

# Frontier Series

## Packer Penetrator - Split Phase

The RMSpumptools Split Phase (3 -Leg) Packer Penetrator for ESP Wells is a universal application, delivering pressure-tight 3-Phase power through Downhole ESP Packers and encapsulated ESP Systems (PODS/CANS). Three phases are branched out into individual legs that are fed through narrow bores in the POD or Packer - this product is particularly suited to concentric applications where space is premium. They can be supplied factory moulded to many types of downhole cable, including the MLE and no adapter is required to secure the penetrator into the packer.

### Electrical Specification

Maximum Voltage:	8 kVAC
Maximum Working Current:	250 A
Maximum Working Temperature:	150°C (302°F)
Maximum Working Pressure:	7,500 psi
Maximum H <sub>2</sub> S:	40%
Maximum CO <sub>2</sub> :	90%

### Key Performance Features

#### Split Phase Configuration

Each phase is split to penetrate the packer (or Pod) through three separate bores. Interchangeable with other 3-leg packer penetrator systems, completely gas tight using industry standard compression fittings.

#### Unique Pressure Barrier Technology

Zero Gas Leakage, total safety security with zero possibility of gas migration.

#### Unique Stack-up Tolerant Design

Providing variable space-out when installing. Eliminates risky cutting of 3/8" SS tubes, eliminates terminating connections on site, preventing potential damage to insulation, improving reliability and speed of installation.

#### 'Plug and Play' Upper Connector and 3-into-1 Breakout Module

With factory moulded power cable pigtail. No onsite cable separation or preparation required. 3-Leg breakout module pigtails can be pre spliced to main power cable. Removes all critical process from rig floor, no on site specialist required, saves rig time and improves reliability.

#### Seal Integrity Test included as part of Installation Procedure for absolute peace of mind

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

#### No Specialist Tooling Required

Reduced risk of delays due to missing or broken specialist tooling.

#### Unrivalled Reliability Track Record

Total confidence of reliability.

### Other Key Features

Protective Caps provided  
 Gold Plated Pins and Sockets  
 Qualified to IEC60502  
 Only NACE MR01-75 Materials used  
 Kidney shaped Breakout to minimise space requirement.

### Experience

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

