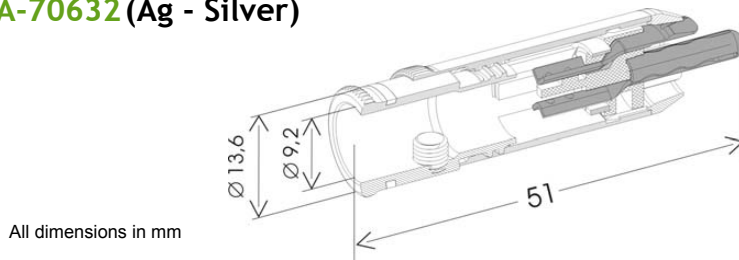


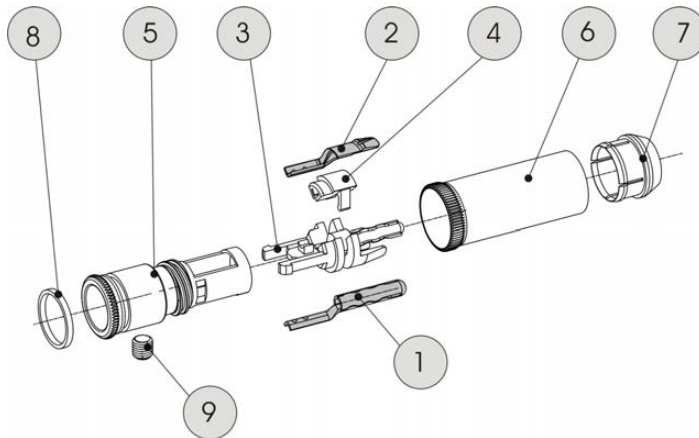


WBT-0102 Cu/Ag E

WBT-RCA-70631 (Cu - Copper)  
WBT-RCA-70632 (Ag - Silver)



All dimensions in mm



Component list		
1	Plus contact pure copper or fine silver	1
2	Minus contact pure copper or fine silver	1
3	Dielectric – plus contact Ultramid <sup>1)</sup>	1
4	Dielectric – minus contact Dyneon <sup>2)</sup>	1
5	Holding unit copper alloy	1
6	Shaft of clamping barrel copper alloy	1
7	Head of clamping barrel copper alloy	1
8	Marking ring <sup>4)</sup> Desmopan <sup>4)</sup>	1
9	Torx <sup>3)</sup> screw M4x4 Copper alloy	1
Extent of delivery 1 – 9 assembled		
Revision date 13.12.2006		

<sup>1)</sup> Ultramid 95 is a registered trademark of BASF • <sup>2)</sup> Dyneon is a registered trademark of 3M • <sup>3)</sup> Torx is a registered trademark of Camcar Textron  
<sup>4)</sup> Desmopan is a trademark of Bayer • WBT and nextgen are registered trademarks of WBT GmbH

## WBT - 0102 RCA Plug nextgen™ - technology

(Internat. Pat. EP 0 460 145 B1)

RCA wideband plug for analogue and digital connections

### 1. Mechanics

- Single-element low-tolerance contact elements (Tol. <math>\pm 0.02\text{ mm}</math>)
- Central Contact Unit consisting of two moulded contact holders, (1)+(3) and (2)+(4)
- The brass holding unit (5) grips the central contact unit and also provides the cable strain relief thanks to the grub screw (9) (Torx<sup>3)</sup> T.6).
- The brass 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 (7) and the holding unit made of brass (5).

### 2. Materials

- Signal conductors (1) and (2) Pure copper or fine silver
- Dielectric plus contact (3) Ultramid<sup>1)</sup>, glass-fibre reinforced
- Dielectric minus contact (4) Dyneon<sup>3)</sup>
- Grub screw (9) copper alloy
- Holding unit (5) copper alloy
- Clamping barrel (6) and (7) copper alloy, chromium plated

### 3. Surfaces

- Signal conductor Cu, (1), (2) pure fine gold 0.5  $\mu\text{m}$
- Signal conductor Ag, (1), (2) pure platinum 0.4  $\mu\text{m}$
- Clamping barrel, (6), (7) chromium plated, two layer coating
- Holding unit (5), Cu version gold plated without ferromagnetic intermediate layer
- Ag version platinized, without ferromagnetic intermediate layer
- Marking ring (8) Desmopan 192<sup>4)</sup>, coloured versions available according to the EIA/CEA norm for multi channel systems

### 4. Operating Characteristics (reliably observed after more than 10<sup>3</sup> connections/disconnections)

- Permanent current  $I_D > 10\text{ A}$
- Transition resistance  $R_D < 0.1\text{ m}\Omega$  (loop measured with WBT -0110)
- Contact resistance  $R_{BI}, R_{BO} < 0.45\text{ m}\Omega$  (patch resistance, inner / outer)
- Self capacitance  $C \approx 2.82\text{ pF}$
- Insulation resistance  $R_{iA}, R_{iC} > 1.3 \cdot 10^9\Omega$  (conductor/ conductor, conductor/chassis)
- Characteristic impedance 75 Ohm for more than 200 MHz

### 5. Dimensions

- Outer / inner diameter 13,6 / 9 mm
- Total length 51 mm

### 6. Mounting

- Connection soldering
- Cables for cables up to 9 mm dia.



WBT-0102 Cu  
RoHS compliant