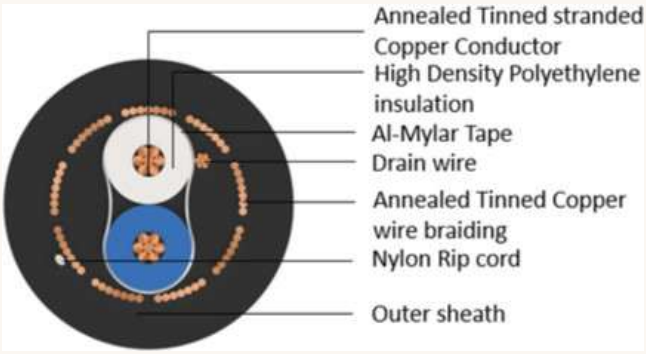
COMMUNICATION CABLE · RS-485 DATA CABLE · UNARMOURED

INDOCABLES RS-485 UNARMOURED DATA CABLE, 300/500 V AC



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES RS-485 UNARMOURED, will be used at machine interference for data and signal transmission in the low frequency range. This is suitable to use in control, regulation & measurement and can be used in dry, damp, or wet environment with medium mechanical stress.

CONSTRUCTION

1. Stranded Annealed Tinned Copper conductor Insulated with High Density Polyethylene
2. Twisted pairs laid up with suitable lay and wrapped with helically application of non-hygroscopic polyester tape with suitable overlap
3. Shielded with Al. Mylar tape with continuity material ATC drain wire
4. Screened by Annealed Tinned Copper wire braiding Nylon Ripcord
5. Sheathed with PVC Type ST1

CHARACTERISTICS

VOLTAGE RATING
300/500 V

OPERATION TEMPERATURE
Operation: -10? to 70?[F1]
Installation: 0? to 50?[F1]

CORE IDENTIFICATION
1 Pair – White-Blue
2 Pair – White-Blue, White-Orange

BENDING RADII
12 x Overall Diameter

PACKING LENGTH
100 Meter Coil

NOTES
Outer sheath with LSZH available on demand

OUTSTANDING FEATURES

- Low capacitance
- High level of screening to ensure interference free performance
- High speed data transmission

DIMENSION DATA

Product code	No. of Pair	Conductor Size AWG	Conductor Size mm²	Overall dia. (Approx.) mm
IC-CM-1P-00022-TC-PE-2YY-0300-CUST †	1	24	0.22	6.50 ± 2
IC-CM-1P-00032-TC-PE-2YY-0300-CUST †	1	22	0.32	7.0 ± 2
IC-CM-1P-00050-TC-PE-2YY-0300-CUST	1	20	0.5	7.50 ± 2
IC-CM-1P-00080-TC-PE-2YY-0300-CUST †	1	18	0.8	8.0 ± 2
IC-CM-1P-00100-TC-PE-2YY-0300-CUST	1	17	001[F3]	8.50 ± 2
IC-CM-2P-00022-TC-PE-2YY-0300-CUST †	2	24	0.22	9.0 ± 2
IC-CM-2P-00032-TC-PE-2YY-0300-CUST †	2	22	0.32	9.5 ± 2
IC-CM-2P-00050-TC-PE-2YY-0300-CUST	2	20	0.5	10.0 ± 2
IC-CM-2P-00080-TC-PE-2YY-0300-CUST †	2	18	0.8	11.0 ± 2
IC-CM-2P-00100-TC-PE-2YY-0300-CUST	2	17	001[F3]	11.50 ± 2

† Code derived from the Indo Cables code structure — this conductor size is not yet in the code master. See flag F4.

ELECTRICAL CHARACTERISTICS

Size		AWG 24	22	20	18	17
Maximum Conductor Resistance @ 20°C	?/Km[F2]	86	60	36.7	23.5	18.5
CAPACITANCE						
Core to Core	nf/km @800/1000 KHz	≤ 100	≤ 100	≤ 100	≤ 100	≤ 100
Core to Shield	nf/km	≤ 250	≤ 250	≤ 250	≤ 250	≤ 250
Characteristics impedance	?[F2]	120	120	120	120	120
Maximum Loop Resistance	?/Km[F2]	172	120	73.4	47	37
Insulation Resistance	Ω/Km	5 G	5 G	5 G	5 G	5 G
Velocity of Propagation %		66	66	66	66	66
DIELECTRIC STRENGTH (DC VOLTAGE)						
Cond to Cond	KV/ 1 Minute	1	1	1	1	1
Cond to shield	KV/ 1 Minute	0.5	0.5	0.5	0.5	0.5

FLAGGED FOR CONFIRMATION

F1 Operation and installation temperatures print as "-10? to 70?" and "0? to 50?" in the source specification. Reproduced as written; unit symbol to be confirmed.
F2 Resistance and impedance units print as "?/Km" and "?" in the source specification. Reproduced as written; unit symbol to be confirmed.
F3 Conductor size for AWG 17 prints as "001" mm² in the source specification. Reproduced as written; read as 1.0 sq.mm for the code lookup.
F4 0.22, 0.32 and 0.8 sq.mm are not in the SIZE block of the code master. Codes marked † follow the structure (sq.mm × 100, five digits) and need adding to the register.
F5 The BIS CM/L 6200267409 licence shown in the certification band is held against IS 7098 Part 1. This item is registered in the code master to CUST (customer specification), with no CM/L against the CM line.
F6 The source specification prints the same product code on two rows (1 pair 0.22 sq.mm and 2 pair 0.8 sq.mm). The new codes follow the pairs and sizes as tabulated.

ISO 9001 Cert. 99 100 22646 (TÜV SÜD)
ISI BIS CM/L 6200267409 (IS 7098 Pt-1)[F5]
ROHS Compliant
REACH Compliant
MAKE IN INDIA Manufactured in India