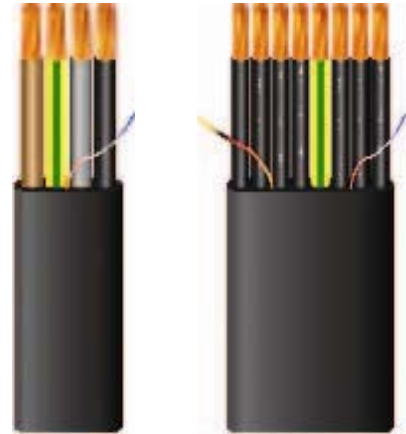


**Applications**

SIMBAL ‘FLATFLEX ‘N’ Neoprene flat cables are typically used on festoon systems on cranes & handling equipment, in applications with high mechanical stress & frequent bending in one plane.

**Design**

1. **Conductor :-** <= 25mm<sup>2</sup>—Extra Flexible plain copper, Class 6  
>= 35mm<sup>2</sup> - Flexible plain copper, Class 5 to IEC 60228 / DIN VDE 0295
2. **Insulation :-** EPR Rubber compound 3GI3 to VDE 0207 pt 20
3. **Outer Sheath :-** PCP Rubber compound 5GM3, to VDE 0207 pt 21  
Colour - Black



**Marking**

NGFLGOEU-J, Number of cores - Cross section, 300/500 V, Year of manufacture

**Core Identification**

In accordance with HD 308 S2  
 4 cores :- Black, Grey, Green/Yellow, Brown  
 5 cores :- Black, Grey, Green/Yellow, Brown, Blue  
 > 5 cores :- Black with white printed numbers (with or without green/yellow earth).

**Standards**

DIN VDE 0250 part 809

<b>Mechanical Properties</b>		
Tensile Strength of the conductor	Static	15 N / mm <sup>2</sup>
	Dynamic	30 N / mm <sup>2</sup>
Bending Radii	10 x cable thickness	
Max travelling speed of festoon	180 m / min	
<b>Chemical Properties</b>		
Oil resistant		
For Indoor & Outdoor applications, Moisture, UV and Ozone resistant		
Flame retardant in accordance with IEC 60 332 part 1		
<b>Electrical &amp; Thermal Properties</b>		
Nominal Voltage	U <sub>o</sub> / U	300 / 500 V
MaMaximum Operating Voltage in AC systems	U <sub>m</sub>	500 V
Maximum Operating Voltage in DC systems	V <sub>m</sub>	750 V
Test Voltage	2.0 k V - 50Hz in AC	
Current Rating	See facing page (Acc. To DIN VDE 0298 part 4)	
Max surface temperature		
- fixed installation	- 25 deg C up to + 60 deg C	
- mobile installation	- 40 deg C up to + 80 deg C	
Maximum temperature at the conductor		
- in service	+ 90 deg C	
- in short circuit	+ 200 deg C	

**Cable Specification**

Number of cores & nominal cross section	Gland PG (Metric)	Current rating at 30 deg C	Outer dimensions Approx	Weight Approx	Stock Item
4c x 1.5mm <sup>2</sup>	2121(M25/21)	22 Amps	17.5 x 6.2mm	0.200 kg/m	Yes
4c x 2.5mm <sup>2</sup>	2121(M25/21)	30 Amps	20 x 7mm	0.260 kg/m	Yes
4c x 4mm <sup>2</sup>	2930(M32/29)	40 Amps	26 x 9mm	0.410 kg/m	Yes
4c x 6mm <sup>2</sup>	2930(M32/29)	52 Amps	29 x 9.5mm	0.600 kg/m	Yes
4c x 10mm <sup>2</sup>	3640(M40/36)	71 Amps	33 x 11mm	0.800 kg/m	Yes
4c x 16mm <sup>2</sup>	3640(M40/36)	96 Amps	38 x 13mm	1.150 kg/m	Yes
4c x 25mm <sup>2</sup>	8107 Plate Gland	127 Amps	49.5 x 15mm	1.700 kg/m	Yes
4c x 35mm <sup>2</sup>	8108 Plate Gland	157 Amps	55 x 17mm	2.200 kg/m	Yes
4c x 50mm <sup>2</sup>	8108 Plate Gland	190 Amps	63 x 19mm	3.000 kg/m	
4c x 70mm <sup>2</sup>	8108 Plate Gland	242 Amps	71 x 22mm	4.000 kg/m	
4c x 95mm <sup>2</sup>	8110 Plate Gland	293 Amps	80 x 25mm	5.300 kg/m	
4c x 120mm <sup>2</sup>	8110 Plate Gland	339 Amps	86 x 27mm	6.400 kg/m	
5c x 1.5mm <sup>2</sup>	2930 (M32/29)	22 Amps	21.5 x 6.2mm	0.240 kg/m	
5c x 2.5mm <sup>2</sup>	2930 (M32/29)	30 Amps	25 x 6.8mm	0.400 kg/m	
5c x 4mm <sup>2</sup>	3640 (M40/36)	40 Amps	32 x 9mm	0.560 kg/m	
5c x 6mm <sup>2</sup>	3640 (M40/36)	52 Amps	35 x 9mm	0.652 kg/m	
5c x 10mm <sup>2</sup>	4245 (M50/42)	71 Amps	44 x 11mm	1.000 kg/m	
5c x 16mm <sup>2</sup>	8107 Plate Gland	96 Amps	50 x 13mm	1.450 kg/m	
5c x 25mm <sup>2</sup>	8108 Plate Gland	127 Amps	60 x 16mm	2.200 kg/m	
7c x 1.5mm <sup>2</sup>	2930(M32/29)	22 Amps	29 x 6.2mm	0.360 kg/m	
7c x 2.5mm <sup>2</sup>	3640(M40/36)	30 Amps	35 x 7.5mm	0.520 kg/m	
7c x 4mm <sup>2</sup>	4245(M50/42)	40 Amps	42 x 9mm	0.700 kg/m	
7c x 6mm <sup>2</sup>	8107 Plate Gland	52 Amps	42 x 9.5mm	0.850 kg/m	
8c x 1.5mm <sup>2</sup>	3640(M40/36)	22 Amps	31.5 x 6.2mm	0.370 kg/m	Yes
8c x 2.5mm <sup>2</sup>	3640(M40/36)	30 Amps	39 x 7.5mm	0.550 kg/m	Yes
10c x 1.5mm <sup>2</sup>	4245(M50/42)	22 Amps	40 x 6.5mm	0.520 kg/m	
12c x 1.5mm <sup>2</sup>	4245(M50/42)	22 Amps	47 x 6.5mm	0.620 kg/m	Yes
12c x 2.5mm <sup>2</sup>	8107 Plate Gland	30 Amps	56 x 8mm	0.800 kg/m	Yes
24c x 1.5mm <sup>2</sup>	8107 Plate Gland	22 Amps	55 x 12.5mm	1.300 kg/m	