

i-Opener CO - Toe Sleeve

The i-Opener™ CO 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. The i-Opener CO allows the operator to test the casing multiple times at a higher pressure than required to open the sleeve. Once activated, the high-flow area through the ports allows injection of the fluid to support plug-and-perf operations or stimulation of the first frac stage.

The i-Opener CO Toe Sleeve has redundant burst disks to protect the inner components of the sleeve from debris and cement during installation. The tool functions on exceeding the absolute pressure rating applied to the rupture disks. Once disks are ruptured, two casing tests are performed. Pressure applied the fourth time to the casing shifts the sleeve, opening the injection ports, and providing communication to the reservoir. Once opened, the sleeve locks open to provide full opening through ports.



Features and benefits

- Large I.D. through the tool
- No inner sleeve between ports once activated
- Allows casing test higher than opening pressure
- Engineered rupture disks versus shear screws
- Redundant flow path to open sleeve
- Compatible with industry standard wiper plugs
- Unrestricted large flow area reduces plugging potential
- Ensures casing integrity before fracturing begins
- 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

i-Opener CO - Toe Sleeve Specifications

Technical Data

Description	i-Opener CO
Size (in./mm)	5.500 (139,70)
Maximum O.D. (in./mm)	7.060 (179,3)
Minimum I.D. (in./mm)	4.575 (116,2)
Burst - Internal absolute pressure rating (psi/bar)	20,629 (1422,32)
Collapse pressure rating (psi/bar)	12, 907 (889,91)
Flow area (in. ²)	17.9
Temperature rating (°F/°C)	325 (162,7)
Rupture disk range (psi/bar)	3,000 to 15,500 (206,84 to 1,068)
Material	4140-4145, 125 ksi
Overall length (in./mm)	53.550