

Trelleborg Sealing Solutions have launched the Turcon® Variseal® MC - a high integrity, multi-contact spring energized seal that eliminates break-out concerns and stick-slip issues in subsea valve applications.

The Turcon® Variseal® MC from Trelleborg Sealing Solutions has been developed to replace multiple chevron seals or V-stack type products in subsea valve stems requiring a high-integrity sealing capability. It includes a series of discrete spring-energized sealing profiles integrated within a U-shaped Turcon® polytetrafluoroethylene (PTFE) based material seal body.

The Turcon® Variseal® MC is designed to provide integrated redundancy, helping to extend the flex life of seals in high-pressure applications while providing better performance and lower operator costs. With the addition of anti-extrusion devices, the Turcon® Variseal® MC can withstand pressures of up to 207 MPa/ 30,000 psi.

The unique single-piece design significantly improves sealing integrity and leak tightness in high-pressure applications by providing higher contact force across multiple seal hardware interfaces.

The Turcon® Variseal® MC should be chosen when operational conditions require a seal to perform with high resistance to chemical media, under extreme temperatures whilst maintaining good extrusion or compression characteristics.

Features and benefits

- Good static and semi-dynamic sealing effect
- Reduced friction under high loads
- · Almost universal chemical compatibility
- Permanent elasticity unaffected by contact with chemicals
- · Withstands aggressive and abrasive process media
- · Unlimited shelf life
- Compact form and single piece installation, ideal for replacing multi-piece packing and sealing systems
- · No external preload required
- Resistant to compression set for maintenance free stem sealing
- Available to suite standard gland dimensions from 200 to 500 series. Special sizes and geometries also available.
- Available with anti-extrusion back-up rings for service in extreme conditions where single or double extrusion gaps are present

Applications

High pressure sealing environments including:

- · Down-hole tools
- Valve-stems
- Down-hole flow control
- Sub surface safety valves
- Polished bore receptacles
- Sliding sleeves
- · Hydraulic cylinders

TECHNICAL INFORMATION FOR TURCON® VARISEAL® MC

Technical Data	
Operating Pressure	30,000 psi / 207 MPa
Speed	Up to 32 ft/s / 10 m/s
Temperature Range	-196 °C to +265 °C / -320 °F to +509 °F
Clearance	Typically up to 0.3mm at 2 MPa
Media	Resistant to virtually all media

