

N Connectors

Product Facts

- Threaded coupling mechanism to provide a rigid coaxial interconnection
- Broad product family of cable mounted, elbow, bulkhead, panel mounted connectors and adaptors
- Broadband performance - low VSWR
- Teflon dielectric for improved electrical performance
- Silver or Nickel finish provides for design flexibility
- Fully intermateable with MIL-C-39012, IEC 169-16 and CECC 22 210 connectors

The Greenpar N Connector featuring a 5/8 - 24 threaded coupling for optimum stability is highly suited for critical applications and environments. This medium sized connector can withstand shock and vibration to assure a low noise level and has a constant impedance of 50 Ohms.

It also features a captive centre contact and provides excellent performance at frequencies up to 11 Ghz, with voltages to 1000 volts rms.

This Greenpar connector offers the added benefits of low overall applied cost with a labour-saving two-crimp assembly. The contact is simply crimped to the cables centre conductor, then both braid and cable support are simultaneously crimped to complete the termination.

N Series Connectors are available as plug, jack, panel jack, bulkhead jack and right-angle plug configurations.

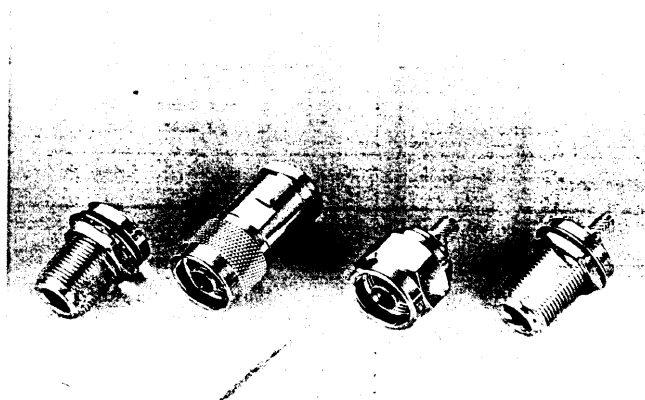


Table of Contents

Page

N Straight Plugs Crimp 50 Ohm.....	57
N Elbow Plugs Crimp 50 Ohm.....	58
N Elbow Plugs Solder 50 Ohm.....	58
N Straight Jacks Crimp 50 Ohm.....	59
N Straight Plugs Solder 50 Ohm.....	60
N Straight Jack Solder 50 Ohm.....	61
N Bulkhead Jack Crimp 50 Ohm.....	62
N Bulkhead Jack Solder 50 Ohm.....	62
N Panel Jack Crimp 50 Ohm.....	63
N Panel Jack Solder 50 Ohm.....	63
N Panel Plugs 50 Ohm.....	64
N Bulkhead Sockets 50 Ohm.....	64
N Panel Sockets 50 Ohm.....	64
N In-Series Adaptor Connectors 50 Ohm.....	65
N Plug Terminations 50 Ohm.....	66
N Plug Terminations 75 Ohm.....	66
N Plug Dust Cap and Chain.....	66
N Jack Dust Cap and Chain.....	66

Related Product Data

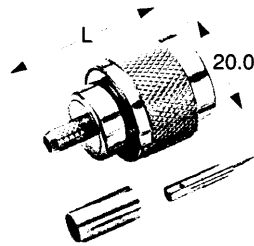
- Connector Selection - Page 4
- Method of Termination - Page 5
- Theory and Application - Page 6
- Greenpar® Connector Selection Guide - Page 7
- N Connector Specification-Page 56
- Tooling - Page 57-62
- Cable Preparation Details - Pages 112-117
- Cable Assembly Instructions - Pages 118-123
- Packaging - All connectors are packaged individually. Also available in tray & bulk. See Part N Selection Tables

