

SUNKYE



Sunkye is a company that specializes in producing specific connectors, which are widely used in both military and civil areas. The military areas include aerospace, aviation, electrical, ship-building, defense systems, and more, while the civil areas include communication, telecom, automotive, rail, oil & gas and others.

Company profile

The design team focuses on meeting customer requirements with continuous innovative technology, while the manufacturing team provides high-quality products by utilizing advanced equipment in standardized processes. This ensures that customers benefit from the products.

Sunkye is certified ISO-9001 and has passed UL, VDE, and CE certifications. Also ensures product quality by testing its products in realistic conditions with advanced test facilities and professional test employees.

The Sunkye team is committed to offering high-quality products, the best service, prompt delivery, and competitive prices for its customers.



Manufacture Equipment:

Five-Axis CNC, AGIE EDM, SODICK WEDM-LS, 40G Vector Network Analyzers, Vacuum Heat Treatment Equipment, Glass-sintered System, Laser Processing Center, High Velocity Ram Machine, Gold, Nickel and Cadmium Plating Production Line, Thermosetting Injection Machine, Thermoplastic Injection Machine, Swiss Automatic Lathe, etc.

Test Facilities:

Comprehensive Test Instrument of Temperature, Humidity and Vibration; Experimental Box of Temperature and Shock; Layer Thickness Meter; Coordinate Measurement Machine, etc.





SUNKYE HTHP Electrical Connectors

SUNKYE

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SUNKYE CONNECTOR D011 Series

High Temperature & High Pressure Connectors

HTHP Connectors For Oil & Gas Application Equipment

Sunkye is a global solutions provider of innovative seal solutions and differentiated products to the global oil and gas industry. We serve a wide range of customers including oil and gas producers, original equipment manufacturers (OEMs), and engineering and service companies which utilize our technologies, products, and services for producing oil and gas from land-based and offshore platforms throughout the world.

Sunkye is uniquely qualified to deliver turnkey custom solutions for a complete range of High-Pressure, High-Temperature (HPHT) applications. Our industry-leading materials knowledge, engineering design experience, and testing capabilities are key to achieving reliable service in the most extreme HPHT environments.

Product Introduction

- Part No. D011-01P-232
- Glass Sintering Adapter with Single Contact
- High Temperature Alloy Shell
- Alloy Contact, Ceramic and Glass Insulator



Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, 0.3G²/Hz, acceleration 20G, 200°C.4h on direction X, Y, Z.
- Shock: 490m²/s, 11ms

Electrical Performance

- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current ≤5mA
- Normal Temperature Insulate Resistance: ≥5000MΩ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: ≥500MΩ (500VDC, 200°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +200°C
- Operating Pressure: 0 MPa to 172.5 MPa
- High Temperature Life: 200°C, 600h
- Temperature Shock: -55°C to +200°C, 15 cycles, the temperature switching time is ≤ 15min
- Salt Spray: 24h
- Air Leak: helium leak test ≤ 1×10⁻³Pa.cm³/s
- High Temperature High Pressure: 172.5MPa, 200°C, 336h

Product Introduction

- Part No. D011-01P-497
- Injection Sealed Single Contact Adapter
- Beryllium Bronze Shell and Contact
- PEEK Injection Sealed Insulator



Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, 0.3G²/Hz, acceleration 20G, 175°C.4h on direction X, Y, Z.
- Shock: 490m²/s, 11ms
- Endurance: 500 cycles

