

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) | ≥30dB | IEC 61300-3-6 |
| Test Wavelength | 850nm Multi-Mode | |
| End face inspection | ×400 | |

3. Operating Temperature: -40° C ~ +85° C

4. Storage Temperature: -20° C ~ +70° C

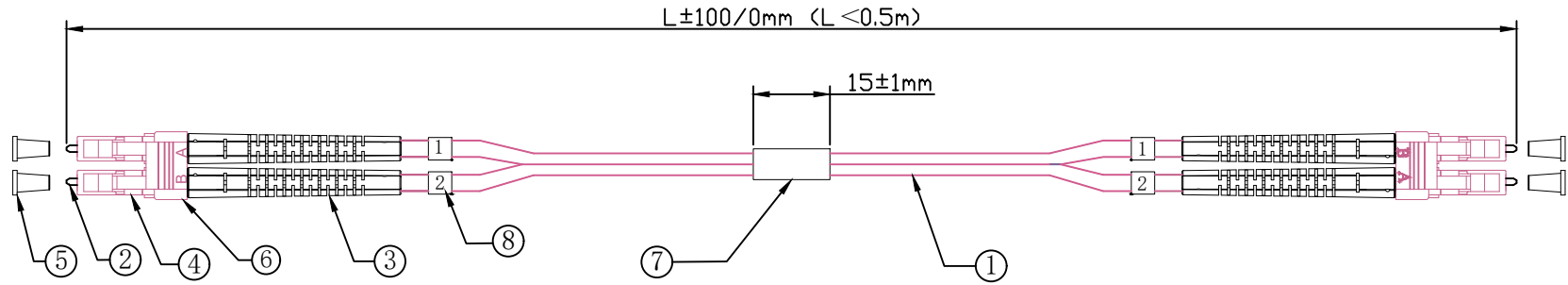
5. Min. bending radius : 10*D (Static) 20*D (Dynamic)

D:diameter of cable

MATERIAL LIST:

| | | | |
|-----|--|--------|--------|
| ⑧ | Ring 1 2 | 4pcs | |
| ⑦ | Black Heat Shrink Tube | 2pcs | |
| ⑥ | LC Clip Erika violet RAL4003 | 2pcs | |
| ⑤ | LC Dust Cap White | 4pcs | |
| ④ | LC Duplex Connector Erika violet RAL4003 | 4pcs | |
| ③ | Flex-Angle boot ID: 2.0mm | 4pcs | |
| ② | LC/UPC MM Ferrule 126-128um | 4pcs | |
| ① | Fiber Optical Cable Duplex Ø2.0mm OM4 50/125um Erika violet RAL4003 LSZH | L+0.1m | |
| NO. | SPECIFICATION STANDARD | QT'Y | REMARK |

| | | | | | | | | | | | |
|------------|-----|-------------------------------|--|--|--------------|---|---------------------|------------|------------|---------------|------|
| SYNERGY 21 | | | | | | | | | | | |
| | | | | | CUSTOMER | | | | ITEM NO. | see the chart | |
| | | | | | PRODUCT NAME | LC/UPC-LC/UPC DX OM4 2.0mm, Flex-Angle boot | Manufacture country | CHINA | UNIT | mm | |
| | | | | | NEW | 2024-08-16 | AO | DRAWNBY | CHECKBY | APPOBY | DATE |
| BY | CHK | REVISION RECORD MODIFICATIONS | | | DATE | REV. | SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2024-08-16 | |



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) | ≥ 30dB | IEC 61300-3-6 |
| Test Wavelength | 850nm Multi-Mode | |
| End face inspection | ×400 | |

MATERIAL LIST:

| | | | |
|-----|--|--------|--------|
| ⑧ | Ring 1 2 | 4pcs | |
| ⑦ | Black Heat Shrink Tube | 1pc | |
| ⑥ | LC Clip Erika violet RAL4003 | 2pcs | |
| ⑤ | LC Dust Cap White | 4pcs | |
| ④ | LC Duplex Connector Erika violet RAL4003 | 4pcs | |
| ③ | Flex-Angle boot ID: 2.0mm | 4pcs | |
| ② | LC/UPC MM Ferrule 126-128um | 4pcs | |
| ① | Fiber Optical Cable Duplex Ø2.0mm OM4 50/125um Erika violet RAL4003 LSZH | L+0.1m | |
| NO. | SPECIFICATION STANDARD | QT'Y | REMARK |

