SIEMENS energy

Siemens Energy
Subsea Connectors and Sensors

Energizing Subsea

Reliable. Proven. Valued.



siemens-energy.com/subsea



DigiTRON™



ElecTRON™



SpecTRON™



WEPS Sensors™

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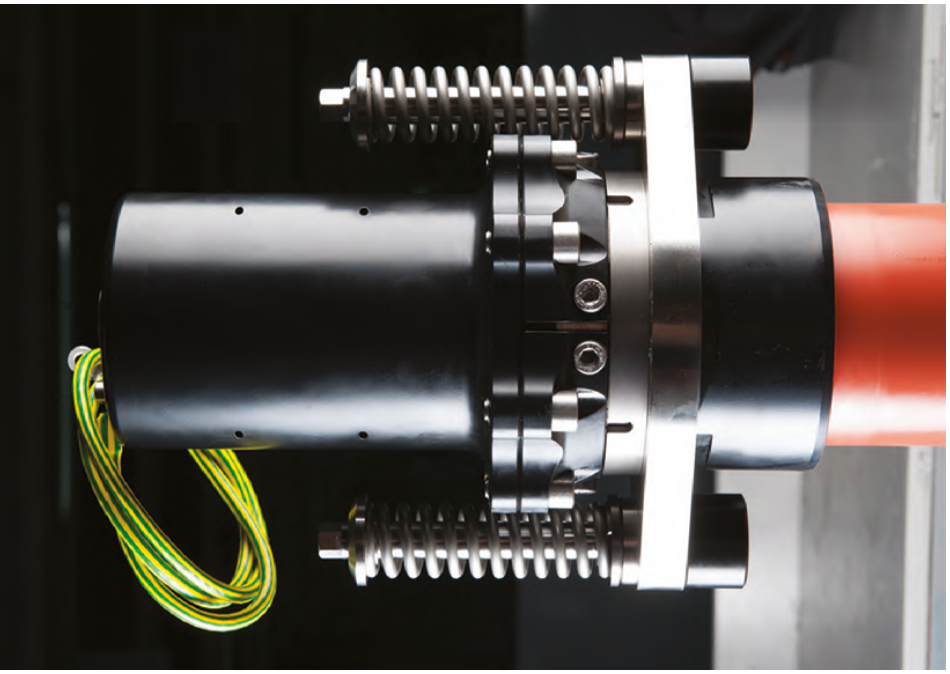
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High-quality subsea pressure, temperature and dP sensors

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Advanced engineering for subsea systems

Decarbonisation, digitalisation, and electrification are three major trends that are influencing the infrastructure, products and processes across the oil and gas market. Their presence has certainly been recognised in Europe in recent times, but their reach is now being felt on a global scale as they gain momentum and motivate change throughout our industry.

These trends combined have resulted in a significant drive to create all-electric installations by establishing subsea tiebacks, saving on the construction of new platforms or FPSOs. The result is lower capital expenditure, reduced operating costs, and a greater availability of data to monitor the status of the system.



Opportunity through agility

As fields become deeper and step out distances become longer, we see the challenges our customers face in achieving dynamic and productive systems that are also cost-effective and profitable.

Siemens Energy's subsea connectors and sensors introduce the agility our customers need to enable the digitalisation of their technology and create a smarter way to produce oil. The introduction of fiber-optic technology has been revolutionary in increasing efficiency, improving recovery, and boosting revenue for operators.

Digitalisation allows customers to use our products to remotely monitor their subsea production system, with the harvested data generating the ability to operate more effectively over longer periods of time. The result is significant cost saving and minimal environmental impact. There is higher availability of systems, higher up-time, and less maintenance cost.

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Customer first

For us, it is all about helping our customers make smarter decisions about how to extract oil and gas by incorporating reliable products and smart technology into their production systems. This is what we've been doing for more than 40 years. We have an engineering competence that's proven, and that's why we continue to be a trusted supplier to oil and gas projects around the world.

Siemens Energy commitment to putting customers first has resulted in the creation and launch of our online product configurator tool which can be used to generate quotations quickly and efficiently for standard product configurations.

Our configurator enables customers to obtain the latest pricing and lead time information instantly, whilst clearly showing how costs and lead times can be optimised through the removal of non-standard options. The tool currently gives the opportunity to generate quotations for our DigiTRON+ and WEPS-300 product ranges.

For more information on how to access this innovative new tool please contact connectorsales.gb@siemens-energy.com



Heritage. Experience. Customer.

Unique position



At Siemens Energy Subsea, we are uniquely placed to offer a reliable and proven portfolio of subsea electrical and optical connector systems, and pressure and temperature sensors that allow the connection of an entire, end-to-end, subsea production system. Our customers know they can come to us for design through to delivery with one order, one contact, and the weight of more than 40 years' proven subsea engineering technology heritage behind it.

High-performance and durability



Our market-leading, high-integrity subsea technology has been pioneering from the outset. Our products are constantly being developed by a large team of engineering experts to bring the next generation of high-quality connectors and sensors to market.Our products have been designed to meet the changing needs of our customers and it is these technically advanced, customer-driven designs combined with service excellence that create our long term customer relationships and partnerships.

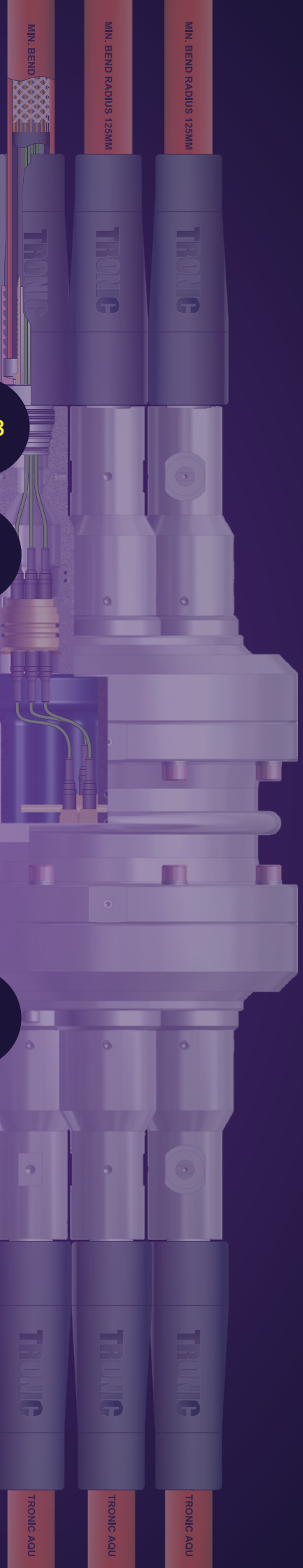
Value-driven customer service



As a trusted partner for subsea technology, our customer service goes far beyond the development of world-class products. We know that providing products is just the beginning of developing successful relationships with our customers; it is also about delivering value. We have a team of highly qualified application engineers who apply their extensive technical capabilities to helping customers select the right products for their project. Post project we have an experienced team of installation engineers located across the globe who offer installation, refurbishment, on site rapid response support and continued first class service to our customer base.

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Our team of engineering experts aim for excellence with every development and design they undertake, and this shows clearly with the number of 'world's firsts' we have achieved. While these successes are recognised and celebrated, they also provide the drive for us to maintain our market-leading position.



