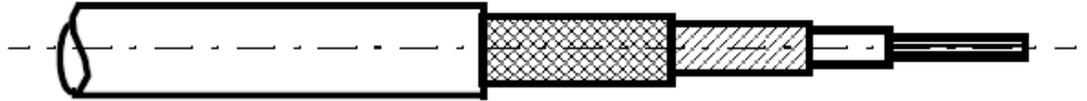


Prepared (also subject responsible if other) EWILBER William Berg		No. 1301-TZC 500 32		
Approved	Checked	Date 2018-10-10	Rev N	Reference

OD 10 mm 50 Ω Coaxial Cable for Outdoor use



1 GENERAL

Modified RG-8, 50 Ω coaxial cable intended for outdoor use.
 Low loss cable for use from DC up to 4 GHz.
 Halogen free

2 DESIGN

2.1 Conductor AWG10

Solid copper or copper clad aluminum: OD = 2.74 ± 0.025 mm

2.2 Dielectric

Extruded foamed polyethylene (PE): OD = 7.25 ± 0.13 mm
 The dielectric shall adhere to the center conductor.

2.3 Shielding

Tin plated copper OR tin plated copper clad aluminum wire (Min Ø 0.15 mm) over wrapped Al-foil bonded to the dielectric. 100% foil coverage and minimum 85% braid coverage, with Min 30% Copper content, to minimize product corrosion potential, and maintain defined shield and loop resistance.

2.4 Jacket

Extruded black polyethylene (LDPE).
 OD = 10.16 ± 0.20 mm
 UV resistant

2.5 Weight

90 to 95 gram/m

Prepared (also subject responsible if other) EWILBER William Berg		No. 1301-TZC 500 32		
Approved	Checked	Date 2018-10-10	Rev N	Reference

3 LIMITING VALUES

3.1 Electrical values

Parameter	Symbol	Conditions	Values	Unit
Impedance	Z		50 ± 2	Ω
Frequency range	f		DC - 4	GHz
Capacitance	C		78	pF/m
Conductor resistance DC	R _c	max	4.6	Ω/Km
Shield resistance DC	R _s	max	5.9	Ω/Km
Loop resistance DC	R _L	max	10.0	Ω/Km
Maximum attenuation at frequency:		140 MHz 350 MHz 900 MHz 1800 MHz 1900 MHz	6.0 9.0 15.0 21.0 22.0	dB/100 m
Rated voltage			600	
Breakdown voltage			2600	V DC
Shielding effectiveness		typ	> 90	dB

3.2 Mechanical values

Parameter	Symbol	Conditions	Values	Unit
Dielectric adhesiveness to center conductor		According to 1521-TZC50032	> 80	N
Tensile strength			> 1500	N
Bending radius static		min	100	mm

3.3 Environmental resistance

Temperature range - 40...+ 80 °C

CPR Compliance D_{ca} - s₂,d₂,a₂ EN 50575, EN 13501-6

Prepared (also subject responsible if other) EWILBER William Berg		No. 1301-TZC 500 32		
Approved	Checked	Date 2018-10-10	Rev N	Reference

4 BANNED AND RESTRICTED SUBSTANCES

All included parts shall be RoHS compliant

All included parts shall be free from Ericsson banned and restricted substances according to document 2/000 21-FAU 104 04 Uen.

5 Product Quality

General:

The product shall meet applicable requirements in Quality specification 105 63-2031 Uen.

Design:

Once an out turn sample is approved, neither the design nor the included material may be changed without approval from Ericsson design responsible.

6 MARKING

The cable shall be marked with at least the following text along the outside of the sheath, once per meter, if not otherwise stated in the table below:

ERICSSON PPP PPP PP YYWW BBBBB LLLLL M

- PPP... = Part number, TZC 500 32.
- YYWW = Year and week of manufacture.
- BBBBB = Batch number (optional marking).
- LLLLL = Sequential length markers with a pitch of max two meters, continuous length marking is allowed

The marking shall be resistant to mechanical wear that can arise under normal handling, storing and operation.

DECLARATION OF PERFORMANCE (DOP) label shall be attached on the packaging or reel.

7 DELIVERY

Reel max OD 600 mm. Delivery lengths, see product list.

Prepared (also subject responsible if other) EWILBER William Berg		No. 1301-TZC 500 32		
Approved	Checked	Date 2018-10-10	Rev N	Reference

8 REFERENCES

1521-TZC 500 32 Test method for adherence of foam over conductor
 105 63-2031 General quality requirements on components
 2/000 21-FAU 104 04 Ericsson banned and restricted substances

9 INTERNAL INFORMATION

9.1 Storage

Spool must stand up (horizontal axis)

10 PRODUCT LIST

Product code purchased	Continuous delivery lengths
TZC 500 32/25	25 m (min 25m, max 27m)
TZC 500 32/50	50 m (min 50m, max 55m)
TZC 500 32/70	70 m (min 70m, max 75m)
TZC 500 32/100	100 m (min 100m, max 110m)
TZC 500 32/200	200 m (min 200m, max 210m)
TZC 500 32/500	500 m (min 500m, max 520m)

Prepared (also subject responsible if other) EWILBER William Berg		No. 1301-TZC 500 32		
Approved	Checked	Date 2018-10-10	Rev N	Reference

11 REVISION RECORDS

Rev	Description
B	Jacket changed to polyethylene. Values changed for maximum attenuation in table 3.1.
C	Para 2.1, copper clad aluminium changed to solid copper. Para 5, 38 kg/km changed to 128 kg/km.
D	Paragraph 4, 5, 6 is added to the specification. Tensile strength is added to table 3.1.
E	Para 2.1, 2.2, 2.3 and 2.4 text and dimensions added.
F	Paragraph 4 - manufacturer and date of manufacturing added Paragraph 5 - length of delivery changed from 500 to min 300 and max 600.
G	Product TZC 50032/500 added. Delivery lengths moved from para. 5 to para. 8.
H	2.2: Changed 7,37 to 7,25. 2.3: Added dia 0,15. Changed Al-foil to Al/Pet/Al-foil and 8,26 to max 8,24. 2.4: Changed 10,16 ± 0,25 to 10,16 ± 0,20
J	3.1 Attenuation for 1800 and 1900 MHz added
K	1: Requirement for halogen free added 2.1: Copper clad aluminium added as option to solid copper. 3.1: Requirement for conductor and shield resistance changed. 3.1: Requirement for loop resistance added 3.1: Requirement for attenuation changed at 1800MHz and 1900MHz. 3.1: Requirement for velocity of propagation deleted. 3.2: Requirement for the dielectric adhesiveness to centre conductor added. 3.3: Requirements for upper temperature decreased to + 80 °C. 6: References added, 8: New lengths (product numbers) added to product list.
L	Paragraph 2.5 WEIGHT added.
M	Formalia changes/updates § 2.3: Option for use of TCCA braid wire added § 2.4: UV-resistant added § 2.5: Updated § 3.1: Shielding effectiveness req. added § 4 & 5: Added § 10: Updated to reflect currently used product numbers.
N	Updated with CPR requirement.