Simplex Spiral Armored Cable

FCA-XX-X-SSA-X-X-EX / 1 Fiber

Description

Waveoptics Simplex Spiral Armored Cables can be used for indoor applications, in industrial environments that require a rugged cable that is also flexible, offering ease of installation and routing, while providing protection in harsh indoor environments.

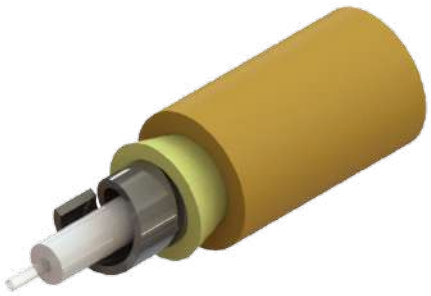
The optical fiber is under a protective cover made of acrylate and a tight buffer. Aramid yarn as a strength member to provide excellent tensile strength during installation.

Stainless steel spiral armor is lighter and has a smaller outer diameter compared to conventional fiber optic cable armor, offering more flexibility. Provides crush and rodent resistance.

The following jacket and tight buffer materials are available:

PVC RISER: used in vertical installations. Prevents the spread of flames to higher floors, in case of fire. Riser cable jackets are rated for flame generation and are held to a lower standard compared to plenum cables.

PVC PLENUM: ideal for applications in spaces with good air circulation, such as low ceilings or under elevated floors. Resistant to fire and produces low smoke when burned. Cable jackets used in plenum spaces are rated for both flame and smoke generation.



SIMPLEX SA CABLE 2.0MM OFNR
01F G652D S EX

Quality

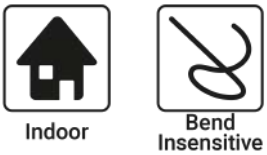
Waveoptics is a ISO-9001: 2015 certified company.

We meet or exceed the following international standards:

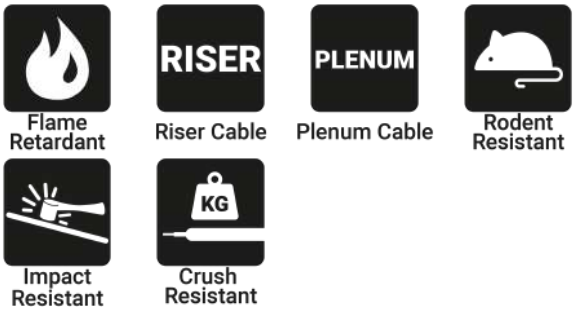
- Telcordia GR-409: Generic requirements for indoor fiber optic cable.
- IEC 60794: Basic requirements for optical fiber and cable elements.

Each Waveoptics cable meets the highest quality standards in the industry and contains a compliance certificate in which the performed tests in our quality laboratory are physically attached.

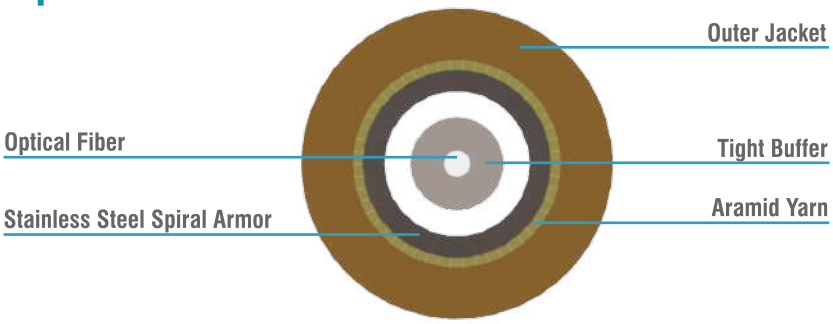
Applications:



Protections:



Dimensions and Properties



Design	
Fiber count / fiber color code	1 / 6
Tight buffer diameter	0.9 mm (0.04 in) (±5%)
Dielectric strength member	Aramid yarn
Outer jacket / tight buffer material*	PVC Riser / PVC Plenum
Reel length	2 km (6,562 ft) (±5%)
Temperature range	
Operation	-40°C to 80°C (-40°F to 176°F)
Installation	-30°C to 80°C (-22°F to 176°F)
Storage / transport	-40°C to 80°C (-40°F to 176°F)
Mechanical properties	
Maximum crush resistance	1,500 N/100mm
Minimum bend radius (operation / installation)	25 mm (1 in) / 50 mm (2 in)

Note: Waveoptics recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.
*LSZH jacket also available upon request.

Outer jacket / tight buffer material	Nominal outer diameter (mm) (in) (±5%)	Jacket thickness (mm) (in)	Tensile strength (N) (lbf) long-term / short-term	Cable weight (kg/km) (lb/kft) (±10%)
PVC Riser	2.0 (0.078)	0.4 (0.016)	100 / 200 (22.5 / 45)	7 (4.7)
PVC Plenum				7 (4.7)

