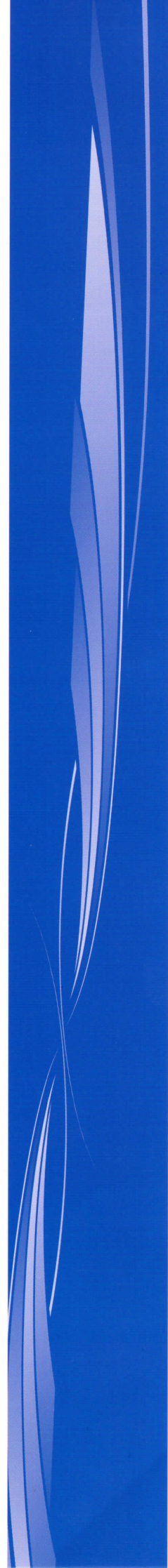


**Junkosha**

Creating Unsurpassed Value

# **Junflon<sup>®</sup> MWX**

**JUNFLON<sup>®</sup>  
Microwave Coaxial Cable  
Assemblies**



## MWX 0 Series ~Phase Stability~



The MWX0 series offer excellent phase stability against temperature fluctuations from -30 to +85°C and bending.

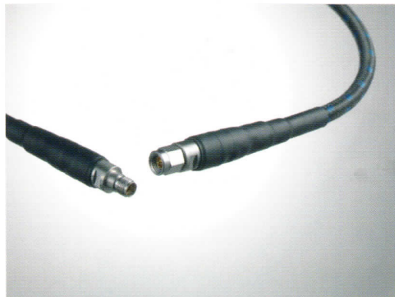
They are ideal for connecting Vector Network Analyzers for precision measurements. Cables are offered in wide range of the frequencies of 26.5, 40, 50, and 67 GHz with various connectors.

### Major applications

- Vector network analyzers
- RF and high-speed digital testers

Frequency	Cable type	Typical insertion loss (dB/m)		VSWR		Cable outer diameter (mm)	Mass (g/m)	Minimum bending radius (mm)	Continuous operating temperature (°C)	Assembly length (mm)	
		18.5 GHz	Maximum frequency	per connector	both ends of assy.					Min	Max
26.5 GHz	MWX021	1.6	2.0	1.153	1.33	8.5	122	30	-30~+85	700	1500
50.0 GHz	MWX051	2.7	4.6	1.21	1.46	6.6	76	30		700	1500
67.0 GHz	MWX061	3.5	7.3	1.21	1.46	6.6	73	30		700	1500

## MWX 1 Series ~Wide Temperature & High Durability~



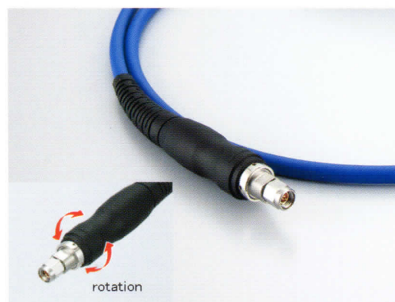
### MWX121 Heat-resistant for measurement

The MWX121 offer excellent durability of connector and cable bending in wide temperature range from -65 to +125°C for microwave measurements.

### Major applications

- Microwave measurements requiring compatibility with broad temperature range for applications like device evaluations
- Inspections requiring high durability

Frequency	Cable type	Typical insertion loss (dB/m)		VSWR		Cable outer diameter (mm)	Mass (g/m)	Minimum bending radius (mm)	Continuous operating temperature (°C)	Assembly length (mm)	
		18.5 GHz	Maximum frequency	per connector	both ends of assy.					Min	Max
26.5 GHz	MWX121	1.2	1.3	1.153	1.33	6.6	80	30	-65~+125	200	5000



### MWX122 High-durability for measurement

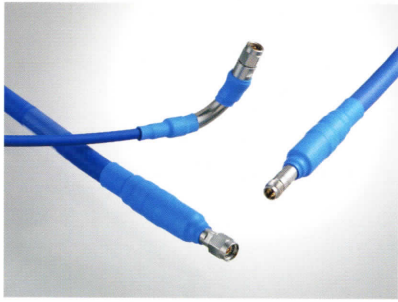
This is the high performance microwave cable assembly which is the best optimized for vector network analyzer. Its extraordinary durability in use of measurement test eventually leads to total cost reduction. New cable structure and strain relief with torque canceller were developed by simulation of actual measurement motion.

### Major applications

- Inspections requiring high durability
- Vector network analyzers

Frequency	Cable type	Typical insertion loss (dB/m)		VSWR		Cable outer diameter (mm)	Mass (g/m)	Minimum bending radius (mm)	Continuous operating temperature (°C)	Assembly length (mm)	
		18.5 GHz	Maximum frequency	per connector	both ends of assy.					Min	Max
26.5 GHz	MWX122	1.5	1.9	1.153	1.33	6.5	79	30	-65~+85	300	3000

## MWX 2 Series ~Flexible~



The MWX2 series offer flexibility and low repulsion to reduce stress loads to measured objects with excellent phase stability against bending in intensive use of microwave measurement. Cables are offered in wide range of the frequencies of 26.5, 40, 50, and 67 GHz with various connectors.

