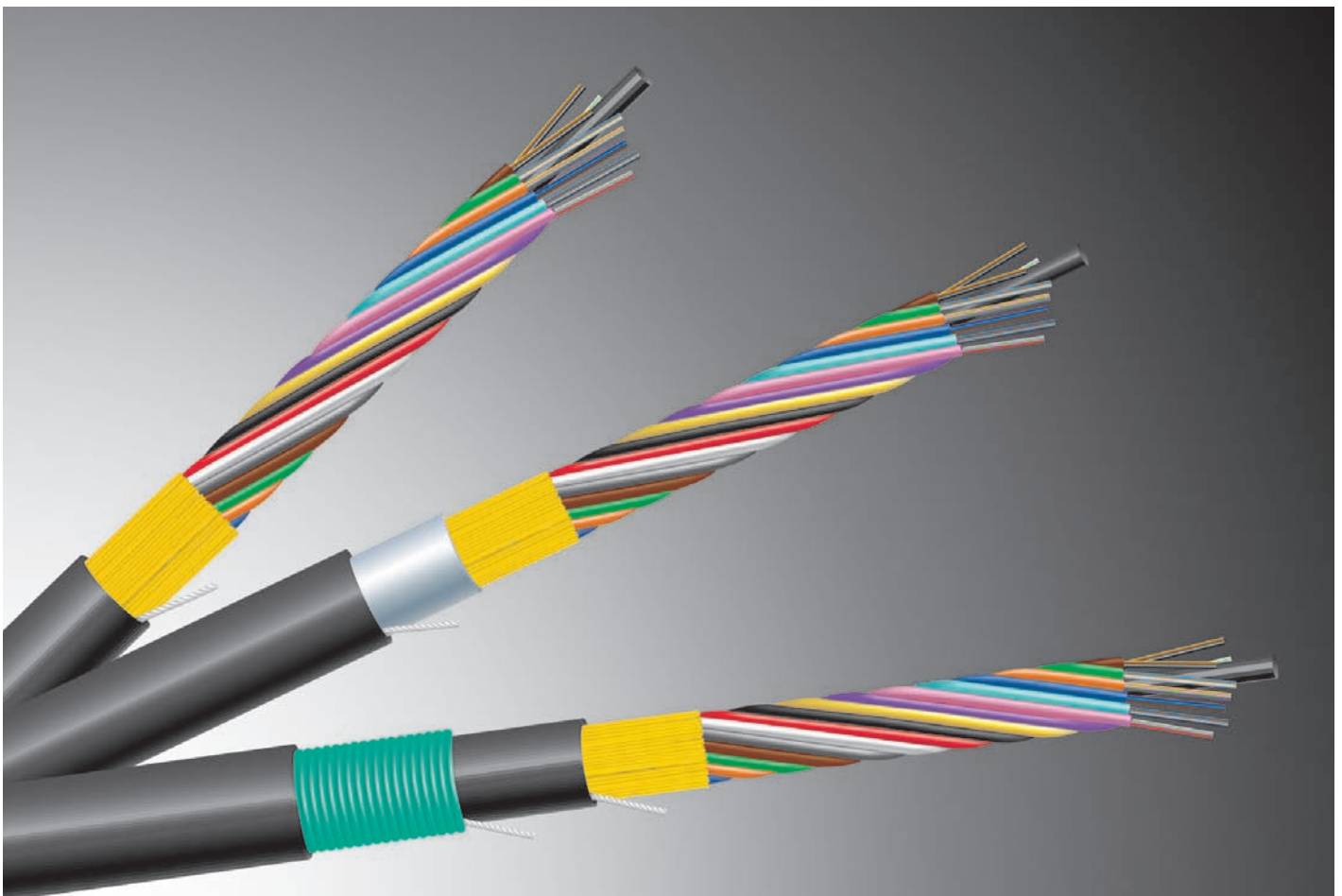
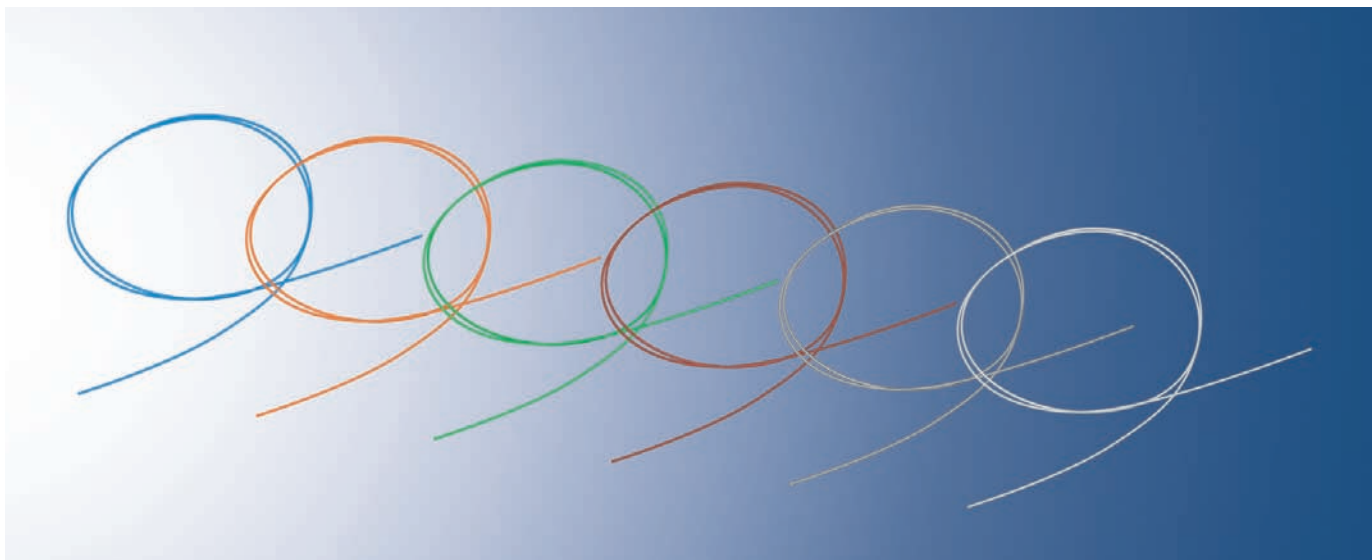


