



power connection cable series

(N)TMCGC11Y

Single-Core MV PUR-Sheathed Cable

DIN VDE 0250-813 3.6/6–18/30 kV screened flexible EPR/PUR single-core MV cable



DIN VDE 0250-813 (N)TMCGC11Y

3.6/6 kV to 18/30 kV Screened

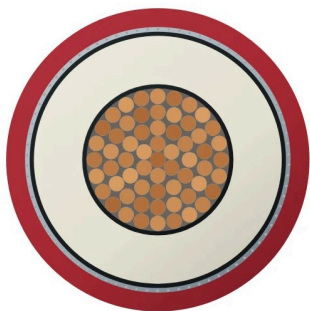
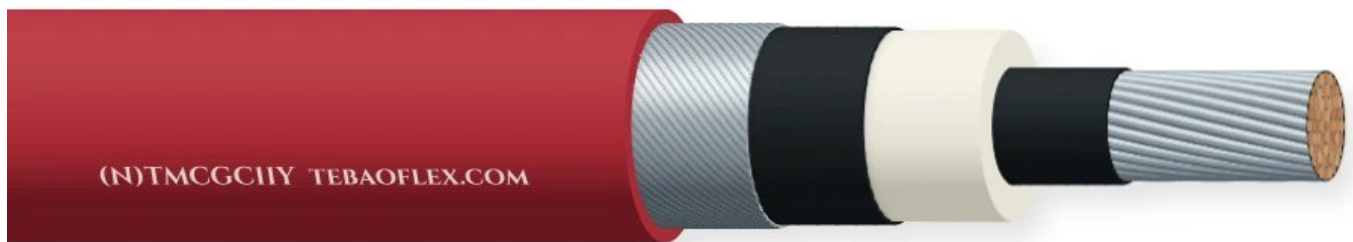
3G13 EPR + 11Y PUR Sheath

Application

(N)TMCGC11Y Single-Core Medium-Voltage PUR-Sheathed Cable (3.6/6 kV, 6/10 kV, 12/20 kV & 18/30 kV; 25 mm² to 630 mm²) engineered per DIN VDE 0250-813 with Class 5 fine-stranded tinned copper conductor, triple-extruded inner/outer.

Typical uses: Medium-Voltage Switchgear, Transformer & VFD Jumpers, Mobile Mining Substation Skids & Tunnel Boring (TBM), Wind Turbine Tower Base & Nacelle MV Transformer Loops, Port Shore-to-Ship (AMP) Containerised MV Skids, Test-Bay & Temporary Utility Substation Bypass Leads

Construction



Cross-section, not to scale

- 1 Class 5 fine-stranded tinned copper conductor
- 2 Inner semiconducting elastomer stress-control layer ('G')
- 3 3G13 Ethylene Propylene Rubber (EPR) MV dielectric
- 4 Outer semiconducting rubber ('G') + Tinned Cu screen ('C')
- 5 11YM1 Polyurethane ('11Y') heavy-duty outer sheath

Technical data

Typical values

Rated voltage tiers (U ₀ /U)	3.6/6 kV · 6/10 kV · 8.7/15 kV · 12/20 kV · 18/30 kV (U _{max} up to 36 kV)	Routine AC test voltage	11 kV (3.6/6) · 17 kV (6/10) · 29 kV (12/20) · 43 kV (18/30) for 5 min
Partial discharge level	≤ 5 pC at 1.73 × U ₀	Max. DC resistance @ 20 °C	0.393 Ω/km (50) · 0.206 Ω/km (95) · 0.129 Ω/km (150) · 0.0817 Ω/km (240)
Max. conductor temperature	+90 °C continuous operation	Short-circuit temperature	+250 °C (up to 5 s)
Ambient temperature range	-40 °C to +80 °C (fixed) · -25 °C to +80 °C (flexible handling)	Min. bend radius	5 × OD (fixed routing) · 10 × OD (flexible / mobile movement)
Max. tensile load	15 N / mm ² of copper power conductor cross-section	Sheath tear & abrasion	11YM1 PUR tear strength ≥ 20 N/mm; abrasion < 100 mm ³
Oil, grease & hydrolysis	11YM1 polyether PUR resists ASTM #2 oil, hydraulic fluids & microbes	Halogen-free outer sheath	11YM1 polyurethane is naturally halogen-free
Weather, UV & water	Ozone proof and suitable for outdoor / wet industrial installation	Standards	Based on DIN VDE 0250-813 & DIN VDE 0207-20 / 0207-21

Sizes

6 standard constructions

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

VDE designation	Conductor / Cu screen	Outer Ø ≈ mm	Weight ≈ kg/km	Max. DC R Ω/km	Air 30°C A
6/10 kV (N)TMC GC11Y 3 sizes					
☐ (N)TMC GC11Y 1×50/16 6/10kV	50 mm ² Cl.5 + 16 mm ² Cu screen	24.2	920	0.3930	238
☐ (N)TMC GC11Y 1×95/16 6/10kV	95 mm ² Cl.5 + 16 mm ² Cu screen	28.0	1,410	0.2060	358
☐ (N)TMC GC11Y 1×185/25 6/10kV	185 mm ² Cl.5 + 25 mm ² Cu screen	33.8	2,410	0.1080	540
12/20 kV (N)TMC GC11Y 3 sizes					
☐ (N)TMC GC11Y 1×50/16 12/20kV	50 mm ² Cl.5 + 16 mm ² Cu screen	28.6	1,150	0.3930	242
☐ (N)TMC GC11Y 1×120/16 12/20kV	120 mm ² Cl.5 + 16 mm ² Cu screen	33.8	1,910	0.1640	418
☐ (N)TMC GC11Y 1×240/25 12/20kV	240 mm ² Cl.5 + 25 mm ² Cu screen	40.5	3,280	0.0817	645

– Also manufactured in 3.6/6 kV, 8.7/15 kV and 18/30 kV voltage classes from 25 mm² up to 630 mm².

Standards and approvals

- ✓ DIN VDE 0250-813 Compliant
- ✓ IEC 60502-2 PD Tested
- ✓ RoHS 2, REACH & CE

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/n-tmcgc11y-single-core-mv-pur-sheathed-cable



Typical values for this cable type, based on DIN VDE 0250-813 / IEC 60502-2. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.