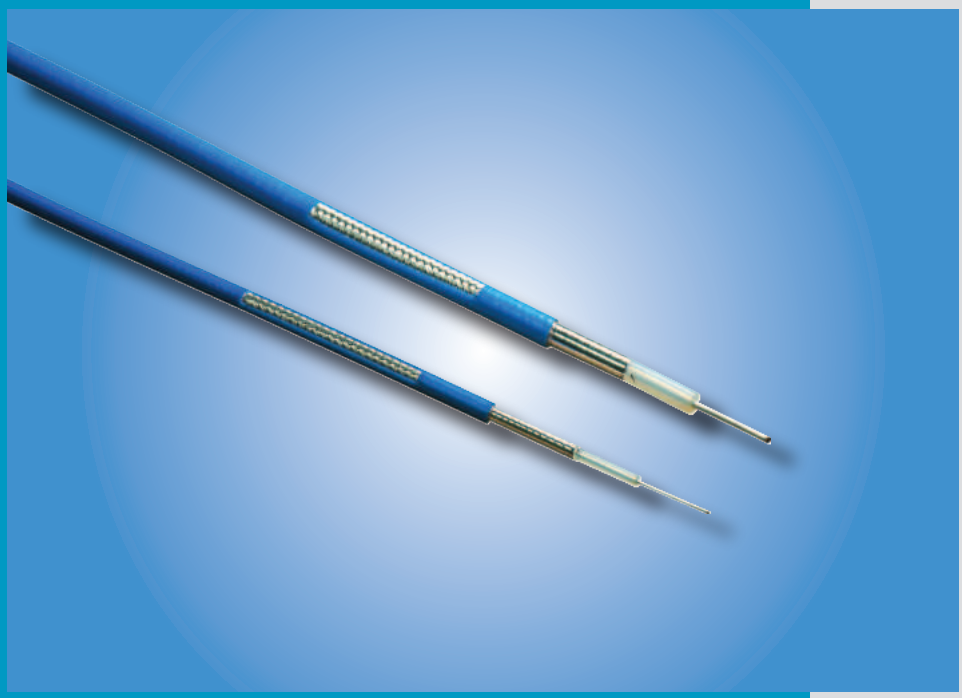
FSC

--High Performance Flexible Coax Cable



Typical Applications:

* Interconnection between boards
* Cabinet jumper
* Airborne radar
* Missile system
* Phased array radar
* Feed network
* Instrumentation

FSC series RF cable chooses international leading silver plated copper spiral wrap as its outer conductor， select strong durable solid PTFE as cable dielectric , along with silver-plated copper braid,standardized cable structure size, can be easily selected standardized semi-rigid and conformable cable connector .

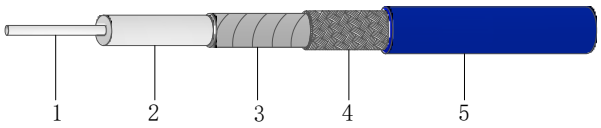
Features & Benefits:

* Good mechanical phase stability
* Good amplitude stability
* Flexible alternative to Semirigid Coax
* Good trade off performance vs. price
* The semi-rigid connectors are suitable

Replacment reference chart

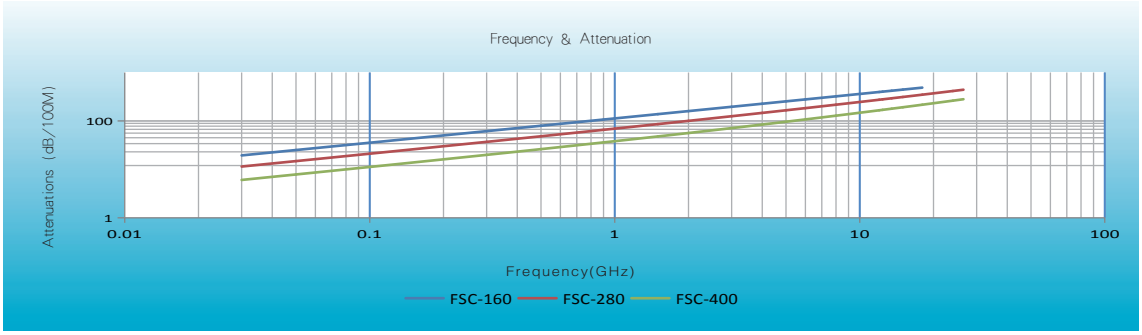
F+S	TIMES	H+S	HABIA	HARBOUR
FSC-160	TFLEX-047			
FSC-280	TFLEX-405	MULTIFLEX86	MULTIBEND86	SS405
FSC-400	TFLEX-402	MULTIFLEX141	MULTIBEND141	SS402

