

المواصفات الفنية الخاصة بالمناقصة العامة

رقم المناقصة : (٢٠١١/١١)

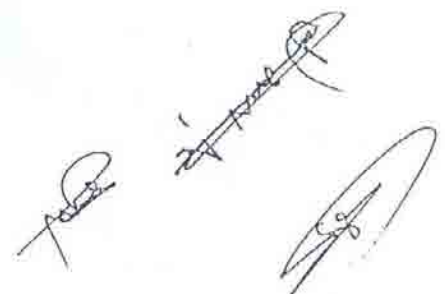
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المؤسسة العامة للاتصالات السلكية واللاسلكية

الإدارة العامة للمشتريات والمخازن

إدارة المشتريات - قسم العقود والمناقصات

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1. General.

This specification details construction, electrical and mechanical requirements, testing and packing of 1 Pair self supporting drop wire, to be installed between distribution points and telephone subscribers premises.

2. Associated Documents.

2.1. where international standards are not available, standards in accordance with ASTM (American Society for Testing and Materials) and BS (British Standards) Have been specified. The latest Issues shall apply and deemed to be Integral parts of this specification.

2.1.1 The following standards are referred to in this specification:

ASTM B 3	Conductor, Quality Copper Wire
ASTM D 1248	Insulation, Quality of Polyethylene Compound.
MAT - 061	Inspection and Testing.
MAT - 062	Packing and Marking.

3. Temperature and Environment.

3.1. The drop wire shall, without detriment, maintain the physical and electrical characteristics detailed in this specification, over a working temperature range of 10 C to + 80 C.

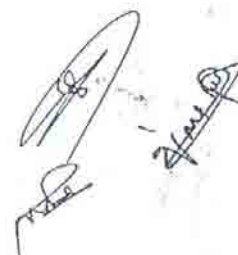
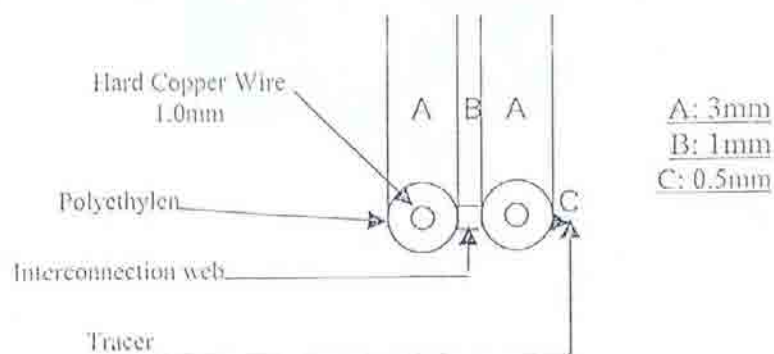
3.2. The drop wire shall suffer no deterioration from sunlight of corrosive Elements in the atmosphere.

4. Construction.

4.1. The assembly shall consist of two conductors laid parallel, insulated to form a Figure 8 configuration. It shall be possible to separate the drop wire into two, fully insulated conductors by cutting along the interconnecting web.

4.2. Polarity identification shall be provide by a single ridge tracer longitudinally moulded along the jacket throughout the intere length the drop wire unaided eye and to the touch.

4.3. The dimension of the drop wire shall be as shown in the figer below
- The thickness of the conductor insulation must be 1.0 mm



5. Materials

5.1. Conductors

Each conductor shall consist of hard drawn Copper Wire. The conductor shall meet the requirements of ASTM B 3 have a conductivity of at least 99%. The diameter of the conductor shall be 1.00mm.

5.2. Insulation

5.2.1. The Insulation shall be high density polyethylene (H. D.P.E).

5.2.2. The Polyethylene compound shall be according to (ASTM D 1248).

5.2.3. The insulation must contain 2.5% black carbon uniformly distributed along the insulation.

5.2.4. A finished drop wire shall not support combustion fire more than one minute after five 15 – Seconds applications of standard test flame to a vertically supported specimen with an interval of 15 Seconds between successive applications of the flame. The specimen shall not convey flame either during or after five applications of the test flames.

