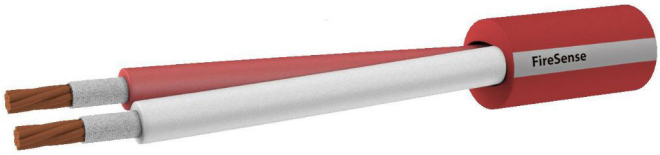
PRODUCT DATA SHEET

2 Core - White Stripe
2HR Fire Rated Cable

FEATURES



- ✓ 2HR Fire Rated
- ✓ AS/NZS 3013 Approved - WS52W
- ✓ AS/NZS 5000.2 Approved
- ✓ AS/CA S008 Compliant
- ✓ AS 1670:2018 Markings
- ✓ White stripe for speaker circuits
- ✓ ActivFire Certified
- ✓ RCM Certified
- ✓ 110°C continuous operation
- ✓ Flame retardant
- ✓ Easy to install on cable tray
- ✓ Easy to strip and terminate
- ✓ 8-10 twists per meter
- ✓ Smallest diameter on the market
- ✓ Low smoke zero halogen (PVC Free) Third Party Accredited

PRODUCT DESCRIPTION

FireSense fire rated cables have been specifically designed for use with Australian EWIS systems.

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 and are the only fire rated cables in Australia to have ActivFire Certification.

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).

FireSense fire rated cables have also been tested and approved to electrical standards AS/NZS 5000.2 and communication/wiring standard AS/CA 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/NZS 3013 and AS/CA S008.

AS1670.2018 REQUIRES ALL CABLES THAT ARE LV (EWIS SPEAKER CIRCUITS) TO HAVE A WHITE STRIPE TO DIFFERENTIATE FROM ELV CABLES.

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

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.

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ORDERING INFORMATION

Part Number	No. of Cores	Cross Section (mm²)	Copper Wire Diameter (mm)	Approx Overall Diameter (mm)	AS/NZS 3013 Classification	Drum Length
FR-0.75-2CW	2	0.75	0.37	9.8	WS51W	250m, 500m
FR-1.00-2CW	2	1.00	0.42	10.0	WS51W	250m, 500m
FR-1.50-2CW	2	1.50	0.52	10.3	WS52W	250m, 500m

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	450/750V
Operating Temperature	-25°C to +110°C
Insulation Colour	Red, White
Sheath Colour	Red
Min Bending Radius	10 x Cable Diameter
AS1670.2018 Sheath Marking	LV FIRE

* 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 Appendix A,B,D,E, AS/NZS 4507 (CI-3)
Cable Construction	AS/NZS 5000.2
Conductors & Insulation	AS/NZS 1125, AS/NZS 3808, IEC 60228 AS/NZS 1660.1, AS/NZS 1660.2, 1660.3, 1660.4
Vertical Flame Spread	AS/NZS 1660.5.1
Smoke Density	AS/NZS 1660.5.2, IEC 61034
Halogen Gas	AS/NZS 1660.5.3, IEC 60754 - 1&2
Acidity of Gases	AS/NZS 1660.5.4
Vertical Flame Propagation	AS/NZS 1660.5.6, IEC 60332-1, IEC 60332-3-24
ACMA Compliance	AS/CA S008

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ELECTRICAL CHARACTERISTICS

Part Number	Resistance (Ω / km)	Capacitance (pF/m)	Inductance (uH/m)
FR-0.75-2CW	23.4	55	0.87
FR-1.00-2CW	18.0	46	0.80
FR-1.50-2CW	11.9	48	0.75

APPROVALS & CERTIFICATION

Part Number	AS/NZS 3013			AS/NZS 5000.2	
	Rating	Certificate No.	Issuer	Certificate No.	Issuer
FR-0.75-2CW	WS51W	SFC2331900a.1	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-1.00-2CW	WS51W	SFC24560a-R5.0	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-1.50-2CW	WS52W	SFC2401600a.1	Warrington Fire	GMA-511152	Global Mark Pty Ltd

ActivFire Listing Number	afp-2417		
RCM Responsible Supplier	E6560	Level 3	GMA-511152
GECA Claims Authentication License Number	Fir-2021		
Bureau Veritas CoC Number	2835		

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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

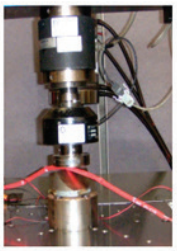
Classification of the fire and mechanical performance of wiring system elements:

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

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