World's first 11kV subsea connector deployed **1988**

World's first field-wide ESP development for AMOCO **1995**

Awarded the E&P Meritorious award for engineering innovation for high power subsea wet mate connector **2005**

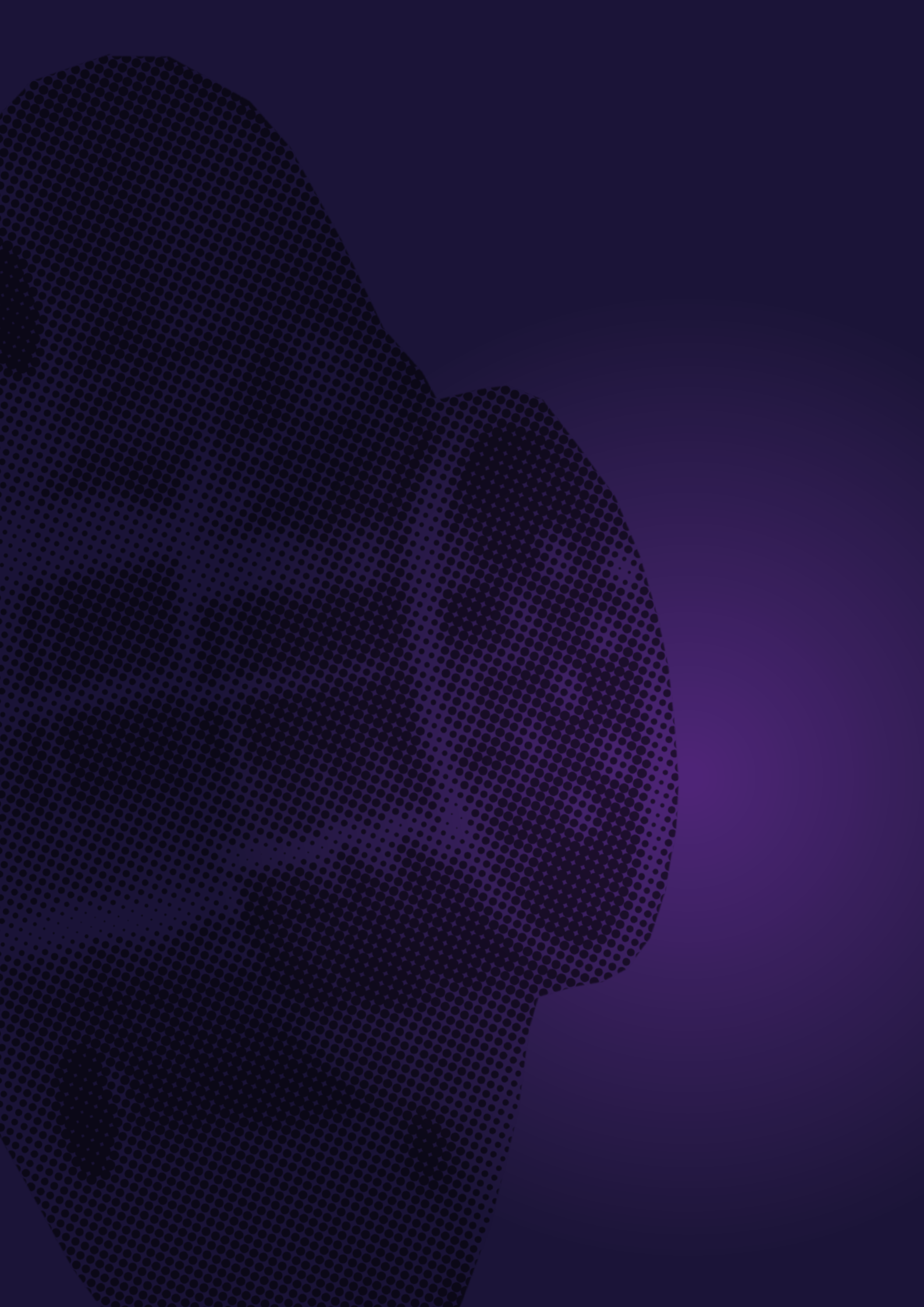
World's first commercial subsea separation system **2009**

Awarded world's first subsea gas compression project **2011**

SpecTRON45, the word's first 45 kV wet mate connector system **2017**

A proven present: influences future technology

Our engineering heritage and continued investment in people and facilities proves our commitment to serving the oil and gas market and supporting its future growth. But there is another industry that has seen rapid and continued development that we have the technology to support: renewables. The expertise of our engineers and their capability to design new solutions means we are well placed to support this thriving industry long into the future.



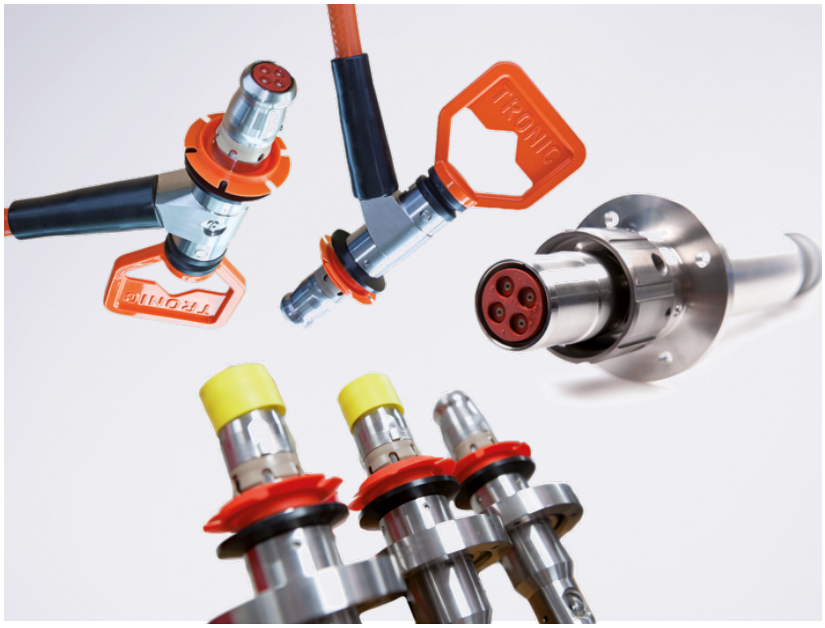
DigiTRON

Controls and Instrumentation Connectors

220,000 DigiTRON connectors installed worldwide

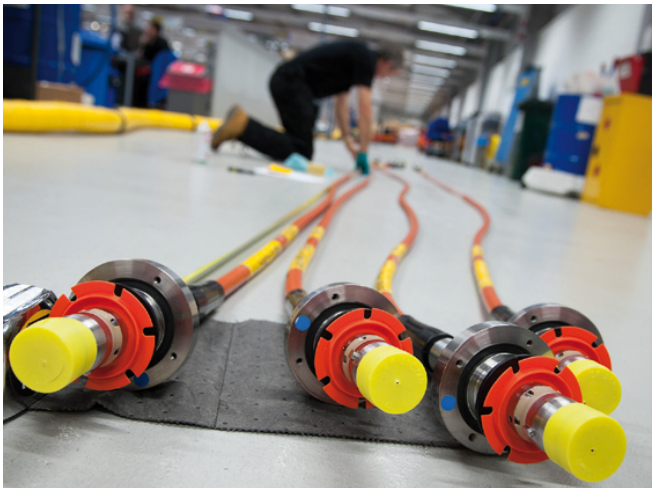
Our vast range of DigiTRON products have been held in high esteem across the oil and gas industry for more than two decades. This technologically advanced range of subsea products are known by operators around the world for their reliability, integrity and trusted performance.

The full range of DigiTRON products includes: DigiTRON+ low voltage, DigiTRONe ethernet, DigiTRON3 3kV voltage, DigiTRONf fiber optic, and AquaTRON oil-filled hose harnesses and distribution systems, and makes Siemens Energy Subsea uniquely placed to be able to offer bundled packages that cover umbilical termination, control system distribution, and XT equipment.



