# QUALITY COMPONENTS for RADIO and ELECTRONICS

Products of science and industry with built-in dependability designed and produced for expanding fields of application.

Today's Radio and Electronics "know-how" at Amphenol comes from pioneering research in keeping with growing needs and rapid development of Electronics. Radio and Electronic design, component functions, the best ways of precision, quantity production, wide distribution and prompt deliveries are the backbone of Amphenol service. Typical Amphenol products selected for listing in these pages from a full line and wide variety of Radio and Electronic supplies only partially indicate the complete line of products and services available for Radio and Electronic needs. Products are also made for special design projects and material specification according to customer's requirements. Inquiries will bring a prompt response with complete detailed information.

> The following twenty-five pages represent a condensed listing of Amphenol's well known and complete line of Radio-Electronic component parts. Illustrated and described are Radio Parts and Accessories, Synthetics for Electronics, High Frequency Cables and Connectors, "AN" Connectors and "AN" Fittings.

## Scanned by N7RHU

AMERICAN PHENOLIC CORPORATION CHICAGO 50, ILLINOIS AMPHENOL LIMITED, TORONTO, CANADA

AMPHENOD





#### **RETAINER RING "S" TYPE** SOCKETS and "CP" TYPE PLUGS

• For quick easy assembly to chassis or panel from 19 gauge (.044') to 16 gauge (.062') using No. 4 Amphenol patented tempered steel retainer ring. High di-electric molded bakelite and cadmium plated contacts for easy soldering. Rota-tion feature for lining up contacts — wiring for short leads reduces chassis area required. Complete with retainer ring.



"S" Sockets Li	st Price	"CP
78-S4 - 4-Contact	11c	86-0
78-S5 - 5-Contact	11c	86-0
78-S6 6-Contact	11c	86-0
78-S7S - 7-Small		86-0
78-7SL - 7-Large		86-0
78-S7C - 7-Comb. for 7L and 7	S 14c	86-0
78-S8 8-Octal	14c	86-0
78-S9 - 9-Contact	17c	86-0
78-S11 - 11-Contact	24c	
78-8L — Loktal	17c	

"CP" Plugs		List Price	•
86-CP4 - 4-Prong		110	
86-CP5 - 5-Prong		110	
86-CP6 - 6-Prong		110	;
86-CP7S - 7-Prong	Small	110	;
86-CP7L 7-Prong	Large .	110	
86-CP8 - 8-Prong	(Octal).	140	
86-CP9 9-Prong	(Octal s	tyle), 17c	
86-CP11 11-Pron	g (Octal	style) 24c	



**U.H.F. LOW-LOSS POLYSTYRENE SOCK-**

ETS- Extremely low losses even at the highest freguencies. Transparent body molded from "912-A" polystyrene with extra long contact soldering lugs to prevent possible soldering heat damage. High efficiency in operation for temperature ranges not exceeding 200° F. Mounts in  $15\frac{4}{52}$ " hole with  $1\frac{1}{52}$ " mounting centers 



LOKTAL SOCKET — Made of Amphenol "912-A" pure polystyrene like the octal but with floating con-tacts for small loktal tube prongs. Takes full advantage of the high efficiency of the loktal tubes which do not have a loss-inducing insulating material base.

**U.H.F. MINIATURE LOW-LOSS SOCKETS** — Amphenol "912-A" polystyrene 5 and 6 contact sockets for use with Miniature Amphenol polystyrene plug-in coil forms also listed. Greatly re-duces U.H.F. circuit losses. Fits Hytron Bantam Jr. tubes. 

No. 54-7P-MINIATURE POLYSTYRENE SOCKET.

An ultra-low loss socket to take full advantage of the newly developed seven prong miniature tubes. Molded from Amphenol 912-A polystyrene.

# **U.H.F. TIP JACK OR BUSHING** — Contact accommodates .080" phone tip but contact may be removed and the transparent Amphenol "912-A" body used as a high frequency thru-panel bushing as well. Mounts in a plain round $\frac{5}{6}$ " hole, and is held in place with No. 2-9 retainer ring included.

CRYSTAL HOLDER SOCKET - Same as 33-2 below except molded of ultra low-loss famplenoi "912-A" polystyrene. Contacts are of phosphor bronze, silver plated to keep resistance at a minimum. Contacts may be removed and the polystyrene body used as a two hole feed thru bushing.



