

DATA CABLES

ELECTRICAL CHARACTERISTICS/STRANDING

Data cables – Electrical characteristics

| Conductor size | 0.14 26 AWG | 0.25 24 AWG | 0.34 22 AWG | 0.50 20 AWG | 0.75 19 AWG | 1.00 18 AWG | 1.50 16 AWG |
|---|---|--|--|---|--|--|--|
| max. conductor resistance at 20 °C acc. to DIN VDE 0812 | $\Omega/1000$ ft 45.1 Ω/km 148.0 | $\Omega/1000$ ft 24.4 Ω/km 79.9 | $\Omega/1000$ ft 17.7 Ω/km 58.0 | $\Omega/1000$ ft 11.86 Ω/km 38.9 | $\Omega/1000$ ft 7.92 Ω/km 26.0 | $\Omega/1000$ ft 5.94 Ω/km 19.5 | $\Omega/1000$ ft 4.05 Ω/km 13.3 |
| Capacitance conductor/conductor for... | | | | | | | |
| ...PVC | nF/1000ft 36.5 nF/km 120 | nF/1000ft 36.5 nF/km 120 | nF/1000ft 39.5 nF/km 130 | nF/1000ft 42.5 nF/km 140 | nF/1000ft 45.5 nF/km 150 | nF/1000ft 48.5 nF/km 160 | nF/1000ft 52.0 nF/km 170 |
| ...TPE-E | nF/1000ft 18.5 nF/km 60 | nF/1000ft 18.5 nF/km 60 | nF/1000ft 18.5 nF/km 60 | nF/1000ft 21.5 nF/km 70 | nF/1000ft 24.5 nF/km 80 | nF/1000ft 27.4 nF/km 90 | nF/1000ft 30.5 nF/km 100 |
| ...PE | nF/1000ft 18.5 nF/km 60 | nF/1000ft 18.5 nF/km 60 | nF/1000ft 18.5 nF/km 60 | nF/1000ft 21.5 nF/km 70 | nF/1000ft 24.5 nF/km 80 | nF/1000ft 27.4 nF/km 90 | nF/1000ft 30.5 nF/km 100 |
| ...SABIX® 336 | nF/1000ft 12.5 nF/km 40 | nF/1000ft 12.5 nF/km 40 | nF/1000ft 12.5 nF/km 40 | nF/1000ft 14.0 nF/km 45 | nF/1000ft 15.0 nF/km 50 | nF/1000ft 20.0 nF/km 65 | nF/1000ft 21.5 nF/km 70 |

The mentioned values are approximate values. Capacitance are dependent on cable constructions, shielding and wall thickness of the insulation and therefore can be different from above mentioned data.

Data cables – construction of strands

For example, item series 0305, 0315, 0345, 5305, 5315, 5345, 6305, 6315, 6345, ...

| AWG | nominal section | no. of strands x strand size |
|-----|----------------------|------------------------------|
| 26 | 0.14 mm ² | ≈ 18 x 0.10 mm \varnothing |
| 24 | 0.25 mm ² | ≈ 14 x 0.15 mm \varnothing |
| 22 | 0.34 mm ² | ≈ 7 x 0.25 mm \varnothing |
| 20 | 0.50 mm ² | ≈ 17 x 0.20 mm \varnothing |
| 19 | 0.75 mm ² | ≈ 23 x 0.20 mm \varnothing |
| 18 | 1.00 mm ² | ≈ 30 x 0.20 mm \varnothing |
| 16 | 1.50 mm ² | ≈ 28 x 0.25 mm \varnothing |

\varnothing = abbreviation for strand diameter