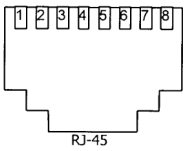
4.5.2 G703 connector (120 ohm E1 and 100 ohm T1 standards)



Front view soket

Pin 1:	Rx_Ring	**Pin 5:**	Tx_Tip
Pin 2:	Rx_Tip	**Pin 6:**	Not connected or equiment ground
Pin 3:	Not connected or equipment ground	**Pin 7:**	Not connected
Pin 4:	Tx_Ring	**Pin 8:**	Not connected

Figure 60 – Affectation of G703 access points at NT back

	**SHIELDED CABLES MANDATORY**

4.6 Initiating services

Once RT and NT are installed and in operational status, service initiation requires a further step: the Base Station operator must activate the cross-connections (see User Manual 3CC 12424 Axxx Base Station § Client Services and *§ 6.2 Implementation of client services* of the present document).

4.7 Filling in the installation sheet

The installation sheet (*Appendix 1 – 7390 TS installation sheet*) is initially issued by Radio Planning. It contains all the data needed by the installer for successful programming of the RT.

The installer must complete this sheet by supplying the requested information, in particular the serial numbers of the installed equipment, then submit it to the supervisor. The information in the sheet ensures the traceability of the customer installation equipment, to facilitate subsequent interventions.

The sheet should be signed by the client and the installer. It allows with the customer, the effective commissionings to be validated.

The sheet consists of three parts:

- 7390 RT installation sheet,
- 7390 NT installation sheet
- 7390 RT/NT connections sheet.

4.7.1 7390 RT installation sheet

This part contains all the information necessary for the configuration. The installer must have this information to configure the radio part (see *4.2.3.1 Configuration setting of the 7390RT parameters*).

For each parameter to be entered according to the Radio Planning, the installer must if appropriate indicate the **real input value** if this differs from the value on the sheet. He must also provide the following information: site and operator co-ordinates.

4.7.2 NT installation sheet

This sheet is to be completed for each NT in the installation, by filling in the requested information.

4.7.3 RT/NT wiring sheet

The installer must fill in, in this part, all the information relating to the wiring and to the equipment used for carrying out the assembly.

In addition, a wiring diagram is to be drawn up.

PAGE INTENTIONALLY LEFT BLANK

5 Operation and maintenance

5.1 7390 system supervision

The system operator receives the alarms sent by the network equipment. With the aid of the the 7390LT software applications, the operator can view and analyze the alarms and trigger the appropriate operations (see specific procedures below).

On detection of a fault, the operator analyzes alarms and starts the suitable maintenance actions.

5.2 Preventive maintenance

This maintenance is carried out, either during a corrective maintenance inspection, or during a periodic inspection, on all station equipment. It consists in inspecting the units and their interconnections (connectors, cables, sockets, etc.) and ensuring that the environment of the Indoor Units (NTs and RTs) complies with installation requirements (see section 3). It is essential to check connectors and splitters state with earthing.

In case of doubt, the suspect parts should be checked, taking all precautions to avoid interrupting link data transmission.

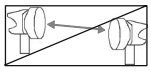
5.3 Corrective maintenance

	**DO NOT OPEN THE EQUIPMENT UNDER ANY CIRCUMSTANCE**

Corrective maintenance is carried out with the use of the programs of the 7390 LT software.

To use the alarms refer to section "Alarms" of the Base Station User Manual, ref.: 3CC12424Axxx.

5.4 Changing a faulty NT unit



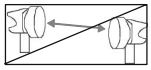
Make sure that the network manager has deleted the NT to be replaced beforehand and declared the new one, using the 7390 LT software (see the Base Station User Manual, Ref.: 3CC12424 Axxx).

Stages

1. Turn off NT unit power.
2. Disconnect the main cables connecting the NT unit to the power source.
3. Disconnect all cables connected to the NT unit to be changed.
4. Change NT unit after checking that the characteristics coincide (number of inputs, impedance, etc.).
5. Reconnect NT unit cables.
6. Connect the NT power cable to the main supply.
7. Power up NT unit.
8. Wait for "Power on" LED to light up.
9. Wait for flashing of "Alarm" LED. The NT unit is in operation once the LED is extinguished.

10. Make NT replace operation in the 7390 LT software application (see section **NT replace** of the Base Station User Manual, Ref.: 3CC12424 Axxx)
11. Check the absence of alarms in the 7390 LT software application (see section **Alarms** of the Base Station User Manual, Ref.: 3CC12424 Axxx).
12. Update the station installation sheet (*Appendix 1 – 7390 TS installation sheet*).

