



Flat festoon cables

NGFLGÖU

Flat Rubber Festoon Cable

Unscreened 300/500 V flat power and control cable for crane festoons and trolleys



DIN VDE 0250-809

U0/U 300/500 V

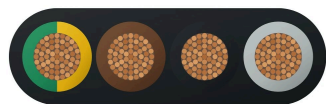
Flat profile

Application

Parallel-core rubber flat cable to DIN VDE 0250-809 for single-plane bending on C-rail and I-beam festoon systems, overhead cranes, hoists and transfer lines — indoors and outdoors down to -35 °C in motion.

Typical uses: Overhead bridge & gantry cranes, Container & ship-to-shore festoons, Automated plating & dip lines, Steelworks & foundry hoists, Bulk material handling, Machine tool & transfer gantries

Construction



Cross-section, not to scale

- 1 Conductor
- 2 Core insulation
- 3 Core arrangement
- 4 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	Screen	Unscreened
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 (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

40 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
1.5 mm ² control 9 sizes									
☐ NGFLGÖU-J 3G1.5	NGFLGÖU-O 3X1.5	3 × 1.5	16	6.2	12.5	43	130	19	68
☐ NGFLGÖU-J 4G1.5	NGFLGÖU-O 4X1.5	4 × 1.5	16	6.2	15.8	58	170	19	90
☐ NGFLGÖU-J 5G1.5	NGFLGÖU-O 5X1.5	5 × 1.5	16	6.0	20.1	72	210	18	113
☐ NGFLGÖU-J 7G1.5	NGFLGÖU-O 7X1.5	7 × 1.5	16	6.0	26.8	101	280	18	158
☐ NGFLGÖU-J 8G1.5	NGFLGÖU-O 8X1.5	8 × 1.5	16	6.0	29.3	115	310	18	180
☐ NGFLGÖU-J 10G1.5	NGFLGÖU-O 10X1.5	10 × 1.5	16	6.7	37.0	144	440	20	225
☐ NGFLGÖU-J 12G1.5	NGFLGÖU-O 12X1.5	12 × 1.5	16	6.8	43.5	173	530	20	270
☐ NGFLGÖU-J 24G1.5	NGFLGÖU-O 24X1.5	24 × 1.5	16	12.3	53.2	346	1,040	62	540
☐ NGFLGÖU-J 42G1.5	NGFLGÖU-O 42X1.5	42 × 1.5	16	16.1	72.3	605	1,920	81	945
2.5 mm ² & bundled control 8 sizes									
☐ NGFLGÖU-J 4G2.5	NGFLGÖU-O 4X2.5	4 × 2.5	14	7.3	19.5	96	260	22	150
☐ NGFLGÖU-J 5G2.5	NGFLGÖU-O 5X2.5	5 × 2.5	14	7.4	24.6	120	320	22	188
☐ NGFLGÖU-J 7G2.5	NGFLGÖU-O 7X2.5	7 × 2.5	14	7.4	32.8	168	440	22	263
☐ NGFLGÖU-J 8G2.5	NGFLGÖU-O 8X2.5	8 × 2.5	14	7.4	35.9	192	490	22	300
☐ NGFLGÖU-J 10G2.5	NGFLGÖU-O 10X2.5	10 × 2.5	14	8.0	45.3	240	660	24	375
☐ NGFLGÖU-J 12G2.5	NGFLGÖU-O 12X2.5	12 × 2.5	14	8.0	53.5	288	780	24	450
☐ NGFLGÖU-J 24G2.5	NGFLGÖU-O 24X2.5	24 × 2.5	14	15.6	68.0	576	1,690	78	900
☐ NGFLGÖU-J 7×(3×1)	NGFLGÖU-O 7×(3×1)	7 × (3 × 1)	18	10.3	51.8	202	770	41	315
4-core power 13 sizes									
☐ NGFLGÖU-J 4G4	NGFLGÖU-O 4X4	4 × 4	12	8.9	23.5	154	390	36	240
☐ NGFLGÖU-J 4G6	NGFLGÖU-O 4X6	4 × 6	10	9.5	26.9	230	500	38	360
☐ NGFLGÖU-J 4G10	NGFLGÖU-O 4X10	4 × 10	8	11.0	32.6	384	750	44	600
☐ NGFLGÖU-J 4G16	NGFLGÖU-O 4X16	4 × 16	6	12.9	37.5	614	1,060	65	960

