

**Note:**  
 1.RoHS 2011/65/EU and amendment directives (EU) 2015/863 compliant;  
 REACH 1907/2006/EC compliant.  
 2.Text:

Test Grade Designation:Each to Reference		
Grade IL/RL	IEC61753 Grade B	
Insertion Loss (IL)	97%≤0.25dB mean≤0.12dB	IEC 61300-3-4
Return Loss(RL)	≥50dB	IEC 61300-3-6
Test Wavelength	1310nm	Single-Mode
End face inspection	×400	

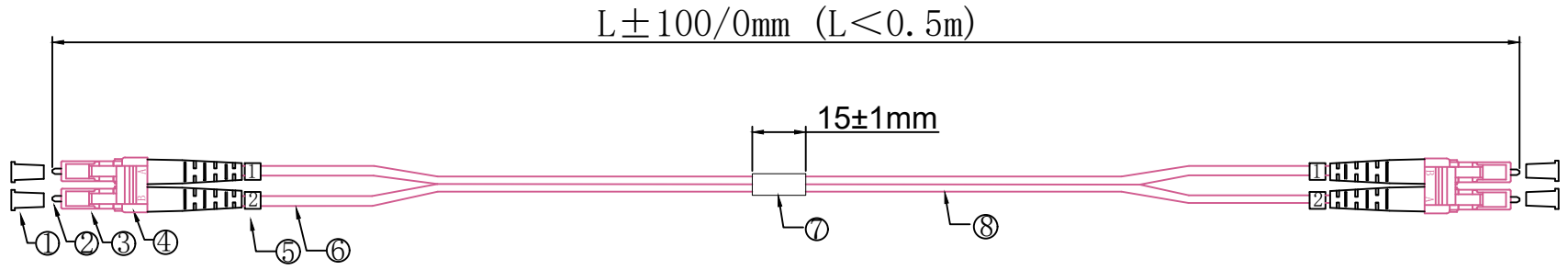
3. Operating Temperature:-40° C ~+85° C  
 4. Storage Temperature:-20° C ~+70° C  
 5. Min. bending radius : 10\*D(Static) 20\*D(Dynamic)  
 D:diameter of cable

**MATERIAL LIST:**

⑧	Fiber Optical Cable Duplex $\phi$ 2.0 OM4 50/125umErika violet LSZH	L+0.1m	
⑦	Black Heat shrink tubing	2pcs	
⑥	Ring 1, 2	4pcs	
⑤	LC White Boot	4pcs	
④	LC Erika violet Clip	2pcs	
③	LC 2.0 MM Erika violet Duplex Connector	4pcs	
②	LC/UPC MM Ferrule $\phi$ 126-128um	4pcs	
①	LC White Dust cap	4pcs	
NO	SPECIFICATION STANDARD	QT' Y	REMARK

SYNERGY 21									
CUSTOMER					ITEM NO.			See the chart	
PRODUCT NAME		LC/UPC-LC/UPC OM4 50/125um Duplex LSZH Patch cord		Manufacture country		CHINA	UNIT	mm	
DRAWNBY		CHECKBY		APPOBY		DATE			
SYNERGY 21		SYNERGY 21		SYNERGY 21		2024-08-21			

NEW		2024-08-21	AO
BY	CHK	REVISION RECORD MODIFICATIONS	DATE REV.



**Note:**  
 1.RoHS 2011/65/EU and amendment directives (EU) 2015/863 compliant; REACH 1907/2006/EC compliant.  
 2.Text:

Test Grade Designation:Each to Reference		
Grade IL/RL	IEC61753 Grade B	
Insertion Loss (IL)	97%≤0.25dB mean≤0.12dB	IEC 61300-3-4
Return Loss(RL)	≥50dB	IEC 61300-3-6
Test Wavelength	1310nm	Single-Mode
End face inspection	×400	

**MATERIAL LIST:**

⑧	Fiber Optical Cable Duplex $\phi$ 2.0 OM4 50/125umErika violet LSZH	L+0.1m	
⑦	Black Heat shrink tubing	1pc	
⑥	Ring 1, 2	4pcs	
⑤	LC White Boot	4pcs	
④	LC Erika violet Clip	2pcs	
③	LC 2.0 MM Erika violet Duplex Connector	4pcs	
②	LC/UPC MM Ferrule $\phi$ 126-128um	4pcs	
①	LC White Dust cap	4pcs	
NO	SPECIFICATION STANDARD	QT' Y	REMARK

3. Operating Temperature:-40° C ~+85° C  
 4. Storage Temperature:-20° C ~+70° C  
 5. Min. bending radius : 10\*D(Static) 20\*D(Dynamic)  
 D:diameter of cable

<b>SYNERGY 21</b>									
CUSTOMER						ITEM NO.		See the chart	
PRODUCT NAME		LC/UPC-LC/UPC OM4 50/125um Duplex LSZH Patch cord		Manufacture country		CHINA	UNIT	mm	
DRAWNBY			CHECKBY			APPOBY		DATE	
SYNERGY 21		SYNERGY 21		SYNERGY 21		2024-08-21			

NEW		2024-08-21		AO	
BY	CHK	REVISION RECORD MODIFICATIONS		DATE	REV.

