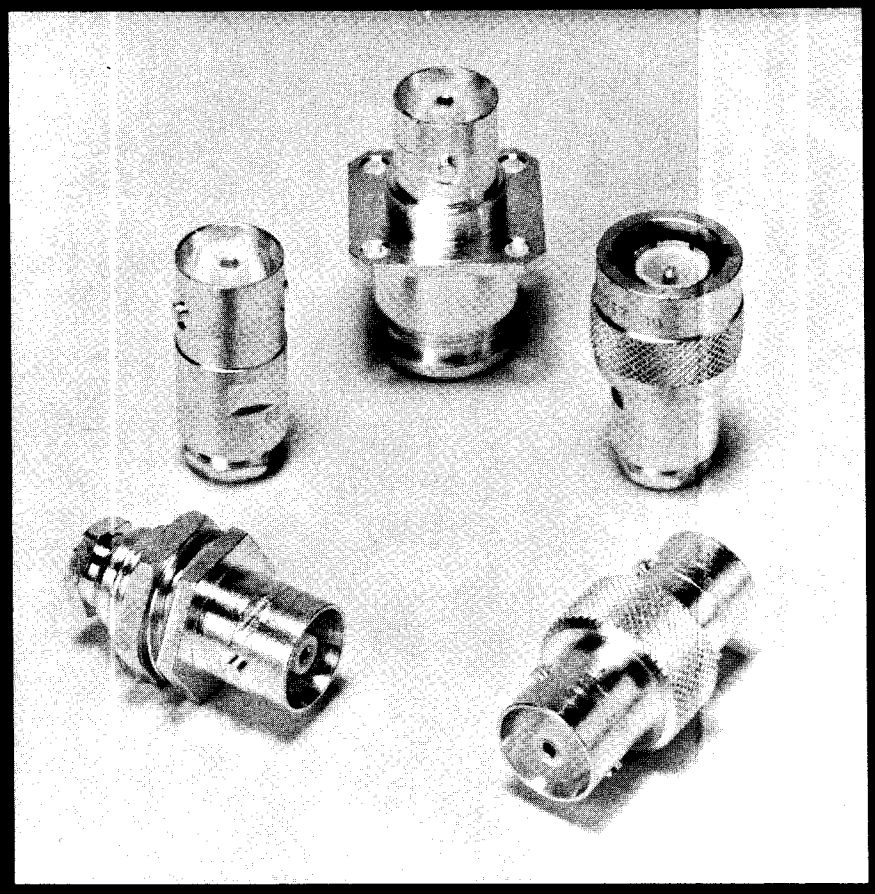
Series C



Introduction

The Greenpar series C coaxial connectors are bayonet-coupled connectors designed for full interchangeability with those made to U.S. Military Specification MIL-C-39012.

They are available in both 50- and 75-ohm impedance versions, and may be used with an extensive range of coaxial cables including British Uniradio and American RG types.

The 50-ohm range is not intermateable with the 75-ohm range

Performance

VSWR (typical) : 1.05 up to 4GHz
Working voltage : 1000V peak
Voltage proof : 2500V peak
Temperature range : -55 to +150°C

Contents

	Page
50- and 75-ohm series C	
Plugs	77
Bulkhead jacks and jacks	78
Panel jacks and bulkhead sockets	79
Panel sockets, bulkhead plugs and panel plugs	80
Adaptors	81
Protective caps	82
Assembly instructions	83-87

Fig. 1. Improved MIL style braid clamp, non captive centre contact

1. Place clamp nut, flat washer (when provided) and V-groove gasket over cable. Note that groove in gasket is towards free end of cable.
2. Trim outer sheath from cable, to dimension shown.
3. Fit braid clamp over braid so that internal shoulder butts against end of outer sheath.
4. Fold braid back over clamp, avoiding crossed wires. Trim off surplus braid as shown.
5. Trim dielectric to dimension shown, and check conductor length is as specified.
6. Tin centre conductor.
7. Mount contact (male for plugs; female for jacks) over centre conductor to butt against face of dielectric.
8. Hold cable and contact firmly together, and solder.
9. Slide V-groove gasket, flat washer (if applicable) and clamp nut up to braid clamp. Ensure V-groove gasket seats on clamp.
10. Engage clamp nut in body.
11. Holding body and cable rigid, tighten clamp nut to shear V-groove gasket.

