

NOTES

COMPONENTS COVERED: THIS SECTION COVERS THE FOLLOWING TYPES LISTED IN THE ORDER GIVEN:-

50 OHM CONCENTRIC  
50 OHM MOULDED  
60 OHM CONCENTRIC  
GENERAL PURPOSE

ALL ITEMS ARE SUITABLE FOR USE AT FREQUENCIES ABOVE 1Mc/s

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MATCHED IMPEDANCE TYPES: THESE ARE DESIGNED TO MINIMISE REFLECTIONS AT FREQUENCIES ABOVE 600Mc/s, WHEN INSERTED IN THE APPROPRIATE CABLE

CABLES: WHERE POSSIBLE, SUITABLE CABLES HAVE BEEN INDICATED. IT SHOULD BE NOTED THAT SUCH CABLES DO NOT NECESSARILY HAVE THE SAME TEMPERATURE RATING AS THE ASSOCIATED PLUGS AND/OR SOCKETS. THE SPECIFICATION DEALING WITH CABLES IS DEF-14.

MATING COMPONENTS: WHERE POSSIBLE, THE JOINT SERVICE APPROVED MATING COMPONENTS ARE TABULATED WITH THEIR ASSOCIATED ITEMS

DAMP HEAT: THIS EXPRESSION COVERS BOTH CLIMATIC AND TROPICAL EXPOSURE CONDITIONING

PATTERN 12: THESE SUPERSEDE PATTERN 1 NOW OBSOLESCE. THE MAXIMUM DIMENSIONAL INCREASE IN BODY LENGTH DOES NOT EXCEED 13/32. THE WORKING VOLTAGE IS INCREASED TO 500 VOLTS

ASSOCIATED DATA SHEETS:

NO GENERAL INFORMATION CONCERNING THE USE OF R.F. PLUGS HAS BEEN ISSUED

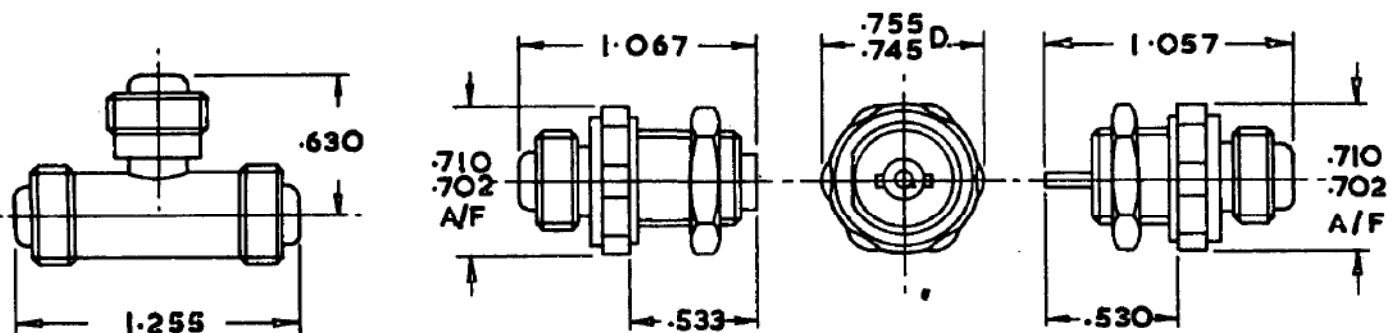
SEE SECTION A FOR PANEL PIERCING DIMENSIONS AND ACCESSORIES FOR PATTERNS 4, 8 AND 40

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# RADIO FREQUENCY PLUGS & SOCKETS

WITH BARRIER AND PANEL SEALS

PATTERN 2



**STYLE AR2B**

**STYLE ABR2G**

**STYLE SR2E**

MAXIMUM PANEL THICKNESS 1/8. ALL THREADS 9/16. DIA. x 26 T.P.I. WHITWORTH FORM  
MATERIAL - ALUMINIUM BRONZE OR APPROVED ALTERNATIVE. FINISH - CLEAN  
THE ADAPTOR AR2B IS SEALED ONLY WHEN IT IS MATED WITH THREE SEALED PLUGS

