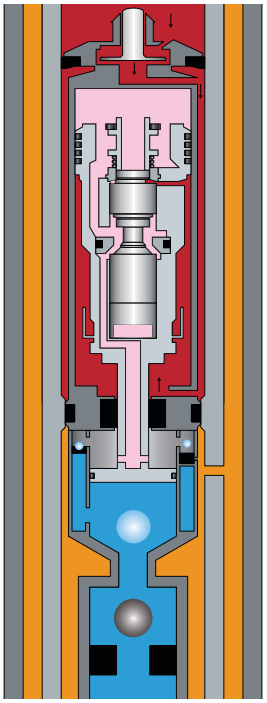
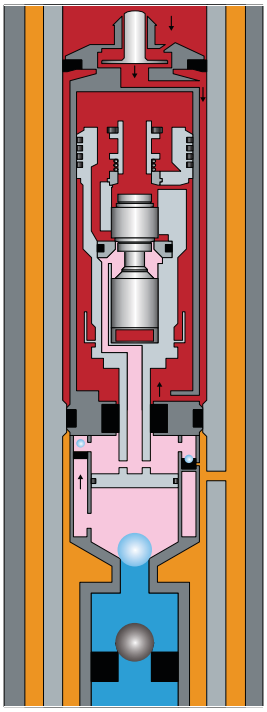
LV-Type Hydraulic Piston Pump

Weatherford's LV pump is a low-volume, single-displacement hydraulic piston pump that provides a reliable and economical artificial-lift method for producing horizontally drilled wells common with oil and gas-shale plays. The LV pump is ideal for a wide range of depths, volumes and well conditions. Blending the power fluid with the produced fluid or using heated power fluid enables the pump to produce viscous fluids. Long, slow strokes enable production rates to be modified by varying the injection rate or by changing the pump-end piston. Several wells can be produced from one surface package, lowering the overall cost per well.



Upstroke



Downstroke

Applications

- Deviated, horizontal wellbores
- Coalbed methane and dewatering gas wells
- Oil and gas-shale plays

Features, Advantages and Benefits

- Low pump-to-engine piston ratios allow for reduced operating pressures, producing higher volumes at greater depths.
- Pump design produces fluid volumes of 10–50 BPD without risk of failure caused by deliquification problems, minimizing maintenance costs and nonproductive time.
- Gas-lock is impossible so there is no wasted energy, and internal damage due to fluid pound is eliminated.

© 2012 Weatherford. All rights reserved.

LV-Type Piston Pump

Specifications

Pump designation, in.	2 x 1-5/8 x 1	2 x 1-5/8 x 1-1/16
Stroke length, in. ***(mm)***	49 *1,244*	49 *1,244*
Middle rod area, in² ***(mm²)***	0.358 *9.09*	0.358 *9.09*
Displacement engine, BPD/spm ***(m^3/day/spm)***	15.08 *2.4*	15.08 *2.4*
Displacement pump, BPD/spm ***(m^3/day/spm)***	5.76 *0.92*	6.45 *1.03*
Maximum displacement, BPD ***(m^3/day)***	202 *32.12*	225 *35.77*
Maximum speed, spm	35	35
P/E ratio	0.46	0.52

© 2012 Weatherford. All rights reserved.

Weatherford products and services are subject to the Company's standard terms and conditions, available on request or at weatherford.com. For more information contact an authorized Weatherford representative. Unless noted otherwise, trademarks and service marks herein are the property of Weatherford and may be registered in the United States and/or other countries. Weatherford products named herein may be protected by one or more U.S. and/or foreign patents. For more information, contact patents@weatherford.com. Specifications are subject to change without notice. Weatherford sells its products and services in accordance with the terms and conditions set forth in the applicable contract between Weatherford and the client.