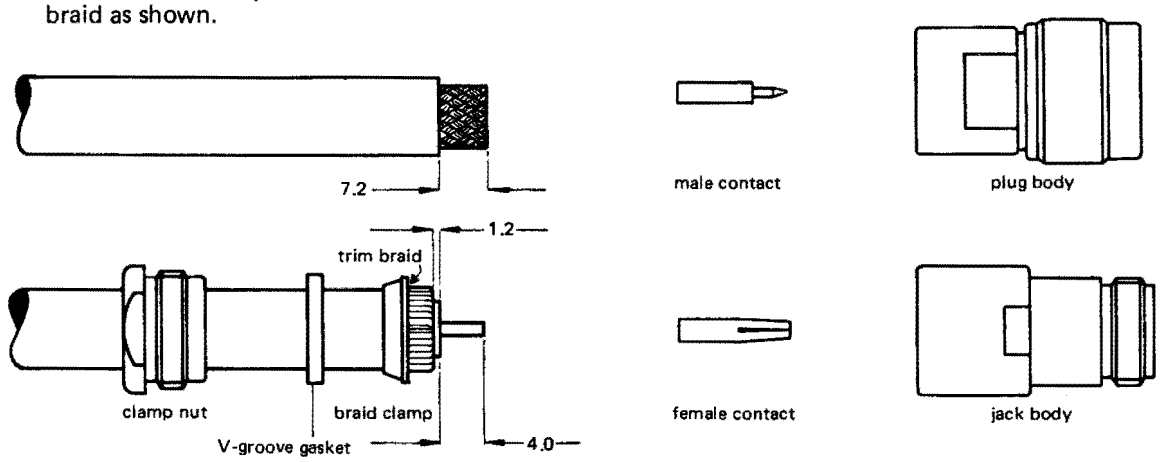


Fig. 2. Improved MIL style braid clamp, non captive centre contact

1. Place clamp nut, flat washer (when provided) and V-groove gasket over cable. Note that groove in gasket is towards free end of cable.
2. Trim outer sheath from cable, to dimension shown.
3. Fit braid clamp over braid so that internal shoulder butts against end of outer sheath.
4. Fold braid back over clamp, avoiding crossed wires. Trim off surplus braid as shown.
5. Trim dielectric to dimension shown, and check conductor length is as specified.
6. Tin centre conductor.
7. Mount contact over centre conductor to butt against face of dielectric.
8. Hold cable and contact firmly together, and solder.
9. Slide V-groove gasket and clamp nut up to braid clamp.
10. Press sub-assembly into body as far as possible.
11. Engage clamp nut in body.
12. Holding body and cable rigid, tighten clamp nut to shear V-groove gasket.

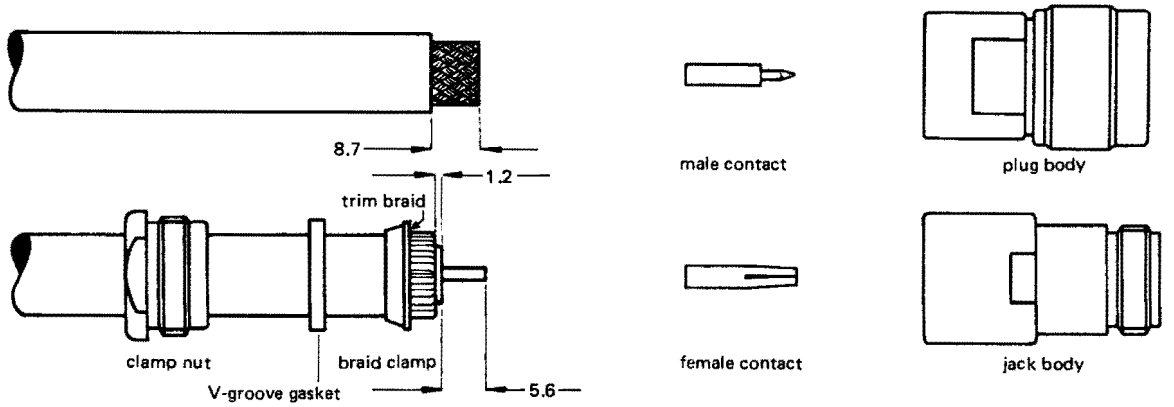


Fig. 3. Improved MIL-style braid clamp, captive centre contact

1. Place clamp nut, flat washer (when provided) and V-groove gasket over cable. Note that groove in gasket is towards free end of cable.
2. Trim outer sheath from cable to dimension shown
3. Fit braid clamp over braid so that internal shoulder butts against end of outer sheath.
4. Fold braid back over clamp, avoiding crossed wires.
5. Trim off surplus braid as shown.
6. Trim dielectric to dimension shown, and check conductor length is as specified.
7. Tin centre conductor.
8. Slide holding washer and rear insulator over dielectric to butt against braid.
9. Mount contact (male for plugs: female for jacks) over centre conductor with shoulder pressed against rear insulator.
10. Hold cable and contact firmly together, and solder.
11. Slide V-groove gasket, flat washer (when provided) and clamp nut up to braid clamp. Ensure V-groove gasket seats on clamp.
12. Fit front insulator over contact to butt against rear insulator.
13. Press sub-assembly into body as far as possible, and engage clamp nut.
14. Holding body and cable rigid, tighten clamp nut to shear V-groove gasket.

