# (3563)F. CABO 12 FIBRAS AUTOSUST 2.0MM AS80M-GYFTY 12B1 G652D 2KM

## 1. Cable Description

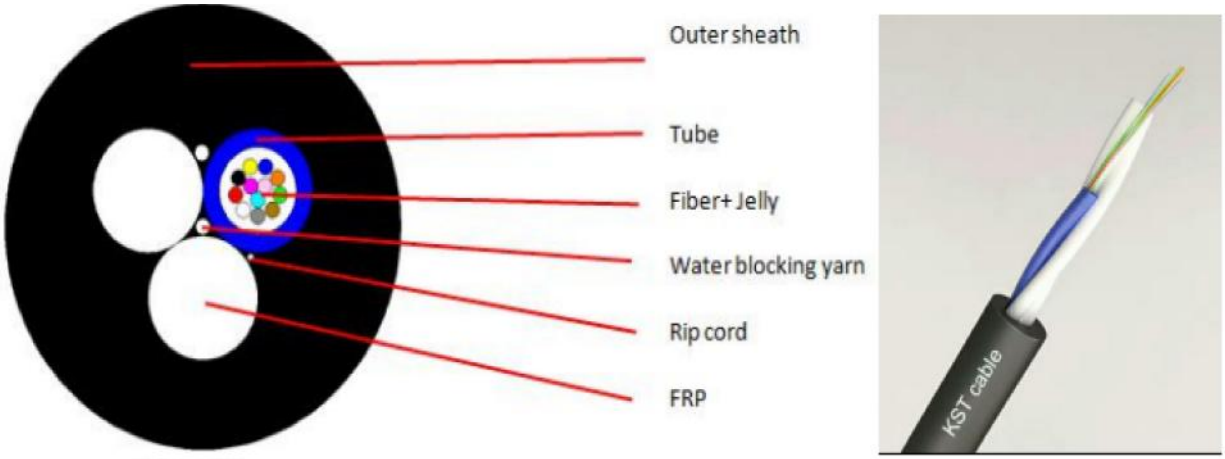
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound.FRP rods  filled . The cable is completed with a polyethylene (PE) sheath.

## 2.Application

The actual status of overhead power lines ,covers the general requirements of single jacket ADSS dielectric Cable for aerial or duct

## 3. Characteristics

· FRP Filled element make cable high tension
· Tube filling gel
· Loose tube stranded
· PE sheath outdoor cable





## 4.Cable construction details

| | | | |
|---|---|---|---|
| Number of fiber | 12core | | |
| | | number | 1 |

| | | |
|---|---|---|
| Loose tube | material | PBT |
| | diameter | 2.0mm ±0.1mm |
| Strength member | material | FRP |
| | diameter | 2.0mm±0.1mm |
| Overall cable diameter | 8.0±0.2mm | |
| Cable weight per km | 55.0 kg/km±5kg | |

**Fiber color** Color code according to customer's requirement

| Cable | Color code Brazil | Internacional color code |
|---|---|---|
| 1 | Green | Blue |
| 2 | Yellow | Orange |
| 3 | White | Greeen |
| 4 | Blue | Brown |
| 5 | Red | Grey |
| 6 | Violet | White |
| 7 | Browm | Red |
| 8 | Pink | Black |
| 9 | Black | Yellow |
| 10 | Grey | Violet |
| 11 | Orange | Pink |
| 12 | Aqua | Aqua |

## Cable Mechanical characteristic

| core | Cable diameter | weight |
|---|---|---|
| 12 | 8.0±0.2mm | 55 kg/km±5kg |
| Temperature range | -40+70 | |
| Min Bending Radius(mm) | Long term | 10D |
| Min BendingRadius(mm) | Short term | 20D |
| Min allowable Tensile Strength(N) | Long term | 1500 |
| Min allowable Tensile Strength(N) | Short term | 3000 |
| Operationtemperature （℃） | -40+70 | |
| Installationtemperature （℃） | -20+60 | |
| Storage temprature （℃） | -40+70 | |

