KYOCERA introduces reliable, Waterproof Branch Connector for harsh conditions of automotive electronics

Sheltap® clamshell-style connector is designed to withstand water-pressure and extreme temperature; helps streamline auto assembly workflow

Kyoto/London, October 26th, 2018. Kyocera today introduced a new clamshell-style branch connector for automotive electronics that features a unique locking structure for waterproof connections, ensuring reliability in harsh conditions. The new Sheltap 9715 Series Waterproof Electronic Branch Connector was shown for the first time at CEATEC JAPAN 2018 (Booth #H009), October 16-19. Samples are now available upon request.

A branch connector is used to install electronic equipment, such as a navigation system or dashboard camera, by branching power from the vehicle’s main wiring harness. Since Kyocera introduced its original 9215 series branch connectors in 1992, the products have been lauded for providing reliable connections while streamlining assembly and installation workflow through their unique clamshell structure. In 2014, Kyocera became an early developer of connectors for aluminum wiring to support weight-saving initiatives among automakers. Rapid adoption of advanced driver assistance systems (ADAS) and other automotive electronics has created new

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Sheltap 9715 Series Waterproof Electronic Branch Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>Branching Electronic Wiring for Automotive Equipment</td>
</tr>
<tr>
<td>Sample Shipment Date</td>
<td>October 3, 2018</td>
</tr>
<tr>
<td>Key Benefits</td>
<td>• Waterproof, able to withstand high-pressure washing</td>
</tr>
<tr>
<td></td>
<td>• Operates in -40 to +85 °C (185 °F)</td>
</tr>
</tbody>
</table>
demand for connectors that can withstand harsh environments, including the vehicle exterior and direct exposure to the elements in all weather conditions.

Kyocera designed the Sheltap branch connector series to provide a high level of waterproof functionality and reliability — successfully passing the high-pressure washing and high-temperature exposure testing of the JASO¹ D616 standards, which evaluate wire harness connectors with specially designed enclosures and sealant materials for automotive applications. Kyocera’s Sheltap series connectors embody the company’s commitment to supporting the rapid advancement of electronic technologies in diverse markets, including automotive, shipping, and outdoor security / camera-monitoring applications.

Key Features: Sheltap® 9715 Series Waterproof Branch-Style Electronic Connectors

1. **Unique Lock Structure Ensures Reliable Waterproofing and Ability to Withstand Extreme Temperatures**
   By combining a unique housing lock structure with sealant materials, the new connectors are able to meet JASO D616 standards for high waterproofing and reliability in automotive components. The Sheltap series connectors can also operate in extreme temperatures from -40 to +85 °C (185 °F).

2. **Weight Reduction: Connects Aluminum Wiring, 40% Lighter Than Copper Wire**
   The products are designed to meet the special interconnection requirements of aluminum wiring, which is 40 percent lighter than copper wire, and increasingly seen as a key to meeting vehicle weight-reduction goals.

3. **Improves Reliability and Ease of Use**
   The new waterproof connectors are easy to assemble – simply insert the wires and apply pressure. The connector keeps wires in place for excellent workflow, instantly providing a reliable connection with a waterproof seal.

¹ Japanese Automotive Standards Organization
4. **Environmentally friendly products, RoHS compliant**

Advanced technologies play an important role in realizing a comfortable life for everyone. Kyocera introduces various unique products that make people’s lives more convenient and comfortable. Sensor devices capable of measuring vital signs help create a pleasant environment for everyone and contribute to preventive medical care, and IoT units compatible with LPWA for use in a variety of applications will be on display.

**Specification**

| Applicable wire               | Copper: AVSS0.5, CAVS0.5, CIVUS0.5  
                                  | Aluminum: ALVUS0.75, ALVUS0.5, ALVSSH0.5 |
|-------------------------------|-------------------------------------|
| Rated current                 | AC/DC 9A/Contact (Copper Wire 0.5mm², Aluminum Wire 0.75 mm²)  
                                  | AC/DC 8A/Contact (Aluminum Wire 0.5 mm²) |
| Rated voltage                 | AC/DC 125V Contact |
| D.W. Voltage                  | AC 1,000Vrms/min. |
| Operating temperature range   | -40 to +85 °C (185 °F) |

**About Sheltap®**

Kyocera’s Sheltap series of branch-style electronic connectors are engineered for automotive use. The clamshell design allows Sheltap connectors to branch and distribute electricity easily and with long-term reliability, even in harsh environments.

Sheltap is registered trademarks of Kyocera in Japan, U.S.A., China, and Europe
For more information on KYOCERA: www.kyocera.co.uk

About KYOCERA
Headquartered in Kyoto, Japan, KYOCERA Corporation is one of the world’s leading manufacturers of fine ceramic components for the technology industry. The strategically important divisions in the KYOCERA Group, which is comprised of 264 subsidiaries (as of March 31, 2018), are information and communications technologies, products which increase quality of life, and environmentally friendly products. The technology group is also one of the oldest producers of solar energy systems worldwide, with more than 40 years of experience in the industry.

The company is ranked #522 on Forbes magazine’s 2017 “Global 2000” listing of the world’s largest publicly traded companies. With a global workforce of over 75,000 employees, KYOCERA posted net sales of approximately €12.04 billion in fiscal year 2017/2018. The products marketed by the company in Europe include printers, digital copying systems, microelectronic components, and fine ceramic products. The KYOCERA Group has two independent companies in the United Kingdom: KYOCERA Fineceramics Ltd. and KYOCERA Document Solutions.

The company also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by KYOCERA founder Dr. Kazuo Inamori — to individuals and groups worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (converted at approximately €764,000 per prize category).

Contact
KYOCERA Fineceramics Ltd.
Daniela Faust
Manager Corporate Communications
Hammfelddamm 6
41460 Neuss
Germany
Tel.: +49 (0)2131/16 37 – 188
Fax: +49 (0)2131/16 37 – 150
Mobil: +49 (0)175/727 57 06
daniela.faust@kyocera.de
www.Kyocera.de