Outer Jacket Color Guide

SINGLE MODE FIBER

SM G652.x fiber
SM G657.x fiber
Yellow

MULTI MODE FIBER

MM OM1 fiber
MM OM2 fiber
Orange

MM OM3 fiber
MM OM4 fiber
Aqua

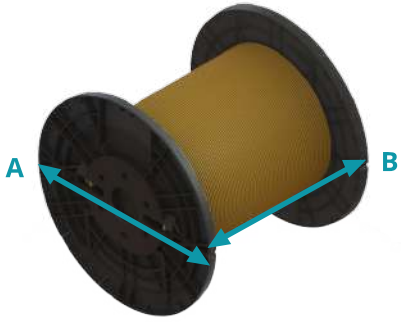
MM OM5 fiber
Lime Green

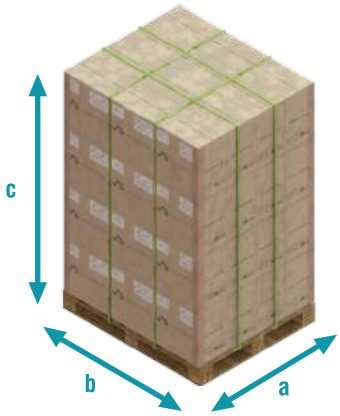
Printed Information on Outer Jacket

=/MONTH//YEAR/ WAVEOPTICS= =SIMPLEX SPIRAL ARMORED= =/FIRE RATING/= =/FIBER TYPE/= =/FIBER COUNT/= =/METERS*/ M= =/LOT #/=

- Printed in black, except for dark colored cables, which will be printed in white.
- Marking interval: every 1 meter + 1% or 2 feet + 1%.
- The marking can be changed according to customer requirements.
- *The standard marking interval is every 1 meter, in case the marking requirement is in feet, a notification on the purchase order would be necessary.

Reel Dimensions and Pallet Packaging Information





Outer jacket / tight buffer material	Nominal outer diameter (mm) (in) (±5%)	Reel length (m) (ft) (±5%)	A (mm) (in) (±5%)	B (mm) (in) (±5%)	Reel weight (kg) (lb) (±10%)	Pallet capacity (m) (ft) (±5%)	a (mm) (in) (±5%)	b (mm) (in) (±5%)	c (mm) (in) (±5%)
PVC Riser	2.95 (0.12)	2,000 (6,562)	457 (18)	340 (13)	32.5 (71.7)	36,000 (118,110)	1,100 (43)	1,200 (47)	1,556 (61)
PVC Plenum					34.5 (76.1)				

Note 1: please contact your sales agent for different reel lengths available.
*Note 2: all documentation included in the packaging is in english, if a different language is needed, please contact your sales agent.

Packaging includes*:
1.- Reel handling instructions.
2.- Test report certificate.
3.- Product description (weight, dimensions, lot and part number).

Transmision Performance by Fiber Type

Fiber type	Single Mode				Multi Mode				
Waveoptics fiber type	G652.D	G657.A1	G657.A2	G657.B3	OM1	OM2	OM3	OM4	OM5
Waveoptics fiber code	F	T	E	N	B	L	M	P	V
OFS® fiber type	G652.D	AllWave® FLEX	AllWave® FLEX+	EZ-Bend®	62.5 um Laser Optimized	50 um Graded Index	LaserWave® FLEX 300	LaserWave® FLEX 550	LaserWave® WideBand
OFS® fiber code	1	2	3	6	5	8	9	0	4
Wavelength (nm)	1310/1550				850/1300				
Max. attn. (dB/km) (1)	0.4/0.3	0.4/0.3	0.4/0.3	0.4/0.3	3.4/1	3/1			
Min. bandwidth (MHz*km) (2)	-				200/500	750/500	1500/500	3500/500	3500/500
1-Gigabit ethernet distance (m) (3)	-				300	750	> 550	> 550	> 550
10-Gigabit ethernet distance (m) (4)	-				-	150	300	400	400
40/100-Gigabit ethernet distance (m) (5)	-				-	-	100/70	150/100	150/100
Cable marking specifications	G652.D	G657.A1	G657.A2	G657.B3	OM1	OM2	OM3	OM4	OM5

Notes:
(1) Maximum attenuation after cabling process.
(2) OFL (overfilled launch) bandwidth measurement.
(3) 1-Gb/s at 850 nm transmissions based on IEEE 802.3z test protocol.
(4) 10-Gb/s at 850 nm transmissions based on IEEE 802.3ae test protocol.
(5) 40/100-Gb/s at 850 nm transmissions based on IEEE P802.3ba test protocol.
*For more information about the optical fibers, consult the corresponding data sheets.

Part Number Configuration

FCA-XX-X-SSA-X-X-EX

Outer diameter
20 - 2.0 mm

Waveoptics optical fiber type
F - SM G652.D
T - SM G657.A1
E - SM G657.A2
N - SM G657.B3
B - MM OM1
L - MM OM2 TRUE BEND
M - MM OM3 TRUE BEND
P - MM OM4 TRUE BEND
V - MM OM5 TRUE BEND

OFS® optical fiber type
1 - SM G652.D
2 - AllWave® FLEX
3 - AllWave® FLEX+
6 - EZ-Bend®
5 - 62.5 um Laser Optimized
8 - 50 um Graded Index
9 - LaserWave® FLEX 300
0 - LaserWave® FLEX 550
4 - LaserWave® WideBand

Outer jacket material
R - PVC Riser
P - PVC Plenum

Tight buffer diameter
9 - 900 um

Optical cable compliance
EX - Waveoptics standard

AC - Buy American Act compliance

Note: please contact your Waveoptics distributor if you need any additional compliance or if you have questions about the part number configuration.