F Series

Specification

F TYPE Technical Specification

F connectors were designed as a low cost method of coupling coaxial cables and equipment used in TV, MTV, and safelite communication applications. They have threaded coupling interfaces and the plug utilises the center contacts of the cable rather than a separately applied pin. They are designed for low frequency transmissions (typically video) up to 2GHz.

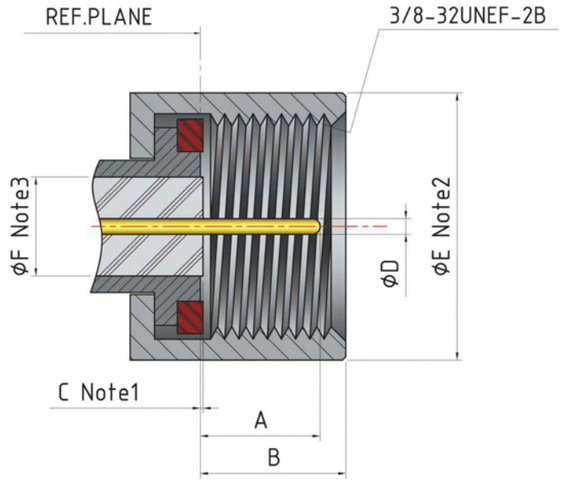





Features

- Interface according to IEC 169-24

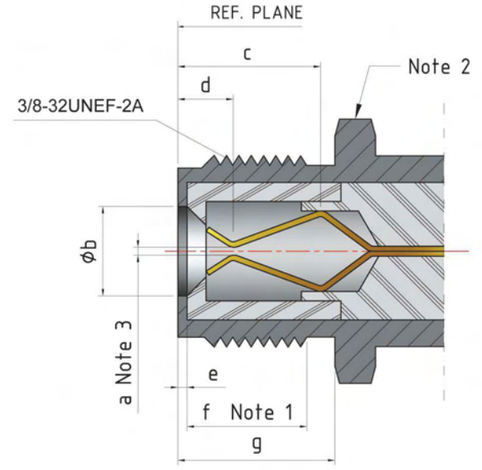
Interface Mating Dimensions



Note :
1.Protrusion of dielectric beyond reference plane is applicable to only the 0.146 in nominal dielectric core diameter cables. When larger core diameter cables are used, no protrusion of the dielectric beyond the reference plane is permitted.

2.Shape of coupling nut is optional; however, provision for wrench tighting should be made. For example, wrench flats.

3.Applicable to only the 0.146 in nominal dielectric core diameter cables. The 3.8mm maximum diameter is not applicable when larger core diameter cables are used.



Note :
1.Lenght of full thread.
2.Shape of connector body is optional; however, provision for wrench tightening should be made. For example, wrench flats.

3.Socket contact shall accept a pin contact of 0.51 mm to 1.63 mm (0.20 in to 0.64 in); this shall be satisfied at dimension " d ".

PLUG

Letter	Milimeters (inches)	
	Minimum	Maximum
A	4.95(.195)	6.86(.270)
B	–	7.29(.287)
C	–	0.25(.010)
D	0.51(.020)	1.63(.024)
E	–	12.95(.510)
F	–	3.80(.149)

JACK

Letter	Milimeters (inches)	
	Minimum	Maximum
a	See Note 3	
b	3.86(.152)	–
c	7.00(.295)	–
d	–	4.70(.185)
e	0.30(.012)	–
f	5.56(.219)	–
g	7.59(.299)	–

Electrical

Impedance	75Ω
Frequency Range	0 to 4 GHz
VSWR	≦1.2
RF Leakage	≧100 dB
Dielectric Withstanding Voltage	1500 V rms
Voltage Rating	500 V rms (depending on cable)
Center Contact Resistance	≦10 mΩ
Outer Contact Resistance	≦1 mΩ
Insulation Resistance	≧5 GΩ

Mechanical

Mating	3/8-32 UNEF Screw-on Coupling
Connector Durability	≧500 Cycles (for beryllium copper female contact only)
Recommended Mating Torque	0.38 lbs ~ 0.51 lbs
Coupling Nut Retention Force	1.5 lbs
Cable Retention Force	≧20 lbs

Environmental

Temperature Range	-40° C to 60° C
Corrosion (Salt Spray)	IEC61169-1, Sub clause9.4.6
Vibration	IEC61169-1, Sub clause9.3.3
Thermal Shock	IEC61169-1, Sub clause9.4.4
Mechanical Shock	IEC61169-1, Sub clause9.3.14

Material

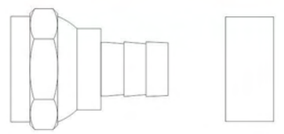
Parts Name	Material	Plating
Body	Brass	Nickel
Center Contact	Male : Brass Female :Phosphor Bronze	Gold or Tin
Ferrule	Brass	Nickel
Insulator	Delrin, Polypropylene, PTFE	
Nut	Brass or Steel	Nickel
Washer	Brass or Steel	Nickel

Note: Other Material/Finish is Available on Request.

Crimp Termination for Flexible Cable

F Straight Crimp Plug

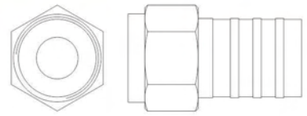
F101



Hand Tool	Nil
Cable	RG6/U, 59/U, 3C-2V
Cable Assembly Instruction	See Appendix A

F Straight Plug Attached Grip Ring

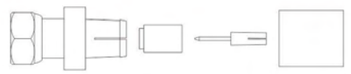
F105



Hand Tool	Nil
Cable	RG6U, 59/U
Cable Assembly Instruction	See Appendix A

F Straight Crimp Plug

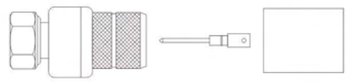
F108



Hand Tool	See Appendix B
Cable	7C-2V
Cable Assembly Instruction	See Appendix A

F Straight Crimp Plug

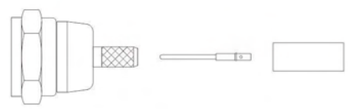
F130



Hand Tool	See Appendix B
Cable	RG11, 12
Cable Assembly Instruction	See Appendix A

F Straight Crimp Plug

F112



Hand Tool	See Appendix B
Cable	RG179/U
Cable Assembly Instruction	See Appendix A Code E