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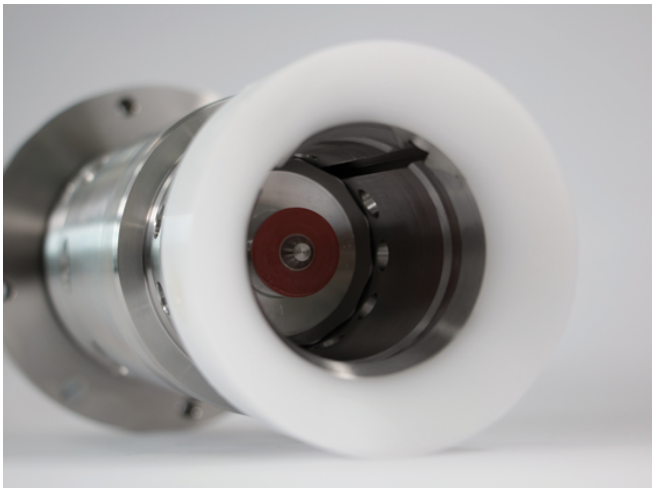
DigiTRON+: Trusted, proven, reputable.



Since its introduction in 2000, our DigiTRON+ connector has been supplied to all major operators and has been deployed in all regions around the world to more than 400 projects. There are currently hundreds of thousands of these technically advanced, robust subsea connectors in operation, demonstrating the product's impressive track record for reliability and resilience.

DigiTRON+ is a modular and flexible design that's easily configurable. Customers benefit from the fast lead times we can achieve with this connector due to the use of fewer components in the design. Its 30-year design life, long-term electrical integrity, and all-metal construction brings a robustness to any subsea production system, and that's why DigiTRON+ is one of the most trusted subsea brands.

DigiTRONf: Fiber-optic, high repeatability, best performance.



DigiTRONf is Siemens Energy Subsea's fiber-optic version of our DigiTRON+ connector, delivering the same operational reliability that DigiTRON+ is valued for. We developed DigiTRONf as a direct response to an industry need for fiber-optic connectors that offer a higher reliability, and that's what we've delivered: a 12-way, wet-mate fiber connector that is strong, cost effective and high quality with a repeatable performance.

The API-17F qualified DigiTRONf currently has the best optical performance on the market and has achieved 1,000 mate counts with no maintenance. The advanced technology employed in the development of this connector is subsea proven and been in operation since 2018.

DigiTRONf shares many of the features of the reliable DigiTRON+ making it very robust for subsea duty. It now joins a range of connectors that's trusted across the global oil and gas industry.

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DigiTRON3: High voltage integrity, compact size, durability.



DigiTRON3 is the world's first compact 3kV high voltage connector. Its small size makes DigiTRON3 a low-cost solution compared to traditional high voltage connectors, also enabling the size of the umbilical termination head and subsea transformer modules to be reduced. DigiTRON3 is ideal for long step-out control systems or where power is needed subsea such as for pumps or pipeline heating applications.

Designed, manufactured, and qualified at our world-class production facility, every DigiTRON3 product undergoes a stringent high voltage test regime to verify its quality before leaving the factory. This, along with its superior high voltage design, means our customers can be confident of the long-term integrity of their subsea HV systems.

DigiTRON3 connectors have been successfully deployed subsea around the world since 2018 with no failures, which proves their reliability and resilience. This connector has been designed to meet the specific needs of operators and the result is a high integrity and durable product that supports current and future field challenges.

DigiTRON PURE: Standardised, simplified, efficient.



DigiTRON PURE is our standardised program that allows customers to take control of the order and purchase process on a selection of standard DigiTRON products. By using DigiTRON PURE, our customers can access the best price, lead time and on-time delivery through the re-use of their specific standard design.

This off-the-shelf ordering process reduces system engineering requirements and delivers faster order acknowledgement to both increase productivity and further enhance customer experience. Each quality DigiTRON product is supplied with our standard Factory Acceptance Test and documentation.

To find out how to build reliability and cost effectiveness into your subsea system using DigiTRON products contact us at subsea@siemens-energy.com

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Qualifications and Specifications

DigiTRON+

- The connector design is based on the proven Controlled Environment (CE) principle used in all Siemens Subsea connectors.
- Complies with API-17F
- TRL 7 rating

Number of lines	4, 7 and 12
Material	Super Duplex or 316L st. steel
Depth Rating (m)	4,000
Design life	30 years
Rated voltage pin to earth / pin-pin (AC)	1,000 V / 2,000 V
Rated voltage pin to earth / pin-pin (DC)	1,500 V / 1,500 V
Maximum working current (Amps)	20–40 (no of ways dependent)
No of mates	1,000
Operating Temperature (wet)	-5 °C to +60 °C
Storage Temperature	-40 °C to +70 °C

DigiTRONf

- The connector design is based on the proven Controlled Environment (CE) principle used in all Siemens Subsea connectors.
- Complies with API-17F

Number of lines	12
Material	Super Duplex
Depth Rating (m)	4,000
Design life	30 years
Insertion loss	Typically < 0.2 dB Max ≤ 0.4 dB
Back reflection	Typically < -70 dB Max ≤ -45 dB
No of mates	1000
Operating Temperature (wet)	-5 °C to + 50 °C
Storage Temperature	-40 °C to + 70 °C

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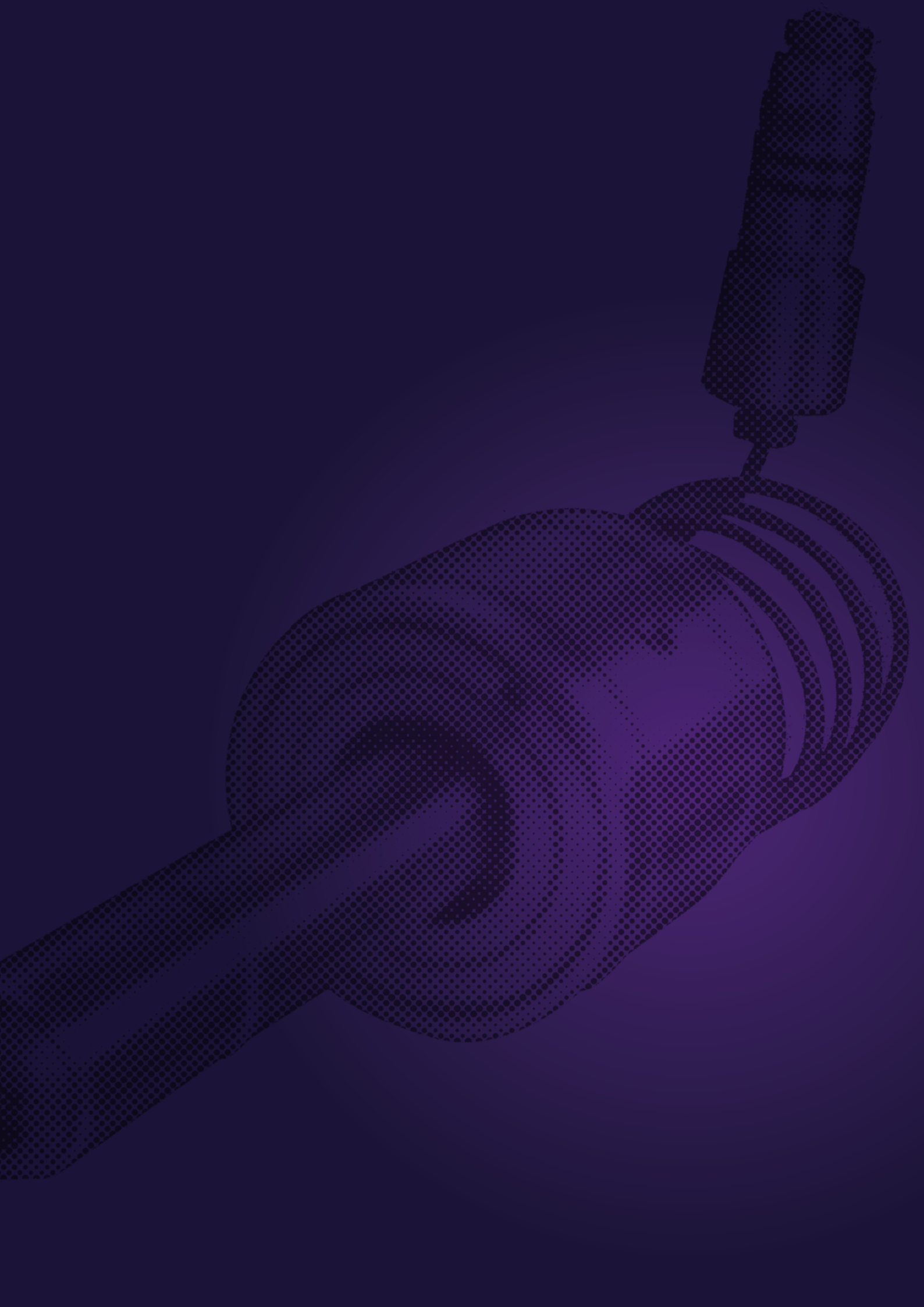
DigiTRON3

