

**TECHNICAL DATA SHEET****CONDUCTIVE FILAFLEX****Description**

CONDUCTIVE FILAFLEX is a Thermoplastic Polyurethane elastomer electrically conductive which makes it suitable for wearable devices and other flexible electronics applications.

<b>Physical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test method according to</b>
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<u>Material density</u>	<u>1.35</u>	<u>g/cm<sup>3</sup></u>	<u>ISO 1183</u>
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<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test method according to</b>
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<u>Hardness</u>	<u>92</u>	<u>Shore A</u>	<u>DIN 53505 – ISO 868</u>
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<u>Tensile modulus (Young)</u>	<u>90</u>	<u>MPa</u>	<u>ISO 527</u>
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<u>Notched impact strength (Charpy) at +23°C</u>	<u>NB</u>	<u>kJ/m<sup>2</sup></u>	<u>ISO 179</u>
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<u>Elongation at break</u>	<u>&gt;100</u>	<u>%</u>	<u>ISO 527</u>
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<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test method according to</b>
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<u>Electrical Resistivity surface</u>	<u>&lt;1E1</u>	<u>ohm</u>	<u>ASTM D 257</u>
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<u>Electrical Resistivity</u>	<u>3.9</u>	<u>Ω-cm</u>	<u>Approx.</u>
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<b>Printing properties</b>	<b>Recommended</b>
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<u>Printing temperatures</u>	<u>245-250°C</u>
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<u>Printing speed</u>	<u>20 mm/s</u>
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<u>Hot-bed temperature</u>	<u>50-60°C</u>
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<u>Retractions</u>	<u>2-3 mm/s to 40 mm/s</u>
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**Printing speed** should be lower as recommended to get a perfect printing. After each change of material the extruder must be cleaned.

The information provided here is for reference only because the raw materials are from different sources. We request that customers inspect and test our products before using them to satisfy themselves as to contents and suitability.