



Flat festoon cables

NGFLCGÖU

Screened Flat Rubber Festoon Cable

EMC-screened 300/500 V flat cable for VFD crane drives, encoders and bus festoons

DIN VDE 0250-809

U0/U 300/500 V

EMC screened

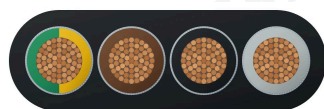


Application

Flat rubber festoon cable to DIN VDE 0250-809 with individually braided tinned copper screens on cores or twisted pairs — engineered to suppress PWM inverter noise and protect encoder, sensor and fieldbus signals on crane festoons.

Typical uses: VFD-driven bridge & gantry cranes, Ship-to-shore & RMG container cranes, Automated stacker & hoist trolleys, Steelworks & rolling mill cranes, Plating, anodising & dip lines, Encoder, resolver & fieldbus loops

Construction



Cross-section, not to scale

- 1 Conductor
- 2 Core insulation
- 3 Individual screen
- 4 Core arrangement
- 5 Outer sheath

IEC 60228 / DIN VDE 0295

Technical data

Typical values

Rated voltage U0/U	300/500 V	Max. operating voltage AC	0.7/1.2 kV
Max. operating voltage DC	0.9/1.8 kV	AC test voltage	2.5 kV
Current rating	DIN VDE 0298-4	Individual screen	Tinned copper braid (≈ 60 % cores, ≈ 80 % pairs), transfer impedance optimised at 30 MHz
Temperature, flexing	-35 to +80 °C	Temperature, fixed	-50 to +80 °C
Max. conductor temperature	+90 °C	Short-circuit temperature	+250 °C
Min. bending radius, moving	3-5 × cable height (21-136 mm per size table, DIN VDE 0298-3)	Min. bending radius, fixed	3 × H (≤ 12 mm), 4 × H (> 12 mm)
Max. travel speed	180 m/min	Max. tensile load	15 N/mm ² of conductor cross-section
Torsional stress	Not permitted (bend in one plane only)	Oil resistance	EN 60811-404
Flame retardance	IEC 60332-1-2	UV & ozone	Ozone, UV and moisture resistant
Locations	Indoors and outdoors, dry and wet conditions	Standards	DIN VDE 0250-809
Standard packing	500 m on wooden drums or cut-to-length festoon sets		

