

FSB-K

--High Performance Ultra-loss Armored Coax Cable



Typical Applications :

- * Phase Array Radar
- * Electronic Warfare
- * Shipboard system
- * Microwave System interconnection

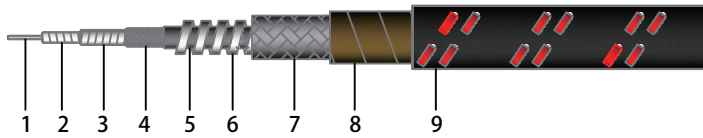
FSB-K fixed-amplitude stable-phase armor cable is the ideal solution for military radar, phased array radar, electronic warfare, shipborne systems, field testing and other applications in harsh natural environment. The versatile product can meet the requirements of relatively stringent requirements on plug-in loss, mechanical phase stability, and amplitude and temperature phase stability. The armor especially designed can provide very reliable protection for internal cables, so that the product features excellent resistance to compression, tension, sand, wear and other mechanical properties. The series of products have even more excellent properties in environmental performance and they are resistant to water, salt spray corrosion, high temperature and ultraviolet. FSB-K is superior to products with equal electrical performance in smaller diameter and lighter weight when compared with the program adopting other cables and external armor.

Feature & Benefits:

- * Excellent phase stable vs. temperature
- * Excellent mechanical phase and amplitude stability
- * Ultra-low loss
- * Excellent shielding performance
- * Good bending performance
- * Good power handling station



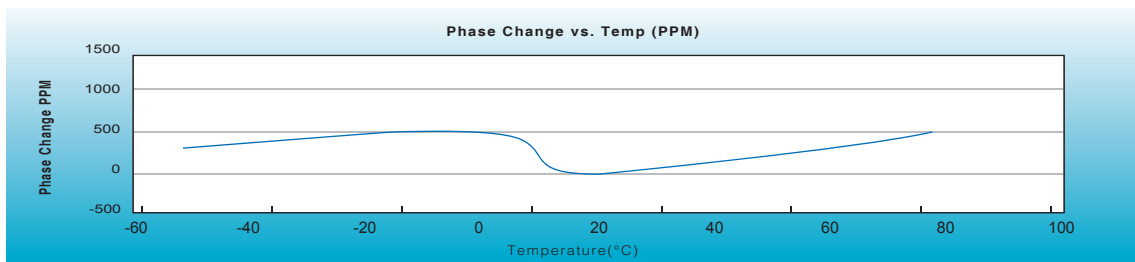
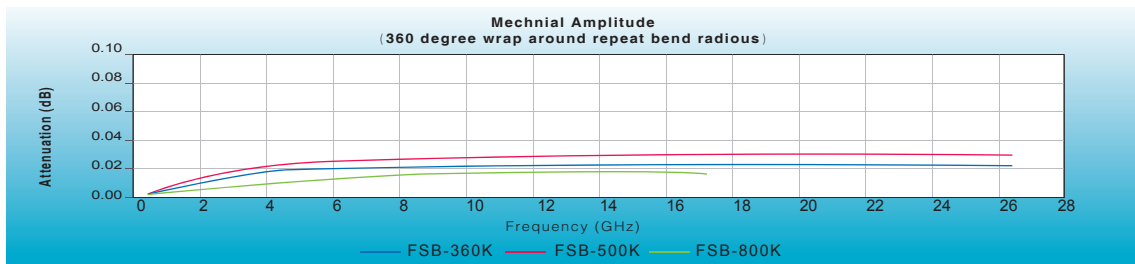
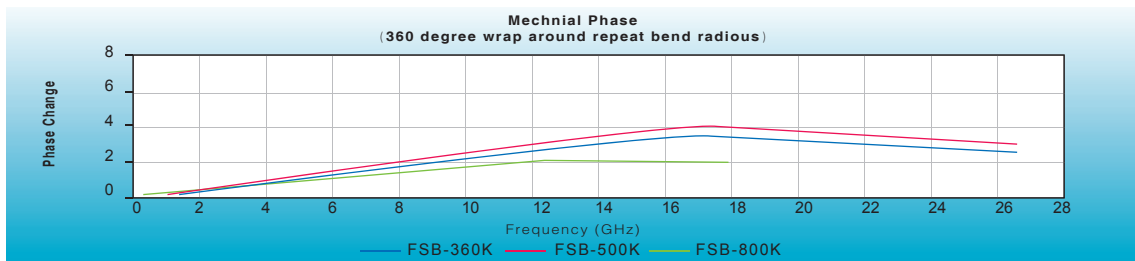
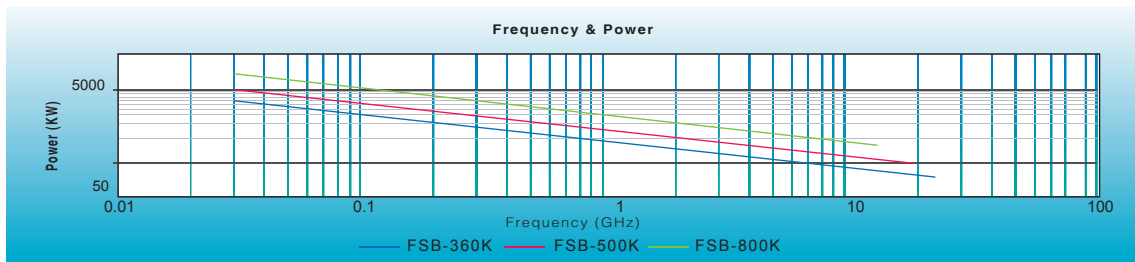
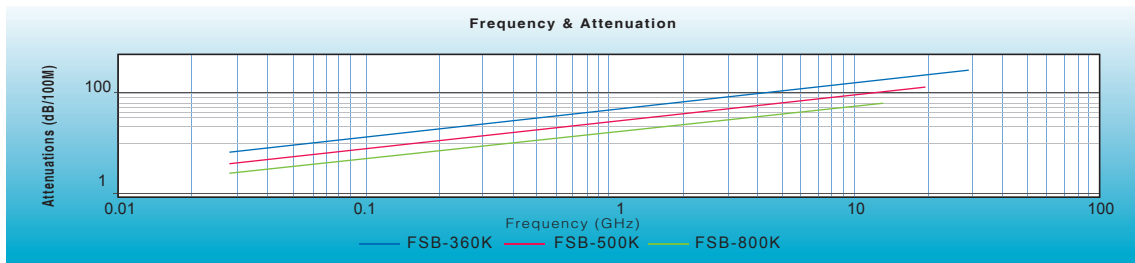
FSB-K Specification



