A brand of the Prysmian Group

AFUMEX® GOLD | 0.6/1 kV | CLASS 5

FIRESTOP FS110 FLEXIBLE MULTICORE

Afumex® LSOH cables

Cable description

Fire rated, flexible multicore LSOH cable suitable for installation wiring.

Application

- Power supply to essential equipment such as lighting, fans and lifts in the event of a fire in confined spaces.
- Classified (WS52W) meaning the scope of testing is designed to confirm performance when installed in a wiring system.
- Circuit integrity up to an extreme temperature of 1050 °C at the end of 2 hours.
- LSZH – Suitable for confined and high people density areas such as underground transport tunnels, airports and public buildings.

Approvals/Qualifications

NATA accredited facility Qualification (third party)
AS/NZS 5000.1.
AS/NZS 3013 WS52W

Behaviour in flame and fire

Fire performance rating:	AS/NZS 3013 WS52W AS/NZS 4507 CI-3
Flame propagation:	IEC 60332-3 cat A IEC 60332-1
Halogen free/Low smoke emission:	AS/NZS 4507

Temperature range

Maximum operating temperature: +110 °C
Minimum operating temperature: -25 °C

Flexibility

Minimum bending radius:
Installed cables: 10D
During installation: 12D

Resistance to

Fire:	2 hrs
Chemical exposure:	Occasional
Mechanical impact:	Moderate
Water exposure:	Spray
Solar radiation and weather exposure:	UV stabilised

Cable design

Conductor:	Flexible plain annealed copper (class 5)
Fire barrier:	Mica glass tape
Insulation:	X-HF-110 (LSOH)
Colour:	2 cores: Red, black 3 cores: Red, white, blue 4 cores: Red, white, blue, black 5 cores and above: White with numbered cores
Sheath:	Red, HFS-110-TP (LSOH)

Installation conditions

In free air
In duct
Internal wiring
External building

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Physical & electrical characteristics

FIRESTOP FS110 FLEXIBLE MULTICORE					
Product code	Number of cores	Nominal conductor area mm²	Approx. overall diameter mm	Approx. mass kg/100 m	AS/NZS 3013 WS Rating
103CEFFFS110RD	3C+E	10	21.6	60.3	WS52W
163CEFFFS110RD	3C+E	16	24.2	83.1	WS52W
253CEFFFS110RD	3C+E	25	27.5	113.9	WS52W
353CEFFFS110RD	3C+E	35	30.7	148.3	WS52W
503CEFFFS110RD	3C+E	50	35.2	206.1	WS52W
703CEFFFS110RD	3C+E	70	40.8	283.7	WS52W
104CEFFFS110RD	4C+E	10	23.5	80	WS52W
164CEFFFS110RD	4C+E	16	26.5	108	WS52W
254CEFFFS110RD	4C+E	25	30.9	151	WS52W
354CEFFFS110RD	4C+E	35	33.8	196	WS52W
504CEFFFS110RD	4C+E	50	40.1	275	WS52W
704CEFFFS110RD	4C+E	70	45.3	378	WS52W

All other core count constructions available on request.

CLASS 5 | FS110 MULTICORE					
Size	Resistance		Reactance at 50Hz (ohm/km)	Voltage drop (mV/A.m)	
	DC @ 20°C	AC @ 110°C		Three phase	Single phase
10	1.91	2.59	0.0810	4.48	5.17
16	1.21	1.64	0.0779	2.84	3.28
25	0.780	1.06	0.0783	1.84	2.12
35	0.554	0.750	0.0761	1.31	1.51
50	0.386	0.523	0.0754	0.917	1.06
70	0.272	0.369	0.0744	0.654	0.755
95	0.206	0.280	0.0729	0.504	0.582
120	0.161	0.219	0.0723	0.403	0.465
150	0.129	0.176	0.0728	0.334	0.386
185	0.106	0.146	0.0730	0.286	0.330
240	0.0801	0.111	0.0722	0.234	0.270
300	0.0641	0.0905	0.0718	0.204	0.236

Physical & electrical characteristics

CURRENT CARRYING CAPACITY* | CLASS 5 | FS110 MULTICORE				
Nominal conductor area mm²	Unenclosed		Enclosed	
	Spaced A	Touching surface A	Metallic wiring enclosure in air A	Underground duct one duct A
TWO CORE				
10	94	88	75	84
16	124	116	100	109
25	163	154	129	139
35	202	190	163	171
50	254	238	202	209
70	318	299	257	259
95	381	357	303	304
120	450	421	362	357
150	515	482	412	403
185	586	547	474	456
240	698	652	577	541
300	799	745	656	611
THREE & FOUR CORE				
10	80	75	65	71
16	106	99	84	91
25	140	131	112	118
35	173	162	137	143
50	218	204	175	178
70	273	255	217	217
95	327	306	263	259
120	387	360	306	298
150	444	413	356	341
185	505	470	402	381
240	602	559	489	453
300	688	638	-	509

* Based on 110°C conductor temperature, 40°C ambient air temperature and where applicable, burial depth of 0.5 m, soil temperature of 25°C and soil thermal resistivity of 1.2°C.m/W. Refer to AS/NZS 3008.1.1:2017 for other installation conditions.