- The connector design is based on the proven Controlled Environment (CE) principle used in all Siemens Subsea connectors.
- Complies with API-17F, with HV test voltages according to SEPS-1001

Number of lines	4
Material	Super Duplex (PReN > 40) or 316L st. steel
Depth Rating (m)	4,000
Design life	30 years
Rated voltage pin to earth / pin-pin (AC)	1,800 V / 3,600 V
Minimum breakdown voltage	10.8 kV (6 × Uo)
Partial Discharge (PD) test voltage	4.5 kV (2.5 × Uo)
No of mates	1,000
Operating Temperature (wet)	-5 °C to + 60 °C
Storage Temperature	-40 °C to + 70 °C



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ElecTRON

Instrumentation Feed through Subsea Connector Systems

Installed in over 2,000 systems worldwide and decades of experience



Siemens Energy's subsea ElecTRON range for the instrumentation feedthrough market has been designed to accurately convey live signal from the downhole well environment to bring greater efficiency and improve performance. The ElecTRON product range services Vertical Xmas Trees with its ElecTRONv, and Horizontal Xmas Trees with ElecTRONh products.

The reliability of the ElecTRON system is reflected in its engineering; the manufacturing of the range is so robust there are connectors still in operation that were deployed more than 25 years ago in harsh environments. As the industry pushes limits and faces new challenges of managing higher pressure and temperature, new technologies such as all-electric application become increasingly prevalent for XT and future downhole controls. As requirements for fibre optic downhole monitoring systems increase, Siemens Energy plan to release their Next generation of products developed and qualified with these enhanced requirements in mind.

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ElecTRON Dry Mate Connectors: Simple design, reliable, optimum performance.



ElecTRON dry mate connectors allow for quick and easy termination of the downhole cable while keeping the seal integrity, following industry standards and requirements. Qualified to 15,000 PSI and temperatures up to 149 °C, these connectors are highly reliable and are renowned for strength and consistency. They have a simple design that incorporates tried and tested components which accounts for their excellent track record and high deployment rates. Tested to industry standards, they have a high level of integrity, making ElecTRON dry mate connectors safe and dependable in the field.

ElecTRON Wet Mate Connectors: Long-lasting, high-calibre, robust.

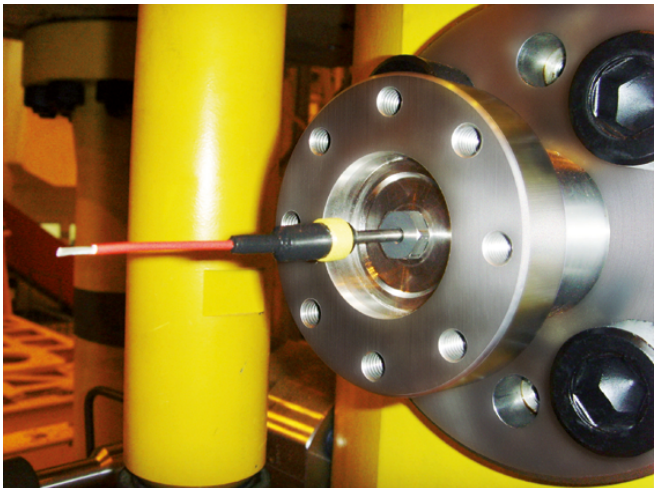


ElecTRON wet mate connectors are a specialised, field-proven product. They are based on patented Controlled Environment (CE) principle that ensures durability and allows for repeated subsea mating capability. Like the ElecTRON dry mate connectors they are qualified to high pressure and high temperature ranges. These connectors have the strength and flexibility to tolerate misalignment while being mated and de-mated in full subsea pressure without affecting their performance.

Once energised together, connector pairs benefit from protection of water ingress by two oil-filled diaphragms – primary and secondary – this dual seal philosophy offers an increased integrity of the connector by design. Known for their strong reliability and performance, and with a design life of 30 years, it is this that makes ElecTRON connectors of choice for operators.

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ElecTRON Well Head Outlet: Easy installation, hard-wearing, safe.



In its dual role of final barrier of the subsea system and the first interface with subsea environment, the high integrity of the ElecTRON Well Head Outlet and its ability to cope with high pressure and temperature is essential to the protection of the system. A primary metal seal, engineered to industry standards, provides a high-reliability safety system that is valued by operators of projects around the world. The design of the Well Head Outlet had the might of Siemens Energy Subsea's extensive engineering team behind it whose focus was delivering to market a product that's easy to install and hard-wearing, so operators benefit from reduced installation time and lifetime service.



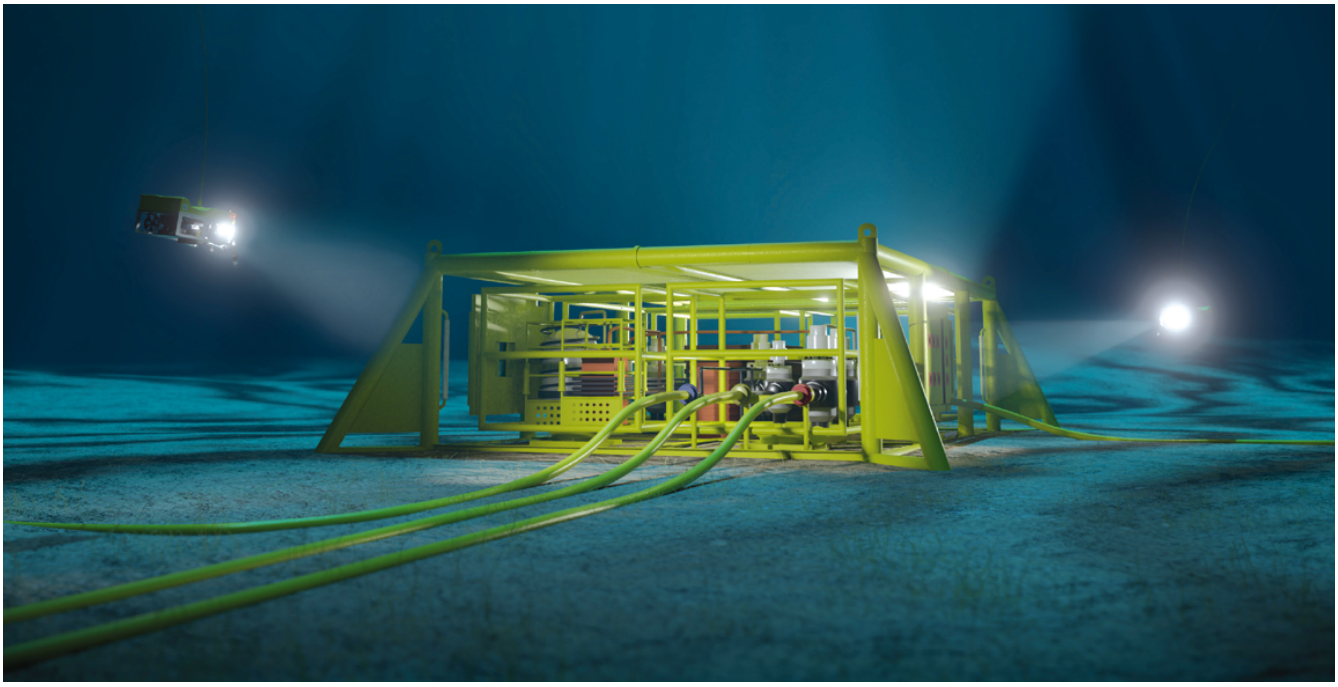
Contact us now to find out how to drive efficiency and performance of your subsea production system using ElecTRON products: subsea@siemens-energy.com

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Qualifications and Specifications

- The connector design is based on the proven Controlled Environment (CE) principle used in all Siemens Subsea connectors.

