

**AFUMEX® GOLD | 0.6/1kV | CLASS 5**
**FIRESTOP FS110 FLEXIBLE SDI**


### Cable description

Fire rated, flexible single core LSOH cable suitable for installation wiring.

### Application

- Power supply to essential circuits such as mains, sub mains in areas where circuit integrity is essential in the event of a fire.
- 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)  
Insulation colour: Natural  
Sheath: Red, 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 FLEXIBLE SDI

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
251CFFFS110RD	1C	25	14.1	35.1	WS52W
351CFFFS110RD	1C	35	14.9	44.6	WS52W
501CFFFS110RD	1C	50	16.5	59.7	WS52W
701CFFFS110RD	1C	70	18.2	79.1	WS52W
951CFFFS110RD	1C	95	20.2	101	WS52W
1201CFFFS110RD	1C	120	21.9	126	WS52W
1501CFFFS110RD	1C	150	24.2	155	WS52W
1851CFFFS110RD	1C	185	26.2	186	WS52W
2401CFFFS110RD	1C	240	29.4	241	WS52W
3001CFFFS110RD	1C	300	32.4	298	WS52W
4001CFFFS110RD	1C	400	36.4	388	WS52W
5001CFFFS110RD	1C	500	40.5	496	WS52W
6301CFFFS110RD	1C	630	46.0	655	WS52W

## CLASS 5 | FS110 SINGLE CORE

Size	Resistance		Reactance at (ohm/km)		Voltage drop (mV/A.m)		
	DC @ 20°C	AC @ 110°C	50Hz Trefoil	50Hz Flat Touching	Three phase		Single phase
					Lay flat touching	Trefoil touching	
10	1.91	2.59	0.107	0.123	4.48	4.48	5.17
16	1.21	1.64	0.101	0.116	2.85	2.84	3.28
25	0.780	1.06	0.0973	0.113	1.84	1.84	2.12
35	0.554	0.750	0.0930	0.108	1.31	1.31	1.51
50	0.386	0.523	0.0901	0.105	0.926	0.921	1.06
70	0.272	0.369	0.0869	0.102	0.665	0.658	0.760
95	0.206	0.280	0.0849	0.100	0.518	0.509	0.588
120	0.161	0.219	0.0828	0.0980	0.419	0.408	0.471
150	0.129	0.176	0.0830	0.0982	0.353	0.34	0.393
185	0.106	0.145	0.0821	0.0973	0.307	0.293	0.338
240	0.0801	0.111	0.0808	0.0960	0.259	0.242	0.279
300	0.0641	0.0898	0.0800	0.0953	0.232	0.213	0.246
400	0.0486	0.0699	0.0788	0.0941	0.208	0.187	0.216
500	0.0384	0.0571	0.0780	0.0932	0.194	0.172	0.199
630	0.0287	0.0455	0.0777	0.0929	0.182	0.159	0.184

Physical & electrical characteristics

CURRENT CARRYING CAPACITY\* | CLASS 5 | FS110 SINGLE CORE

Nominal conductor area mm <sup>2</sup>	Unenclosed			Enclosed	
	Spaced A	Spaced from surface A	Touching surface A	Metallic wiring enclosure in air A	Underground duct one duct A
TWO SINGLE CORE					
10	102	98	80	77	88
16	135	129	105	102	115
25	178	170	139	133	148
35	221	210	172	167	177
50	279	263	218	207	214
70	351	329	273	263	262
95	422	395	329	312	321
120	500	466	390	364	366
150	577	536	450	426	420
185	660	611	516	481	477
240	794	732	621	583	561
300	916	841	716	-	648
400	1105	1006	860	-	738
500	1290	1164	999	-	837
630	1529	1359	1168	-	973
THREE SINGLE CORE					
10	99	85	80	70	76
16	130	112	105	91	97
25	173	149	139	121	125
35	214	184	172	148	151
50	270	233	217	190	188
70	340	292	273	234	229
95	410	353	329	277	268
120	487	418	390	331	316
150	562	482	450	378	357
185	644	553	516	438	404
240	775	665	620	538	481
300	895	766	714	612	542
400	1079	918	855	757	648
500	1260	1064	990	864	729
630	1493	1240	1154	993	828

\* 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.