

RHEYFLAT® N (N)GFLCGOEU-J

Screened Rubber Flat Cables

300/500 V

Type Approval Certificates

VDE

Applications

Used for festoon systems (e.g. on gantry cranes, container cranes etc), handling systems, machine tools, lifts and e-chain cable carrier systems. For applications with high mechanical stresses and frequent bending in one plane only. Copper screens are efficient against electro magnetic disturbances caused by power cables.

Design

1. Conductor

Copper bare
 $\leq 25 \text{ mm}^2$: extra-flexible stranded, class 6
 $\geq 35 \text{ mm}^2$: flexible stranded, class 5 according to IEC 60228
 DIN VDE 0295

2. Insulation

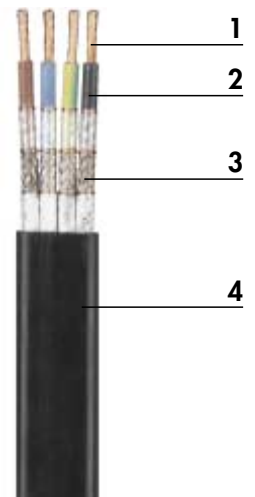
EPR (ethylen propylen rubber) rubber compound 3GI3 refer to DIN VDE 0207 part 20

3. Screen

Tinned copper braid

4. Outer sheath

PCP (polychloropren)
 Colour: black
 Rubber compound 5GM3 refer to DIN VDE 207 part 21



Marking

none

Core identification

(DIN VDE 0293 part 308/HD 308 S2)

Colour code:

4 cores: green/ yellow-brown-
black-grey

5 cores: green/ yellow-blue-
brown-black-grey

≥ 5 cores: black with printed numbers

Standards

In line with DIN VDE 0250 part 809

Options

- special low temperatur resistance compounds
- with UL approbation
- further options upon request

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Cable characteristics

Mechanical properties			
Minimum bending radii:	outer diameter d		
	< 8 mm	8 - 12 mm	> 12 mm
Flexible operation	3 d	4 d	5 d
Forced guidance e.g.:			
Festoon systems	3 d	4 d	5 d
E-Chain cable carrier systems	4 d	4 d	5 d
Fixed installation	3 d	3 d	4 d
Travelling speed up to 120 m/min (festoon application)			

Chemical properties
Oil resistant
For indoor and outdoor applications. Moisture, UV and ozone resistant.

Electrical and Thermal properties	
Nominal voltage	$U_o/U = 300/500$ kV
Maximum operating voltage in AC systems	$U_o/U = 330/550$ kV
Maximum operating voltage in DC systems	$U_o/U = 495/825$ kV
AC test voltage	2,000 V
Maximum admissible conductor temperature	
in service	+ 90 °C
in short circuit	+ 200 °C
Maximum admissible surface temperature	
fixed installation	- 40 °C to +80 °C
flexible operation	- 25 °C to +60 °C

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Technical data

Number of cores and nominal cross-section mm ²	Art. No.	Permissible current rating (A)**	ΔU (cos φ 0.8) Voltage drop (V/A x km)	Approx. outer diameter mm	Approx. weight kg/km
4x1.5 C*	7907 0092	23	20.2	6.4 x 19.0	230
8x1.5 C*	7907 0064	16	20.2	7.3 x 37.0	480
12x1.5 C*	7907 0061	12	20.2	8.4 x 56.0	770
4x2.5 C*	7907 0066	32	12.3	8.0 x 23.0	290
12x2.5 C*	7907 0194	17	12.3	9.7 x 71.0	1,150
4x4 C*	7907 0179	43	7.8	10.4 x 30.0	505
4x6 C*	7907 0180	56	5.3	11.0 x 33.0	595
4x10 C*	7907 0181	78	3.2	12.3 x 38.0	855
4x16 C*	7907 0182	104	2.0	14.0 x 43.0	1,160
4x25 C	7909 1855	138	1.2	15.7 x 50.2	1,640
4x50 C	7907 0193	213	0.74	20.7 x 68.0	3,030
4x(2x1) C*	7907 0169	10	31.2	13.0 x 38.0	630

* stock types

** ambient temperature 30 °C, conductor temperature 90 °C