

**Features:**

- AS/NZS 3013 Approved
- AS/NZS 5000.2 Approved
- AS/ACIF S008 Compliant
- 450/750V Rated
- 110°C continuous operation
- Low Smoke Zero Halogen
- Flame Retardant
- Small outside diameter
- Easy to install on cable tray
- Easy to strip and terminate

**Description:**

FireSense Fire Rated Cables have been specifically designed for use with Australian Fire Alarm and EWIS systems.

FireSense fire rated cables have been independently tested and approved by EXOVA / Warrington Fire to the requirements of AS/NZS 3013 for both fire and mechanical cable properties. All FireSense cables are certified 2 hour fire rated.

FireSense Fire Rated Cables have also been tested and approved to electrical standards AS5000.2 and communication/wiring standard AS/ACIF S008 by respective industry testing authorities.

It is a requirement of AS/NZS 1670.1, 1670.4, 1668.1 & 4214 that cables be approved to AS/NZ 3013 and AS/ACIF S008.

FireSense fire rated cables have a reduced outside diameter which allows 2 cables to fit within a single conduit providing ease of installation. The cable's 7 stranded copper conductors and firm insulation material also allows for neat placement on cable trays and allows ease of stripping and termination.

All FireSense fire rated cables are 2 core and are available on 250m and 500m drums with conductor sizes of 0.75mm, 1.00 mm and 1.5mm.

It is recommended that FireSense stainless steel cable ties be used for fixing cable to tray every 1.0 metre when mounted horizontally and every 0.6 metres when mounted vertically. When fixing FireSense fire rated cables to cetenary wire our manufacturers recommendation is as follows:

If Cable bunch is >= 25mm diameter cables should be supported with Stainless Steel ties every 300mm

If Cable bunch is < 25mm diameter cables should be supported with Stainless Steel ties every 600mm

**Ordering Information:**

Part Number	No. of Cores	Cross Section mm <sup>2</sup>	Conductor Strands/Dia	Overall Diameter mm	AS/NZS 3013 Classification	Drum Length
<b>0.75mm</b>						
FR-0.75-2C-250	2	0.75	7 / 0.37	9.6	WS51W	250M
FR-0.75-2C-500	2	0.75	7 / 0.37	9.6	WS51W	500M
<b>1.00mm</b>						
FR-1.00-2C-250	2	1.00	7 / 0.42	9.9	WS51W	250M
FR-1.00-2C-500	2	1.00	7 / 0.42	9.9	WS51W	500M
<b>1.50mm</b>						
FR-1.50-2C-250	2	1.50	7 / 0.52	10.3	WS52W	250M
FR-1.50-2C-500	2	1.50	7 / 0.52	10.3	WS52W	500M

### Standards Compliance:

<b>Fire &amp; Mechanical:</b>	AS/NZS 3013 Appendix A,B,D,E
<b>Conductors:</b>	AS/NZS 1125 Class 2
<b>Cable Construction:</b>	AS/NZS 5000.2
<b>Vertical Flame Spread:</b>	AS/NZS 1660.5.1
<b>Smoke Density:</b>	AS/NZS 1660.5.2
<b>Halogen Gas:</b>	AS/NZS 1660.5.3
<b>Acidity of Gases:</b>	AS/NZS 1660.5.4
<b>Vertical Flame Propagation:</b>	AS/NZS 1660.5.6
<b>ACMA Compliance:</b>	AS/ACIF S008
<b>ACMA Supplier Code:</b>	N24281

### Construction:

<b>Conductors:</b>	Stranded Annealed Copper
<b>Flame Barrier:</b>	Mica Tape
<b>Insulation:</b>	Flame Retardant, Low Smoke, Zero Halogen (X-HF-110)
<b>Sheath:</b>	Flame Retardant, Low Smoke, Zero Halogen (HFS-110-TP)
<b>Voltage Rating:</b>	450/750Volts
<b>Operating Temperature:</b>	-25° to +110°C
<b>Insulation Color:</b>	Red, White
<b>Sheath Color:</b>	Red
<b>Min Bending Radius:</b>	10 x Cable Diameter.

### Classification of the fire and mechanical performance of wiring system elements:

AS3013 is a classification system which defines the performance of a Wiring System (WS). The classification system prefix is 'WS' followed by two numerals and a supplementary letter W. ie

WS 5 2 W

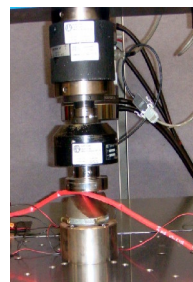
The First numeral indicates the wiring system's ability to maintain circuit integrity during a fire condition.

1	15 minutes
2	30 minutes
3	60 minutes
4	90 minutes
5	120 minutes



The Second numeral indicates the wiring system's degree of mechanical protection due to cutting and impact load.

	Impact Test (J)	Cutting Test (kN)	Level of Protection
1	2.5	0.3	Light
2	15	1.0	Moderate
3	50	5.0	Heavy
4	500	5.0	Very Heavy
5	5000	5.0	Extremely Heavy



The 'W' suffix denotes the wiring system's capability to maintaining circuit integrity when subjected to water spray immediately following a fire condition.

Cables are subjected to fire at 1050°C for 120 minutes, then water sprayed for a further 3 minutes.



### AS/NZ3013 Approval Certificates:

Cable	AS/NZ3013 Rating	Test Certificate Number	Issuer
FR-0.75-2C	WS51W	SFC2331900a.1	EXOVA / Warrington Fire
FR-1.00-2C	WS51W	SFC2331900a.1	EXOVA / Warrington Fire
FR-1.50-2C	WS52W	SFC2401600a.1	EXOVA / Warrington Fire

**ActivFire Listing No.**    afp 2417

