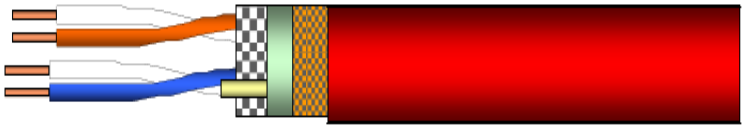
FIRETUF DATA 2P LSHF-FR

SF/UTP 2x2xAWG22/1 cable with circuit integrity behavior



Application

Campus wiring, Riser applications, Horizontal backbone wiring, Building control systems, Intelligent fire alarm systems.
Circuit integrity structured wiring alarm cable, compatible with all known connection systems to EN 50173
IEEE 802.3: 10Base-T; (100Base-T <75m), IEEE 802.5 16 MB; ISDN; TPDDI; ATM RS485 (10Mbits)

Standards

Generally to ISO/IEC 11801: 95, EN 50173:95; EN 50288-1
Generally caterogised between Cat 3 and Cat 5 see notes 1, 2, 3, 4, 5
Passes – ISO/IEC 11801 class D (95); TIA Cat 5 Ch (TSB67); ISO/IEC 11801 Class C

Flame resistance

Low Smoke:	BSEN 50268, IEC 61034-2,	
Halogen Free:	IEC 60754-1&2	
Flame Retardant:	IEC 60332-1, IEC 60332-3-24, BS4066 part 3, UL 1581 VW 1	
Circuit Integrity:	BS5839-1 2002 (clause 26.2e); BS8434-2; BSEN 50200, IEC60331	
	BS5839 enhanced 3 in 1 test	Passed
	Continued data operation @ 950°C	> 2 hours
	BS6387 CWZ	Passed
	BS EN 50200 (IEC60331)	>3 hours

Certification

Approved by LU (London Underground) – Independently tested by BRE Global.
Fire resistant BS5839-1 (clause 26.2e); BS8434-2; BSEN 50200
Flame retardant BS4066 part 3; Smoke emission BSEN 20568
LUL-Flammability, smoke & fume 2-01001-002
LU STANDARD e4156 part 1 – Approval ref TLL-ENG-MATTS-0076 (dated 21/06/2007)

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Construction

Conductor	Bare copper wire, Ø 0.65 mm (AWG 22) 0.332mm2
Insulation	PE/Silicone Rubber1, Ø PE 1.0mm and Silicone Rubber 1.7 mm
Twisting	2 cores to the pair
Cable lay up	2 pairs to the core
Fire protection wrapping	Glass tape
Screen	stranded drain wire + Al-PET-foil + copper braid, tinned
Sheath	Halogen free, flame retardant thermoplastic sheathing compound acc. to EN 50290-2-27, Ø 8.2 mm
Colour	red RAL 3000
Marking	Firetuf Data (910244) 0.65mm x 2 pairs BS5839 + 26.2e Draka UK (then 105 spaces then) Firetuf Data (910244) 0.65mm x 2 pairs BS5839 + 26.2e Draka UK DD/MM/YY XXXX ####m

Note[1] – *Silicone rubber insulation especially for circuit integrity cables*

Mechanical properties

Bending radius	without load	≥ 32.5 mm
	with load	≥ 65 mm
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

Electrical properties

at 20°C± 5°C

Loop resistance		≤ 110 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V) 1 minute	≥ 2000 MΩ*km
Mutual capacitance	at 800 Hz	Nom. nF/km
Capacitance unbalance	(pair/ground)	≤ 1600 pF/km
Characteristic impedance	(at 10) MHz	(100 ± 15) Ω
Nominal velocity of propagation		ca. 57 %
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer Impedance	at 10 MHz	5 mΩ/m
Current carrying capacity per pair	AC 2.0 Amps	DC 2.5 Amps
Voltage drop single phase /DC	115 mV/A/m	

Note[2] – Structured cabling Characteristic Impedance is normally within (100 ± 5) Ω , due to the insulation system this is not achievable all the time