8

**STANDARD CRYSTAL HOLDER SOCKET** — Of black or mica filled bakelite for crystal holders having two prongs on 34" centers. Easily mounted and requires minimum area on chasis or panel. Used extensively for crystal phasing in receivers, crystal control of transmitters and test equipment. May be used as dual tip jack on test panels. Cadmium plated contacts.

33-2	 For	1/8"	Diameter	Pronus (Black	Bakelite)	Re list
33-3	 For	5/82"	Diameter	Prongs (Black	Bakelite)	BC list
33-21 99 9T	 For	18".	Diameter	Prongs (Mica	Filled Bakelite)14	4c list
33-31	 ror	/32	Diameter	Prongs (Mica	Filled Bakelite)14	4c list

MIP MOLDED-IN-PLATE SOCKETS-World's strongest socket. Sturdy steel mounting plate molded directly into bakelite body, cannot come loose or vi- brate. 14% Mounting centers. Mounts in 14% hole				
(MIP7L and MIP20 in 19/22" hole). Molded from high dielectric black bakelite.		Ø	0	50
77-MIP4 — 4-Contact MIP Sockets				10c list
77-MIP6 — 6-Contact MIP Sockets				10c list
77-MIP7S— 7-Small MIP Sockets				10c list
77-MIP9 — 9-Octal Style MIP Sockets				15c list 20c list
77-MIP12 — 12-Octal Style MIP Sockets	• • • • •			

MIDGET OCTAL - Has all the features of the standard MIP sockets, but is smaller in size. For building compact radios and as the companion socket for the above loktal. Mounting centers, 15%. Mounts in 11% hole. - Midget Octal. . 



STEATITE SOCKETS --- Recommended STEATTE SUCKETS— Recommended for high frequency work where high tempea-tures are encountered such as in transmitter, amplifiers having high output and for exter-sive replacement service use. Plates have slotted mounting holes to fit riveting centers from  $1\frac{1}{2}$ " to  $1\frac{1}{6}$ ".

Less		With	
Plate	List	Plate	List
49-554	39c	4-Contact Steatite Socket	40c
49-555	39c	5-Contact Steatite Socket. 49-RSS5	40e
49-556	39c	6-Contact Steatite Socket 49-RSS6	400
49-5575	39c	7-Small Steatite Socket 49-RSS7S	400
49-SS7L	49c	7-Large Steatite Socket 49-RSS7	500
49-558	39c	8-Octal Steatite Socket	400

**MAGNAL STEATITE SOCKET** — Eleven contact socket of steatite as above. Has  $1\frac{1}{6}$  pin circle to accept magnal 11-prong bases as found on many popular cathode ray and television tubes. Has octal style locating keyway. Complete with No. 2-14 ring. 





FLOATING OCTAL SOCKETS -- Completely cushioned. Has enlarged mounting holes in the plate into which live rubber grommets are placed for cushioning the socket to obtain vibration free operation. Eliminates most tube microphonics. Mountain in a  $13_{16}^{**}$  hole with two  $\frac{1}{4}^{**}$  screw holes on  $1\frac{1}{2}^{**}$  centers. Complete with socket, four rubber grommets, two mounting screws, nuts and washers.

## REPLACEMENT SOCKETS - Regular "S" sockets and "OP" plugs (listed to the left, above) assembled with No. 4 retainer ring to nickel-plated steel mounting plate with slotted mounting poles to fit riveting centers from 1½" to 1½". Extensively used by servicemen as replacements.



		-		
Saakat Dium				
aucket - Plug				List
78-RS-4 86-RCP-4	4.Contact			40.
70 00 5 00 000 5	4-00maut			 125
/8-M3-5 86-HCP-5	- 5-Contact			124
79.85.6 00 800 0	C Ocentration	•••	• • • •	 
10-13-0 - 00-10F-0	· o-contact.			 120
78-BS-75 86-BCP-75	7.Small			 
70 00 71 00 000 00	1-0111att	••		 120
/8-H3-/L 86-RCP-7L	· 7-Large			100
79 DC 70	71.00 0	•••	• • • •	 . 120
10-no-10-	/-L & 3 Comp,			 15c
78-BS-8 86-BCP-8	8-Octal			 
70 00 00 00 00 0	0-00lat	• •		 . 100
/8-MS-9 86-MCP-9	9-Contact			100
79 DC 11 96 DCD 11	11 O	•••	• • • •	 . 100
10-no-11 - 00-nur-11	· II-Contact			 25e
78-RS-8L	L aktal		• • • •	 
	LURIAL			 . 180

#### MICA FILLED BAKELITE SOCKETS

All bakelite sockets and plugs on this page are also available molded from low-loss mica filled bakelite. To order, add letter """ to catalog number and 6c to list price. Especially desirable for high frequency applications as mica filled bakelite has lower power factor and better dielectric constant.

#### CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOL LTD.

IN TORONTO . AMPHENOL LIMITED

Clamo

61-F11 61.M11 61-MP1

60.M11



with



#### MINIATURE SOCKETS

78-7P RCA— For 7-prong miniature tube series. Metal shell in socket center for grounding to chassis. Mounts firmly in place in %<sup>s</sup> hole with No. 2-9 retainer ring.

78-7P - 7-Contact 

For socket as above but molded in U.H.F. polystyrene se listing on another page.



78-5P RAYTHEON - For 5-prcng miniature tubes of the Raytheon hear-ing aid tube types. Mounts firmly in  $\frac{1}{2}$ " hole with No. 2-10 retainer ring. **78-5P** — 5-Contact



78-5H BANTAM JR. -- For 5prong Hytron Bantam Jr. miniature tube types with <sup>3</sup>/<sub>2</sub>" diameter prongs. Also in 6-prong types for coil forms and plug connections.

For socket as above but molded in U. H. F. polystyrene see listing on another page.



78-S3S PHOTOCELL - With contact spacing for practically all three prong miniature photocells – RCA Pee-Wee, Cetron, etc. Mounts firmly in  $\frac{5}{6}$ " hole with No. 2-9 retainer ring.

### MINIATURE PLUGS



CABLE TYPE -Extremely compact plugs, used extensively for speaker connections in com-pact midgets. Also ideal for all plug-in connections where space is

Cable Plug



plug-in connections where space is limited. Plated brass prongs are deeply recessed in individually molded pockets, preventing shorts due to insulation pul-ing back. With molded finger grip. Fit miniature sockets above. CHASSIS TYPE -

 
 Mounts in a plain round hole, 5% in diameter. No screws or rivets required.

 Edd firmly in place by the No. 2-9 tempered steel reamer ring. Use with female miniature connectors
 stainer ring. Use with female r (MPF types) on preceding page. Êh

hassis	Cable	Prongs	
-CP-3S	71-3S	3	
-CP-4S	71-4S	4	
-CP-5S	71-5S	517c list	
-CP-6S	71-6S	617c list	



# 110-250 VOLT CONNECTORS - With 79-CC-4 cable clamps

SHIELDED CABLE CONNECTORS

for cables up to 1/2' in diameter. Clamp take up cable pull and re-liveres soldered connections of strain. Extremely practical for plug and cable connections of power lines. Fully shielded cable terminals in molded bakelite connection units encased in a tightly covered drawn steel cap — snaps on and fits securely — easily removed. Available without clamp also but rubber grommets for protection against abrasion.



FUL	List	protection against abrasion.	With	List
	Price		Grommet	Price
	40c	2-Pole Universal Receptacle	61-F4	35c
	40c	2-Pole Standard Plug		35c
1	40c	2-Pole Polarized Plug		35c
	50c	3-Pole Recentacle		45c
	60c	3-Pole Polarized Plug		456



MULTI-WIRE CABLE CONNECTORS — Made of regular Amphenol "S" type tube sockets and "CP" plugs, snugly covered by a steel cap that fits tightly but may be removed with an ordinary serve driver. Cover is 1° in height, black japanned. A rubber grommet protecte cable from abrasions. Metal cover shields con-tections and provides an unbreakable cable terminal. Small and sturdy. Accommodates cables to "%".

Famala Mala 

78-PF4	86-PM4
78-PF5	86-PM5
78-PF6	86-PM6
78-PF7S	86-PM7S
78-PF7L	86-PM7L
78-PF8	86-PM8 /
78-PF9	86-PM9
78-PF11	86-PM11

**ONE PIECE MOLDED SPEAKER PLUGS**—Have prongs securely molded into one piece body. Each prong is deeply set into individually molded pockets eliminating the possibility of shorts in case of wire insulation pull-back. Extensively used as speaker plugs, for intercommunication systems, public address, remote control, etc. Fit standard

7-Small.....

tube sockets.	
WITH FINGER GRIP	WITH STRAIGHT SIDE
71-4 - 4-Prong	70-8 - 8-Prong
71-5 — 5-Prong	70-9 - 9-Prong
71-6 - 6-Prong. 11c list	70-12 - 12-Prong
71-7 — 7-Prong11c list	70-20 - 20-Prong

**20-CONTACT SOCKET AND SHIELDED PLUG** —Molded bakelite plug encased in black japanned steel shells for cables with up to twenty No. 18 conductors. Rubber grommet accepts cables to  $\gamma_{00}^{\prime\prime}$  in diameter. Prongs molded directly into bakelite body, eliminating possibility of working loose or getting out of alignment. Molded octal type polarizing stud prevents incorrect insertions. Socket has molded-in steel mounting plate. Mounts in a 1% "hole, with riveting centers of 11/2".

