TFCrane (N)GRDGCGÖU-J

Based on: DIN VDE 0250-814

— Low Voltage Screened Rubber Insulated Flexible Cable
— Upon request, weights and diameters may be individually adjusted based on end-use applications or customer requirements.

Applications: Screened flexible cable designed for use on festoon systems. on hall gantry cranes, gantry cranes, rack material handling equipment, transportation system or machine tools. Suitable where the maximum emission values are required or where power cables are expected to cause interference and disruption on data cables. Power cables are the cable is used under high mechanical stresses, especially for applications with frequent bending. Usable in wet or dry conditions, outdoors, indoors.

Construction

Conductors	Flexible stranded annealed bare copper conductor class 5 to IEC 60228
Separator	If needed a suitable tape separator between the conductor and insulation
Insulation	EPDM rubber, halogen-free, lead-free compound, type 3GI3 acc. to DIN VDE 0207/20. developed by TFKable
Color of insulation*	Colour coding of power conductors comply to HD 308. DIN VDE 0293- 308 Power cores: 3-core circuit identification: Green-yellow, blue, brown 4-core circuit identification: Green-yellow, brown, black, grey 5-core circuit identification: Green-yellow, blue, brown, black, grey
Inner sheath	A synthetic thermosetting compound type Gm1b acc. to DIN VDE 0207/21
Color of inner sheath	Black
Screen over inner sheath	Braid screen made of tinned copper wires - covering min. 80%
Outer layer of sheath	Designed by TFKable, synthetic thermosetting compound, type 5GM3 acc. to DIN VDE 0207/21
Colour of outer jacket	Black

**other core identification available on request*

Characteristics

Rated Voltage U_0/U	0.6/1 kV
Max. operating voltage Um	1.2 kV
AC test voltage	3 kV
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

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

OD of 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
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 (N)GRDGCGÖU-J 4x10 0.6/1 kV CE year + meter

Parameters

Number of cores x cross-section	Conductor diameter	Approx. overall diameter	Approx. weight	Max. tensile load
mm²	**mm**	**mm**	**kg/km**	**N**
4x1.5	1.5	13.2	267	90
4x2.5	2.1	15.9	392	150
4x4	2.7	18.3	548	240
4x6	3.2	19.6	659	360
4x10	4.2	23.7	991	600
4x16	5.3	26.8	1416	960
4x25	6.6	31.6	2025	1500
4x35	7.8	35.4	2485	2100
4x50	9.6	41.8	3496	3000
4x70	11.4	46.1	4550	4200
5x1.5	1.5	14.5	346	112.5
5x2.5	2.1	17.5	497	187.5
5x4	2.7	19.6	636	300
5x6	3.2	21.0	780	450
5x10	4.2	25.5	1180	750
5x16	5.3	29.4	1659	1200
5x25	6.6	35.1	2371	1875
5x35	7.8	38.5	3021	2625
5x50	9.6	45.4	4238	3750
5x70	11.4	50.2	5551	5250

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