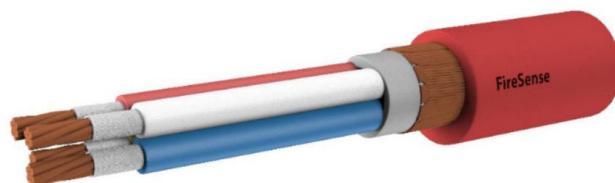


FEATURES

- ✓ 2HR Fire Rated
- ✓ 0.6/1kV insulation rating
- ✓ 110°C conductor temp
- ✓ AS/NZS 3013 – WS52W
- ✓ AS/NZS 5000.1
- ✓ AS/ACIF S008
- ✓ RCM Certified
- ✓ ActivFire Certified
- ✓ Low smoke zero halogen
- ✓ Flame retardant
- ✓ Ideal for VSD applications
- ✓ Same size earth conductors



CONDUCTOR SIZES AVAILABLE

2.50 mm²
4.00mm²
6.00mm²

PRODUCT DESCRIPTION

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

FireSense Fire Rated Cables have been independently tested and approved by EXOVA/Warringtonfire to the exacting requirements of AS/NZS 3013 for both fire and mechanical cable properties. All FireSense cables are certified 2 hour Fire Rated. FireSense Fire Rated Cables have also been tested and approved to electrical standards AS/NZS 5000.1 and communication/wiring standard AS/ACIF S008 by respective industry testing authorities.

FireSense cables are manufactured using 100% pure, annealed, 7 strand 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 3C+ES cables are available with 2.5mm², 4.0mm² and 6.0mm² conductors and contain a copper braid screen specifically designed for interconnection between VSD controllers and essential fire fans.

It is recommended that FireSense stainless steel cable ties be used for fixing cable to tray every 1.0 metre when mounted horizontal 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 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 (mm ²) | Core Conductor Strands x dia. (mm) | Overall Diameter (mm) | Operating Temp (°C) | AS/NZS 3013 Rating |
|---------------|--------------|----------------------------------|------------------------------------|-----------------------|---------------------|--------------------|
| FR-2.50-3C+ES | 3 + E | 2.50 | 7 x 0.67 | 17.7 | -25 to +110 | WS52W |
| FR-4.00-3C+ES | 3 + E | 4.00 | 7 x 0.85 | 19.3 | -25 to +110 | WS52W |
| FR-6.00-3C+ES | 3 + E | 6.00 | 7 x 1.04 | 21.3 | -25 to +110 | WS52W |

ELECTRICAL CHARACTERISTICS

| Part Number | DC Resistance (Ω / km) | AC Resistance @ 50Hz (Ω / Km at °C) As per AS3008 Table 35 | | | | Current Carrying Capacity Unenclosed (Amps) As per AS3008 Table 15 | | | 3 Phase Voltage Drop @ 50Hz (mV/A.m at °C) As per AS3008 Table 42 | | | |
|---------------|------------------------|---|------|------|------|---|----------|----------|--|------|------|------|
| | | 20°C | 45°C | 75°C | 90°C | 110°C | Stranded | Touching | Exposed | 45°C | 75°C | 90°C |
| FR-2.50-3C+ES | 7.05 | 8.14 | 9.01 | 9.45 | 10 | 35 | 33 | 30 | 14.1 | 15.6 | 16.4 | 17.4 |
| FR-4.00-3C+ES | 4.60 | 5.06 | 5.61 | 5.88 | 6.24 | 47 | 44 | 40 | 8.77 | 9.71 | 10.2 | 10.8 |
| FR-6.00-3C+ES | 2.98 | 3.38 | 3.75 | 3.93 | 4.17 | 59 | 56 | 50 | 5.86 | 6.49 | 6.8 | 7.22 |

CONSTRUCTION

| | |
|------------------------------|--|
| Conductors | Stranded Annealed Copper |
| Screen | Braided Annealed Copper 24 Strands of 7 x 0.25mm diameter Wires |
| Flame Barrier | Mica Tape |
| Insulation | Flame Retardant, Low Smoke, Zero Halogen (X-HF-110) |
| Sheath | Flame Retardant, Low Smoke, Zero Halogen (HFS-110-TP) |
| Operating Temperature | -25°C to +110°C |
| Insulation Colour | Red, Blue, White, Green/Yellow |
| Sheath Colour | Red |
| Min Bending Radius | 10 x Cable Diameter |

STANDARDS COMPLIANCE

| | |
|----------------------------|------------------------------|
| Fire & Mechanical | AS/NZS 3013 Appendix A,B,D,E |
| Conductors | AS/NZS 1125 Class 2 |
| Cable Construction | AS/NZS 5000.1 |
| Vertical Flame Speed | AS/NZS 1660.5.1 |
| Smoke Density | AS/NZS 1660.5.2 |
| Halogen Gas | AS/NZS 1660.5.3 |
| Acidity of Gases | AS/NZS 1660.5.4 |
| Vertical Flame Propagation | AS/NZS 1660.5.6 |
| ACMA Compliance | AS/ACIF S008 |

APPROVALS

| Part Number | AS/NZS 3013 | | | AS/NZS 5000.1 | |
|---------------|-------------|-----------------|----------------------|-----------------|--------|
| | Rating | Certificate No. | Issuer | Certificate No. | Issuer |
| FR-2.50-3C+ES | WS52W | SFC26123A.04 | EXOVA/Warringtonfire | ASA-181008-EA | ASA |
| FR-4.00-3C+ES | WS52W | SFC26123B.04 | EXOVA/Warringtonfire | ASA-181008-EA | ASA |
| FR-6.00-3C+ES | WS52W | SFC26123C.04 | EXOVA/Warringtonfire | ASA-181008-EA | ASA |

| | |
|-----------------------|----------|
| ActivFire Listing No. | afp-2417 |
|-----------------------|----------|

| | | | |
|--------------------------|-------|---------|---------------|
| RCM Responsible Supplier | E6560 | Level 3 | ASA-181008-EA |
|--------------------------|-------|---------|---------------|



CLASSIFICATION

AS3013 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.

