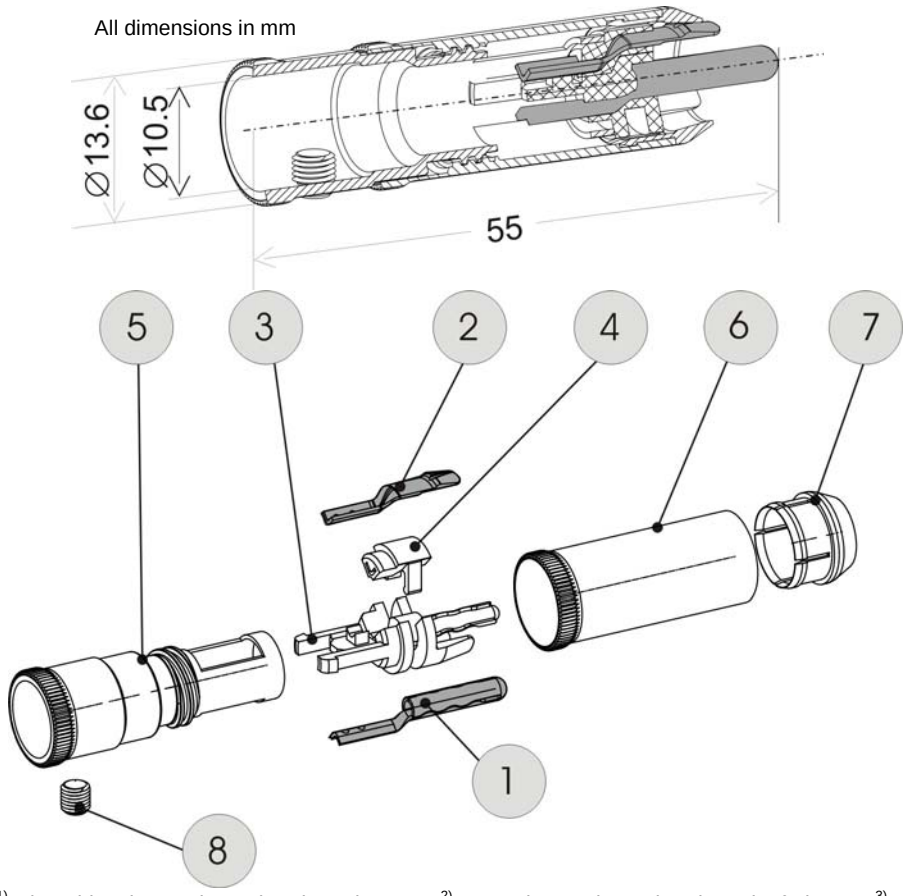
WBT-0152 Cu E

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 brass alloy	1
6	Shaft of clamping barrel brass alloy	1
7	Head of clamping barrel brass alloy	1
8	Torx [3)] screw M4x4 brass alloy	1

Extent of delivery 1 – 8 assembled

Revision date 15.12.2009

[1)] Ultramid 95 is a registered trademark BASF• [2)] Vectra is a registered trademark of Ticona • [3)] Torx is a registered trademark of Camcar Textron
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WBT - 0152 Topline RCA Plug nextgen™ technology

(Internat. Pat. EP 0 460 145 B1**)**

WBT-0152 Cu
RoHS compliant

RCA wideband plug for analogue and digital connections

1. Mechanics
   - Single-element low-tolerance contact elements (Tol. < ± 0.02 mm)
   - Central Contact Unit consisting of two moulded contact holders, (1)+(3) and (2)+(4)
   - The holding unit (5) grips the central contact unit and also provides the cable strain relief thanks to the grub screw (8) (Torx[3)] T.6).
     Hint: Due to the production process the radial position of the Torx screw hole relativ to the contact elements is not specified.
   - 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)	Ultramid [1)], glass-fibre reinforced
– Dielectric minus contact (4)	Vectra S135 [2)],
– Holding unit (5)	brass
– grub screw (8)	brass
– Clamping barrel (6) and (7)	brass

3. Surfaces:

– Signal conductor (1) and (2)	pure fine gold 0.5 µm
– Clamping barrel, (6), (7)	laser engraved, chromium plated, two layer coating
– Holding unit (5)	gold plated without ferromagnetic intermediate layer

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 ≈ 2.82 pF
– Insulation resistance	R_{ia}, R_{aG}> 1.3·$10^9$0hm (conductor/ conductor, conductor/chassis)
– Characteristic impedance	Z = 75 Ohm for more than 200 MHz

5 Dimensions

– Outer / inner diameter	13.6 / 10.5 mm
– Total length	55 mm

6. Mounting

– Connection	soldering
– Cables	for cables up to 10.5 mm dia

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