



Weatherford®

Liner Systems

Premium Hydraulic Static (PHS) Liner Hanger

9-5/8 × 11-3/4 in. and 11-3/4 × 13-3/8 in.

This size of Weatherford's premium hydraulic static (PHS) liner hanger was designed specifically for deepwater applications, such as the Gulf of Mexico, which feature tight clearance between the liner and the host casing. The cone and slips section are designed to optimize bypass and, in addition to the protected slips, make the PHS hanger an ideal choice for drill-down and reaming liner applications.

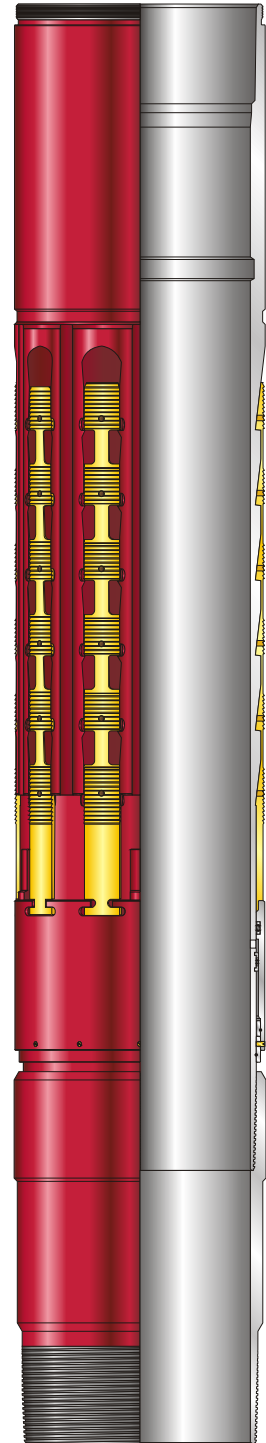
Differential pressure across the hydraulic cylinder activates the PHS hanger. Setting down weight on the PHS hanger then sets it, forcing the slips to bite into the host casing.

Applications

- Liners in deep and/or highly deviated wells
- Extended-reach liners
- Liners at any necessary depth
- Drill-down liners
- Liners that must be reamed down

Features, Advantages and Benefits

- Hydraulic activation removes the need for drillstring manipulation, making it possible to set the PHS liner hanger in deep and/or highly deviated wells.
- Large slip contact area minimizes the stress in the host casing and the liner hanger, enabling the PHS hanger to support extreme loads.
- The PHS liner hanger incorporates the profile and seal bore for Weatherford's RSM retrievable cement packoff. This feature eliminates the need for—and cost of—a separate assembly.





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Features, Advantages and Benefits (continued)

- Nitrided slips ensure that the liner hanger can be set in the hardest grades of host casing.
- Non-tortuous bypass channels allow for high circulation rates past the hanger assembly to aid removal of debris during well cleaning and improve the quality of cement displacement.
- Design of the liner hanger optimizes the burst and collapse ratings of the body and cylinder.
- Premium design aluminum shear screws ensure accurate predetermined setting pressures within ± 5 percent for enhanced reliability; with this advantage hydraulic events can be planned with a high degree of accuracy and safety.

Specifications

- Standard metallurgies in both sizes are P-110 (125 ksi) and API 140 (140 ksi) OCTG.
- Connections on the 11 3/4- x 13 3/8-in. model are Hydril[®] 561 and on the 9 5/8- x 11 3/4-in. model are Grant Prideco WHC-1.

Options

- Special crossovers to other connections are available on request.

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