



Medium-voltage flat festoon & reeling cables

(N)TSFLCGEWÖU MV Flat Reeling Cable (3.6/6 & 6/10 kV)

(N)TSFLCGEWÖU Medium-Voltage Flat Reeling Cable

3.6/6 & 6/10 kV flat crane festoon & high-speed reeling cable (25–120 mm², 120 m/min)



DIN VDE 0250-813

3.6/6 & 6/10 kV · Flat Profile

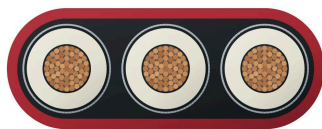
Up to 120 m/min · -35 °C Flex

Application

DIN VDE 0250-813 (N)TSFLCGEWÖU medium-voltage flat reeling and festoon cable (3.6/6 and 6/10 kV, 3-core and 4-core, 25–120 mm²) for fast-moving STS container cranes and stacker-reclaimers up to 120 m/min.

Typical uses: Ship-to-shore (STS) container crane festoons, RMG & automated stacking crane (ASC) reels, Bucket-wheel excavators & stacker-reclaimers, Port bulk unloaders & shipyard gantry cranes, High-speed industrial MV monospiral reels

Construction



Cross-section, not to scale

1	Phase conductor	DIN VDE 0295 · IEC 60228
2	Inner semiconductive layer	DIN VDE 0250-813
3	Core insulation	DIN VDE 0207-20
4	Outer semiconductive layer	DIN VDE 0250-813
5	Concentric split earth screen (3E / 4E)	DIN VDE 0250-813
6	Flat outer sheath	DIN VDE 0250-813

Technical data

Typical values

Rated voltage U₀/U	3.6/6 kV (U _m 4.2/7.2 kV AC, 5.4/10.8 kV DC) · 6/10 kV (U _m 6.9/12 kV AC, 9/18 kV DC)	Routine AC test voltage	11 kV AC for 3.6/6 kV series · 17 kV AC for 6/10 kV series
Current carrying capacity	105 A (25 mm ²) to 282 A (120 mm ²) according to DIN VDE 0298-4	Conductor temperature	+90 °C max continuous operation · +250 °C max short-circuit (1 s)
Ambient temperature range	Fixed -50 °C to +80 °C · Fully flexible -35 °C to +80 °C	Min. bending radius & S-guide	408 to 572 mm (DIN VDE 0298-3, D _{applied} = 1.5 × flat cable height) · S-guide distance ≥ 20 × D
Tensile, travel speed & torsion	15 N/mm ² max tensile load (1,125–5,400 N) · Up to 120 m/min gantry reeling speed · Torsion not permitted	Sheath & environmental durability	Red polychloroprene (CR / Type 5GM5) outer sheath resistant to oil, ozone, UV, moisture and weather
Dynamic bend endurance	Type-tested under reversed bending and high-speed monospiral/festoon reeling cycles	Standards	Based on DIN VDE 0250-813 · DIN VDE 0298-3 · DIN VDE 0298-4 · IEC 60228

Sizes

14 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation (N)TSFLCGEWÖU	Voltage kV	Phase mm ²	Concentric E mm ²	Cond. Ø mm	Min. H mm	Max. H mm	Min. W mm	Max. W mm	Min. bend mm	Mass ≈ kg/km	Max. pull N	DC Res. 20°C Ω/km	Current A	1s Short-Cct kA
☐ 3.6/6 kV · 3×25 + 3×25/3E	3.6/6	25	3×25/3E	6.9	24.2	27.2	64.3	68.3	408	2,730	1,125	0.80	105	3.58
☐ 3.6/6 kV · 3×35 + 3×25/3E	3.6/6	35	3×25/3E	8.3	24.7	27.7	65.8	69.8	416	3,120	1,575	0.57	130	5.01
☐ 3.6/6 kV · 3×50 + 3×25/3E	3.6/6	50	3×25/3E	9.8	27.8	30.0	71.1	75.1	450	3,860	2,250	0.39	162	7.15
☐ 3.6/6 kV · 3×70 + 3×35/3E	3.6/6	70	3×35/3E	11.4	28.9	31.9	76.8	80.8	479	4,730	3,150	0.28	200	10.01
☐ 3.6/6 kV · 3×95 + 3×50/3E	3.6/6	95	3×50/3E	13.3	29.2	30.9	75.5	79.5	464	5,280	4,275	0.21	241	13.59
☐ 3.6/6 kV · 3×120 + 3×70/3E	3.6/6	120	3×70/3E	15.1	35.4	37.4	92.3	97.3	561	7,400	5,400	0.16	282	17.16
☐ 6/10 kV · 3×25 + 3×25/3E	6/10	25	3×25/3E	6.9	25.0	27.5	66.7	69.7	413	2,860	1,125	0.80	105	3.58
☐ 6/10 kV · 3×35 + 3×25/3E	6/10	35	3×25/3E	8.3	25.5	28.5	68.2	72.2	428	3,260	1,575	0.57	130	5.01
☐ 6/10 kV · 4×35 + 4×25/4E	6/10	35	4×25/4E	8.3	25.5	28.5	86.7	91.7	428	4,110	2,100	0.57	130	5.01
☐ 6/10 kV · 3×50 + 3×25/3E	6/10	50	3×25/3E	9.8	28.1	31.1	74.6	78.6	467	4,030	2,250	0.39	162	7.15
☐ 6/10 kV · 3×70 + 3×35/3E	6/10	70	3×35/3E	11.4	29.7	32.7	79.2	83.2	491	4,850	3,150	0.28	200	10.01
☐ 6/10 kV · 4×70 + 4×35/4E	6/10	70	4×35/4E	11.4	29.5	32.5	100.9	105.9	488	6,240	4,200	0.28	200	10.01
☐ 6/10 kV · 3×95 + 3×50/3E	6/10	95	3×50/3E	13.3	31.7	34.7	84.7	89.7	521	5,920	4,275	0.21	241	13.59
☐ 6/10 kV · 3×120 + 3×70/3E	6/10	120	3×70/3E	15.1	35.1	38.1	92.9	97.9	572	7,420	5,400	0.16	282	17.16

- Per DIN VDE 0298-3, the effective applied diameter for flat cable bending calculations is $D = 1.5 \times \text{flat cable height (Max. H)}$, yielding the tabulated minimum bending radius of $15 \times \text{Max. H}$ (408–572 mm).
- On 3.6/6 kV 3×25+3×25/3E, minimum width is corrected to 64.3 mm (datasheet prints 46.3–68.3 mm, a digit transposition of 64.3 mm).

Standards and approvals

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

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Web

tebaoflex.com/cables/n-tsflcgewoeu-mv-flat-reeling-cable



Typical values for this cable type, based on DIN VDE 0250-813 · DIN VDE 0298-3 / 0298-4. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.