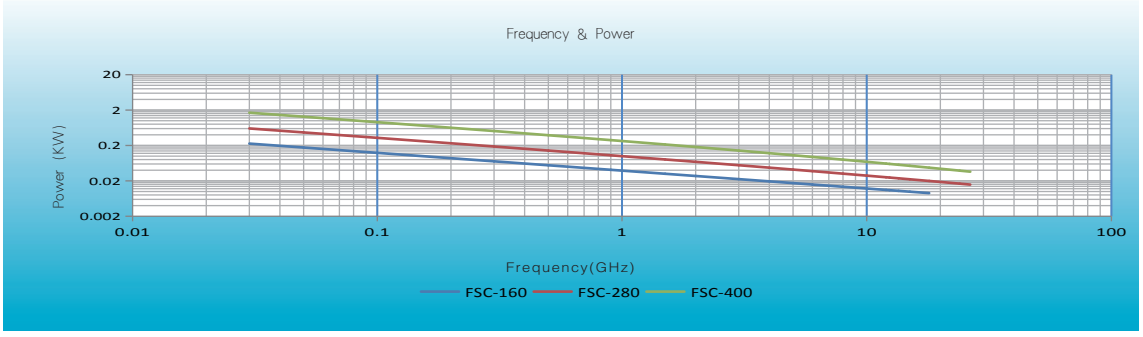
FSC Specification

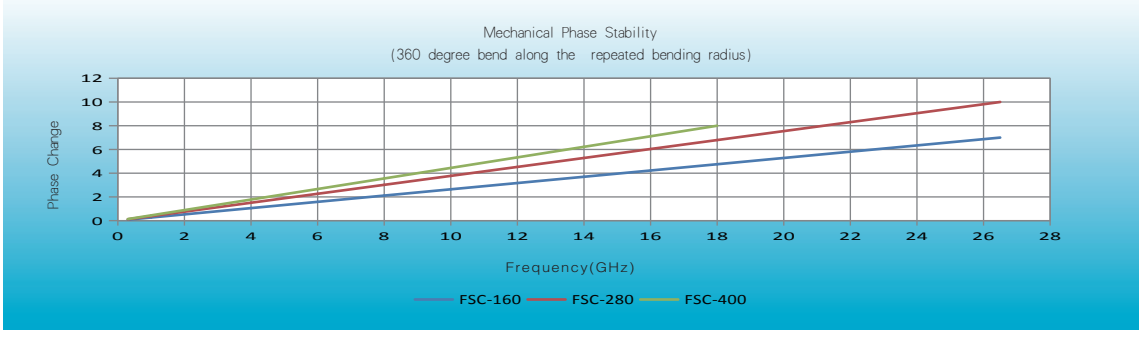


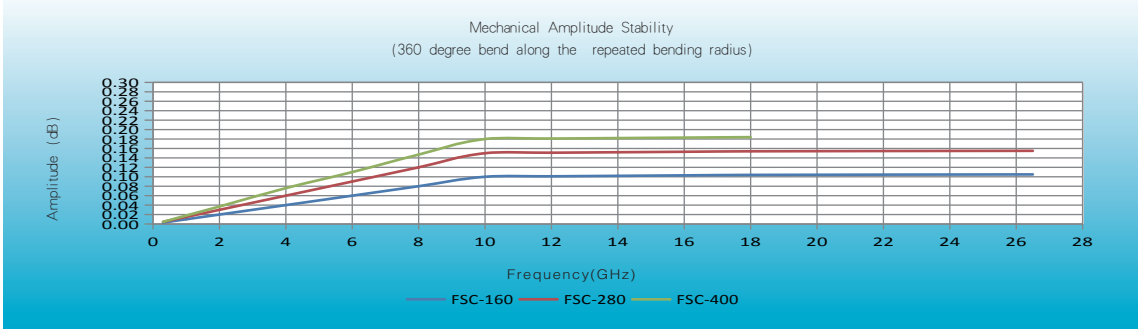
1. Center conductor，Silver plated copper
2. Dielectric，Solid PTFE
3. Outer conductor ，Silver plated copper tape wrapped
4. Outer shield，Silver-plated copper braid
5. Jacket， Blue FEP

