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ENGINEERING



# StabSeals

designed to withstand the most demanding conditions

# StabSeal Universal

## Key advantages

This sealing solution is engineered for subsea hydraulic hotstab operations where predictable, repeatable performance is essential. With exceptionally low mating force, it enables smooth connection even in challenging subsea conditions. The design provides reliable extrusion resistance, excellent wear characteristics, and robust durability, supporting multiple stabbing operations without compromising sealing integrity.

Its strong performance across both low and medium temperature ranges - depending on O-ring compound selection - provides operational flexibility. All material options comply with Norsok requirements, ensuring suitability for critical subsea applications.

Assembly is straightforward and forgiving, making it a practical choice for field technicians while maintaining high sealing capability across low and high pressures.

## Standard material configuration

- Hydrolysis-resistant polyurethane / NBR
- Optional configurations available depending on application requirements

## Typical application envelope

Designed for subsea hydraulic hotstab systems operating in moderate pressure environments.

## Pressure rating

- Standard rating: 690 bar / 10,000 psi

## Media & temperature

- For glycol-based control fluids: up to 40 °C (60 °C short term)
- For mineral-oil-based fluids: up to 110 °C

## Limitations

This solution is not recommended for high-temperature applications

## Groove compatibility

Suitable for standard and non-standard groove geometries, and fully interchangeable with grooves designed for O-ring alone or O-ring + back-up configurations. This flexibility makes it easy to adopt the seal into existing hardware without redesign.



Contact Seal Engineering's technical team. We'll ensure the optimal seal design and material combination for your application!

# StabSeal T

## Key advantages

Engineered for the most demanding subsea environments, this sealing solution delivers exceptional performance where reliability is non-negotiable. Its ultra-high pressure capability and outstanding extrusion resistance ensure long-term integrity even under extreme hydraulic loads. With a broad material portfolio, including compounds tailored for chemically aggressive injection fluids, the design supports wide-range compatibility in both low and high temperature regimes.

Every material option is validated to meet NORSOK standards, ensuring compliance for critical subsea operations. The sealing system maintains consistent, dependable sealing performance at both low and high pressures, making it a robust choice for mission-critical applications.

## Operational considerations

While the design may require a higher mating force compared to StabSeal Universal, this is a direct result of its reinforced construction - essential for achieving superior pressure capacity and long-term stability.

## Typical application envelope

Hydraulic hotstabs for subsea use, where reliability, durability, and chemical resilience are essential.

## Pressure rating

- Standard rating: 1380 bar / 20,000 psi
- Custom-engineered variants available for even higher pressure demands

## Media & temperature

- Suitable for chemically aggressive injection fluids
- Temperature range for standard materials: -18 °C to +121 °C
- Custom compounds available for ultra-low to ultra-high temperature conditions

## Standard material configuration

- HNBR + PEEK
- Wide selection of alternative combinations available depending on application requirements

## Groove compatibility

Suitable for all standard O-ring grooves with or without back-up rings.



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