HUMIDITY CLASS:	H1.	
TEMPERATURE CATEGORY:	40/70	Δ
WORKING VOLTAGE: (NORMAL AIR DENSITY)	500 VOLTS PEAK	
WORKING VOLTAGE: (LOW AIR DENSITY)	NOT SPECIFIED	
PROOF VOLTAGE:	2KV PEAK	
INSULATION RESISTANCE:	NOT LESS THAN 100MΩ INITIALLY OR 10MΩ AFTER DAMP HEAT	
CONTACT RESISTANCE:	POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX. SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.	
IMPEDANCE MATCHING:	INSERTION OF ITEM IN SUITABLE CABLE PRODUCES MISMATCH WHICH, EXPRESSED AS VOLTAGE STANDING WAVE RATIO, IS LESS THAN 1.2:1	
SEALING:	AIR LEAKAGE NOT GREATER THAN 1 c.c. PER HOUR AT 20lb/sq. in. AFTER ALL CONDITIONING	
CABLE FIXING:	WITHSTANDS 30lb PULL ALONG CABLE AXIS	
VIBRATION:	WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT	
BUMPING:	WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION	
CORROSION:	WITHSTANDS RCS-11 SALT WATER TEST	
ENDURANCE:	WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES AND SIX WEEKS HIGH TEMPERATURE CYCLING WITH NEGLIGIBLE ELECTRICAL AND MECHANICAL DETERIORATION	

MATING COMPONENTS, APPROPRIATE CABLES AND JOINT SERVICE CATALOGUE NUMBERS

STYLE	TYPE	MATING COMPONENT	APPROPRIATE CABLES	JOINT SERVICE CATALOGUE NO.
AR2B	ADAPTOR, FREE, PLUG TO PLUG TO PLUG MALE SHELL	PR2A PR2C PR2E	NOT SPECIFIED	054-0013
SR2E	SOCKET, FIXED, MALE SHELL	PR2A PR2C PR2E	NOT SPECIFIED	054-0014
ABR2G	ADAPTOR, FIXED, PLUG TO PLUG, MALE SHELL	PR2A PR2C PR2E	NOT SPECIFIED	054-0015

SECTION 15/D

SHEET No. 2

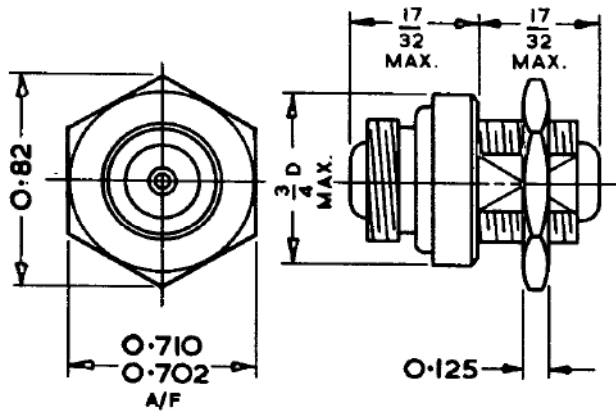
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ALL J.S. CAT. NUMBERS TO BE PRECEDED BY 5999-99-

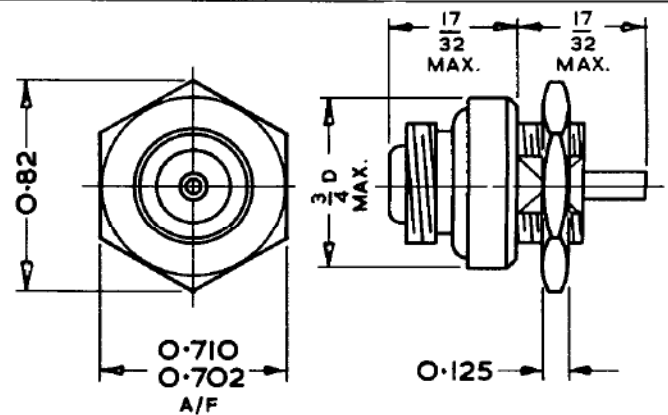
# RADIO FREQUENCY PLUGS & SOCKETS

## PATTERN 2

## 50 OHM CONCENTRIC



STYLE ABR2G



STYLE SR2E

ALL THREADS  $\frac{9}{16}$  DIA. X 26 TPI. BS WHIT.

