# DATAFLAMM®-C-PAAR

**colour code DIN 47100, low capacitance, EMC-preferred type**




## TECHNICAL DATA

**Data cable**

| | |
|---|---|
| **Temperature range** | flexible +5°C to +70°C<br>fixed -40°C to +70°C |
| **Peak operating voltage** | 0.14 mm²: 350 V<br>0.25 - 0.75 mm²: 500 V<br>(not for high power current installation purposes) |
| **Test voltage core/core** | 0.14 mm²: 800 V<br>0.25 - 0.75 mm²: 1200 V |
| **Mutual capacitance core/core** | at 800 Hz, approx. 70 pF/m |
| **Coupling resistance** | at 30 MHz, approx. 250 Ohm/km |
| **Minimum bending radius** | flexible 7.5x Outer-Ø<br>fixed 4x Outer-Ø |

## CABLE STRUCTURE

- Copper wire bare, 0.5 - 0.75 mm²: finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Wire structure:
  0.14 mm²: approx. 18 x 0.1 mm
  0.25 mm²: approx. 14 x 0.15 mm
  0.34 mm²: 7 x 0.25 mm
- Core insulation: PE acc. to DIN VDE 0819-103 / DIN EN 50290-2-23 (compound type LD/MD)
- Core identification acc. to DIN 47100 (paired stranding), colour coded
- x = without protective conductor
- Cores stranded in pairs with optimal lay lengths, Pairs stranded in layers with optimal lay lengths
- Foil wrapping
- Drain wire, tinned copper
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Foil wrapping
- Outer sheath: thermoplastic compound acc. to DIN VDE 0207-24 (compound type HM2)
- Sheath colour: grey (RAL 7005)
- Length marking: in metres

## PROPERTIES

- halogen-free
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- PE-insulated cores ensure substantially lower capacity values than PVC-insulated cores

## TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2 (outer sheath)
- certifications and approvals:
  EAC

## APPLICATION

Used in telecommunication devices and information processing systems in public buildings, laboratories and department stores where the release of halogens must be avoided in the event of fire. Used as connection cable for signal, measurement and control technology, call systems and intercoms, clock systems, electronic weighing equipment and office machines. The cable can be laid on plaster and in dry, damp and wet rooms. The halogen-free thermoplastic sheath does not emit corrosive or toxic gases. Due to the screening, it is interference-free against foreign pulse generators and high-frequency signals. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

## NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|---|---|---|---|---|---|
| 52435 | 2 x 2 x 0.14 | 26 | 5.4 | 22.5 | 37.0 |
| 52436 | 3 x 2 x 0.14 | 26 | 5.8 | 25.6 | 47.0 |
| 52437 | 4 x 2 x 0.14 | 26 | 6.5 | 39.1 | 66.0 |
| 52438 | 5 x 2 x 0.14 | 26 | 7.0 | 45.3 | 76.0 |
| 52439 | 6 x 2 x 0.14 | 26 | 7.5 | 51.4 | 87.0 |
| 52440 | 7 x 2 x 0.14 | 26 | 7.5 | 54.2 | 94.0 |
| 52441 | 10 x 2 x 0.14 | 26 | 9.6 | 68.7 | 119.0 |
| 52442 | 12 x 2 x 0.14 | 26 | 9.8 | 78.3 | 135.0 |
| 52443 | 15 x 2 x 0.14 | 26 | 11.0 | 79.9 | 157.0 |
| 52444 | 18 x 2 x 0.14 | 26 | 11.5 | 99.2 | 190.0 |
| 52445 | 2 x 2 x 0.25 | 24 | 6.8 | 27.1 | 44.0 |
| 52446 | 3 x 2 x 0.25 | 24 | 7.1 | 42.4 | 66.0 |

