

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

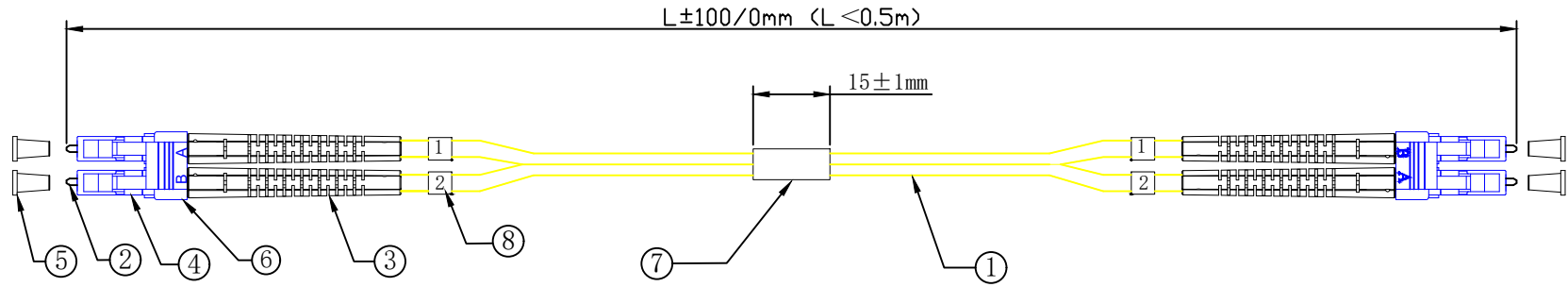
| | | |
|--|---------------------------|---------------|
| Test Grade Designation:Each to Reference | | |
| Grade IL/RL | IEC61753 Grade B | |
| Insertion Loss (IL) | 97%≤0.25dB mean≤0.12dB | IEC 61300-3-4 |
| Return Loss(RL) | ≥50dB | IEC 61300-3-6 |
| Test Wavelength | 1310nm | Single-Mode |
| End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

MATERIAL LIST:

| | | | |
|-----|--|--------|--------|
| ⑧ | Ring 1 2 | 4pcs | |
| ⑦ | Black Heat Shrink Tube | 2pcs | |
| ⑥ | LC Clip Blue | 2pcs | |
| ⑤ | LC Dust Cap White | 4pcs | |
| ④ | LC Duplex Connector Blue | 4pcs | |
| ③ | LC Flex-Angle boot ID: 2.0mm | 4pcs | |
| ② | LC/UPC SM Ferrule 126-128um | 4pcs | |
| ① | Fiber Optical Cable Duplex ϕ 2.0mm OS2(G657.A2) 9/125um Yellow 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 OS2 2.0mm, Flex-Angle boot | 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 | |



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| Test Wavelength | 1310nm | Single-Mode |
| End face inspection | × 400 | |

MATERIAL LIST:

| | | | |
|-----|---|--------|--------|
| ⑧ | Ring 1 2 | 4pcs | |
| ⑦ | Black Heat Shrink Tube | 1pc | |
| ⑥ | LC Clip Blue | 2pcs | |
| ⑤ | LC Dust Cap White | 4pcs | |
| ④ | LC Duplex Connector Blue | 4pcs | |
| ③ | LC Flex-Angle boot ID: 2.0mm | 4pcs | |
| ② | LC/UPC SM Ferrule 126-128um | 4pcs | |
| ① | Fiber Optical Cable Duplex Ø2.0mm OS2 (G657.A2) 9/125um Yellow LSZH | L+0.1m | |
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 D: diameter of cable

| | | | | | | | | | | | |
|------------|-----|-------------------------------|--|--|--------------|---|---------------------|------------|------------|---------------|------|
| SYNERGY 21 | | | | | | | | | | | |
| | | | | | CUSTOMER | | | | ITEM NO. | see the chart | |
| | | | | | PRODUCT NAME | LC/UPC-LC/UPC DX OS2 2.0mm, Flex-Angle boot | 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 | |

PACKING DRAW

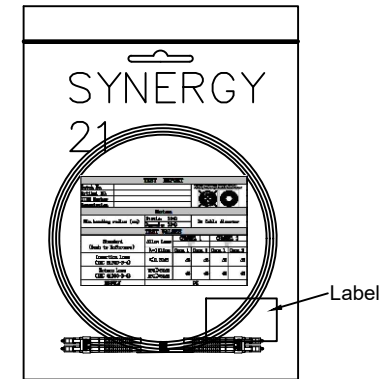


Chart:

