


AS/NZS 3013 Fire Rated Cable Technical Information

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

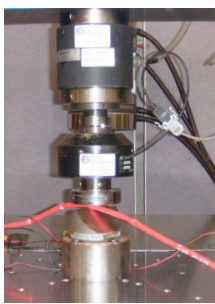
AS/NZS 3013 is a classification system which defines the performance of a Wiring System (WS). The classification system prefix is 'WS' followed by two numerals and a supplementary letter W. ie.

WS 5 2 W

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



	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.

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



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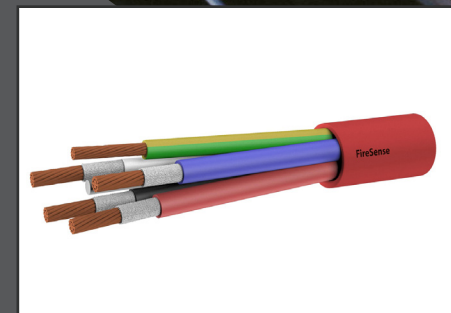
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Flexible Fire Rated Power Cables



Cable Accessories



Stainless Steel Ties



Cable Tie Gun

Part Number	Length	Width	Quantity per pack	SS Grade
SST-200	200mm	4.6mm	100	AISI.304
SST-360	360mm	4.6mm	100	AISI.304
SST-200C	200mm	4.6mm	100	AISI.304
SST-360C	360mm	4.6mm	100	AISI.304
SST-200-316	200mm	4.6mm	100	AISI.316
SST-360-316	360mm	4.6mm	100	AISI.316

Our 2HR Fire Rated Power Cables

2HR FR Cable Features:

- 2HR Fire Rated
- 0.6 / 1kV rated
- Low Smoke Zero Halogen
- Flame Retardant
- 110°C Conductor Temp
- Easy to install on tray
- Easy to strip & terminate

Approvals:

- ✓ AS/NZS 3013
- ✓ AS/NZS 5000.1
- ✓ AS/CA S008
- ✓ AS/NZS 4417 – RCM Certified
- ✓ ActivFire Certified

All FireSense fire rated Power cables carry a 2HR fire rating, are approved to all relevant Electrical & Communications standards and were specifically designed for use within Mechanical/Electrical industries.

They are constructed from the highest quality cross linked polymers available and manufactured using 100% pure, annealed conductors. This allows for ease of stripping and termination while achieving the highest possible electrical performance and flexibility.

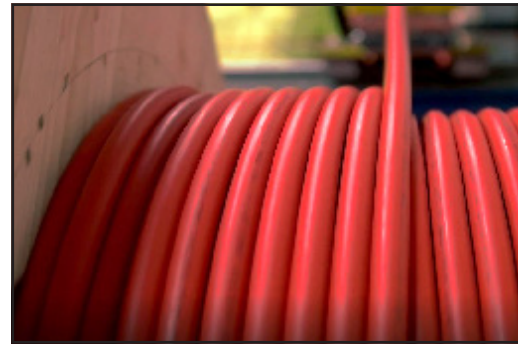
Our highly specialised 110°C insulation and outer sheath materials meet the stringent Impact and Cutting test requirements of AS/NZS 3013, yet allow for ease of stripping and cable placement on trays saving valuable installation time on site.

Our fire rated cables have been independently tested and approved by Warrington Fire to the requirements of AS/NZS 3013 for both fire and mechanical cable properties. Our Power cables have also been tested and approved to electrical standards AS/NZS 5000.1 by respective industry testing authorities.

It is a mandatory requirement of AS/NZS 3000:2007 Appendix H and AS/NZS 1668.1 that cables be approved to AS/NZS 3013 and carry a 2HR fire rating.

All FireSense cables have been tested, approved and are marked with our ASA Certification Number & RCM logo, as per the 'Building Wire' requirements of AS/NZS 4417. Our cables are the only fire rated cables in Australia to have ActivFire Certification.

All FireSense fire rated cables are made from LSZH materials and are 100% PVC free.

