



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

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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
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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. $< \pm 0.02$ mm)
- Central Contact Unit consisting of two moulded contact holders, (4)+(5) and (8)+(9)
- The Ultramid¹⁾ holding unit (2) grips the central contact unit and also provides the cable strain relief thanks to the grub screw (Torx³⁾ 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) Ultramid¹⁾, glass-fibre reinforced
- Dielectric minus contact (9) Dyneon³⁾
- 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 μ m
- Signal conductor Ag (5), (8) pure platinum 0.4 μ m
- Clamping barrel (6), (7) laser engraved, coloured anodized ceramic
- Cap (1), Cu version gold plated without ferromagnetic intermediate layer
- Ag version platinumized, 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 10³ connections/disconnections)

- Permanent current $I_D > 10$ A
- Transition resistance $R_0 < 0.1$ mOhm (loop measured with WBT-0110)
- Contact resistance $R_{B1}, R_{B2} < 0.45$ mOhm (patch resistance, inner / outer)
- Self capacitance $C \approx 2.65$ pF
- Insulation resistance $R_{iA}, R_{iG} > 1.3 \cdot 10^6$ Ohm (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



WBT-0110

Characteristic Impedance 75 Ω

RoHS compliant