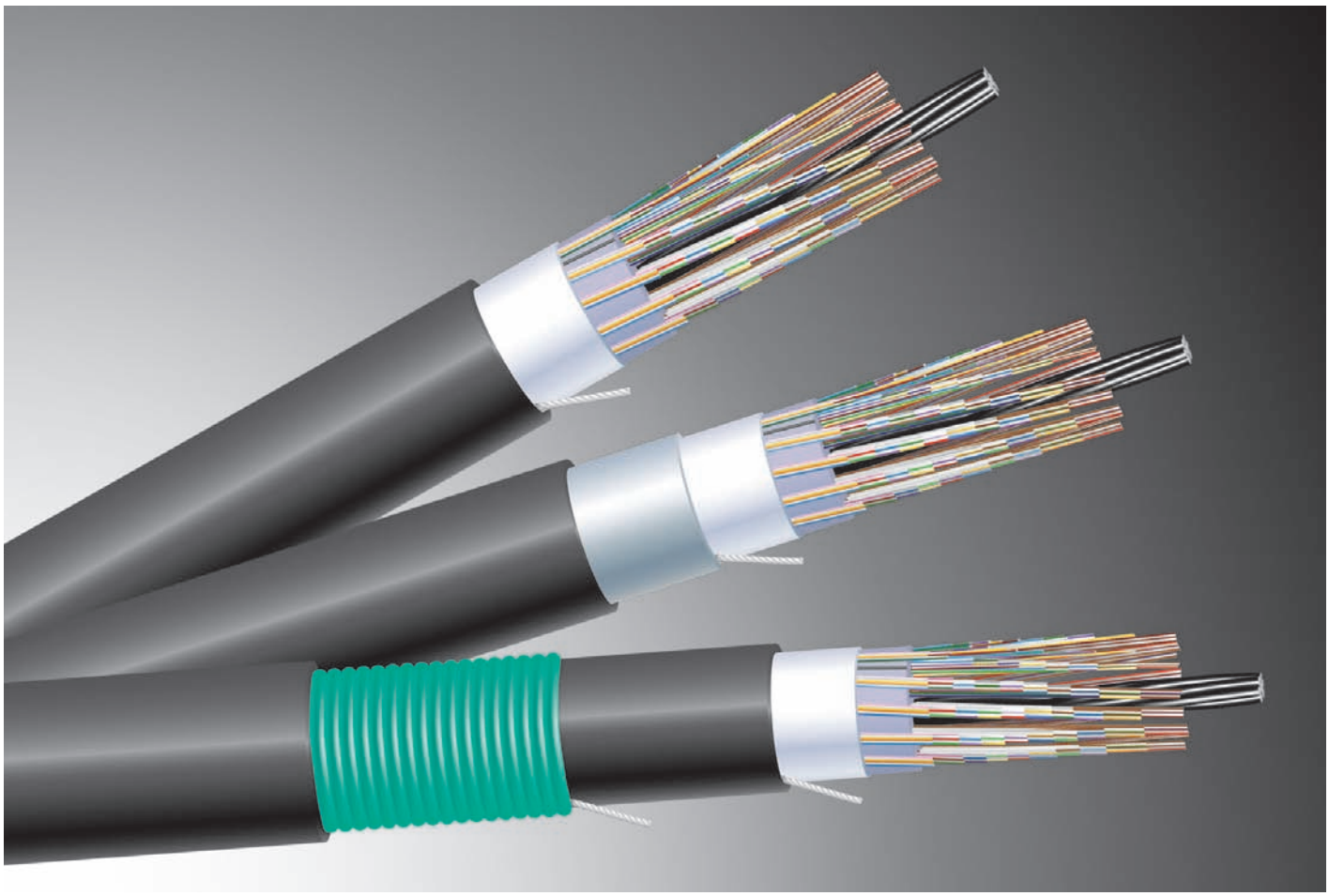
FITEL

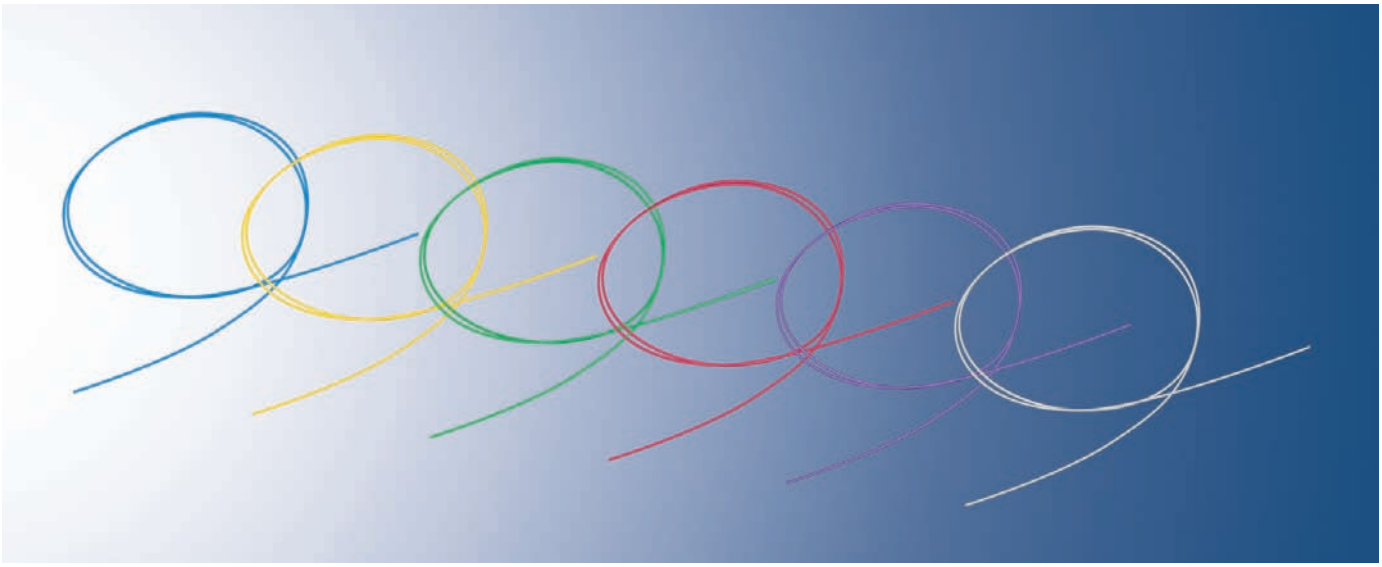
Optical Fiber Ribbon Slotted Core Cable

(Fundamental Structures)



FURUKAWA ELECTRIC

Optical Fiber SM332



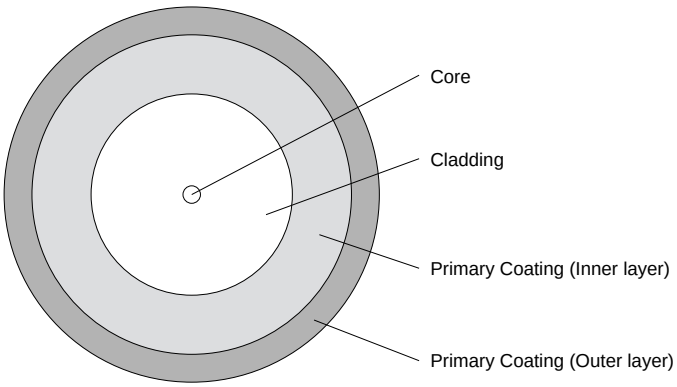
Outline

FURUKAWA optical fiber SM332 is a matched cladding design single mode fiber made of synthesized silica with a coating of 245µm 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±0.5µm @ 1310nm 10.4±1.0µm @ 1550nm
Cladding	Material	Silica
	Diameter	125±1.0µm
Primary Coating	Inner Layer	UV Curable Acrylate
	Outer Layer	UV Curable Acrylate
Coating Diameter*2		245±10µm
Core Concentricity Error		≦0.8µm
Cladding Non-Circularity		≦1.0%
Cable Cut-Off Wavelength		≦1260nm
Macrobend Loss		Radius: 37.5mm
		Number of Turns: 100
		≦0.10dB @ 1550nm
Proof Stress		0.69 GPa
Zero Dispersion Wavelength		1300~1324nm
Zero Dispersion Slope		≦0.093 ps/(nm^2·km)
Chromatic Dispersion		≦3.5 ps/(nm·km) @ 1288~1339nm
		≦18 ps/(nm·km) @ 1550nm