Optical Fiber Loose Tube Cable

(Fundamental Structures)



Optical Fiber SM332



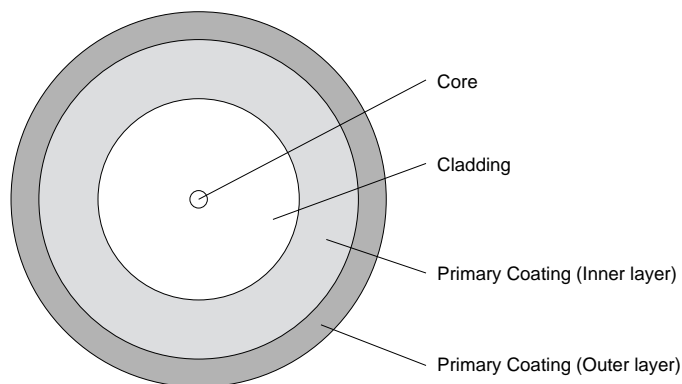
Outline

FURUKAWA optical fiber SM332 is a matched cladding design single mode fiber made of synthesized silica with a coating of 245 μ m mechanically strippable acrylate.

SM332 is designed to minimize the dispersion in the 1310nm wavelength region as well as 1550nm region.

FURUKAWA optical fiber SM332 is manufactured by Vapor phase Axial Deposition (VAD), which can provide the excellent optical, mechanical and geometrical characteristics.

