



TFCrane NGFLGÖU-J/O

DIN VDE 0250-809

- Low Voltage Flat Rubber Flexible Cable for Festoon Applications
- Upon request, weights and diameters may be individually adjusted based on end-use applications or customer requirements.



Applications:

Flexible flat cable designed for mechanical stresses, especially for applications with frequent bending during operation and for bending in one plane only. The cable is used on festoon systems and for connecting moveable parts of machine tools, material handling equipment. Usable in wet or dry conditions, outdoors and indoors.

Construction

Conductors

Special design ensuring higher flexibility. Flexible stranded annealed bare copper conductor:

- Up to 25 mm² - extra flexible, class 6 acc. to IEC 60228
- Above 35 mm² - flexible, class 5 to IEC 60228

Separator

If needed a suitable tape separator between the conductor and insulation

Insulation

Special EPDM rubber. halogen-free. lead-free compound. type 3GI3 quality, developed by TFKable

Colour coding of power conductors compliant to HD 308, DIN VDE 0293- 308

-J version:

- 3 - core: Green-yellow, blue, brown
- 4 - core: Green-yellow, brown, black, grey or green-yellow, blue, brown, black
- 5 - core: Green-yellow, blue, brown, black, grey
- Above 5 cores: Green-yellow, other cores black with white numbering

-O version:

- 3 - core: Brown, black, grey or blue, brown, black
- 4 - core: Blue, brown, black, grey
- 5 - core: Blue, brown, black, grey, black
- Above 5 cores: Black with white numbering

Circuit identification

Core arrangement

Parallel

Outer sheath

Special synthetic thermosetting compound, 5GM3 quality acc. to DIN VDE 0207/21. developed by TFKable

Colour of outer jacket

Black

Characteristics

Rated Voltage U_o/U

300/500 V (600 V)

Max. operating voltage U_m

0.7/1.2 kV

AC test voltage

2.5 kV

**This parameter depends on the product scope.*

Characteristics

Current carrying capacity	DIN VDE 0298-4
Max. conductor operating temperature	+90°C
Max. conductor temperature during short circuit	+250°C
Minimum ambient temperature for fixed installation	-40°C
Minimum ambient temperature for mobile installation	-35°C 4 x 150mm ² - 240mm ² : -25°C

Minimum bending radius acc. to DIN VDE 0298-3:

Thickness of flat cable [mm]	>8 ≤ 12	>12 ≤ 20	>20
Fixed installation	3D	4D	4D
On drums	5D	5D	5D
On deflection pulleys	7.5D	7.5D	7.5D
Moving freely	4D	5D	5D
Travel speed up to	250m/min 4 x 150mm ² - 240mm ² : 240m/min		
Tensile load	15N/mm ²		
Flame propagation	PN-EN 60332-1-2, IEC 60332-1-2		
Oil resistant	PN-EN 60811-404, IEC 60811-404		
UV resistant	UL 2556, ISO 4892-2		
Ozone resistant	PN-ISO 1431-1		

Example of standard sheath marking: TFKABLE 3 TFCrane NGFLGÖU-J 4x50 300/500 V CE year + meter

Parameters

Number of cores x cross-section	Conductor diameter	Approx. height of flat cable	Approx. width of flat cable	Approx. weight	Max. tensile load
mm ²	mm	mm	mm	kg/km	N
4x10	4.0	10.3	30.4	684	600
4x16	5.0	12.3	35.4	1004	960
4x25	6.1	14.4	41.9	1465	1500
4x35	7.3	16.0	47.2	1933	2100
4x50	9.0	18.1	55.6	2655	3000
4x70	10.8	20.2	62.9	3558	4200
4x95	12.9	23.3	73.5	4691	5700
4x120*	14.0	25.0	78.4	5766	7200
4x150*	15.8	27.9	88.0	7175	9000
4x185*	18.1	31.1	99.1	8778	11100
4x240*	19.6	34.0	107.7	11220	14400

**Based on standard*

Standard length cable packing: 500 m on drums. Other forms of packing and delivery are available on request