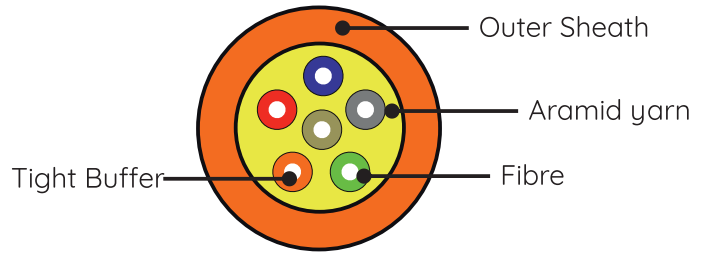


# Tight Buffered Distribution FO Cable

## Cable Description

Ritchfield Tight Buffered Distribution indoor fibre optic cable is made by evenly applying strands of Aramid yarns or High strength glass yarns as the strengthmember over  $\phi 900\mu\text{m}$  or  $\phi 600\mu\text{m}$  tight buffer fibers and then is completed with PVC / LSZH jacket.



### Application

- Adopted to indoor distribution.
- As pigtail of communication equipment.
- Suitable for communication equipment served.
- Suitable for floor connection.

### Characteristics

- High strength aramid yarn member.
- More tight buffeed design.
- Round construction.
- Saft. Easy to strip.

## Features

Items	Description
Number of fiber	1~48 cores
Fiber type	G652D/G657A/G657B/G655/OM1/OM2/OM3/OM4/OM5
Out sheath	Material: LSZH/PVC/PE

## Fibre Colors

The color of the individual fibres, shall be in accordance with the table as below:

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Grey	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Voilet	Pink	Aqua

When the fibers are over 12, the 13-24 fibers will be marked with a black tracer, the black fiber will be marked with white tracer. The tracer should be marked on the fiber surface with a interval.

## Fibre Characteristic

Fiber Style	Unit	SM	MM 50/125	MM 62.5/125
Condition	nm	1310/1550	850/1300	850/1300
Attenuation	dB/km	≤ 0.36/0.23	≤ 3.0/1.0	≤ 3.0/1.0
Dispersion	1310 nm	Ps/(nm*km)	≤ 18	.....
	1550 nm	Ps/(nm*km)	≤ 22	.....
Bandwidth	850 nm	MHZ.KM	.....	≥ 400
	1300 nm	MHZ.KM	.....	≥ 800
Zero dispersion wavelength	nm	≥1302	.....	.....
		≤1322	.....	.....
Zero dispersion slope	nm	≤0.091	.....	.....
PMD Maximum Individual Fiber		≤0.2	.....	.....
PMD Design Link Value	Ps/(nm <sup>2</sup> *km)	≤0.08	.....	.....
Fiber cutoff wavelength λ <sub>c</sub>	nm	≥1180, ≤ 133	.....	.....
Cable cutoff wavelength λ <sub>cc</sub>	nm	≤1260	.....	.....
MFD	1310 nm	um	9.2 ± 0.4	.....
	1550 nm	um	10.4 ± 0.8	.....
Numerical Aperture(NA)		.....	0.200 ± 0.015	0.275 ±
Step (mean of bidirectional measurement)	dB	≤0.05	≤0.10	≤0.10
Irregularities over fiber length and point discontinuity	dB	≤0.05	≤0.10	≤0.10
Difference backscatter coefficient	dB/km	≤0.03	≤0.08	≤0.10
Attenuation uniformity	dB/km	≤0.01	.....	.....
Core diameter	um	.....	50 ± 1.0	62.5 ± 2.5
Cladding diameter	um	60.0 ± 0.1	60.0 ± 0.1	60.0 ± 0.1
Cladding non-circularity	%	≤1.0	≤1.0	≤1.0
Coating diameter	um	242 ± 7	242 ± 7	242 ± 7
Coating/chaffinch concentricity error	um	≤12.0	≤12.0	≤12.0
Coating non circularity error	%	≤6.0	≤6.0	≤6.0
Core/cladding concentricity error	um	≤0.6	≤1.5	≤1.5
Curl(radius)	um	≤4	.....	.....

## Fibre Standards

ITU-T G.652.D/G.657.A,IEC 60793-2-50 G677B.3

## Standard Compliance

Temperature Cycling	IEC60794-1-2F1(-10°C TO +70°C)
Tensile Strength Crush	IEC60794-1-2E1A IEC60794-1-2E3
Impact Test	IEC60794-1-2E4
Torsion Test	IEC60794-1-2E7

## Geometric Characteristics

Characteristic	Data	Unit
Cladding roundness	≤ 0.7	%
Cladding diameter	125 ± 0.7	μm
Coating diameter	242 ± 5	μm
Coating/package concentricity error	≤12.0	μm
Core/package concentricity error	≤0.6	μm
The warpage (radius)	≥4	m

## Environmental Characteristics

Item	Parameter	
Tensile	Short Term	600N
	Long Term	200N
Crush Resistance	Short Term	1000N
	Long Term	200N
Temperature Range (°C)	Transport&Storage	-40~+70
Minimum Bending Radius	Short Term	20D mm
	Long Term	10D mm