5.5 Changing a faulty RT unit



Stages

1. Turn off the NT power supply.
2. Disconnect the mains cable connecting the NT unit to the power source.
3. Disconnect the RT/NT connection cable.
4. Change RT after checking on the label that mnemonics are identicals to the previous one.
5. Install again the RT and carry out antenna alignment. For this, refer to sections 3 and 4.
6. Reconnect the RT/NT connection cable.
7. Connect the NT to the mains supply.
8. Power up the NT.
9. Wait between 2 and 5 minutes. Reconfiguration is automatic.
10. Check the absence of alarms in the 7390 LT software application (see section "Alarms" of the Base Station User Manual, Ref.: 3CC12424 Axxx).
11. Update the station installation sheet (*Appendix 1 – 7390 TS installation sheet*).

6 Changes of configuration

The changes to the transmission network may require changes to the equipment configurations in order to meet new requirements. The A7390 equipment is likely to satisfy these changes either by modifying just the equipment software configuration or by physically modifying the equipment and its configuration.

	**The supervisor must be informed of any configuration changes**

These changes may involve either changes of configuration using the 7390 LT software, or changes of configuration with physical intervention on the equipment.

The possible changes using the 7390 LT software only are:

- declaration/removal/reset of an NT terminal (cf. *§ 6.1 Declaration, deletion, reset of an NT*),
- implementation of client services (cf.*§ 6.2 Implementation of client services*).

The possible changes with physical intervention are:

- addition/removal of an NT unit (cf. *§ 6.1 Declaration, deletion, reset of an NT*),
- changing an NT unit (cf. *§ 5.4 Changing a faulty NT unit*),
- changing an RT unit (cf. *§ 6.3 Changing an RT*),
- addition of an NT to a cluster (cf. *§ 6.4 Adding an NT to a cluster*),
- affectation of an NT unit to another BS (cf. *§ 6.5 Affectation of an NT to another BS*).

6.1 Declaration, deletion, reset of an NT

To add a new NT :

- update the "Installation information" sheet required for station installation (refer to *Appendix 1 – 7390 TS installation sheet*),
- carry out installation (refer to *Chapter 3 Installation of the 7390TS Terminal Station*) and commissioning (refer to *Chapter 4 Commissioning the 7390 TS Terminal Station*) of the NT,
- to declare the new NT terminal, execute the commands indicated in section **Declaring a new NT** of the Base Station User Manual (ref. 3CC12424Axxx).

To delete a NT from the network:

- update the "Installation information" sheet required for station installation (refer to *Appendix 1 – 7390 TS installation sheet*),
- execute the commands indicated in section **NT deletion** of the Base Station User Manual (ref. 3CC12424Axxx),
- turn off power to unit using ON/OFF switch (reference 6 of *Figure 51 – The NT unit 220V*).

To reset a NT :

- execute the commands indicated in section **NT reset** of the Base Station User Manual (ref. 3CC12424Axxx).
- if necessary, update the "Installation information" sheet (refer to *Appendix 1 – 7390 TS installation sheet*).

To replace a NT :

- update the "Installation information" sheet required for station installation (refer to *Appendix 1 – 7390 TS installation sheet*),
- carry out installation (refer to *Chapter 3 Installation of the 7390TS Terminal Station*) and commissioning (refer to *Chapter 4 Commissioning the 7390 TS Terminal Station*) of the NT,
- make NT replace operation that changes serial number from old NT to new NT, execute the commands indicated in section **NT replace** of the Base Station User Manual (ref. 3CC12424Axxx).

6.2 Implementation of client services

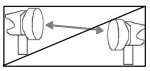
To implement client services :

- execute the commands indicated in section *Client services* of the Base Station User Manual (ref. 3CC12424Axxx),

Note: *The system benefits from E1 or IP links. For each case, use the specific procedure.*

- if necessary, update the "Installation information" sheet (refer to *Appendix 1 – 7390 TS installation sheet*).

6.3 Changing an RT



When changing the RT, as needs to be done in the event of **a change to the frequency band** on the Base Station, it is necessary to reinitialise the radio part configuration and in case of an integrated antenna **to carry out antenna alignment** (tracking).

To change the RT:

- turn off the mains supply to the NT,
- disconnect the mains cable,
- disconnect the RT/NT link cable,
- for an integrated antenna, carry out installation of the RT unit and tracking of the Terminal Station antenna (for this, refer to *Chapter 3 Installation of the 7390TS Terminal Station*).
- restart the Terminal Station. For this, refer to *Chapter 4 Commissioning the 7390 TS Terminal Station*.
- reconfigure the system according to the procedures in *Chapter 4 Commissioning the 7390 TS Terminal Station*.

