

FSE | High Performance Ultra-Flexible Phase Stable Coax Cable



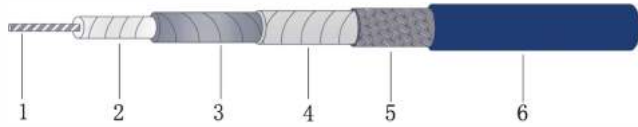
➤ Product features

- Ultra flexible
- Phase stable
- Durable repeat bending
- Low loss
- Good shielding

FSE series uses international leading low loss and stable RF cable technical-19 stranded conductor, low density PTFE dielectric, silver plated flat heli-foil. This is the lowest loss structure among the flexible cables. This product can be widely used in repeated bending, ultra-flexible, extra requirement of ultra-low loss and phased application.



FSE | Specification

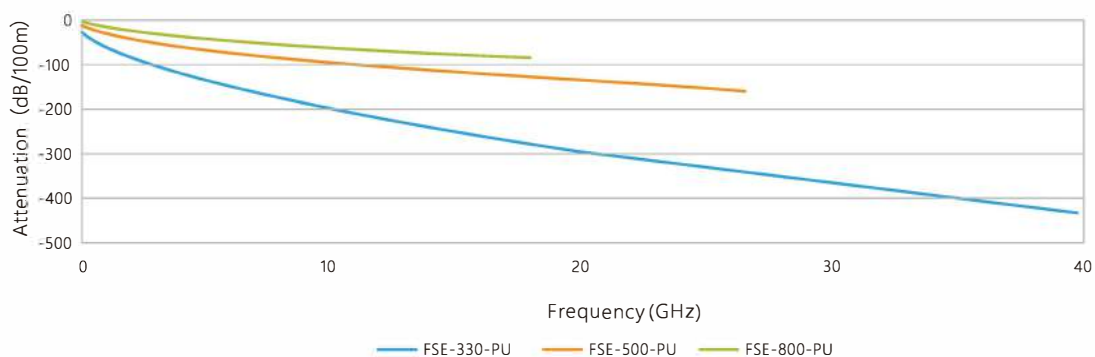


1	Center Conductor	Stranded SPC	4	Interlayer	PTFE
2	Dielectric	PTFE	5	Outer Shield	SPC Wire
3	Outer Conductor	SPC Tape	6	Jacket	PUR

