

PRODUCTS - SOLUTIONS - RESOURCE

PRODUCT OVERVIEW:

The Atmospheric Delta Hydraulic Port is a high performance pressure activated sleeve designed to hydraulically gain access to the annulus during frac operations. The Atmospheric Delta is a combination tool adapting proven Resource technology from the existing Delta Port design with an atmospheric chamber giving the ability to function in any formation. Once hydraulically opened the sleeve provides a flow area equal to or greater than liner volume. The opening pressure can easily be adjusted in the field to accommodate any wellbore depth and design. The Teflon coated pistons maintain a consistent opening value in the worst wellbore conditions and fluids.

Field adjustable shear screws allow for a selective opening pressure. The internal atmospheric chamber requires predetermined calculations of hydrostatic pressure, friction losses and pressure necessary to set any hydraulic activated tools within the BHA. Careful consideration must be taken when planning the opening pressure. External formation pressure will not hinder the operation of the Atmospheric Delta Port. Shear plugs are installed to block unused shear screw holes to preventing fluid and debris entry which may impede the function of the tool. The compact Delta design provides ease of handling and rig floor make up, liner string flexibility, and trouble free deployment into various well profiles.

The Delta is rated at full 10,000 psi differential pressure. The atmospheric chamber is capable of handling the maximum number of shear screws which is approximately 13,200 psi. Standard configurations are P-110 equivalent. Alternate materials, configurations and higher differential pressure ratings are available for utilization in extremely hostile environments. A full line of accessory equipment is available providing a complete open hole multi-stage stimulation system.

FEATURES:

- A combination of proven features ensures access to the formation.
- First stage in Zone Seeker ball drop operations.
- 360° opening to allow equal frac distribution.
- Teflon Coated pistons maintains consistent opening pressures in any environment.
- External pressure will not affect the atmospheric component of the Delta Port.
- Both components allow for equal or greater than liner flow area once open.
- Pistons lock in open position once activated ensuring the sleeve will not close impeding the flow area.
- Field adjustable opening shear values.
- Available in corrosion resistant alloys for hostile environments.
- Standard and premium thread connection available.