MATERIALS - ALUMINIUM BRONZE. FINISH CLEAN

HUMIDITY CLASS:	H1
TEMPERATURE CATEGORY:	40/85
WORKING VOLTAGE: (NORMAL AIR DENSITY)	NOT SPECIFIED
WORKING VOLTAGE: (LOW AIR DENSITY)	NOT SPECIFIED
PROOF VOLTAGE:	NOT SPECIFIED
INSULATION RESISTANCE:	NOT LESS THAN 100MΩ INITIALLY OR 10MΩ AFTER DAMP HEAT
CONTACT RESISTANCE:	POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX. SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.
IMPEDANCE MATCHING:	INSERTION OF ITEM IN SUITABLE CABLE PRODUCES MISMATCH WHICH, EXPRESSED AS VOLTAGE STANDING WAVE RATIO, IS LESS THAN 1.2:1
SEALING:	AIR LEAKAGE NOT GREATER THAN 1 c.c. PER HOUR AT 20lb/sq. in. AFTER ALL CONDITIONING
CABLE FIXING:	WITHSTANDS 30lb PULL ALONG CABLE AXIS
VIBRATION:	WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT
BUMPING:	WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION
CORROSION:	WITHSTANDS RCS-11 SALT WATER TEST
ENDURANCE:	WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES AND SIX WEEKS HIGH TEMPERATURE CYCLING WITH NEGLIGIBLE ELECTRICAL AND MECHANICAL DETERIORATION

MATING COMPONENTS, APPROPRIATE CABLES AND JOINT SERVICE CATALOGUE NUMBERS

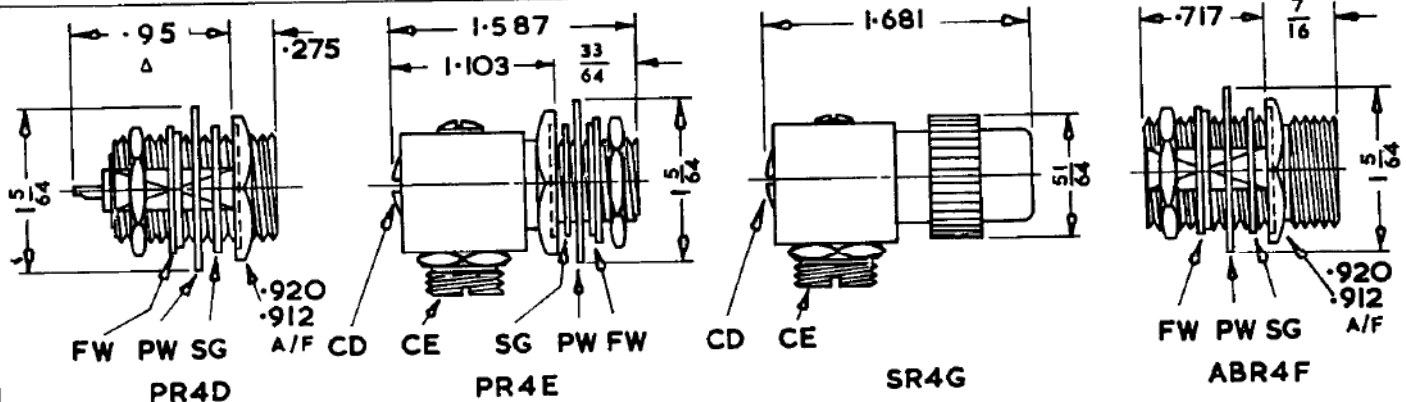
STYLE	TYPE	MATING COMPONENT	APPROPRIATE CABLES	JOINT SERVICE CATALOGUE NO.
ABR2G	ADAPTOR, FIXED, PLUG TO PLUG, MALE SHELL	PR2A PR2C PR2E	NOT SPECIFIED	Z. 540015
SR2E	SOCKET, FIXED, MALE SHELL	PR2A PR2C PR2E	NOT SPECIFIED	Z. 540014

ALL Z NUMBERS TO BE PRECEDED BY 5935-

# RADIO FREQUENCY PLUGS & SOCKETS WITH BARRIER AND PANEL SEALS

## GENERAL PURPOSE

## PATTERN 4



Panel Thickness  $\frac{3}{16}$  max.  $\frac{1}{32}$  min.  
 Finish:- Flanged Washer - tinned brass  
 All other parts - silver plated

FW:- Flanged Washer  
 PW:- Packing Washer  
 (Syn. Resin Bonded Fabric)  
 SG:- Panel Sealing Gasket  
 CD:- Cap, Detachable  
 CE:- Cable Entry

NOTE 1 On PR4E and SR4G the Cable Entry and Cap are detachable and interchangeable to give a straight cable entry.

