

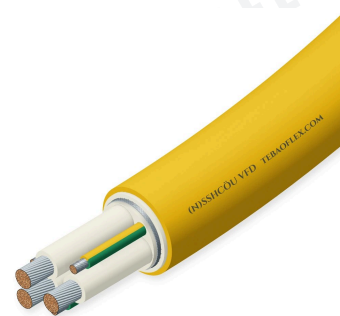


Screened power & VFD / motor supply cables

(N)SSHCÖU VFD

(N)SSHCÖU 0.6/1 kV VFD Mining Cable

Symmetrical 3+3 EMC-screened rubber motor cable for VFD drives in mines & tunnels



DIN VDE 0250-812

U0/U 0.6/1 kV (640/1140 V)

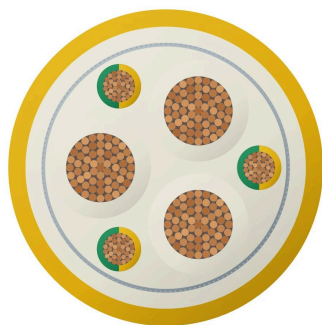
Symmetrical 3+3 EMC

Application

Heavy-duty 0.6/1 kV (640/1,140 V) EMC-optimised rubber VFD motor cable based on DIN VDE 0250-812 with three phase cores, three symmetrical split earth conductors and a concentric tinned-copper braid screen for mining and tunnelling drives.

Typical uses: Opencast conveyor & crusher drives, Underground VFD pump & fan drives, Tunnel boring machines (TBM), Mine hoist & winch motors, Slurry & dredging pumps, Heavy construction plant

Construction



Cross-section, not to scale

1	Phase & PE conductors	DIN EN 60228 / IEC 60228
2	Core insulation	DIN VDE 0207-20
3	Symmetrical PE cores (3)	120° symmetrical return path
4	Inner sheath	DIN VDE 0207-21
5	EMC concentric screen	
6	Outer sheath	DIN VDE 0207-21

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV (also permitted for U0/U = 640/1,140 V systems)	Max. operating voltage	AC: 0.7/1.2 kV · DC: 0.9/1.8 kV
AC test voltage	5.0 kV, 5 min (main cores)	EMC screen & earth symmetry	Symmetrical 3 + 3 split PE in outer interstices + overall concentric tinned copper wire braid
Current rating basis	99 to 540 A (laid on surface at 30 °C ambient per DIN VDE 0298-4 Table 15)	Ambient temperature, flexing	–25 °C to +90 °C (standard); –45 °C to +90 °C (low-temp black variant)
Ambient temperature, fixed	–40 °C to +90 °C (–45 °C on low-temp variant)	Max. conductor temperature	+90 °C continuous · +250 °C short-circuit
Max. tensile load	15 N/mm ² of total power-conductor cross-section (720 to 10,800 N)	Torsional stress	±25 %/m
Min. bending radius	Per DIN VDE 0298-3 (5 × OD fixed; 10 × OD flexible guiding)	Flame retardance	IEC 60332-1-2 vertical flame; MSHA flame resistance
Oil resistance	IEC 60811-404 (5GM5 polychloroprene elastomer outer sheath)	Water submersion	Submersible in water up to +40 °C to approx. 10 m depth
Weather & ozone	UV, ozone and moisture resistant for indoor, underground and opencast service	Standards	Based on DIN VDE 0250-812 · (N)SSHCÖU

Sizes

10 standard constructions

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Designation · cores × mm ²	Cond. Ø max mm	OD min mm	OD max mm	Mass ≈ kg/km	Max. tensile N	DC resist. 20 °C Ω/km	Capacitance μF/km	Inductance mH/km	Current (30 °C) A	Short-circuit 1 s kA
☐ (N)SSHCÖU · 3 × 16 + 3 × 2.5 mm ²	5.4	24.4	27.4	1,190	720	1.240	0.42	0.26	99	2.29
☐ (N)SSHCÖU · 3 × 25 + 3 × 4 mm ²	6.3	28.2	31.2	1,680	1,125	0.795	0.42	0.26	131	3.58
☐ (N)SSHCÖU · 3 × 35 + 3 × 16/3 mm ²	7.5	30.5	33.5	2,000	1,575	0.565	0.49	0.25	162	5.01
☐ (N)SSHCÖU · 3 × 50 + 3 × 25/3 mm ²	8.9	36.0	39.0	2,820	2,250	0.393	0.51	0.25	202	7.15
☐ (N)SSHCÖU · 3 × 70 + 3 × 35/3 mm ²	10.6	41.2	44.2	3,800	3,150	0.277	0.59	0.24	250	10.01
☐ (N)SSHCÖU · 3 × 95 + 3 × 50/3 mm ²	12.1	45.7	48.7	4,760	4,275	0.210	0.60	0.24	301	13.59
☐ (N)SSHCÖU · 3 × 120 + 3 × 70/3 mm ²	14.1	48.7	52.7	5,890	5,400	0.164	0.69	0.23	352	17.16
☐ (N)SSHCÖU · 3 × 150 + 3 × 70/3 mm ²	16.0	55.7	59.7	7,230	6,750	0.132	0.70	0.23	404	21.45
☐ (N)SSHCÖU · 3 × 185 + 3 × 95/3 mm ²	17.8	60.4	64.4	8,640	8,325	0.108	0.71	0.23	461	26.46
☐ (N)SSHCÖU · 3 × 240 + 3 × 120/3 mm ²	20.2	68.2	72.2	11,100	10,800	0.082	0.73	0.23	540	34.32

– In '3 × 16 + 3 × 2.5' and '3 × 25 + 3 × 4', 2.5 mm² and 4 mm² denote the cross-section of each of the 3 split earth conductors; from 35 mm² upward, '3 × 16/3' denotes 3 split earth conductors with a combined cross-section of 16 mm² (5.33 mm² each).

– Current capacity values are nominal for rubber cables laid on a surface at 30 °C ambient per DIN VDE 0298-4 Table 15.

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

info@tebaoflex.com

Web

tebaoflex.com/cables/vfd-mining-cable



Typical values for this cable type, based on DIN VDE 0250-812 · (N)SSHCÖU. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.