General Specification	Vertical Systems		Horizontal Systems					
	Standard	Improved Compliance	Single Pin			Multi Pin		
Maximum number of electrical conductors	1	1	1	1	1	2 (Splitter)	2	3
Maximum Working Pressure PSI (Bar)	15,000 (1034)	10,000 (689)	10,000 (689)	15,000 (1034)	7,500 (517)	10,000 (689)	10,000 (689)	10,000 (689)
Maximum Test Pressure PSI (Bar)	22,500 (1551)	15,000 (1034)	15,000 (1034)	22,500 (1551)	11,250 (776)	15,000 (1034)	15,000 (1034)	15,000 (1034)
Maximum Water Depth (metres)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Operating Temperature °C	-18 to 135	-18 to 135	-18 to 145	-18 to 135	-18 to 149	-18 to 145	-18 to 121	-18 to 121
Test Medium	Gas	Gas	Gas	Gas	Gas	Gas	Hydro	Hydro
Number of Matings (Wet Mate pair)	100	100	100	100	100	100	100	100
Number ol Matings (Dry Mate pair)	20	20	20	20	20	20	20	20
Minimum Storage Temperature °C	-18	-18	-18	-18	-18	-18	-18	-18

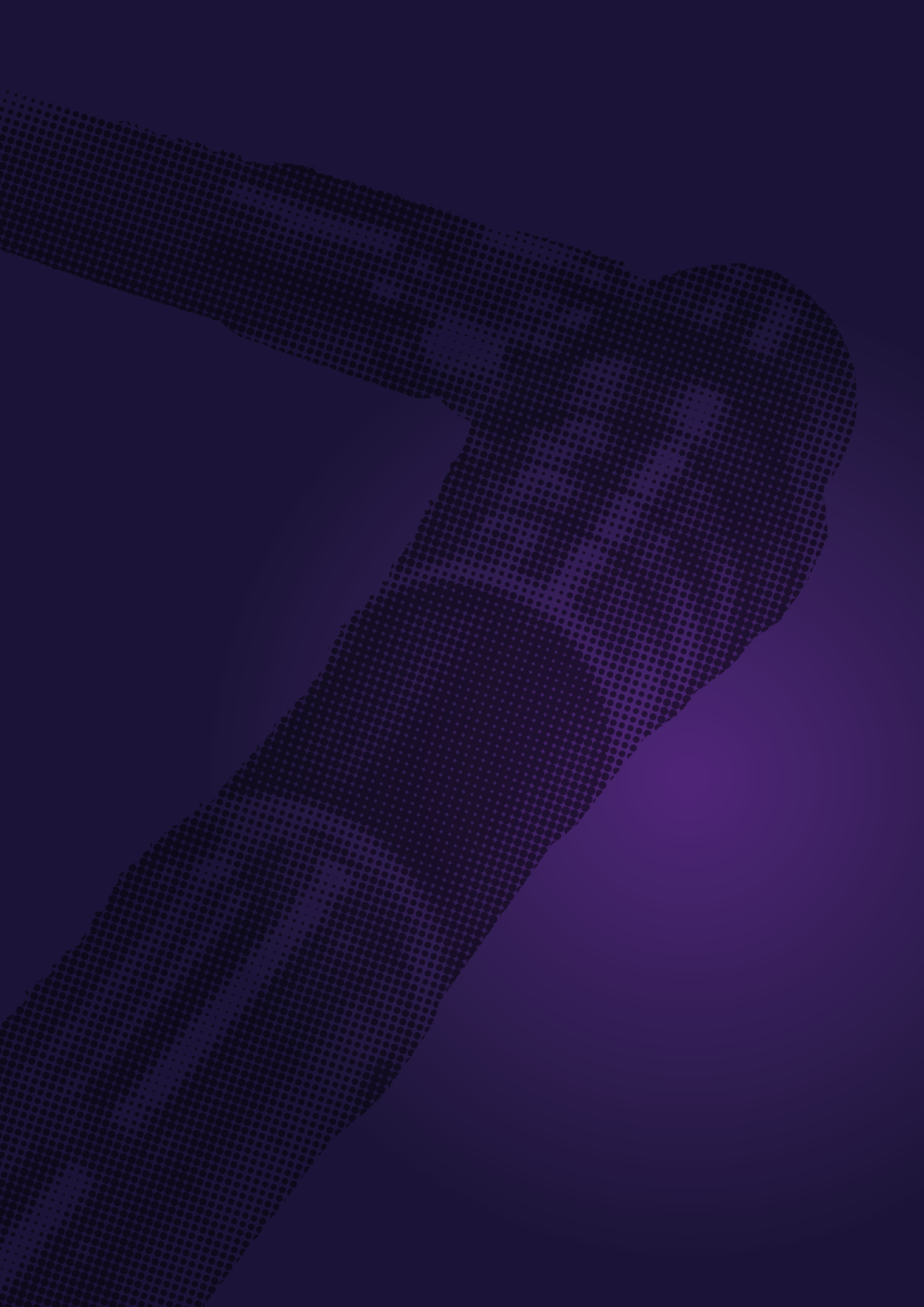


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Electrical Specification	Vertival Systems		Horizontal Systems					
	Standard	Improved Compliance	Single Pin			Multi Pin		
Maximum Working Voltage	1,000 V DC	1,000 V DC	1,000 V DC	1,000 V DC	1,000 V DC	1,000 V DC	1,000 V DC	1,000 V DC
Maximum Working Current	5 Amps	5 Amps	5 Amps	5 Amps	5 Amps	5 Amps	5 Amps	5 Amps
Insulation Resistance (System @ Ambient)	> 1 G	> 1 G	> 1 G	> 1 G	> 1 G	> 1 G	> 1 G	> 1 G
Insulation Resistance (Connector @ Ambient)	> 10 G	> 10 G	> 10 G	> 10 G	> 10 G	> 10 G	> 10 G	> 10 G
Insulation Resistance (Connector @ Max Temp)	> 100 M	> 100 M	> 100 M	> 100 M	> 100 M	> 100 M	> 100 M	> 100 M
Contact Resistance (per connector pair – excludes cables)	< 4 milli	< 4 milli	< 4 milli	< 4 milli	< 4 milli	< 4 milli	< 4 milli	< 4 milli
Line Resistance (permanently installed equipment – excluding leads)	< 100 milli	< 100 milli	< 100 milli	< 100 milli	< 100 milli	< 100 milli	< 100 milli	< 100 milli

Misalignment Capability	Vertical Systems		Horizontal Systems					
	Standard	Improved Compliance	Single Pin			Multi Pin		
Radial mm (inch)	up to ±2.5 (±0.1)	up to ±2.5 (±0.1)	±3 (±0.12)	±3 (±0.12)	±3 (±0.12)	±3 (±0.12)	±3 (±0.12)	±3 (±0.12)
Axial mm (inch)	up to ±5 (±0.2)	up to ±12.7 (±0.2)	±2.3 (±0.09)	±2.3 (±0.09)	±2.3 (±0.09)	±2.3 (±0.09)	±2.3 (±0.09)	±2.3 (±0.09)
Maximum Tubing Hanger Rotation	-	-	±1°	±1°	±1°	±1°	±1°	±1°
Angular Misalignment	1°	1°	-	-	-	-	-	-

