

OptiSleeve Sliding Sleeve

Weatherford's OptiSleeve sliding sleeve is a tubing-mounted device used to regulate flow from individual producing zones or to control communication between the tubing and the annulus. The tool has one connection, which minimizes potential leak paths. The non-elastomeric seal is chemically inert for hostile environments, including exposure to oil-based muds and amine inhibitors. The OptiSleeve tool can be opened or closed using standard B shifting tools run on slickline, coiled tubing, or wash pipe.

The OptiSleeve tool is available in two versions:

- The OptiSleeve version contains an integral landing nipple profile and is specified as either the OptiSleeve U (open-up) tool or the OptiSleeve D (open-down) tool.
- The invertible **OptiSleeve I** version has no nipple profile and can be run as an open-up sleeve or an open-down sleeve by simply flipping the sleeve over; no conversion is necessary. This version maximizes completion flexibility and can be run in conjunction with a landing nipple profile mounted above the OptiSleeve tool for well security.

Applications

- Regulation of flow from individual zones between packers
- Circulation of completion or kill fluids from the annulus to the tubing above the production packer
- Injection of water to individual zones for waterflooding

Features, Advantages and Benefits

- Non-elastomeric seal is chemically inert for hostile environments, providing reliable sealing at temperatures up to 375°F (190°C) and 10,000 psi (68,948 kPa).
- Equalizing slots are designed to prevent damage to the seal when the sleeve is opened under differential pressure.
- Invertible pin × pin design allows shift-down or shift-up to open by simple inversion of the tool (OptiSleeve I version).
- Standard wireline B shifting tool opens and closes the sleeve, providing flexibility in completing the well without complicated conversions to the sliding sleeve.
- Robust design, with only one connection in the tool, minimizes potential leak paths.
- The ability to open and close individual sleeves allows control over communication between zones so that zones can be selectively produced.
- Flow-control devices, such as plugs and separation sleeves, can be installed in the nipple profile, saving money and reducing the number of connections.





OptiSleeve Sliding Sleeve

Specifications

Tubing Size (in.)		ΤοοΙ					
	Seal Bore (in./ <i>mm</i>)	OD (in./ <i>mm</i>)	Maximum Pressure Rating (psi/ <i>MP</i> a)	Maximum Temperature Rating (°F/° <i>C</i>)	Tensile Strength (lbf/ <i>kN</i>)	Differential Opening Pressure (psi/ <i>MPa</i>)	Torque Limit (ft-lb/ <i>N•m</i>)
2-3/8	1.875 47.62	3.090 78.49		375° 191°	106,000 <i>471.5</i>	1,500 <i>10,342</i>	1,300 <i>1,</i> 762
2-7/8	2.188 55.58 2.312 58.72	3.750 95.25	10,000		136,000 <i>605.0</i>		3,500 <i>4,745</i>
3-1/2	2.562 65.07 2.750 69.85 2.812 71.42	4.500 114.30	68.95		210,000 796.2		4,000 <i>5,423</i>
4-1/2	3.312 84.12 3.437 87.30 3.625 92.08 3.688 93.68 3.750 95.25 3.813 96.85	5.500 139.70	8,200 56.54	325° 163°	260,000 <i>1,156.5</i>		6,000 <i>8,135</i>
5-1/2	4.562 115.87 4.750 120.65	6.630 168.40	6,300 43.44 7,500 51.71	300° 149°	450,000 2,001.7		6,500 <i>8,813</i>
7	5.625 142.88	8.250 209.55			603,000 2682.3		9,200 12,473

weatherford.com

2

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.



Downhole Control Valves

OptiSleeve Sliding Sleeve

Options

- The OptiSleeve sliding sleeve is available with an integral nipple profile: the open-up (OptiSleeve U) configuration, or the open-down (OptiSleeve D) configuration. It is also available in an invertible (OptiSleeve I) version.
- All versions of the OptiSleeve sliding sleeve are available in either common oilfield alloy or corrosionresistant alloy.

For Internal Use Link to Endeca assembly part numbers: <u>OptiSleeve Sliding Sleeve</u>

weatherford.com

3

© 2006–2011 Weatherford. All rights reserved. 3995.02

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.