

Transmission & Distribution
Material & Installation Specification

Cable Grips

I. Quantity

The base bid shall include the indicated number of "Cable Grips" and appropriate accessories required to support individual cables or cable assemblies suspended in vertical riser conduits or under u-guard.

II. Material

- A. The material shall be equal in quality, design, performance, and appearance to the items specified on drawing TDMIS-1106. All grips shall be as manufactured by "Kellems" or engineer approved equal.
- B. All steel hardware to be 302 Stainless Steel.
- C. Grips shall be sized appropriately for the conductor or cable assemble diameter as shown in TDMIS-1106 drawings.

III. Installation

- A. The installation shall be as appropriate on drawing TDMIS-1106 and as required by this specification.
- B. Size and type: Grips shall be "Kellems" as listed above and shall not be substituted without express approval of Engineer.
- C. Grips shall be hung from a lag bolt and washer or a "J" hook.
- D. Cable shall be supported by rope and blocks or hoist during installation of grip, then weight of cable can be lowered until grip supports all the weight and ropes can be removed without further cable sag. The purpose of this method is to avoid the cables weight from causing strain on transformer bushings or other apparatus not designed to support the weight of long cables.

IV. Method of measurement

Shall be included with conductor or cable assembly units and shall include all materials, accessories, lubricants, abrasives, tools, labor, equipment excavation and backfill, and supervision required for a complete and operational system.