PACKING DRAW

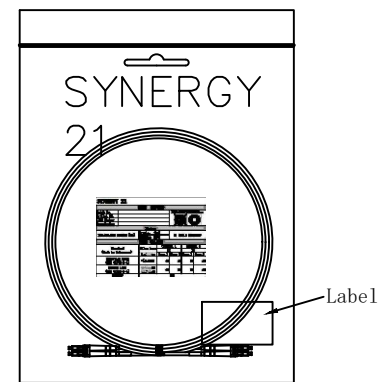


Chart:

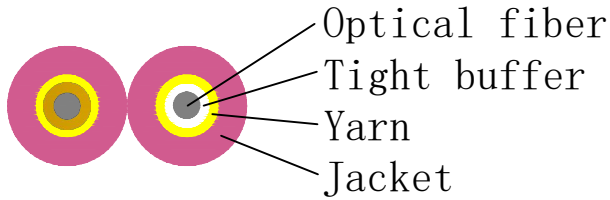
NO.	ITEM NO.	LENGTH	COLOR	EAN Nummer	PACKING
1	S216794	0.25m	Erika violet	4038816136053	SYNERGY 21 BAG A
2	S216762	0.5m	Erika violet	4038816069061	SYNERGY 21 BAG A
3	S216763	1m	Erika violet	4038816147639	SYNERGY 21 BAG A
4	S216764	1.5m	Erika violet	4038816069078	SYNERGY 21 BAG A
5	S216765	2m	Erika violet	4038816069092	SYNERGY 21 BAG A
6	S216766	3m	Erika violet	4038816069139	SYNERGY 21 BAG A
7	S216767	5	Erika violet	4038816069153	SYNERGY 21 BAG B
8	S216768	7.5m	Erika violet	4038816069160	SYNERGY 21 BAG B
9	S216769	10m	Erika violet	4038816069184	SYNERGY 21 BAG B
10	S216770	15m	Erika violet	4038816069191	SYNERGY 21 BAG B
11	S216771	20m	Erika violet	4038816069207	SYNERGY 21 BAG B

PACKING:SYNERGY 21 PE BAG+LABEL

SYNERGY 21					
TEST REPORT					
Batch No.		Attention: Please check the test results! Achtung: Bitte überprüfen Sie den Testergebnis!			
Artikel NO.					
ITEM Number					
Description					
Notes					
Min. bending radius (mm)	Static: 10*D Dynamic: 20*D	D: Cable diameter			
TEST VALUES					
Standard (Each to Reference)	Allow Loss λ = nm	CHANNEL 1		CHANNEL 2	
		LC	LC	LC	LC
Insertion Loss (IEC 61300-3-4)	< 0.30dB	dB	dB	dB	dB
Return Loss (IEC 61300-3-6)	dB	dB	dB	dB	dB
<b>RESULT</b>		<b>OK</b>			

SYNERGY 21										
CUSTOMER							ITEM NO.	See the chart		
PRODUCT NAME		LC/UPC-LC/UPC OM4 50/125um Duplex LSZH Patch cord			Manufacture country		CHINA	UNIT	mm	
DRAWNBY		CHECKBY		APPOBY		DATE				
BY	CHK	NEW REVISION RECORD MODIFICATIONS			2024-08-21	AO	SYNERGY 21		2024-08-21	
					DATE	REV.	SYNERGY 21		2024-08-21	

### Cable cross-section



### OM4 Characteristic of Optical Fiber

Item	Unit	Specification	
		BI-OM4	
Core diameter	μm	50±2.5	
Cladding diameter	μm	124.8± 0.7	
Cladding non-circularity	%	≤1.0	
Core/Clad concentricity error	μm	≤1.5	
Coating diameter	μm	245 ± 10	
Coating/cladding concentricity error	μm	≤12	
OFL Bandwidth	850nm	MHz·km	≥ 3500
	1300nm	MHz·km	≥ 500
EMB Bandwidth	850nm	MHz·km	≥ 4700
Attenuation Coefficient	850nm	dB/km	≤ 2.4
	1300nm	dB/km	≤ 0.6
Macro-bend loss (100turn,75mm radius)	850nm	dB	≤0.5
	1300nm	dB	≤0.5
Proof stress level		kpsi	100
Effective group index of refraction	850nm	/	1.483
	1300nm	/	1.478
Zero dispersion wavelength λ 0		nm	1295 ≤ λ 0 ≤1340

Other parameters meet standard IEC 60793-2-10

### Cable structure and parameter

Item	Contents	Unit	Value	
Tight buffer fiber	Diameter	mm	0.9±0.05	
	Material	/	LSZH	
Filler	Material	/	Yarn	
	Diameter	mm	2.0(±0.1)×4.1(±0.2)	3.0(±0.1)×6.1(±0.2)
Outer jacket	Material	/	LSZH	
	Color	/	SM: Yellow OM1/OM2: Orange OM3:Aqua OM4:Violet	
	Short term	N	Cable OD:1.2(±0.1)mm; 1.6(±0.1)mm	30
Tensile performance	Long term	N	Cable OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm	40
			Cable OD:1.2(±0.1)mm	20
	Short term	N/100mm	Cable OD:1.6(±0.1)mm	30
			Cable OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm	40
Crush	Short term	N/100mm	Cable OD:1.2(±0.1)mm	200
			Cable OD:1.6(±0.1)mm;3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm	500
	Long term	N/100mm	Cable OD:1.2(±0.1)mm;1.6(±0.1)mm	100
Cable attenuation	dB/km		SM: ≅ 0.4 at 1310nm, ≅ 0.3 at 1550nm	
			MM: ≅ 1.0 at 1300nm, ≅ 3.0 at 850nm	
Cable weight (Approx.)	kg/km		7.3	13.5

### SYNERGY 21

					CUSTOMER		ITEM NO.	see the chart		
					PRODUCT NAME	Fiber optic cable	Manufacture country	CHINA	UNIT	mm
		NEW	2024-08-21	AO	DRAWNBY	CHECKBY	APPOBY	DATE		
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV	SYNERGY 21	SYNERGY 21	SYNERGY 21	2024-08-21		