Steel-braid armoured Ex-i mining hybrid cable

L-2YYQY

300/500 V Armoured Ex-i Mining Hybrid Cable

PN-G-91006 / IEC 60079-14 · 300/500 V · −30…+70 °C steel-braid armoured Ex-i mining cable



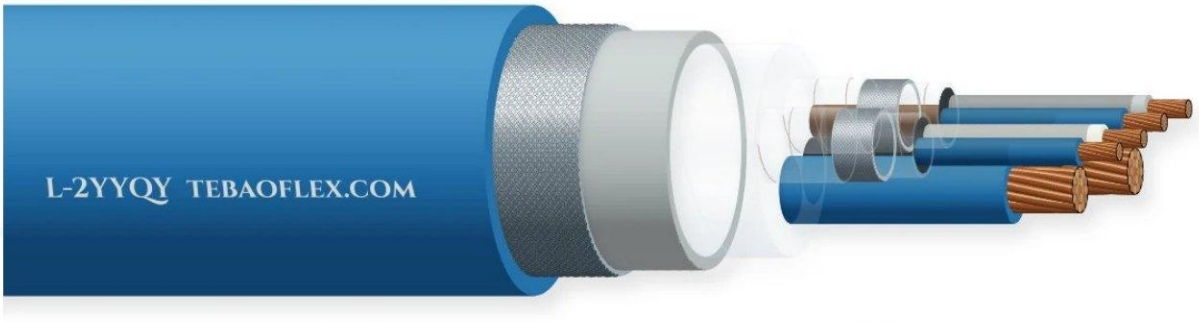
300/500 V Ex-i | Power + 2×Pair | Steel Braid (Q)

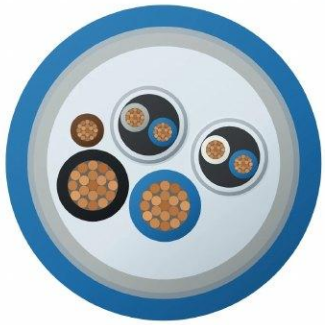
Application

L-2YYQY 300/500 V steel-braid-armoured Ex-i mining hybrid cable combining 2 × 6 mm² PE power cores, 2 × (2 × 0.5 mm²) screened control pairs and a 1 × 0.5 mm² pilot core under galvanized steel wire braid armour and a blue PVC Ex-i sheath.

Typical uses: Underground Coal & Methane-Hazard Mine Automation, Longwall Roof Support Electro-Hydraulic Control, Intrinsically Safe (Ex-i) Gas Monitoring & Telemetry, Tunnelling & Subterranean Conveyor Interlock Systems

Construction





Cross-section, not to scale

1	Power Cores (2x6 mm²)	IEC 60079-14 / PN-G-91006
2	Screened Control Pairs (2x2x0.5 mm²)	IEC 60079-14 / PN-G-91006
3	Unscreened Control Core (1x0.5 mm²)	IEC 60079-14 / PN-G-91006
4	Inner Sheath & Steel Braid Armour	IEC 60079-14 / PN-G-91006
5	Intrinsically Safe Outer Sheath	IEC 60079-14 / PN-G-91006

Technical data

Typical values

Rated voltage / transmission duty	300/500 V (IEC 60079-14 / PN-G-91006)	**Core / conductor construction**	Power Cores (2x6 mm²) — Two 6.0 mm² Class 5 flexible plain annealed copper power cores with low-capacitance polyethylene (PE) insulation (Blue and Black)
Primary dielectric / insulation	Screened Control Pairs (2x2x0.5 mm²) — Two twisted 0.5 mm² PE-insulated control pairs (Blue/Grey & Blue/White), each wrapped with PET tape and an individual tinned copper braid	**Continuous operating temperature**	−30…+70 °C (rated operating envelope)
Storage & transport temperature	−40…+80 °C on export drum or reel	**Outer protection / sheath**	Intrinsically Safe Outer Sheath — Blue flame-retardant polyvinyl chloride (PVC) outer sheath identifying intrinsically safe (Ex-i) underground mining circuits
Minimum bending radius	10 × OD	**Structural layer count**	5 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per IEC 60079-14 / PN-G-91006	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60079-14 / PN-G-91006		

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	Weight ≈ kg/km	Tensile load kN ≈	Min. bend R mm
L-2YYQY Construction Schedule (−30…+70 °C) 3 sizes						
☐ L-2YYQY 2×4+2×(2×0.5)+1×0.5	2×4 + 2×(2×0.5) + 1×0.5 mm²	Class 5 Cu + Cu screen + Q braid	16.8	420	3.8	170
☐ L-2YYQY 2×6+2×(2×0.5)+1×0.5	2×6 + 2×(2×0.5) + 1×0.5 mm²	Class 5 Cu + Cu screen + Q braid	18.4	510	4.6	185
☐ L-2YYQY 2×10+2×(2×0.75)+1×0.75	2×10 + 2×(2×0.75) + 1×0.75 mm²	Class 5 Cu + Cu screen + Q braid	21.2	690	6.2	215

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per IEC 60079-14 / PN-G-91006.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
2×4 + 2×(2×0.5) + 1×0.5 mm²	4.95	300/500 V / 32 A + Ex-i	−30…+70 °C
2×6 + 2×(2×0.5) + 1×0.5 mm²	3.30	300/500 V / 41 A + Ex-i	−30…+70 °C
2×10 + 2×(2×0.75) + 1×0.75 mm²	1.91	300/500 V / 57 A + Ex-i	−30…+70 °C

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

Standards and approvals

- IEC 60079-14 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/l-2yyqy-300-500v-steel-braid-armoured-intrinsically-safe-mining-cable

Typical values for this cable type, based on IEC 60079-14 / PN-G-91006. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.