

i-Opener SO - Toe Sleeve

The i-Opener™ SO (Single Open) Toe Sleeve is designed for use in horizontal multi-zone completions as the primary initiation point to establish injection into the formation without the need for intervention. Once activated, the high flow area through the ports allows injection of fluid to support plug-n-perf operations or stimulation of the first frac stage.

The i-Opener SO Toe Sleeve has redundant burst discs that protect the inner components of the sleeve from debris and cement during installation. The tool is activated by exceeding the absolute pressure rating of the rupture discs. Once ruptured, pressure shifts the sleeve, opening the injection ports and providing communication to the reservoir.

Features

- Large I.D. through the tool
- Engineered rupture discs versus shear screws
- Redundant flow path to open sleeve

Benefits

- Compatible with industry standard wiper plugs
- Unrestricted large flow area reduces plugging potential
- Greater accuracy for activation pressure
- Debris tolerant during activation

Applications

- Cemented and open hole horizontal multistage completions
- Toe initiation for plug-and-perf and sleeve systems
- First stage fracs

Technical Data

Description		
Size (in./mm)	4.500 (114.3)	5.500 (139.7)
Maximum O.D. (in./mm)	5.65 (143.5)	7.06 (179.3)
Minimum I.D. (in./mm)	3.710 (94.2)	4.663 (118.4)
Burst Pressure Rating (PSI/kPa)	17,500 (120,660)	16,000 (110,320)
Collapse Pressure Rating (PSI/kPa)	11,700 (80,670)	11,000 (75,840)
Flow Area (in. ² /cm ²)	12.0 (77.42)	17.0 (109.68)
Temperature Rating (°F/°C)	325 (163)	325 (163)
Rupture Disk Range (PSI/kPa)	3,000 - 16,500 (20,680 - 113,760)	3,000 - 15,500 (20,680 - 106,870)
Material	4140-4145, 125 KSI	
Overall Length (in./mm)	42.5 (1,079)	43.4 (1,102)