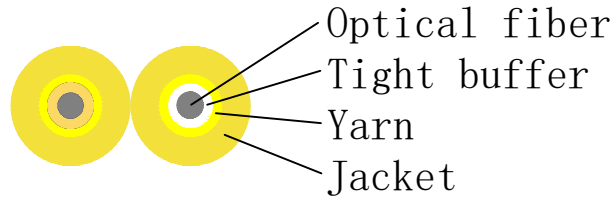
| NO. | ITEM NO. | LENGTH | COLOR | EAN Nummer | PACKING |
|-----|----------|--------|--------|---------------|------------------|
| 1 | S217039 | 0.25m | Yellow | 4038816233417 | SYNERGY 21 BAG A |
| 2 | S217040 | 0.5m | Yellow | 4038816114112 | SYNERGY 21 BAG A |
| 3 | S217041 | 1m | Yellow | 4038816114204 | SYNERGY 21 BAG A |
| 4 | S217042 | 1.5m | Yellow | 4038816114228 | SYNERGY 21 BAG A |
| 5 | S217043 | 2m | Yellow | 4038816114235 | SYNERGY 21 BAG A |
| 6 | S217044 | 3m | Yellow | 4038816114303 | SYNERGY 21 BAG A |
| 7 | S217045 | 5m | Yellow | 4038816114310 | SYNERGY 21 BAG B |
| 8 | S217046 | 7.5m | Yellow | 4038816114327 | SYNERGY 21 BAG B |
| 9 | S217047 | 10m | Yellow | 4038816114358 | SYNERGY 21 BAG B |
| 10 | S217048 | 15m | Yellow | 4038816207258 | SYNERGY 21 BAG C |
| 11 | S217049 | 20m | Yellow | 4038816114402 | SYNERGY 21 BAG C |

PACKING:SYNERGY 21 PE BAG+LABEL

| SYNERGY 21 | | | | | |
|-----------------------------------|------------------------------------|---|---------|-----------|---------|
| TEST REPORT | | | | | |
| Batch No. | | Attention: Please clean the fiber surfaces! Achtung: Bitte reinigen Sie die Steckstrahlfläche! | | | |
| 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) | \dots dB | dB | dB | dB | dB |
| RESULT | | OK | | | |

| SYNERGY 21 | | | | | | | | | |
|------------|-----|-------------------------------|-----|------------|------|--------------|---|---------------------|-----------------------|
| | | | | | | CUSTOMER | | ITEM NO. | see the chart |
| | | | | | | PRODUCT NAME | LC/UPC-LC/UPC DX OS2 2.0mm, Flex-Angle boot | Manufacture country | CHINA UNIT mm |
| | | | NEW | 2024-08-16 | A0 | DRAWNBY | CHECKBY | APPOBY | DATE |
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Cable cross-section



G657A2 Characteristic of Optical Fiber

| Item | Unit | Specification | | |
|--|-----------------------------------|---------------------------|-------------|------|
| | | G. 657A2 | | |
| Mode field diameter | 1310nm | μm | 8.6 ± 0.4 | |
| | 1550nm | μm | 9.6 ± 0.5 | |
| Cladding diameter | | μm | 124.3~125.0 | |
| Cladding non-circularity | | % | ≤1.0 | |
| Core concentricity error | | μm | ≤0.5 | |
| Coating diameter | | μm | 245 ± 5 | |
| Coating/cladding concentricity error | | μm | ≤10 | |
| Cable cut-off wavelength | | nm | ≤ 1260 | |
| Attenuation Coefficient | 1310nm | dB/km | ≤0.35 | |
| | 1550nm | dB/km | ≤0.21 | |
| Macro-bend loss (1 turn, 7.5mm radius) | 1550nm | dB | ≤0.5 | |
| | 1625nm | dB | ≤1.0 | |
| Proof stress level | | kpsi | 100 | |
| PMD | Maximum Individual Fiber | | ps/√km | 0.2 |
| | Link Design Value (M=20, Q=0.01%) | | ps/√km | 0.1 |
| | Typical Value | | ps/√km | 0.04 |
| Effective group index of refraction | 1310nm | / | 1.4672 | |
| | 1550nm | / | 1.4683 | |
| Zero dispersion wavelength | | nm | 1300~1322 | |
| Zero dispersion slope | | ps/(nm ² · km) | ≤0.091 | |
| Zero dispersion slope typical value | | ps/(nm ² · km) | 0.086 | |

Other parameters meet standard ITU-T G.657

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 | 2024-08-16 | AO | DRAWNBY | CHECKBY | APPOBY | DATE | | |
| BY | CHK | REVISION RECORD MODIFICATIONS | DATE | REV | SYNERGY 21 | SYNERGY 21 | SYNERGY 21 | 2024-08-16 | | |