For system initialization and retrofit, refer to section ***NT Supervision*** of the Base Station User Manual (ref. 3CC12424Axxx).

6.4 Adding an NT to a cluster

6.4.1 Case of a pre-wired installation

In the case of a pre-wired installation, for which an extension has been envisaged, the cables are already pulled, the distribution frames and repeaters are already in place and there are load modules filling the free NT locations.

To add an NT to a cluster:

- remove the load module,
- connect the NT in place of the load module,
- follow the procedure for adding an NT described in *§ 6.1 Declaration, deletion, reset of an NT*.

Note: *There is no service interruption and, furthermore, it is not necessary to reconfigure the radio parameters of the RT.*

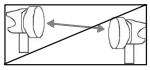
6.4.2 Case of a non-pre-wired installation

Where extension has not been envisaged, the repeaters and distribution frames must be wired, leading to an interruption of services. Once wiring has been carried out:

- follow the procedure for adding an NT described in *§ 6.1 Declaration, deletion, reset of an NT*,
- reconfigure the RT radio parameters as described in *§ 4.2.3 Site configuration and adjustment procedures*.

Note: *You are recommended, with a view to possible future Multi-NT use, to wire as for Multi-NT on first installation. This means that it will not be necessary to reset the RT, so avoiding the interruption of services.*

6.5 Affectation of an NT to another BS



To change the Base Station on a Terminal Station:

- delete the NT in the BS with the 7390 LT software beforehand (cf. *§ 6.1 Declaration, deletion, reset of an NT*),
- declare the NT in the new BS with the 7390 LT software,
- turn off the mains supply to the NT unit,
- carry out tracking of the Terminal Station antenna. For this, refer to *Chapter 3 Installation of the 7390TS Terminal Station*.
- restart the Terminal Station. For this, refer to *Chapter 4 Commissioning the 7390 TS Terminal Station*.
- reconfigure the system according to the procedures in *Chapter 4 Commissioning the 7390 TS Terminal Station*.

For system initialization and retrofit, refer to section *NT supervision* of the Base Station User Manual (ref. 3CC12424Axxx).

PAGE INTENTIONALLY LEFT BLANK

Appendix 1 – 7390 TS installation sheet

A.1.1 – 7390 RT INSTALLATION SHEET

General information

Name	**.....**	**Operator**
Address	**No .....**	
	Street	
	Bld ..... Stair	
	Floor	
	Town ..... Country	

Radio planning parameters

	Installation parameters to be entered (Radio planning instructions)	**Installation parameters entered (OK or new values)**
Site identification		
Name of the corresponding Base Station		
Sector number (1, 2, 3, 4, etc.)		
Distance between BS and TS		
Altitude difference		
Climatic zone (A, B, etc.)		
Availability		
RBS antenna type (dBi)		
RBS antenna tilt		
RBS power out		
RT antenna type (dBi)		
Polarization (H or V)		
Frequency band (GHz)		
Frequency down link		
Frequency up link		
Bandwidth		
Duplex deviation (MHz)		
Sub-band (A,.B, etc.)		

7390 RT INSTALLATION SHEET (continuation)

Designation	
Version	
Reference (3CC...)	
ICS (01,02, etc.)	
Serial number	
Reception level (dBm)	
Installation type (rooftop, tower, mast)	
Mecanical support References	
Radio installation height / ground	
Obstacle (type, distance,...)	

Installer: **Costumer:**

Date:

Name:

Visa:

A.1.2 – 7390 NT INSTALLATION SHEET

Name **Address**	**.....** **No .....** **Street .....** **Bld ..... Stair .....** **Floor .....** **Town ..... Country .....**	**Operator**

Designation	NT
Type	
Reference (3CC...)	
ICS (01,02, ...)	
Serial number	
Downloaded application	
Version	
Position, location of the equipment	
Installation type (Rack, wall-mounting, table)	
Mother board (Ref. + ICS + Serial number)	

ACCEPTANCE

Green LED lighting: (OK or NO OK) ☐

Red LED off: (OK or NO OK) ☐

Installer: **Costumer:**

Date:

Name:

Visa:

A.1.3 – 7390 RT/NT CABLING SHEET

Diagram marks				
Type of cable				
Length between RT and the first element				
Splitter references				
Splitter serial numbers				
Repeater references				
Repeater ICS				
Repeater serial number				
75 ohm load references				

Connecting diagram

Installer: **Costumer:**

Date:

Name:

Visa:

A.1.4 – LIST OF CHECKPOINTS FOR TS COMMISSIONING

CHECK SAFETY RULE

- Equipment grounding OK ☐ NOK ☐
- Differential protection OK ☐ NOK ☐
- Fire protection OK ☐ NOK ☐