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|---|---|---|---|---|---|
| 52447 | 4 x 2 x 0.25 | 24 | 7.9 | 54.5 | 81.0 |
| 52448 | 5 x 2 x 0.25 | 24 | 8.5 | 59.8 | 98.0 |
| 52449 | 6 x 2 x 0.25 | 24 | 9.4 | 64.6 | 116.0 |
| 52450 | 7 x 2 x 0.25 | 24 | 9.4 | 71.3 | 120.0 |
| 52451 | 10 x 2 x 0.25 | 24 | 11.8 | 93.3 | 153.0 |
| 52452 | 12 x 2 x 0.25 | 24 | 12.1 | 108.0 | 175.0 |
| 52453 | 15 x 2 x 0.25 | 24 | 13.5 | 123.4 | 213.0 |
| 52454 | 18 x 2 x 0.25 | 24 | 14.5 | 139.7 | 248.0 |
| 52455 | 2 x 2 x 0.34 | 22 | 8.0 | 43.3 | 68.0 |
| 52456 | 3 x 2 x 0.34 | 22 | 8.4 | 55.0 | 92.0 |
| 52457 | 4 x 2 x 0.34 | 22 | 9.1 | 64.0 | 110.0 |
| 52458 | 5 x 2 x 0.34 | 22 | 10.1 | 74.5 | 128.0 |

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| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|---|---|---|---|---|---|
| 52459 | 6 x 2 x 0.34 | 22 | 11.1 | 85.0 | 147.0 |
| 52460 | 7 x 2 x 0.34 | 22 | 11.1 | 89.8 | 154.0 |
| 52461 | 10 x 2 x 0.34 | 22 | 14.2 | 119.8 | 209.0 |
| 52462 | 12 x 2 x 0.34 | 22 | 14.7 | 139.4 | 245.0 |
| 52463 | 15 x 2 x 0.34 | 22 | 16.4 | 160.0 | 279.0 |
| 52464 | 18 x 2 x 0.34 | 22 | 17.4 | 207.2 | 363.0 |
| 52465 | 2 x 2 x 0.5 | 20 | 8.3 | 50.2 | 76.0 |
| 52466 | 3 x 2 x 0.5 | 20 | 8.8 | 64.5 | 107.0 |
| 52467 | 4 x 2 x 0.5 | 20 | 9.7 | 77.2 | 134.0 |
| 52468 | 5 x 2 x 0.5 | 20 | 10.6 | 96.2 | 150.0 |
| 52469 | 6 x 2 x 0.5 | 20 | 11.6 | 107.4 | 176.0 |
| 52470 | 7 x 2 x 0.5 | 20 | 11.6 | 117.3 | 185.0 |
| 52471 | 10 x 2 x 0.5 | 20 | 15.0 | 158.2 | 275.0 |
| 52472 | 12 x 2 x 0.5 | 20 | 15.6 | 177.8 | 330.0 |
| 52473 | 15 x 2 x 0.5 | 20 | 17.4 | 236.4 | 380.0 |
| 52474 | 18 x 2 x 0.5 | 20 | 18.3 | 265.4 | 450.0 |
| 52475 | 2 x 2 x 0.75 | 19 | 9.7 | 64.6 | 105.0 |
| 52476 | 3 x 2 x 0.75 | 19 | 10.3 | 81.7 | 137.0 |
| 52477 | 4 x 2 x 0.75 | 19 | 11.4 | 107.6 | 166.0 |
| 52478 | 5 x 2 x 0.75 | 19 | 12.6 | 126.1 | 200.0 |
| 52479 | 6 x 2 x 0.75 | 19 | 13.6 | 138.6 | 236.0 |
| 52480 | 7 x 2 x 0.75 | 19 | 13.6 | 153.7 | 255.0 |
| 52481 | 10 x 2 x 0.75 | 19 | 17.8 | 220.0 | 363.0 |
| 52482 | 12 x 2 x 0.75 | 19 | 18.3 | 265.5 | 434.0 |
| 52483 | 15 x 2 x 0.75 | 19 | 20.6 | 327.6 | 500.0 |
| 52484 | 18 x 2 x 0.75 | 19 | 21.9 | 374.6 | 580.0 |

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