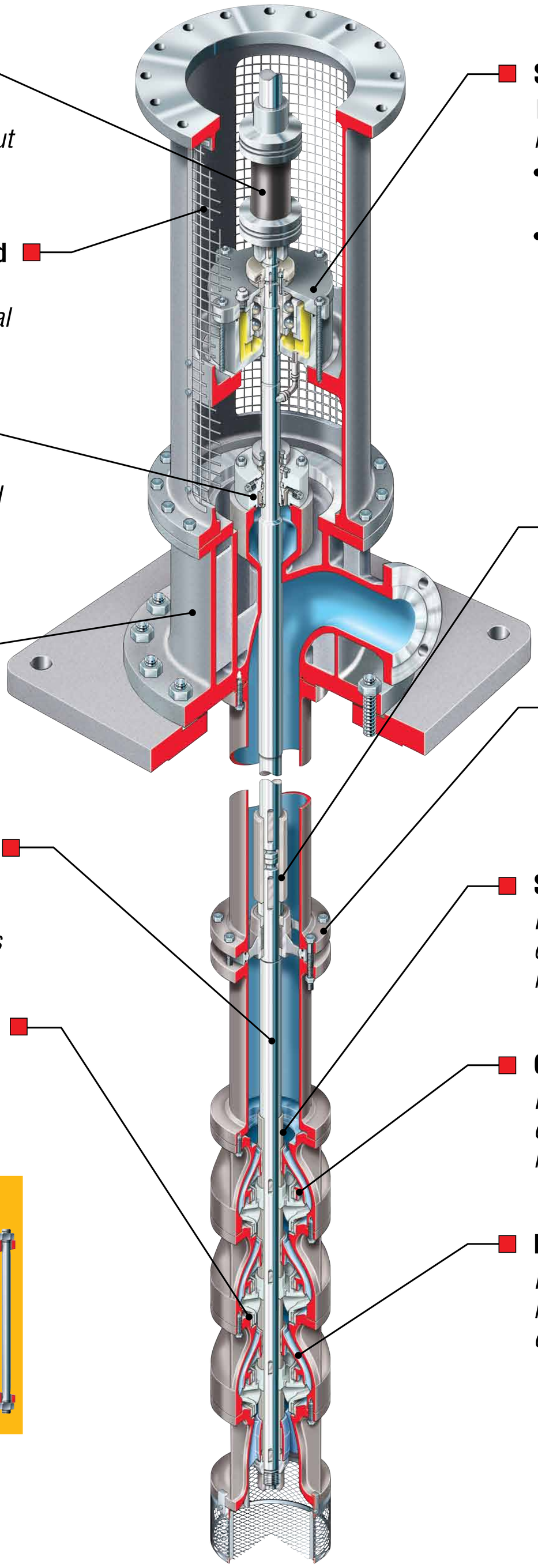
WUJ ISO 13709/API 610

(VS1) Vertical Line Shaft Pump



Flanged Spacer Type Coupling

Permits easy maintenance of thrust bearings and mechanical seals without disturbing or removing the driver

Non-Sparking Screen Coupling Guard

Provides safety while allowing visual inspection of coupling and mechanical seal areas

ISO 21049/API 682 Compliant Mechanical Seal Chamber

Accommodates all cartridge-mounted seal designs, including: single and dual pressurized or unpressurized liquid; and gas designs

Discharge Head

Is available in any required rating and incorporates all gauge, vent and drain connections

Undercritical Stiff Shaft Design and Minimized Bearing Span

Reduce deflection and assure stable operation under all service conditions

Mixed Flow Hydraulics With Integral Diffuser Design

Provides reliable performance in high- flow, low-head applications

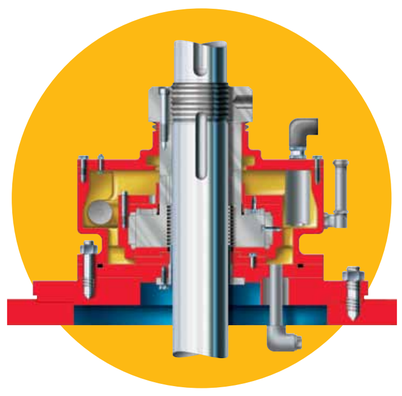
Available Radial Flow Hydraulics With Tie Bolt Design

Reliably performs in low-flow, high-head applications

Separate Axial Thrust Bearing Assembly

Withstands total hydraulic thrust and rotor weight:

- *Self-lubricating anti-friction bearings are utilized for standard applications*
- *Tilting pad thrust bearings for high horsepower or high thrust applications, permitting the use of standard motors*



Oversized Bearings

Mounted in the suction bell and discharge case eliminate unsupported shaft overhang

Centerline Aligned and Flanged Columns

Ensure total indicator readings well within API 610 limits

Sleeve Bearings

Provide hydraulic shaft support to each stage and are available in multiple materials to suit application needs

Casing and Impeller Wear Rings

Prevent galling, allow economical retention of operating efficiency and maintain mechanical stability

Multivane Diffusers

Provide smooth operation at partial load capacity and low radial forces on each impeller

USA and Canada
Flowserve Corporation
5215 North O'Connor Blvd.
Suite 2300
Irving, Texas 75039-5421 USA
Telephone: 1 937 890 5839

Europe, Middle East, Africa
Flowserve (Austria) GmbH
Industriestrasse B / 6
2345 Brunn am Gebirge
Telephone: 43 2236 31 530
Telefax: 43 2236 33 430

Latin America
Flowserve Corporation
Boulevard del Cafetal
Edificio Ninina, Local 7
El Cafetal - Caracas
Venezuela 1061
Telephone: 58 212 985 3092
Telefax: 58 212 985 1007

Asia Pacific
Flowserve Pte. Ltd.
200 Pandan Loop #06-03/04
Pantech 21
Singapore 128388
Telephone: 65 6775 3003
Telefax: 65 6779 4607

FPD-1253 (E)
Printed in USA.
October 2007

Experience In Motion

flowserve.com