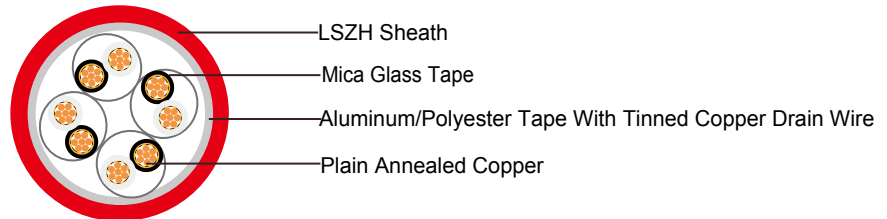


## 300/500V Mica+XLPE Insulated & LSZH Sheathed Fire Alarm Cables

FFX200P 05mROZ1-R (CU/MICA+XLPE/OSCR/LSZH 300/500V Class 2 )



### APPLICATION

The cables are designed, manufactured and tested as data transmission cables for emergency services. These are primarily intended for indoor instrumentation and control cabling, electrically noisy environments and fire alarm systems in office buildings when high frequency signal transmission has to be assured in the event of a fire.

### STANDARDS

Basic design to BS 7629-1

### FIRE PERFORMANCE

Circuit Integrity	IEC 60331-21; 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Note: Asterisk \* denotes superseded standard.



### CABLE CONSTRUCTION

**Conductors:** Plain annealed copper wire, stranded according to IEC(EN) 60228 class 2.

**Insulation:** Mica glass tape covered by extruded cross-linked XLPE compound or cross-linked compound type EI5 as per BS 7655: section 5.1.

**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 cables with 8 pairs or more, 4 pairs are assembled to form a bunch, the bunches are then cabled together.

**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

**Insulation Colour:** According to IEC 60189-2 (other colour code on request).

**Sheath Colour:** Colour red (other colours on request).

### PHYSICAL AND THERMAL PROPERTIES

**Temperature range during operation (fixed state):** -30°C - +90°C

**Temperature range during installation (mobile state):** -20°C - +50°C

**Minimum bending radius:** 8 x Overall Diameter

### CONSTRUCTION PARAMETERS

Cable Code	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Approx. Weight
mm <sup>2</sup>	mm	mm	mm	kg/km
1 Pairs				
1x2x0.75 stranded FFX200P 05mROZ1-R (PH30)	0.6	0.8	7.8	64
1x2x1 stranded FFX200P 05mROZ1-R (PH30)	0.6	0.9	8.4	73
1x2x1.5 stranded FFX200P 05mROZ1-R (PH30)	0.7	0.9	9.3	87
2 Pairs				
2x2x0.75 stranded FFX200P 05mROZ1-R (PH30)	0.6	0.9	10.7	118
2x2x1 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.0	11.5	136
2x2x1.5 stranded FFX200P 05mROZ1-R (PH30)	0.7	1.0	13.0	165
5 Pairs				
5x2x0.75 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.1	14.8	218
5x2x1 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.2	15.7	266
5x2x1.5 stranded FFX200P 05mROZ1-R (PH30)	0.7	1.3	18.1	342
10 Pairs				

10x2x0.75 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.3	20.1	380
10x2x1 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.4	21.3	455
10x2x1.5 stranded FFX200P 05mROZ1-R (PH30)	0.7	1.5	24.8	606
15 Pairs				
15x2x0.75 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.4	24.9	535
15x2x1 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.5	26.5	646
15x2x1.5 stranded FFX200P 05mROZ1-R (PH30)	0.7	1.6	30.8	862
20 Pairs				
20x2x0.75 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.5	28.2	680
20x2x1 stranded FFX200P 05mROZ1-R (PH30)	0.6	1.6	30.2	839
20x2x1.5 stranded FFX200P 05mROZ1-R (PH30)	0.7	1.8	34.9	1121

approximate values



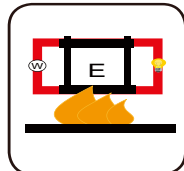
300/500V

Rated Voltage



BS 7629-1

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



Flame Retardancy  
NF C32-070-2.1(C2)  
IEC60332-1-2/EN50265-2-1



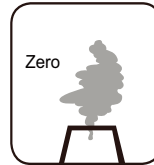
Low Toxicity  
NES 02-713/NF C 20-454



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

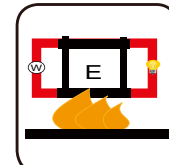


Low Smoke Emission  
IEC 61034-1&2  
EN 50268-1&2/NF C32-073



Zero

Halogen Free  
IEC60754-1  
EN50267-2-1



Functional Integrity  
DIN 4102-12