Electrical Performance

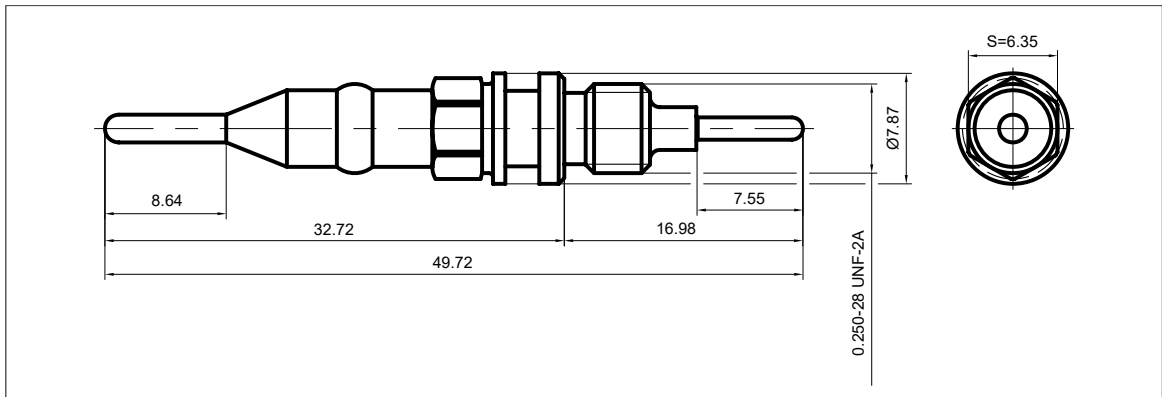
- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current ≤5mA
- Normal Temperature Insulate Resistance: ≥5000MΩ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: ≥500MΩ (500VDC, 175°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +175°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 175°C, 600h
- Temperature Shock: -55°C to +175°C, 15 cycles, the temperature switching time is ≤ 15min
- Salt Spray: 48h
- Air Leak: helium leak test ≤ 1×10⁻³Pa.cm³/s
- High Temperature High Pressure: 140MPa, 175°C, 10h

Outline Dimensions

Dimensions: The contact end is #14 socket, the other end max welding # 16 wire.





Product Introduction

- Part No. D011-01P-627
- Glass Sintering Adapter with Single Contact
- High Temperature Alloy and Fluororubber Shell
- Alloy Contact, Ceramic , Glass and Rubber Insulator



Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, $0.3G^2/Hz$, acceleration 20G, 175°C.4h on direction X, Y, Z.
- Shock: $490m^2/s$, 11ms
- Endurance: 500 cycles

Electrical Performance

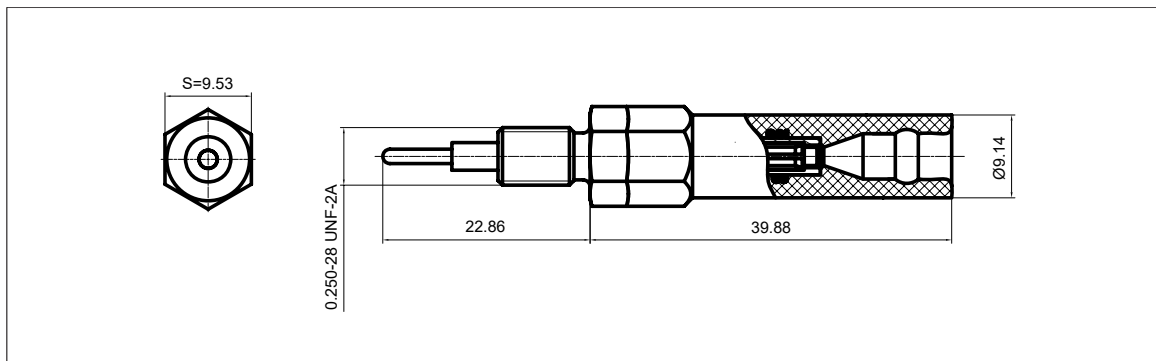
- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current $\leq 5mA$
- Normal Temperature Insulate Resistance: $\geq 5000M\Omega$ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: $\geq 500M\Omega$ (500VDC, 200°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +200°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 200°C, 600h
- Temperature Shock: -55°C to +200°C , 15 cycles, the temperature switching time is $\leq 15min$
- Salt Spray: 48h
- Air Leak: helium leak test $\leq 1 \times 10^{-3} Pa.cm^3/s$
- High Temperature High Pressure: 140MPa, 200°C , 10h

Outline Dimensions

Dimensions: One end is #14 pin, the other end is # 16 socket.