1. Center conductor, silver plated copper
2. Dielectric, LD-PTFE
3. Outer conductor, Silver plated copper tape wrapped
4. Shielding layer, Silver-plated copper braid
5. Steel Armor
6. Anti-torsion Braid
7. Waterproof layer
8. PTFE Braid
9. PTFE Braid

FSB-360K				FSB-500K			FSB-800K		
Mechanical Specifications									
Dimension	mm		Inch	mm		Inch	mm		Inch
Center Conductor	0.91		0.036	1.45		0.057	2.30		0.091
Dielectric	2.50		0.098	4.00		0.157	6.25		0.246
Outer Conductor	2.70		0.106	4.30		0.169	6.60		0.260
Shielding	3.20		0.126	4.76		0.187	7.10		0.280
Jacket	3.60		0.142	5.20		0.205	7.80		0.307
	6.00		0.236	8.00		0.315	10.50		0.413
Bend Radius/Installed	30		1.181	40		1.575	50		1.969
Bend Radius/Repeated	60		2.362	100		3.937	125		4.921
Weight	93 g/m		.063 lbs/ft	150 g/m		.101 lbs/ft	310 g/m		.208 lbs/ft
	T: -55°/165°C (-67°/329°F)								
Electrical Specifications									
Impedance	50 Ohms			50 Ohms			50 Ohms		
Velocity	82%			83%			83%		
Dielectric Constant	1.49			1.45			1.45		
Shielding	> 90 dB			> 90 dB			> 90 dB		
Times Delay	4.06 nS/m		1.24 nS/Ft	4.01nS/m		1.22 nS/Ft	4.01 nS/m		1.22 nS/Ft
Capacitance	81.4 pF/m		24.8 pF/Ft	80.3 pF/m		24.5 pF/Ft	80.3 pF/m		24.5 pF/Ft
Inductance	0.19uH/m		0.058 uH/Ft	0.18 uH/m		0.056uH/Ft	0.17 uH/m		0.053 uH/Ft
Cutoff Frequency	46 GHz			29 GHz			18 GHz		
Vlotage Withstand	900DC			1500 DC			3600 DC		
Peak Power	2.0 kW			5.6 kW			32.4 kW		
Attenuation&Power	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	dB/100 m	dB/100 Ft	kW
30	6.42	1.96	2.989	3.93	1.20	5.112	2.51	0.77	10.655
50	8.29	2.53	2.314	5.08	1.55	3.957	3.24	0.99	8.244
100	11.74	3.58	1.634	7.19	2.19	2.794	4.60	1.40	5.817
300	20.40	6.22	0.940	12.49	3.81	1.608	8.00	2.44	3.341
500	26.40	8.05	0.726	16.17	4.93	1.243	10.37	3.16	2.579
900	35.55	10.84	0.540	21.77	6.64	0.923	13.99	4.26	1.912
1000	37.50	11.43	0.511	22.96	7.00	0.875	14.76	4.50	1.812
1500	46.08	14.05	0.416	28.21	8.60	0.712	18.17	5.54	1.472
2000	53.36	16.27	0.359	32.66	9.96	0.615	21.07	6.42	1.269
3000	65.65	20.02	0.292	40.18	12.25	0.500	25.98	7.92	1.029
4000	76.10	23.20	0.252	46.58	14.20	0.431	30.18	9.20	0.886
5000	85.37	26.03	0.225	52.25	15.93	0.385	33.91	10.34	0.789
6000	93.81	28.60	0.204	57.40	17.50	0.350	37.32	11.38	0.717
8000	108.91	33.20	0.176	66.64	20.32	0.301	43.44	13.25	0.615
10000	122.35	37.30	0.157	74.85	22.82	0.268	48.92	14.91	0.547
12000	134.60	41.04	0.142	82.34	25.10	0.244	53.93	16.44	0.496
12400	136.94	41.75	0.140	83.76	25.54	0.240	54.89	16.73	0.487
13500	143.19	43.66	0.134	87.58	26.70	0.229	57.45	17.52	0.465
15000	151.36	46.15	0.127	92.57	28.22	0.217	60.81	18.54	0.440
18000	166.67	50.81	0.1	101.92	31.07	0.197	67.13	20.47	0.398
24000	194.22	59.21	0.099	118.75	36.20	0.169			
26500	204.79	62.44	0.094	125.20	38.17	0.160			
35000	255.69	77.96	0.075						
40000									
Other Frequency	dB/100 m=K1*sqrt(FMHz)+K2*FMHz								
K1	1.1684700			0.7156867			0.4563799		
K2	0.0005500			0.0003280			0.0003280		

