



Weatherford®

Production Optimization

Electrical Wellhead Outlet

Weatherford's electrical wellhead outlet (WHO) is designed for cable feed-through and exit management of the electric downhole cable (TEC) from a wellhead.

A metal-metal primary pressure seal on the TEC armor and the bore of the wellhead penetrator provides the primary pressure barrier. The chamber within the WHO allows interface of the downhole cable with the surface cabling. A bulk head feed through provides the critical secondary pressure barrier.

Features, Advantages and Benefits

- Manufactured to suit client requirements in terms of port size, materials, well conditions and pressure and temperature ratings
- All seals are metal-to-metal to assure system integrity for low and high pressure applications
- Designed to operate in harsh environments throughout the life of the well, whether on land or offshore
- Easy and quick to install
- The WHO has been certified as complying with the Essential Health and Safety Requirements of Annex II of ATEX Directive 94/9/EC; certification has been assured by compliance with European community standards EN 60079-0: 2006 and EN 60079-1: 2004
- Designed to API 6A





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Specifications

General	
Wellhead connection thread	1/2 in. NPT male
Intermediate body connection thread	1 in. AE
Electrical exit connecting thread	1/2 in. NPT male
Component material (standard)	400 series stainless steel (13 Cr)
Component material (options)	HP yield alloys
Overall diameter, in. (cm)	1.5 (3.81)
Overall length, in. (cm)	11.5 (29.21)
Working pressure, psi (bar)	10,000 (689.5)
Burst pressure (calculated), psi (bar)	20,000 (1378.9)
Weight, lb. (kg)	6 (2.72)
Certifications	Marked Ex d IIB T4 for use in Zone 1 hazardous locations by TUV Rheinland CE marked as Ex II 2G DNV survey at 10,000 PSI operating pressure

Options

- Junction box—supplied as standard
- Wellhead flange adaptors to comply with wellhead specifications