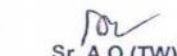


**CHAPTER - 20**  
**ERECTION & COMMISSIONING OF CABLE**

Chapter Code No	DESCRIPTION OF WORK	UNIT	Rate/ Unit
1	2	3	4
20.1	Laying of 11 KV, XLPE, Cable (Aluminium conductor) underground as per relevant IS/AVVNL standards including excavation of 30 cm x 120 cm deep trench in Kaccha land 25 cm thick under layer of sand. 'A' class beicks covering refilling soil in the remaining(Including fixing of G.I.Pipe of required size at both end with 3 Mtr projected above the ground surface & 0.3 Mtr. below ground level)		
	a) 3x35 Sq mm to 3x185 Sq mm	Mtr.	105.92
	b) 3x240 Sq mm to 3x400 Sq mm	Mtr.	119.18
	<b>Note: per meter shall be paid extra for excavation in Pakka Road.</b>	Mtr.	55.88
20.2	Laying of two (D/C) 11 KV, XLPE, Cable (Al. conductor) underground cable w/o overlapping as per relevant IS/AVVNL standards including excavation of 50 cm width x120 cm deep trench in Kaccha land, 25 cm thick under layer of sand. 'A' class bricks or concrete block covering refilling soil in the remaining portion and providing/fixing cable route indicators at every 30Mtr.of cable and at every turn.		
	a) 3x35 Sq mm to 3x185 Sq mm	Mtr.	185.43
	b) 3x240 Sq mm to 3x400 Sq mm	Mtr.	209.87
	<b>Note: per mtr shall be paid extra for excavation in Pakka Road.</b>	Mtr.	99.06
20.3	Installation of cable termination / straight through joints on 11KV Aluminium conductor XLPE /PILCA Cable with outdoor/ indoor termination end and /or straight through joint including required excavation / remoral/ fixing / refixing/ testing etc. as required		
	A) (I) Outdoor end terminal 3x35 Sq mm to 3x185 Sq mm	Nos	1144.75
	(ii) 3x240 Sq mm to 3x400 Sq mm	Nos	1335.52
	B) (I) Indoor end terminal 3x35 Sq mm to 3x185 Sq mm	Nos	1049.38
	(ii) 3x240 Sq mm to 3x400 Sq mm	Nos	1282.41
	C) (I) Straight through joint 3x35 to 3x185 Sq mm	Nos	2384.73
	(ii) 3x240 Sq mm to 3x400 Sq mm	Nos	2782.29
20.4	Laying of 33 KV XLPE Cable ( Aluminium Conductor ) underground as per relevant ISS / AVVNL standard including excavation of 30 cm width x120 cm deep trench in Kaccha land 25 cm thick under layer of sand. 'A' class bricks or concrete block covering refilling soil in the remaining portion and providing/fixing cable route indicators at every 30Mtr.of cable and at every turn.		
	A) 3x50 Sq mm to 3x185 Sq mm	Mtr.	132.46
	B) 3x240 Sq mm to 3x400 Sq mm	Mtr.	145.75
	<b>Note:- Per mtr. Rate shall be paid extra for excavation of puccka road</b>	Mtr.	56.27

