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## PRESS RELEASE

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### **Technological Advancement for Medical Applications - ODU MEDI-SNAP® High Voltage**

Technological innovations play a decisive role in the constant advancement of medical progress. They make it possible to perform medical procedures more efficiently, more precisely, more gently and thus more patient-friendly. ODU presents new high-voltage connectors as part of the MEDI-SNAP® portfolio to support the challenges of leading-edge medical applications in the field of power and signal transmission.

#### **Transmission of high pulse and continuous voltages together with simultaneous provision of high pulse currents and sensitive signals in a compact design**

ODU MEDI-SNAP® High Voltage connectors are characterized by their functionality and versatility. Under the apt motto "the perfect connection", ODU has created a complete package that builds on the proven MEDI-SNAP® connector and at the same time has the ability to transmit high voltages. Both pure high-voltage connectors and combinations of higher voltages (up to 5kV peak voltage) together with signals in a hybrid configuration are possible. These are combined in a robust and reliable design. The connectors are autoclavable. If the cable and the entire cable assembly are designed accordingly, then this enables continued re-use in sterile medical environments and thus ensures the highest hygiene standards. Of course, other sterilisation methods commonly used in the medical field are also possible.

#### **Versatile application possibilities**

A decisive factor that distinguishes the ODU MEDI-SNAP® High Voltage connectors from others is their wide range of applications in the medical field. The connectors ensure



reliable power transmission and help to make the treatment process safer and more effective. They are used in a wide range of applications, including:

- **Ablation catheters:** ODU MEDI-SNAP® High Voltage connectors enable the precise transmission of radiofrequency energy generated at the catheter tip and delivered to the patient. In this way, tissue can be treated permanently with pinpoint accuracy and gentleness without the need for major surgical interventions.
- **Shock wave therapy:** ODU MEDI-SNAP® High Voltage connectors are indispensable for safely transmitting high voltages required to generate shock waves from the energy source to the therapy devices.
- **Piezo applications:** Piezo elements and piezo actuators are ideally suited for medical technology. They generate the desired movements very precisely and can also be perfectly adapted to the respective application. Due to their small size, mobile solutions can be realised, be it in surgical drives such as hand drills, in mobile infusion devices or other therapy devices.

### Challenges in development

However, the development of the ODU MEDI-SNAP® High Voltage connectors also brought some challenges on the way. Maintaining the required clearance and creepage distances at higher voltages and in a compact design is one of the main tasks in the design phase. In addition, the choice of insulation materials is crucial to ensure, among other things, a high resistance to any partial discharges that may otherwise occur. The stress on the insulating body materials caused by high-voltage pulses over the service life of the devices is also an important design aspect during development.

High mating cycles, compact design, high pin count, secure locking and the ability to transmit high voltages in combination with high pulse currents are what ODU MEDI-SNAP® High Voltage connectors from ODU stand for. The plastic housing provides reliable insulation from the inner conductive materials and meets the highest safety standards. "We offer our customers a unique combination of customised solutions, hybrid options for different requirements and an experienced development team with expertise in the field of medical technology," says Mark Bingham - Head of Product Management Circular Connectors at ODU. The ability to transmit high voltages in combination with control signals opens up countless fields of application and solutions that further advance medical progress and ultimately lead to better patient care.



**ODU Group: global representation with perfect connections**

The ODU Group is one of the world's leading suppliers of connector systems, employing 2,600 people around the world. In addition to its company headquarters in Muehldorf a. Inn (Germany), ODU also has an international distribution network and production sites in Sibiu/Romania, Shanghai/China, and Tijuana/Mexico. ODU combines all relevant areas of expertise and key technologies including design and development, machine tooling and special machine construction, injection, stamping, turning, surface technology, assembly and cable assembly. The ODU Group sells its products globally through its sales offices in China, Denmark, France, Germany, Hong Kong, Italy, Japan, Korea, Austria, Sweden, UK and the US, as well as through numerous international sales partners. ODU connectors ensure a reliable transmission of power, signals, data and media for a variety of demanding applications including medical technology, military and security, automotive, industrial electronics, and test and measurement.