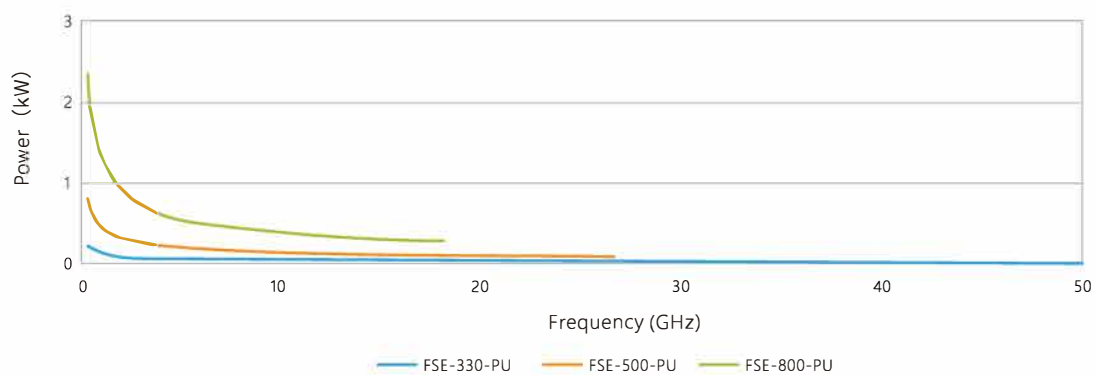
	FSE-330-PU			FSE-500-PU			FSE-800-PU		
Physical & Mechanical Specifications									
Dimensions	mm	Inch		mm	Inch		mm	Inch	
Jacket	4.00	0.157		5.50	0.217		8.20	0.323	
Bend Radius: Installation	16	0.630		20	0.787		33	1.299	
Bend Radius: Repeated	36	1.417		50	1.969		82	3.228	
Weight	30 g/m	0.020 lbs/ft		53 g/m	0.036 lbs/ft		145 g/m	0.097 lbs/ft	
Temperature Range	-40~+85°C (-40~+185°F)								
Electrical Specifications									
Operating Frequency	50 GHz			26.5 GHz			18 GHz		
Max Phase Stability(±°)	±10			±6			±6		
Max Amplitude Stability (±dB)	±0.10			±0.10			±0.10		
Impedance	50Ω								
Shielding Effectiveness	> 90dB								
Velocity of Propagation	74%			80%			83%		
Attenuation & Power Handling	Attenuation (+25°C Ambient) & Power Handling(+40°C Ambient; Sea Level; VSWR1:1)								
Frequency (MHZ)	dB/ m	dB/ Ft	kW						
1000	0.581	0.177	0.108	dB/ m	dB/Ft	kW	dB/ m	dB/ Ft	kW
2000	0.833	0.254	0.075	0.283	0.086	0.435	0.177	0.054	1.269
4000	1.199	0.366	0.052	0.402	0.123	0.306	0.252	0.077	0.890
8000	1.739	0.530	0.036	0.574	0.175	0.214	0.361	0.110	0.621
10000	1.964	0.599	0.032	0.821	0.250	0.150	0.520	0.159	0.432
18000	2.719	0.829	0.023	0.923	0.281	0.133	0.585	0.178	0.384
26500	3.385	1.032	0.019	1.257	0.383	0.098	0.803	0.245	0.280
40000	4.296	1.310	0.015	1.544	0.471	0.080			
50000	4.901	1.494	0.013						
Attenuation at Frequency	dB/m= $\frac{K1*\sqrt{FMHz}+K2*FMHz}{100}$								
K1	1.7798616			0.8811000			0.5476560		
K2	0.0018415			0.0004150			0.0003772		