N Connector Specification

N 50 Ohm

Characteristics	Hex Crimp 50 Ohm	Solder Crimp 50 Ohm	Solder Clamp 50 Ohm
Electrical			
Impedance, Nom (ohms)	50	50	50
Working Voltage (Volts RMS)	1000 Max. at Sea Level		
Contact Resistance (Milliohms)	Centre 1.0 Max Outer 1.0 Max		
Initial Insulation Resistance (Megohms)	5000 Min		
Dielectric Withstand Voltage (VAC)	2500 RMS Max		
RF Insertion Loss Max (dB)	0.3 Max. at 4 GHz		
Frequency Range (GHz)	0 to 11.0		
VSWR in Frequency Range @ 4 GHz	Straight 1.30 Max Right Angle 1.50 Max		
Mechanical			
Mating Style	5/8" - 24 Threaded Coupling		
Coupling Nut Retention Min. (N)	445 Min		
Cable Retention (N)	RG158/141/142/223-170N RG59/62A/210-170N RG174/188/316-85N RG8A/9B/213/214-350N		
Durability (Cycles)	500 Matings		
Environmental			
Temperature Range Operating (°C)	-65°C to 165°C		
Vibration	MIL-STD-202 Method 204 Test Cond. B		
Salt Spray	MIL-STD-202 Method 101 Test Cond. B		
Thermal Shock	MIL-STD-202 Method 107 Test Cond. B		
Material			
Connector Body	Brass		
Connector Body Plating	Nickel or Silver		
Centre Contact Male	Brass		
Centre Contact Male Plating	Gold or Silver		
Centre Contact Female	Brass, Phosphor Bronze or Beryllium Copper		
Centre Contact Female Plating	Gold or Silver		
Insulation	Teflon		
Gasket	Silicon Rubber - White		
Crimp Ferrule	Annealed Copper		
Crimp Ferrule Plating	As Per Body Plating		

N Straight Plugs Crimp 50 Ohm

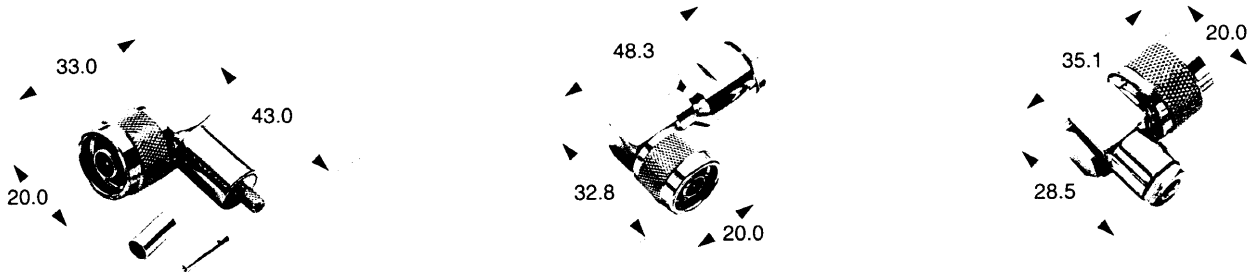


N Straight Plugs Crimp 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG58C/U, 141A/U, URM43, 76	Hex Crimp	Silver	Silver	Teflon	1-1337416-0	31.0	9-1478240-0	9-1478242-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337631-0	31.0	9-1478240-0	9-1478242-0	
RG55B/U, RG142B/U, RG223/U, RG400/U	Hex Crimp	Silver	Silver	Teflon	1-1478180-0	31.0	9-1478240-0	9-1478242-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1478181-0	31.0	9-1478240-0	9-1478242-0	
PSF 1/4M, RG8A/U, 213/U URM67	Hex Crimp	Silver	Silver	Teflon	1-1337410-0	31.0	9-1478239-0	- ¹	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337629-0	31.0	9-1478239-0	- ¹	
RG9B/U, 214/U, URM91,	Hex Crimp	Silver	Silver	Teflon	1-1337415-0	31.0	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337630-0	31.0	9-1478240-0	9-1478246-0	
BELDEN 9880	Hex Crimp	Silver	Silver	Teflon	1-1478184-0	31.0	9-1478239-0	- ¹	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1478185-0	31.0	9-1478239-0	- ¹	
BELDEN 9913	Hex Crimp	Silver	Silver	Teflon	1-1478182-0	31.0	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1478183-0	31.0	9-1478240-0	9-1478246-0	

¹Coaxial Hex Crimp Hand Tool Includes Die Set
²Preferred Part
 CSO-Consult Sales Office

N Elbow Plugs Crimp 50 Ohm



N Elbow Plugs Crimp 50 Ohm

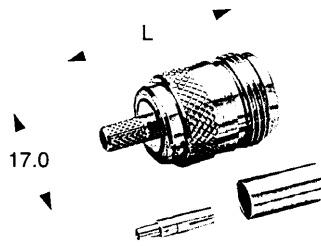
Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG58C/U, 141A/U, URM43, 76 BELDEN 9907	Hex Crimp	Silver	Silver	Teflon	1-1337413-0	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337627-0	9-1478240-0	9-1478246-0	
RG55B/U, RG142B/U, RG223/U, RG400/U	Hex Crimp	Silver	Silver	Teflon	CSO	-	-	-
	Hex Crimp	Gold	Nickel	Teflon	CSO	-	-	
PSF 1/4M, RG8A/U, 213/U URM67	Hex Crimp	Silver	Silver	Teflon	1-1337412-0	9-1478239-0	- ¹	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337626-0	9-1478239-0	- ¹	
RG9B/U, 214/U, URM91	Hex Crimp	Silver	Silver	Teflon	1-1478214-0	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337628-0	9-1478240-0	9-1478246-0	