	FSC-160		FSC-280		FSC-400	
Physical & Mechanical Specifications						
Dimensions	mm	Inch	mm	Inch	mm	Inch
Center Conductor	0.29	0.011	0.51	0.020	0.91	0.036
Dielectric	0.94	0.037	1.63	0.064	3.00	0.118
Outer Conductor	1.14	0.045	1.79	0.070	3.20	0.126
Outer Shield	1.34	0.053	2.16	0.085	3.55	0.140
Jacket	1.60	0.063	2.80	0.110	4.00	0.157
Bend Radius，minimum	6	0.236	14	0.551	20	0.787
Bend Radius，repeated	16	0.63	28.00	1.10	46.00	1.81
Weight	7 g/m	.0005 lbs/f	22 g/m	.015 lbs/ft	49 g/m	.033 lbs/f
Temperature Range	T：−55° /125° C (−67° /257° F)					
Electrical Specifications						
Impedance	50 Ohms		50 Ohms		50 Ohms	
Velocity of Propagation	70%		70%		70%	
Dielectric Constant	2.04		2.04		2.04	
Shielding Effectiveness	> 90 dB		> 90 dB		> 90 dB	
Time Delay	4.76 nS/m	1.45 nS/Ft	4.76 nS/m	1.45 nS/Ft	4.76 nS/m	1.45 nS/Ft
Capacitance	95.2 pF/m	29.0 pF/Ft	95.2 pF/m	29.0 pF/Ft	95.2 pF/m	29.0 pF/Ft
Inductance	0.27 uH/m	0.082 uH/Ft	0.23 uH/m	0.070 uH/Ft	0.22 uH/m	0.066 uH/Ft
Cutoff Frequency	108 GHz		62 GHz		34 GHz	
Voltage Withstand	500 DC		1000 DC		1500 DC	
Peak Power	0.63 kW		2.5 kW		5.6 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	dB/100 m	dB/100 Ft	kW
30	19.41	5.92	0.226	11.44	3.49	0.605	6.05	1.84	1.687
50	25.07	7.64	0.175	14.81	4.52	0.467	7.85	2.39	1.299
100	35.47	10.81	0.124	21.06	6.42	0.329	11.22	3.42	0.909
300	61.52	18.76	0.071	36.98	11.27	0.187	19.93	6.08	0.512
500	79.50	24.24	0.055	48.19	14.69	0.144	26.17	7.98	0.390
900	106.80	32.56	0.041	65.55	19.99	0.106	36.02	10.98	0.283
1000	112.62	34.33	0.039	69.30	21.13	0.100	38.17	11.64	0.267
1500	138.10	42.10	0.032	85.96	26.21	0.081	47.83	14.58	0.213
2000	159.64	48.67	0.027	100.31	30.58	0.069	56.28	17.16	0.181
3000	195.88	59.72	0.022	125.02	38.12	0.055	71.10	21.68	0.143
4000	226.53	69.06	0.019	146.47	44.66	0.047	84.20	25.67	0.121
5000	253.61	77.32	0.017	165.84	50.56	0.042	96.22	29.34	0.106
6000	278.16	84.80	0.016	183.73	56.01	0.038	107.46	32.76	0.095
8000	321.89	98.14	0.014	216.37	65.97	0.032	128.31	39.12	0.080
10000	360.57	109.93	0.012	246.06	75.02	0.028	147.61	45.00	0.069
12000	395.66	120.63	0.011	273.66	83.43	0.025	165.81	50.55	0.062
12400	402.33	122.66	0.011	278.98	85.06	0.025	169.35	51.63	0.060
13500	420.16	128.10	0.010	293.30	89.42	0.024	178.91	54.55	0.057
15000	443.39	135.18	0.010	312.20	95.18	0.022	191.62	58.42	0.053
18000	486.73	148.39	0.009	348.17	106.15	0.020	216.09	65.88	0.047
24000	564.12	171.99	0.008	414.70	126.43	0.017	262.17	79.93	0.039
26500	593.60	180.98	0.007	440.80	134.39	0.016	280.53	85.53	0.036
Attenuation at Frequency	dB/100 m=K1*sqrt(FMHz)+K2*FMHz					
K1	3.5406664			2.0669291			1.0824000		
K2	0.0006499			0.0039370			0.0039370		


