

# DATAFLAMM-C-PAAR EMC-preferred type, halogen-free, screened, meter marking



## Technical data

- Special data cable
- **Temperature range**  
flexing +5 °C to +70 °C  
fixed installation -40 °C to +70 °C
- **Operating top level voltage**  
(not for purposes of high current and power installation)  
0,14 mm<sup>2</sup> = 350 V  
>0,14 mm<sup>2</sup> = 500 V
- **Test voltage**  
0,14 mm<sup>2</sup> = 800 V  
>0,14 mm<sup>2</sup> = 1200 V
- **Insulation resistance**  
min. 2 GOhm x km
- **Capacitance**  
core/core <70 nF/km
- **Minimum bending radius**  
approx. 7,5x cable ø
- **Coupling resistance**  
max. 250 Ohm/km
- **Radiation resistance**  
up to 100x10<sup>6</sup> cJ/kg (up to 100 Mrad)

## Application

Are used as connecting cable for signal, measuring, control, call-announcing and two-way intercom speaking systems, clock installations, electronic weighing equipment and electrical apparatus for office requirements. The cables are suitable for installation in dry, damp and wet environments as well as in masonry and concrete. PE-insulated cores, compared with the conventional PVC-insulated cores, assure a remarkable and more favourable capacitance values. These cables are generally installed in telecommunication apparatus and data transmission systems in public buildings, laboratories, trading centres where the freedom from halogen in case of fire and the flame propagation must be avoided. With screened braiding offers interference-free signal transfer. The halogen-free thermoplastic sheath produce neither corrosive nor toxic gases.

**EMC** = Electromagnetic compatibility

To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

CE The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

## Cable structure

- Bare copper, fine wire conductors to DIN VDE 0812, conductor make-up for 0,34 mm<sup>2</sup> - 7x0,25 mm
- PE-insulation, compound type 2YJ1 to DIN VDE 0207 part 2
- Cores colour coded to DIN 47100
- Cores twisted in layers
- Core wrapping with polyester (PETP) foil
- Tinned copper screened braiding, approx. 85% coverage
- Halogen-free outer sheath, to DIN VDE 0207 part 24, compound type HM2
- Sheath colour grey (RAL 7005)
- with meter marking, change-over in 2011

## Properties

- Halogen-free according to VDE 0482 part 267/ DIN EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Corrosiveness of combustion gases according to VDE 0482 part 267/ DIN EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Halogen-free sheath compound, self-extinguishing and flame retardant according to VDE 0482 part 265-2-1/ DIN EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

| Part no. | No.pairs x cross-sec. mm <sup>2</sup> | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|---------------------------------------|--------------------|---------------------|------------------------|---------|
| 52435    | 2 x 2 x 0,14                          | 5,1                | 22,5                | 37,0                   | 26      |
| 52436    | 3 x 2 x 0,14                          | 6,1                | 25,6                | 47,0                   | 26      |
| 52437    | 4 x 2 x 0,14                          | 6,3                | 39,1                | 66,0                   | 26      |
| 52438    | 5 x 2 x 0,14                          | 7,4                | 45,3                | 76,0                   | 26      |
| 52439    | 6 x 2 x 0,14                          | 8,0                | 51,4                | 87,0                   | 26      |
| 52440    | 7 x 2 x 0,14                          | 8,2                | 54,2                | 94,0                   | 26      |
| 52441    | 10 x 2 x 0,14                         | 8,6                | 68,7                | 119,0                  | 26      |
| 52442    | 12 x 2 x 0,14                         | 9,6                | 78,3                | 135,0                  | 26      |
| 52443    | 15 x 2 x 0,14                         | 10,0               | 79,9                | 157,0                  | 26      |
| 52444    | 18 x 2 x 0,14                         | 10,4               | 99,2                | 190,0                  | 26      |
| 52445    | 2 x 2 x 0,25                          | 5,8                | 27,1                | 44,0                   | 24      |
| 52446    | 3 x 2 x 0,25                          | 7,0                | 42,4                | 66,0                   | 24      |
| 52447    | 4 x 2 x 0,25                          | 7,6                | 54,5                | 81,0                   | 24      |
| 52448    | 5 x 2 x 0,25                          | 8,3                | 59,8                | 98,0                   | 24      |
| 52449    | 6 x 2 x 0,25                          | 9,2                | 64,6                | 116,0                  | 24      |
| 52450    | 7 x 2 x 0,25                          | 9,4                | 71,3                | 120,0                  | 24      |
| 52451    | 10 x 2 x 0,25                         | 10,7               | 93,3                | 153,0                  | 24      |
| 52452    | 12 x 2 x 0,25                         | 11,2               | 108,0               | 175,0                  | 24      |
| 52453    | 15 x 2 x 0,25                         | 11,7               | 123,4               | 213,0                  | 24      |
| 52454    | 18 x 2 x 0,25                         | 12,9               | 139,7               | 248,0                  | 24      |
| 52455    | 2 x 2 x 0,34                          | 6,8                | 43,3                | 68,0                   | 22      |
| 52456    | 3 x 2 x 0,34                          | 7,7                | 55,0                | 92,0                   | 22      |
| 52457    | 4 x 2 x 0,34                          | 8,4                | 64,0                | 110,0                  | 22      |
| 52458    | 5 x 2 x 0,34                          | 9,4                | 74,5                | 128,0                  | 22      |
| 52459    | 6 x 2 x 0,34                          | 10,1               | 85,0                | 147,0                  | 22      |

