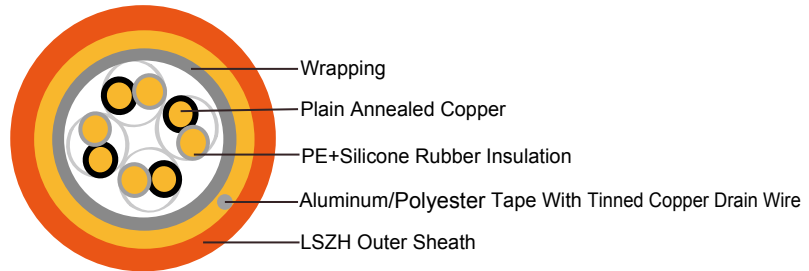




Fire Resistant FTP CAT3 Data Cables

FFX-CAT3FTPXP22FR



APPLICATION

The cables are designed for structure wiring, compatible with all known connection systems according to EN 50173. Based on the design for structured wiring (found in IEC 61156 and BS EN 50288), this cable brings together high frequency data transmission and circuit integrity in a one pair, two pair and four pair cable that will continue to transmit data even when being directly attacked by fire.

STANDARDS

Basic design to EN 50173

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23; BS 6387 CWZ; DIN VDE 0472-814(FE180); CEI 20-36/2-1; SS229-1; NBN C 30-004 (cat. F3); NF C32-070-2.3(CR1)
System circuit integrity	DIN 4102-12, E30 depending on lay system
Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic gases	NES 02-713; NF C 20-454

Note: Asterisk * denotes superseded standard.

VOLTAGE RATING

60V

CABLE CONSTRUCTION

Conductors: Plain annealed copper wire, sized 0.64mm and solid according to IEC(EN) 60228 class 1.

Insulation: PE wrapping with fire resistant silicone rubber compound type EI2 as per BS 7655-1.1.

Cabling Elements: Insulated cores are twisted to form pairs with varying lay length to minimize crosstalk. Two-pair cable had four cores laid in quad formation.

Cabling: Pairs are cabled together in concentric layer.

Overall Screen: Aluminum/polyester tape with tinned copper drain wire

Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1 (Thermosetting LSZH compound type SW2-SW4 as per BS 7655-2.6 can be offered.)

COLOUR CODE:

Sheath Colour: Red, white or black

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -20°C - +90°C

Temperature range during installation (mobile state): -5°C - +50°C

Minimum bending radius: 8 x Overall Diameter

ELECTRICAL PROPERTIES

Characteristic Impedance	100 Ohm±15%
Nominal Velocity Of Propagation (NVP)	69%
Max. Dc Resistance	5.8 Ohm/100m
Max. Resistance Unbalance	5%
Max. Propagation Delay Skew	30 ns/100m
Max. Propagation Delay	536 ns/100m@100 mhz
Max. Pulling Load	80N



TRANSMISSION PROPERTIES

FREQ (MHz)	NEXT(dB/100m) Minum Value/Typical Value/Standard Value	IL (dB/100m)	SRL(dB/100m) Minum Value/Typical Value/Standard Value
1	43.0/48.0/41.0	2.6	13.0/16.0/12.0
4	34.0/38.0/32.0	5.6	13.0/16.0/12.0
8	29.0/33.0/26.0	8.5	13.0/16.0/12.0
10	28.0/33.0/26.0	9.8	13.0/16.0/12.0
16	25.0/30.0/23.0	13.1	11.0/14.0/10.0

CONSTRUCTION PARAMETERS

Cable Code	Nominal Insulation Thickness	Nominal Overall Diameter	Approx. Weight
	mm	mm	kg/km
FFX-CAT3FTP1P22FR	0.25	6.8	48
FFX-CAT3FTP2P22FR	0.25	8.1	97
FFX-CAT3FTP4P22FR	0.25	10.4	122



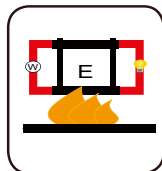
60V

Rated Voltage



EN 50173

Standard



Circuit Integrity
IEC 60331/BS 6387
NF C32-070-2.3(CR1)



Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4



Low Smoke Emission
IEC 61034-1&2
EN 50268-1&2/NF C32-073



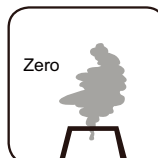
Low Toxicity
NES 02-713/NF C 20-454



Low Corrosivity
IEC60754-2
EN50267-2-2/3
NF C 32-074

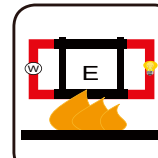


Low Smoke Emission
IEC 61034-1&2
EN 50268-1&2/NF C32-073



Zero

Halogen Free
IEC60754-1
EN50267-2-1



Functional Integrity
DIN 4102-12