NOTE 2 The Flanged Washer and Packing Washer are used when fitting component to a panel of dissimilar metal or finish.

NOTE 3 Accessories for PR4E, SR4G and Cables, see Sheet No.1

HUMIDITY CLASS: H2

TEMPERATURE CATEGORY: 40/70

WORKING VOLTAGE: 500 VOLTS PEAK  
 (NORMAL AIR DENSITY)

WORKING VOLTAGE: NOT SPECIFIED  
 (LOW AIR DENSITY)

PROOF VOLTAGE: 2kV PEAK

INSULATION RESISTANCE: 100MΩ UNDER ALL TEST CONDITIONS

CONTACT RESISTANCE: POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.  
 SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.

IMPEDANCE MATCHING: INSERTION OF ITEM IN SUITABLE CABLE PRODUCES MISMATCH WHICH, EXPRESSED AS VOLTAGE STANDING WAVE RATIO, IS LESS THAN 1.2:1

SEALING: AIR LEAKAGE NOT GREATER THAN 1 c.c. PER HOUR AT 20lb/sq. in. AFTER ALL CONDITIONING

CABLE FIXING: WITHSTANDS 30lb PULL ALONG CABLE AXIS

VIBRATION: WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT

BUMPING: WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION

CORROSION: WITHSTANDS RCS-11 SALT WATER TEST

ENDURANCE: WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES AND SIX WEEKS HIGH TEMPERATURE CYCLING WITH NEGLIGIBLE ELECTRICAL AND MECHANICAL DETERIORATION

MATING COMPONENTS  
AND JOINT SERVICE  
CATALOGUE NUMBERS

STYLE	TYPE	MATING COMPONENT	JOINT SERVICE CATALOGUE NO.
PR4D	PLUG, FIXED, FEMALE SHELL	SR4G	011-9484
PR4E	PLUG, FIXED, FEMALE SHELL	SR4G	054-0018
SR4G	SOCKET, FREE MALE SHELL	{ PR4D PR4E ABR4F	054-0022
ABR4F	ADAPTOR, SOCKET TO SOCKET, FEMALE SHELL	SR4G	054-0019

ALL J.S. CAT. NUMBERS  
TO BE PRECEDED BY  
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SECTION 15/D

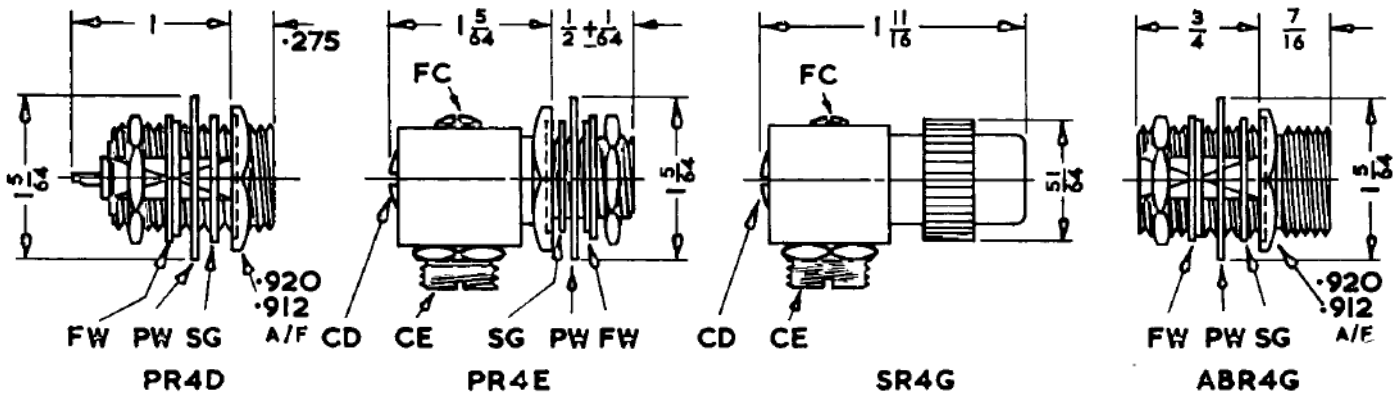
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# RADIO FREQUENCY PLUGS & SOCKETS

