FEATURES

- ✓ 2HR Fire Rated
- ✓ 110°C conductor temp
- ✓ AS/NZS 3013 – WS52W
- ✓ AS/NZS 5000.1
- ✓ AS/CA S008
- ✓ RCM Certified
- ✓ ActivFire Certified
- ✓ Flame retardant
- ✓ Low smoke zero halogen (PVC Free)
  Third Party Accredited

PRODUCT DESCRIPTION

FireSense fire rated cables have been specifically designed for use within the Fire Alarm and Mechanical/Electrical industries. They are constructed from the highest quality cross linked polymers available and are designed to be easy to install, strip and terminate.

Our cables have been independently tested and approved by 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.

All FireSense fire rated series cables are made from LSZH materials and have received third party PVC Free Certification from GECA (Good Environmental Choice Australia).

They have also been tested and approved to electrical standards AS/NZS 5000.1 and communication/wiring standard AS/CA S008 by respective industry testing authorities.

FireSense Power cables are manufactured using 100% pure, annealed, copper conductors for ease of termination while achieving the highest possible electrical performance. FireSense's highly specialised 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 time on site.

FireSense 2C+E cables have 2.5mm^2, 4.0mm^2 and 6.0mm^2 conductors and are ideal for powering FIP and EWIS panels, diesel pump control panels, centralised emergency lighting system or any other 240VAC essential service equipment & devices.

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 catenary wire our manufacturer's 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 (mm²) (Conductors)	Cross Section (mm²) (Earth Conductor)	Class Conductor	Approx Overall Dia (mm)	Operating Temp (ºC)	AS/NZS 3013 Rating
FR-2.50-2C+E	2 + E	2.50	2.50	2	13.4	-25 to +110	WS52W
FR-4.00-2C+E	2 + E	4.00	2.50	2	14.9	-25 to +110	WS52W
FR-6.00-2C+E	2 + E	6.00	2.50	2	17.5	-25 to +110	WS52W
FR-10-2C+E	2 + E	10	4.00	6	22.0	-25 to +110	WS52W
FR-16-2C+E	2 + E	16	6.00	6	25.5	-25 to +110	WS52W

ELECTRICAL CHARACTERISTICS

Part Number	DC Resistance (Ω / km)	AC Resistance @ 50Hz (Ω / Km at ºC) As per AS3008 Table 35				Current Carrying Capacity Unenclosed (Amps) As per AS3008 Table 15		
	20ºC	45ºC	75ºC	90ºC	110ºC	Spaced	Touching	Exposed
FR-2.50-2C+E	7.05	8.14	9.01	9.45	10	35	33	30
FR-4.00-2C+E	4.60	5.06	5.61	5.88	6.24	47	44	40
FR-6.00-2C+E	2.98	3.38	3.75	3.93	4.17	59	56	50
FR-10-2C+E	1.91	2.01	2.23	2.33	2.48	80	75	68
FR-16-2C+E	1.21	1.26	1.40	1.47	1.56	106	99	89

TECHNICAL SPECIFICATIONS

Conductors	Stranded Annealed Copper
Flame Barrier	Mica Tape
Insulation	Flame Retardant, Low Smoke, Zero Halogen (X-HF-110)
Sheath	Flame Retardant, Low Smoke, Zero Halogen (HFS-110-TP)*
Voltage Rating	0.6/1kV
Operating Temperature	-25ºC to +110ºC
Insulation Colour	Red, Black, Green/Yellow
Sheath Colour	Red
Min Bending Radius	10 x Cable Diameter

* Please note: LSZH HFS-110-TP sheath material is UV stabilised but red colour may be subject to fading over time if exposed to direct sunlight.

STANDARDS COMPLIANCE

Fire & Mechanical	AS/NZS 3013
Cable Construction	AS/NZS 5000.1
ACMA Compliance	AS/CA S008
Conductors	AS/NZS 1125
Insulation	AS/NZS 3808
Sheath	AS/NZS 3808
Cable	AS/CA S008
Cable Performance	AS/NZS 4507 (RHE-3)
Vertical Flame Spread	AS/NZS 1660.5.1 (Section 6 - Category C - AS/NZS IEC 60332-3-24)
Smoke Density	AS/NZS 1660.5.2, AS/NZS IEC 61034
Halogen Gas	AS/NZS 1660.5.3, AS/NZS IEC 60754-1
Acidity of Gases	AS/NZS 1660.5.4, AS/NZS IEC 60754-2
Vertical Flame Propogation	AS/NZS 1660.5.6, AS/NZS IEC 60332-1

APPROVALS & CERTIFICATION

Part Number	AS/NZS 3013			AS/NZS 5000.1	
	Rating	Certificate No.	Issuer	Certificate No.	Issuer
FR-2.50-2C+E	WS52W	SFC26123D-R5.0	Warrington Fire	GMA-511153	Global Mark Pty Ltd
FR-4.00-2C+E	WS52W	SFC26123D-R5.0	Warrington Fire	GMA-511153	Global Mark Pty Ltd
FR-6.00-2C+E	WS52W	SFC26123D-R5.0	Warrington Fire	GMA-511153	Global Mark Pty Ltd
FR-10-2C+E	WS52W	SFC2711500b.2	Warrington Fire	GMA-511153	Global Mark Pty Ltd
FR-16-2C+E	WS52W	SFC2711500b.2	Warrington Fire	GMA-511153	Global Mark Pty Ltd

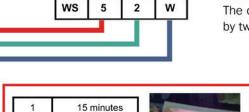|			
ActivFire Listing Number	afp-2417		
RCM Responsible Supplier	E6560	Level 3	GMA-511153
GECA Claims Authentication License Number	Fir-2021		
Bureau Veritas CoC Number	2835		

CLASSIFICATION

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

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 1050ºC for 120 minutes, then water sprayed for a further 3 minutes.

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