



Medium-voltage armoured tunnel & mining cables

3GSEYQY 18/30 kV

EPR-Insulated Steel-Braid Armoured Tunnel Cable

Individual 16 mm² copper core screens + ≥ 90 % galvanized steel wire braid armour



18/30 kV (Um 36 kV)

3GI3 EPR + Cu Screen

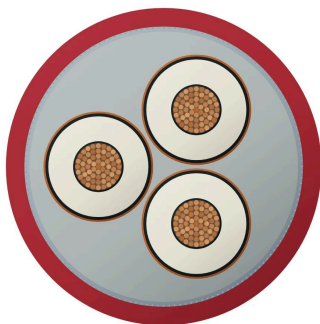
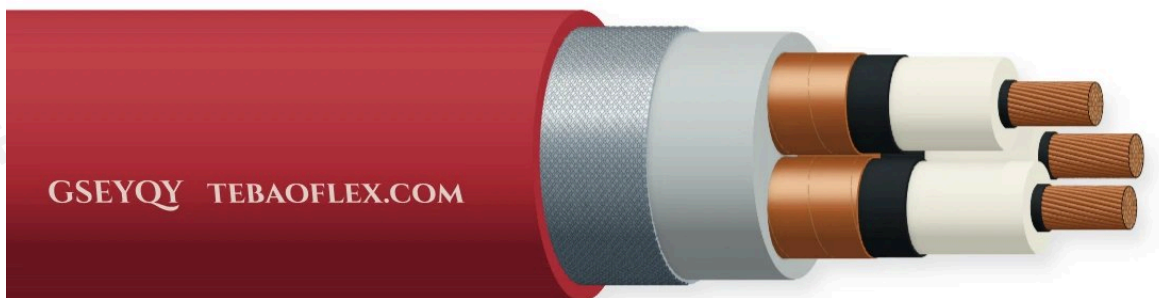
GSWB Armour ≥ 90%

Application

Medium-voltage 18/30 kV (Um = 36 kV) screened and armoured tunnel power cable (3GSEYQY) to DIN VDE 0250-605 and IEC 60502-2, with Class 2 copper cores, 3GI3 EPR insulation, 16 mm² copper screens, ≥ 90 % steel wire braid armour, and red outer sheath.

Typical uses: Tunnel boring machine (TBM) 30 kV feeders, Underground mine main shaft & drift feeders, Mobile skid-mounted MV mine substations, Hydroelectric cavern & metro tunnel construction, Open-pit quarry & overland conveyor rings, Heavy civil engineering temporary MV grids

Construction



Cross-section, not to scale

1	Conductors	3 × 25 mm ² to 3 × 120 mm ² phase conductors
2	Inner semi-conductive screen	Homogenizes radial electric stress at 18/30 kV
3	Core insulation (3G)	
4	Outer semi-conductive screen	
5	Individual metallic core screen (SE)	
6	Inner bedding sheath (Y)	
7	Galvanized steel wire braid armour (Q)	
8	Outer sheath (Y)	

Technical data

Typical values

Rated voltage U ₀ /U (Um)	18/30 kV (Um = 36 kV) per IEC 60502-2 / DIN VDE 0250-605	AC test voltage	48 kV AC routine dielectric test
Ambient operating temperature	-25 to +60 °C flexible / relocation · -40 to +80 °C fixed installation	Max. conductor temperature	+90 °C continuous operation · +250 °C short-circuit (max. 5 s)
Permissible tensile & torsional load	15 N/mm ² tensile load (1,125 N to 5,400 N) · ±25 %/m max. torsional stress	Min. bending radius	15 × D during pulling / relocation · 10 × D fixed installation (DIN VDE 0298-3)
Standards	DIN VDE 0250-605 · IEC 60502-2 · DIN VDE 0295 / IEC 60228 Class 2 · DIN VDE 0207-20 (3GI3)	Standard packing	Heavy-duty steel or reinforced wooden drums for tunnel & mine transport

Sizes

6 standard constructions

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

Order designation	Cores × mm ²	OD min mm	OD max mm	Total weight ≈ kg/km	Min. bend R (fixed) mm	Max. pull (15 N/mm ²) N
☐ 3GSEYQY 3 × 25/16	3 × 25/16	65.1	72.0	6,860	720	1,125
☐ 3GSEYQY 3 × 35/16	3 × 35/16	68.0	75.1	7,640	751	1,575
☐ 3GSEYQY 3 × 50/16	3 × 50/16	70.8	78.3	8,520	783	2,250
☐ 3GSEYQY 3 × 70/16	3 × 70/16	74.5	82.4	9,760	824	3,150
☐ 3GSEYQY 3 × 95/16	3 × 95/16	79.0	87.2	11,280	872	4,275
☐ 3GSEYQY 3 × 120/16	3 × 120/16	82.2	90.9	12,600	909	5,400

– All sizes incorporate a 16 mm² copper tape screen over each core plus a ≥ 90 % coverage galvanized steel wire braid armour.

Electrical parameters

6 sizes

Cores × mm ²	Max. DC resistance at 20 °C Ω/km	Metallic screen	Current in air (30 °C) A	Routine AC test
3 × 25/16	0.727	16 mm ² Cu tape / core	131	48 kV AC
3 × 35/16	0.524	16 mm ² Cu tape / core	162	48 kV AC
3 × 50/16	0.387	16 mm ² Cu tape / core	196	48 kV AC
3 × 70/16	0.268	16 mm ² Cu tape / core	246	48 kV AC
3 × 95/16	0.193	16 mm ² Cu tape / core	298	48 kV AC
3 × 120/16	0.153	16 mm ² Cu tape / core	346	48 kV AC

– Current ratings are typical values in free air at 30 °C ambient and 90 °C conductor temperature per IEC 60502-2.

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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/gseyqy-cable



Typical values for this cable type, based on DIN VDE 0250-605 / 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.