Note3 Structured cabling systems minimum for c=65%, due to the insulation (PE + Sil Rbr) system this is not achieved, that is nvp 0,57

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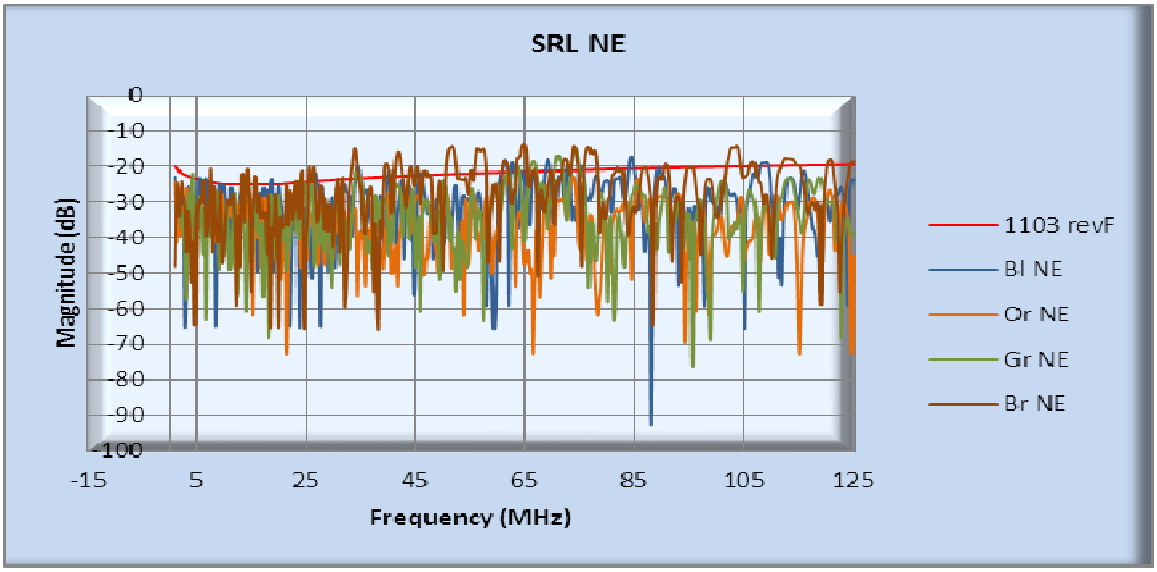
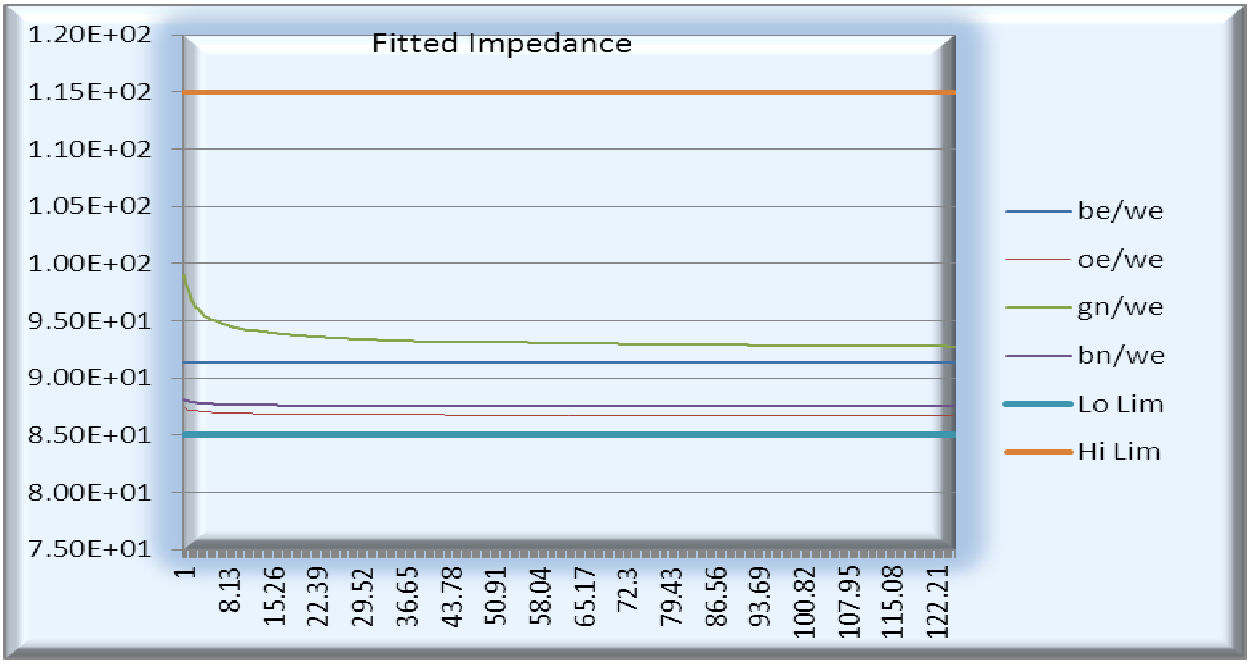
Electrical data (nominal) acc. to Cat.5 (at 20°C)





