

**AFUMEX® SILVER | 0.6/1 kV | CLASS 2**

**FIRESTOP FS110 STRANDED CONDUCTOR MULTICORE**



**Cable description**

Fire rated multicore LSOH cable suitable for installation wiring.

**Application**

- Power supply to essential equipment such as lighting, fans and lifts affording circuit integrity 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: Stranded plain annealed copper (class 2)  
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: Black, HFS-110-TP (LSOH)

**Installation conditions**

In free air  
In duct  
Internal wiring  
External building

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## Physical &amp; electrical characteristics

FIRESTOP FS110 STRANDED CONDUCTOR MULTICORE					
Product code	Number of cores	Nominal conductor area mm <sup>2</sup>	Approx. overall diameter mm	Approx. mass kg/100 m	AS/NZS 3013 WS Rating
1.52CEFS110BK	2C+E	1.5	12.9	20	WS52W
2.52CEFS110BK	2C+E	2.5	14.0	25	WS52W
42CEFS110BK	2C+E	4	14.8	29	WS52W
62CEFS110BK	2C+E	6	15.8	35	WS52W
102CEFS110BK	2C+E	10	18.1	51	WS52W
162CEFS110BK	2C+E	16	20.2	69	WS52W
252CEFS110BK	2C+E	25	24.9	102	WS52W
352CEFS110BK	2C+E	35	27.0	129	WS52W
1.53CEFS110BK	3C+E	1.5	14.0	24	WS52W
2.53CEFS110BK	3C+E	2.5	15.2	31	WS52W
43CEFS110BK	3C+E	4	16.2	36	WS52W
63CEFS110BK	3C+E	6	17.4	44	WS52W
103CEFS110BK	3C+E	10	20.0	65	WS52W
163CEFS110BK	3C+E	16	22.3	88	WS52W
253CEFS110BK	3C+E	25	26.8	130	WS52W
353CEFS110BK	3C+E	35	29.4	167	WS52W
503CEFS110BK	3C+E	50	32.2	216	WS52W
703CEFS110BK	3C+E	70	37.1	296	WS52W
953CEFS110BK	3C+E	95	40.6	383	WS52W
1203CEFS110BK	3C+E	120	44.4	475	WS52W
1503CEFS110BK	3C+E	150	49.5	589	WS52W
1853CEFS110BK	3C+E	185	55.1	742	WS52W
2403CEFS110BK	3C+E	240	61.8	963	WS52W
1.54CFS110BK	4C	1.5	14.0	24	WS52W
2.54CFS110BK	4C	2.5	15.2	31	WS52W
1.54CEFS110BK	4C+E	1.5	15.2	28	WS52W
2.54CEFS110BK	4C+E	2.5	16.5	37	WS52W
44CEFS110BK	4C+E	4	17.7	45	WS52W
64CEFS110BK	4C+E	6	19.1	55	WS52W
104CEFS110BK	4C+E	10	22.1	80	WS52W
164CEFS110BK	4C+E	16	24.6	109	WS52W
254CEFS110BK	4C+E	25	29.8	162	WS52W
354CEFS110BK	4C+E	35	32.8	209	WS52W
504CEFS110BK	4C+E	50	36.0	272	WS52W
704CEFS110BK	4C+E	70	41.6	374	WS52W
954CEFS110BK	4C+E	95	45.8	489	WS52W
1204CEFS110BK	4C+E	120	50.0	607	WS52W
1504CEFS110BK	4C+E	150	55.7	751	WS52W
1854CEFS110BK	4C+E	185	62.0	945	WS52W
2404CEFS110BK	4C+E	240	69.5	1225	WS52W

Physical & electrical characteristics

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Size	Resistance		Reactance at 50Hz (ohm/km)	Voltage drop (mV/A.m)	
	DC @ 20°C	AC @ 110°C		Three phase	Single phase
10	1.83	2.48	0.0840	4.29	4.95
16	1.15	1.56	0.0805	2.70	3.12
25	0.727	0.984	0.0808	1.71	1.97
35	0.524	0.710	0.0786	1.24	1.43
50	0.387	0.524	0.0751	0.92	1.06
70	0.268	0.364	0.0741	0.645	0.745
95	0.193	0.262	0.0725	0.475	0.548
120	0.153	0.209	0.0713	0.385	0.445
150	0.124	0.170	0.0718	0.322	0.372
185	0.0991	0.136	0.0720	0.271	0.313
240	0.0754	0.105	0.0709	0.224	0.259
300	0.0601	0.0852	0.0704	0.196	0.226

Physical & electrical characteristics

CURRENT CARRYING CAPACITY\* | CLASS 2 | FS110 MULTICORE

Nominal conductor area mm <sup>2</sup>	Unenclosed		Enclosed	
	Spaced A	Touching surface A	Metallic wiring enclosure in air A	Underground duct one duct A
TWO CORE				
10	95	89	76	85
16	126	118	102	111
25	168	158	133	144
35	206	194	166	175
50	251	236	200	208
70	317	298	256	260
95	392	367	312	313
120	455	426	368	363
150	519	486	417	409
185	598	559	486	468
240	708	662	588	554
300	815	760	670	626
THREE & FOUR CORE				
10	81	76	64	71
16	107	101	86	93
25	144	135	116	122
35	177	166	140	146
50	216	202	174	177
70	272	255	217	217
95	337	314	270	267
120	391	364	311	304
150	447	416	360	346
185	515	479	411	391
240	611	567	498	463
300	701	650	-	522

\* 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.