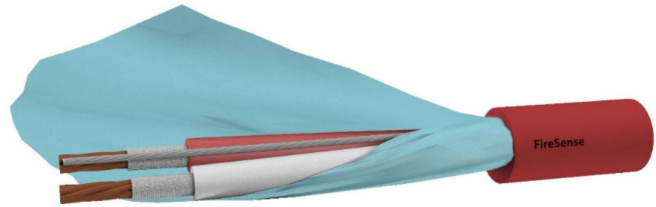


#### FEATURES

- ✓ 2HR Fire Rated
- ✓ AS/NZS 3013 Approved - WS52W
- ✓ 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 strip and terminate
- ✓ Smallest diameter on the market
- ✓ 8-10 twists per meter
- ✓ Low smoke zero halogen (PVC Free) Third Party Accredited



#### 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. The screened alternative reduces electrical noise & reduces the impact on signals.

It is recommended that FireSense stainless steel cable ties be used for fixing cable to tray every 1.0 meter 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  $\geq 25\text{mm}$  diameter cables should be supported with stainless steel ties every 300mm.  
If cable bunch is  $< 25\text{mm}$  diameter cables should be supported with stainless steel ties every 600mm.

**ORDERING INFORMATION**

Part Number	No. of Cores	Cross Section (mm <sup>2</sup> )	Copper Wire Diameter (mm)	Twist per m	Approx Overall Dia (mm)	AS/NZS 3013 Classification	Drum Length
FR-0.75-2CS	2	0.75	0.37	8-10	10.3	WS51W	250m, 500m
FR-1.50-2CS	2	1.50	0.52	8-10	10.5	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
Overall Screen	Aluminium/Polyester Laminate
Drain Wire	Tinned Copper 7/0.25mm <sup>2</sup>
AS1670.2018 Sheath Marking	ELV 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

**ELECTRICAL CHARACTERISTICS**

Part Number	Resistance ( $\Omega$ / km)	Capacitance Red/White (pF/m)	Capacitance Conductor/Screen (pF/m)	Inductance (uH/m)
FR-0.75-2CS	23.4	55	108	0.87
FR-1.50-2CS	11.9	89	163	0.74

**APPROVALS & CERTIFICATION**

Part Number	AS/NZS 3013			AS/NZS 5000.2	
	Rating	Certificate No.	Issuer	Certificate No.	Issuer
FR-0.75-2CS	WS51W	SFC2331900b.1	Warrington Fire	GMA-511152	Global Mark Pty Ltd
FR-1.50-2CS	WS52W	SFC2401600b.2	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		

#### 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.