6. Electrical Requirements.

6.1. The maximum conductor resistance shall be 23 Ω /km at +20 c.

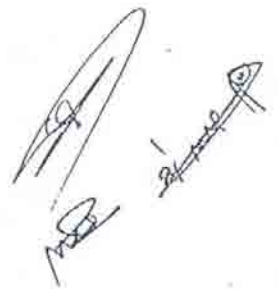
6.2. The resistance unbalance between two conductors shall not exceed 2% of the loop resistance.

6.3. The insulation resistance at 500 VDC must be 5000 M Ω /km (1min).

6.4. dielectric strength must be 4000 V AC (3 min).

6.5. The mutual capacitance, measured in dry air at 800 Hertz on Cable length shall not exceed 40 nF/Km.

6.6. The drop wire shall pass an immersion test according to MAT-061 without breakdown.



7. Mechanical Requirements.

All tests shall be performed as specified in Specification MAT-061.

7.1. Conductor

7.1.1. The tensile strength shall be not less than 400 N/mm for 1.0mm.

7.2. Insulation

7.2.1. Polyethylene

7.2.1.1. The maximum melt flow index shall be 0.5.

7.2.1.2. The tensile strength shall be not less than 12.5 N/m the ultimate elongation not less than 400%.

8. Sample

The submitted sample must be not less than (100m).

9. Compliance.

Tenderers shall state their compliance with this specification. Any deviations suggested by a manufacturer, shall be fully documented and may be presented in the form of an alternative offer.

10. Delivery lengths.

The drop wire shall be delivered in coils of 500 Meter length.


11. Inspection.

The manufacturer shall keep suitable summary records for a period of not less than five years of all electrical and physical test data. The test results will be supplied along with each consignment.

12. Packing and Marking.

Packing / Unpacking instructions may be supplied along with each consignment. The packing material should not contain any sharp edges or nails which may damage the material.

*** END OF SPECIFICATION ***



Information to be Submitted with the Tender

Tenderers shall be give details of the construction of drop wire physical, Electrical & Mechanical Characteristic in the relating to the concerned tender in the form given table below.

	Characteristics	Tender Offer.
1	Construction	
1.1	Conductor Material	
1.2	Conductor Diameter (mm)	
1.3	Insulation Material	
1.4	Insulation Thickness (A,B,C)	
1.5	Black Carbon Content drop wire	
1.6	Weight of copper per 500m of conductor	
1.7	Overall weight of roll (500m). Kg	
1.8	Standard length of roll (500m)	
2	Electrical Characteristic at 20C	
2.1	Conductivity of conductor %	
2.2	Max conductor resistance Ω /km	
2.3	Resistance unbalance between tow conductors /km	
2.4	Insulation resistance at (500 VDC)	
2.5	Dielectric Strength.	
2.6	Mutual capacitance at 800Hz	
3	Mechanical characters tic	
3.1	Tensile strength of Conductor	
3.2	Conductor elongation	
3.3	Tensile strength of insulation	
3.4	Insulation elongation	
4	Sample	
4.1	Length of the sample	

Schedule to tender No.11/2011
for the supply of

BLACK DROP WIRE

No.	Items	Qty. ROLL	Unit price	Total price
1	BLACK DROP WIRE	4,000		

NOTES: -

The tenderers must reply to the following points, otherwise the offer will be rejected: -

1. Complete statement from the manufacturing company regarding specification compliance.
2. Reply to all points of technical specifications, which is stated in PTC technical schedules.
3. Catalogs and documents, specifying construction of cables.
4. Samples must be applicable to the submitted offer as per PTC specifications, and must not be less than 100 meters in length.
5. History of supply experiences.

ملاحظات:-

- يجب الإجابة على هذه الأسئلة الموضحة أدناه وسوف لا ينظر إلى أي عطاء مالم يكن مستوفي هذه الشروط:-
١. الإجابة المعملية من الشركة المصنعة على كل مواصفات المؤسسة.
 ٢. الإجابة على المواصفات الفنية الموضحة في الجداول الفنية .
 ٣. الكاتلوجات والوثائق التي توضح تركيب الكابلات المطلوبة.
 ٤. العينات المقدمة يجب أن تكون مطابقة للعرض المقدم ولا تقل عن ١٠٠ متر.
 ٥. الخبرة التزويدية للمصنع.