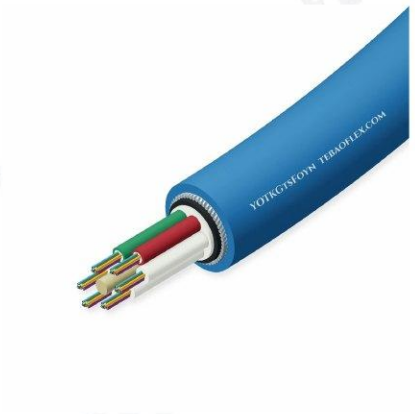
EMAG round-steel-wire armoured mine shaft optical cable

YOTKGtsFoyn

SWA Multi-Loose-Tube Mine Shaft Optical Cable

ZN-TF-115 / IEC 60332-3-22 · 12–144F · Round steel wire armoured mine shaft optical cable



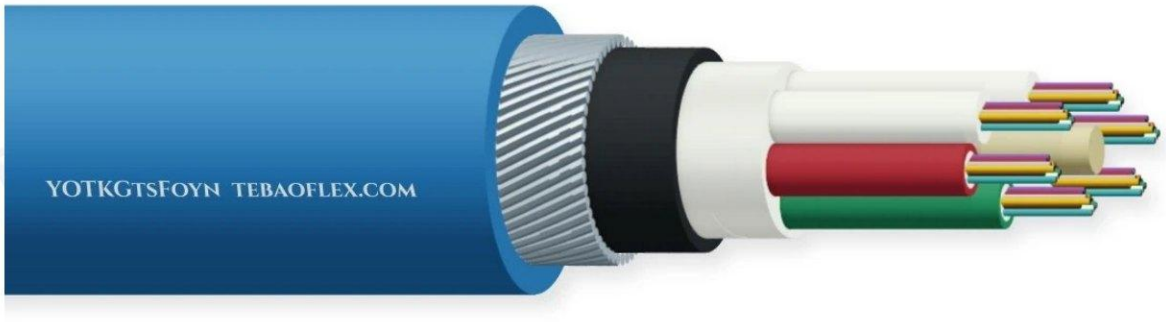
ZN-TF-115 / EMAG | 11–15 kN Round SWA (Fo) | IEC 60332-3-22 Cat. A

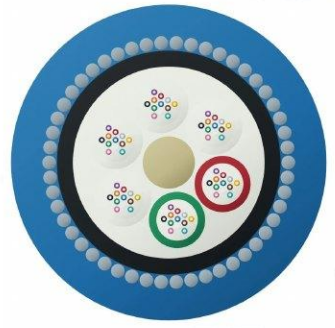
Application

YOTKGtsFoyn EMAG-approved round steel wire armoured (Fo) multi-loose-tube optical telecom cable for vertical mine shafts and >45° inclines, featuring a central FRP rod, SZ gel-filled PBT tubes (Gts), 15 kN SWA and blue Cat. A FR-PVC sheath (yn).

Typical uses: Underground Coal & Hard-Rock Mining, Open-Cast Excavators, Draglines & Shovels, Vertical Mine Shafts, Hoists & Boreholes, Tunneling, Mineral Processing & Slurry Plants

Construction





Cross-section, not to scale

1. Central Strength Member (CSM)
2. Gel-Filled Loose Tubes (6×12F Gts)
3. Water-Blocking Tape & Black Inner Sheath
4. Round Steel Wire Armour (Fo)
5. EMAG Mining Outer Sheath (yn)

Technical data

Typical values

Rated voltage / transmission duty	Optical (ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22)	Core / conductor construction	Central Strength Member (CSM) — Dielectric Fiber-Reinforced Plastic (FRP) central anti-buckling rod
Primary dielectric / buffering	Gel-Filled Loose Tubes (6×12F Gts) — SZ-stranded PBT tubes (Red/Green marker + Natural tubes) with 12 SM fibres	Continuous operating temperature	-40 to +70 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22	Storage & transport temperature	−40...+80 °C on export wooden/steel drum
Outer protection / armouring	EMAG Mining Outer Sheath (yn) — Blue Cat. A bunched-flame-retardant (IEC 60332-3-22) mining PVC jacket	Minimum bending radius	15 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22	Flame retardancy & mine fire safety	Self-extinguishing / flame-retardant mining jacket per ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22	RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22		

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
YOTKGtsFoyn Construction Schedule (-40 to +70 °C) 3 sizes						
☐ YOTKGtsFoyn 24J (6×4F) G.652.D Shaft SWA	24 × SM G.652.D (6×4F)	SZ gel-filled PBT + Round SWA	16.4	540	11.0	245
☐ YOTKGtsFoyn 72J (6×12F) G.652.D Shaft SWA	72 × SM G.652.D (6×12F)	SZ gel-filled PBT + Round SWA	17.2	595	12.5	260
☐ YOTKGtsFoyn 144J (12×12F) G.652.D Shaft SWA	144 × SM G.652.D (12×12F)	SZ gel-filled PBT + Round SWA	21.2	860	15.0	320

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
24 × SM G.652.D (6×4F)	0.36	≤0.22 dB/km @ 1550 nm · 11 kN SWA	-40 to +70 °C
72 × SM G.652.D (6×12F)	0.36	≤0.22 dB/km @ 1550 nm · 12.5 kN SWA	-40 to +70 °C
144 × SM G.652.D (12×12F)	0.36	≤0.22 dB/km @ 1550 nm · 15 kN SWA	-40 to +70 °C

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

Standards and approvals

- ZN-TF-115 / EMAG 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/yotkgtsfoyn-round-steel-wire-armoured-multi-loose-tube-mine-shaft-optical-cable

Typical values for this cable type, based on ZN-TF-115 / EN 60794-1-2 / IEC 60332-3-22. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.