Screened rubber festoon & drag-chain power cable

(N)3GRDC5G-J/O

0.6/1 kV Screened Rubber Festoon Cable

VDE 0250-812 · 0.6/1 kV · Screened rubber festoon & drag-chain power cable

DIN VDE 0250-812 | 0.6/1 kV (Max 1.2 kV) | 240 m/min Festoon

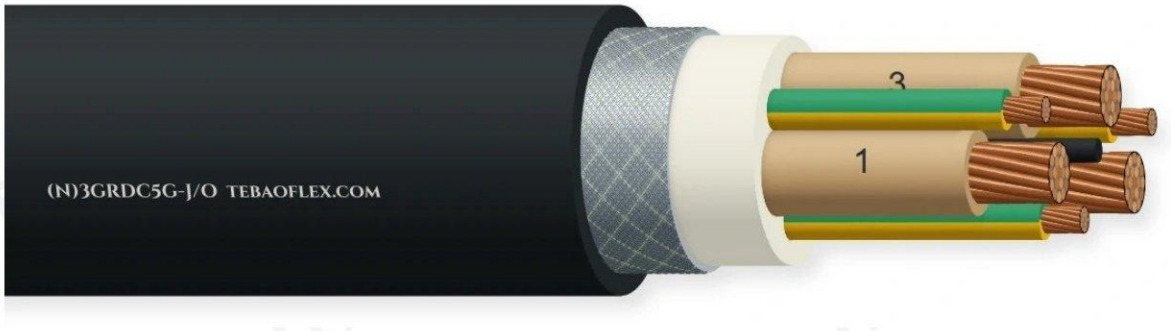


Application

(N)3GRDC5G-J/O 0.6/1 kV (Max 1.2 kV) Class 5 Bare-Copper HEPR-Insulated GM1b Inner-Sheathed 80% Tinned-Copper/Synthetic-Fibre Screened 5GM5 CR Festoon & Drag-Chain Cable (VDE 0250-812, 0.6/1 kV, -40 to +90 °C).

Typical uses: Ship-to-Shore (STS) Container Cranes, RTG, RMG & Automated Stacking Cranes, Heavy Steelwork & Bulk Port Hoists, Offshore Deck & Shipyard Gantries

Construction





Cross-section, not to scale

1. Phase Conductors (3×35 mm² Bare Cu)
2. Split PE Conductors (3G6 mm²)
3. Inner Rubber Sheath (GM1b)
4. Tinned Cu + Synthetic Fibre Braid (80% C5G)
5. Outer Sheath (Black 5GM5 CR Rubber)

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404)	**Core / conductor construction**	Phase Conductors (3×35 mm² Bare Cu) — VDE 0295 Class 5 flexible plain copper with numbered tan HEPR (3G) insulation
Primary dielectric / buffering	Split PE Conductors (3G6 mm²) — Three symmetrical green/yellow HEPR protective earth cores in outer valleys	**Continuous operating temperature**	−40…+90 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Outer Sheath (Black 5GM5 CR Rubber) — Flame-retardant (IEC 60332-1-2), oil- (EN 60811-404) & UV-resistant CR jacket (240 m/min)	**Minimum bending radius**	7.5 × OD
Hydrostatic, tensile & crush duty	Tinned Cu + Synthetic Fibre Braid (80% C5G) — 80%-coverage tinned copper wire + synthetic fibre hybrid screen over inner sheath	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404		

Sizes

3 standard constructions

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

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
(N)3GRDC5G-J/O Construction Schedule (−40…+90 °C) 3 sizes						
☐ (N)3GRDC5G-J/O Config A (Compact)	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ (N)3GRDC5G-J/O Config B (Standard)	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ (N)3GRDC5G-J/O Config C (Heavy Hybrid)	8×2×20 AWG + 4×12 AWG (or 12C)	Stranded tinned Cu (IEC 60228 / ASTM)	16.6	420	18.5	140

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24 AWG + 2×18 AWG (or 4C)	28.40	0.6/1 kV (45–100 Ω data)	−40…+90 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−40…+90 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−40…+90 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- VDE 0250-812 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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-3grdc5g-j-o

Typical values for this cable type, based on DIN VDE 0250-812 / IEC 60332-1-2 / EN 60811-404. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.