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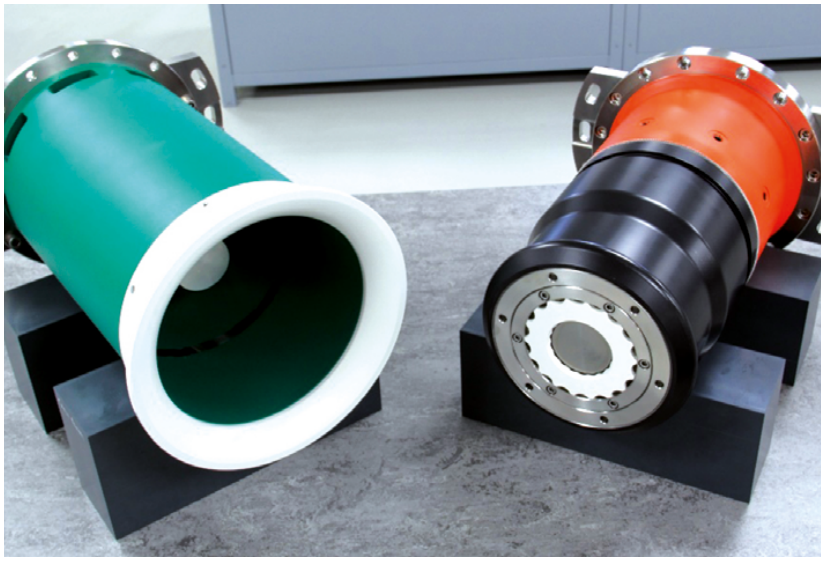
SpecTRON

Subsea Medium and High-power Electrical Connector Systems

1,200 systems installed worldwide

In 1994, Siemens Energy was selected by Petrobras as partner for the installation of the world's first subsea Electrical Submersible Pump (ESP) system using its SpecTRON range of products.

Since then, there has been significant increase in demand for high power subsea equipment requiring medium and high voltages, and that's why we've continued to develop our SpecTRON Connector range. We want to ensure there are quality products available for the oil and gas market that are not only standards compliant and field proven (TRL 7) but are also high-performance and durable and compliant with industry standards.



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SpecTRON 8: Cost-effective, compact, high integrity.



This modular connector solution is one of the most recent additions to our range of high-tech medium and high power connector systems. Introduced in 2010 and incorporating advanced modern technology, SpecTRON 8 was designed in response to the need for increased power ESP systems. During the last decade, this highly deployed connector has proven equally suitable for when configured for mudline pumps and renewables technology.

SpecTRON 8 has high integrity and reliability which makes it ideal for all-electric, high-voltage controls applications, providing dependable power distribution to subsea modules. It works with our Modular Umbilical Termination Unit (MUTU), a flexible and customisable solution for the splitting and marshalling of control circuits, which delivers configurability in response to project specific requirements.

SpecTRON 8 has a proven deployment history with hundreds in operation in subsea production systems around the world and is valued by customers for its industry-leading, compact design, and cost effectiveness. It is easily configured to suit different applications and with a high pressure rating and compliance with API standards, it's a durable product that retains efficiency throughout its lifespan.

The SpecTRON 8 dual penetrator solution has been specifically designed and developed for subsea ETH projects. The product consists of the following:

A Dual Penetrator – 3.8 / 6.6(7.6)kV, 120 A, 300 bar rated bidirectional Dual Penetrator assembly system utilising metallic sealing. The penetrator assembly is utilised to penetrate the annulus in PiP ETH systems.

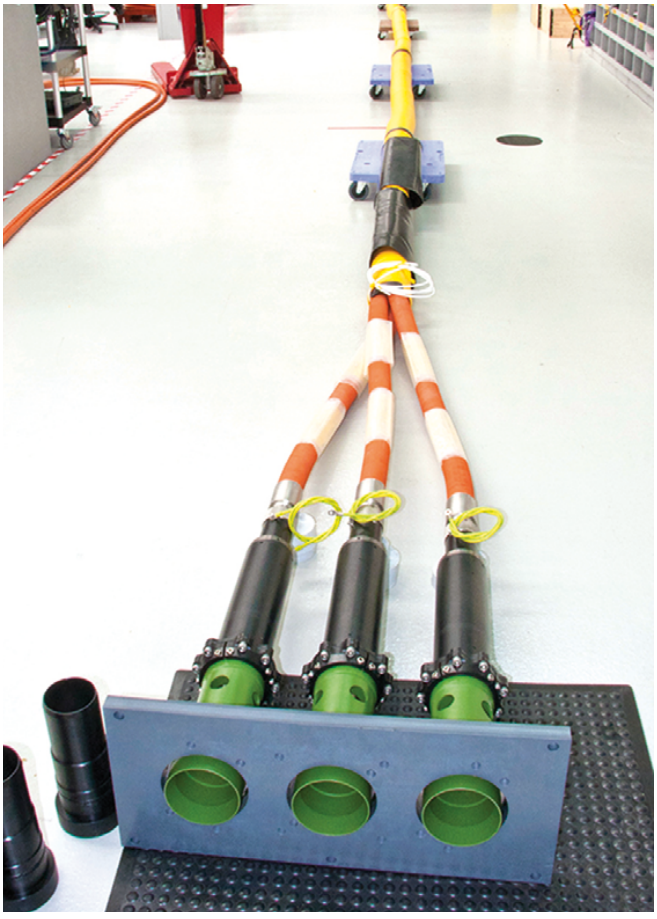
Cold Splice – 3.8 / 6.6 (7.6) kV, 120 A rated splice assembly utilised to terminate the inboard side of the Dual Penetrator assembly to the ETH cables.

Hot Splice – 3.8 / 6.6 (7.6) kV, 120 A rated splice system used to splice the ETH cables along the length of the PiP. Utilises triple layer elastomeric moulding for electric field control and allows for quick and reliable splicing operations.

SpecTRON 10+: Reliable, adaptable, demonstrated.

SpecTRON 10 is a market leader in subsea connectors. With hundreds of deployments across its notable history, it's a field-proven product that supports subsea pumps, 10 kV Direct-Current (DC) applications, and the tidal renewables. This connector is a hardworking component that with proven interfaces to major pump vendors and can quickly support new interfaces.

We are continuously developing SpecTRON 10 to meet new customer requirements. Following its introduction to market in 1995 and a redevelopment in 2010, it will now undergo a further upgrade to support the next generation of high-power and high voltage subsea pumps and processing systems. This adaptable and industrious connections system has a wide range of interfaces and the capability to support new customer-specific requirements quickly.



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SpecTRON 45: High voltage, new features, modern technology.

SpecTRON 45 is the latest connector to join the SpecTRON range and was designed specifically for subsea power distribution. This high-voltage connector has great reliability and uses innovative new features to give high integrity. The design includes a metal compensation system to provide long-term stability of the insulation system, our Common Module Interface (CMI) and Quick Connect technologies.

It brings with it the benefits of an easy installation process and high-performance connectivity. Qualified to the latest standards with state-of-the-art patented technology, SpecTRON 45 is easy to mate and operate and comes with a very low mating force reducing the complexity of mating tools. We've combined advanced technology and innovative new technologies to deliver a flexible, modular design ideal for installation in long-distance, high voltage step outs as well as high current systems.





If you want to build high performance and high integrity into your subsea production system, contact us at subsea@siemens-energy.com to find out more about our SpecTRON range of connectors.

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Qualifications and Specifications

- The connector design is based on the proven Controlled Environment (CE) principle used in all Siemens Subsea connectors.
- The SpecTRON product range is aligned to the requirements of IEC 61886-1, with factory acceptance (routine) testing in accordance with these requirements and all future qualification (type) testing activities carried out in accordance with IEC 61886-1.
  Full documentation can be supplied upon request.