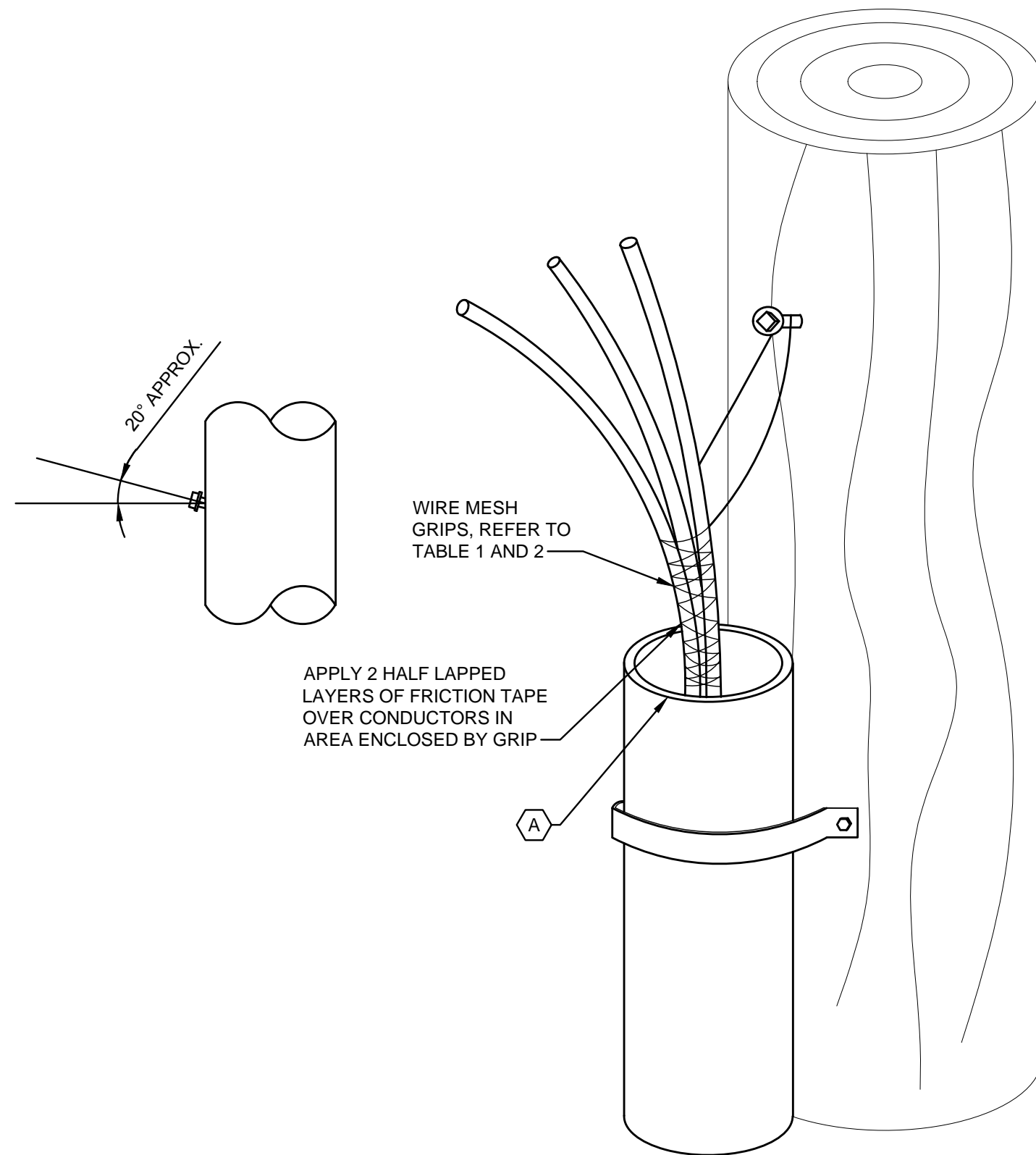
V. Basis of payment

Shall be included with cable and cable assembly unit price for a completed and operational splice. No separate payment shall be allowed for grips.

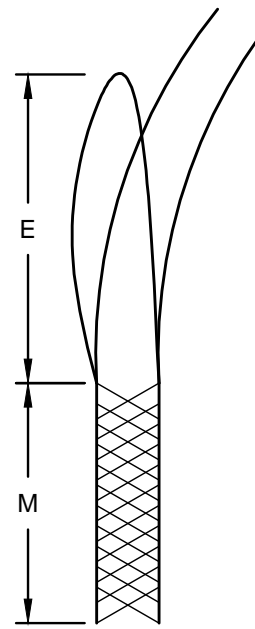
CITY OF COLUMBUS DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER CABLE GRIPS		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-1106
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	SHEET 1 of 3	

CODED NOTES:

A GRIP SHALL BE OUTSIDE OF THE CONDUIT TO PERMIT PROPER INSTALLATION OF THE GRIP.



CITY OF COLUMBUS, OHIO DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER		
CABLE GRIPS		
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SCALE: NTS	SHEET: 2 OF 3	

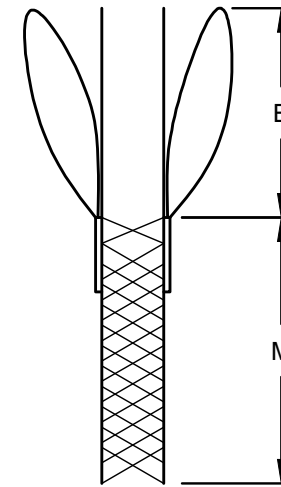


"E" - EYE LENGTH
"M" - MESH LENGTH

HEAVY DUTY, SINGLE EYE, CLOSED MESH, MULTI-WEAVE

CABLE DIA. RANGE (IN.)	APPROX. BREAKING STRENGTH (LBS.)		E (IN)	M (IN)	PART#
	TIN-COATED BRONZE	STAINLESS STEEL			
0.23-0.31	500	1400	5	4.5	
0.29-0.37	500	1150	5	5.5	
0.35-0.44	870	1700	6	6.5	
0.41-0.50	870	1700	6	7.5	
0.46-0.56	1050	2100	6	8	
0.52-0.62	1050	2100	7	8.5	
0.58-0.68	1050	2100	7	9.5	
0.64-0.75	1390	4161	7	9.5	
0.70-0.81	1390	4100	8	10.5	
0.75-0.87	1390	-	8	10.5	
0.81-0.94	1390	-	8	10.5	
0.87-1.00	1790	5350	8	11.5	
0.94-1.06	1790	5300	9	12.5	
1.00-1.18	1790	5300	9	13.5	
1.06-1.25"	1790	5300	9	14.5	

TABLE 1
SINGLE EYE GRIPS



"E" - EYE LENGTH
"M" - MESH LENGTH

DOUBLE EYE, CLOSE MESH

CABLE DIA. RANGE (IN.)	APPROX. BREAKING STRENGTH (LBS.)		E (IN)	M (IN)	PART#
	TIN-COATED BRONZE	STAINLESS STEEL			
0.75-0.99	2820	4250	10	25	
1.00-1.24	4280	7300	10	28	
1.25-1.49	4280	7300	10	30	
1.50-1.99	4280	11100	10	34	
2.00-2.49	8050	20100	12	36	
2.50-2.99	8050	20100	12	38	
3.00-3.49	10060	25200	12	40	
3.50-3.99	12070	-	12	44	
4.00-4.49	12070	-	12	46	
4.50-4.99	12070	-	12	68	

TABLE 2
DOUBLE EYE GRIPS

CITY OF COLUMBUS, OHIO DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER		
CABLE GRIPS		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-1106
APPROVED: <i>[Signature]</i>		
SCALE: NTS	SHEET: 3 OF 3	