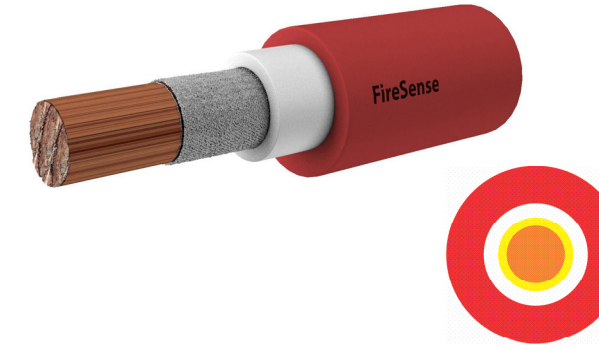


2HR Fire Rated Flexible Single Core

Our Single Core range is suited for use in submains, MSSB to mechanical service switchboards and downsizing applications.

All FireSense Single Core cables use Class 6 flexible conductors making the cable much easier to install. The stranded conductor layout allows for maximum flexibility and holds its shape and integrity during stripping and lugging.

The 110°C operating temperature allows for increased current capacity of approximately 15% to 20% over 90°C rated cables (as per AS/NZS 3008.1.2009).



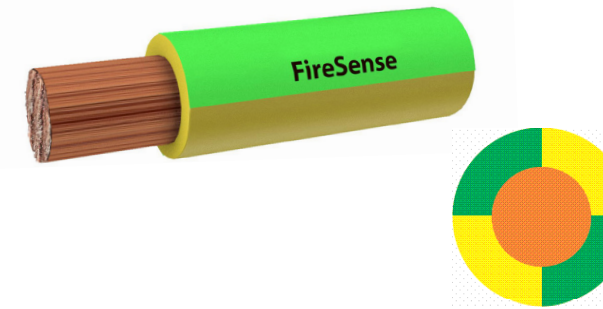
Part Number	No. of Cores	Cross Section	Conductor Class	Approx Overall Diameter	AS/NZS 3013 Classification
FR-35-1C	1	35mm ²	6	16.0mm	WS52W
FR-50-1C	1	50mm ²	6	18.0mm	WS52W
FR-70-1C	1	70mm ²	6	20.0mm	WS52W
FR-95-1C	1	95mm ²	6	23.0mm	WS52W
FR-120-1C	1	120mm ²	6	25.0mm	WS52W
FR-150-1C	1	150mm ²	6	28.0mm	WS52W
FR-185-1C	1	185mm ²	6	30.0mm	WS52W
FR-240-1C	1	240mm ²	6	33.0mm	WS52W
FR-300-1C	1	300mm ²	6	35.0mm	WS52W
FR-400-1C	1	400mm ²	6	41.0mm	WS52W
FR-500-1C	1	500mm ²	6	46.0mm	WS52W
FR-630-1C*	1	630mm ²	6	50.0mm	WS52W

*Indent item – lead times may apply.

Flexible Earth Cable

FireSense Earth cables are a Class 6 flexible conductor with LSZH insulation. While our Earth range is not fire rated, they are designed to be used in conjunction with our fire rated Single Core range. Superior flexibility is provided by its Class 6 construction reducing valuable installation time.

This cable is suited to meet Green Building (GBCA) or Greenstar requirements where cable being installed must be halogen free. It is also ideal for use in underground applications, i.e. tunnels, etc.

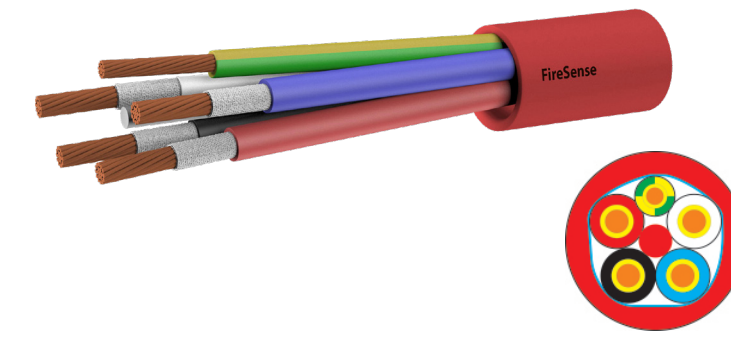


Part Number	No. of Cores	Cross Section	Conductor Class	Approx Overall Diameter
LSZH-16-1CE	1	16mm ²	6	8.0mm
LSZH-25-1CE	1	25mm ²	6	9.5mm
LSZH-35-1CE	1	35mm ²	6	11.0mm
LSZH-50-1CE	1	50mm ²	6	12.0mm
LSZH-70-1CE	1	70mm ²	6	14.0mm
LSZH-95-1CE	1	95mm ²	6	18.0mm
LSZH-120-1CE	1	120mm ²	6	19.0mm

