage @ 50 Hz 2,970 rpm
Specific gravity = 1.0



BEP data			
Q = 742 m^3/d	H = 4.55 m	P = 0.55 kW	E = 68%

Baker Hughes