Technical Data Sheet

Rosenberger

Non-Armored Universal Central Loose Tube Cable

RU00

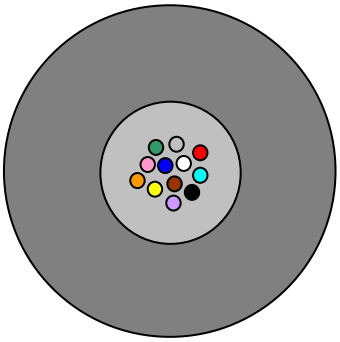
Application

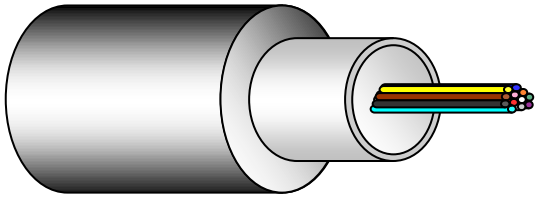
- Inside and outside building in Cable Ducts
- Aerial (Lashed)
- Riser installations

Description

- Non-armored Central gel-filled loose tube cable
- Flame-retardant jacket

Profile/Outline





Other options can be on request from customers

Construction

Loose Tube	Central loose tube size with color-coated fibers and gel-filled results in economical use and facilitates installation
Cable Core	250μ m bare fibers
Waterproof Element	The filling compound around the cable core and if necessary water-swellable tape
Ripcord	Easily ripping the cable jacket
Cable Jacket	Flame-retardant and Low Smoke Halogen-free jacket and excellent UV-resistance
Color of Jacket	Black

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Temperature Range

Transport and Storage	-30℃ to +65℃
Installation	-20℃ to +50℃
Operation	-30℃ to +65℃

Mechanical Properties

Fiber Count	Subunit Count	Nominal Cable Diameter	Nominal Cable Weight	Tensile Strength Long/Short	Crush Resistance Long/Short	Bending Radius (Static)	Bending Radius (Dynamic)
		mm	Kg/Km	N	N/10cm	mm	mm
2-12	1	9.5	90	600/1200	300/1000	10D	20D
12-24	2	11.5	120	600/1200	300/1000	10D	20D

Fiber Transmission Performance

Single Mode Fiber Specification

No.	Items	Unit	OS2 (G652D)	NDZSF (G655)	G657A1/A2	G657B2/B3
	IEC 60793-2-10 Fiber Type		**B1.1**	**B4**	**B6a.1/2**	**B6b.2/3**
1	Mode-Field Diameter @ 1310nm	μm	9.2±0.4	9.2±0.4	(8.6-9.5)±0.4	(6.3-9.5)±0.4
	Mode-Field Diameter @ 1550nm		10.4±0.5	9.6±0.5	9.8±0.5	9.8±0.5
2	Cladding Diameter	μm	125±0.7	125±0.7	125±0.7	125±0.7
3	Core-cladding Concentricity	μm	≤0.5	≤0.5	≤0.5	≤0.5
4	Cladding Non-circularity	%	≤0.7	≤0.7	≤0.7	≤0.7
5	Coating Diameter	μm	245±5	245±5	245±5	245±5
6	Cladding-coating Concentricity	μm	<12.0	<12.0	<12.0	<12.0
7	Numerical aperture		0.14	0.14		
8	Fiber Cutoff Wavelength	nm	λ_{cc}≤1260	λ_{cc}≤1450	λ_{cc}≤1260	λ_{cc}≤1260
9	PMD Link Value	ps/√km	≤0.06	≤0.04	≤0.06	≤0.06
	PMD Maximum Individual Fiber	ps/√km	≤0.1	≤0.1	≤0.2	≤0.2
10	Proof Test (Entire fiber length)	kpsi	≥100	≥100	≥100	≥100
11	Attenuation @ 1310nm	[dB/km]	≤0.36		≤0.36	≤0.36
	Attenuation @ 1383nm	[dB/km]	≤0.36	≤0.40	≤0.36	≤0.36
	Attenuation @ 1490nm	[dB/km]			≤0.24	≤0.24
	Attenuation @ 1550nm	[dB/km]	≤0.22	≤0.20	≤0.22	≤0.22
	Attenuation @ 1625nm	[dB/km]	≤0.23	≤0.23	≤0.23	≤0.23
12	Operating Temperature	℃	-60 ~ + 85	-60 ~ + 85	-60 ~ + 85	-60 ~ + 85
13	Fatigue coefficient (typical)		≥20	≥20	≥20	≥20

