# **Fire Resistant Fibre Optic Cable**



OSA Fire Rated Optical Cable series of Fire Resistant cable is ideal for installations requiring a cable that can withstand damage from fire or flame for a period of time. This cable allows for systems to remain operational for a limited time

where traditional cables will not.



Perfect for critical systems, where time is required for system shutdown or data backup to take place, or for signaling & safety purposes.

# **KEY FEATURES**

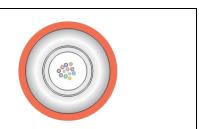
- Fire resistant cable offers protection in hazardous or fire prone areas for critical systems
- Non-metallic, all dielectric construction allows for cable installation in areas such
- as power substations with restrictions in place for metallic cable
- High performance components and construction
- Low smoke zero halogen UV stabilised outer jacket lowers corrosive gas emissions during a fire situation
- Complies with relevant IEC codes, standards & specifications for
- fire resistant & flame retardant properties
- Glass yarn offers a level of deterence against non-burrowing rodents
- Wide operating temperature range of -20°C to +70°C
- 4 to 24 fibres\*(subject to availability)

## **Application**

- Suitable for indoor/outdoor confined spaces
- Fire prone areas
- Hazardous environments
- Critical systems and signaling applications
- Warning systems for mine sites



Fibre type	OM3 (G651)	SM (G652.D)
Attenuation at 850nm (db/km)	<3.0	n/a
Attenuation at 1300/1310nm (db/km)	<1.0	<0.40
Attenuation at 1550nm (db/km)	n/a	<0.30
Bandwidth at 850nm (MHz.km)	>1500	n/a
Bandwidth at 1300nm (MHz.km)	>500	n/a



#### **Cable Construction**

Outer jacket	Low Smoke Zero Halogen
Intermediate members	Glass Yarn
Fire protective wrapping	Mica Tape
Inner tube	Polyethelene
Glass fibres	250um Loose Tube in Thixotropic Gel



## **Technical Specifications**

	90 minute specification	180 minute specification	
Tensile performance	2000 N	2500 N	IEC 60794-1-2-E1
Crush performance	2000 N / 100mm	2000 N / 100mm	IEC 60794-1-2-E3
Impact performance	10 J	20 J	IEC 60794-1-2-E4
Flame retardant	Complies to IEC specification	Complies to IEC specification	IEC 60332-1-2
Fire retardant	Complies to IEC specification	Complies to IEC specification	IEC 60332-3-24
Fire resistant	750°C for 90 minutes	950°C for 180 minutes1	IEC 60331-25
Halogen acid gas emission	0.3%	0.5%	IEC 60754-1/2
Acidity of gases during fire	pH 4.3, conductivity 10 μS/mm	pH 4.3, conductivity 10 μS/mm	IEC 60754-1/2
Smoke emission	60%	60%	IEC 61034-1/2

## **Cable Characteristics**

Fibre Count	Nominal diameter (mm)	Nominal weight (kg/km)	Min. bend radius operation (cm)	Min. bend radius installation (cm)		
90 minute specification						
4, 6, 12	7.5	60	7.5	11.25		
24	8.0	70	8.0	12		
180 minute specification						
4, 6, 12	7.5	60	7.5	11.25		
24	8.5	70	8.5	12.75		

NSW - Silverwater Unit 4, 52 Holker Street Silverwater NSW 2128

E: sales@opticalsolutions.com.au

P: +61 2 9395 1400 F: +61 2 9647 0014 **NSW - Sydney City** 

Unit 10, 10 Bradford Street Alexandria NSW 2015

E: <a href="mailto:sydcity@opticalsolutions.com.au">sydcity@opticalsolutions.com.au</a>

P: +61 2 9304 4555 F: +61 2 9700 8055 VIC

Unit 3 / 1 Rocklea Drive Port Melbourne VIC 3207

E: vicsales@opticalsolutions.com.au

P: +61 3 9646 4166 F: +61 3 9646 4155

QLD

Unit 2/40 Borthwick Ave Murarrie QLD 4172

E: <a href="mailto:qldsales@opticalsolutions.com.au">qldsales@opticalsolutions.com.au</a>

P: +61 7 3399 5280 F: +61 7 3399 9805 ACT

22 Isa Street Fyshwick ACT 2609

E: actsales@opticalsolutions.com.au

P: +61 2 6162 4600 F: +61 2 6162 4605

WA

28a Teddington Rd Burswood WA 6100

E: wasales@opticalsolutions.com.au

P: +61 8 9361 7000 F: +61 8 9361 7011