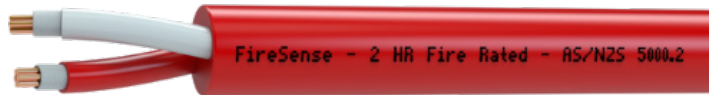


#### FEATURES

- ✓ 2HR Fire Rated
- ✓ AS/NZS 3013 Approved
- ✓ AS/NZS 5000.2 Approved
- ✓ AS/CA S008 Compliant
- ✓ AS 1670:2018 Markings
- ✓ ActivFire Certified
- ✓ RCM Certified
- ✓ 110°C continuous operation
- ✓ Flame retardant
- ✓ Easy to install on cable tray
- ✓ Easy to strip and terminate
- ✓ Smallest diameter on the market
- ✓ Low smoke zero halogen (PVC Free) Third Party Accredited
- ✓ ≤1.50mm: 8-10 twists per meter, 2.50mm: 6 twists per meter, 4.00mm: 4 twists per meter  
6.00mm: 3 twists per meter



#### PRODUCT DESCRIPTION

FireSense fire rated cables have been specifically designed for use with Australian Fire Alarm and 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.

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  $\geq 25$ mm diameter cables should be supported with stainless steel ties every 300mm.  
If cable bunch is  $< 25$ mm diameter cables should be supported with stainless steel ties every 600mm.

**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	ELV FIRE
Weight per metre (kg)	FR-0.75-2C - 0.087
	FR-1.00-2C - 0.124
	FR-1.50-2C - 0.132
	FR-2.50-2C - 0.196
	FR-4.00-2C - 0.239
	FR-6.00-2C - 0.343

\* 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.

**ELECTRICAL CHARACTERISTICS**

Part Number	DC Resistance ( $\Omega$ / km)	Capacitance (pF/m) Red / White	Inductance (uH/m)
FR-0.75-2C	25.3	44	0.87
FR-1.00-2C	21.2	46	0.80
FR-1.50-2C	13.6	48	0.75
FR-2.50-2C	7.41	53	0.71
FR-4.00-2C	4.61	57	0.68

**STANDARDS COMPLIANCE**

Fire & Mechanical	AS/NZS 3013
Cable Construction	AS/NZS 5000.2
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 Propagation	AS/NZS 1660.5.6, AS/NZS IEC 60332-1

**ORDERING INFORMATION**

Part Number	No. of Cores	Cross Section (mm <sup>2</sup> )	Copper Wire Diameter (mm)	Approx Overall Diameter (mm)	AS/NZS 3013 Classification	Drum Length
FR-0.75-2C	2	0.75	0.37	9.8	WS51W	250m, 500m
FR-1.00-2C	2	1.00	0.42	10.0	WS51W	250m, 500m
FR-1.50-2C	2	1.50	0.52	10.3	WS52W	250m, 500m
FR-2.50-2C	2	2.50	0.67	11.8	WS52W	250m, 500m
FR-4.00-2C	2	4.00	0.85	13.7	WS52W	Cut to length
FR-6.00-2C	2	6.00	1.04	16.2	WS52W	Cut to length

**APPROVALS & CERTIFICATION**

Part Number	AS/NZS 3013			AS/NZS 5000.2	
	Rating	Certificate No.	Issuer	Certificate No.	Issuer
FR-0.75-2C	WS51W	FAS 240027 R1.6	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-1.00-2C	WS51W	FAS 240027 R1.6	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-1.50-2C	WS52W	FAS 240027 R1.6	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-2.50-2C	WS52W	FAS 240027 R1.6	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-4.00-2C	WS52W	FAS 240027 R1.6	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-6.00-2C	WS52W	FAS 240027 R1.6	Warrington Fire	GMA-511152	Global Mark Pty Ltd

<b>ActivFire Listing Number</b>	afp-2417		
<b>RCM Responsible Supplier</b>	E6560	Level 3	GMA-511152
<b>Bureau Veritas GECA Certificate Number</b>	3407		
<b>Bureau Veritas PVC Free Certificate Number</b>	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.

