



NSGAFCMÖU 1.8/3 kV screened rubber wire

NSGAFCMÖU

Screened Rubber-Insulated Single-Core Wire

DIN VDE 0250-602 1.8/3 (3.6) kV screened EPR/PCP short-circuit-proof single-core wire



DIN VDE 0250-602

1.8/3 (3.6) kV + CM Screen

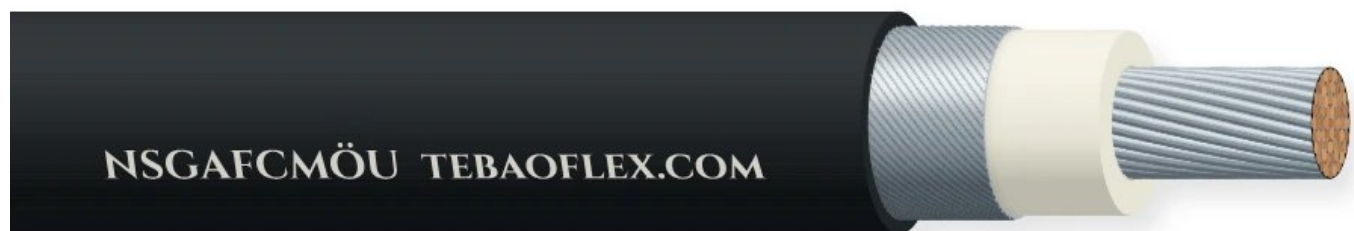
Mining & Rail Switchgear

Application

Screened, inherently short-circuit-proof rubber-insulated single-core power and control wire (NSGAFCMÖU) to DIN VDE 0250-602 rated $U_0/U = 1.8/3$ (3.6) kV, combining 3GI3 EPR dielectric, a concentric tinned copper screen (CM), and a 5GM2.

Typical uses: Underground Coal & Hard-Rock Mining Switchgear, Railway Locomotives & Traction Converter Racks, 690 V / 1,000 V / 3.3 kV Frequency Inverter Drives, Short-Circuit-Proof Transformer & Rectifier Leads, Open-Cast Excavator & Stacker-Reclaimer Cabinets

Construction



Cross-section, not to scale

- 1 Fine-stranded Class 5 tinned copper phase conductor
- 2 1.8/3 kV EPR (3GI3) dielectric
- 3 Inner elastomer bedding / semiconductive tape
- 4 Concentric tinned copper screen (CM)
- 5 Heavy-duty 5GM2 polychloroprene outer sheath (ÖU)

Technical data

Typical values

Nominal AC voltage (U ₀ /U)	1.8/3 kV · Max operating U _m = 3.6 kV AC	Max. operating DC voltage	2.7/5.4 kV DC
AC test voltage (core to screen)	6.0 kV AC rms for 5 min	AC test voltage (screen to water)	2.0 kV AC rms for 5 min
Max. conductor temperature	+90 °C continuous · +250 °C short-circuit	Operating temperature (fixed)	−40 °C to +80 °C
Operating temperature (flexing)	−25 °C to +80 °C	Phase / screen sizes	1×1.5/1.5 mm ² up to 1×240/35 mm ²
Min. bend radius	5 × OD (fixed) · 10 × OD (flexible installation)	Oil resistance (Ö)	DIN EN 60811-404 (IRM 902 oil at 100 °C)
Flame retardancy (U)	DIN EN 60332-1-2	Ozone & weather	DIN VDE 0250-602 ozone & moisture resistant
Standards	DIN VDE 0250-602		

Sizes

14 standard constructions

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

Order designation	Phase / Screen mm ²	Phase R @20°C Ω/km	EPR Core OD mm	Overall OD mm	Weight kg/km	Ampacity A (30°C)	Fixed R mm
Screened Control & Auxiliary Feeder Sizes — 1×1.5/1.5 mm ² to 1×25/6 mm ² 7 sizes							
☐ NSGAFCMOEU-1X1.5/1.5	1 × 1.5 / 1.5	13.700	5.0	9.2	115	30	46
☐ NSGAFCMOEU-1X2.5/1.5	1 × 2.5 / 1.5	8.210	5.5	9.8	135	41	49
☐ NSGAFCMOEU-1X4/2.5	1 × 4.0 / 2.5	5.090	6.0	10.6	168	55	53
☐ NSGAFCMOEU-1X6/2.5	1 × 6.0 / 2.5	3.390	6.5	11.2	198	70	56
☐ NSGAFCMOEU-1X10/4	1 × 10 / 4.0	1.950	7.5	12.6	265	98	63
☐ NSGAFCMOEU-1X16/6	1 × 16 / 6.0	1.240	8.8	14.2	355	132	71
☐ NSGAFCMOEU-1X25/6	1 × 25 / 6.0	0.795	10.5	16.0	475	176	80
Screened Switchgear, VFD & Traction Power Sizes — 1×35/6 mm ² to 1×240/35 mm ² 7 sizes							
☐ NSGAFCMOEU-1X35/6	1 × 35 / 6.0	0.565	11.8	17.5	595	218	88
☐ NSGAFCMOEU-1X50/10	1 × 50 / 10	0.393	13.6	19.6	810	276	98
☐ NSGAFCMOEU-1X70/10	1 × 70 / 10	0.277	15.5	21.8	1,045	347	109
☐ NSGAFCMOEU-1X95/16	1 × 95 / 16	0.210	17.8	24.5	1,365	416	123
☐ NSGAFCMOEU-1X120/16	1 × 120 / 16	0.164	19.6	26.5	1,640	488	133
☐ NSGAFCMOEU-1X185/25	1 × 185 / 25	0.108	23.8	31.4	2,420	644	157
☐ NSGAFCMOEU-1X240/35	1 × 240 / 35	0.082	26.8	35.0	3,120	764	175

- When installing single-core screened cables in 3-phase AC circuits, bond the concentric copper screens at one end (or via cross-bonding) if circulating sheath currents exceed thermal limits.

Standards and approvals

- ✓ DIN VDE 0250-602 NSGAFCMÖU 1.8/3 kV Compliant
- ✓ DIN VDE 0118 Mining & VDE 0100-520 Short-Circuit Proof

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/nsgafcmoeu-screened-rubber-insulated-single-core-wire



Typical values for this cable type, based on DIN VDE 0250-602 / VDE 0100-520 / VDE 0118. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.