UNDERSTANDING FIBER JACKET COLOR CODING

The color of the jacket on fiber optic cable identifies what type of fiber is used in the jacket. This is specified in TIA 598-C.

Orange: OM1 62.5-Micron Multimode
Orange: OM2 50-Micron Multimode

Aqua: OM3 Laser-Optimized 50-Micron Multimode

Aqua/Violet*: OM4 Laser-Optimized 50-Micron Multimode

Yellow: OS1/OS2 Single-mode

Blue: Polarization-maintaining Single-Mode

Black: Outdoor fiber

*OM4 cable is not specified in the standard. Aqua is used for OM3/OM4 cable (and some higher-grade OM2 cable). Violet is used for OM4 cable in Europe and is becoming more common in North America.

Color Coding					
	Jacket	Jacket Nomenclature	Connector	Connector Body	
OM1 62.5-µm Multimode	Orange	62.5/125	Beige	Beige	
OM2 50-µm Multimode	Orange	50/125	Black	Black	
OM3 50-µm Multimode	Aqua	850 50/125	Aqua	Black	
OS1 APC Single-mode	Yellow	SM/NZDS, SM	Green (MPO is black)	Green	
OS1 UPC Single-mode	Yellow	SM/NZDS, SM	Blue	Blue	

Military Applications

Slate: 62.5-Micron Multimode Green: 100-Micron Multimode

If not specified, jacket colors are the same as for non-military applications.

Bare Fiber Color Coding

When multiple, bare fibers are housed in one buffer tube, the fibers are color coded for identification. This enables installers to easily identify the individual fibers on each end of the link.

Fiber Position	Color and Tracer
1	Blue
2	Orange
3	Green
4	Brown
5	Slate
6	White
7	Red
8	Black
9	Yellow
10	Violet
11	Rose
12	Aqua
13	Blue/Black
14	Orange/Black
15	Green/Black
16	Brown/Black
17	Slate/Black
18	White/Black
19	Red/Black
20	Black/Yellow
21	Yellow/Black
22	Violet/Black
23	Rose/Black
24	Aqua/Black

Fiber Connector Color Coding

Fiber connectors and the connector/strain-relief boot are also color coded, although often the boot colors vary by manufacturer. The following colors are listed in <u>TIA 568-C.3.</u>

Fiber Type	Connector	Connector/Boot
OM1 62.5-Micron	Beige/Black/Aqua	Beige
OM2 50-Micron	Beige/Black/Aqua	Black
OM3 50-Micron	Beige/Black/Aqua	Aqua
Single-mode	Blue	Blue
Single-mode APC	Green	Green
	UPC polish	
	APC polish	
	APC postn	

In addition, the fiber connector/strain-relief boots are also color coded to indicate the polish style of the fiber endface. UPC stands for Ultra Physical Contact. APC stands for Angled Physical Contact. The UPC endface is polished at a 0° angle. The APC endface is polished at an 8° angle to prevent light from reflecting and traveling back up the interface. The boot colors may vary by manufacturer.

Connector Boot	Endface	Fiber Type
Blue	UPC	Single-mode
Green	APC	Single-mode
Black	UPC	OM2 50-Micron
Grey/Beige	UPC	OM1 62.5 Micron
White	UPC	OM3 50-Micron