Frequency & Attenuation
Attenuations (dB/100M)
100
1
0.01
0.1
1
10
100
Frequency(GHz)
FSC-160
FSC-280
FSC-400


Frequency & Power
Power (KW)
20
2
0.2
0.02
0.002
0.01
0.1
1
10
100
Frequency(GHz)
FSC-160
FSC-280
FSC-400


Mechanical Phase Stability
(360 degree bend along the repeated bending radius)
Phase Change
12
10
8
6
4
2
0
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
Frequency(GHz)
FSC-160
FSC-280
FSC-400


Mechanical Amplitude Stability
(360 degree bend along the repeated bending radius)
Amplitude (dB)
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
Frequency(GHz)
FSC-160
FSC-280
FSC-400

Assemblies order information

FSCXXX-XXXXXX-XX.XXX

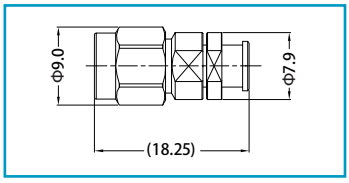
M: Metric system, meter
E.g.: -01.20M = 1.2meter
F: Imperial Standard, Ft
E.g.: 07.50F = 7.5 Ft

Cable Size
– 160
– 280
– 400

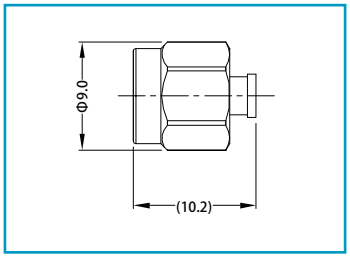
Connector Type, two sides independent
SM = SMA Male
SMPF= SMP Female
NM = Type N Male

Connectors Information

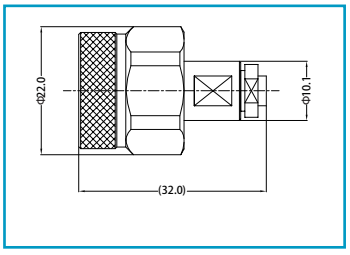
TS-C280-SM-A



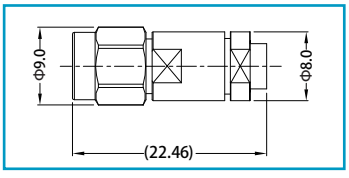
TS-C280-SM-B



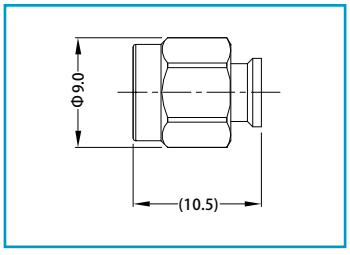
TS-C400-NM-A



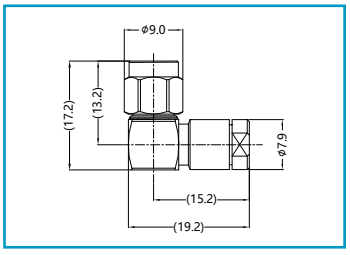
TS-C400-SM-A



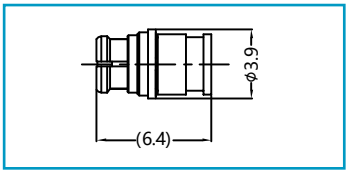
TS-C400-SM-B



ES-F350-SM-RA-A



TS-C280-SMPF-A



Type	Cable	Description	P/N	Materials	Attach Method
SMA–Male	FSC–280	TS–C280–SM–A	01–MS037	Stainless Steel	Soldering inner/outer conductor
SMA–Male	FSC–280	TS–C280–SM–B	01–MS038	Stainless Steel	Soldering inner/outer conductor
SMA–Male	FSC–400	TS–C400–SM–A	01–MS042	Stainless Steel	Soldering inner/outer conductor
SMA–Male	FSC–400	TS–C400–SM–B	01–MS043	Stainless Steel	Soldering inner/outer conductor
SMA–Male–RA	FSC–400	ES–F350–SM–RA–A	01–MR021	Stainless Steel	Spring Finger inner contact Soldering outer conductor
SMP–Female	FSC–280	TS–C280–SMPF–A	07–FS001	Beryllium copper	Soldering inner/outer conductor
N–Male	FSC–400	TS–C400–NM–A	02–MS039	Stainless Steel	Soldering inner/outer conductor

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