CHECK RT INSTALLATION

- No pollutants or possible flow on the RT OK ☐ NOK ☐
- No possible trespassing in the RT antenna field OK ☐ NOK ☐
- Direct view between RT antenna and base station antenna OK ☐ NOK ☐
- Use of a torque wrench for the RT assembly OK ☐ NOK ☐
- Support stiffness and absence of vibrations OK ☐ NOK ☐
- Same polarization as for base station antenna OK ☐ NOK ☐

CHECK CABLES BETWEEN RT and NT

- N 75Ω connectors RT side OK ☐ NOK ☐
- Watertightness by thermoshrinkable pre-pasted sleeve RT side OK ☐ NOK ☐
- No cable strain OK ☐ NOK ☐
- Observe minimum bend radius OK ☐ NOK ☐

CHECK NT INSTALLATION

- Min Max temperature of the premises hosting the NT (-5º to + 55ºC) OK ☐ NOK ☐
- Ventilation clearance above the NT OK ☐ NOK ☐
- Check the NT grounding OK ☐ NOK ☐
- Check that all client access cables are shielded cables OK ☐ NOK ☐
- Diagram compliant with multi-NT connection OK ☐ NOK ☐
- Repetear(s) installed indoor OK ☐ NOK ☐

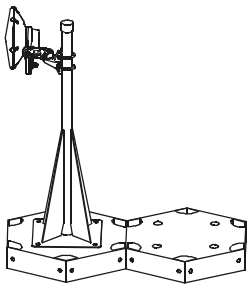
PAGE INTENTIONALLY LEFT BLANK

Appendix 2 – Using the DALLET® system by SOFRER™ for 1m & 1.5m high mast on rooftop

Recommendations according to Snow and Wind Rules NV 65 are only indications and should be verified according to the sites.

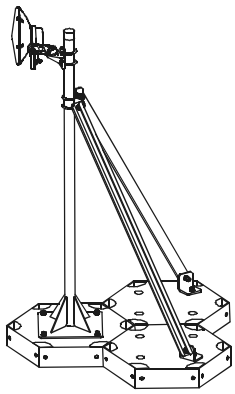
Feet weight : about 50 Kg for each DALLET.

Zone 1 and Zone 2



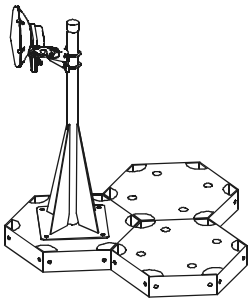
2 DALLET

Zone 1 and Zone 2



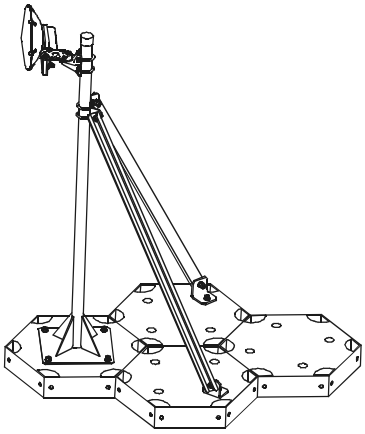
3 DALLET

Zone 3



3 DALLET

Zone 3

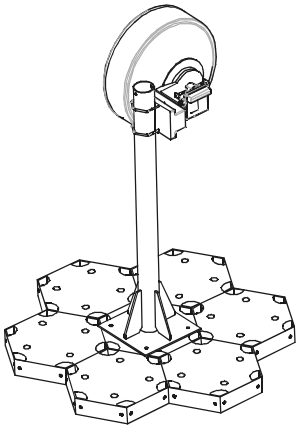


4 DALLET

Figure 61 – Dallet system for 26 cm antenna

	Before any use, verify the rules applicable locally and compute according to the regulations.

Dallet system for 60 cm antenna



7 DALLET

Figure 62 – Dallet system for zone 1, 2 and 3

Appendix 3 – Mounting coaxial connectors

Sheet "N" 75Ω

Delta Ohm	**SPECIFICATION TECHNIQUE** *Fiche N mâle à sertir pour câble 75 ohms - ET 2PA 981*	**DSP-511** 03-01-D Page 1 sur 2