Product Introduction

- Part No. D011-01P-770
- Glass Sintering Adapter with Single Contact
- High Temperature Alloy Shell
- Alloy Contact, Ceramic and Glass Insulator

Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, 0.3G²/Hz, acceleration 20G, 200°C.4h on direction X, Y, Z.
- Shock: 490m²/s, 11ms
- Endurance: 500 cycles

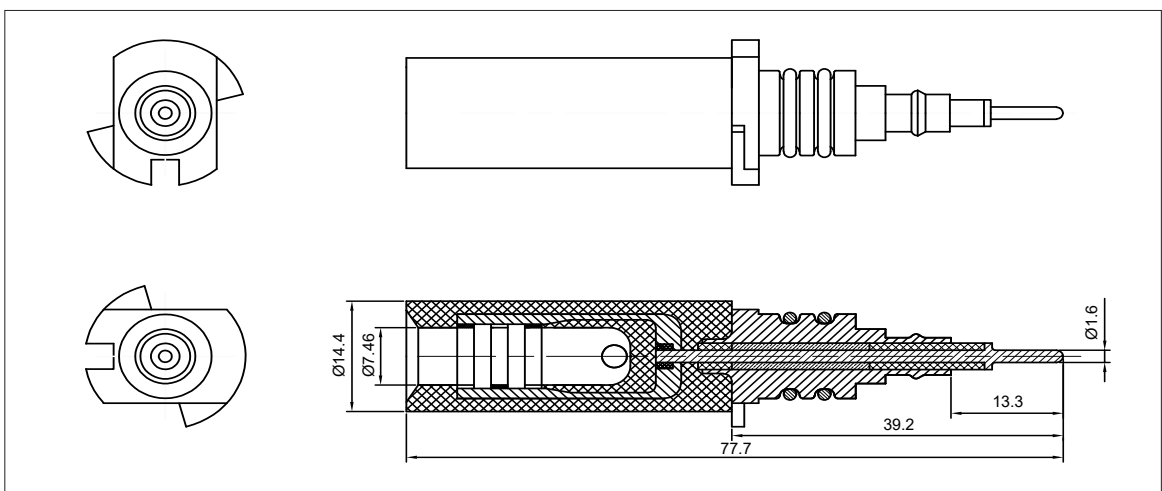
Electrical Performance

- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current ≤5mA
- Normal Temperature Insulate Resistance: ≥5000MΩ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: ≥500MΩ (500VDC, 200°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +200°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 200°C, 600h
- Temperature Shock: -55°C to +200°C , 15 cycles, the temperature switching time is ≤ 15min
- Salt Spray: 48h
- Air Leak: helium leak test ≤ 1×10⁻³Pa.cm³/s
- High Temperature High Pressure: 140MPa, 200°C , 10h

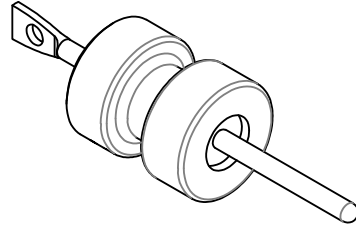
Outline Dimensions





Product Introduction

- Part No. D011-01P-229
- Glass Sintering Adapter with Single Contact
- High Temperature Alloy Shell
- Alloy Contact, Ceramic and Glass Insulator



Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, $0.3G^2/Hz$, acceleration 20G, 200°C.4h on direction X, Y, Z.
- Shock: $490m^2/s$, 11ms
- Endurance: 500 cycles

