



### Typical Applications:

- \* Antenna seeker
- \* Revolving doors
- \* Sectoral radar
- \* Rotary joint
- \* System Interconnect
- \* Wireless

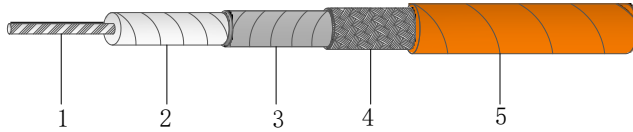
FSE series uses international leading low loss and stable RF cable technic, 19 stranded conductor, low density PTFE dielectric, silver plated flat helicoil. This is the lowest loss structure among the flexible cables. This product can be widely used in repeated bending, ultra flexible, etc, high require of ultra loss and phased application.

### Features & Benefits:

- \* Good mechanical phase stability
- \* Good temperature phase stability
- \* Extremely low loss
- \* Good amplitude stability
- \* Good bending performance
- \* Good power handing capability

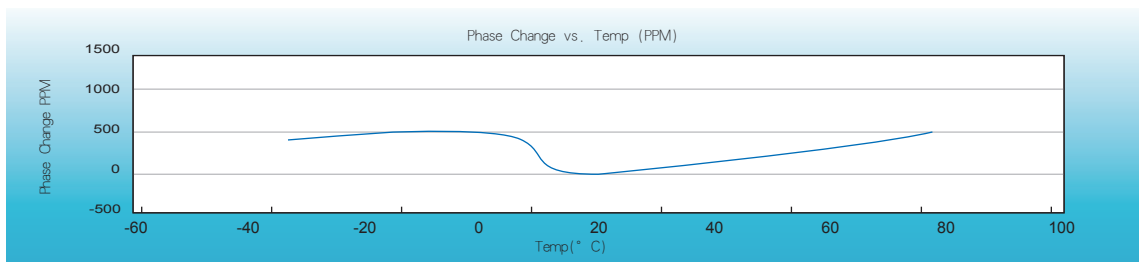
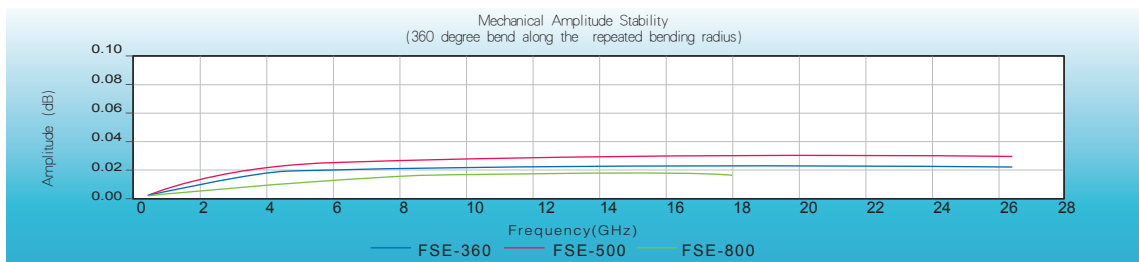
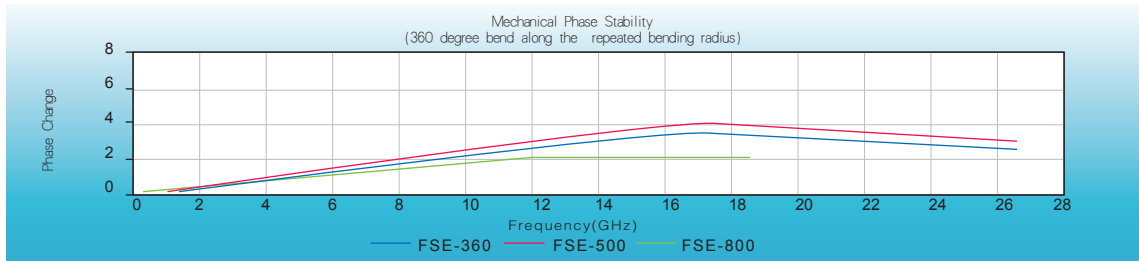
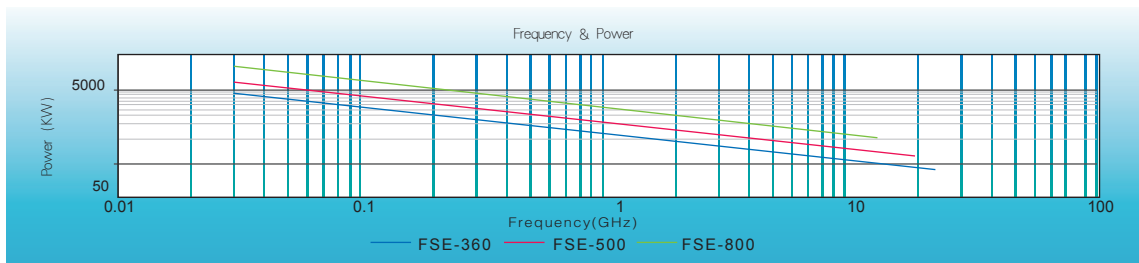
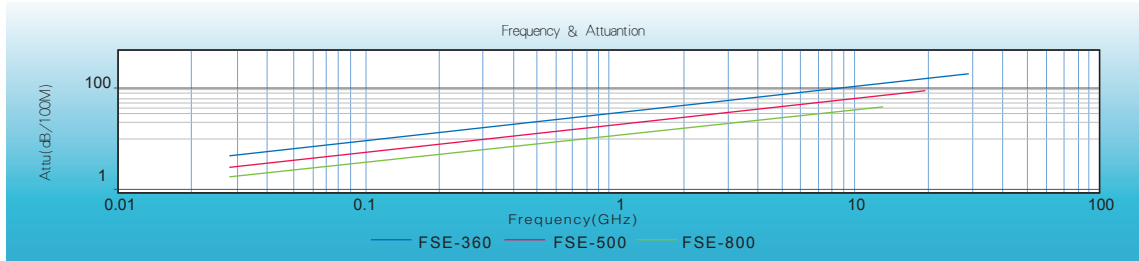


