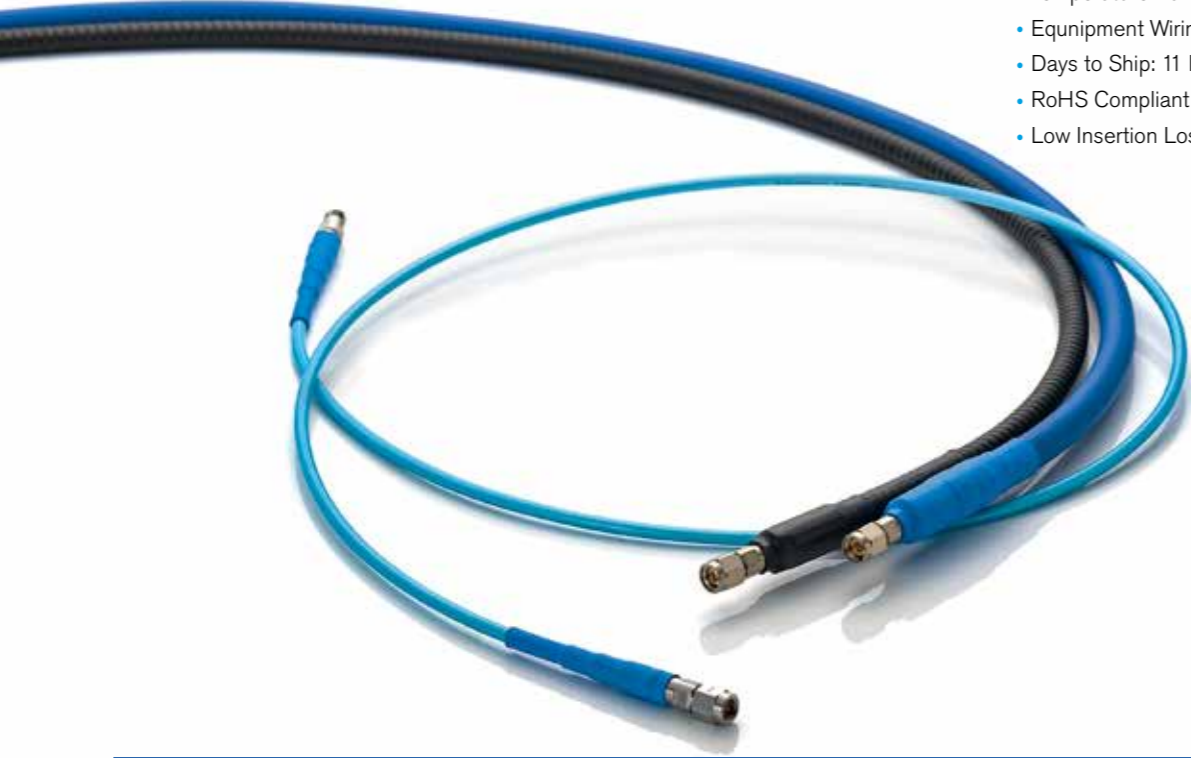


3 Series Cable Assemblies for Equipment Wiring

342



Features

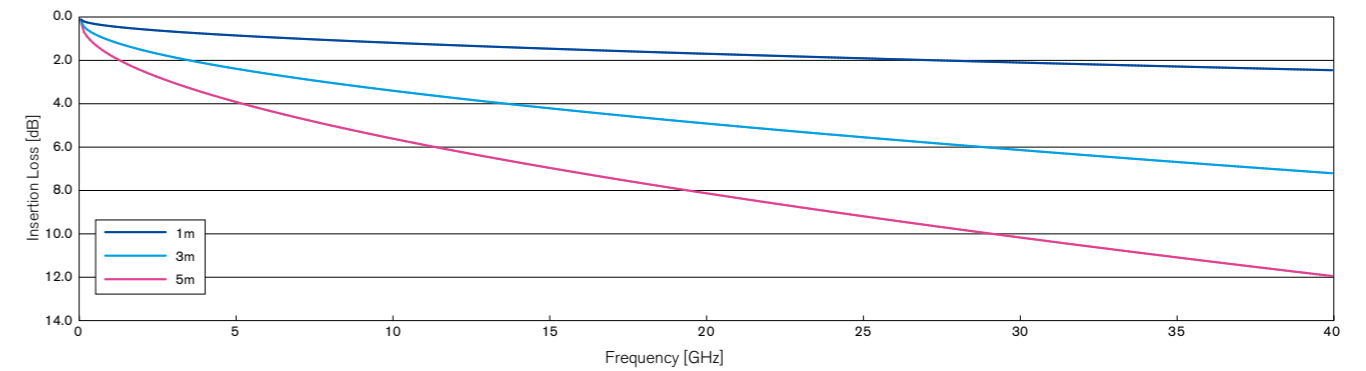
- Phase Stability: Temperature Change
- Maximum Operating Frequency: 40.0 GHz
- Temperature Range: -65 to 125°C
- Equipment Wiring
- Days to Ship: 11 Business Days
- RoHS Compliant
- Low Insertion Loss