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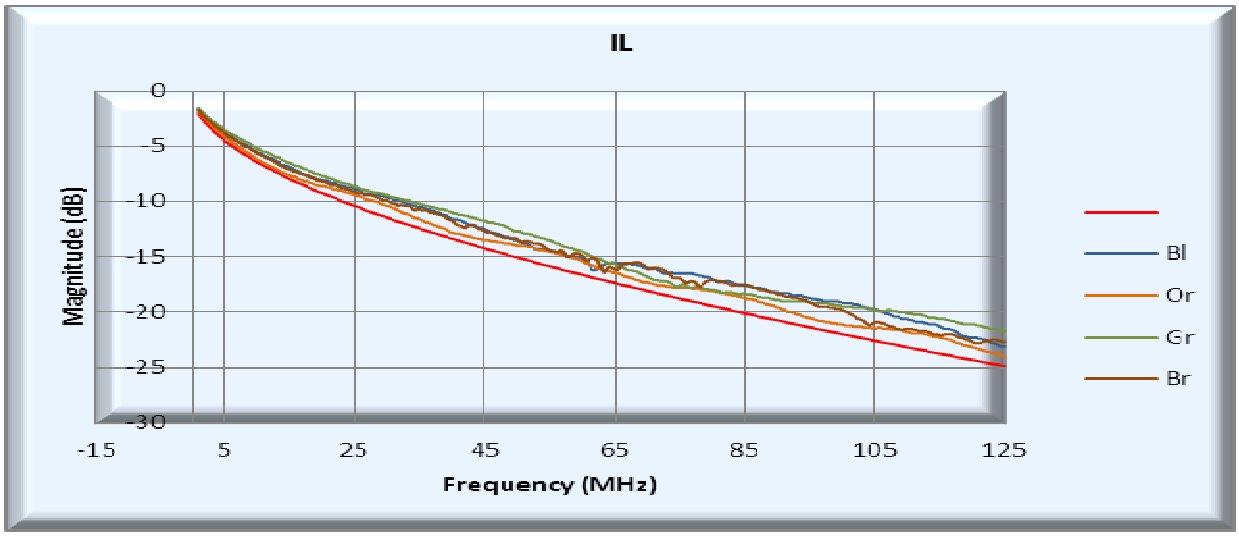

Technical data

Part number	Cable type DIN/VDE	Product name	Outer diameter	Fire load		Weight	Copper content	Tensile force
			mm	MJ/km	kWh/m	kg/km		N
60018008	J-2Y/2G(St)CH 2x2x0.65 -100	ICS IE FIRETUF DATA 2P LSHF-FR	8.2			86.6	37.5	100

[PRODUCT CODE TABLE]