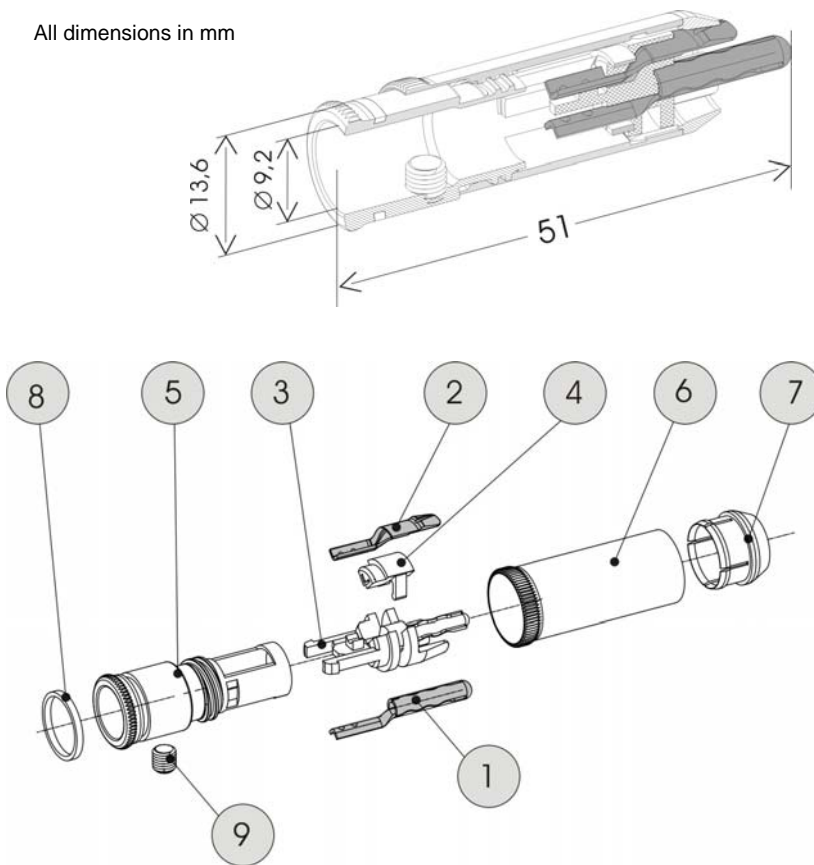


All dimensions in mm



Component list		
1	Plus contact pure copper	1
2	Minus contact pure copper	1
3	Dielectric – plus contact Ultramid ¹⁾	1
4	Dielectric – minus contact Vectra S135 ²⁾	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 ⁴⁾ Desmopan ⁴⁾	1
9	Torx ³⁾ screw M4x4 Copper alloy	1
Extent of delivery 1 – 9 assembled		
Revision date 15.12.2009		

¹⁾ Ultramid 95 is a registered trademark of BASF • ²⁾ Vectra is a registered trademark of Ticona • ³⁾ Torx is a registered trademark of Camcar Textron
⁴⁾ 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. $\pm 0.02\text{ mm}$)
- 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) (Torx³⁾ 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
- Dielectric plus contact (3) Ultramid¹⁾, glass-fibre reinforced
- Dielectric minus contact (4) Vectra S135²⁾
- Grub screw (9) copper alloy
- Holding unit (5) copper alloy
- Clamping barrel (6) and (7) copper alloy, chromium plated
- Marking ring (8) Desmopan 192⁴⁾, coloured versions available according to the EIA/CEA norm for multi channel systems

3. Surfaces

- Signal conductor Cu, (1), (2) pure fine gold 0.5 μm
- Clamping barrel, (6), (7) chromium plated, two layer coating
- Holding unit (5), Cu version gold plated without ferromagnetic intermediate layer
Ag version without ferromagnetic intermediate layer

4. Operating Characteristics (reliably observed after more than 10³ connections/disconnections)

- Permanent current $I_D > 10\text{ A}$
- Transition resistance $R_D < 0.1\text{ mOhm}$ (loop measured with WBT -0110)
- Contact resistance $R_{Bi}, R_{Ba} < 0.45\text{ mOhm}$ (patch resistance, inner / outer)
- Self capacitance $C \approx 2.82\text{ pF}$
- Insulation resistance $R_{iB}, R_{iG} > 1.3 \cdot 10^9\text{ Ohm}$ (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