DATA SHEET

Crimp type N male plug for 75 ohms cable – ET 2PA 981

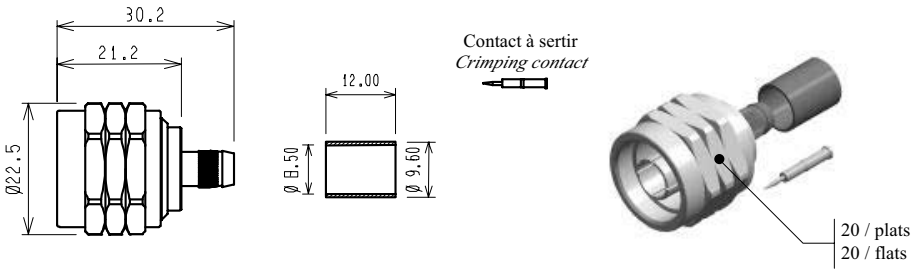
1. CODIFICATION / *Reference.*

Réf. DELTA OHM	***: 08 250 178***
Réf. ALCATEL	***: 1AB019020005***

2. CABLIER / *Cable manufacturer.*

Ref. FILOTEX	***: ET 2PA 981***
Dimension du câble */ Cable dimension*	***: Ame : ø1.02±0.1; Diélec. ø4.6±0.1; Gaine : ø7.15±0.15*** *: Core : ø 1.02±0.1; Dielectric : ø 4.6±0.1; Jacket : ø 7.15±0.15*

3. DIMENSION / *Dimension.*



4. CARACTERISTIQUE ELECTRIQUE *Electrical characteristic.*

Impédance caractéristique / *Characteristic impedance*		***: 75Ω ± 2%***
Fréquence d'utilisation / *Operating frequency range*		***: DC – 3 GHz***
Résistance d'isolement / *Insulation resistance*		***: ≥ 5 x 10³ MΩ***
Tension de service au sol / *Working voltage at sea level*		***: 1 kVeff / 50 Hz***
Essai de tenue en tension au sol / *Proof voltage at sea level*		***: 1.5 kVeff / 50 Hz***
Pertes d'insertion / *Insertion loss*		***: ≤ 0.05 dB***
Résistance de contact / *Contact resistance*	- Contact central / *Center contact*	***: ≤ 1 mΩ***
	- Contact extérieur / *Outer* contact	***: ≤ 0.2 mΩ***

5. CARACTERISTIQUE MECANIQUE / *Mechanical characteristic.*

Matière et protection du contact central */ Material and finish of the center contact*	***: LAITON doré*** *: Gold plated brass*
Matière et protection des autres parties métalliques */ Material and finish of the other metal parts*	***: LAITON nickelé*** *: Nickel plated brass*
Isolant / *Insulator*	***: PTFE***
Connecteur (accouplement) */ Connector (coupling)*	***: N mâle conforme à la norme NF C 93566*** *: N male in compliance with NF C 93-566 standard*
Traction sur le câble / *Cable retention force*	***: ≥ 2 daN***
Blocage du système de verrouillage (accouplement) */ Locking system clamping (coupling)*	***: Effectué avec un couple = 0,7 N.m à 1,1 N.m*** *: Executed with torque = 0.7 N.m to 1.1 N.m*
Etanchéité à l'accouplement / *Coupling tightness*	***: IP 67 par joint plat en SILICONE*** / *by Silicone gasket*
Température d'utilisation / *Operating temperature range*	***: - 40 °C < θ < + 65 °C***
Poids / *Weight*	***: 33 g***

6. DIVERS / *Miscellaneous.*

Conditionnement / *Packaging*	***: unitaire*** / *per unit*

Rédigé par :	Approuvé par :	Edition du : / /

Mise à jour	Par	Le	Objet de la mise à jour
B	*BLONDEAU*	*23-02-2000*	*Modification suivant DT 016-00*
C	*ESTEBANEZ*	*06-07-2000*	*Modification suivant FIP 00-27-074*
D	*ESTEBANEZ*	*08-03-2001*	*Modification suivant FIP 01-10-022*

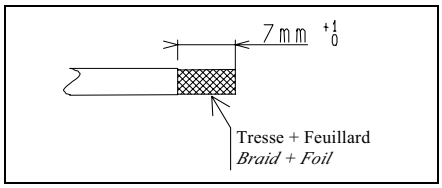
Fiche "F" 75Ω

Delta Ohm	SPECIFICATION TECHNIQUE *Fiche N mâle àsertir pour câble 75 ohms - ET 2PA 981*	DSP-511 03-01-D Page 2 sur 2

7. PREPARATION DU CABLE *(Cable preparation).*

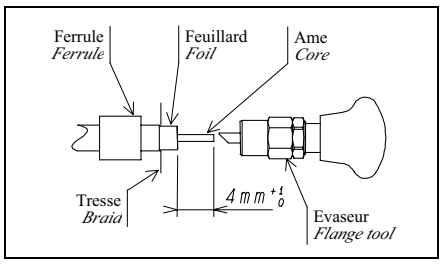
7.1 F - Dénuder la tresse *(7 mm).*

GB - *Strip the braid (7 mm).*



7.2 F - Monter la ferrule et rabattre la tresse. Dénuder l'âme (4 mm). Evaser entre le feuillard et la tresse à l'aide de l'outil **22-395-036**.

