

Banana Plug WBT-0644

The high-current plug for cables up to 10 mm²/7 AWG

WBT

WBT-0644 E

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product specifications
overleaf



Banana plug WBT-0644

for cables of 2.5 - 10 mm²/13-7 AWG
Midline-version for crimping or soldering

Made in Germany

Design Patent

The requirements of cable connection have strongly increased. Conventional connectors do not seem to meet the increased demands e.g. of the sizes of cross sections any longer.

WBT has developed and produced high-quality connectors which are distinguished by well-approved connection techniques and solid contact mechanisms since 1985. The banana plug WBT-0644 has also been conceived with regard to the increased demands: being a solid turned part it thoroughly rules out any unnecessary transition resistances. Its expandable contact pin assures a tight fit to all pole terminals. Due to the tremendous contact pressure, achieved by this mechanism, even a constant current of 200 A (!) can be safely transmitted.

WBT connectors are made of a special OFC copper alloy and a special 24-carat gold plating perfectly protects from corrosion. An additional Torx* screw warrants a reliable tensile force relief.

Operation

When screwing the plug sleeve the cross pin makes the centre pin moving forward and expanding the contact pin at the same time. This way the plug can be locked into the pole terminal and assures highest contact pressure.

To avoid any damage of the contact lamellas the WBT-0644 should only be inserted or withdrawn in relaxed condition (the contact pin unexpanded).

Cable termination

WBT banana plugs are designed for crimping or soldering. In case of soldering the gap between both Torx* screws offers space to place the bit of the soldering iron. Especially for thick wires the crimping technique is recommended. For information about the technical advantages of this connection technique please refer to the WBT website www.wbt.de, the current WBT catalogue or the special WBT brochure about crimping.

In case of crimping you would only have to strip the cable as usual, slide on a suitable cable end sleeve and crimp the cable end sleeve by means of an appropriate crimping tool. Then place the crimped cable end into the plug up to the area under the front Torx* screw. The front screw fixes the cable to the plug whereas the back screw fixes the insulating casing of the cable and assures the necessary tensile force relief. To prevent the clamping mechanism from obstruction the crimped cable end should not be inserted farther than to the second gap.

Hints for crimping technique

Crimping connector designs usually require specific machining mastery. Your WBT-0644 is perfectly built for this connection technique. Why shouldn't you benefit from this advantage? You would only need cable end sleeves as well as a crimping tool.

- Choose the pure copper end sleeves from WBT (or should you want to terminate silver cable the special silver versions). In order to achieve the best possible crimping result (a cold-welding bond) the sleeve should tightly fit to the cable cross section.
- Slide the cable end sleeve on the cable strands. Avoid by all means to twist the strands: It complicates applying the sleeve since you would widen the cross section.
- The crimping tool should provide a special bit for multi-mandrel pressure so that an 8 mm long connection piece can be achieved with one powerful squeeze.

N.B. The WBT-0644 banana plug is only approved for use in the low-voltage range. WBT GmbH assumes no liability for whatsoever incorrect use.

Accessories/Recommended tools:



WBT offers a wide range of crimping accessories: gold-plated cable sleeves made of highly conductive electrolyte copper, E-Cu > 99.996% (in sizes from 0.5 to 16 mm²/22-5 AWG), sleeves made from fine silver (1.5 to 6 mm²/17-10 AWG), special crimping pliers for the above requirements and a complete crimping set for beginners. **WBT-0403 crimping pliers/WBT-0411 crimping set.**



A special bonus for those who appreciate precision tools: the torque screwdriver WBT-0481. In machine

construction quality, with high-grade finish and precise turning moment. Factory-set to 0.5 Nm. With 18-piece set containing different bits made of hardened steel. The bits are also available separately.

WBT-0481 Torque controlled Dynakey/WBT-0490 Dynakey set.

*Torx is a registered trademark of Camcar Textron, USA.

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Detailed product information available.

Design and specifications subject to change without notice.

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