| Part no. | No.pairs x cross-sec. mm <sup>2</sup> | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|---------------------------------------|--------------------|---------------------|------------------------|---------|
| 52460    | 7 x 2 x 0,34                          | 10,4               | 89,8                | 154,0                  | 22      |
| 52461    | 10 x 2 x 0,34                         | 11,5               | 119,8               | 209,0                  | 22      |
| 52462    | 12 x 2 x 0,34                         | 12,6               | 139,4               | 245,0                  | 22      |
| 52463    | 15 x 2 x 0,34                         | 14,3               | 160,0               | 279,0                  | 22      |
| 52464    | 18 x 2 x 0,34                         | 15,5               | 207,2               | 363,0                  | 22      |
| 52465    | 2 x 2 x 0,5                           | 7,6                | 50,2                | 76,0                   | 20      |
| 52466    | 3 x 2 x 0,5                           | 9,1                | 64,5                | 107,0                  | 20      |
| 52467    | 4 x 2 x 0,5                           | 9,8                | 77,2                | 134,0                  | 20      |
| 52468    | 5 x 2 x 0,5                           | 11,0               | 96,2                | 150,0                  | 20      |
| 52469    | 6 x 2 x 0,5                           | 11,5               | 107,4               | 176,0                  | 20      |
| 52470    | 7 x 2 x 0,5                           | 11,8               | 117,3               | 185,0                  | 20      |
| 52471    | 10 x 2 x 0,5                          | 13,4               | 158,2               | 275,0                  | 20      |
| 52472    | 12 x 2 x 0,5                          | 14,8               | 177,8               | 330,0                  | 20      |
| 52473    | 15 x 2 x 0,5                          | 16,1               | 236,4               | 380,0                  | 20      |
| 52474    | 18 x 2 x 0,5                          | 17,4               | 265,4               | 450,0                  | 20      |
| 52475    | 2 x 2 x 0,75                          | 9,0                | 64,6                | 105,0                  | 18      |
| 52476    | 3 x 2 x 0,75                          | 10,2               | 81,7                | 137,0                  | 18      |
| 52477    | 4 x 2 x 0,75                          | 11,2               | 107,6               | 166,0                  | 18      |
| 52478    | 5 x 2 x 0,75                          | 12,2               | 126,1               | 200,0                  | 18      |
| 52479    | 6 x 2 x 0,75                          | 13,1               | 138,6               | 236,0                  | 18      |
| 52480    | 7 x 2 x 0,75                          | 13,5               | 153,7               | 255,0                  | 18      |
| 52481    | 10 x 2 x 0,75                         | 15,0               | 220,0               | 363,0                  | 18      |
| 52482    | 12 x 2 x 0,75                         | 17,0               | 265,5               | 434,0                  | 18      |
| 52483    | 15 x 2 x 0,75                         | 18,3               | 327,6               | 500,0                  | 18      |
| 52484    | 18 x 2 x 0,75                         | 19,6               | 374,6               | 580,0                  | 18      |

Dimensions and specifications may be changed without prior notice. (RB01)