



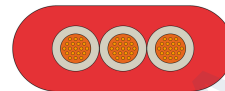
TEBAOFLEX CABLE

DATA SHEET

Mining&Industrial cable

(N)TSFLCGEWOEU MV MEDIUM VOLTAGE FLAT REELING CABLE

Flexible medium-voltage flat cable for high mechanical stresses



APPLICATION

Flexible medium-voltage flat reeling cable for mobile equipment such as fast-moving container cranes, cranes, large mobile equipment and excavators. Designed for high mechanical stresses and repeated changes of direction.

KEY FEATURES

Parameter	Value
Application	Flexible medium-voltage flat reeling cable for high mechanical stresses
Dynamic service	For tensile loads, multiple changes of direction and guide rollers
Core arrangement	Parallel core arrangement with split earth conductor concentrically distributed
Sheath system	Red CR-based rubber sheath with high outdoor and moisture resistance

DESIGN

Parameter	Value
Conductor	Tinned finely stranded electrolytic copper, class F
Insulation	High-quality EPR special compound with semiconductive field control
Sheath	PROTOFIRM CR-based special compound, red
Type	(N)TSFLCGEWOEU; 3C + concentric ground

ELECTRICAL, THERMAL, MECHANICAL AND MATERIAL DATA

Parameter	Value
Rated voltage U_0/U	3.6 / 6 kV
Maximum AC voltage U_0/U	4.2 / 7.2 kV
Maximum DC voltage U_0/U	5.4 / 10.8 kV
AC test voltage	11 kV
Ampacity	According to DIN VDE 0298 Part 4
Conductor temperature	90 deg C; short circuit 250 deg C
Ambient temperature, fixed	-50 deg C to +80 deg C
Ambient temperature, fully flexible	-35 deg C to +80 deg C
Tensile load	15 N/mm ² maximum on conductor
Torsional stress	Not allowed
Minimum bending radius	According to DIN VDE 0298 Part 3
S-type guide distance	20 x D cable diameter
Travel speed	Up to 120 m/min gantry reeling operation
Chemical resistance	Oil, ozone, UV, moisture and weather resistant
Materials	Tinned copper; EPR insulation; CR-based red rubber sheath

TECHNICAL DATA

APPLICATION NOTES

Parameter	Value
Construction	Parallel core arrangement; split earth conductor concentrically distributed around each core
Bending	According to DIN VDE 0298 Part 3; recommended applied diameter D = 1.5 x flat cable height
Testing	Reversed bending test and reeling test
Identification	Natural-colored insulation with black semiconductive layer

(N)TSFLCGEWOEU - 3.6/6 kV

Configuration	Conductor dia. max. mm	Height min.-max. mm	Width min.-max. mm	Bending radius mm	Weight kg/km	Tensile force N	Resistance Ohm/km	Current A	Short circuit kA
3x25+3x25/3E	6.9	24.2-27.2	46.3-68.3	408	2,730	1,125	0.80	105	3.58
3x35+3x25/3E	8.3	24.7-27.7	65.8-69.8	416	3,120	1,575	0.57	130	5.01
3x50+3x25/3E	9.8	27.8-30.0	71.1-75.1	450	3,860	2,250	0.39	162	7.15
3x70+3x35/3E	11.4	28.9-31.9	76.8-80.8	479	4,730	3,150	0.28	200	10.01
3x95+3x50/3E	13.3	29.2-30.9	75.5-79.5	464	5,280	4,275	0.21	241	13.59
3x120+3x70/3E	15.1	35.4-37.4	92.3-97.3	561	7,400	5,400	0.16	282	17.16

(N)TSFLCGEWOEU - 6/10 kV

Configuration	Conductor dia. max. mm	Height min.-max. mm	Width min.-max. mm	Bending radius mm	Weight kg/km	Tensile force N	Resistance Ohm/km	Current A	Short circuit kA
3x25+3x25/3E	6.9	25.0-27.5	66.7-69.7	413	2,860	1,125	0.80	105	3.58
3x35+3x25/3E	8.3	25.5-28.5	68.2-72.2	428	3,260	1,575	0.57	130	5.01
4x35+4x25/4E	8.3	25.5-28.5	86.7-91.7	428	4,110	2,100	0.57	130	5.01
3x50+3x25/3E	9.8	28.1-31.1	74.6-78.6	467	4,030	2,250	0.39	162	7.15
3x70+3x35/3E	11.4	29.7-32.7	79.2-83.2	491	4,850	3,150	0.28	200	10.01
4x70+4x35/4E	11.4	29.5-32.5	100.9-105.9	488	6,240	4,200	0.28	200	10.01
3x95+3x50/3E	13.3	31.7-34.7	84.7-89.7	521	5,920	4,275	0.21	241	13.59
3x120+3x70/3E	15.1	35.1-38.1	92.9-97.9	572	7,420	5,400	0.16	282	17.16

CERTIFICATIONS