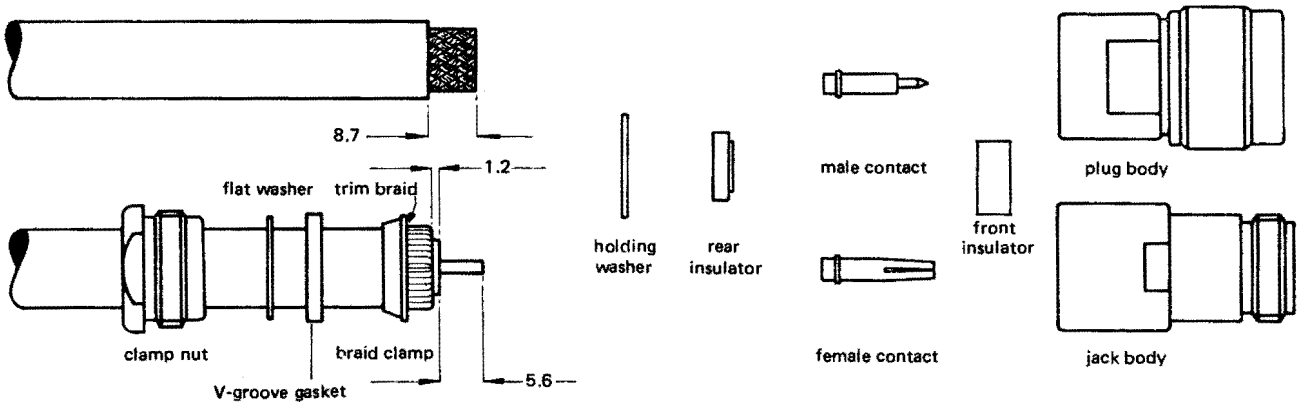
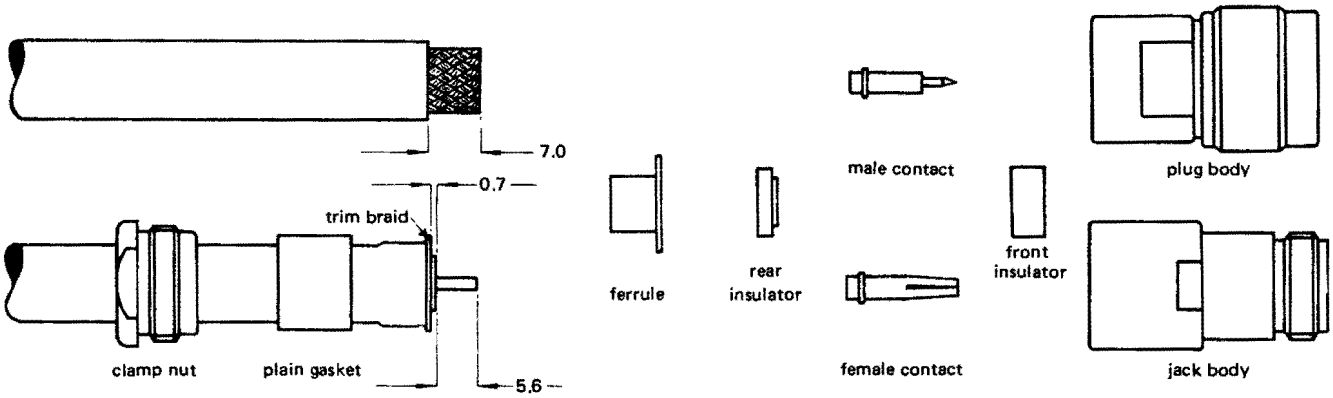
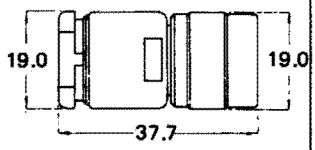
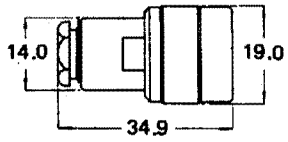
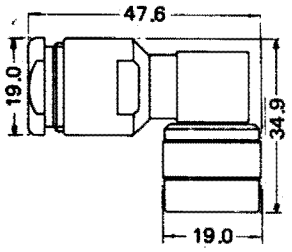
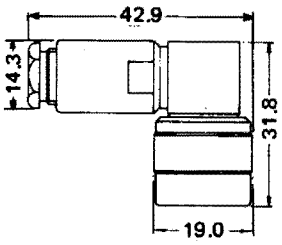


Fig. 4. Pressure sleeve cable clamp, captive centre contact

1. Place clamp nut and plain gasket over cable.
2. Trim outer sheath from cable to dimension shown.
3. Fold back braid and insert ferrule to trap braid between outer sheath and ferrule.
4. Trim off surplus braid as shown.
5. Trim dielectric to dimension shown, and check that exposed centre conductor length is as specified.
6. Tin centre conductor.
7. Slide rear insulator over dielectric to butt against ferrule.
8. Mount contact (male for plugs; female for jacks) over centre conductor with shoulder pressed against rear insulator.
9. Hold cable and contact firmly together, and solder.
10. Slide plain gasket and clamp nut up to ferrule, trapping braid.
11. Fit front insulator over contact to butt against rear insulator.
12. Press sub-assembly into body as far as possible, and engage clamp nut.
13. Holding body and cable rigid, tighten clamp nut to compress plain gasket and retain cable.



