

# Frontier Series

## Split Phase Wellhead Connector

The Split Phase (3-Leg) Connector for ESP Wells is a universal application for concentric and/or limited space wellhead configurations, providing reliable gas-tight 3-phase power to conventional ESP systems. The Connector enables equivalent power transmission equivalent to our Single Mandrel range, but by passing through the wellhead as individual phases before converging downhole into a single ESP cable.

### Electrical Specification - (values may differ depending on model and materials)

Maximum Voltage:	8 kVAC
	12 kVDC
Maximum Working Current:	250 A
Maximum Working Temperature:	135°C (275°F)
Maximum Working Pressure:	5,525 psi
Maximum H <sub>2</sub> S:	40%
Maximum CO <sub>2</sub> :	90%

### Key Performance Features

#### 3 Leg Configuration

Each phase is split to penetrate wellhead through three separate bores; completely gas tight using industry standard compression fittings.

#### Dual Pressure Barrier Technology

Provides double isolation between wellhead and bonnet cavity as well as bonnet cavity and surface, giving total protection against gas leaks to surface.

#### 'Plug & Play' Surface Connector

Reusable, factory assembled and tested product, No special training, or specialist required. Saves rig time and improves reliability performance.

#### Single Assembly Downhole Penetrator and 3-into-1 Breakout Module

With moulded pigtail to downhole cable. No on-site cable phase separation and termination preparation required; only standard horizontal splice. Removes critical process from rig floor. No on-site specialist required. Saves rig time and improves reliability performance.

#### Permanently Activated Internal Seals (tested during assembly)

No pressure-activated seals, no possibility of gas migration through penetrator, even at low pressures.

#### Available with Optional Deck Connector System

Enables surface connector and cable to be removed during workovers - prevents damage during workover.

#### Unrivalled Reliability Track Record

Total confidence of reliability.

### Other Key Features

Debris Caps provided  
Gold Plated Pins and Sockets  
Qualified to IEC60502  
API 6A PR2 Certified  
Metal to Metal Sealing  
Only NACE MR01-75 Materials used

### Experience

The industry's unchallenged number one choice for reliability. Exclusive supplier to the demanding North Sea market for over 20 years.