Sizes

19 standard constructions

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

Order designation -J	Order designation -O	Cores × mm ²	AWG ≈	Height max mm	Width max mm	Copper ≈ kg/km	Weight ≈ kg/km	Min. bend R mm	Max. pull N
Screened control cores 7 sizes									
☐ NGFLCGÖU-O 12×1(C)	NGFLCGÖU-O 12×1(C)	12 × 1 (C)	18	7.1	51.3	136	660	21	180
☐ NGFLCGÖU-J 4G1.5(C)	NGFLCGÖU-O 4×1.5(C)	4 × 1.5 (C)	16	7.4	19.5	68	250	22	90
☐ NGFLCGÖU-J 8G1.5(C)	NGFLCGÖU-O 8×1.5(C)	8 × 1.5 (C)	16	7.4	35.1	136	510	22	180
☐ NGFLCGÖU-J 12G1.5(C)	NGFLCGÖU-O 12×1.5(C)	12 × 1.5 (C)	16	8.0	55.0	204	780	24	270
☐ NGFLCGÖU-J 4G2.5(C)	NGFLCGÖU-O 4×2.5(C)	4 × 2.5 (C)	14	8.2	23.0	113	350	25	150
☐ NGFLCGÖU-J 8G2.5(C)	NGFLCGÖU-O 8×2.5(C)	8 × 2.5 (C)	14	8.2	43.5	227	710	25	300
☐ NGFLCGÖU-J 12G2.5(C)	NGFLCGÖU-O 12×2.5(C)	12 × 2.5 (C)	14	9.0	64.0	340	1,080	27	450
Screened twisted-pair bus 3 sizes									
☐ NGFLCGÖU-O 4×(2×1)C	NGFLCGÖU-O 4×(2×1)C	4 × (2 × 1) C	18	11.3	33.8	91	630	45	120
☐ NGFLCGÖU-O 7×(2×1)C	NGFLCGÖU-O 7×(2×1)C	7 × (2 × 1) C	18	11.3	56.0	159	1,090	45	210
☐ NGFLCGÖU-O 6×(2×2.5)C	NGFLCGÖU-O 6×(2×2.5)C	6 × (2 × 2.5) C	14	15.2	62.7	340	1,680	76	450
Screened 4-core VFD power 9 sizes									
☐ NGFLCGÖU-J 4G4(C)	NGFLCGÖU-O 4×4(C)	4 × 4 (C)	12	10.2	29.3	181	550	41	240
☐ NGFLCGÖU-J 4G6(C)	NGFLCGÖU-O 4×6(C)	4 × 6 (C)	10	11.1	31.8	272	665	44	360
☐ NGFLCGÖU-J 4G10(C)	NGFLCGÖU-O 4×10(C)	4 × 10 (C)	8	13.3	39.0	453	1,060	67	600
☐ NGFLCGÖU-J 4G16(C)	NGFLCGÖU-O 4×16(C)	4 × 16 (C)	6	14.4	43.2	725	1,360	72	960
☐ NGFLCGÖU-J 4G25(C)	NGFLCGÖU-O 4×25(C)	4 × 25 (C)	4	16.8	50.3	1,133	1,980	84	1,500
☐ NGFLCGÖU-J 4G35(C)	NGFLCGÖU-O 4×35(C)	4 × 35 (C)	2	18.9	57.4	1,586	2,590	95	2,100
☐ NGFLCGÖU-J 4G50(C)	NGFLCGÖU-O 4×50(C)	4 × 50 (C)	1	21.5	66.0	2,266	3,590	108	3,000
☐ NGFLCGÖU-J 4G70(C)	NGFLCGÖU-O 4×70(C)	4 × 70 (C)	2/0	23.9	73.8	3,172	4,630	120	4,200
☐ NGFLCGÖU-J 4G95(C)	NGFLCGÖU-O 4×95(C)	4 × 95 (C)	3/0	27.2	83.7	4,305	5,950	136	5,700

- (C) denotes tinned copper braided screens over individual cores or twisted pairs. Minimum bending radius applies in the flat bending plane.

Electrical & conductor data

12 sizes

Cross-section mm ²	AWG ≈	Stranding IEC 60228	Max. conductor resistance 20 °C, Ω/km	Current rating in air 30 °C, A	Short-circuit 1 s kA	Used in
1	18	Class 6	19.5	19	0.14	12×1(C), 4×(2×1)C, 7×(2×1)C
1.5	16	Class 6	13.3	24	0.21	4×1.5(C), 8×1.5(C), 12×1.5(C)
2.5	14	Class 6	7.98	32	0.36	4×2.5(C), 8×2.5(C), 12×2.5(C), 6×(2×2.5)C
4	12	Class 6	4.95	43	0.57	4×4(C)
6	10	Class 6	3.3	56	0.86	4×6(C)
10	8	Class 6	1.91	78	1.43	4×10(C)
16	6	Class 6	1.21	104	2.29	4×16(C)
25	4	Class 6	0.78	138	3.58	4×25(C)
35	2	Class 5	0.55	170	5.01	4×35(C)
50	1	Class 5	0.39	212	7.15	4×50(C)
70	2/0	Class 5	0.27	263	10.01	4×70(C)
95	3/0	Class 5	0.21	316	13.59	4×95(C)

– Current ratings per DIN VDE 0298-4 for one flat cable free in air at 30 °C; apply grouping derating when stacked on festoon saddles.

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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ngflcgoeu-screened-flat-festoon-cable



Typical values for this cable type, based on DIN VDE 0250-809. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.