PLUGS

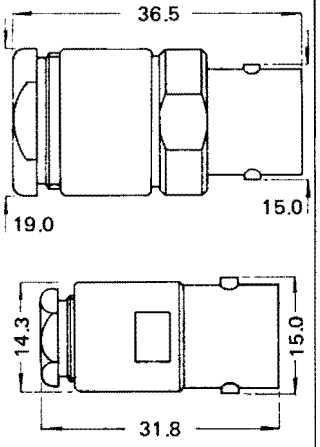
Connector outline	Dim. A	Dim. B	Assy. data Fig.	Greenpar Eng. No. 50 ohm	Greenpar Eng. No. 75 ohm	Cable clamp	Cable groups 1 4 6 7 10 12 25 27 30 52 60 62 73 79 107
PLUGS							
			1	25019		–	
			3	25019		A	
			4	25019		C	
			1		27519	–	
			3		27519	A	
			4		27519	C	
			5	25003		–	
			6	25003		A	
			7	25003		C	
			6 or 5		27503	A or –	
			7		27503	C	
ELBOW PLUGS							
			2	25013		–	
			3	25013		A	
			4	25013		C	
			2		27513	–	
			3		27513	A	
			4		27513	C	
			6	25020		A	
			7	25020		C	
			6		27520	A	
			7		27520	C	

ORDERING INFORMATION

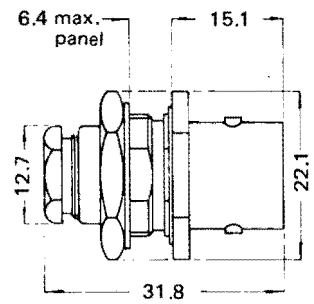
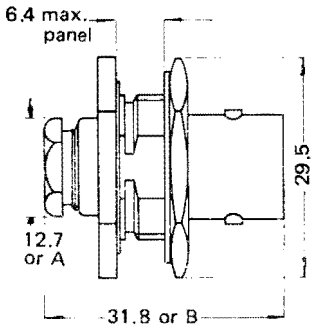
To order, please specify GREENPAR ENGINEERING No., CABLE CLAMP and CABLE GROUP. e.g. GE 27520C12.

50 and 75 ohm series C

JACKS AND BULKHEAD JACKS

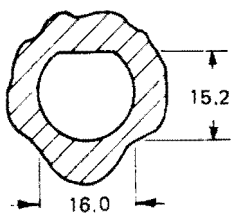
Connector outline	Dim. A	Dim. B	Assy. data Fig.	Greenpar Eng. No. 50 ohm	Greenpar Eng. No. 75 ohm	Cable clamp	Cable groups 1 4 6 7 10 12 25 27 30 52 60 62 73 79 107
JACKS							
			1	25017		–	
			3	25017		A	
			4	25017		C	
			1		27517	–	
			3		27517	A	
			4		27517	C	
			5	25022		–	
			6	25022		A	
			7	25022		C	
			5		27522	–	
			6		27522	A	
			7		27522	C	

ORDERING INFORMATION
To order, please specify GREENPAR ENGINEERING No., CABLE CLAMP and CABLE GROUP. e.g. GE 27522C12.

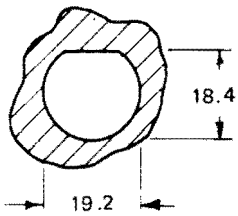
Connector outline	Dim. A	Dim. B	Assy. data Fig.	Greenpar Eng. No. 50 ohm	Greenpar Eng. No. 75 ohm	Cable clamp	Cable groups 1 4 6 7 10 12 25 27 30 52 60 62 73 79 107
BULKHEAD JACKS							
			5	25070		–	
			6	25070		A	
			7	25070		C	
			6		27570	A	
			7		27570	C	
		19 0 36.8	6	25071		A	
			7	25071		C	
			6		27571	A	
			7		27571	C	
			1	25031		–	
			3	25031		A	
			4	25031		C	
			3		27531	A	
			4		27531	C	

ORDERING INFORMATION
To order, please specify GREENPAR ENGINEERING No., CABLE CLAMP and CABLE GROUP. e.g. GE 27531C1.

PANEL PIERCING



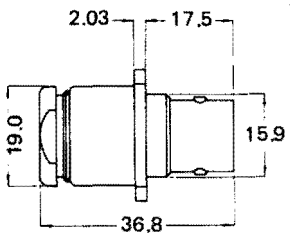
GE 25070 and 27570

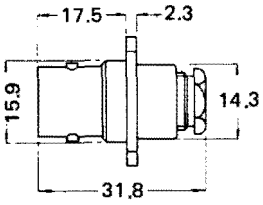


GE 25071, 27571, 25031, 27531.