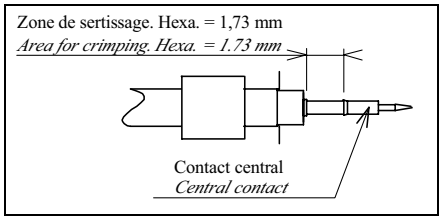
GB - *Insert the ferrule and flange the braid. Strip the core (4 mm). Widen between the foil and the braid with the tool* ***22-395-036***.



8. MONTAGE DU CONNECTEUR *(Mounting of the connector).*

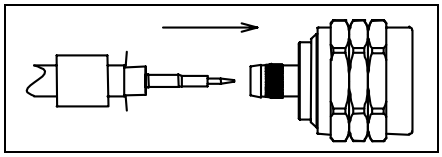
8.1 F - Monter le contact central sur l'âme du câble et sertir celui-ci à l'aide de la pince **22-395-208** (hexagone 1,73 mm).

GB - *Insert the center contact on the core of the cable and crimp with the pliers* ***22-395-208*** *(hexagon 1,73 mm).*



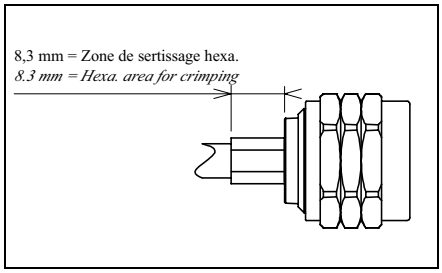
8.2 F - Insérer le câble équipé dans le corps. Couper le surplus de tresse au ras du corps.

GB - *Insert the assembled cable into the body. Cut the excess of braid against the body.*



8.3 F - Positionner la ferrule et sertir celle-ci à l'aide de la pince **22-395-208** (hexagone 8,3 mm).

GB - *Set up the ferrule and crimp it with pliers* ***22-395-208*** *(hexagon 8,3 mm).*



Rédigé par :	Approuvé par :	Edition du : / /

ALCATEL

Filotex ®

Coaxial cable 75Ω

PRODUCT REFERENCES

FILOTEX ref. : **ET 2PA 981**

CONSTITUTION

1 1.02 +/– 0.1 mm bare copper inner conductor

2 Cellular polyolefin insulation Ø = 4.60 +/– 0.1 mm

3 Aluminium/PET/Aluminium tape

4 Tinned copper braid (filling factor ≥ 60%).

5 LSZH ivory jacket Ø = 7.15 +_ 0.15 mm

Weight : 58 Kg/Km

Main applications

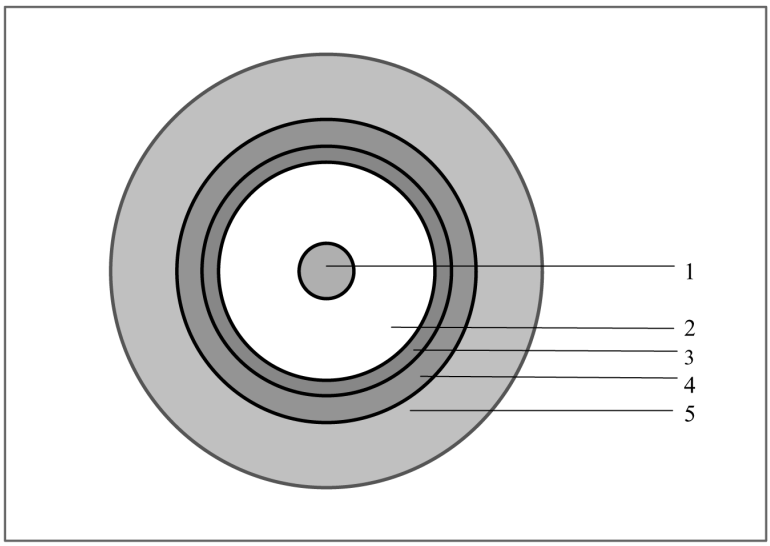
- Drop coaxial cable for indoor/outdoor applications.

