

Qteq's Heavy Duty Protectors are designed to protect Tubing Encapsulated Cable (TEC) or Tubing Encapsulated Fibre (TEF) from potential impact and abrasion damage during installation of permanent downhole monitoring systems.

The heavy duty protector provides positive standoff of the production tubing from the casing wall even in highly deviated and horizontal wells. Specialized equipment is required for the installation and retrieval of these protectors. Qteq provides this equipment as part of our installation service package. These protectors are also available as centralizers and can be installed in combination with light duty cross-coupling protectors to meet specific well application requirements. They can also be used as stand-off guards for specific production equipment, gauge protectors for multi-drop gauge architectures and slim-hole applications, and mid-joint protectors for heavily deviated wells.



Features and Benefits

- Tapered profiles minimize the potential for hang-ups during system installation and retrieval.
- Vertical movement of protectors constrained by coupling shoulders and tubing upsets.
- Specialized pneumatic and hydraulic tools used for efficient installation and removal of protectors.
- Standard designs can be easily modified to meet specific tubing and casing size requirements.
- Multiple sizes and types of protectors can be installed in a single well to maximize protection while minimizing cost.
- Ultimate protection for TEC, TEF and other control lines for a wide variety of applications.

Specifications

Metallurgy	Carbon Steel, Super Duplex Stainless Steel
Retaining Method	Pin Lock
Installation Method	Pneumatic and Hydraulic Installation Tools
Sizes	2.375" EUE, 2.875" EUE, 3.500" EUE. Other sizes available upon request
Application	4mm TEC Bare (Thermocouple), 1/4" TEC Bare, 11mm TEC Encapsulated, ESP cable, multi-tube flat packs, fully customizable
Well Design	Deviated wells, horizontal wells, significant dog legs, special protection, low clearance