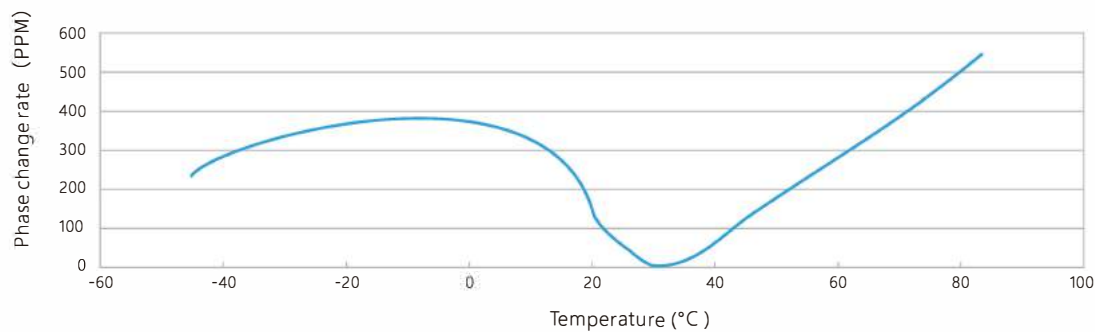
Frequency & Attenuation



Frequency & Power

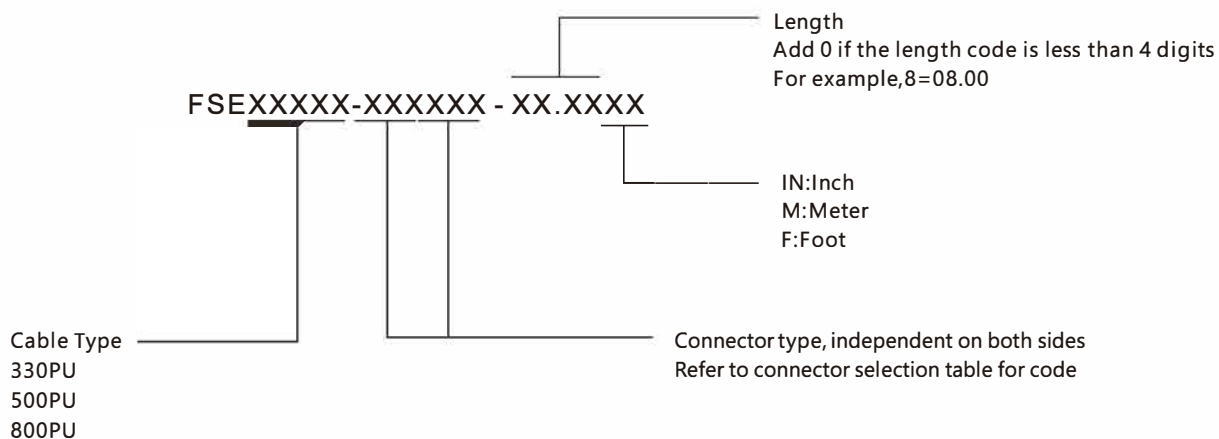


Temperature Phase (PPM)





Assembly Selection Information



For example: FSE330PU-24M24M-36.00IN

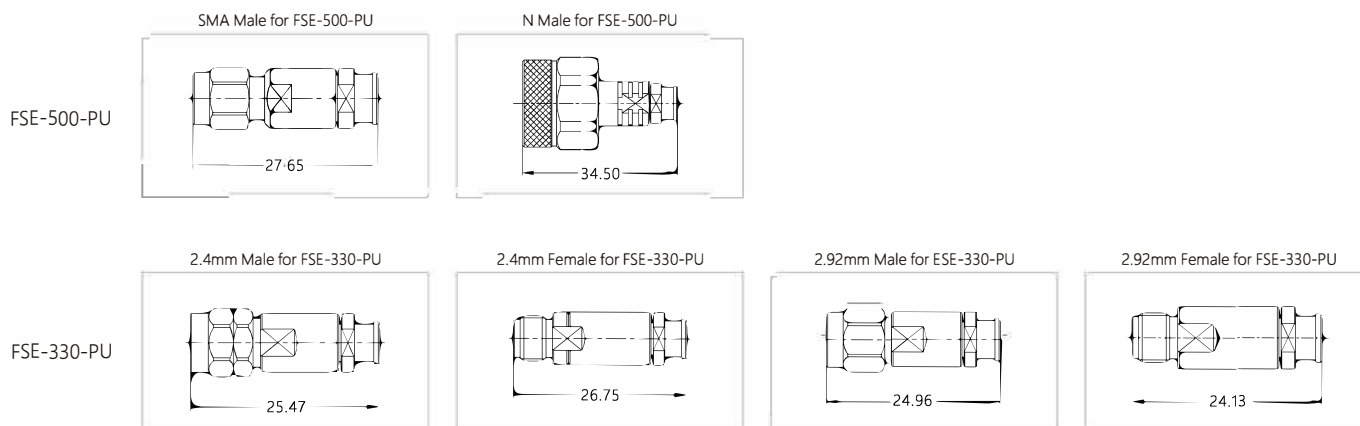
Optional Connectors

Connector Code	Connection Type	Operating Frequency (GHz)	FSE-330-PU	FSE-500-PU	FSE-800-PU	Typical VSWR	Max VSWR
24M	2.4mm Male	50GH z	●			1.30	1.35
24F	2.4mm Female	50GH z	●			1.30	1.35
29M	2.92mm Male	40GH z	●			1.25	1.30
29F	2.92mm Female	40GH z	●			1.25	1.30
35M	3.5mm Male	26.5GH z		○		1.25	1.30
SM	SMA Male	18GH z		●	○	1.25	1.30
NM	N Male	18GH z		●	○	1.25	1.30
TM	TNCA Male	18GH z			○	1.25	1.30

Note:

● = stocked and ○ = designed but not stocked.

Connector drawing



Disclaimer: The product information provided in this manual is for reference only, and the details shall be subject to the actual situation of the product.