Multi Mode Fiber Specification

No.	Items	Unit	OM1	OM2	OM2+

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	IEC 60793-2-10 Fiber Type		A1b	A1a	A1a.1	
1	Core Diameter	μm	62.5±2.5	50±2.5	50±2.5	
2	Cladding Diameter	μm	125±2.0	125±2.0	125±2.0	
3	Core-cladding Concentricity	μm	≤1.5	≤1.5	≤1.5	
4	Cladding Non-circularity	%	≤1.0	≤1.0	≤1.0	
5	Coating Diameter	μm	245±10	245±10	245±10	
6	Cladding-coating Concentricity	μm	<12.0	<12.0	<12.0	
7	Numerical aperture		0.275±0.015	0.200±0.015	0.200±0.015	
8	Proof Test (Entire fiber length)	kpsi	≥100	≥100	≥100	
9	Bandwidth @ 850nm	[MHz/km]	≥200	≥500	≥950 VCSEL	≥700 OFL
	Bandwidth @ 1300nm	[MHz/km]	≥600	≥500		≥500 OFL
10	Attenuation @ 850nm	[dB/km]	≤3.0	≤2.5	≤2.5	≤2.5
	Attenuation @ 1300nm	[dB/km]	≤0.8	≤0.7	≤0.7	≤0.7
11	Operating Temperature	℃	-60 ~ + 85	-60 ~ + 85	-60 ~ + 85	
12	Fatigue coefficient (typical)		≥20	≥20	≥20	

10G Multi Mode Fiber Specification

No.	Items	Unit	OM3		OM4	
	IEC 60793-2-10 Fiber Type		A1a.2		A1a.3	
1	Core Diameter	μm	50±2.5		50±2.5	
2	Cladding Diameter	μm	125±2.0		125±2.0	
3	Core-cladding Concentricity	μm	≤1.5		≤1.5	
4	Cladding Non-circularity	%	≤1.0		≤1.0	
5	Coating Diameter	μm	245±10		245±10	
6	Cladding-coating Concentricity	μm	<12.0		<12.0	
7	Numerical aperture		0.200±0.015		0.200±0.015	
8	Proof Test (Entire fiber length)	kpsi	≥100		≥100	
9	Bandwidth @ 850nm	[MHz/km]	≥2000 VCSEL	≥1500 OFL	≥4700 VCSEL	≥3500 OFL
	Bandwidth @ 1300nm	[MHz/km]		≥500 OFL		≥500 OFL
10	Attenuation @ 850nm	[dB/km]	≤2.5	≤2.5	≤2.5	≤2.5
	Attenuation @ 1300nm	[dB/km]	≤0.7	≤0.7	≤0.7	≤0.7
11	Operating Temperature	℃	-60 ~ + 85		-60 ~ + 85	
12	Fatigue coefficient (typical)		≥20		≥20	

Cable Transmission Performance

Fiber Symbol	G652D/ G657A1/A2/B2/B3		G655C/D/E		OM1		OM2/OM2+		OM3/OM4	
Fiber Type	B1.3/ B6a.1/2 B6b.2/3		B4		A1b		A1a/A1a.1		A1a.2/A1a.3	
Wavelength (nm)	1310	1550	1550	1625	850	1300	850	1300	850	1300
Attenuation (dB/Km)	≤ 0.36	≤ 0.22	≤ 0.22	≤ 0.25	≤ 3.2	≤ 1.0	≤ 2.7	≤ 1.0	≤ 2.7	≤ 1.0

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Ordering Information

RU00 - □□□ - □□ □□ - □□□ - □□□□□

1 2 3 4 5 6 7 8

1 Product Type
RU00 = Product code

2 Fiber Type
1 = Color coated bare fibers

3 Central Strength Member
0 = No central member

4 Water swellable tape option
0 = No water swellable tape
1 = Water swellable tape

5 Jacket Color
YL = Yellow
OR = Orange
BL = Blue
AQ = Aqua
BK = Black

6 Jacket Material
02 = LSZH

7 Fiber Count
004 = 4 Cores
012 = 12 Cores
024 = 24 Cores

8 Fiber Symbol
G652D = Fiber G.652D
OM3 = Fiber OM3
OM4 = Fiber OM4
…See Fiber Indicate Symbol on Catalogue

Draft	Date	Checker	Approved	Date
Xiang Ming	23/12/13	Lily Zhang	Laddie Lu	10/02/14

Rev.	Engineering change number	Name	Date
A00	14-e001		

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