  
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Chapter Code No	DESCRIPTION OF WORK	UNIT	Rate/ Unit
1	2	3	4
20.5	Laying of two ( D/C) 33KV, XLPE (Aluminium conductor) underground cables w/o overlapping as per relevant IS/ AVVNL standard including excavation of 50 cm width x 120 cm deep trench in Kaccha land.25 cm thick under layer of sand. 'A' class bricks or concrete block covering refilling soil in the remaining portion and providing/fixing cable route indicators at every 30Mtr.of cable and at every turn.		
	A) 3x50 Sq mm to 3x185 Sq mm	Mtr.	233.20
	B) 3x 240 Sq mm to 3x400 Sq mm	Mtr.	254.41
	<b>Note:- per meter shall be paid extra for excavation in Pakka Road.</b>	Mtr.	99.06
20.6	Intallation of 33 KV Cable (XLPE) termination / straight through joints ( Heat shrinkable type) as per manufacturer's kit guidance and direction including preparation of cable and testing refilling etc as required.(Including crimping of lugs)		
A)	(I) Outdoor end terminal 3x50 Sq mm to 3x185 Sq mm	Nos	1430.90
	(ii) 3x240 Sq mm to 3x400 Sq mm	Nos	1748.79
B)	(I) Indoor end termination 3x50 Sq mm to 3x185 Sq mm	Nos	1144.75
	(ii) 3x240 Sq mm to 3x400 Sq mm	Nos	1398.99
C)	(i) Straight through joint 3x50 Sq mm to 3x185 Sq mm	Nos	3222.12
	(ii) 3x240 Sq mm to 3x400 Sq mm	Nos	3730.78
	<b>Note:- Rate shall be reduced by 20% for "Push On" typekit</b>		
20.7	Laying of 33 KV & 11KV XLPE cable without Road cutting i.e. through burrowing machine "VERMIER".(120 cm deep).Use of this technology must be restricted to the situation like:-		
	(i) When the passages available for laying the proposed cable is totally a metal or cement concrete road.		
	(ii) When the road cutting is not permitted by the local administration.		
	A) 33 / 11 KV 3C x 300 Sq.mm cable	Mtr.	448.47
	B) 33 / 11 KV below 3C x 300 Sq.mm cable	Mtr.	402.93
	C) LT 3.5 Core 95 Sq.mm and above	Mtr.	402.93
	(iii)When cable laid in a HDPE pipe		
	33 / 11 KV 3C x 300 Sq.mm cable	Mtr.	567.27
	Add Cost of 200 HDPE pipe		
	(a) PN4 HDPE pipe(IS-4984)	Mtr.	396.00
	(b) HDPE DWC pipe(IS-14930)	Mtr.	247.50
	33/11 KV below 3X300 Sq.mm cable	Mtr.	509.85
	LT 3.5 core Sq qmm.	Mtr.	510.84
	Add Cost of 200 HDPE pipe		
	(i)PN4 HDPE pipe(IS-4984)	Mtr.	272.25
	(ii)HDPE DWC pipe(IS-14930)	Mtr.	178.20
	When cable laying through manual trench less (Bogie)		
	(i) 33/11 KV 3CX300 Sqmm. Cable	Mtr.	242.91
	(ii)33/11 KV below 3CX300 Sqmm.	Mtr.	202.43
	(iii) LT 3.5 core 95 Sqmm and above	Mtr.	202.43
	Cost of pipe shall be extra as above		
20.8	Laying of under ground LT XLPE cable including excavation of 30cmx120cm.deep trench in Kachh land and refilling by 25 cm thick layer of sand 'A' class bricks covering refiling soil in the remaining portion.		
a)	3.5 C x 300 sq. mm	Mtr.	89.97
b)	3.5 C x120-185 sq. mm	Mtr.	73.61
c)	4 C-25/50 sq. mm	Mtr.	40.89
d)	4 C-up to 16 sq. mm	Mtr.	24.54
e)	2C- up to 6 sq. mm	Mtr.	19.63
	<b>Note:- Per mtr. Rate shall be paid extra for excavation of puccka road</b>	Mtr.	56.27
20.9	Underground Cable fault locating machine charges (Per Fault)		
A	FOR HT CABLES		
20.9.1	For 33 /11 KV cable fault pin pointing (Within ACC)	Per fault	16500.00
20.9.2	For 33 /11 KV cable fault pin pointing (Other than ACC)	Per fault	
20.9.3	For 33 /11 KV cable fault pressure testing (Within ACC)	Per fault	11000.00
20.9.4	For 33 /11 KV cable fault pressure testing (Other than ACC)	Per fault	

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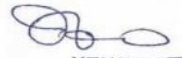
Chapter Code No	DESCRIPTION OF WORK	UNIT	Rate/ Unit
1	2	3	4
<b>B</b>	<b>FOR LT CABLES</b>		
20.10	Installation of Cable termination / straight through joints on LT XLPE/PVC insulated cable with outdoor or straight through joint including required excavation /removal/fixing/refixing/ testing etc. as required.	Per fault	16500.00
A (i)	Outdoor end terminal 3.5C/ 4Cx50 Sq.mm to 3.5C/4Cx185 Sq.mm	Nos	763.17
(ii)	Outdoor end terminal 3.5 C/4 Cx240 Sq.mm to 3.5 C/4Cx400 Sq.mm	Nos	890.35
B (i)	Straight through joint 3.5C/ 4Cx50 Sq.mm to 3.5C/4Cx185 Sq.mm	Nos.	1589.82
(ii)	Straight through joint 3.5 C/4 Cx240 Sq.mm to 3.5 C/4Cx400 Sq.mm	Nos.	1854.86
20.11	Installation of Outdoor cable termination on 11 KV Aerial Bunched Cable including required removal /fixing/refixing/ testing etc. as required.		
A	Outdoor end terminal 50 Sq.mm to 95 Sq.mm	Nos.	381.58
20.12	Installation of Straight through joint on HT XLPE Insulated Cable with straight through joint including required removal /fixing/refixing/ testing etc. as required. (without excavation).		
A	<b>For 11 KV :-</b>		
i	Straight through joint 3x35 to 3x185 Sq.mm		
ii	Straight through joint 3x240 to 3x400 Sq.mm	Nos.	1430.94
B	<b>For 33 KV :-</b>		
i	Straight through joint 3x50 to 3x185 Sq.mm		
ii	Straight through joint 3x240 to 3x400 Sq.mm	Nos.	1788.62
20.13	For assisting in cable fault location detailed as below by engaging the services of skilled person on cable fault locating machine.	Per 8 hrs.	250.00
20.14	For Extra Loop (Ghera) to be provided near the pole on termination point and the length of cable along the pole for mounting of cable jointing kit.		
A	<b>11 KV Cable :-</b>		
i	3x35 Sq. mm to 3x185 Sq.mm	Per mtr	101.60
ii	3x240 Sq.mm to 3x400 Sq.mm	Per mtr	114.30
B	<b>33 KV Cable :-</b>		
i	3x50 Sq. mm to 3x185 Sq.mm	Per mtr	228.60
ii	3x240 Sq. mm to 3x400 Sq.mm	Per mtr	247.65

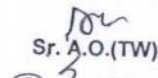
Note:-

1. The rates are inclusive of all applicable Taxes/ Duty except service tax which will be paid extra by Nigam if applicable.

2. If the cable jointing kits of HT/LT are not available with Nigam, than the unit officer will obtain NAC from ACOS & the contractor will supply the same as per latest SIR plus 10% (profit) of approved vendors.

  
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