FSB-K *Tested Data*



FSB-K Connector & Assemblies

Assemblies order information

FSBXXX-XXXXXX-XX.XXX

Cable Size

-360K
-500K
-800K

M: Metric system, meter

E.g.: 01.20M = 1.2M

F: British Unit, Ft

E.g: 07.50F = 7.5 Ft

Connector Type, two sides independent

24F = 2.4mm Female

35M = 3.5mm Male

35F = 3.5mm Female

KM = 2.92mm Male

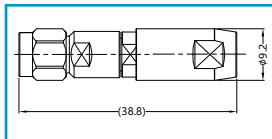
SM = SMA Male

NM = Type N Male

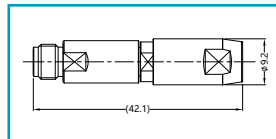
NF = Type N Female

Connectors Information

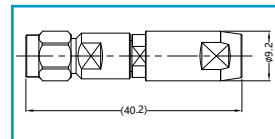
TS-B360-SM-H



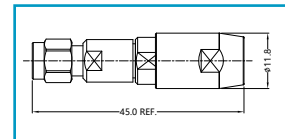
ES-B360-24F-C



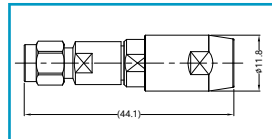
ES-B360-KM-G



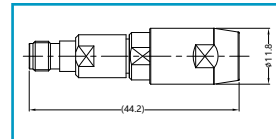
TS-B500-SM-C



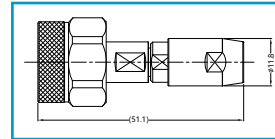
ES-B500-35M-C



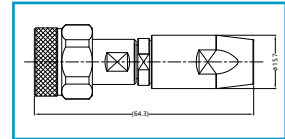
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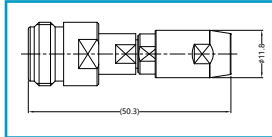
TS-B500-NM-B



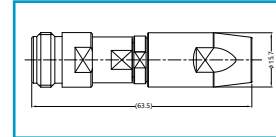
TS-B800-NM-D



TS-B500-NF-B



TS-B800-NF-F



Type	Cable	Description	P/N	Materials	Attach Method
3.5-Male	FSB-500K	ES-B500-35M-C	03-MS010	Stainless	Soldering inner/outer conductor
3.5-Female	FSB-500K	ES-B500-35F-C	03-FS005	Steel	Soldering inner/outer conductor
2.92-Male	FSB-360K	ES-B360-KM-G	04-MS024	Stainless	Soldering inner/outer conductor
2.4-Male	FSB-360K	ES-B360-24F-C	05-FS011	Steel	Soldering inner/outer conductor
SMA-Male	FSB-360K	TS-B360-SM-H	01-MS078	Stainless	Soldering inner/outer conductor
SMA-Male	FSB-500K	TS-B500-SM-C	01-MS031	Steel	Soldering inner/outer conductor
N-Male	FSB-500K	TS-B500-NM-B	02-MS023	Stainless	Soldering inner/outer conductor
N-Male	FSB-800K	TS-B800-NM-D	02-MS031	Steel	Soldering inner/outer conductor
N-Female	FSB-500K	TS-B500-NF-B	02-FS005	Stainless	Soldering inner/outer conductor
N-Female	FSB-800K	TS-B800-NF-F	02-FS019	Steel	Soldering inner/outer conductor

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