# FSE Specification



1. Center conductor, 19 stranded silver plated copper
2. Dielectric, LD-PTFE
3. Outer conductor, Silver plated copper tape wrapped
4. Interlayer, PTFE
5. Outer shield, Silver-plated copper braid
6. Jacket, Orange PTFE

FSE-360		FSE-500		FSE-800		
<b>Physical &amp; Mechanical Specifications</b>						
Dimensions	mm	Inch	mm	Inch	mm	Inch
Center Conductor	0.91	0.036	1.45	0.057	2.30	0.091
Dielectric	2.48	0.098	3.75	0.148	6.10	0.240
Outer Conductor	2.72	0.107	3.95	0.156	6.38	0.251
Interlayer	2.90	0.114	4.35	0.171	6.58	0.259
Outer Shield	3.30	0.130	4.80	0.189	7.15	0.281
Jacket	3.80	0.150	5.20	0.205	8.00	0.315
Bend Radius, minimum	18	0.709	20	0.787	32	1.260
Bend Radius, repeated	36	1.42	52	2.05	80	3.15
Weight	35 g/m	.024 lbs/ft	50 g/m	.034 lbs/f	130 g/m	.087 lbs/ft
Temperature Range	T: -65° /200° C (-67° /392° F)					
<b>Electrical Specifications</b>						
Impedance	50 Ohms		50 Ohms		50 Ohms	
Velocity of Propagation	83%		83%		83%	
Dielectric Constant	1.45		1.45		1.45	
Shielding Effectiveness	> 90 dB		> 90 dB		> 90 dB	
Time Delay	4.01 nS/m	1.22 nS/Ft	4.01 nS/m	1.22 nS/Ft	4.01 nS/m	1.22 nS/Ft
Capacitance	80.3 pF/m	24.5 pF/Ft	80.3 pF/m	24.5 pF/Ft	80.3 pF/m	24.5 pF/Ft
Inductance	0.31 uH/m	0.095 uH/Ft	0.31 uH/m	0.095 uH/Ft	0.31 uH/m	0.094 uH/Ft
Cutoff Frequency	46 GHz		28 GHz		18 GHz	
Voltage Withstand	1000 DC		1500 DC		3500 DC	
Peak Power	2.5 kW		5.6 kW		30.6 kW	
Attenuation&Power Handling	Attenuation (+25° C Ambient) ; Power (+40° Ambient, Sea Level, VSWR 1:1)					
Frequency (MHz)	dB/100 m	dB/100 Ft	kW	dB/100 m	dB/100 Ft	kW
30	6.97	2.13	2.369	4.84	1.48	4.261
50	9.02	2.75	1.832	6.25	1.91	3.298
100	12.79	3.90	1.291	8.85	2.70	2.329
300	22.33	6.81	0.740	15.39	4.69	1.340
500	28.97	8.83	0.570	19.91	6.07	1.036
900	39.18	11.95	0.422	26.81	8.17	0.769
1000	41.37	12.61	0.399	28.28	8.62	0.729
1500	51.04	15.56	0.324	34.75	10.59	0.593
2000	59.29	18.08	0.279	40.23	12.27	0.512
3000	73.36	22.36	0.225	49.50	15.09	0.416
4000	85.42	26.04	0.193	57.39	17.50	0.359
5000	96.22	29.33	0.172	64.38	19.63	0.320
6000	106.10	32.35	0.156	70.74	21.57	0.291
8000	123.96	37.79	0.133	82.13	25.04	0.251
10000	140.01	42.68	0.118	92.26	28.13	0.223
12000	154.77	47.19	0.107	101.50	30.95	0.203
12400	157.60	48.05	0.105	103.26	31.48	0.200
13500	165.20	50.37	0.100	107.98	32.92	0.191
15000	175.17	53.41	0.094	114.14	34.80	0.181
18000	193.99	59.14	0.085	125.68	38.32	0.164
24000	228.33	69.61	0.072	146.46	44.65	0.141
26500	241.64	73.67	0.068	154.43	47.08	0.134
35000	283.81	86.53	0.058			
40000	306.88	93.56	0.054			
Attenuation at Frequency	dB/100 m=K1*sqrt(FMHz)+K2*FMHz					
K1	1.2657000		0.8811000		0.5476560	
K2	0.0013435		0.0004150		0.0003772	



