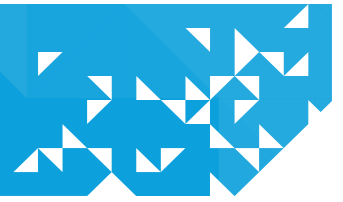


ORIO™ Toe Sleeve



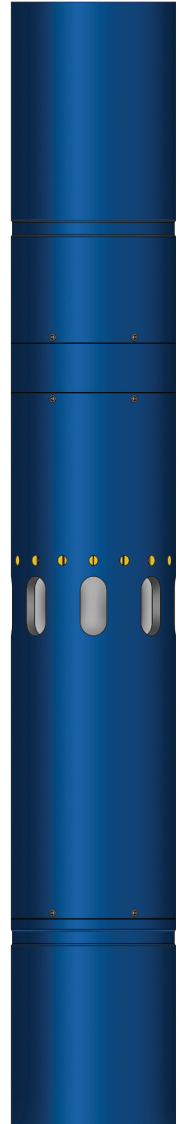
The ORIO™ Toe Sleeve is a hydraulically operated sliding sleeve which is run near the toe of a horizontal well. The toe sleeve allows the casing to be tested to surface pressures up to 15,000 psi. Once a successful test is achieved, the toe sleeve is opened at a predetermined pressure allowing communication to the formation. The toe sleeve allows for a high injection rate to facilitate subsequent plug and perf operations.

The unique and patented three-layer design keeps all the moving parts encapsulated and protected from the well-bore environment. This ensures that the sleeve, once activated, is always fully open.

The ORIO™ Toe Sleeve utilizes rupture disks and an atmospheric chamber to precisely control the opening pressure. Annular pressure and cement do not affect the opening pressure of the tool.

FEATURE AND BENEFITS

- Equipped with dual rupture disks which allow for accurate opening pressures and casing tests in excess of 15,000 psi
- The opening piston is hydraulically balanced while running in the hole, thus preventing premature opening of the tool
- The unique and patented three-layer design keeps all the moving parts encapsulated and protected from the well-bore environment
- Shouldered connections allow for rotation while running in the hole or during cementing operations
- Compatible with heavy-duty cement wiper plugs
- Rated up to 18,000 psi



Patent Pending

ORIO™ TOE SLEEVE

| SIZE Inches | WEIGHT | MAX O.D. Inches | MIN I.D. Inches |
|----------------------|--|--------------------|--------------------|
| 4.500 Slim OD | 4.500" 11.6-15.1 PPF | 5.350 | 3.000 |
| 4.500/5.500 Big Bore | 4.500" 11.6-13.5 PPF 5.000" All Weights | 5.750 | 3.800 |
| 4.500/5.000 Standard | 4.500" 11.6-15.1 PPF 5.000" All Weights | 5.625 | 3.490 |
| 5.500 Standard | 5.500" 17-23 PPF | 6.760 | 4.240 |
| 5.500 Big Bore | 5.500" 17-23 PPF | 7.375 | 4.600 |