3. Operating Temperature: -40° C ~ +85° C

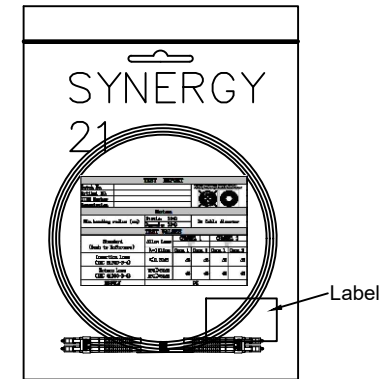
4. Storage Temperature: -20° C ~ +70° C

5. Min. bending radius : 10*D (Static) 20*D (Dynamic)

D: diameter of cable

| | | | | | | | | | | |
|----|--|-------------------------------|--|--|--------------|--|---|--|---------------------|--|
| | | | | | SYNERGY 21 | | | | | |
| | | | | | CUSTOMER | | ITEM NO. | | see the chart | |
| | | | | | PRODUCT NAME | | LC/UPC-LC/UPC DX OM4 2.0mm, Flex-Angle boot | | Manufacture country | |
| | | | | | CHINA | | UNIT | | mm | |
| | | NEW | | | 2024-08-16 | | AO | | | |
| | | DRAWNBY | | | CHECKBY | | APPOBY | | DATE | |
| BY | | CHK | | | SYNERGY 21 | | SYNERGY 21 | | SYNERGY 21 | |
| | | REVISION RECORD MODIFICATIONS | | | DATE | | REV. | | 2024-08-16 | |

PACKING DRAW



PACKING:SYNERGY 21 PE BAG+LABEL

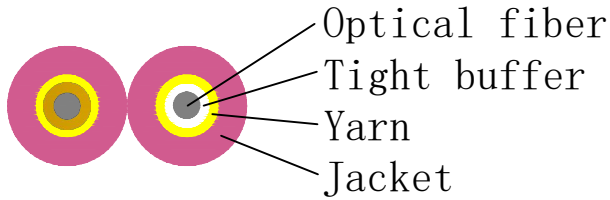
Chart:

| NO. | ITEM NO. | LENGTH | COLOR | EAN Nummer | PACKING |
|-----|----------|--------|--------------|---------------|------------------|
| 1 | S217019 | 0.25m | Erika violet | 4038816135919 | SYNERGY 21 BAG A |
| 2 | S217020 | 0.5m | Erika violet | 4038816113559 | SYNERGY 21 BAG A |
| 3 | S217021 | 1m | Erika violet | 4038816207227 | SYNERGY 21 BAG A |
| 4 | S217022 | 1.5m | Erika violet | 4038816113580 | SYNERGY 21 BAG A |
| 5 | S217023 | 2m | Erika violet | 4038816113757 | SYNERGY 21 BAG A |
| 6 | S217024 | 3m | Erika violet | 4038816113795 | SYNERGY 21 BAG A |
| 7 | S217025 | 5m | Erika violet | 4038816113818 | SYNERGY 21 BAG B |
| 8 | S217026 | 7.5m | Erika violet | 4038816113825 | SYNERGY 21 BAG B |
| 9 | S217027 | 10m | Erika violet | 4038816113832 | SYNERGY 21 BAG B |
| 10 | S217028 | 15m | Erika violet | 4038816113887 | SYNERGY 21 BAG C |
| 11 | S217029 | 20m | Erika violet | 4038816113900 | SYNERGY 21 BAG C |

| SYNERGY 21 | | | | | |
|-----------------------------------|------------------------------------|---|---------|-----------|---------|
| TEST REPORT | | | | | |
| Batch No. | | Attention: Please clean the fiber surfaces! Achtung: Bitte reinigen Sie die Stöckstrahlfläche! | | | |
| 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 $\lambda = \dots$ nm | CHANNEL 1 | | CHANNEL 2 | |
| | | LC | | LC | |
| Insertion Loss (IEC 61300-3-4) | ≤ 0.30 dB | Conn. 1 | Conn. 2 | Conn. 1 | Conn. 2 |
| Return Loss (IEC 61300-3-6) | ≥ 15.0 dB | dB | dB | dB | dB |
| RESULT | | OK | | | |

| SYNERGY 21 | | | | | | | | | | | |
|------------|-----|--|-------------------------------|--|------------|--------------|---|---------------------|---------------|------------|----|
| | | | | | | CUSTOMER | | ITEM NO. | see the chart | | |
| | | | | | | PRODUCT NAME | LC/UPC-LC/UPC DX OM4 2.0mm, Flex-Angle boot | Manufacture country | CHINA | UNIT | mm |
| | | | | | | DRAWNBY | CHECKBY | APPOBY | | DATE | |
| BY | CHK | | NEW | | 2024-08-16 | A0 | SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2024-08-16 | |
| | | | REVISION RECORD MODIFICATIONS | | DATE | REV | | | | | |

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 | Short term | N | Cable OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm | 40 |
| | | | Long term | N |
| | Long term | N | 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 OD:3.0(±0.1)*6.0(±0.2)mm; 2.0(±0.1)*4.0(±0.2)mm | 200 |
| 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. | | | |
| | | | | PRODUCT NAME | Fiber optic cable | | | Manufacture country | CHINA | UNIT | mm |
| NEW | | | | 2024-08-16 | A0 | DRAWNBY | CHECKBY | APPOBY | DATE | | |
| BY | CHK | REVISION RECORD MODIFICATIONS | | DATE | REV | SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2024-08-16 | | |