المواصفات الفنية الخاصة بالمناقصة العامة

رقم المناقصة : (٢٠١١/٧٣)

الخاصة بشراء وتوريد (٩٩٠) موفة ألياف ضوئية مختلفة السعات

المؤسسة العامة للاتصالات السلكية واللاسلكية

الإدارة العامة للمشتريات والمخازن

إدارة المشتريات - قسم العقود والمناقصات

Fibre Optic Splice Closures (Distribution Joint, 24/40 Fibres)

1- The closures is required for joining the two main cables (24 fibres, armoured, loose tubes (each cable has 6 loose tubes and each tube has 4 fibres)) and to splice them with the secondary fibre access cables (40 fibres).

2- The closure should include all the jointing materials for splicing (40 fibres) in addition to the fibre protection sleeves and moisture absorption compound Minimum of four cable entries, three cable entries materials should be supplied with the closure kit and the remaining entries with removable plugs and cable entries materials for future use.

3- Minimum four cable entries with diameters range from =22mm. and the cable entries should be divided in the two side of the closure.

4- The closure should be directly buried and in cable ducts with manholes.

5- The closure should be a mechanical type and be able to re-enterable many times for easy splicing any new branch cable. With out adding any new materials.

6- Equipped with fibre organizer trays of (24 fusion splices per each tray) with total capacity of 24/40 fibre splices and to hold the fibres splice parts and access length of fibre after splicing.

7- The splice trays or units should be movable ones to easy splicing any fibre to new branches without affecting the working ones –

8- The protection sleeve in the splice trays should be in on layer for easy maintenance.

9- The splice trays should be suitable for fusion and mechanical splice.

10- The capacity of the closure should be not less than 40 fibre splices.

11- It should have fixed parts to hold the central strength member of the cable so to prevent the cable from pulling out and prevent fibre bending in the organizer when the cable is twisted when handling the closure.

12- The closure should be with an appropriate dimension to prevent fibres and buffers from too tight bending radii.

13- It should be corrosion resistant and watertight.

14- It should be able to withstand maximum tensile load and the pressure when used for buried application.

15- It should be offered with materials of mounting on the manholes wall.

16- It should be considered that the manholes where the closures will be mounted might be filled with water fluid in the rain sessions.

17- The tenderer should offer one sample of the offered closure.

18- The closures should be opened and reclosed as of ten as required with out using power, consumable material or special tools.

19- The closures should include the pressure gas valve.

20- The closures shall be designed for a life expectancy of at least 30 years.

21- We will refuse the closures with the cylindrical shape.

22- The tender should offer catalogues for each type, which clear the mechanical construction details, dimension, drawing of the product offered and the installation construction. And should be in English language.

23- Information to be supplied: Manufacturers name - country of origin – make /model/code No-Closure content - materials used - operating environments.

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Technical data sheet of optical fibre closure 24/40 fibre

Characteristics	Offered by the Tender
1- Closure - Capacity - Cable entries - Cable entire diameter - Cable fixing - Dimension - Corrosion resistant - Water tight - Max tensile load - Max pressure - Opened and reclosed as often as required with out using power, consumable material or special tools. - Including pressure gas value - Life expectancy	
2- Organizer trays - Tray no - Tray capacity - Protection sleeve arrangement in the tray - Suitable for fusion and mechanical splice - Tray dimension - Splice tray movability	
3- Materials - Jointing materials for splicing the full capacity - Cable entries materials - materials of mounting on the manholes wall	

Distribution Joint,24/40 fibres

Item	specification	
1- Closure		
Material of closure	plastic	
Capacity of closure	24 to 40 fibers	Expandable to72 fiber by adding cassettes
Number of entries	Minimum 6	
Cable enter diameter	6 min . 29 max .	
Cable fixing	Fixed by base of Galvanized steel	
Dimension Of Closure (L * W * H)mm	Min 450 * 200 * 150 Max 700 * 380 * 300	
Corrosion resistant	yes(necessary)	
Water tight	found	
Max tensile load	yes(necessary)	
Max pressure	yes(necessary)	
Opened and reclosed as often as required without using power consumable material or special tools	yes(necessary)	
Including pressure gas value	found	
Life expectancy	30 year	
2- Organizer trays		
Number of tray	2 to 4	
Tray capacity	12 to 24	
Protection sleeve arrangement in the tray	Arrangement shape	
Suitable for fusion and mechanical splice	yes(necessary)	
Tray dimension	suitable	
Splice tray movability	easy	
3- Materials		
Jointing materials for splicing the full capacity	found	
Cable entries materials	found	
Materials of mounting on the manholes wall	found	

Note:-

***The closure should have area under the splice trays or in side of closure in order to keep of spear of loose tubes.*

Fibre Optic Splice Closures (Distribution Joint, 36/48 Fibres)

1- The closures is required for joining the two main cables (36 fibres, armoured, loose tubes (each cable has 6 loose tubes and each tube has 6 fibres)) and to splice them with the secondary fibre access cables (48 fibres).