PANEL JACKS AND BULKHEAD SOCKETS

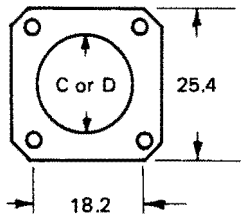
PANEL JACKS





Connector outline	Dim. A	Dim. B	Assy. data Fig.	Greenpar Eng. No. 50-ohm	Greenpar Eng. No. 75-ohm	Cable clamp
			1	25016		–
			3	25016		A
			4	25016		C
			3		27516	A
			4		27516	C
			6	25098		A
			7	25098		C
			6		27598	A
			7		27598	C

Cable groups: 1 4 6 7 10 12 25 27 30 52 60 62 73 79 107

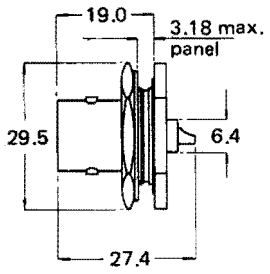


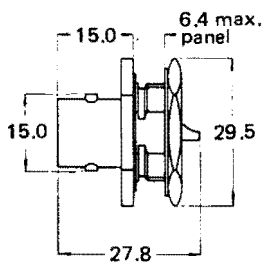
ORDERING INFORMATION
To order, please specify GREENPAR ENGINEERING No., CABLE CLAMP, CABLE GROUP and MOUNTING HOLE details. e.g. GE 27598C12H.

MOUNTING DETAILS
Dimension C: rear mounting – 16.1
Dimension D: front mounting – 19.3 or 14.5 (25098 and 27598)

MOUNTING HOLES
4 - 40 UNC – F
3.2 mm. dia. – H
6 - 32 UNC – J

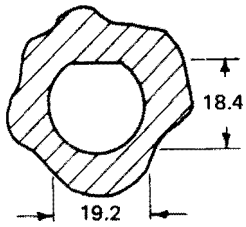
BULKHEAD SOCKETS





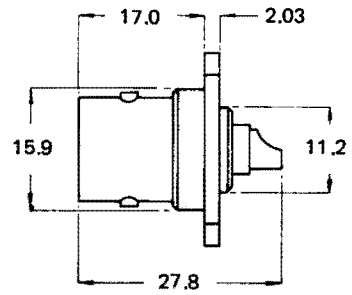
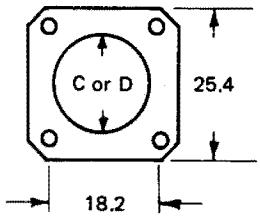
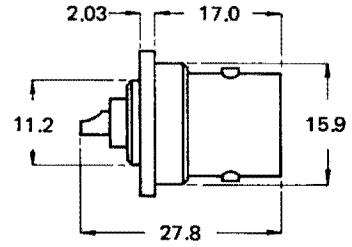
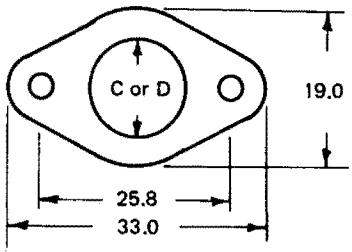
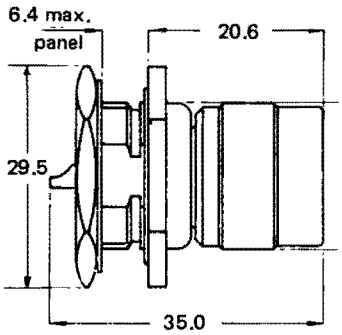
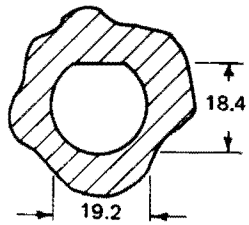
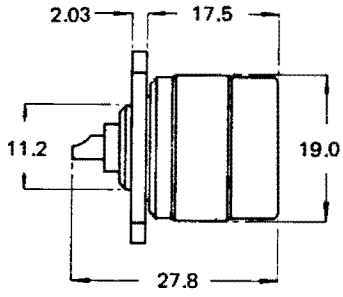
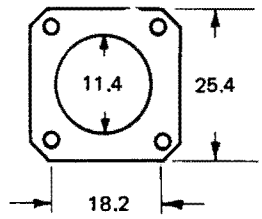
Greenpar Eng. No. 50-ohm	Greenpar Eng. No. 75-ohm
25008	27508
25087	27587

PANEL PIERCING



ORDERING INFORMATION
To order, please specify GREENPAR ENGINEERING No., only.