## Fiber characteristic

| Fiber style | | Unit | SM G652 | SM G652D | MM 50/125 | MM 62.5/125 | MM OM3-300 |
|---|---|---|---|---|---|---|---|
| condition | | nm | 1310/1550 | 1310/1550 | 850/1300 | 850/1300 | 850/1300 |
| attenuation | | dB/km | ≤ | ≤ | ≤ | ≤3.0/1.0 | ≤3.0/1.0 |
| | | | 0.36/0.23 | 0.36/0.23 | 3.0/1.0 | | |
| Dispresion | 1550nm | Ps/(nm*km) | ---- | ≤18 | ---- | ---- | Dispresion |
| | 1625nm | Ps/(nm*km) | ---- | ≤22 | ---- | ---- | |
| Bandwith | 850nm | MHZ.KM | ---- | ---- | ≧400 | ≧160 | Bandwith |
| | 1300nm | MHZ.KM | ---- | ---- | ≧800 | ≧500 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Zero dispersion wavelength | | nm | 1300-1324 | ≧1302, ≤1322 | ---- | ---- | ≧ 1295, ≤1320 |
| Zero dispresion slope | | nm | ≤0.092 | ≤0.091 | ---- | ---- | ---- |
| PMD Maximum Individual Fibr | | | ≤0.2 | ≤0.2 | ---- | ---- | ≤0.11 |
| PMD Design Link Value | | Ps(nm2*km) | ≤0.12 | ≤0.08 | ---- | ---- | ---- |
| Fibre cutoff wavelength λc | | nm | ≧ 1180, ≤1330 | ≧1180,≤ 1330 | ---- | ---- | ---- |
| Cable sutoffwavelength λcc | | nm | ≤1260 | ≤1260 | ---- | ---- | ---- |
| MFD | 1310nm | um | 9.2+/-0.4 | 9.2+/-0.4 | ---- | ---- | ---- |
| | 1550nm | um | 10.4+/-0.8 | 10.4+/-0.8 | ---- | ---- | ---- |
| Numerical Aperture(NA) | | | ---- | ---- | 0.200+/-0.015 | 0.275+/-0.015 | 0.200+/-0.015 |
| Step(mean of bidirectional measurement) | | dB | ≤0.05 | ≤0.05 | ≤0.10 | ≤0.10 | ≤0.10 |
| Irregularities over fiber length and point | | dB | ≤0.05 | ≤0.05 | ≤0.10 | ≤0.10 | ≤0.10 |

## Dicontinuity

| | | | | | | |
|---|---|---|---|---|---|---|
| Difference backscatter coefficient | dB/km | ≤0.05 | ≤0.03 | ≤0.08 | ≤0.10 | ≤0.08 |
| Attenuation uniformity | dB/km | ≤0.01 | ≤0.01 | | | |
| Core dimater | um | | | 50+/-1.0 | 62.5+/-2.5 | 50+/-1.0 |
| Cladding diameter | um | 125.0+/-0.1 | 125.0+/-0.1 | 125.0+/-0.1 | 125.0+/-0.1 | 125.0+/-0.1 |
| Cladding non-circularity | % | ≤1.0 | ≤1.0 | ≤1.0 | ≤1.0 | ≤1.0 |
| Coating diameter | um | 242+/-7 | 242+/-7 | 242+/-7 | 242+/-7 | 242+/-7 |
| Coating/chaffinch concentrically error | um | ≤12.0 | ≤12.0 | ≤12.0 | ≤12.0 | ≤12.0 |
| Coating non circularity | % | ≤6.0 | ≤6.0 | ≤6.0 | ≤6.0 | ≤6.0 |
| Core/cladding conentricity error | um | ≤0.6 | ≤0.6 | ≤1.5 | ≤1.5 | ≤1.5 |
| Curl(radius) | um | ≤4 | ≤4 | ---- | ---- | ---- |