## Ordering Information

Part Number	Product Description
RF2-02TDSMIN-<JT>	2 Core Tight Buffered Distribution FO cable, 09/125um Single mode, Indoor, <jacket type>
RF2-04TDSMIN-<JT>	4 Core Tight Buffered Distribution FO cable, 09/125um Single mode, Indoor, <jacket type>
RF2-08TDSMIN-<JT>	8 Core Tight Buffered Distribution FO cable, 09/125um Single mode, Indoor, <jacket type>
RF2-12TDSMIN-<JT>	12 Core Tight Buffered Distribution FO cable, 09/125um Single mode, Indoor, <jacket type>
RF2-24TDSMIN-<JT>	24 Core Tight Buffered Distribution FO cable, 09/125um Single mode, Indoor, <jacket type>
RF2-48TDSMIN-<JT>	48 Core Tight Buffered Distribution FO cable, 09/125um Single mode, Indoor, <jacket type>

Part Number	Product Description
RF2-02TDM1IN-<JT>	2 Core Tight Buffered Distribution FO cable, 62.5/125um OM1 Multi Mode, Indoor, <jacket type>
RF2-04TDM1IN-<JT>	4 Core Tight Buffered Distribution FO cable, 62.5/125um OM1 Multi Mode, Indoor, <jacket type>
RF2-08TDM1IN-<JT>	8 Core Tight Buffered Distribution FO cable, 62.5/125um OM1 Multi Mode, Indoor, <jacket type>
RF2-12TDM1IN-<JT>	12 Core Tight Buffered Distribution FO cable, 62.5/125um OM1 Multi Mode, Indoor, <jacket type>
RF2-24TDM1IN-<JT>	24 Core Tight Buffered Distribution FO cable, 62.5/125um OM1 Multi Mode, Indoor, <jacket type>
RF2-48TDM1IN-<JT>	48 Core Tight Buffered Distribution FO cable, 62.5/125um OM1 Multi Mode, Indoor, <jacket type>
RF2-02TDM2IN-<JT>	2 Core Tight Buffered Distribution FO cable, 50/125um OM2 Multi Mode, Indoor, <jacket type>
RF2-04TDM2IN-<JT>	4 Core Tight Buffered Distribution FO cable, 50/125um OM2 Multi Mode, Indoor, <jacket type>
RF2-08TDM2IN-<JT>	8 Core Tight Buffered Distribution FO cable, 50/125um OM2 Multi Mode, Indoor, <jacket type>
RF2-12TDM2IN-<JT>	12 Core Tight Buffered Distribution FO cable, 50/125um OM2 Multi Mode, Indoor, <jacket type>
RF2-24TDM2IN-<JT>	24 Core Tight Buffered Distribution FO cable, 50/125um OM2 Multi Mode, Indoor, <jacket type>
RF2-48TDM2IN-<JT>	48 Core Tight Buffered Distribution FO cable, 50/125um OM2 Multi Mode, Indoor, <jacket type>
RF2-02TDM3IN-<JT>	2 Core Tight Buffered Distribution FO cable, 50/125um OM3 Multi Mode, Indoor, <jacket type>
RF2-04TDM3IN-<JT>	4 Core Tight Buffered Distribution FO cable, 50/125um OM3 Multi Mode, Indoor, <jacket type>
RF2-08TDM3IN-<JT>	8 Core Tight Buffered Distribution FO cable, 50/125um OM3 Multi Mode, Indoor, <jacket type>
RF2-12TDM3IN-<JT>	12 Core Tight Buffered Distribution FO cable, 50/125um OM3 Multi Mode, Indoor, <jacket type>
RF2-24TDM3IN-<JT>	24 Core Tight Buffered Distribution FO cable, 50/125um OM3 Multi Mode, Indoor, <jacket type>
RF2-48TDM3IN-<JT>	48 Core Tight Buffered Distribution FO cable, 50/125um OM3 Multi Mode, Indoor, <jacket type>
RF2-02TDM4IN-<JT>	2 Core Tight Buffered Distribution FO cable, 50/125um OM4 Multi Mode, Indoor, <jacket type>
RF2-04TDM4IN-<JT>	4 Core Tight Buffered Distribution FO cable, 50/125um OM4 Multi Mode, Indoor, <jacket type>
RF2-08TDM4IN-<JT>	8 Core Tight Buffered Distribution FO cable, 50/125um OM4 Multi Mode, Indoor, <jacket type>
RF2-12TDM4IN-<JT>	12 Core Tight Buffered Distribution FO cable, 50/125um OM4 Multi Mode, Indoor, <jacket type>
RF2-24TDM4IN-<JT>	24 Core Tight Buffered Distribution FO cable, 50/125um OM4 Multi Mode, Indoor, <jacket type>
RF2-48TDM4IN-<JT>	48 Core Tight Buffered Distribution FO cable, 50/125um OM4 Multi Mode, Indoor, <jacket type>

JT = Jacket Type PV - PVC, LZ - LSZH