2- The closure should include all the jointing materials for splicing (48 fibres) in addition to the fibre protection sleeves and moisture absorption compound Minimum of four cable entries, three cable entries materials should be supplied with the closure kit and the remaining entries with removable plugs and cable entries materials for future use.

3- Minimum four cable entries with diameters range from =22mm. and the cable entries should be divided in the two side of the closure.

4- The closure should be directly buried and in cable ducts with manholes.

5- The closure should be a mechanical type and be able to re-enterable many times for easy splicing any new branch cable. With out adding any new materials.

6- Equipped with fibre organizer trays of (24 fusion splices per each tray) with total capacity of 36/48 fibre splices and to hold the fibres splice parts and access length of fibre after splicing.

7- The splice trays or units should be movable ones to easy splicing any fibre to new branches without affecting the working ones –

8- The protection sleeve in the splice trays should be in on layer for easy maintenance.

9- The splice trays should be suitable for fusion and mechanical splice.

10- The capacity of the closure should be not less than 48 fibre splices.

11- It should have fixed parts to hold the central strength member of the cable so to prevent the cable from pulling out and prevent fibre bending in the organizer when the cable is twisted when handling the closure.

12- The closure should be with an appropriate dimension to prevent fibres and buffers from too tight bending radii.

13- It should be corrosion resistant and watertight.

14- It should be able to withstand maximum tensile load and the pressure when used for buried application.

15- It should be offered with materials of mounting on the manholes wall.

16- It should be considered that the manholes where the closures will be mounted might be filled with water fluid in the rain sessions.

17- The tenderer should offer one sample of the offered closure.

18- The closures should be opened and reclosed as of ten as required with out using power, consumable material or special tools.

19- The closures should include the pressure gas valve.

20- The closures shall be designed for a life expectancy of at least 30 years.

21- We will refuse the closures with the cylindrical shape.

22- The tender should offer catalogues for each type, which clear the mechanical construction details, dimension, drawing of the product offered and the installation construction. And should be in English language.

23- Information to be supplied: Manufacturers name - country of origin – make /model/code No-Closure content - materials used - operating environments.

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Technical data sheet of optical fibre closure 36/48 fibre

Characteristics	Offered by the Tender
1- Closure - Capacity - Cable entries - Cable entire diameter - Cable fixing - Dimension - Corrosion resistant - Water tight - Max tensile load - Max pressure - Opened and reclosed as often as required with out using power, consumable material or special tools. - Including pressure gas value - Life expectancy	
2- Organizer trays - Tray no - Tray capacity - Protection sleeve arrangement in the tray - Suitable for fusion and mechanical splice - Tray dimension - Splice tray movability	
3- Materials - Jointing materials for splicing the full capacity - Cable entries materials - materials of mounting on the manholes wall	

Distribution Joint,36/48 fibres

Item	specification	
1- Closure		
Material of closure	plastic	
Capacity of closure	36 to 48 fibers	Expandable to72 fiber by adding cassettes
Number of entries	Minimum 6	
Cable enter diameter	6 min . 29 max .	
Cable fixing	Fixed by base of Galvanized steel	
Dimension Of Closure (L * W * H)mm	Min 450 * 200 * 150 Max 700 * 380 * 300	
Corrosion resistant	yes(necessary)	
Water tight	found	
Max tensile load	yes(necessary)	
Max pressure	yes(necessary)	
Opened and reclosed as often as required without using power consumable material or special tools	yes(necessary)	
Including pressure gas value	found	
Life expectancy	30 year	
2- Organizer trays		
Number of tray	2 to 4	
Tray capacity	12 to 24	
Protection sleeve arrangement in the tray	Arrangement shape	
Suitable for fusion and mechanical splice	yes(necessary)	
Tray dimension	suitable	
Splice tray movability	easy	
3- Materials		
Jointing materials for splicing the full capacity	found	
Cable entries materials	found	
Materials of mounting on the manholes wall	found	

Note:-

The closure should have area under the splice trays or in side of closure in order to keep of spear of loose tubes.

Fibre Optic Splice Closures (Distribution Joint, 48/72 Fibres)

1- The closures is required for joining the two main cables (48 fibres, armoured, loose tubes (each cable has 6 loose tubes and each tube has 8 fibres)) and to splice them with the secondary fibre access cables (72 fibres).

