

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



FRNC



HELUKABEL DATAFLAMM-C-PAAR 2x2x0,5 QMM / 52465 500 V halogen-free 001042625 CE

RoHS

## Technical data

- Special data cable, halogen-free
- **Temperature range**  
flexing +5°C to +70°C  
fixed installation -40°C to +70°C
- **Operating peak voltage**  
(not for heavy current installation purposes)  
0,14 mm<sup>2</sup> = 350 V  
≥ 0,25 mm<sup>2</sup> = 500 V
- **Test voltage**  
0,14 mm<sup>2</sup> = 800 V  
≥ 0,25 mm<sup>2</sup> = 1200 V
- **Insulation resistance**  
min. 2 GOhm x km
- **Capacitance**  
core/core < 70 nF/km
- **Minimum bending radius**  
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 optimize 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/EC.

## Cable structure

- Bare copper-conductor, fine-wire to DIN VDE 0812
- Conductor construction:  
0,34 mm<sup>2</sup> = 7x0,25 mm
- Core insulation of PE compound type L/MD to DIN VDE 0819-103 / DIN EN 50290-2-23
- Core identification to DIN 47100
- Cores stranded in pairs with optimal lay-length
- Pairs stranded in layers with optimal lay-length
- Foil wrapping
- Tinned copper braided screen, approx. 85% coverage
- Outer sheath compound type HM2 to DIN VDE 0207 part 24
- Sheath colour grey (RAL 7005)
- with meter marking

## Properties

### Tests

- Halogen-free to DIN VDE 0482 part 267, DIN EN 50267-2-1, IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Corrosiveness of combustion gases acc. to DIN 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 acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, 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	4,7	22,5	37,0	26
52436	3 x 2 x 0,14	5,1	25,6	47,0	26
52437	4 x 2 x 0,14	5,8	39,1	66,0	26
52438	5 x 2 x 0,14	6,3	45,3	76,0	26
52439	6 x 2 x 0,14	6,8	51,4	87,0	26
52440	7 x 2 x 0,14	6,8	54,2	94,0	26
52441	10 x 2 x 0,14	8,9	68,7	119,0	26
52442	12 x 2 x 0,14	9,2	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	11,0	99,2	190,0	26
52445	2 x 2 x 0,25	5,7	27,1	44,0	24
52446	3 x 2 x 0,25	6,2	42,4	66,0	24
52447	4 x 2 x 0,25	7,0	54,5	81,0	24
52448	5 x 2 x 0,25	7,9	59,8	98,0	24
52449	6 x 2 x 0,25	8,6	64,6	116,0	24
52450	7 x 2 x 0,25	8,6	71,3	120,0	24
52451	10 x 2 x 0,25	10,6	93,3	153,0	24
52452	12 x 2 x 0,25	11,4	108,0	175,0	24
52453	15 x 2 x 0,25	12,5	123,4	213,0	24
52454	18 x 2 x 0,25	13,1	139,7	248,0	24
52455	2 x 2 x 0,34	6,5	43,3	68,0	22
52456	3 x 2 x 0,34	7,2	55,0	92,0	22
52457	4 x 2 x 0,34	7,9	64,0	110,0	22
52458	5 x 2 x 0,34	8,8	74,5	128,0	22
52459	6 x 2 x 0,34	9,8	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	9,8	89,8	154,0	22
52461	10 x 2 x 0,34	12,2	119,8	209,0	22
52462	12 x 2 x 0,34	12,9	139,4	245,0	22
52463	15 x 2 x 0,34	14,4	160,0	279,0	22
52464	18 x 2 x 0,34	15,3	207,2	363,0	22
52465	2 x 2 x 0,5	7,4	50,2	76,0	20
52466	3 x 2 x 0,5	8,0	64,5	107,0	20
52467	4 x 2 x 0,5	9,0	77,2	134,0	20
52468	5 x 2 x 0,5	9,9	96,2	150,0	20
52469	6 x 2 x 0,5	10,9	107,4	176,0	20
52470	7 x 2 x 0,5	10,9	117,3	185,0	20
52471	10 x 2 x 0,5	13,8	158,2	275,0	20
52472	12 x 2 x 0,5	14,5	177,8	330,0	20
52473	15 x 2 x 0,5	15,8	236,4	380,0	20
52474	18 x 2 x 0,5	17,1	265,4	450,0	20
52475	2 x 2 x 0,75	8,5	64,6	105,0	19
52476	3 x 2 x 0,75	9,3	81,7	137,0	19
52477	4 x 2 x 0,75	10,6	107,6	166,0	19
52478	5 x 2 x 0,75	11,7	126,1	200,0	19
52479	6 x 2 x 0,75	12,7	138,6	236,0	19
52480	7 x 2 x 0,75	12,7	153,7	255,0	19
52481	10 x 2 x 0,75	15,6	220,0	363,0	19
52482	12 x 2 x 0,75	16,8	265,5	434,0	19
52483	15 x 2 x 0,75	18,6	327,6	500,0	19
52484	18 x 2 x 0,75	20,5	374,6	580,0	19

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