



### Applications :

- 5G development
- Research & Development Labs
- Bench VNA's and analyzers
- High Volume Production Test
- RF Module Testing

**When everything is important, Times new Clarity™ Series is the clear choice. Industry-leading performance and unparalleled value.**

- |                                |                              |                          |
|--------------------------------|------------------------------|--------------------------|
| • Broad Frequency Response     | • Solid Connector Retention  | • Long Flex Life         |
| • Rugged & Durable             | • RF Stable with Flexure     | • Ergonomically Designed |
| • Predictable over Temperature | • Consistent between Batches | • Attractive Appearance  |

### Ordering Information:

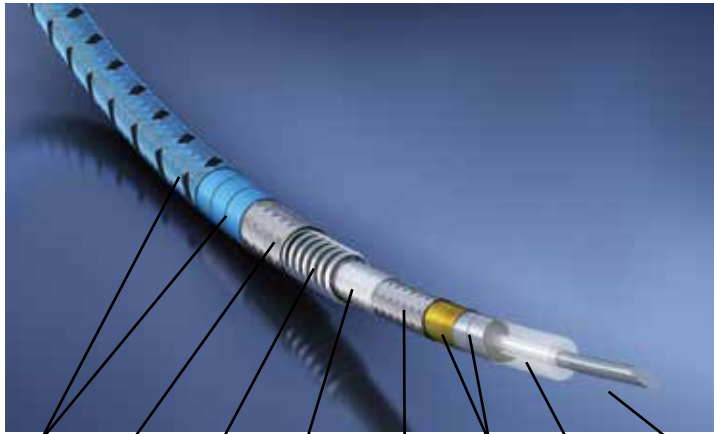
Clarity Series  
Steel Armored  
50 GHz

CLS50-XXXXXX-XX.XXX

Every half foot or quarter meter  
(1.5ft or 0.5m is the shortest)  
Example: -01.50F = 1.5ft

F= feet  
M=meters

24M = 2.4mm male  
24F = 2.4mm female  
2RF = 2.4mm ruggedized female



Abrasion resistant PTFE braid and interlayer  
 Stainless steel wire round braid  
 Stainless steel spring  
 FEP Jacket  
 Silver plated copper round wire braid  
 Helically interlayer  
 Times Solid TF-4 Dielectric  
 Solid Silver plate copper center conductor

### Connectors & Strain Relief:

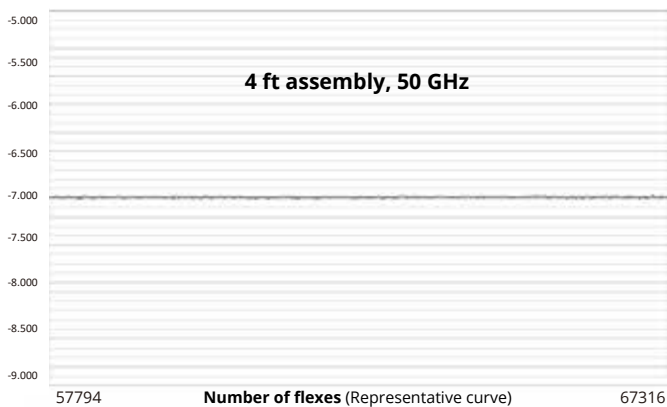
- User friendly stainless steel SureGrip™ knurled coupling nut
- Unique, elliptical-shaped, Sure-Grip™ injected molded strain relief



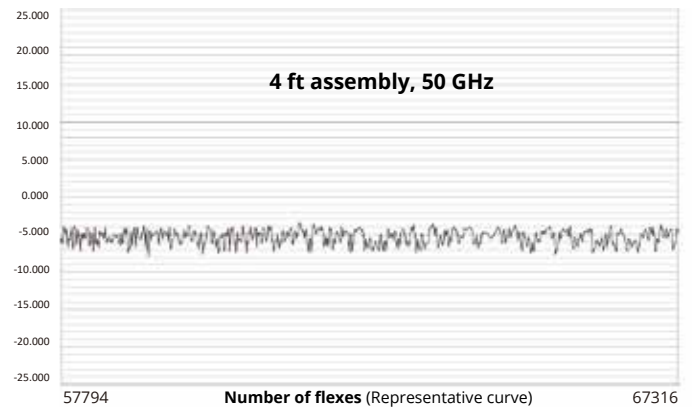
| Mechanical Specifications  |              |                  |               |               |
|--|--------------|------------------|---------------|---------------|
| Dimensions   |              | in               | mm            |               |
| Armored Diameter: armor/strain relief                                    |              | 0.29 / 0.50      | 7.95 / 12.70  |               |
| Min bend radius, armored (max flex life)                                 |              | 1.5 (3.0)        | 38 (76)       |               |
| Crushing (armored version)   |              | 200 lbs/lin.in.  |               |               |
| Flex life <sup>1</sup>   |              | 50,000           |               |               |
| Temperature Range  |              | -67°/+ 257°F     | -55°/+125°C   |               |
| Electrical Specifications (50GHz)  |              |                  |               |               |
| Impedance  |              | 50 Ohms          |               |               |
| Velocity of Propagation  |              | 70%              |               |               |
| Shielding Effectiveness  |              | > 100 dB         |               |               |
| Capacitance  |              | 29pf/ft (95pf/m) |               |               |
| VSWR (typ/max)   |              | 1.30:1 / 1.40:1  |               |               |
| Phase Stability (degrees)*   |              | typical          | +/- 4.0       |               |
| Amplitude Stability (dB)*  |              | typical          | +/- 0.08      |               |
| Attenuation, max   | @77°F (25°C) | <b>18 GHz</b>    | <b>40 GHz</b> | <b>50 GHz</b> |
|  | dB/ft        | 0.93             | 1.50          | 1.72          |
|  | (dB/m)       | (3.06)           | (4.93)        | (5.64)        |
| Attenuation (per 100ft) at any frequency: 0.5556*√f(MHz) + 0.0008*f(MHz) |              |                  |               |               |

1. As tested using Times' flex testing methods. 4ft long cable. Longer cables can have more total instability. Assumes test equipment is calibrated every 8 hours. New cables can have a break in period of several hundred flexes before optimum stability occurs. Contact your Times representative or the factory for a copy of this test procedure and/or actual test results.

### Amplitude Stability while in motion



### Phase Stability while in motion



### Always:

- Inspect interfaces before every mate. Clean frequently
- Gently start the coupling nut. Fully thread & tighten w/fingers first
- Use a calibrated torque wrench
- Cap connectors and protect the assembly when not in use

### Never:

- Force the cable beyond the recommended minimum bend radius
- Force two connectors. If any resistance is felt STOP and examine
- Mate connectors that have non-concentric contacts
- Insert foreign or dirty objects into the interface

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