



### 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

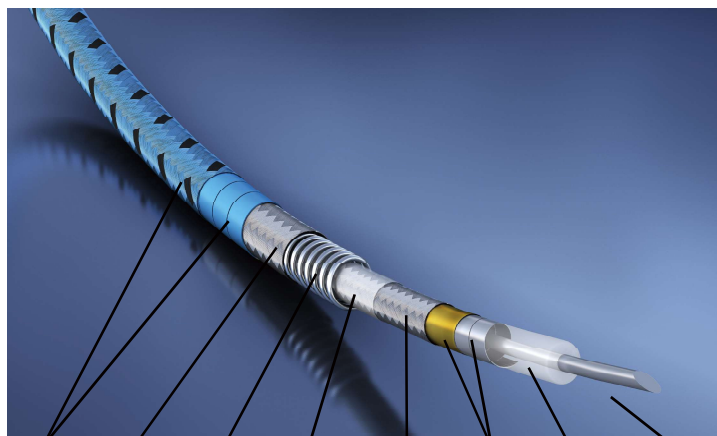
Every half foot or quarter meter  
(1.5ft or 0.5m is the shortest)  
Example: -01.50F = 1.5ft

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 :

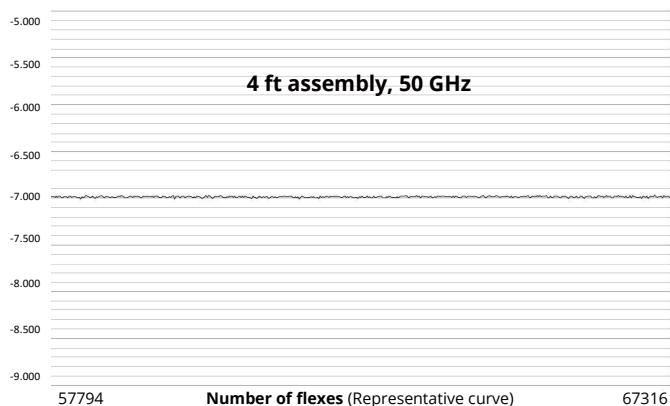
- User friendly stainless steel SureGrip™ knurled coupling nut
- Unique, elliptical-shaped, Sure-Grip™ injected molded strain relief



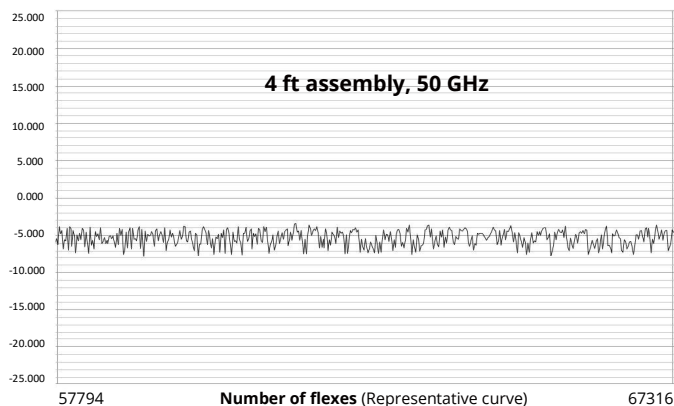
Mechanical Specifications				
Dimensions		in	mm	
Armored Diameter: armor/strain relief		0.29 / 0.50	7.95 / 12.70	
Min bend radius, armored (max flex life)		1.5 (3.0)	38 (76)	
Crushing (armored version)		200 lbs/lin.in.		
Flex life <sup>1</sup>		50,000		
Temperature Range		-67°/+ 257°F	-55°/+125°C	
Electrical 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)	18 GHz	40 GHz	50 GHz
	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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# Mouser Electronics

Authorized Distributor

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