60 OHM CONCENTRIC  
(IMPEDANCE 60 OHMS WHEN FILLED  
WITH SUITABLE COMPOUND)

## PATTERN 4 Δ



Finish:- Flanged Washer - tinned brass  
All other parts - silver plated

FW:- Flanged Washer  
PW:- Packing Washer  
(Syn. Resin Bonded Fabric)  
SG:- Panel Sealing Gasket  
CD:- Cap, Detachable  
CE:- Cable Entry

NOTE 1 On PR4E and SR4G the Cable Entry and Cap are detachable and interchangeable to give a straight cable entry.

NOTE 2 The Flanged Washer and Packing Washer are used when fitting component to a panel of dissimilar metal or finish.

NOTE 3 Accessories, see Sheet No.1.

HUMIDITY CLASS: H2  
TEMPERATURE CATEGORY: 40/70  
WORKING VOLTAGE: 500 VOLTS PEAK  
(NORMAL AIR DENSITY)  
WORKING VOLTAGE: NOT SPECIFIED  
(LOW AIR DENSITY)  
PROOF VOLTAGE: 2.0kV PEAK  
INSULATION RESISTANCE: 100MΩ UNDER ALL TEST CONDITIONS  
CONTACT RESISTANCE: POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.  
SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.  
IMPEDANCE MATCHING: INSERTION OF ITEM IN SUITABLE CABLE PRODUCES MISMATCH WHICH, EXPRESSED AS VOLTAGE STANDING WAVE RATIO, IS LESS THAN 1.2:1  
SEALING: AIR LEAKAGE NOT GREATER THAN 1 c.c. PER HOUR AT 20lb/sq. in. AFTER ALL CONDITIONING  
CABLE FIXING: WITHSTANDS 30lb PULL ALONG CABLE AXIS  
VIBRATION: WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT  
BUMPING: WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION  
CORROSION: WITHSTANDS RCS-11 SALT WATER TEST  
ENDURANCE: WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES AND SIX WEEKS HIGH TEMPERATURE CYCLING WITH NEGLIGIBLE ELECTRICAL AND MECHANICAL DETERIORATION

MATING COMPONENTS  
AND JOINT SERVICE  
CATALOGUE NUMBERS

STYLE	TYPE	MATING COMPONENT	JOINT SERVICE CATALOGUE NO.
PR4D	PLUG, FIXED, FEMALE SHELL	SR4G	Z.119484
PR4E	PLUG, FIXED, FEMALE SHELL	SR4G	Z.540018
SR4G	SOCKET, FREE MALE SHELL	{ PR4D PR4E ABR4F	Z.540022
ABR4F	ADAPTORS, SOCKET TO SOCKET, FEMALE SHELL	SR4G	Z.540019

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SECTION 15/D

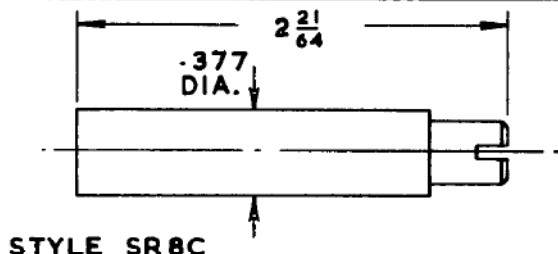
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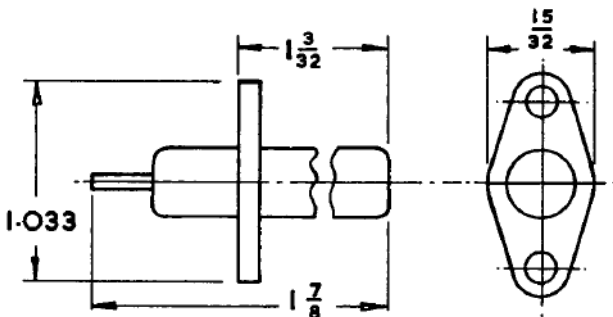
# RADIO FREQUENCY PLUGS AND SOCKETS NON-SEALED