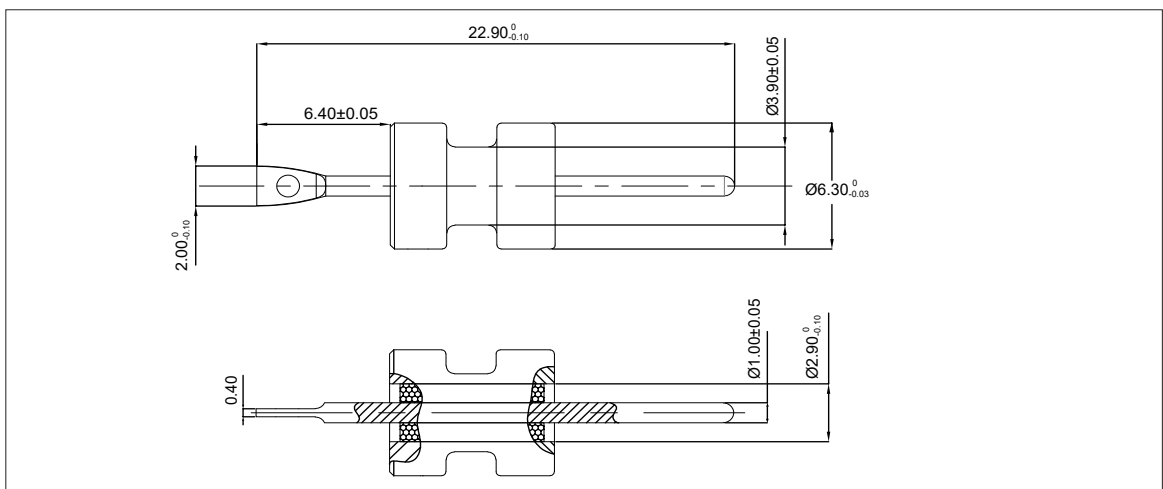
Electrical Performance

- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current $\leq 5mA$
- Normal Temperature Insulate Resistance: $\geq 5000M\Omega$ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: $\geq 500M\Omega$ (500VDC, 200°C)
- Rated Current: 1A continuous current

Environmental Performance

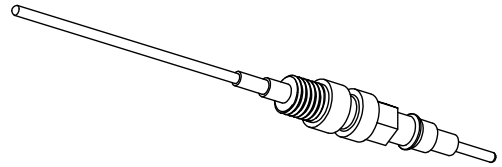
- Temperature Range: -55°C to +200°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 200°C, 600h
- Temperature Shock: -55°C to +200°C, 15 cycles, the temperature switching time is $\leq 15min$
- Salt Spray: 48h
- Air Leak: helium leak test $\leq 1 \times 10^{-3} Pa \cdot cm^3/s$
- High Temperature High Pressure: 140MPa, 200°C, 10h

Outline Dimensions



Product Introduction

- Part No. D011-01P-968
- Injection Sealed Single Contact Adapter
- Beryllium Bronze Shell and Contact
- PEEK Injection Sealed Insulator



Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, 0.3G²/Hz, acceleration 20G, 175°C.4h on direction X, Y, Z.
- Shock: 490m²/s, 11ms
- Endurance: 500 cycles

