



BS 7629-1 Screened Fire Alarm Cables

BS 7629-1

Screened Fire-Resistant Alarm Cable

300/500 V screened fire-resistant LSZH alarm & emergency lighting cable
(Standard 30 / Enh)



300/500 V

BS 7629-1 / BS 5839-1

Standard 30 & Enhanced 120

Application

BS 7629-1 is the benchmark UK 300/500 V screened fire-resistant cable for BS 5839-1 fire detection, voice evacuation and BS 5266-1 emergency lighting systems. Constructed with Damage-Resistant Insudite/silicone-mica insulation, laminated aluminium/copolymer sc

Typical uses: Fire detection & alarm (BS 5839), Emergency escape lighting (BS 5266), Voice evacuation (PA/VA), Hospitals & multi-phase evacuation, Schools, hotels & offices

Construction



Cross-section, not to scale

1	Plain annealed copper	BS EN 60228
2	Mica-glass fire barrier (Enhanced)	BS 8434-2
3	Fire-resistant thermoset insulation	BS 7655-1.5
4	Full-size circuit protective conductor	BS 7629-1
5	Bonded aluminium/copolymer tape	BS 7629-1
6	LTS3 LSZH outer sheath	BS 7655-6.1

Technical data

Typical values

Rated voltage U0/U	300/500 V	Routine AC test voltage	2.0 kV rms for 5 minutes
Mutual capacitance @ 1 kHz	≈95 pF/m (1.5 mm ² 2-core)	Operating temperature range	-20 °C to +70 °C
Max. short-circuit temperature	+250 °C	Recommended installation temp.	0 °C to +60 °C
Minimum internal bend radius	6 × overall cable diameter	CPC conductor size	Equal to phase cross-section (1.0–4.0 mm ²)
Standard 30 fire test	BS EN 50200 PH30/PH60 + BS 8434-1 (30 min flame/impact/water) + BS 6387 CWZ	Enhanced 120 fire test	BS EN 50200 PH120 + BS 8434-2 (930 °C, 60 min flame+shock + 60 min flame+shock+water)
Halogen acid gas & smoke	BS EN 60754-1 (<0.5 % HCl) & BS EN 61034-2 (>60 % light transmittance)	Standards	BS 7629-1

Sizes

13 standard constructions

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

Designation	Cores × mm ²	Cross-section	Outer Ø ≈ mm	Copper kg/km	Total weight ≈ kg/km	Min. bend R fixed mm
BS 7629-1 standard series 13 sizes						
☐ BS 7629-1 Std 2×1.0+E	2×1.0 + 1.0 CPC	1.0 mm ²	7.4	29	78	44
☐ BS 7629-1 Std 2×1.5+E	2×1.5 + 1.5 CPC	1.5 mm ²	8.0	43	95	48
☐ BS 7629-1 Std 2×2.5+E	2×2.5 + 2.5 CPC	2.5 mm ²	9.4	72	138	56
☐ BS 7629-1 Std 2×4.0+E	2×4.0 + 4.0 CPC	4.0 mm ²	11.2	115	198	67
☐ BS 7629-1 Std 3×1.5+E	3×1.5 + 1.5 CPC	1.5 mm ²	8.6	58	116	52
☐ BS 7629-1 Std 3×2.5+E	3×2.5 + 2.5 CPC	2.5 mm ²	10.1	96	168	61
☐ BS 7629-1 Std 4×1.5+E	4×1.5 + 1.5 CPC	1.5 mm ²	9.5	72	140	57
☐ BS 7629-1 Std 4×2.5+E	4×2.5 + 2.5 CPC	2.5 mm ²	11.2	120	205	67
☐ BS 7629-1 Std 7×1.5+E	7×1.5 + 1.5 CPC	1.5 mm ²	11.6	115	215	70
☐ BS 7629-1 Enh 2×1.5+E	2×1.5 + 1.5 CPC (Enh)	1.5 mm ²	8.5	43	108	51
☐ BS 7629-1 Enh 2×2.5+E	2×2.5 + 2.5 CPC (Enh)	2.5 mm ²	9.9	72	152	59
☐ BS 7629-1 Enh 4×1.5+E	4×1.5 + 1.5 CPC (Enh)	1.5 mm ²	10.1	72	158	61
☐ BS 7629-1 Enh 4×2.5+E	4×2.5 + 2.5 CPC (Enh)	2.5 mm ²	11.8	120	224	71

– Nominal outer diameters and weights are subject to manufacturing tolerances per BS 7629-1 / BS 5839-1.

Electrical data

13 sizes

Cores × mm ²	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
2×1.0 + 1.0 CPC	18.100	15	13
2×1.5 + 1.5 CPC	12.100	19	16
2×2.5 + 2.5 CPC	7.410	26	22
2×4.0 + 4.0 CPC	4.610	34	29
3×1.5 + 1.5 CPC	12.100	17	15
3×2.5 + 2.5 CPC	7.410	23	20
4×1.5 + 1.5 CPC	12.100	17	15
4×2.5 + 2.5 CPC	7.410	23	20
7×1.5 + 1.5 CPC	12.100	13	11
2×1.5 + 1.5 CPC (Enh)	12.100	19	16
2×2.5 + 2.5 CPC (Enh)	7.410	26	22

Cores × mm ²	Max. DC R @ 20 °C Ω/km	Current in air A	Current in duct/tray A
4×1.5 + 1.5 CPC (Enh)	12.100	17	15
4×2.5 + 2.5 CPC (Enh)	7.410	23	20

– Current ratings apply at +30 °C ambient in free air and +25 °C in enclosed tray/conduit.

Standards and approvals

- ✓ BS 7629-1
- ✓ BS 5839-1 Standard & Enhanced
- ✓ BS EN 50200 PH30 / PH60 / PH120
- ✓ BS 8434-1 & BS 8434-2
- ✓ BS 6387 CWZ

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/bs-7629-1-screened-fire-resistant-alarm-cable



Typical values for this cable type, based on BS 7629-1 / BS 5839-1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.