		SpecTRON 8
Electrical Spec	**Number of Contacts**	3 (and screen contact)
	Voltage Uo/U(Um)	5/8.7 (10) kV
	Voltage Frequency (Contact Siemens Subsea for D.C applications)	1–200 Hz
	Maximum Current (Dependent on ambient temperature & supply frequency)	220–355 A
Mechanical Spec	**Water Depth Rating**	3,000 metres (9,843 feet)
	Differential Pressure Rating (Inboard pressure high)	345 bar
Environmental Spec	**Working Temperature Range**	-5˚ to 20˚C 110˚C (Penetrator)
	Storage Temperature Range	-25˚C to 60˚C
		Qualified to Technology Readiness Level (TRL 7).

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		SpecTRON 10+
Electrical Spec	Number of Contacts	1 (and screen contact)
	Voltage Uo / U(Um)	6 / 10 (12) kV
	Voltage Frequency (Contact Siemens Subsea for D.C applications)	1–200 Hz
	Maximum Current (Dependent on ambient temperature & supply frequency)	630 A
Mechanical Spec	Water Depth Rating	3,000 metres (9,843 feet)
	Differential Pressure Rating (Inboard pressure high)	345 bar
Environmental Spec	Working Temperature Range	-5˚ to 20˚C 60˚C (Penetrator)
	Storage Temperature Range	-25˚ to 60˚C
		Qualified to Technology Readiness Level (TRL 7).

		SpecTRON 45
Electrical Spec	Number of Contacts	1 (and screen contact)
	Voltage Uo / U(Um)	26 / 45 (52) kV
	Voltage Frequency (Contact Siemens Subsea for D.C applications)	1–200 Hz
	Maximum Current (Dependent on ambient temperature & supply frequency)	1250 A
Mechanical Spec	Water Depth Rating	3,000 metres (9,843 feet)
	Differential Pressure Rating (Inboard pressure high)	10 bar
Environmental Spec	Working Temperature Range	-5˚ to 20˚C 60˚C (Penetrator)
	Storage Temperature Range	-25˚ to 60˚C
		Qualified to Technology Readiness Level (TRL 5).

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First WEPS sensor deployed – Togi Project
1988
2000th Subsea Pressure and Temperature sensor deployed
2000
World's most accurate Subsea Differential Pressure sensor deployed, the SDP-5
2002
Revolution in Subsea Differential pressure measurement, the SDP-6 with remote seal technology is released
2005
Market leading WEPS-100 range of Subsea Pressure and Temperature sensors enters the market
2010
10000th WEPS and 2000th SDP subsea sensors deployed
2013
Next Generation and future proof WEPS-300 sensor is released to market
2021

WEPS Sensors

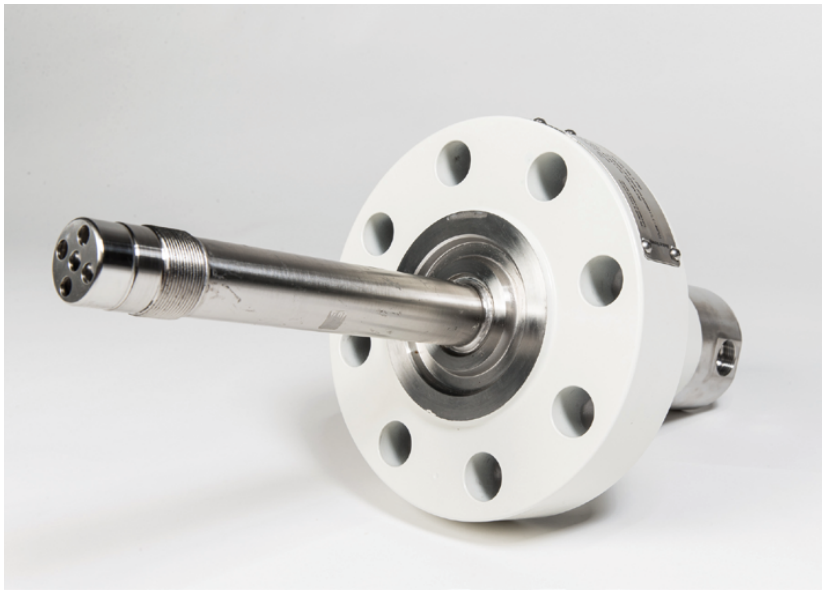
High-quality subsea pressure, temperature and dP sensors

Over 25,000 sensors installed globally

Over 17,500 pressure and temperature sensors deployed

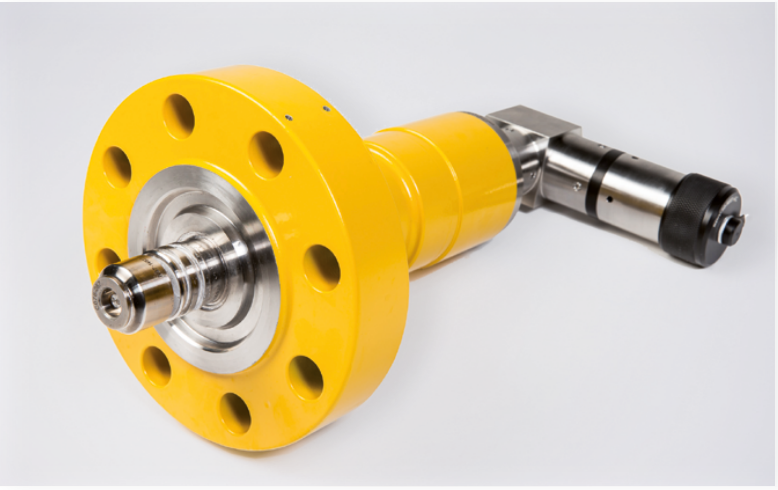
Siemens Energy has a long and distinguished track record for the successful delivery of subsea sensors. With thousands of sensors currently installed in projects globally, their innovative design and proven reliability are the attributes that allow us to retain our position as market leader.

Our products are widely recognised for their high quality, low subsea failure rate, and excellent performance for remaining accurate over time. Since our first subsea sensor was engineered in 1988, they have proven extremely reliable with low drift, which is why more than 30 years after installation they are still in specification.



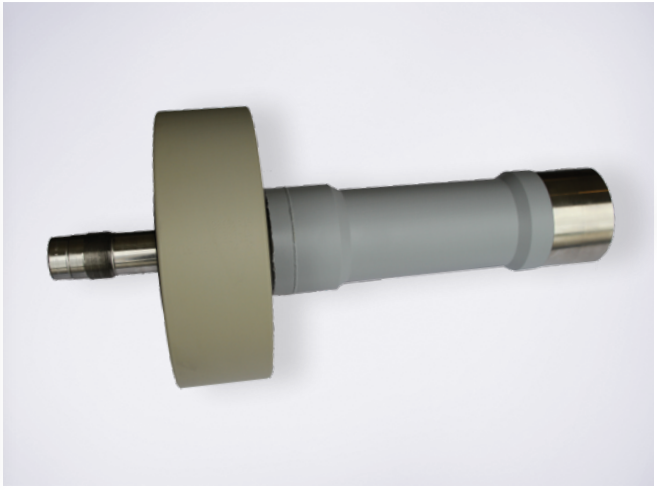
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WEPS-100: Modular, configurable, competitive.



The WEPS-100 subsea pressure and temperature sensor is our current market leading product, and for good reason. It's configurability gives it a flexibility that benefits our customers and with more than 5,000 units produced since 2010, it's certainly proven in use. The WEPS-100 is fully compatible with the Siemens Energy DigiTRON connector range, with direct bulkhead connection possible (pictured above). This sensor has been designed to be modular with many output protocol variant and flange variant options available; we also offer an extended housing version for insulated applications. It delivers consistently high reliability and stability and is unsurpassed in accurately communicating critical information from subsea wells.

