



power connection cable series

RG7H1OZR

Three-Core Screened Armoured MV Cable

CEI 20-13 6/10–18/30 kV +105 °C G7 HEPR 3-core screened & SWA armoured MV cable



CEI 20-13 RG7H1OZR

3-Core Screened + SWA Armoured

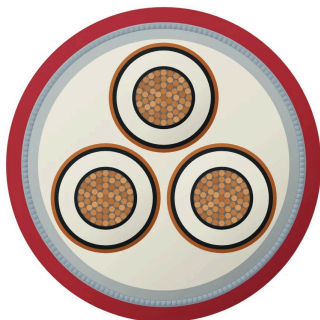
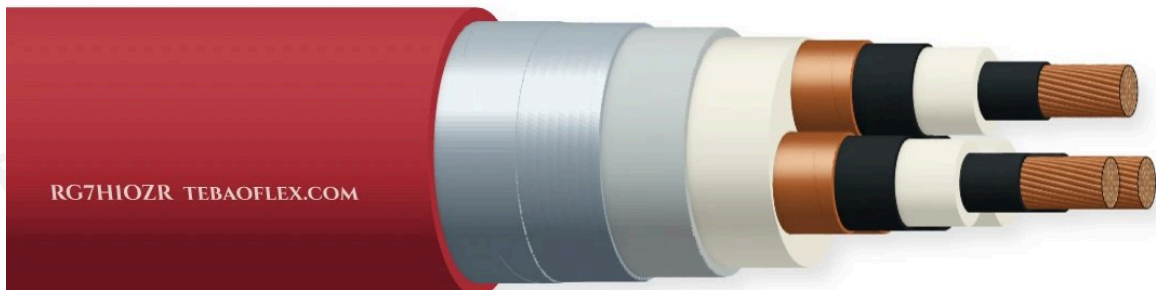
6/10 kV to 18/30 kV G7 HEPR

Application

RG7H1OZR Three-Core Screened Armoured Medium-Voltage Cable (6/10 kV, 8.7/15 kV, 12/20 kV & 18/30 kV; 3×25 mm² to 3×240 mm²) manufactured to Italian standard CEI 20-13 and IEC 60502-2—combining three Class 2 compacted red copper.

Typical uses: Oil Refineries, LNG Terminals & Offshore Topsides, Direct-Buried 15 kV / 20 kV / 30 kV Utility & Solar Feeders, Underground Mine Shafts, Tunnel Galleries & Quarries, Heavy Steelworks, Rolling Mills & Chemical Complexes, High-Power MV Compressors, Pumps & Crusher Drives

Construction



Cross-section, not to scale

- 1 3 × Class 2 compacted circular red copper conductors ('R')
- 2 Triple-extruded inner & cold-strippable outer semicon screens
- 3 +105 °C G7 High-Modulus HEPR dielectric insulation
- 4 3 × Individual H1 copper screens + inner PVC bedding ('O')
- 5 Galvanized round steel wire armour ('Z' = Filo d'acciaio)
- 6 Overall Red flame-retardant PVC outer sheath ('R', Type Rz)

Technical data

Typical values

Rated voltage tiers (U ₀ /U)	6/10 kV · 8.7/15 kV · 12/20 kV · 18/30 kV (U _{max} up to 36 kV)
Partial discharge limit	≤ 5 pC at 1.73 × U ₀ on every phase core
Continuous conductor temp.	+105 °C continuous operation (G7 HEPR)
Short-circuit temperature	+250 °C (max. 5 s)
Min. bend radius	15 × overall cable OD (during pulling) · 12 × OD (fixed)
Bunched flame propagation	CEI 20-22 II & IEC 60332-3-22 Cat A vertical tray fire test
ATEX & direct burial	Approved for direct soil burial and ATEX Zone 1/2 pipe racks

Routine AC test voltage	21 kV (6/10) · 30.5 kV (8.7/15) · 42 kV (12/20) · 63 kV (18/30) for 5 min
Max. DC resistance @ 20 °C	0.524 Ω/km (35) · 0.387 Ω/km (50) · 0.193 Ω/km (95) · 0.124 Ω/km (150)
Emergency overload temp.	+140 °C
G7 HEPR wall + Armour	4.5 mm G7 wall (12/20 kV) + 2.0/2.5 mm galvanized round steel wires
Vertical shaft support	Round steel wire armour supports vertical drop weights in mine shafts
Crush & rodent barrier	Steel wire armour ('Z') provides full mechanical & rodent protection
Standards	CEI 20-13 · CEI UNEL 35027 · IEC 60502-2

Sizes

6 standard constructions

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

CEI designation	Conductors, screen & SWA	Outer Ø ≈ mm	Weight ≈ kg/km	Air 30°C A	Buried 20°C A
12/20 kV RG7H10ZR Three-Core Screened & Steel-Armoured MV 6 sizes					
☐ RG7H10ZR 3×25/16 12/20kV	3×25 mm ² + H16 + 2.0 mm SWA	53.5	4,120	150	145
☐ RG7H10ZR 3×35/16 12/20kV	3×35 mm ² + H16 + 2.0 mm SWA	56.2	4,650	180	170
☐ RG7H10ZR 3×50/16 12/20kV	3×50 mm ² + H16 + 2.5 mm SWA	60.2	5,580	215	202
☐ RG7H10ZR 3×70/16 12/20kV	3×70 mm ² + H16 + 2.5 mm SWA	64.5	6,540	264	244
☐ RG7H10ZR 3×95/16 12/20kV	3×95 mm ² + H16 + 2.5 mm SWA	68.8	7,680	320	288
☐ RG7H10ZR 3×150/16 12/20kV	3×150 mm ² + H16 + 2.5 mm SWA	75.8	9,750	414	364

– Because the magnetic fields of all three phases cancel inside the 3-core assembly, ferromagnetic galvanized steel wire armour ('Z') can be used without eddy-current heating.

Standards and approvals

- ✓ CEI 20-13 & IEC 60502-2
- ✓ CEI 20-22 II Cat A Flame
- ✓ ATEX EN 60079-14 Compatible

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/rg7h1ozr-three-core-screened-armoured-mv-cable



Typical values for this cable type, based on CEI 20-13 / 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.