N Elbow Plugs Solder 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	CSO	-
	Solder/Clamp	Gold	Nickel	Teflon	CSO	
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	CSO	-
	Solder/Clamp	Gold	Nickel	Teflon	CSO	
RG55B/U RG142B/U, RG223/U RG400/U	Solder/Clamp	Silver	Silver	Teflon	CSO	-
	Solder/Clamp	Gold	Nickel	Teflon	CSO	
PSF 1/4M, RG8A/U, 213/U, URM67	Solder/Clamp	Silver	Silver	Teflon	1-1478208-0	411-3254
	Solder/Clamp	Gold	Nickel	Teflon	CSO	
RG9B/U, 214/U, URM91	Solder/Clamp	Silver	Silver	Teflon	CSO	-
	Solder/Clamp	Gold	Nickel	Teflon	CSO	

¹CoAxial Hex Crimp Hand Tool Includes Die Set
Preferred Part
CSO-Consult Sales Office

N Type Straight Jacks Crimp 50 Ohm

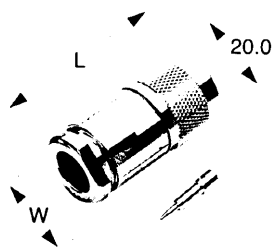


N Straight Jacks Crimp 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG58C/U, 141A/U, URM43, 76	Hex Crimp	Silver	Silver	Teflon	cso	30.1	9-1478240-0	9-1478242-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337633-0	30.1	9-1478240-0	9-1478242-0	
RG55B/U, RG142B/U, RG223/U, RG400/U	Hex Crimp	Silver	Silver	Teflon	cso	30.1	-	-	-
	Hex Crimp	Gold	Nickel	Teflon	cso	30.1	-	-	
PSF 1/4M, RG8A/U, 213/U URM67	Hex Crimp	Silver	Silver	Teflon	1-1337414-0	30.1	9-1478239-0	- ¹	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337632-0	30.1	9-1478239-0	- ¹	
RG9B/U, 214/U, URM91	Hex Crimp	Silver	Silver	Teflon	cso	30.1	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	1-1337634-0	30.1	9-1478240-0	9-1478246-0	

¹ CoAxial Hex Crimp Hand Tool Includes Die Set
Preferred Part
CSO-Consult Sales Office

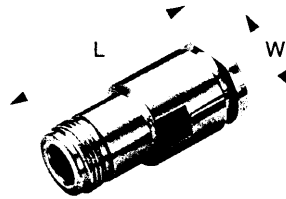
N Straight Plug Solder 50 Ohm



N Straight Plug Solder 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Dim. W	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	cso	33.8	11.0	
	Solder/Clamp	Gold	Nickel	Teflon	cso	33.8	11.0	
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	1-1337409-0	33.8	11.0	411-3252
	Solder/Clamp	Silver	Nickel	Teflon	1-1337407-0	33.8	11.0	
	Solder/Clamp	Gold	Nickel	Teflon	1-1337408-0	33.8	11.0	
RG55B/U, RG124B/U, RG223/U, RG400/U	Solder/Clamp	Silver	Silver	Teflon	1-1478186-0	33.8	11.0	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1478187-0	33.8	11.0	
PSF 1/4M, RG8A/U, 213/U, URM67	Solder/Clamp	Silver	Silver	Teflon	1-1337402-0	39.2	19.0	411-3252
	Solder/Clamp	Silver	Nickel	Teflon	1-1337401-0	39.2	19.0	
	Solder/Clamp	Gold	Nickel	Teflon	1-1337400-0	39.2	19.0	
RG9B/U, 214/U, URM91	Solder/Clamp	Silver	Silver	Teflon	1-1337404-0	39.2	19.0	411-3252
	Solder/Clamp	Silver	Nickel	Teflon	cso	39.2	19.0	
	Solder/Clamp	Gold	Nickel	Teflon	1-1337403-0	39.2	19.0	

