

## Flexible power and control flat cables in line with CEI 20-19 part. 4



### Cable type

**FLEXIFLAT 450/750 V**  
(N)GFLGÖU- J/ (N)GFLGÖU- JZ flat rubber cables for festoon system

### Main application

Flexible power and control cables for use on connecting movable parts of machine tools and any material handling equipment. Suitable for power and signaling supply on festoon systems with fast movement with strong acceleration.

### Construction

<b>Fibre optics:</b>	Plain or tinned copper conductor, flexible to IEC 60228 cl. 6 up to 6 mm <sup>2</sup> , cl. 5 from 10 mm <sup>2</sup> Specially designed for mobile application
<b>Insulation:</b>	EPR compound better than 3GI3 Specially developed compound with improved electrical and mechanical characteristics
<b>Cores identification:</b>	Colours according to HD 308 S2 Standard colours: - 4 cores: green/yellow, brown, black, grey - ≥ 6 cores: black with printed numbers + green/yellow Green/yellow approximately in the middle
<b>Core arrangement:</b>	Parallel, starting from 12 cores in parallel bundle Green/yellow approximately in the middle of the cable
<b>Separation (if any):</b>	Tape(s)
<b>Outer sheath:</b>	Black polychloroprene rubber compound UV resistant, oil and chemical resistant better than 5GM2
<b>Marking:</b>	PALAZZO - FLEXIFLAT 450/750 V <i>n. of cores x cross section</i>

### Parameters

<b>Electrical</b>	Rated voltage	U <sub>0</sub> /U = 450/750 V
	Maximum permissible operating voltage in AC systems	U <sub>m</sub> = 900 V
	AC test voltage over 5 minutes	2,5 kV
	Current Carrying Capacity	According to DIN VDE 0298 part 4
	Bus compatibility	Cable with twisted and individually shielded pairs can be used for bus systems
<b>Thermal</b>	Fully flexible operation	- 25 °C
	Fixed installation	- 40 °C
	Maximum permissible operating temperature of the conductor	90 °C
	Short-circuit temperature of the conductor	250 °C
<b>Mechanical</b>	Tensile load	Up to 15 N/mm <sup>2</sup>
	Minimum bending radii	According to DIN VDE 0298 part 3
	Reeling operation	NO APPLICATION
	Festoon systems	Up to 180 m/min
<b>Chemical</b>	Resistance to oil	According to VDE / IEC standard
	Weather resistance	Unrestricted use outdoor and indoor, UV resistant, moisture resistant.

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**Table 1: FLEXIFLAT 450/750 V (N)GFLGÖU-J (N)GFLGÖU-JZ**

N. of cores and nominal cross section (n-mm <sup>2</sup> )	Max. D. C. electr. res. at 20 °C (Ohm/km)	Nominal conductor diameter (mm <sup>2</sup> )	Nominal overall dimensions WxTh (mm)	Weight for 1000 m (kg/km)	Max. permissible tensile load (N)
3x4x1,5	13,7	1,5	15 x 35	810	270
4x4x1,5	13,7	1,5	15 x 45	1.055	360
3x4x2,5	8,21	2,0	17 x 41	1.125	450
4x4x2,5	8,21	2,0	17 x 53	1.465	600
4x10	1,95	4,2	11 x 35	870	600
4x16	1,24	5,4	13 x 41	1.250	960
4x25	0,795	6,7	14,9 x 48	1.785	1.500
4x35	0,565	8,2	16,8 x 52	2.330	2.100
4x50	0,393	9,6	19,5 x 61	3.200	3.000
4x70	0,277	11,6	22 x 70	4.280	4.200
4x95	0,210	13,2	24 x 79	5.550	5.700

With integrated fibre-optics on request.