High-temperature wire

Liquid-Tight High-Temp Multicore

Liquid-Tight High-Temperature Multicore Cable

600 V -50 to +250 °C liquid-tight fluoropolymer/silicone high-temp multicore cable



600 V / 0.6/1 kV | **-50 to +250 °C** | **Liquid-Tight Jacket**

Application

FLAME ARREST LT liquid-tight high-temperature multicore cable combining Class 5 nickel- or tinned-copper conductors, FEP/PFA fluoropolymer core insulation, reinforcing E-glass braid, and a continuous liquid-tight outer jacket for +250 °C wet zones.

Typical uses: Continuous Casting & Rolling Mills, Aluminium Die-Casting & Quench, Glass Bottle Moulding Machines, Chemical & Autoclave Processing, Food & Pharmaceutical Washdown Ovens

Construction





Cross-section, not to scale

1. Fine-stranded Ni-Cu / Sn-Cu conductor
2. Fluoropolymer (FEP / PFA) core wall
3. PTFE / polyimide barrier wrap
4. Extruded liquid-tight outer jacket

Technical data

Typical values

Rated voltage	600 V AC (0.6/1 kV protected)	AC dielectric test voltage	2500 V AC for 5 min
Insulation resistance	≥ 1000 MΩ·km at +20 °C (FEP/PFA cores)	Continuous operating temp.	-50 °C to +250 °C
Short-term radiant splash	+350 °C intermittent thermal peak	Steam & quench shock	Withstands cold water quench from +250 °C
Conductor stranding	IEC 60228 Class 5 fine-stranded	Min. bending radius (fixed)	6 × overall cable diameter
Min. bending radius (flexing)	12 × overall cable diameter	Cable gland ingress rating	IP67 / IP68 with compression glands
Oil & coolant resistance	EN 60811-404 hydraulic & cutting oils	Flame retardance	IEC 60332-1-2 / UL VW-1 self-extinguishing
Chemical & steam resistance	Impervious to steam, acids, alkalis & Skydrol	Standards	UL 758 / EN 50525-2-83 / IEC 60332-1-2

Sizes

18 standard constructions

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

Order designation	Cross-section / size	Conductor build	Wall ≈ mm	Outer Ø ≈ mm	Metal kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard FLAME ARREST LT configurations 18 sizes							
☐ FLAME-ARREST-LT 2×1	2×1	Class 5 Sn-Cu (1 mm²)	1.40	7.90	19.2	92.8	47
☐ FLAME-ARREST-LT 3G1	3G1	Class 5 Sn-Cu (1 mm²)	1.40	8.30	28.8	110.1	50
☐ FLAME-ARREST-LT 4G1	4G1	Class 5 Sn-Cu (1 mm²)	1.40	8.90	38.4	131.9	53
☐ FLAME-ARREST-LT 5G1	5G1	Class 5 Sn-Cu (1 mm²)	1.40	9.60	48.0	156.7	58
☐ FLAME-ARREST-LT 2×1.5	2×1.5	Class 5 Sn-Cu (1.5 mm²)	1.40	8.50	28.8	114.1	51
☐ FLAME-ARREST-LT 3G1.5	3G1.5	Class 5 Sn-Cu (1.5 mm²)	1.40	8.90	43.2	136.7	53
☐ FLAME-ARREST-LT 4G1.5	4G1.5	Class 5 Sn-Cu (1.5 mm²)	1.40	9.70	57.6	168.6	58
☐ FLAME-ARREST-LT 5G1.5	5G1.5	Class 5 Sn-Cu (1.5 mm²)	1.40	10.40	72.0	199.6	62
☐ FLAME-ARREST-LT 7G1.5	7G1.5	Class 5 Sn-Cu (1.5 mm²)	1.40	11.30	100.8	251.5	68
☐ FLAME-ARREST-LT 12G1.5	12G1.5	Class 5 Sn-Cu (1.5 mm²)	1.40	14.60	172.8	424.3	88
☐ FLAME-ARREST-LT 3G2.5	3G2.5	Class 5 Sn-Cu (2.5 mm²)	1.40	10.80	72.0	209.6	65
☐ FLAME-ARREST-LT 4G2.5	4G2.5	Class 5 Sn-Cu (2.5 mm²)	1.40	11.80	96.0	260.3	71
☐ FLAME-ARREST-LT 5G2.5	5G2.5	Class 5 Sn-Cu (2.5 mm²)	1.40	12.80	120.0	313.3	77
☐ FLAME-ARREST-LT 7G2.5	7G2.5	Class 5 Sn-Cu (2.5 mm²)	1.40	13.90	168.0	396.0	83
☐ FLAME-ARREST-LT 4G4	4G4	Class 5 Sn-Cu (4 mm²)	1.80	13.90	153.6	381.6	83
☐ FLAME-ARREST-LT 4G6	4G6	Class 5 Sn-Cu (6 mm²)	1.80	15.40	230.4	510.2	92
☐ FLAME-ARREST-LT 4G10	4G10	Class 5 Sn-Cu (10 mm²)	1.80	18.60	384.0	792.2	112
☐ FLAME-ARREST-LT 4G16	4G16	Class 5 Sn-Cu (16 mm²)	1.80	21.30	614.4	1,149.8	128

– Outer diameters and weights are nominal engineering values for FLAME ARREST LT subject to standard manufacturing tolerances per UL 758 / EN 50525-2-83 / IEC 60332-1-2.

Electrical & rating data

18 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Primary rating (A or kV)	Derated / AC rating	Dielectric test V AC rms
2×1 mm²	20.00	15.0	12.0	2,000
3G1 mm²	20.00	15.0	12.0	2,000
4G1 mm²	20.00	15.0	12.0	2,000
5G1 mm²	20.00	15.0	12.0	2,000

Configuration	Max. DC R @ 20 °C Ω/km	Primary rating (A or kV)	Derated / AC rating	Dielectric test VAC rms
2×1.5 mm²	13.70	18.0	14.0	2,000
3G1.5 mm²	13.70	18.0	14.0	2,000
4G1.5 mm²	13.70	18.0	14.0	2,000
5G1.5 mm²	13.70	18.0	14.0	2,000
7G1.5 mm²	13.70	18.0	14.0	2,000
12G1.5 mm²	13.70	18.0	14.0	2,000
3G2.5 mm²	8.21	26.0	20.0	2,000
4G2.5 mm²	8.21	26.0	20.0	2,000
5G2.5 mm²	8.21	26.0	20.0	2,000
7G2.5 mm²	8.21	26.0	20.0	2,000
4G4 mm²	5.09	34.0	27.0	2,000
4G6 mm²	3.39	44.0	34.0	2,000
4G10 mm²	1.95	61.0	48.0	2,000
4G16 mm²	1.24	82.0	64.0	2,000

– Electrical resistance at +20 °C and dielectric withstand voltages verified per UL 758 / EN 50525-2-83 / IEC 60332-1-2.

Standards and approvals

- ✓ UL 758 / EN 50525-2-83 / IEC 60332-1-2
- ✓ CE (2014/35/EU) & RoHS 3 (2015/863/EU) Compliant
- ✓ REACH SVHC & Halogen/Asbestos Compliance Verified

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/liquid-tight-high-temperature-multicore-cable

Typical values for this cable type, based on UL 758 / EN 50525-2-83 / IEC 60332-1-2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.