## GENERAL PURPOSE

## PATTERN 8

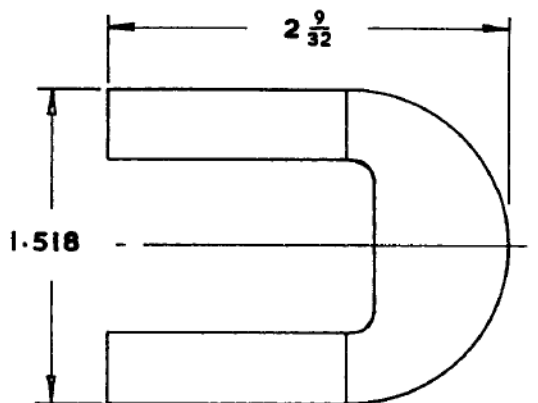


STYLE SR8C



STYLE PR8A

ALL STYLES FINISH - SILVER PLATE



STYLE AR8D

HUMIDITY CLASS:	H2
TEMPERATURE CATEGORY:	40/85
WORKING VOLTAGE: (NORMAL AIR DENSITY)	250 VOLTS PEAK
WORKING VOLTAGE: (LOW AIR DENSITY)	NOT SPECIFIED
PROOF VOLTAGE:	1.5kV PEAK
INSULATION RESISTANCE:	NOT LESS THAN 100MΩ AFTER ALL CONDITIONING
CONTACT RESISTANCE:	POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX. SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.
CABLE FIXING:	WITHSTANDS 30lb PULL ALONG CABLE AXIS
VIBRATION:	WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT
BUMPING:	WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION
CORROSION:	WITHSTANDS RCS-11 SALT WATER TEST
ENDURANCE:	WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES WITH NEGLIGIBLE MECHANICAL DETERIORATION

MATING COMPONENTS, APPROPRIATE CABLES AND JOINT SERVICE CATALOGUE NUMBERS

STYLE	TYPE	MATING COMPONENT	APPROPRIATE CABLES	J.S. CAT. NUMBER
PR8A	PLUG, FIXED (MALE)	SR8C	UNIRADIO No. 6 OR 39	054-0201
SR8C	SOCKET, FREE (FEMALE)	PR8A	NOT SPECIFIED	054-0203
AR8D	ADAPTOR, PLUG TO PLUG	PR8A	NOT SPECIFIED	012-2924

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ALL J.S. CAT. NUMBERS TO BE PRECEDED BY 5935-99-

SECTION 15/D

SHEET No. 5

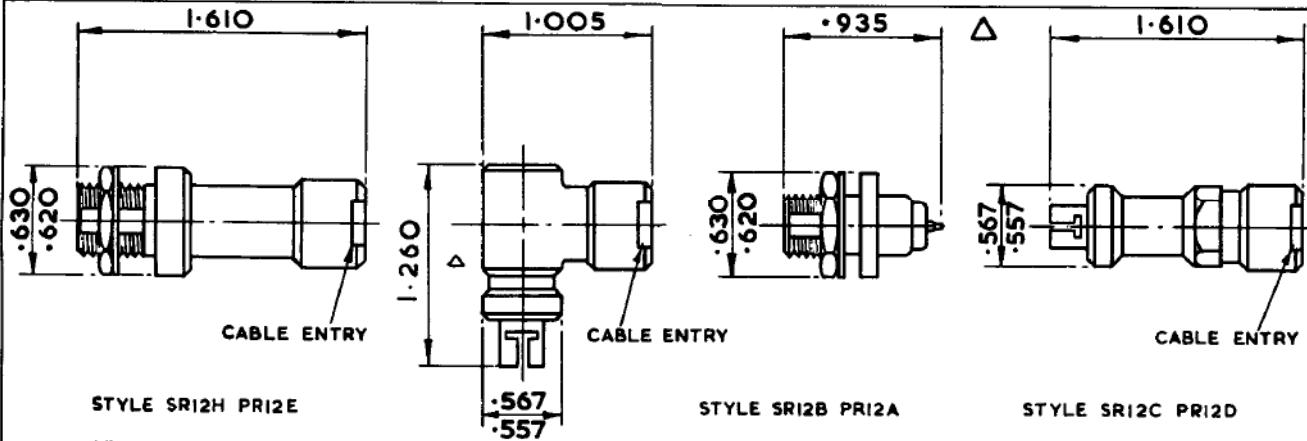
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# RADIO FREQUENCY PLUGS & SOCKETS