Electrical values

- Characteristic impedance : 75Ω
- Nominal capacitance : 55.5 pF/m
- Relative velocity of propagation : 82 %
- Dielectric strength : 1.5 Kv
- Jacket strength : 3.0 Kv
- DC loop resistance ar 20 degres : 38.5Ω /km
- Attenuation at 50 MHz : < 4.72 dB/100 m
  300 MHz : < 11.10 dB/100 m
  450 MHz : < 13.70 dB/100 m
  600 MHz : < 16 dB/100 m
  860 MHz : < 19.50 dB/100 m
  1000 MHz : < 21.10 dB/100 m
  2000 MHz : < 32.40 dB/100 m
- Screening attenuation from 100 to 1000 MHz : ≥ 85 dB according to IEC1196–1§12–4.
- Structural return loss : 30 to 450 MHz : > 20 dB
  450 to 600 MHz : > 18 dB
  600 to 1000 MHz : > 15 dB
  1000 to 2000 MHz : > 12 dB
- Tolerance : 3 peaks at – 4 dB in each bandwith

Physical characteristics

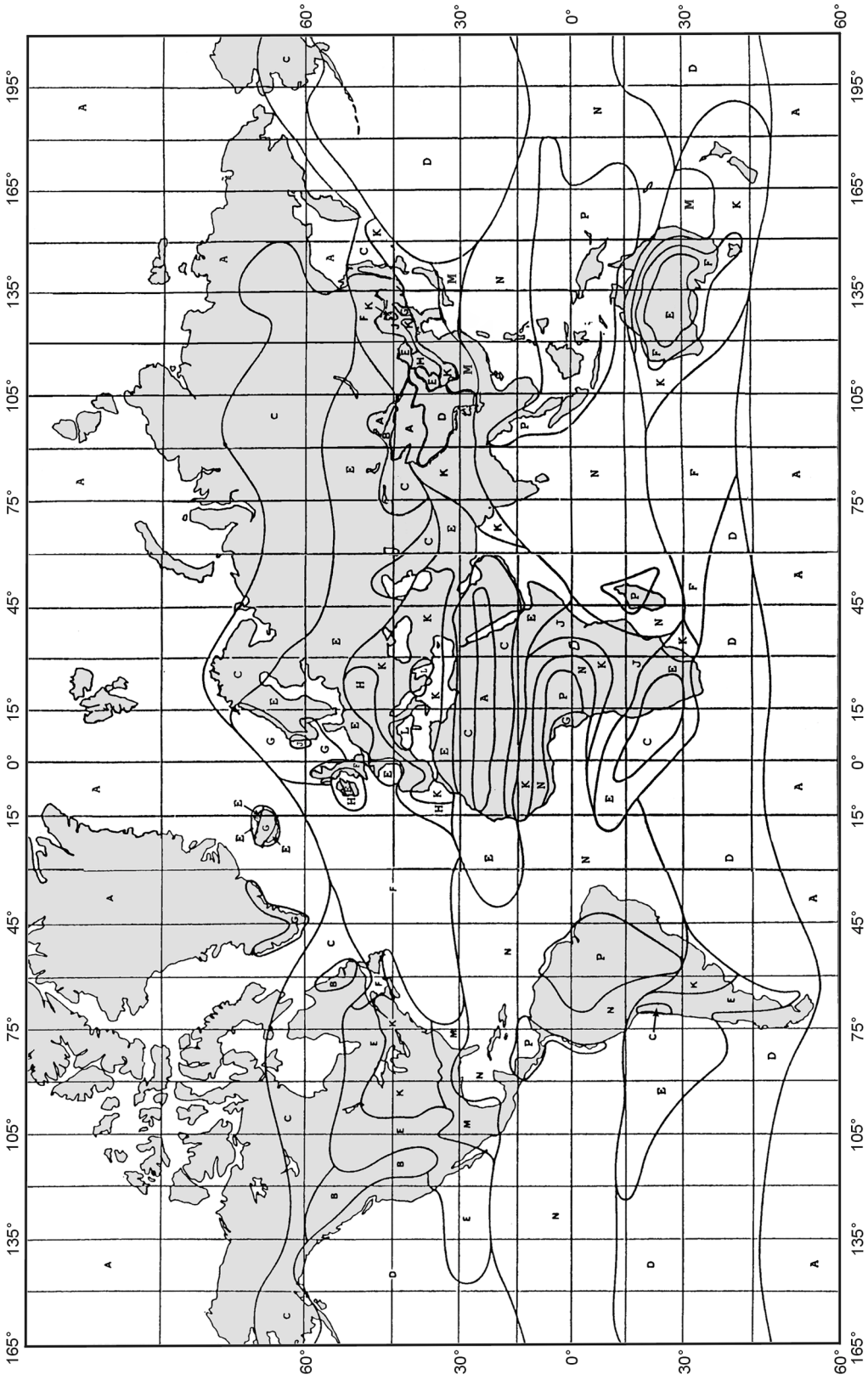
- Maximum pulling strength : 34 daN
- Minimum bending radius for one single bend : 40 mm
  for 10 bends : 80 mm
- Weathering resistance according to NFC 20 540
- Resistance to propagation according to IEC 332–3 but with a reduced volume of flamable material (0.5l instead of 1.5l)
- Smoke emission according to IEC 1034–2
- Halogen content according to IEC 754–1



Information subject to change without notice.

