

Fibre Optic Wellhead Outlet

(FWHO)



Qteq's Fibre Optic Wellhead Outlet (FWHO) is designed to provide a reliable and easy to install termination of the Tubing Encapsulated Fibre (TEF) where it exits the wellhead. After the TEF is fed through a port in the spool piece and into the bore of the wellhead flange, a metal-to-metal primary pressure seal is formed between the OD of the TEF armour and the bore of the wellhead penetrator.

A specialised adaptor creates a secondary metal-to-metal pressure seal to prevent migration of pressurised fluids up the interior of the TEF armour beyond the FWHO in case TEF mechanical integrity is breached downhole. A specialized housing is manufactured and certified to API6A / ISO10423 standards and houses the fibre optic inter connection block for connecting to a surface cable. The surface cable is connected using an Exd Gland.



Features and Benefits

- High temperature and pressure rating.
- Makes use of Design For Assembly (DFA) best practices to simplify well site assembly by one engineer.
- Incorporates pressure-testable cable heads at each end to ensure optical integrity will be maintained during well life.
- All Items comply with API6A / ISO1023 standards, and are sourced from reputable, ISO9001 certified suppliers who have a proven track record supplying electronics and apparatus for such environments.

Specifications

Well Connection	½" NPT
Certification	API 6A/ISO 10423(-20°C ≤ T ≤ 100°C) FF PSL 3
Working Pressure	10,000 psi
Ingress Protection	IP68
Operating Temperature	-20 to +100 °C
Material Class	FF – Sour Service as per NACE MR 00175/ISO 15156
Seals	Metal to Metal, Metal to Epoxy, VITON
Optical Fibre	Up to 4x Single Mode or Multi Mode
Fibre Type	Carbon Polyimide
Downhole Cable	¼"