## WITH BARRIER AND PANEL SEALS

50 OHM

PATTERN 12



STYLE SR12H PR12E

STYLE SR12F PR12G \*

STYLE SR12J PR12K

STYLE SR12B PR12A

STYLE SR12C PR12D

\* WITHOUT NUT AND WASHER

APPROPRIATE CABLE FOR ALL STYLES UNIRADIO 43 OR 76  
FOR OTHER CABLES ALL STYLES ARE CONSIDERED GENERAL  
PURPOSE (UNMATCHED)

HUMIDITY CLASS:	H2	TEMPERATURE CATEGORY:	40/85
WORKING VOLTAGE:	500 VOLTS PEAK NORMAL AIR DENSITY NOT SPECIFIED FOR LOW AIR DENSITY		
PROOF VOLTAGE	2kV PEAK		
INSULATION RESISTANCE:	NOT LESS THAN 100MΩ AFTER ALL CONDITIONING		
CONTACT RESISTANCE:	POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX. SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.		
SEALING:	AIR LEAKAGE NOT GREATER THAN 1 c.c. PER HOUR AT 20lb/sq. in. AFTER ALL CONDITIONING		
CABLE FIXING:	WITHSTANDS 30lb PULL ALONG CABLE AXIS		
VIBRATION:	WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT		
BUMPING:	WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION		
CORROSION:	WITHSTANDS RCS-11 SALT WATER TEST		
ENDURANCE:	WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES AND SIX WEEKS HIGH TEMPERATURE CYCLING WITH NEGLIGIBLE ELECTRICAL AND MECHANICAL DETERIORATION		

STYLE	TYPE	MATING COMP.	J.S. CAT. NO.
PR12A	PLUG FIXED FEMALE SHELL	SR12C SR12J	011-9806
PR12D	PLUG FREE MALE SHELL	SR12B SR12F SR12H	012-2823
PR12E	PLUG FIXED FEMALE SHELL	SR12C SR12J	012-2824
†PR12G	PLUG FREE FEMALE SHELL	SR12C SR12J	Δ
PR12K	PLUG FREE MALE SHELL	SR12B SR12F SR12H	012-2826

STYLE	TYPE	MATING COMP.	J.S. CAT. NO.
SR12B	SOCKET FIXED FEMALE SHELL	PR12D PR12K	011-9810
SR12C	SOCKET FREE MALE SHELL	PR12A PR12E PR12G	012-2827
†SR12F	SOCKET FREE FEMALE SHELL	PR12D PR12K	Δ
SR12H	SOCKET FIXED FEMALE SHELL	PR12D PR12K	012-2829
SR12J	SOCKET FREE MALE SHELL	PR12A PR12E PR12G	012-2830

† PR12G AND SR12F SHOULD BE PROCURED AS PR12E AND SR12H RESPECTIVELY, THE  
ITEMS ARE IDENTICAL EXCEPT FOR THE NUT AND WASHER.

WITH THE EXCEPTION OF SR12B AND PR12A ALL ITEMS REQUIRE ACCESSORIES WHICH  
MUST BE ORDERED SEPARATELY (SEE SHEET No.1)