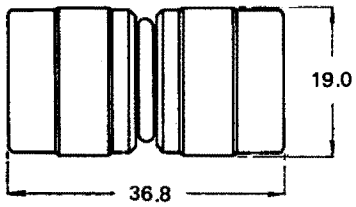
PANEL SOCKETS, BULKHEAD PLUGS, PANEL PLUGS

Connector outline	Greenpar Eng. No. 50 ohm 75 ohm	MOUNTING DETAILS	MOUNTING HOLE
PANEL SOCKETS			
	25040* 25007* 27507*		4-40 UNC – F 3.2 mm. dia. – H 6-32 UNC – J
	25025 27525		4 - 40 UNC – F 3.2 mm. dia. – H 6 - 32 UNC – J
		Dimension C: rear mounting – 16.1 Dimension D: front mounting – 11.4	
BULKHEAD PLUGS		**PANEL PIERCING**	
	25086 27586		
PANEL PLUGS		**MOUNTING DETAILS**	**MOUNTING HOLES**
	25015 27515		4 - 40 UNC – F 3.2 mm. dia. – H 6 - 32 UNC – J

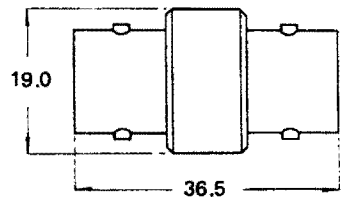
*Item
25040 has a 5.0mm. hole for conductor;
25007, a 2.3mm. hole for conductor;
and
27507, a 1.3mm. hole for conductor.

ORDERING INFORMATION
To order, please specify GREENPAR ENGINEERING No. and, where relevant, MOUNTING HOLE details. e.g. GE 25025J.

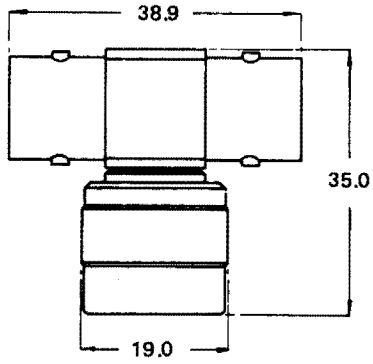
PLUG STRAIGHT ADAPTORS
50 ohm – GE 25023 75 ohm – GE 27523



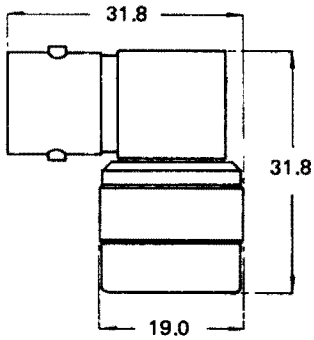
JACK STRAIGHT ADAPTORS
50 ohm – GE 25024 75 ohm – GE 27524



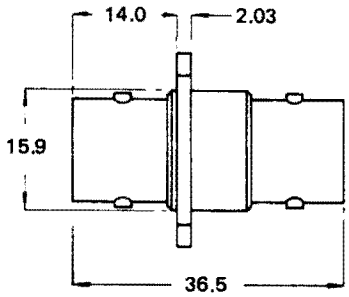
T-ADAPTORS
50 ohm – GE 25009 75 ohm – GE 27509



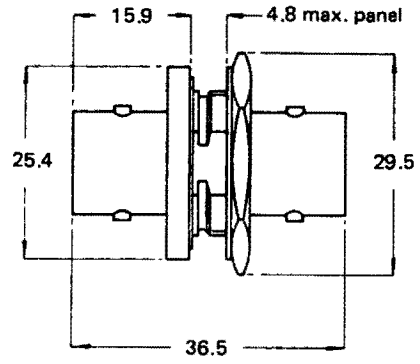
ELBOW ADAPTORS
50 ohm – GE 25010 75 ohm – GE 27510



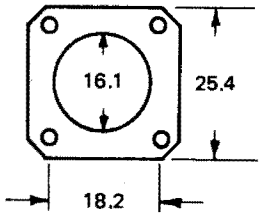
PANEL STRAIGHT ADAPTORS
50 ohm – GE25058 75 ohm – GE27558



BULKHEAD STRAIGHT ADAPTORS
50 ohm – GE 25012 75 ohm – GE 27512



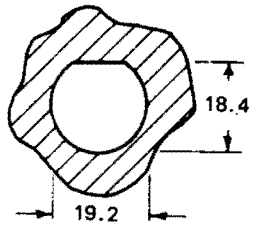
MOUNTING DETAILS



MOUNTING HOLES

4 - 40 UNC – F
3.2 mm. dia. – H
6 - 32 UNC – J

PANEL PIERCING



ORDERING INFORMATION
To order, please specify GREENPAR ENGINEERING No. and, where relevant, MOUNTING HOLE details. e.g. GE27858H.