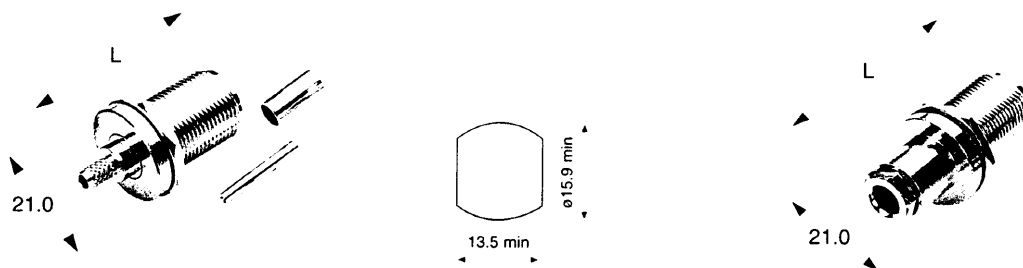
N Straight Jack Solder 50 Ohm



N Straight Jack Solder 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Dim. W	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	cso	34.0	11.0	-
	Solder/Clamp	Gold	Nickel	Teflon	cso	34.0	11.0	
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	cso	34.0	11.0	411-3255
	Solder/Clamp	Gold	Nickel	Teflon	1-1337636-0	34.0	11.0	
RG55B/U, RG124B/U, RG223/U, RG400/U	Solder/Clamp	Silver	Silver	Teflon	cso	34.0	11.0	-
	Solder/Clamp	Gold	Nickel	Teflon	cso	34.0	11.0	
PSF 1/4M, RG8A/U, 213/U, URM67	Solder/Clamp	Silver	Silver	Teflon	1-1337406-0	46.5	19.0	411-3256
	Solder/Clamp	Silver	Nickel	Teflon	1-1337405-0	46.5	19.0	
	Solder/Clamp	Gold	Nickel	Teflon	cso	46.5	19.0	
RG9B/U, 214/U, URM91	Solder/Clamp	Silver	Silver	Teflon	cso	46.5	19.0	411-3256
	Solder/Clamp	Silver	Nickel	Teflon	cso	46.5	19.0	
	Solder/Clamp	Gold	Nickel	Teflon	1-1337637-0	46.5	19.0	

N Bulkhead Jack 50 Ohm



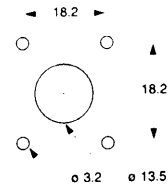
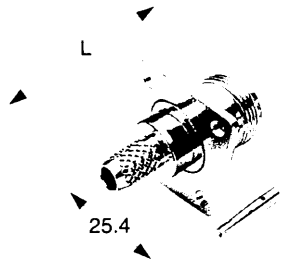
N Bulkhead Jack Crimp 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG58C/U, 141A/U, URM43, 76	Hex Crimp	Silver	Silver	Teflon	1-1337625-0	37.4	9-1478240-0	9-1478242-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	cso	37.4	9-1478240-0	9-1478242-0	
RG55B/U, RG142B/U, RG223/U, RG400/U	Hex Crimp	Silver	Silver	Teflon	cso	37.4	-	-	-
	Hex Crimp	Gold	Nickel	Teflon	cso	37.4	-	-	
PSF 1/4M, RG8A/U, 213/U, URM67	Hex Crimp	Silver	Silver	Teflon	1-1478213-0	37.4	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	cso	37.4	9-1478240-0	9-1478246-0	
RG9B/U, 214/U, URM91	Hex Crimp	Silver	Silver	Teflon	1-1478211-0	37.4	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	cso	37.4	9-1478240-0	9-1478246-0	

N Bulkhead Jack Solder 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	cso	42.8	-	-	-
	Solder/Clamp	Gold	Nickel	Teflon	cso	42.8	-	-	
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	1-1478224-0	42.8	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1337640-0	42.8	-	-	
RG55B/U, RG124B/U, RG223/U, RG400/U	Solder/Clamp	Silver	Silver	Teflon	1-1478188-0	42.8	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1478189-0	42.8	-	-	
PSF 1/4M, RG8A/U, 213/U, URM67	Solder/Clamp	Silver	Silver	Teflon	cso	44.7	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1337642-0	44.7	-	-	
RG9B/U, 214/U, URM91	Solder/Clamp	Silver	Silver	Teflon	cso	44.7	-	-	411-3252
	Solder/Clamp	Gold	Nickel	Teflon	1-1337641-0	44.7	-	-	