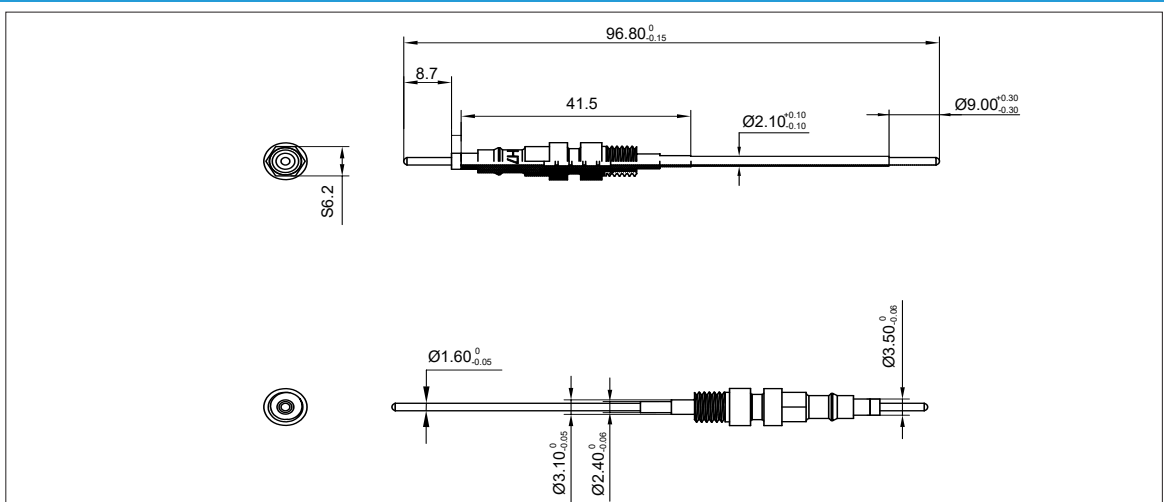
Electrical Performance

- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current ≤5mA
- Normal Temperature Insulate Resistance: ≥5000MΩ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: ≥500MΩ (500VDC, 175°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +175°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 175°C, 600h
- Temperature Shock: -55°C to +175°C, 15 cycles, the temperature switching time is ≤ 15min
- Salt Spray: 48h
- Air Leak: helium leak test ≤ 1×10⁻³Pa.cm³/s
- High Temperature High Pressure: 140MPa, 175°C, 10h

Outline Dimensions





Product Introduction

- Part No. D011-01P-777
- Glass Sintering Adapter with Single Contact
- High Temperature Alloy Shell
- Alloy Contact, Ceramic and Glass Insulator

Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, 0.3G²/Hz, acceleration 20G, 200°C.4h on direction X, Y, Z.
- Shock: 490m²/s, 11ms
- Endurance: 500 cycles

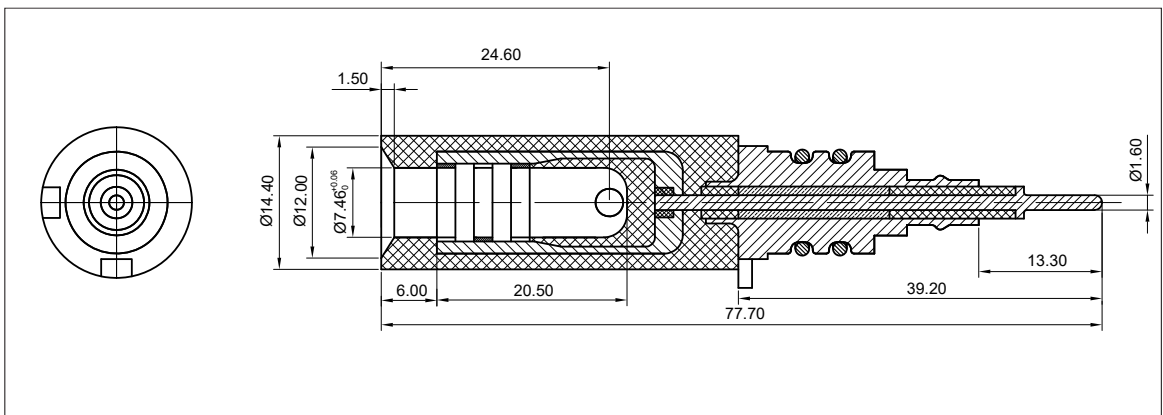
Electrical Performance

- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current ≤5mA
- Normal Temperature Insulate Resistance: ≥5000MΩ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: ≥500MΩ (500VDC, 200°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +200°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 200°C, 600h
- Temperature Shock: -55°C to +200°C , 15 cycles, the temperature switching time is ≤ 15min
- Salt Spray: 48h
- Air Leak: helium leak test ≤ 1×10⁻³Pa.cm³/s
- High Temperature High Pressure: 140MPa, 200°C , 10h

Outline Dimensions



Product Introduction

- Part No. D011-22P-596
- Glass Sintering FeedThru 22P Connector
- High Temperature Alloy Shell
- Alloy Contact, Ceramic and Glass Insulator