ALL J.S. CAT. NUMBERS TO BE PRECEDED BY 5935-99-

SECTION 15/D

SHEET No.6

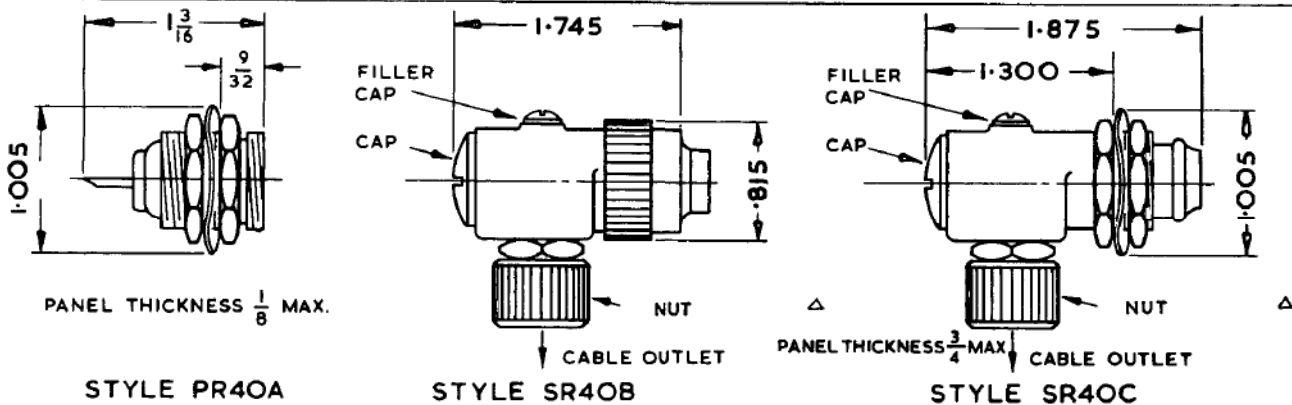
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# RADIO FREQUENCY PLUGS & SOCKETS

## NON-SEALED

### GENERAL PURPOSE

PATTERN 40



MATERIAL - BODY, ALUMINIUM ALLOY.

WASHERS, BERYLLIUM COPPER.

FINISH, ALL CLEAN.

SPECIAL NOTE:- THE NUT, BUSHING RETAINER ON SR40B AND SR40C CAN BE INTERCHANGED WITH THE CAP TO GIVE A STRAIGHT CABLE OUTLET.

HUMIDITY CLASS:	H1
TEMPERATURE CATEGORY:	40/85
WORKING VOLTAGE: (NORMAL AIR DENSITY)	500 VOLTS PEAK
WORKING VOLTAGE: (LOW AIR DENSITY)	NOT SPECIFIED
PROOF VOLTAGE:	2kV PEAK
INSULATION RESISTANCE:	NOT LESS THAN 100MΩ INITIALLY OR 10MΩ AFTER DAMP HEAT
CONTACT RESISTANCE:	POLE. INITIALLY 2 MILLIOHMS MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX. SCREEN. INITIALLY 1 MILLIOHM MAX. AFTER DAMP HEAT 5 MILLIOHMS MAX.
IMPEDANCE MATCHING:	INSERTION OF ITEM IN SUITABLE CABLE PRODUCES MISMATCH WHICH, EXPRESSED AS VOLTAGE STANDING WAVE RATIO, IS LESS THAN 1.2:1
CABLE FIXING:	WITHSTANDS 30lb PULL ALONG CABLE AXIS
VIBRATION:	WITHSTANDS FREQUENCY CYCLING TO RCS-11 WITHOUT RESONANCE, LOOSENING OR DISENGAGEMENT
HUMPING:	WITHSTANDS RCS-11 TEST WITHOUT MECHANICAL DETERIORATION
CORROSION:	WITHSTANDS RCS-11 SALT WATER TEST
ENDURANCE:	WITHSTANDS ENGAGEMENT AND DISENGAGEMENT 500 TIMES WITH NEGLIGIBLE MECHANICAL DETERIORATION

MATING COMPONENTS, APPROPRIATE CABLES AND JOINT SERVICE CATALOGUE NUMBERS

STYLE	TYPE	MATING COMPONENT	APPROPRIATE CABLES UNIRADIO (DEF-14-A)	JOINT SERVICE CATALOGUE NO.
PR40A	PLUG, FIXED, FEMALE SHELL	SR40B SR40C		054-0101
SR40B	SOCKET, FREE, MALE SHELL	PR40A	SEE SHEET NO.1	054-9028
SR40C	SOCKET, FIXED, MALE SHELL			054-9027

Accessories are required for styles SR40B and SR40C (See Sheet No.1)

ALL J.S. CAT. NUMBERS TO BE PRECEDED BY 5935-99-

SECTION 15/D

SHEET No. 8

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