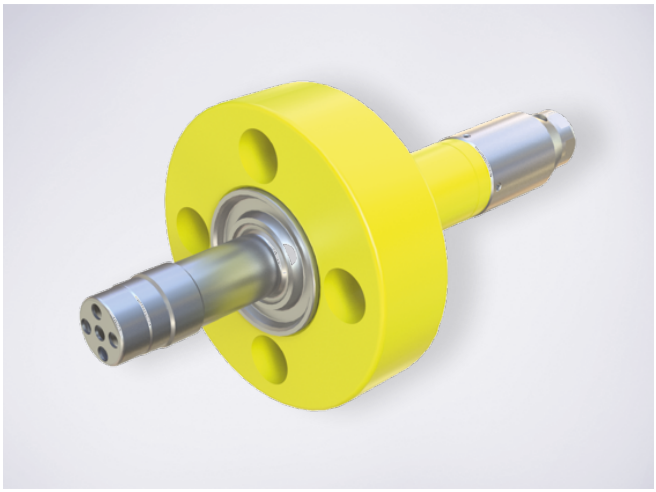
WEPS-900: Accurate, high-performance, field-proven features.



The WEPS-900 sensor has been designed to meet the tough demands of applications classed as high temperature (205 °C / 400°F) and high pressure (20,000 PSI instead of 15,000 PSI). The engineering design of the WEPS-900 incorporates qualified and field-proven features that are included in the WEPS-100 sensor along with a unique non-welded containment system. It is tested and demonstrated to deliver a high-accuracy performance whilst maintaining stability.

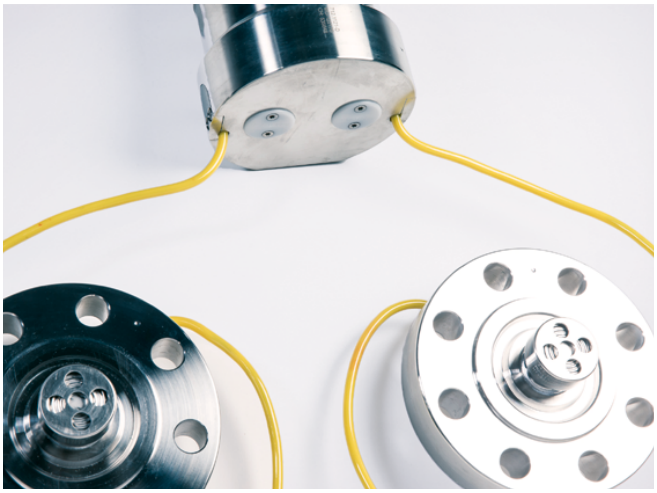
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WEPS-300:
Future proofed, cost effective, stable.



The WEPS-300 subsea pressure and temperature sensor is our next generation, competitive, future proofed sensor. It is production optimized, focusing on standardization, with reduced part numbers and less variants. As with all sensors in the WEPS range it has been engineered and manufactured to the highest quality and has advanced features allowing compliance with technical specifications. It has the qualities of accuracy, stability, reliability, and performance that Siemens Energy Subsea sensors are valued for. Like the WEPS-100, with the WEPS-300 we offer an extended housing option for insulated applications.

SDP-6:
Precise, durable, market leading.



The SDP-6 differential pressure sensor is a highly reliable product for its highly precise measurement of differential pressure. This sensor utilises a remote seal system to prevent process pollution and hydrate formation that directly affect pressure measurement. This product is known across the oil and gas industry for its quality and superior manufacturing, clearly demonstrated by its long history and catalogue of successful projects. The SDP-6 is valued for its high accuracy, stability, and excellent high line pressure capability, which is what makes it a market leading product.

To find out how to build reliability and cost effectiveness into your subsea system using Sensor products contact us at subsea@siemens-energy.com

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Qualifications and Specifications

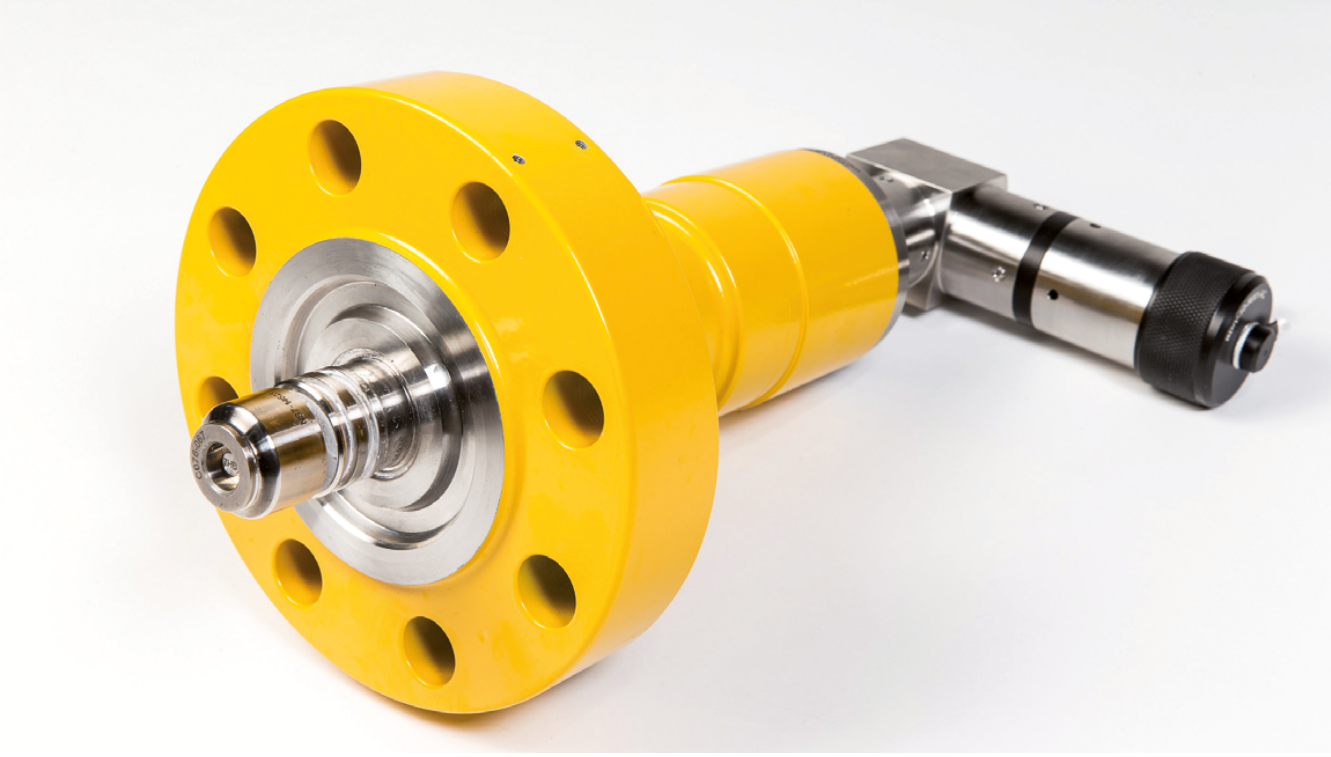
WEPS

Specification

Total Error Band	±0.025% FS (digital) ±0.08% FS (analogue)
Working Pressure Ranges	0–10,000 psi, 0–15,000 psi and 0–20,000psi
Temperature Ranges	-40 °C to +180 °C (+205 °C for WEPS-900 HT).

Features

Proven double barrier seal technology
Proven track record including SIL rated HIPPS systems
Available for use down to -70 °C for start-up choke applications
Full EB-Weld construction
SIL rated for Analogue and digital
Extended housings for insulation applications



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SDP-6

Specification

Total Error Band	± 0.065 % Span
Differential Pressure Ranges	0–320 mbar, 0–1,300 mbar, 0–5,000 mbar and 0–30,000 mbar
Operating Temperature Range	from -40 °C to 120 °C
Maximum line pressure	1,035 bar

Features

Remote seal or direct mounted versions
Extreme stability at extreme line pressures up to 1035bar
High accuracy and sensitivity
3 Barrier to process system
Full EB-Weld Construction
Suitable for use with Single and multiphase flow metering applications
Analog and Digital variants



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Let's
energize
subsea

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