

# **Weatherford®**

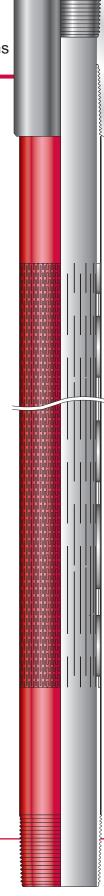
**Expandable Completions** 

## 7-in. ESS® Joint

Weatherford's 7-in. *ESS* expandable sand screen joint consists of a 7-in. base pipe with a slotted, expandable section to which overlapping weave layers are attached. An external layer of perforated, expandable shroud protects filter media from damage during deployment. Expansion is achieved from the surface using a low-pressure rotary compliant-expansion tool.

#### Features, Advantages and Benefits

- Compliant expansion eliminates screen/wellbore annulus for enhanced sand control integrity and borehole stabilization.
- Large ID in reservoir section optimizes production by improving flow performance.
- Large open to flow area and low delta P filter media improve well productivity and inflow performance.
- Joint connections are non-expandable and use premium threads for added durability.
- The ESS joint is compatible with the EZI™ openhole isolation device, enabling multizone, single-trip sand-control completions.





### 7-in. ESS® Joint

### **Specifications**

Material options	316L	25 Cr	Low-Carbon Steel (LCS)	
Connection type <sup>1</sup>	VAM TOP® HT SC90 LH <sup>2</sup>		Tenaris Blue <sup>®</sup> SC LH <sup>2</sup>	
Joint lengths available (ft)	38 and 20		38, 35, and 20	
Base pipe weight (lb/ft)	29			
Pre-expansion running OD at coupling (in./mm)		56 2.02	7.51 190.75	
Pre-expansion running ID at coupling (in./mm)	6.12 155.45			
Post-expansion typical OD range (in./mm)	7.56 to 9.25 192.02 to 234.95		7.51 to 9.25 190.75 to 234.95	
Post-expansion final ID at coupling <sup>3</sup> (in./mm)	6.12 155.45			
Percentage of joint contributing to flow				
38-ft joint	87%		75%	
35-ft joint	N.	$A^4$	75%	
20-ft joint	87%	86%	75%	

#### Materials\*

ESS joint	316L	25 Cr	LCS	
Base pipe	316L	25 Cr	LCS	
Connector	25 Cr	25 01		
Filtration media	316L	316L/Alloy 825	316L	
Outer shroud	310L	3 TOL/Alloy 623	310L	

<sup>\*</sup>Alternative metallurgies available for more aggressive well environments

#### **Filtration Media**

[vveave aperture (µm)   270   230   150   120	Weave aperture (µm)	270	230	150	120
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VAM TOP and Tenaris Blue are registered trademarks of their respective companies.

<sup>&</sup>lt;sup>1</sup>Box coupling x pin <sup>2</sup>LH = left-hand connection

<sup>\*</sup>Connections remain unexpanded

<sup>&</sup>lt;sup>4</sup>NA = not applicable