



Wellhead Outlet

Weatherford's wellhead outlet (WHO) is designed to organize feed-through and exit of optical cable from a platform wellhead. The WHO provides a robust secondary pressure barrier at the wellhead to the primary in-well pressure containment system and a reliable optical interface between downhole optical cable and surface cabling systems.

The cable is fed through the tubing hanger, sealed at the hanger's lower and upper ends, and then wrapped around the neck of the hanger. The cable is then fed through a port in the spool piece and into the bore of the wellhead flange.

The WHO is typically manufactured to suit client requirements in terms of flange size, material, and pressure and temperature ratings.



Features, Advantages and Benefits

- Proven high-pressure optical feed-throughs are designed to operate in harsh downhole environments, providing a significant performance margin when the WHO is operated at wellhead conditions.
- The durable WHO is constructed of 17-4 alloy steel, ensuring reliability throughout the duration of production operations.
- Metal-to-metal seals prevent leaks to ensure system integrity.
- All seals have a post-installation testing capacity, which allows confirmation of pressure integrity.
- The WHO is rated for standard service and can be customized for sour service.



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Specifications

Length (in./mm)	9 228.6	
Material	17-4 alloy steel (typically)	
Working pressure rating (psi/bar)	10,000 689	15,000 1,034
Service	Rated and certified for standard service (sour available)	
Certification	Det Norske Veritas	
Number of seals	2 barriers in every leak path between valve clock and exterior	
Standard flange	1 13/16-in. 6 BX API flange (other available on request)	
Gasket ring	BX	
Seal type	Metal-to-metal	
Seal testing	Post-installation testing capability, all seals	
Standard adapter*	1-in. AE × 5 1/2-in., with HIP fitting	
Adapter material	Heat-treated 15-5 PH stainless steel (typical)	

*For wellheads without a 6 BX API flanged outlet, a 1- × 5 1/2-in. wellhead adapter with Autoclave Engineer's HIP fitting is available.