2- The closure should include all the jointing materials for splicing (48 fibres) in addition to the fibre protection sleeves and moisture absorption compound Minimum of four cable entries, three cable entries materials should be supplied with the closure kit and the remaining entries with removable plugs and cable entries materials for future use.

3- Minimum four cable entries with diameters range from =22mm. and the cable entries should be divided in the two side of the closure.

4- The closure should be directly buried and in cable ducts with manholes.

5- The closure should be a mechanical type and be able to re-enterable many times for easy splicing any new branch cable. With out adding any new materials.

6- Equipped with fibre organizer trays of (24 fusion splices per each tray) with total capacity of 48/72 fibre splices and to hold the fibres splice parts and access length of fibre after splicing.

7- The splice trays or units should be movable ones to easy splicing any fibre to new branches without affecting the working ones –

8- The protection sleeve in the splice trays should be in on layer for easy maintenance.

9- The splice trays should be suitable for fusion and mechanical splice.

10- The capacity of the closure should be not less than 72 fibre splices.

11- It should have fixed parts to hold the central strength member of the cable so to prevent the cable from pulling out and prevent fibre bending in the organizer when the cable is twisted when handling the closure.

12- The closure should be with an appropriate dimension to prevent fibres and buffers from too tight bending radii.

13- It should be corrosion resistant and watertight.

14- It should be able to withstand maximum tensile load and the pressure when used for buried application.

15- It should be offered with materials of mounting on the manholes wall.

16- It should be considered that the manholes where the closures will be mounted might be filled with water fluid in the rain sessions.

17- The tenderer should offer one sample of the offered closure.

18- The closures should be opened and reclosed as of ten as required with out using power, consumable material or special tools.

19- The closures should include the pressure gas valve.

20- The closures shall be designed for a life expectancy of at least 30 years.

21- We will refuse the closures with the cylindrical shape.

22- The tender should offer catalogues for each type, which clear the mechanical construction details, dimension, drawing of the product offered and the installation construction. And should be in English language.

23- Information to be supplied: Manufacturers name - country of origin – make /model/code No-Closure content - materials used - operating environments.

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Technical data sheet of optical fibre closure 48/72 fibre

Characteristics	Offered by the Tender
1- Closure - Capacity - Cable entries - Cable entire diameter - Cable fixing - Dimension - Corrosion resistant - Water tight - Max tensile load - Max pressure - Opened and reclosed as often as required with out using power, consumable material or special tools. - Including pressure gas value - Life expectancy	
2- Organizer trays - Tray no - Tray capacity - Protection sleeve arrangement in the tray - Suitable for fusion and mechanical splice - Tray dimension - Splice tray movability	
3- Materials - Jointing materials for splicing the full capacity - Cable entries materials - materials of mounting on the manholes wall	

Distribution Joint,48/72 fibres

Item	specification	
1- Closure		
Material of closure	plastic	
Capacity of closure	48 to 72 fibers	Expandable to96 fiber by adding cassettes
Number of entries	Minimum 6	
Cable enter diameter	6 min . 29 max .	
Cable fixing	Fixed by base of Galvanized steel	
Dimension Of Closure (L * W * H)mm	Min 450 * 200 * 150 Max 700 * 380 * 300	
Corrosion resistant	yes(necessary)	
Water tight	found	
Max tensile load	yes(necessary)	
Max pressure	yes(necessary)	
Opened and reclosed as often as required without using power consumable material or special tools	yes(necessary)	
Including pressure gas value	found	
Life expectancy	30 year	
2- Organizer trays		
Number of tray	3 to 6	
Tray capacity	12 to 24	
Protection sleeve arrangement in the tray	Arrangement shape	
Suitable for fusion and mechanical splice	yes(necessary)	
Tray dimension	suitable	
Splice tray movability	easy	
3- Materials		
Jointing materials for splicing the full capacity	found	
Cable entries materials	found	
Materials of mounting on the manholes wall	found	

Note:-

***The closure should have area under the splice trays or in side of closure in order to keep of spear of loose tubes.*

Fibre Optic Splice Closures (Distribution Joint, 72/128 Fibres)

1- The closures is required for joining the two main cables (72 fibres, armoured, loose tubes (each cable has 6 loose tubes and each tube has 12 fibres)) and to splice them with the secondary fibre access cables (36 fibres).

2- The closure should include all the jointing materials for splicing (72 fibres) in addition to the fibre protection sleeves and moisture absorption compound Minimum of four cable entries, three cable entries materials should be supplied with the closure kit and the remaining entries with removable plugs and cable entries materials for future use.