N Panel Jack 50 Ohm

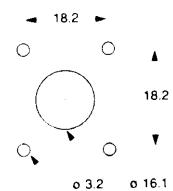
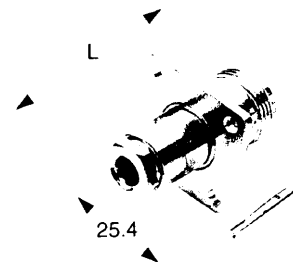


N Panel Jacks Crimp 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Hand Tool Part No.	Interchangeable Die set	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Hex Crimp	Silver	Silver	Teflon	cs0	30.0	-	-	-
	Hex Crimp	Gold	Nickel	Teflon	cs0	30.0	-	-	-
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Hex Crimp	Silver	Silver	Teflon	1-1478212-0	30.0	9-1478240-0	9-1478242-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	cs0	30.0	9-1478240-0	9-1478242-0	-
RG55B/U, RG142B/U, RG223/U, RG400/U	Hex Crimp	Silver	Silver	Teflon	cs0	30.0	-	-	-
	Hex Crimp	Gold	Nickel	Teflon	cs0	30.0	-	-	-
PSF 1/4M, RG8A/U, 213/U, URM67	Hex Crimp	Silver	Silver	Teflon	1-1478210-0	30.0	9-1478240-0	9-1478246-0	411-3247
	Hex Crimp	Gold	Nickel	Teflon	cs0	30.0	9-1478240-0	9-1478246-0	-
RG9B/U, 214/U, URM91	Hex Crimp	Silver	Silver	Teflon	cs0	30.0	-	-	-
	Hex Crimp	Gold	Nickel	Teflon	cs0	30.0	-	-	-

N Panel Jacks Solder 50 Ohm

Connector Cable Range	Termination Type	Centre Contact Plating	Body Plating	Dielectric	Part No.	Dim. L	Assembly Instruction
RG174A/U, 188A/U, 316/U, URM95	Solder/Clamp	Silver	Silver	Teflon	cs0	36.0	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	36.0	-
RG58C/U, 141A/U, URM43, 76, BELDEN 9907	Solder/Clamp	Silver	Silver	Teflon	1-1478192-0	36.0	411-3254
	Solder/Clamp	Gold	Nickel	Teflon	1-1478193-0	36.0	-
RG55B/U, RG142B/U, RG223/U, RG400/U	Solder/Clamp	Silver	Silver	Teflon	1-1478190-0	36.0	411-3254
	Solder/Clamp	Gold	Nickel	Teflon	1-1478191-0	36.0	-
PSF 1/4M, RG8A/U, 213/U, URM67	Solder/Clamp	Silver	Silver	Teflon	cs0	36.0	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	36.0	-
RG9B/U, 214/U, URM91	Solder/Clamp	Silver	Silver	Teflon	cs0	36.0	-
	Solder/Clamp	Gold	Nickel	Teflon	cs0	36.0	-

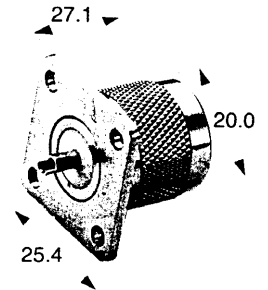
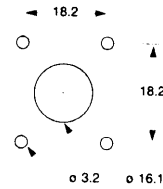


Preferred Part
CSO-Consult Sales Office

N Type Receptacles

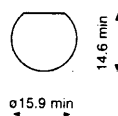
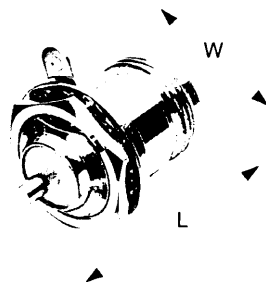
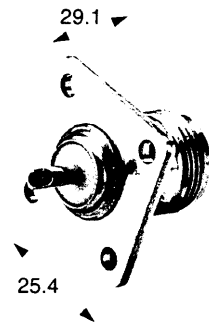
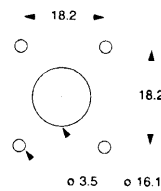
N Panel Plugs 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	1-1478178-0
Gold	Nickel	Teflon	1-1478179-0



N Panel Sockets 50 Ohm

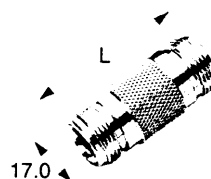
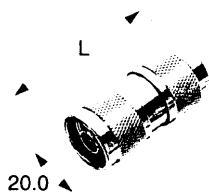
Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	1-1337418-0
Gold	Nickel	Teflon	CSO