Cross Sectional View



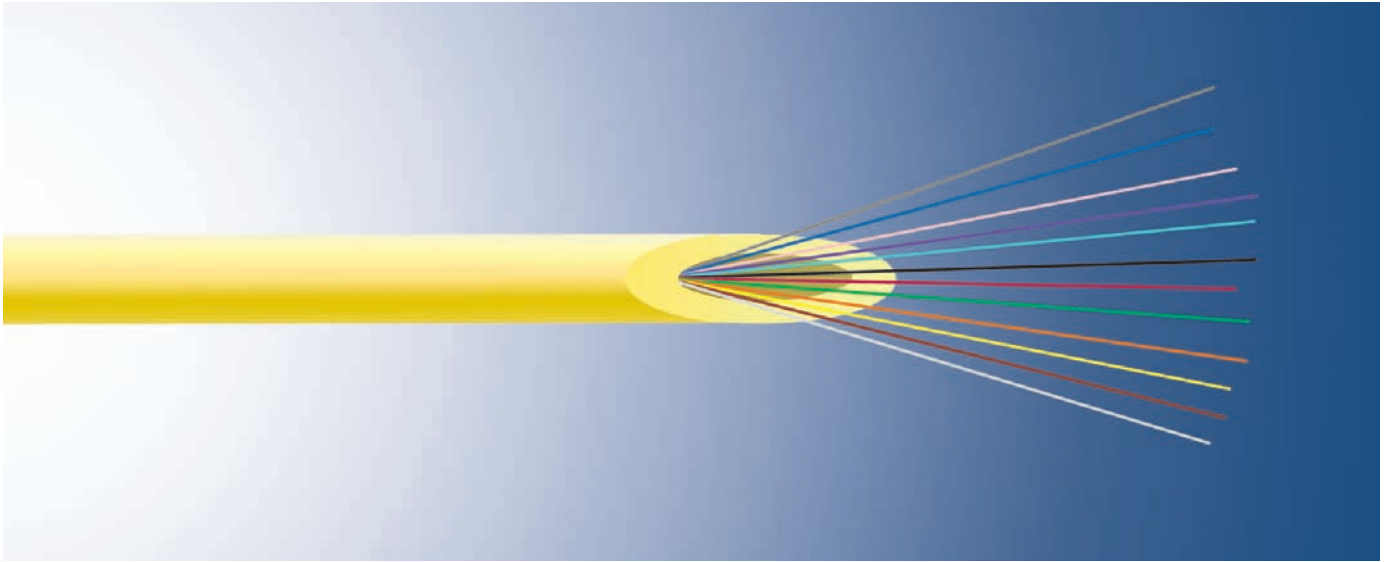
Specification (Compliance with ITU-T G.652)

Item		Description
Core	Material	Germanium Doped Silica
	MFD*1	9.2 \pm 0.5 μ m @ 1310nm 10.4 \pm 1.0 μ m @ 1550nm
Cladding	Material	Silica
	Diameter	125 \pm 1.0 μ m
Primary Coating	Inner Layer	UV Curable Acrylate
	Outer Layer	UV Curable Acrylate
Coating Diameter*2		245 \pm 10 μ m
Core Concentricity Error		\leq 0.8 μ m
Cladding Non-Circularity		\leq 1.0%
Cable Cut-Off Wavelength		\leq 1260nm
Macrobend Loss	Radius: 37.5mm	
	Number of Turns: 100	
	\leq 0.10dB @ 1550nm	
Proof Stress		0.69 GPa
Zero Dispersion Wavelength		1300~1324nm
Zero Dispersion Slope		\leq 0.093 ps/(nm·km)
Chromatic Dispersion	\leq 3.5 ps/(nm·km) @ 1288~1339nm	
	\leq 18 ps/(nm·km) @ 1550nm	

*1 MFD: Mode Field Diameter

*2 Coating Diameter: Uncolored Fiber

Buffer Tube



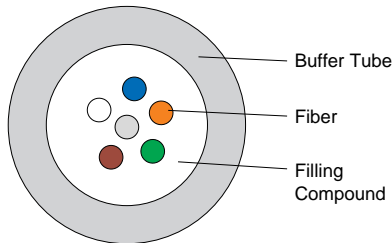
Outline

From 1 to 12 fibers are placed within color-coded buffer tubes, which are several times larger than fibers.

