



Innovex's experience in **ESP Packer Penetrators** is second to none, delivering the most reliability in the industry. Our full range of packer penetrator solutions meet your pressure requirements, well bore conditions, and casing program designs. A robust stock of inventory secures short lead times while training and onsite field support with our certified technicians ensure success on every ESP well completion.

### Standard & Slim-Line Packer Penetrator

Our standard packer penetrator design features a small 1.25" OD annular space requirement to make up the ESP cable above and below the packer and our Slim-Line (SL) Packer Penetrator requires only a 1.00" of annular space.

This ultra slim design allows for the most versatility in tight well designs and supports a full range of ESP pumps on the market while still offering the performance our customers have come to expect.

### Harsh Environment Penetrator

When H<sub>2</sub>S content exceeds 15,000 PPM (1.5%), Innovex recommends our Harsh Environment Penetrator design. H<sub>2</sub>S exposure testing helped determine design enhancements and the correct selection of materials to provide the highest level of performance.

### Tri-Lead Packer Penetrator

Innovex has routinely outperformed the competition by twice the run life in the harshest fields around the world. In extremely harsh wells, we recommend the Innovex Tri-Lead Packer Penetrator to eliminate connections below the ESP Packer. The Motor Lead Extension (MLE) is run continuously from the ESP through the packer utilizing a metal-to-metal seal on top of the packer.

A standard penetrator connection is then made to the ESP cable above the harsh well conditions and above the packer to deliver ultimate performance.

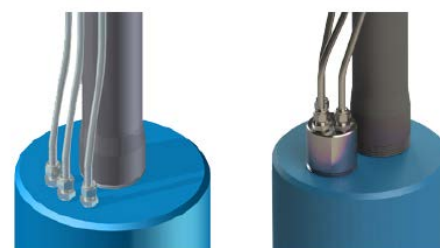


## High Pressure Packer Penetrator

Whether you are boosting production or producing down the decline curve, Innovex offers a full range of pressure ratings, matching your downhole packer, to assure reliability and high production rates. Our 8k and 10k PSI High Pressure Packer Penetrators are designed with superior materials to meet your requirements.

## Dual-String & Multi-Port

Innovex employs a full line of solutions for both Dual-String and Multi-Port installation options. Dual String ESP Packer Penetrators use a bushing to interface with the ESP side of the packer offering a variety of thread connections to allow for various capillary lines and CT lines. Multi-Port ESP Packer features independent porting for each conductor leg (Phase) to pass through the packer.



Multi-Port

Dual-String

Both options are secured with metal-to-metal sealing tube fittings.

## QCI Packer Penetrators Selection Guide

Series	Connection Size	Tubing Size	Conductor		Working Pressure Rating	Well Conditions		
			Wire	Amps		H2S	CO2	Temp
Standard packer (1.125" OD Connection)	1.125" OD (31.75 mm)	1/4" OD	#6 AWG	90	5,000	Less than 1.5% or 15,000 PPM	NACE Compliant	375° F 190° C
		3/8" OD	#5 AWG	150	5,000			
					8,000			
					10,000			
		12 mm OD	#4 AWG	190	5,000			
					8,000			
					10,000			
Harsh Environment PEEK Insulation	1.125" OD (31.75 mm)	3/8" OD	#4 AWG	190	5,000	More than 1.5% or 15,000 PPM	NACE Compliant	375° F 190° C
					8,000			
					10,000			
Slim-Line (.0875" OD Connection)	0.875" OD (22.23 mm)	1/4" OD	#6 AWG	90	5,000	Less than 1.5% or 15,000 PPM	NACE Compliant	375° F 190° C
		3/8" OD	#5 AWG	150	5,000			