PROTECTIVE CAPS

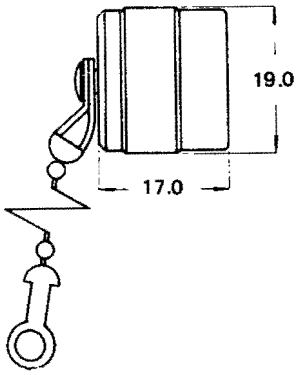
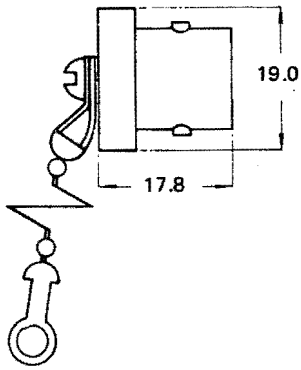
PLUG CAP AND CHAIN GE 20001	JACK CAP AND CHAIN GE 20002
	
Chain length approx. 63mm.	Chain length approx. 75mm.
ORDERING INFORMATION To order, please specify GREENPAR ENGINEERING No. only. e.g. GE 20001.	

Fig. 5. Improved MIL style braid clamp, non captive centre contact

1. Place clamp nut, flat washer and V-groove gasket over cable. Note that groove in gasket is towards free end of cable.
2. Trim outer sheath from cable to dimension shown
3. Fit braid clamp over braid so that internal shoulder butts against end of outer sheath.
4. Fold braid back over clamp, avoiding crossed wires.
5. Trim off surplus braid as shown.
6. Trim dielectric to dimension shown, and check conductor length is as specified.
7. Tin centre conductor.
8. Mount male contact over centre conductor to butt against face of dielectric.
9. Hold cable and contact firmly together, and solder.
10. Slide V-groove gasket, flat washer and clamp nut up to braid clamp. Ensure V-groove gasket seats on clamp.
11. Press sub-assembly into body as far as is possible, and engage clamp nut.
12. Holding body and cable rigid, tighten clamp nut to shear V-groove gasket.

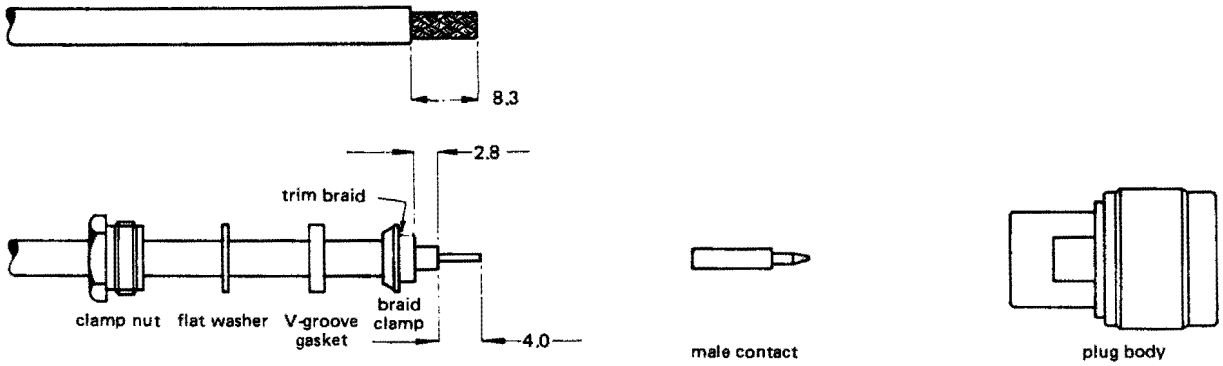


Fig. 6. Improved MIL style braid clamp, captive centre contact

1. Place clamp nut, flat washer (when provided) and V-groove gasket over cable. Note that groove in gasket is towards free end of cable.
2. Trim outer sheath from cable to dimension shown.
3. Fit braid clamp over braid so that internal shoulder butts against end of outer sheath.
4. Fold braid back over clamp, avoiding crossed wires.
5. Trim off surplus braid as shown.
6. Trim dielectric to dimension shown, and check conductor length is as specified.
7. Tin centre conductor.
8. Slide clamp bushing over dielectric to butt against braid, and fit rear insulator to butt against bushing.
9. Mount contact (male for plugs; female for jacks) over centre conductor with shoulder pressed against rear insulator.
10. Hold cable and contact firmly together, and solder.
11. Slide V-groove gasket, flat washer (when provided) and clamp nut up to braid clamp. Ensure V-groove gasket seats on clamp.
12. Fit front insulator over contact to butt against rear insulator.
13. Press sub-assembly into body as far as is possible, and engage clamp nut.
14. Holding body and cable rigid, tighten clamp nut to shear V-groove gasket.