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
☐ NGFLGÖU-J 4G25	NGFLGÖU-O 4X25	4 × 25	4	14.4	43.4	960	1,500	72	1,500
☐ NGFLGÖU-J 4G35	NGFLGÖU-O 4X35	4 × 35	2	16.7	49.9	1,344	2,040	84	2,100
☐ NGFLGÖU-J 4G50	NGFLGÖU-O 4X50	4 × 50	1	19.0	58.0	1,920	2,830	95	3,000
☐ NGFLGÖU-J 4G70	NGFLGÖU-O 4X70	4 × 70	2/0	21.3	65.2	2,688	3,820	107	4,200
☐ NGFLGÖU-J 4G95	NGFLGÖU-O 4X95	4 × 95	3/0	24.1	74.6	3,648	4,930	121	5,700
☐ NGFLGÖU-J 4G120	NGFLGÖU-O 4X120	4 × 120	4/0	27.2	83.2	4,608	6,220	136	7,200
☐ NGFLGÖU-J 4G150	NGFLGÖU-O 4X150	4 × 150	300 kcmil	27.9	88.0	5,760	7,175	140	9,000
☐ NGFLGÖU-J 4G185	NGFLGÖU-O 4X185	4 × 185	350 kcmil	31.1	99.1	7,104	8,778	156	11,100
☐ NGFLGÖU-J 4G240	NGFLGÖU-O 4X240	4 × 240	500 kcmil	34.0	107.7	9,216	11,220	170	14,400
5-core & 7-core power 10 sizes									
☐ NGFLGÖU-J 5G4	NGFLGÖU-O 5X4	5 × 4	12	9.0	31.2	192	510	36	300
☐ NGFLGÖU-J 5G6	NGFLGÖU-O 5X6	5 × 6	10	9.6	34.1	288	640	38	450
☐ NGFLGÖU-J 5G10	NGFLGÖU-O 5X10	5 × 10	8	11.3	41.6	480	960	45	750
☐ NGFLGÖU-J 5G16	NGFLGÖU-O 5X16	5 × 16	6	12.7	47.6	768	1,360	64	1,200
☐ NGFLGÖU-J 7G4	NGFLGÖU-O 7X4	7 × 4	12	9.0	40.9	269	690	36	420
☐ NGFLGÖU-J 7G6	NGFLGÖU-O 7X6	7 × 6	10	9.6	45.3	403	870	38	630
☐ NGFLGÖU-J 7G10	NGFLGÖU-O 7X10	7 × 10	8	11.3	55.9	672	1,320	45	1,050
☐ NGFLGÖU-J 7G16	NGFLGÖU-O 7X16	7 × 16	6	13.4	63.9	1,075	1,990	67	1,680
☐ NGFLGÖU-J 7G25	NGFLGÖU-O 7X25	7 × 25	4	15.6	75.9	1,680	2,820	78	2,625
☐ NGFLGÖU-J 7G35	NGFLGÖU-O 7X35	7 × 35	2	17.4	87.0	2,352	3,820	87	3,675

– Minimum bending radius applies to free movement in the flat plane (bending across cable height H).

Electrical & conductor data

16 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	7×(3×1)
1.5	16	Class 6	13.3	24	0.21	3× 4× 5× 7× 8× 10× 12× 24× 42×
2.5	14	Class 6	7.98	32	0.36	4× 5× 7× 8× 10× 12× 24×
4	12	Class 6	4.95	43	0.57	4× 5× 7×
6	10	Class 6	3.3	56	0.86	4× 5× 7×
10	8	Class 6	1.91	78	1.43	4× 5× 7×
16	6	Class 6	1.21	104	2.29	4× 5× 7×
25	4	Class 6	0.78	138	3.58	4× 7×
35	2	Class 5	0.55	170	5.01	4× 7×
50	1	Class 5	0.39	212	7.15	4×
70	2/0	Class 5	0.27	263	10.01	4×
95	3/0	Class 5	0.21	316	13.59	4×
120	4/0	Class 5	0.16	370	17.16	4×
150	300 kcmil	Class 5	0.129	424	21.45	4×
185	350 kcmil	Class 5	0.106	482	26.46	4×
240	500 kcmil	Class 5	0.0801	565	34.32	4×

– Current ratings per DIN VDE 0298-4 for one flat cable free in air at 30 °C ambient; derate when multiple flat cables are stacked on a festoon saddle.

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/ngflgoeu-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.