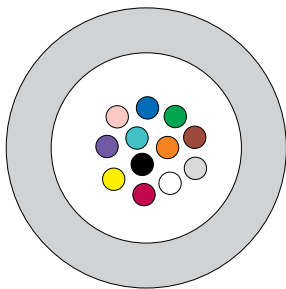
To prevent water intrusion, the buffer tubes are filled with compounds.

Cross Sectional View

Up to 6 Fibers



Up to 12 Fibers



Color Scheme (Identification)

Fiber / Buffer Tube

Fiber No. Buffer Tube No.	Color Code
1	Blue 
2	Orange 
3	Green 
4	Brown 
5	Slate 
6	White 
7	Red 
8	Black 
9	Yellow 
10	Violet 
11	Rose 
12	Aqua 

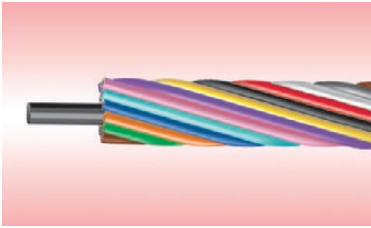
Since the fibers which are accommodated inside of buffer tube moves freely, Therefore this cable called "Loose Tube"

Specification

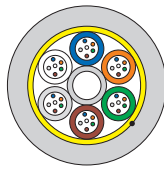
Item	Description	
Optical Fiber	Construction	As per Previous Page
	Number of Fibers per Tube	Up to 6 Fibers / Up to 12 Fibers
	Color Code	Refer to Table Listed on Above
Filling Compound	Material	Thixotropic Jelly Compound
Buffer Tube	Material	Polybutylene Terephthalate (PBT)
	Outer Diameter (Nominal)	2.5mm for up to 6 Fibers per Tube 3.0mm for up to 12 Fibers per Tube
	Color Code	Refer to Table Listed on Above

Fundamental Structure for Loose Tube

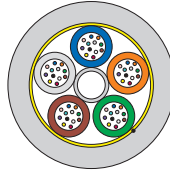
Structure of Core



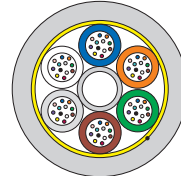
36 Fibers



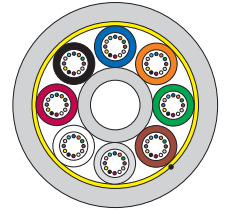
60 Fibers



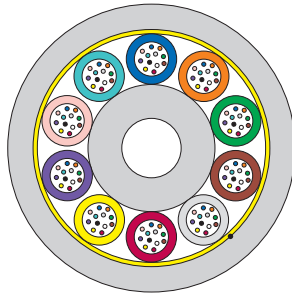
72 Fibers



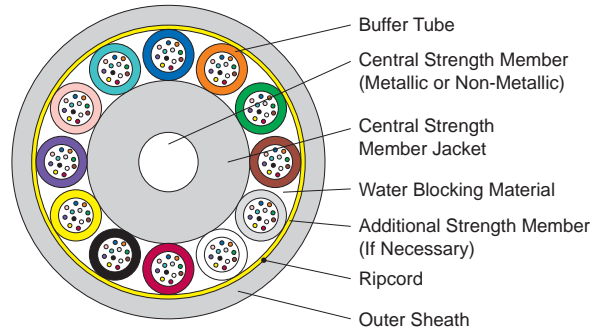
96 Fibers



120 Fibers



144 Fibers



ISO 9001 Certified Manufacturer



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