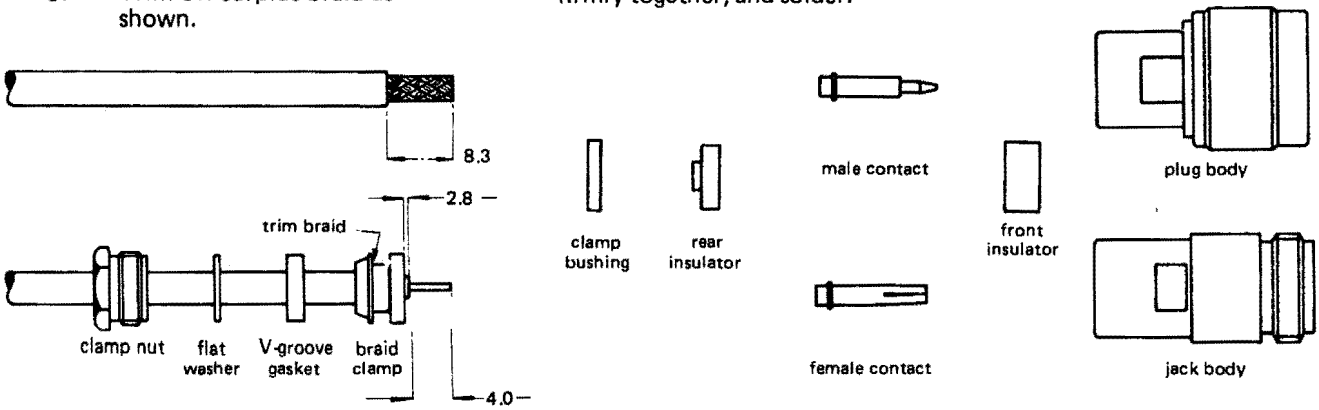


Fig. 7. Pressure sleeve cable clamp, captive centre contact

For C73 see Figure 8.

1. Place clamp nut and plain gasket over cable.
2. Trim outer sheath from cable to dimension shown.
3. Fold back braid and insert ferrule to trap braid between outer sheath and ferrule.
4. Trim off surplus braid as shown.
5. Trim dielectric to dimension shown, and check that exposed centre conductor length is as specified.
6. Tin centre conductor.
7. Slide rear insulator over dielectric to butt against ferrule.
8. Mount contact (male for plugs; female for jacks) over centre conductor with shoulder pressed against rear insulator.
9. Hold cable and contact firmly together, and solder.
10. Slide plain gasket and clamp nut up to ferrule, trapping braid.
11. Fit front insulator over contact to butt against rear insulator.
12. Press sub-assembly into body as far as is possible, and engage clamp nut.
13. Holding body and cable rigid, tighten clamp nut to compress plain gasket and retain cable.

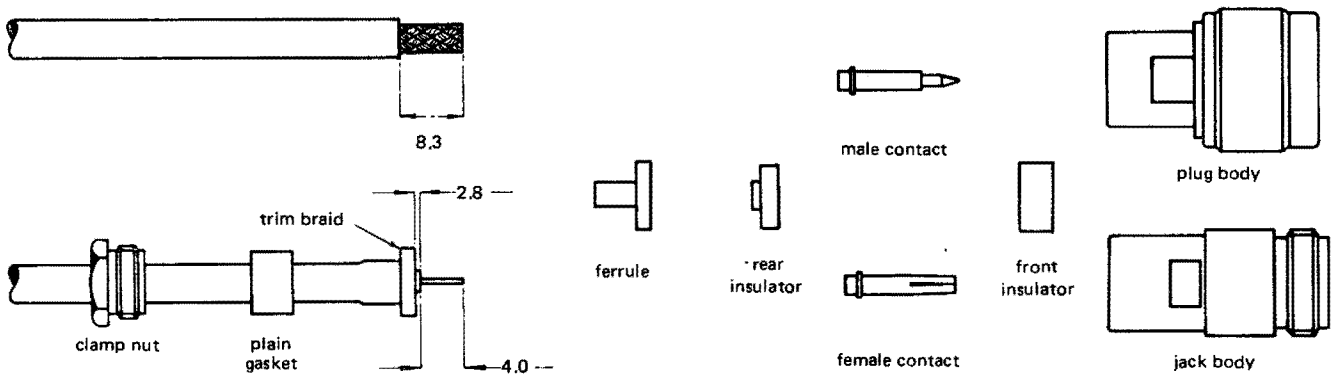


Fig. 8. Clamp for semi-rigid cable C73.

1. Place clamp nut and plain gasket or metal sleeve over outer conductor.
2. Trim outer sheath from cable to dimension shown.
3. Fit ferrule over outer conductor, until conductor butts against internal step of ferrule.
4. Solder ferrule in this position to outer conductor.
5. Trim dielectric flush with face of ferrule.
6. Tin centre conductor.
7. Slide rear insulator over dielectric to butt against ferrule.
8. Place contact onto centre conductor, with collar pressed into recess in rear insulator.
9. Holding contact and cable tightly together, solder securely.
10. Slide gasket or metal sleeve and clamp nut up to ferrule.
11. Press sub-assembly into body as far as possible and engage clamp nut.
12. Holding body and cable rigid, tighten clamp nut firmly.