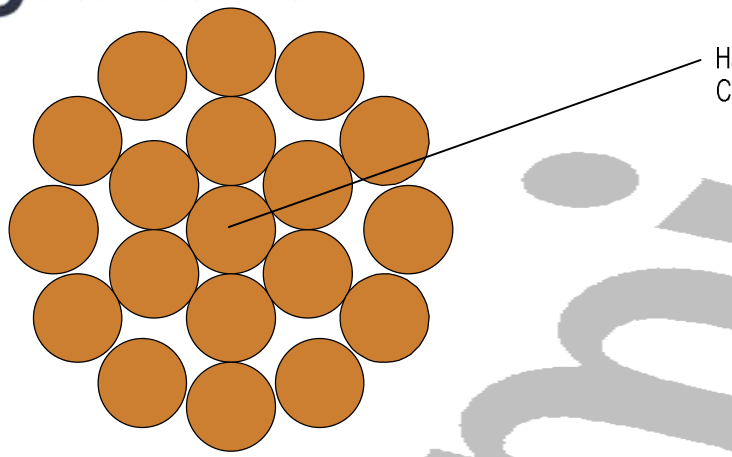
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MECHANICAL / PHYSICAL PROPERTIES AND DATA	UNITS	VALUE
CONDUCTOR MATERIAL:	-	HD Cu
CONDUCTOR STRANDING (NOMINAL):	No./mm	19 / 2.50
CONDUCTOR C.S.A. (NOMINAL):	mm²	93.3
CONDUCTOR DIAMETER (APPROX.):	mm	12.5
CALCULATED BREAKING LOAD (CBL):	kN	36.1
MAXIMUM OPERATING TEMPERATURE:	°C	75
FINAL MODULUS OF ELASTICITY (Calculated):	GPa	118
COEFFICIENT OF LINEAR EXPANSION:	/°C x 10^{-6}	17
MINIMUM BENDING RADIUS (DURING INSTALLATION):	mm	250
MINIMUM BENDING RADIUS (INSTALLED SET IN POSITION):	mm	150
MINIMUM DRUM BARREL DIAMETER:	mm	300
MINIMUM RECOMMENDED BENDING (SHEAVE) DIAMETER:	mm	250
CABLE WEIGHT PER METRE (APPROX.):	kg/km	843

NOTES:
The value provided for CBL is calculated as per AS1746, and is a nominal value only.

ELECTRICAL PROPERTIES AND DATA	UNITS	VALUE
EQUIVALENT ALUMINIUM AREA (NOMINAL):	mm²	146.3
CALCULATED DC RESISTANCE (MAXIMUM):	Ω/km @20°C	0.193
AC RESISTANCE (MAXIMUM):	Ω/km @75°C	0.234
CURRENT RATING WINTER NIGHT (RURAL WEATHERED) STILL:	A	310
CURRENT RATING WINTER NIGHT (RURAL WEATHERED) 1 m/s WIND:	A	501
CURRENT RATING WINTER NIGHT (RURAL WEATHERED) 2 m/s WIND:	A	581
CURRENT RATING SUMMER NOON (RURAL WEATHERED) STILL:	A	225
CURRENT RATING SUMMER NOON (RURAL WEATHERED) 1 m/s WIND:	A	440
CURRENT RATING SUMMER NOON (RURAL WEATHERED) 2 m/s WIND:	A	523
CURRENT RATING WINTER NIGHT (INDUSTRIAL WEATHERED) STILL:	A	340
CURRENT RATING WINTER NIGHT (INDUSTRIAL WEATHERED) 1 m/s WIND:	A	520
CURRENT RATING WINTER NIGHT (INDUSTRIAL WEATHERED) 2 m/s WIND:	A	598
CURRENT RATING SUMMER NOON (INDUSTRIAL WEATHERED) STILL:	A	205
CURRENT RATING SUMMER NOON (INDUSTRIAL WEATHERED) 1 m/s WIND:	A	431
CURRENT RATING SUMMER NOON (INDUSTRIAL WEATHERED) 2 m/s WIND:	A	515
INDUCTIVE REACTANCE TO 0.3 m:	Ω/km	0.262
FAULT CURRENT RATING (d):	kA².sec	166
GEOMETRIC MEAN RADIUS:	mm	4.74

NOTES:
The value provided for DC Resistance is calculated as per AS1746, and is a nominal value only.

CURRENT RATINGS:

a) Values given are calculated only.

b) **Summer Day** based on 35°C Ambient Air Temperature, Temperature Rise by 40°C to Maximum Operating Temperature 75°C, Rual Emissivity = 0.5, Absorbtion = 0.5, Solar Radiation Intensity = 1000W/m², and Angle Of Wind (where applicable) = 90°.

c) **Winter Night** based on 10°C Ambient Air Temperature, Temperature Rise by 40°C to Maximum Operating Temperature 50°C, Rural Emissivity = 0.5, Absorbtion = 0, Solar Radiation Intensity = Nil, and Angle Of Wind (where applicable) = 90°.

d) **Fault Rating** is calculated on an initial temperature of 40°C and a maximum short circuit temperature of 160°C.

Customer Approval:

Name*:

Signature*

Position*:

Company*

Date*:

*To be completed & returned at order.

TITLE:

To AS 1746

19/2.50mm Bare Over Head Hard Drawn Copper Conductor

Reason For Re-Issue:
Format updated

Scale: NTS Colours are for illustration only and may not necessarily reflect actual colours in final product.

Drawn by: A. Vasta

Issue Date: 17-07-2025

Issue No.: 2

Drawing Ref No.:
19-2.50 mm HD Cu BOH (20199260)