FRP-rod dielectric-armoured PUR reeling fibre cable

ZW-(QG)GNOTKSdD

FRP-Armoured PUR Reeling Fibre Cable

IEC 60794-2 / VDE 0888 · All-Dielectric · −40…+80 °C FRP-armoured reeling optical cable



All-Dielectric FO | FRP Rod Armour (QG) | Orange PUR Reeling

Application

ZW-(QG)GNOTKSdD all-dielectric reeling and mining optical cable combining Ø 0.9 mm tight-buffered fibres in a central LSOH module, helical Ø 1.0 mm FRP armour rods (QG), dual black elastomer bedding sheaths with aramid braid and an orange PUR jacket.

Typical uses: Underground Mine & Tunnel Gigabit Optical Backbones, Mobile Reeling Drums, Crane Video & Lidar Telemetry, High-Voltage Substation & Zero-Metal EMC Links, Deployable Tactical, Broadcast & Field Emergency Links

Construction





Cross-section, not to scale

1	Central Optical Module (8J)	IEC 60794-2 / ITU-T G.657.A2
2	FRP Dielectric Armouring (QG)	IEC 60794-2 / ITU-T G.657.A2
3	Inner Elastomeric Sheath	IEC 60794-2 / ITU-T G.657.A2
4	Aramid Reinforcement & Mid Sheath	IEC 60794-2 / ITU-T G.657.A2
5	Outer Reeling Sheath (dD)	IEC 60794-2 / ITU-T G.657.A2

Technical data

Typical values

Rated voltage / transmission duty	Optical Fibre (IEC 60794-2 / ITU-T G.657.A2)	**Core / conductor construction**	Central Optical Module (8J) — Eight Ø 0.9 mm tight-buffered optical fibres (8J, SM G.652.D / G.657.A or MM) reinforced with aramid yarns inside a yellow LSOH inner tube
Primary dielectric / insulation	FRP Dielectric Armouring (QG) — Helical ring of Ø 1.0 mm fibreglass-reinforced plastic (FRP) dielectric armour rods (QG) providing crush and radial impact protection	**Continuous operating temperature**	−40…+80 °C (rated operating envelope)
Storage & transport temperature	−40…+80 °C on export drum or reel	**Outer protection / sheath**	Outer Reeling Sheath (dD) — 1.5 mm high-visibility orange thermoplastic polyurethane (PUR, code dD) outer sheath (OD 19.6 mm) for heavy mining & port reeling drums
Minimum bending radius	12–15 × OD	**Structural layer count**	5 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per IEC 60794-2 / ITU-T G.657.A2	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60794-2 / ITU-T G.657.A2		

Sizes

4 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	Weight ≈ kg/km	Tensile load kN ≈	Min. bend R mm
ZW-(QG)GNOTKSdD Construction Schedule (−40…+80 °C) 4 sizes						
☐ ZW-(QG)GNOTKSdD 4J (4×Ø 0.9 mm FO)	4 × Ø 0.9 mm Tight-Buffered FO	Central module + FRP rods + PUR	16.5	245	6.0	200
☐ ZW-(QG)GNOTKSdD 8J (8×Ø 0.9 mm FO)	8 × Ø 0.9 mm Tight-Buffered FO	Central module + FRP rods + PUR	17.8	285	7.5	215
☐ ZW-(QG)GNOTKSdD 12J (12×Ø 0.9 mm FO)	12 × Ø 0.9 mm Tight-Buffered FO	Central module + FRP rods + PUR	19.2	330	8.5	230
☐ ZW-(QG)GNOTKSdD 24J (24×Ø 0.9 mm FO)	24 × Ø 0.9 mm Tight-Buffered FO	Central module + FRP rods + PUR	21.5	410	10.0	260

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per IEC 60794-2 / ITU-T G.657.A2.

Electrical, optical & thermal parameters

4 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
4 × SM G.657.A2 (1310/1550 nm)	0.38	≤0.38 / ≤0.25 dB/km	−40…+80 °C
8 × SM G.657.A2 (1310/1550 nm)	0.38	≤0.38 / ≤0.25 dB/km	−40…+80 °C
12 × SM G.657.A2 / OM3	0.38	≤0.38 dB/km (SM) / ≤3.0 (OM3)	−40…+80 °C
24 × SM G.657.A2 / OM3	0.38	≤0.38 dB/km (SM) / ≤3.0 (OM3)	−40…+80 °C

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

Standards and approvals

- IEC 60794-2 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/zw-qg-gnotksdd-frp-rod-armoured-pur-reeling-fiber-optic-cable

Typical values for this cable type, based on IEC 60794-2 / ITU-T G.657.A2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.