N Bulkhead Sockets 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dimensions		Part Number		Maximum Panel Thickness
			L	W	Without Solder Tag	With Solder Tag	
Silver	Silver	Teflon	30.5	19.0	CSO	1-1337417-0	3.0
Gold	Nickel	Teflon	30.5	19.0	CSO	CSO	3.0
Silver	Nickel	Teflon	30.5	19.0	CSO	CSO	3.0

N Type Adaptors



N Straight Adaptors Plug 50 Ohm

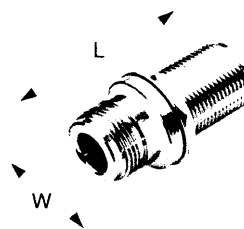
Centre Contact Plating	Body Plating	Dielectric	Dim.L.	Part Number
Silver	Silver	Teflon	40.8	cso
Gold	Nickel	Teflon	40.8	1-1337635-0

N Straight Adaptors Jack 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dim.L.	Part Number
Silver	Silver	Teflon	36.5	cso
Gold	Nickel	Teflon	36.5	1-1337624-0

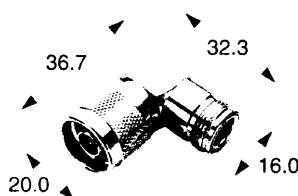
N Bulkhead Adaptors Jack 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dim.L.	Dim.W	Part Number
Silver	Silver	Teflon	-	-	cso
Gold	Nickel	Teflon	-	-	cso



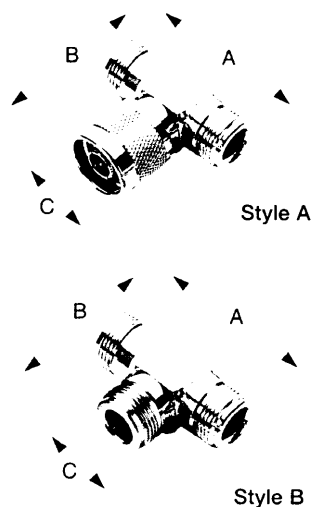
N Elbow Adaptors Plug Jack 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Part Number
Silver	Silver	Teflon	cso
Gold	Nickel	Teflon	cso



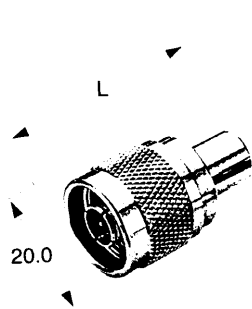
N T-Adaptors 50 Ohm

Style	Centre Contact Plating	Body Plating	Dielectric	Dimensions			Part Number
				A	B	C	
A	Silver	Silver	Teflon	40.0	36.7	20.0	1-1478220-0
	Gold	Nickel	Teflon	40.0	36.7	20.0	1-1478176-0
B	Silver	Silver	Teflon	40.0	32.2	20.0	1-1478219-0
	Gold	Nickel	Teflon	40.0	32.2	20.0	1-1478177-0



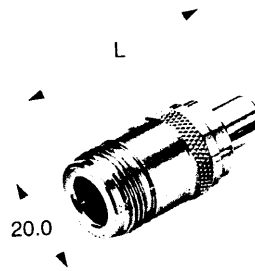
Preferred Part
CSO-Consult Sales Office

N Type Accessories



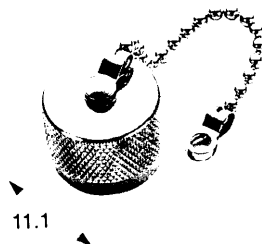
N Plug Terminations 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dim.L.	Part Number
Silver	Silver	Teflon	32.3	CSO
Gold	Nickel	Teflon	32.3	1-1337638-0



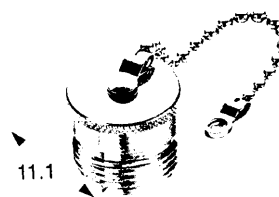
N Jack Terminations 50 Ohm

Centre Contact Plating	Body Plating	Dielectric	Dim.L.	Part Number
Silver	Silver	Teflon	33.3	CSO
Gold	Nickel	Teflon	33.3	CSO



N Plug Dust Cap & Chain

Body Plating	Part Number
Silver	1-1478230-0
Nickel	1-1337639-0



N Jack Dust Cap & Chain

Body Plating	Part Number
Silver	CSO
Nickel	1-1478229-0