### Major applications

- Microwave/millimeter-wave measurements
- Micro-device measurements requiring high flexibility

Frequency	Cable type	Typical insertion loss (dB/m)		VSWR		Cable outer diameter (mm)	Mass (g/m)	Minimum bending radius (mm)	Continuous operating temperature (°C)	Assembly length (mm)	
		18.5 GHz	Maximum frequency	per connector	both ends of assy.					Min	Max
26.5 GHz	MWX221	1.2	1.4	1.153	1.33	6	64	20	-30~+85	200	5000
	MWX221 (armored type)					12.5	212	20		700	5000
40.0 GHz	MWX241 (armored type)	1.8	2.8	1.197	1.43	9.5	137	20		700	5000
	MWX241 (non-armored type, custom-made)					4.1	35	20		200	5000
50.0 GHz	MWX251 (armored type)	2.1	3.7	1.197	1.43	9.5	129	20		700	1500
67.0 GHz	MWX261 (armored type)	2.9	5.6			7.7	90	20		700	1500

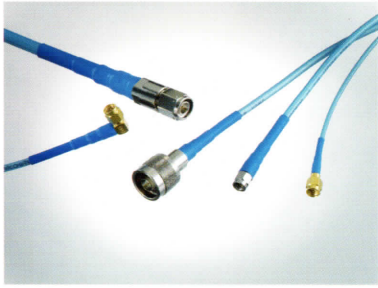
## Connector compatibility and Maximum operating frequency

Connector compatibility and Maximum operating frequency

	18.0GHz				18.5GHz			26.5GHz			40.0GHz			50.0GHz		67.0GHz	
	N (m)	N (f)	N swept (m)	SMA right angle (m)	SMA (m)	SMA (f)	SMA swept (m)	3.5mm (m)	3.5mm (f)	3.5mm swept (m)	2.92mm (m)	2.92mm (f)	2.92mm swept (m)	2.4mm (m)	2.4mm (f)	1.85mm (m)	1.85mm (f)
MWX021	●				●	●		●	●								
MWX051											●	●		●	●		
MWX061																●	●
MWX121	●				●			●	●								
MWX122	●				●			●	●								
MWX221	●	●	●	●	●	●	●	●	●	●							
MWX241	●				●						●	●	●				
MWX251														●	●		
MWX261																●	●

● : Compatible connector

## MWX 3 Series ~Equipment Wiring~



The MWX3 series offer excellent phase stability against temperature fluctuations as low as -65 to high as +125°C by using a porous PTFE dielectric material.

Nine types of cables are offered in maximum frequencies of 18.5, 26.5, and 40 GHz and insertion loss values.

### Major applications

- Electronic equipment for communication satellites and ground stations; electronic devices for aircraft equipment; air traffic control equipment
- Electronic equipment for ships; equipment highly susceptible to signal leaks and interference

Frequency	Cable type	Typical insertion loss (dB/m)		VSWR		Cable outer diameter (mm)	Mass (g/m)	Minimum bending radius (mm)	Continuous operating temperature (°C)	Assembly length (mm)	
		18.5 GHz	Maximum frequency	per connector	both ends of assy.					Min	Max
18.5 GHz	MWX311	3.4	—	1.182	1.40	2.7	18.5	10	-65~+125	100	10000
	MWX312	2.2	—	1.182	1.40	4.1	42	20		100	20000
	MWX313	1.9	—	1.182	1.40	4.7	52	30		100	20000
	MWX314	1.0	—	1.182	1.40	7.7	125	40		200	40000
18.0 GHz	MWX315	—	0.8	1.182	1.40	8.6	155	30	-30~+85	500	5000
26.5 GHz	MWX321	1.8	2.4	1.202	1.44	4.7	52	30	-65~+125	100	20000
	MWX322	1.1	1.3	1.153	1.33	5.2	60	25		200	20000
40.0 GHz	MWX341	2.1	3.3	1.197	1.43	4.0	40	20		100	10000
	MWX342	1.5	2.4	1.197	1.43	3.9	35	20		200	10000

## Connector compatibility and Maximum operating frequency

### Connector compatibility and Maximum operating frequency

Cable type	10.0GHz	15.0GHz	18.0GHz		18.5GHz					26.5GHz			40.0GHz						
	SMA (m) right angle	TNC (m)	SMA (m)	N (m)	SMA (m) right angle	SMA (m)	SMA (f)	SSMA (m)	N (m)	TNC (m)	SMA (m)	3.5mm (m)	3.5mm (f)	SMA (m)	2.92mm (m)	2.92mm (f)	2.4mm (m)	2.4mm (f)	
MWX311	●					●	●	●											
MWX312	●	●			●	●	●		●										
MWX313	●	●				●	●		●										
MWX314						●			●	●									
MWX315			●	●															
MWX321											●	●							
MWX322				●		●						●	●						
MWX341														●					
MWX342															●	●	●	●	

● : Compatible connector

※To allow continuing product improvements, specifications are subject to change without notice.

※The data are measured, not guaranteed values. ※JUNFLON, MWX are registered trademarks of Junkosha Inc.

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