### Assemblies order information

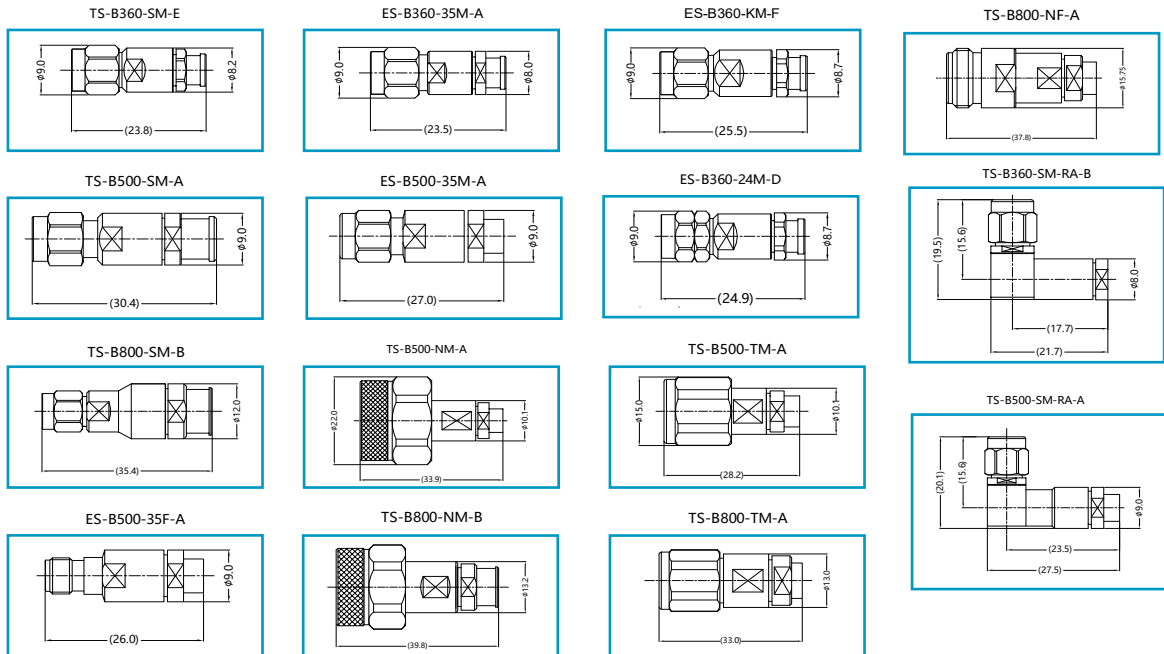
FSEXXX-XXXXXX-XX.XXX

Cable Size  
 - 360  
 - 500  
 - 800

M: Metric system, meter  
 E.g.: -01.20M = 1.2meter  
 F: Imperial Standard, Ft  
 E.g.: 07.50F = 7.5 Ft

Connector Type, two sides independent  
 24M = 2.4mm Male  
 35M = 3.5mm Male  
 35F = 3.5mm Female  
 KM = 2.92mm Male  
 SM = SMA Male  
 SMR = SMA Male Right Angle  
 TM = TNC Male  
 NM = Type N Male  
 NF = Type N Female

### Connectors Information



Type	Cable	Description	P/N	Materials	Attach Method
SMA—Male	FSE—360	TS—B360—SM—E	01—MS028	Stainless Steel	Soldering inner/outer conductor
SMA—Male—RA	FSE—360	TS—B360—SM—RA—B	01—MR010	Stainless Steel	Soldering inner/outer conductor
SMA—Male	FSE—500	TS—B500—SM—A	01—MS029	Stainless Steel	Soldering inner/outer conductor
SMA—Male—RA	FSE—500	TS—B500—SM—RA—A	01—MR012	Stainless Steel	Soldering inner/outer conductor
SMA—Male	FSE—800	TS—B800—SM—B	01—MS035	Stainless Steel	Soldering inner/outer conductor
3.5—Male	FSE—360	ES—B360—35M—A	03—MS007	Stainless Steel	Spring Finger inner contact Soldering outer conductor
3.5—Male	FSE—500	ES—B500—35M—A	03—MS008	Stainless Steel	Spring Finger inner contact Soldering outer conductor
3.5—Female	FSE—500	ES—B500—35F—A	03—FS003	Stainless Steel	Spring Finger inner contact Soldering outer conductor
2.92—Male	FSE—360	ES—B360—KM—F	04—MS023	Stainless Steel	Spring Finger inner contact Soldering outer conductor
2.4—Male	FSE—360	ES—B360—24M—D	05—MS012	Stainless Steel	Spring Finger inner contact Soldering outer conductor
N—Male	FSE—500	TS—B500—NM—A	02—MS022	Stainless Steel	Soldering inner/outer conductor
N—Male	FSE—800	TS—B800—NM—B	02—MS029	Stainless Steel	Soldering inner/outer conductor
N—Female	FSE—800	TS—B800—NF—A	02—FS006	Stainless Steel	Soldering inner/outer conductor
TNC—Male	FSE—500	TS—B500—TM—A	09—MS006	Stainless Steel	Soldering inner/outer conductor
TNC—Male	FSE—800	TS—B800—TM—A	09—MS008	Stainless Steel	Soldering inner/outer conductor

Note: Please contact FocuSimple if you have other connectors request.