

## ÖLFLEX® TRAIN 4GKW C

HDB3823336EN

Version: 06

Date: 26. Dec.2025

### 1. Designation

ÖLFLEX® TRAIN 4GKW C

### 2. Application

For fixed installations inside of rail vehicles and buses. These cables with very small outer diameter are used where space is very limited.

Typical applications are in switchboards and control panels of trains and multi units.

### 3. Design

- Norm references: EN 50264-3-1, type OM
- Conductor: Fine wire strands of non-porous tinned copper wires according to IEC 60228, Class 5  
Conductor resistance according to VDE 0295, Class 5  
Separator tape (if necessary)
- Core insulation: Electron beam cross-linked polymer compound, halogen free and flame retardant  
The insulation colour: White
- Shield: Tinned copper braiding
- Core sheath: Electron beam cross-linked polymer compound, halogen free and flame retardant  
UV resistance  
The sheath colour: Black

### 4. Technical data

Nominal voltage $U_0/U$ ( $U_m$ )	1.8/3 (3.6) kV AC
Nominal voltage $V_0/V$	2.7 kV DC
Test voltage	6.5 kV
Temperature range	Fixed installed: -40 °C up to +125 °C max.
	Occasional flexing: -35 °C up to +90 °C max.
Short circuit temperature	+200 °C
Minimum bending radius ( $\leq 12$ mm)	Fixed installation: 3 x cable diameter Occasional flexing: 4 x cable diameter
( $> 12$ mm)	Fixed installation: 4 x cable diameter Occasional flexing: 5 x cable diameter
UV resistance	Acc. to EN 50525-1 are cables with black sheath suitable for a permanent outdoor use.

### 5. Fire performance

<b>BS6853</b>	Interior use	Ia,Ib,II
	Exterior use	Ia,Ib,II
Vertical flame spread of bunched wires and cables		BS 6853
Smoke density		BS 6853 appendix D
Toxicity of gases		BS 6853 appendix B R < 1.0

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**EN 45545-2**

hazard level

HL 1, HL 2, HL 3

Vertical flame propagation for a single insulated wire or cable  
 Vertical flame spread of bunched wires and cables  
 Smoke density  
 Toxicity of gases  
 Halogen-free  
 No corrosive gases

EN 60332-1-2  
 EN 50305  
 EN 61034-2  
 EN 50305  
 IEC 60754-1  
 IEC 60754-2

**6. Cable make up**
**6.1 Conductor**

- Conductor make up: Fine wire strands of tinned copper according to IEC 60228/EN 60228 resp. VDE 0295 class 5
- Conductor resistance acc. to EN 60228 resp. VDE 0295 class 5+6 for tinned copper wires
- Separator tape (if necessary)

**6.2 Core insulation**

- Insulation: Temperature resistant electron beam cross-linked polymer, halogen free and highly flame retardant  
Manufacturer and compound designation:
- Colours: White

**6.3 Shield**

- Tinned copper braid (over 80% optical coverage)
- Separating tape wrapping or talc powder (if necessary)

**6.4 Core sheath**

- Sheath: Temperature resistant electron beam cross-linked polymer, halogen free and highly flame retardant  
Manufacturer and compound designation:
- Colours: Black

**6.5 Dimension**

Part no.	Conductor	Insulation	Sheath	Outer diameter
	Cross section (mm <sup>2</sup> )	Thickness (mm)	Thickness (mm)	Approx. (mm)
3823336	1.5	0.8	0.7	5.2
3823337	2.5	0.8	0.7	5.6
3823338	4	0.9	0.8	6.5
3823339	6	1.2	0.9	8.0
3823340	10	1.4	0.9	9.4
3823341	16	1.4	0.9	11.0

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Part no.	Conductor	Insulation	Sheath	Outer diameter
	Cross section (mm <sup>2</sup> )	Thickness (mm)	Thickness (mm)	Approx. (mm)
3823342	25	1.6	1.1	13.2
3823343	35	1.6	1.1	14.6
3823344	50	1.6	1.1	16.9
3823345	70	1.6	1.1	18.7
3823346	95	1.6	1.1	20.7
3823347	120	2.0	1.1	23.1
3823348	150	2.0	1.4	25.5
3823349	185	2.1	1.4	27.9
3823350	240	2.1	1.4	30.8
3823351	300	2.2	1.6	34.1

**7. Common requirements**

**RoHS:** Dangerous and forbidden substances according to EC-Directive 2011/65/EU regarding Restriction of the use of certain hazardous substances (RoHS), are not allowed during manufacturing.

**REACH:** All materials used in the manufacturing process of the product are subject to the EC-Regulation No.1907/2006 regarding Registration, Evaluation, Authorization and Restriction of Chemicals (**REACH**).

If substances based on the current Candidate List are used, they shall be listed with their designation and their concentration.