PAGE INTENTIONALLY LEFT BLANK

Appendix 4 – Climatic areas world map



PAGE INTENTIONALLY LEFT BLANK

Appendix 5 – Correspondence between commercial codes and industrial codes relating to the TS

Installation item	Commercial code	Industrial code	Comments
7390 NC - commercial NT **NT unit**			
NCA 001 (2 Eth + 2 G703) 220V	9900NCA001+ 9900SWA001	3CC 10329 AAxx	Without power cable
NGA 001 (2 Eth + G703,) 48V	9900NGA001+ 9900SWA001	3CC 10329 BCxx	With cable 48 V
NGA 004 (2 Eth + 2G703, LEMO) 48V	9900NGA004+ 9900SWA001	3CC 10329 BFxx	With cable 48 V
NCA 002 (2 Eth + 1G703 + X21) 220V	9900NCA002+ 9900SWA001	3CC 10329ABxx	Without power cable
NCB 001 (2 Eth + 4 ISDN- 2B1Q-60 V) 220V	9900NCB001+ 9900SWA001	3CC 10329 ALxx	Without power cable
NGB 001 (2 Eth + 4 ISDN- 2B1Q-60 V) 48V	9900NGB001+ 9900SWA001	3CC 10329 AWxx	With cable 48 V
NCD 001 (2 Eth) 220V	9900NCD001+ 9900SWA001	3CC 10329 ACxx	Without power cable
NCE 001 (2 Eth + 2 T1 ANSI) 220V	9900NCE001+ 9900SWA001	3CC 10329 AExx	Without power cable
NCB 002 (2 Eth + 4 ISDN-4B3T -60 V) 220V	9900NCB002+ 9900SWA001	3CC 10329 ATxx	Without power cable
NGB 002 (2 Eth + 4 ISDN-4B3T -60 V) 48V	9900NGB002+ 9900SWA001	3CC 10329 AZxx	With cable 48 V
7390 NC - commercial NT **NT Lite unit**			
NCF 001 (1 Eth + 1E1 (G703)) 220V	9900NCF001+ 9900SWA001	3DG 55004 AAxx	Without power cable
NCG 001 (1 Eth + 1T1 ANSI) 220V	9900NCG001+ 9900SWA001	3DG 55004 ADxx	Without power cable
RT installation items Indoor-outdoor cabling			
coaxial cable 6F(TC) 75 Ohm	9900XTA001 70 m	1AC 00273 0003 (per meter)	(70 meters)
Crimping tool Delta Ohms	9900YTB001	3CC 11239 AAxx	

Installation item	Commercial code	Industrial code	Comments
Repeater (without cable)	9900XTB002	3CC 08473 AAxx	
Passive Splitter (with-out cable)	9900XTC002	3CC11234AAAxx	
Bended pipe (48 mm of diameter)	9900XTE001	3CC 11132 AAxx	
Self-supporting mast 1 meter (48 mm of diameter)	9900XTD002	3CC 11133 AAxx	
self-supporting mast 1.5 meter (48 mm of diameter)	9900XTD001	3CC 11134 AAxx	
74/114mm-pipe adaptation kit	9900XTF001	3CC 10802 Aaxx	
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 11955 AAxx 3CC 11945 AAxx	24/800/A 24 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 10884 AAxx 3CC 11589 AAxx	25/1008/A 25 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 10884 ABxx 3CC 11589 ABxx	25/1008/B 25 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 10884 ACxx 3CC 11589 ACxx	25/1008/C 25 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 10884 ADxx 3CC 11589 ADxx	25/1008/D 25 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 11196 AAxx 3CC 11943 AAxx	25/1480/A 25 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 11196 ABxx 3CC 11943 ABxx	25/1480/B 25 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 10885 AAxx 3CC 10944 AAxx	26/855/A 26 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 10885 ABxx 3CC 11944 ABxx	26/855/B 26 GHz RT with N connector RT with F connector
24-30 GHz-RT with an integrated antenna of 26 cm	9900RTA001	3CC 11956 AAxx 3CC 12115 AAxx	28/425/A 28 GHz RT with N connector RT with F connector