Property

Electrical Properties		Mechanical Properties		Standard Type	Armored Type	Lightweight Armored Type (for Fixed Wiring)
Maximum Operating Frequency	40.0 GHz	Cable Outer Diameter	3.9 mm	3.9 mm	9.5 mm	8.0 mm
Characteristic Impedance (Typical)	50±1 Ω	Minimum Bending Radius (Inner Side)	20 mm	20 mm	20 mm	20 mm
Capacitance (Typical)	87 pF/m	Maximum Tensile Strength	98 N (10 kgf)	98 N (10 kgf)	98 N (10 kgf)	98 N (10kgf)
Propagation Delay (Typical)	4.35 ns/m	Cable Mass (Typical)	35 g/m	137 g/m	98 g/m	
Velocity of Propagation (Typical)	76 %	Continuous Operating Temperature Range	-65~+125 °C	-30~+85 °C	-30~+85 °C	
Higher Mode Frequency (Typical)	40.5 GHz	Armored Side Pressure	-	196 N/cm	196 N/cm	
VSWR (Typical)	1.43	Assembly Length	200~10,000 mm	700~10,000 mm	500~10,000 mm	
Maximum Frequency Insertion Loss (40.0 GHz)	2.4 dB/m					

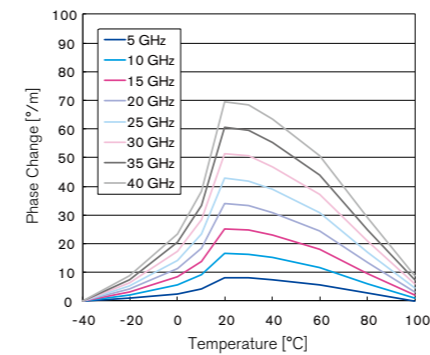
Technical Data

Cable Typical Insertion Loss



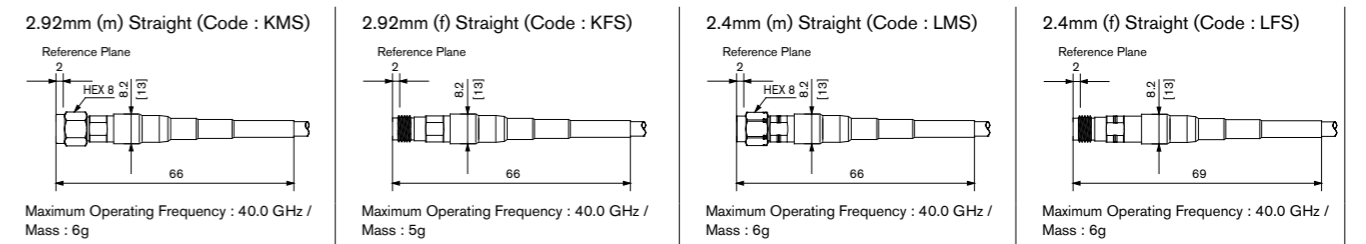
Typical Insertion Loss $(0.315 \times \sqrt{f} [\text{GHz}] + 0.009 \times f [\text{GHz}] + 0.02) \times L [\text{m}]$ **Maximum Insertion Loss** $(0.315 \times \sqrt{f} [\text{GHz}] + 0.009 \times f [\text{GHz}] + 0.02) \times 1.12 \times L [\text{m}]$

342 Phase Change vs. Temperature



The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector



*Refer to P0-4 Connector Code Table for other applicable connectors.

Order Form Example Please provide the following information when placing an order. * See P. 3-4 "Connector Codes"

Example 1	Example 2	Example 3	
MWX342	MWX342 Armored type	MWX342 Lightweight Armored type	
Assembly Length: 1000 mm	Assembly Length: 1000mm	Assembly Length: 1000mm	
Connector I : 2.92mm (f) Straight	Connector I : 2.4mm (f) Straight	Connector I : 2.92mm (m) Straight	a. Cable
Connector II : 2.92mm (m) Straight	Connector II : 2.4mm (m) Straight	Connector II : 2.92mm (m) Straight	b. Assembly Length
Catalog No.	Catalog No.	Catalog No.	c. Connector
MWX342-01000KFSKMS	MWX342-01000LFLSLS/B	MWX342-01000KMSKMS/A	d. Armored

Option • We can deliver products with matched phases for customers who require this characteristic.