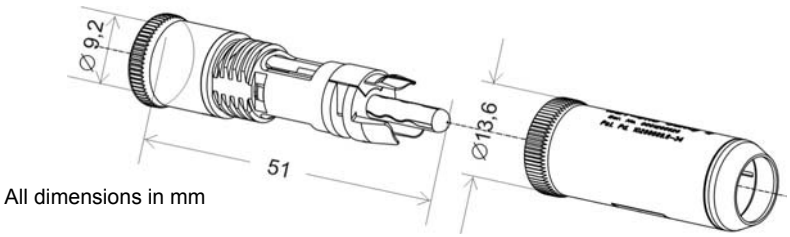
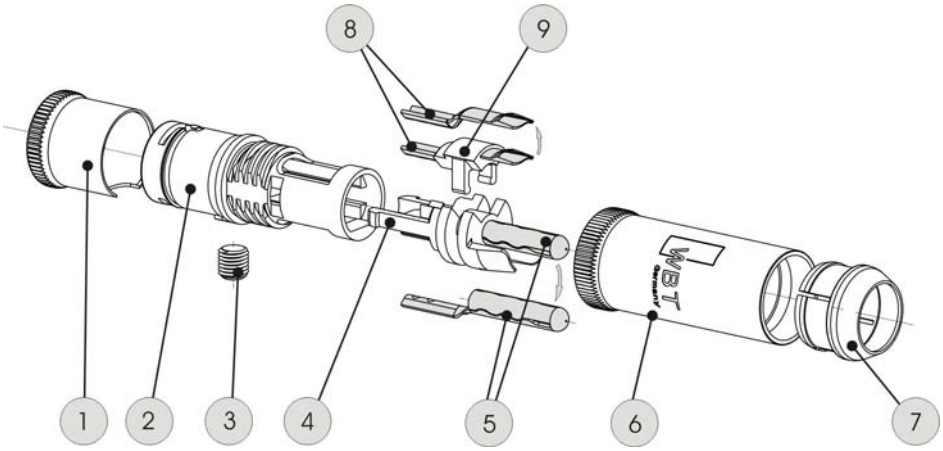
PARTS CONNEXION

WBT-0110 Cu/Ag E

WBT-RCA-66332 (Ag - Silver)
WBT-RCA-66331 (Cu - Copper)



All dimensions in mm



Component list

1	Cap brass alloy	1
2	Holding unit Ultramid [1]	1
3	Torx [3] screw M4x4 brass alloy	1
4	Dielectric – plus contact Ultramid [1]	1
5	Plus contact pure copper or fine silver	1
6	Shaft of clamping barrel AlMg alloy	1
7	Head of clamping barrel AlMg alloy	1
8	Minus contact pure copper or fine silver	1
9	Dielectric – minus contact Dyneon [2]	1

Extent of delivery 1 – 9 assembled

Revision date 24.08.2006

[1] Ultramid 95 is a registered trademark BASF • [2] Dyneon is a registered trademark of 3M • [3] Torx is a registered trademark of Camcar Textron
WBT and nextgen are registered trademarks of WBT GmbH

WBT-0110
Characteristic Impedance 75Ω
RoHS compliant

WBT - 0110 RCA Plug nextgen™

(Internat. Pat. EP 0 460 145 B1)

RCA wideband plug for digital and analogue connections

1. Mechanics
   - Single-element low-tolerance contact elements (Tol. < ± 0.02 mm)
   - Central Contact Unit consisting of two moulded contact holders, (4)+(5) and (8)+(9)
   - The Ultramid [1] holding unit (2) grips the central contact unit and also provides the cable strain relief thanks to the grub screw (Torx[3] T.6).
   - The electrically insulated aluminium clamping barrel (6) and (7) is axially screwed over the thread of the holder and provides a permanent tight contact pressure. This way the plug can be adopted perfectly by every type of RCA socket.
   - EMC shielding is effectively achieved by the by the clamping barrel (6) and (6) and the cap made of brass (1).
2. Materials

– Signal conductors (5) and (8)	Pure copper or fine silver
– Dielectric plus contact (4)	Ultramid [1], glass-fibre reinforced
– Dielectric minus contact (9)	Dyneon [3]
– Cap (1) and grub screw (3)	brass
– Holding unit (2)	glass-fibre reinforced (30%) polyamide 6.6
– Clamping barrel (6) and (7)	aluminium magnesium alloy

3. Surfaces

– Signal conductor Cu (5), (8)	pure fine gold 0.5 µm
– Signal conductor Ag (5), (8)	pure platinum 0.4 µm
– Clamping barrel (6), (7)	laser engraved, coloured anodized ceramic
– Cap (1), Cu version	gold plated without ferromagnetic intermediate layer
Ag version	platinized, without ferromagnetic intermediate layer
– Holding unit (2)	coloured versions available according to the EIA/CEA norm for multi channel systems

4. Operating Characteristics (reliably observed after more than 10^3 connections/disconnections)

– Permanent current	I_D > 10 A
– Transition resistance	$R_ü$ < 0.1 mOhm (loop measured with WBT-0110)
– Contact resistance	R_{Bi} ,R_{Ba}< 0.45 mOhm (patch resistance, inner / outer)
– Self capacitance	C ≈ 2.65 pF
– Insulation resistance	R_{ia}, R_{aG}> 1.3·10^{9}0hm (conductor/ conductor, conductor/chassis)
– Characteristic impedance	Z = 75 Ohm up to 1GHz

5. Dimensions

– Outer / inner diameter	13.6 / 9 mm
– Total length	51 mm

6. Mounting

– Connection	soldering