HARD DRAWN BARE COPPER CONDUCTORS (HDBC)

Application

These are stranded circular hard drawn bare copper conductor mainly used for overhead transmission and distribution network applications, overhead traction system and transformer earthing, where the highest electrical conductivity per unit area and good strength to weight ratio are required.

Construction

Bare stranded hard-drawn copper conductor is a concentric-lay stranded conductor consisting of hard drawn copper wires in single layer and multi-layer construction.

Standard

Bare stranded hard-drawn copper conductor as per BS 7884

Volume Resistivity : 0.01777 Ω.m2/m

Conductivity : 97%

Density : 8.89g/cm³

Coefficient of Linear Expansion : 17 x 10^{-6}/°C

Catalouge Number	Nominal Area	No./Nominal Diameter of wires	Approximate Overall Diameter	Approx. Weight	Max.DC Resistance at 20°C	Minimum Breaking Load
	SQ.MM	**No./mm**	**MM**	**kg/km**	**Ω/km**	**KN**
NHDBC0100	10	7/1.35	4.05	89	1.829	3.752
NHDBC0140	14	7/1.60	4.80	126	1.303	5.267
NHDBC160A	16	3/2.65	5.70	148	1.106	6.194
NHDBC0160	16	7/1.70	5.10	142	1.154	5.946
NHDBC0250	25	7/2.10	6.30	217	0.7563	9.073
NHDBC320A	32	3/3.75	8.06	296	0.552	12.400
NHDBC0320	32	7/2.46	7.38	298	0.5497	12.442
NHDBC0350	35	7/2.50	7.50	308	0.5337	12.860
NHDBC500A	50	7/3.00	9.00	443	0.37060	18.520
NHDBC0500	50	19/1.80	9.00	435	0.3819	17.70
NHDBC700A	70	7/3.55	10.65	621	0.2646	25.93
NHDBC0700	70	19/2.10	10.50	593	0.2806	24.09
NHDBC0950	95	19/2.50	12.50	840	0.1980	34.14
NHDBC1000	100	7/4.30	12.90	911	0.1810	36.54
NHDBC1200	120	19/2.80	14.0	1055	0.1578	42.83
NHDBC1250	125	19/2.90	14.50	1131	0.1471	45.940
NHDBC150A	150	19/3.20	16.00	1377	0.1208	55.940
NHDBC1500	150	37/2.25	15.75	1334	0.1264	53.880
NHDBC185A	185	19/3.55	17.75	1695	0.0981	68.860
NHDBC1850	185	37/2.50	17.50	1647	0.1024	66.490

Notes: Conductors can be supplied in multiples of 1000/500/250 mtrs or required by customer.