



**PRODUCT STANDARD**  
**BUSDUCT ENGINEERING DIVISION**

RU/BDE/ENGG/  
COPPER BRAIDED  
FLEXIBLE/001  
REV-02

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**TECHNICAL REQUIREMENTS OF COPPER BRAIDED FLEXIBLE**

**SPECIFICATION, PROCESS & DRAWING**

- 1) EACH BRAID SHALL BE ELECTROTINNED.
- 2) SPECIFICATIONS AND ALL TECHNICAL REQUIREMENT OF COPPER BRAIDS SHALL BE AS PER CORPORATE PURCHASE SPECIFICATION NO. AA 12010 REV-03 (ATTACHED WITH THIS ENQUIRY)
- 3) SPECIFICATIONS AND ALL TECHNICAL REQUIREMENT OF END FERRULE COPPER TUBES SHALL BE AS PER CORPORATE PURCHASE SPECIFICATION NO. AA 12014 REV-01 (ATTACHED WITH THIS ENQUIRY).
- 4) PROPER PROCESS SHALL BE ENSURED TO AVOID GREEN SULPHATE FORMATION DUE TO MOISTURE ENTRY/ RETENTION DURING MANUFACTURING OR ANY OTHER REASON. IN CASE SUCH DEFECTS ARE OBSERVED DURING GUARANTEE PERIOD - REPAIR/ REPLACEMENT SHALL BE IN THE SCOPE OF SUPPLIER.
- 5) ALL SPECIFICATION & DETAILS IN DRAWINGS SHALL BE FOLLOWED IN ADDITION TO CORPORATE PURCHASE SPECIFICATION.
- 6) TYPICAL DRAWINGS OF COPPER BRAIDED FLEXIBLES ARE AS FOLLOWS-
 

(I) 41001200024	(III) 43001200124
(II) 42001200054	(IV) 43001200131

**DIMENSIONS**

- 1) CURRENT STANDARD THICKNESS OF COPPER WIRES (STRANDS) IS 38 SWG AND THE SAME IS PREFERRED.
- 2) NO. OF BRAIDS CAN BE 5 TO 20 NOS. or MORE AND THICKNESS OF FLEXIBLE SHALL VARY BETWEEN 12 TO 40 MM or MORE.
- 3) WIDTH OF FLEXIBLE SHALL GENERALLY BE 48 MM. LENGTH SHALL VARY BETWEEN 450 TO 700 MM
- 4) CURRENTLY BEING USED CROSS SECTION OF EACH COPPER BRAID IS 105, 120 & 131.25 SQ CM. AND THE SAME IS PREFERRED.
- 5) THE END COPPER FERRULE TUBES (TOTAL 2 NOS. PER FLEXIBLE) TO BE OF 1.5 MM THICKNESS. THE TUBE ID AND OD SHALL BE SUITABLY SELECTED BY THE SUPPLIER SO AS TO ENSURE PROPER GRIP ON COPPER BRAIDS AND AT THE SAME TIME, AVOID DAMAGE TO BRAIDS DUE TO EXCESS PRESSURE.

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<b>REV.</b>	02	<b>PRINTS TO :-</b>	<b>APPROVED -</b>		
<b>ALTD.</b>			A. NARAYAN		
<b>APPD.</b>			<b>PREPARED</b>	<b>ISSUED</b>	<b>DATE</b>
<b>DATE.</b>			RUPESH KUMAR		27/10/2017



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- 6) TRIMMING OFF SURPLUS LENGTH AFTER FORMING AT ENDS TO BE DONE.
- 7) FOR A VERY SMALL REQUIREMENT OF EARTHING FLEXIBLE BRAIDS (AROUND 1% OF TOTAL YEARLY REQMT.), NO. OF BRAIDS SHALL BE 1 AND CROSS SECTION SHALL BE AS PER AVAILABLE SIZES. LENGTH OF THESE FLEXIBLES WILL ALSO BE MUCH LESS (UPTO 300 MM)

**FINISH, PAINTING & PLATING**

- 1) BOTH ENDS OF THE COPPER FLEXIBLE (PRESSED ENDS OF LENGTH UPTO 100 TO 160 MM ON BOTH SIDE) SHALL BE SILVER PLATED WHEN MARKED IN DRAWING.
- 2) IN CASE SILVER PLATING IS NOT SPECIFIED, BOTH ENDS SHALL BE TINNED UP TO 13 MICRONS. NO SEPARATE CHARGES FOR TINNING AT ENDS SHALL BE ADMISSIBLE.
- 3) SAMPLE DRAWINGS ARE ATTACHED FOR REFERENCE TO UNDERSTAND THE VARIOUS TYPES OF CONSTRUCTION.
- 4) IN CASE OF SILVER PLATING ON FERRULES OF COPPER BRAIDED FLEXIBLES, SQ.CM. AREA OF ONLY OUTER PORTION WILL BE APPLICABLE.

**IMPORTANT NOTES**

THE WIRE SIZE/ FLEXIBLE WIDTH/ BRAIDS CROSS SECTION SHALL BE STANDARDISED FOR MAXIMUM REQUIREMENT (UPTO 90%) TO 38SWG/ 48 MM/ 105 SQ MM RESPECTIVELY. HOWEVER, OTHER THICKNESSES MAY HAVE TO BE SUPPLIED AS PER OUR END CUSTOMER REQUIREMENT. THERE IS LIKELY TO BE NOT MORE THAN FIVE TYPES OF FLEXIBLES FOR OUR 90% REQUIREMENT. ONLY THE LENGTH, NO. OF HOLES, WIDTH OF FLATTENED FERRULE PALM AT BOTH ENDS MAY VARY FOR A VERY SMALL REQUIREMENT OF BALANCE 10% QUANTITY.

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