2HR Fire Rated Multicores

Our multicore cables are suited for mechanical/electrical applications, lift applications and 240VAC essential service equipment and devices, including centralised emergency lighting systems.

Class 2 conductors are used up to and including 6mm making the cables easy to terminate at switchboards and control equipment. Class 6 (fine strand) conductors are used for conductor sizes greater than 6mm to provide maximum flexibility during installation.



Part Number	No. of Cores	Cross Section	Conductor Class	Approx Overall Diameter	AS/NZS 3013 Classification
FR-2.50-2C+E	2+E	2.5mm ²	2	13.4mm	WS52W
FR-4.00-2C+E	2+E	4.0mm ²	2	14.9mm	WS52W
FR-6.00-2C+E	2+E	6.0mm ²	2	17.5mm	WS52W
FR-2.50-3C+E	3+E	2.5mm ²	2	14.5mm	WS52W
FR-4.00-3C+E	3+E	4.0mm ²	2	16.1mm	WS52W
FR-6.00-3C+E	3+E	6.0mm ²	2	18.2mm	WS52W
FR-2.50-4C+E	4+E	2.5mm ²	2	15.8mm	WS52W
FR-4.00-4C+E	4+E	4.0mm ²	2	17.2mm	WS52W
FR-6.00-4C+E	4+E	6.0mm ²	2	20.0mm	WS52W

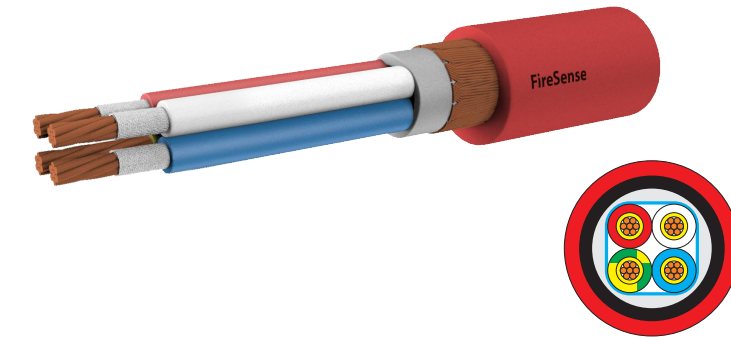
Flexible Multicores

FR-10-3C+E	3+E	10.0mm ²	6	19.4mm	WS52W
FR-10-4C+E	4+E	10.0mm ²	6	23.0mm	WS52W
FR-16-4C+E	4+E	16.0mm ²	6	27.0mm	WS52W
FR-25-4C+E	4+E	25.0mm ²	6	31.0mm	WS52W
FR-35-4C+E	4+E	35.0mm ²	6	36.0mm	WS52W
FR-50-4C+E	4+E	50.0mm ²	6	42.0mm	WS52W

2HR Fire Rated Screened Multicores

Our screened multicore cables are suited for mechanical/electrical applications, lift applications, 240VAC essential service equipment & devices. Screened multicore is ideally suited for Variable Speed Drive Controllers & essential fans.

FireSense 3C+ES cables contain a copper braid screen specifically designed for interconnection between VSD controllers and essential fire fans. Our 3C+ES Power Cables are Class 2 annealed copper construction which makes them extremely easy to strip and terminate to VSD drives and switchboards.



Part Number	No. of Cores	Cross Section	Conductor Class	Approx Overall Diameter	AS/NZS 3013 Classification
FR-2.50-3C+ES	3+E+S	2.5mm ²	2	17.7mm	WS52W
FR-4.00-3C+ES	3+E+S	4.0mm ²	2	19.3mm	WS52W
FR-6.00-3C+ES	3+E+S	6.0mm ²	2	21.3mm	WS52W