3- Minimum four cable entries with diameters range from =22mm. and the cable entries should be divided in the two side of the closure.

4- The closure should be directly buried and in cable ducts with manholes.

5- The closure should be a mechanical type and be able to re-enterable many times for easy splicing any new branch cable. With out adding any new materials.

6- Equipped with fibre organizer trays of (24 fusion splices per each tray) with total capacity of 72/128 fibre splices and to hold the fibres splice parts and access length of fibre after splicing.

7- The splice trays or units should be movable ones to easy splicing any fibre to new branches without affecting the working ones –

8- The protection sleeve in the splice trays should be in on layer for easy maintenance.

9- The splice trays should be suitable for fusion and mechanical splice.

10- The capacity of the closure should be not less than 128 fibre splices.

11- It should have fixed parts to hold the central strength member of the cable so to prevent the cable from pulling out and prevent fibre bending in the organizer when the cable is twisted when handling the closure.

12- The closure should be with an appropriate dimension to prevent fibres and buffers from too tight bending radii.

13- It should be corrosion resistant and watertight.

14- It should be able to withstand maximum tensile load and the pressure when used for buried application.

15- It should be offered with materials of mounting on the manholes wall.

16- It should be considered that the manholes where the closures will be mounted might be filled with water fluid in the rain sessions.

17- The tenderer should offer one sample of the offered closure.

18- The closures should be opened and reclosed as of ten as required with out using power, consumable material or special tools.

19- The closures should include the pressure gas valve.

20- The closures shall be designed for a life expectancy of at least 30 years.

21- We will refuse the closures with the cylindrical shape.

22- The tender should offer catalogues for each type, which clear the mechanical construction details, dimension, drawing of the product offered and the installation construction. And should be in English language.

23- Information to be supplied: Manufacturers name - country of origin – make /model/code No-Closure content - materials used - operating environments.

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Technical data sheet of optical fibre closure 72/128 fibre

Characteristics	Offered by the Tender
1- Closure - Capacity - Cable entries - Cable entire diameter - Cable fixing - Dimension - Corrosion resistant - Water tight - Max tensile load - Max pressure - Opened and reclosed as often as required with out using power, consumable material or special tools. - Including pressure gas value - Life expectancy	
2- Organizer trays - Tray no - Tray capacity - Protection sleeve arrangement in the tray - Suitable for fusion and mechanical splice - Tray dimension - Splice tray movability	
3- Materials - Jointing materials for splicing the full capacity - Cable entries materials - materials of mounting on the manholes wall	

Distribution Joint,72/128 fibres

Item	specification	
1- Closure		
Material of closure	plastic	
Capacity of closure	72 to 128 fibers	
Number of entries	Minimum 6	
Cable enter diameter	6 min . 29 max .	
Cable fixing	Fixed by base of Galvanized steel	
Dimension Of Closure (L * W * H)mm	Min 450 * 200 * 150 Max 700 * 380 * 300	
Corrosion resistant	yes(necessary)	
Water tight	found	
Max tensile load	yes(necessary)	
Max pressure	yes(necessary)	
Opened and reclosed as often as required without using power consumable material or special tools	yes(necessary)	
Including pressure gas value	found	
Life expectancy	30 year	
2- Organizer trays		
Number of tray	6 to 12	
Tray capacity	12 to 24	
Protection sleeve arrangement in the tray	Arrangement shape	
Suitable for fusion and mechanical splice	yes(necessary)	
Tray dimension	suitable	
Splice tray movability	easy	
3- Materials		
Jointing materials for splicing the full capacity	found	
Cable entries materials	found	
Materials of mounting on the manholes wall	found	

Note:-

***The closure should have area under the splice trays or in side of closure in order to keep of spear of loose tubes.**

Schedule of tender no. 73/2011
for the Supply of Optical Fiber Cable Accessories
(Distribution Joint)

Item No	Item Description	Qty	Unit price	Total Price
1	Distribution Joint 24/36 fibers	400		
2	Option 20% organizer tray + 20% protection sleeve (for joint 24/36 fibers)			
3	Distribution Joint 36/48 fibers	400		
4	Option 20% organizer tray + 20% protection sleeve (for joint 36/48 fibers)			
5	Distribution Joint 48/72 fibers	100		
6	Option 20% organizer tray + 20% protection sleeve (for joint 48/72 fibers)			
7	Distribution Joint 72/128 fibers	90		
8	Option 20% organizer tray + 20% protection sleeve (for joint 72/128 fibers)			

1. Specification of above items are required