Technical Characteristics

Mechanical Performance

- Random Vibration: 10Hz-2000Hz, 0.3G²/Hz, acceleration 20G, 175°C.4h on direction X, Y, Z.
- Shock: 490m²/s, 11ms
- Endurance: 500 cycles

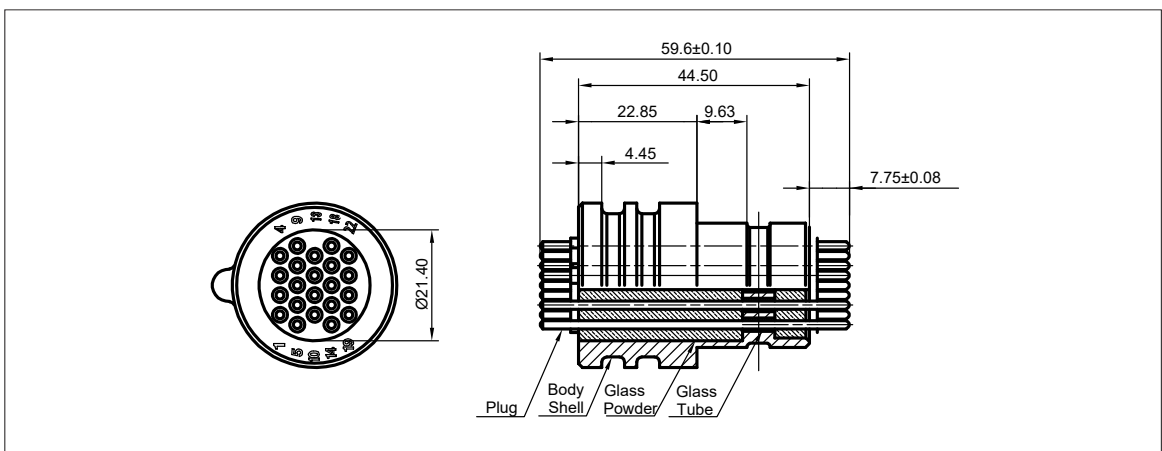
Electrical Performance

- Dielectric Withstanding Voltage: 1000VDC, 60s, leak current ≤5mA
- Normal Temperature Insulate Resistance: ≥5000MΩ (500VDC, normal-tem.)
- High Temperature Insulate Resistance: ≥500MΩ (500VDC, 175°C)
- Rated Current: 1A continuous current

Environmental Performance

- Temperature Range: -55°C to +175°C
- Operating Pressure: 0 MPa to 140 MPa
- High Temperature Life: 175°C, 600h
- Temperature Shock: -55°C to +175°C, 15 cycles, the temperature switching time is ≤ 15min
- Salt Spray: 48h
- Air Leak: helium leak test ≤ 1×10⁻³Pa.cm³/s
- High Temperature High Pressure: 140MPa, 175°C, 10h

Outline Dimensions





Materials Expertise Second to None

- In-house materials research and development capabilities for elastomers, plastics, and metal
- Extensive experience with a wide range of materials and products to provide optimal solutions
- Fully equipped labs enable complete pre-production material and process validation

Rigorous Analysis and Testing

- Finite Element Analysis (FEA) to support qualified HPHT solutions
- In-house testing capabilities for extreme pressures and temperatures and chemical compatibility and rapid gas decompression testing to meet industry standards

Custom-Engineered Solutions

- Experienced design and applications engineering staff works directly with customers from concept to delivery
- Comprehensive seal system designs that deliver high-performance and ease of installation
- Sealing system designs combine various seal geometries with specially developed HPHT materials
- Robust sealing systems for pressures exceeding 30,000 psi and temperatures in excess of 300°C
- Only seal solution provider able to offer elastomeric, thermoplastic, metal to metal and high integrity connector
- CMM dimensional verification with Real time data collection plus remote monitoring & Logs of temperature and pressure profiles during the testing

