

Lamella contacts and push-pull locking

## Robust connectors for high currents

ODU introduces the "ODU-SPC" connector series with new, high power connectors specially tailored to the future market of renewable energies. Thanks to proven lamella contacts combined with a housing with push-pull locking, they stand up to endurance tests - in fields from photovoltaics to wind energy.



The need for high current connectors is increasing as the renewable energies market expands.

The tough requirements regarding stability, environmental conditions and longevity that are demanded by the renewable energy segment have formed the design basis for the robust connectors. According to information from ODU, the result is continuous improvement and enhancement of the company's established connector systems. In detail, what this means is that the new SPC connectors (SPC for Single Power Connector) utilize a robust housing with push-pull locking in addition to ODU's proven lamella contacts. Both components are well-proven in applications, such as in the familiar "ODU MINI-SNAP" and "ODU MINI-SNAP PC" series.

The connectors' plastic push-pull housing represents a solution that is both economical and robust for contacts with diameters from 3 mm to 5 mm. In order to prevent incorrect insertion, the connectors additionally offer various coding options.

But ODU has also already announced a special design for somewhat larger contacts with a diameter of 8 mm or more: the SPC in plastic housing with an innovative locking system that guarantees secure contacting under even the most difficult environmental conditions. The corresponding connectors will be presented to the market shortly.

ODU's connectors allow pluggable connections up to 100 A. "Soon there will even be solutions for currents up to 1000 A," Bernhard Säckl, Product Manager for the ODU-SPC product family, announced. The program will be correspondingly expanded soon, although the upper limit has not been defined yet.

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But one thing is certain: “The basis will again be the proven contact system with ODU lamella, which features very low contact resistance and a large number of contact points.”

Crimp terminals ensure economical processing of the high current connectors from ODU. The SPC family connectors can furthermore be used for cable-to-device and cable-to-cable connections.

### **Custom tailored connection technology**

One advantage with ODU is that the company has all necessary connector technologies in house, allowing it to react swiftly and flexibly to even special customer requirements and to carry out customized projects promptly. “In bringing these connectors to life, we shape the path from the first idea to a product ready for production in such a way that it is as individual as our customers' requirements,” Bernhard Säckl explains. “Such a path can, for example, run from the development and prototype order to the creation of a sample and even to pilot production.”

Market-specific solutions from ODU are already found today in solar inverters, which convert direct current (DC) into alternating current (AC) suitable for the grid. The connection's reliability is a decisive criterion particularly for such solar inverters, because these guarantee the network integration of the solar plant and monitor the complete plant function, making them the core of any solar power plant.



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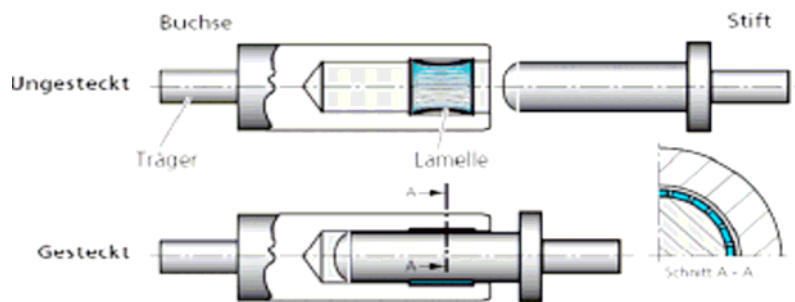
### **Work continues on further developments in the high current concepts**

“Supplying the world with power generated by renewable energies is a job that is progressing swiftly, and this is opening up a broad and also highly interesting development area for high current solutions in the connector market,” Bernhard Säckl reports. “We will continue to pursue the further development of the various high current concepts in order to ensure that our customers will be able to profit from innovative, highly flexible, powerful and yet economical connection solutions even in the future.”

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Thanks to the technical characteristics and robustness, the connectors in the new SPC product family are not limited to use in just the many possible applications in the renewable energy sector. They are also suitable for the inspection and testing fields, as well as for use in industrial plants, switching stations, power and emergency power supply systems, lighting technology and the railway industry.

But the trend toward higher and higher currents is also continuing in the energy storage segment and in automotive electronics. (cp)



The contact system with the ODU lamella contacts features very low contact resistance and a large number of contact points.