*1 MFD: Mode Filed Diameter

*2 Coating Diameter: Uncolored Fiber

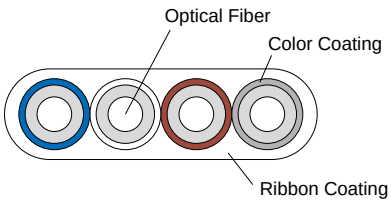
Optical Fiber Ribbon

Outline

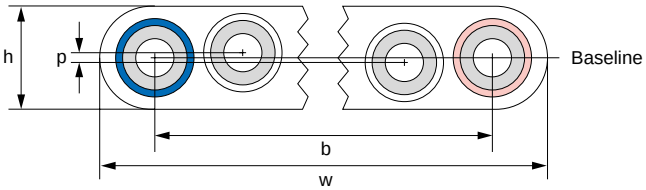
The fibers are placed parallel and cooted together. We are able to realize the high-density optical fiber cable by accommodating these ribbons into groves of slotted core cable. Normally, we have 4 and 8 fiber ribbon type and it reduces the time for splicing by using ribbon splicer, which can splice the ribbons together.

Cross Sectional View

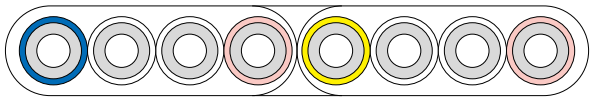
4-Fiber Ribbon



Ribbon Dimension Parameter



8-Fiber Ribbon



Specification

4-Fiber Ribbon

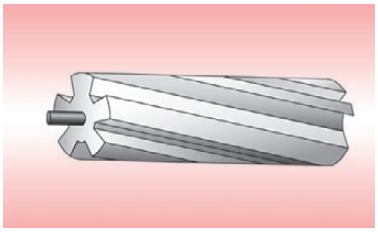
Item		Description
Optical Fiber	Specification	As per Previous Page
	Number of Fibers	4
Ribbon Coating	Material	UV Curable Acrylate
	Width: w	1100±100mm
	Thickness: h	320±50mm
	Planarity: p	≦50mm
Extreme Fibers: b		≦786mm
Identification		Color Coating

8-Fiber Ribbon

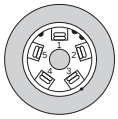
Item		Description
Optical Fiber	Specification	As per Previous Page
	Number of Fibers	8
Ribbon Coating	Material	UV Curable Acrylate
	Width: w	2100±100mm
	Thickness: h	320±50mm
	Planarity: p	≦50mm
Extreme Fibers: b		≦1870mm
Identification		Color Coating

Fundamental Structure for Slotted Core

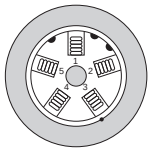
Structure of Core



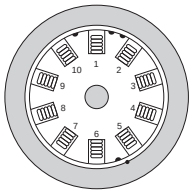
40 Fibers



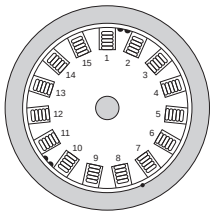
100 Fibers



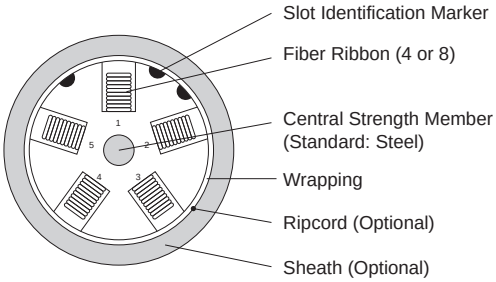
200 Fibers



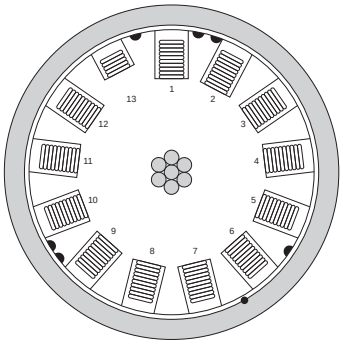
300 Fibers



400 Fibers



1000 Fibers



ISO 9001 Certified Manufacturer

FURUKAWA ELECTRIC CO., LTD.

http://www.furukawa.co.jp