# 



Molded from high dielectric black

#### ACCESSORIES FOR CABLE CONNECTORS CABLE CLAMP-

CABLE TYPE-

- Designed primar-ily for cable strain relief. Used with 78-PF and 86-PM connectors and 60 and 61 series. Simply remove rubber grommet for connector and slip this grip into place. Relieves soldered connections of strain. Also used on panels and chassis, to anchor

Cadmium-plated steel covers which can be slipped over "PF" and "PM" Connectors and 60 and 61 series 110-250 volt Connectors. Locks connectors firmly together, precables firmly in place. Slips easily into any shape hole from  $7_{16}^{\prime\prime\prime}$  to  $5_{8}^{\prime\prime\prime}$ . No screws or urmly together, pre-venting accidental pull-aparts. Espe-cially suited for pub-lic address work. Al-so used extensively in shops, etc., to pull proof connections in





CHASSIS SET 15-C-CHA

power cords. Set consists of one male and one female threaded shell.

**CHASSIS TYPE** — Similar to the cable type in design except that one section is a threaded shell which fits under "S" type socket or retainer ring type 60 and 61 series. The other shell slips over the cable connector. 

All bakelite sockets and plugs on this page are also available molded from low-lcss mica filled bakelite. To order, add letter "T" to catalog number and 6c to list price. Espe-cially desirable for high frequency applications as mica filled bakelite has lower power factor and better dielectric constant.



Essential Quality Parts for the RADIO-ELECTRONIC Industry









PREFOCUSED LAMP RECEPTACLE - For medium-Pherocoused lamps as used in movie projectors. Also adapt-able for using prefocused lamps in flood lights, beacons, search-lights, etc. and for experimental work. Molded from special high heat resisting bakelite to withstand temperatures to 450° F. Special air cooled design. Conservatively rated at 1000 watts 110-250 volts. Listed by underwriters laboratories. Heavy brass contacts assure minimum resistance for maximum light intensity. Can be installed in most movie projectors without drilling new holes. Heavy fiber insulator to cover terminals after wiring included with receptacle alone, not needed with cap.

for receptacle available for use when socket is sus-Insulating cap bended or to add  $\frac{1}{2}$ " to height of socket or to insulate wire terminals from panel.

98-8 Receptacle only \$1.75 list 98-8A Receptacle and cap. \$2.25 list



#### MAGIC EYE ASSEMBLY-For the

magic eye tube in any radio having auto-matic volume control. Also for FM re-eivers, task instruments simult



matic volume control. Also for FM re-ceivers, test instruments, signal tracers and as volume level and modulation in-dicators. Includes one-megohm target-plate resistor wired into socket and five wire color coded cable 22" long. Mount-ing bracket is slotted for tube adjustment. Complete as above with antique bronze escutcheon and necessary hardware for assembly. Tube not included, 58-MEA6 Complete Magic Eye Assembly ..... \$1.25 list



## OCTAL MAGIC EYE ASSEMBLY-Similar to the above, but for octal type magic eye tubes. Has a shorter bracket for the smaller tube size. Complete with 6 wire 22" long color coded cable and full vision type antique bronze escutcheon and necessary bard-

ware for assembly. Tube not included.

58-MEA8 Complete Octal Magic Eye Assembly......\$1.25 list

# **CATHODE RAY ASSEMBLY** — Widely used for mounting 902, 913 and similar cathode ray tubes. Bakelite socket mounted in a protective metal shell, completely wired with eight wire 22" long color coded cable. Adjustable "L" bracket for mounting on panel front or base. Tube not included.





#### MAGIC EYE ESCUTCHEONS - No. 10-1 hood type, large size for mounting over panel or cabinet hole. No. 10-2 Octal base full vision type.

Brass with antique bronze finish.



**TAP CHANGE SWITCH** — An 8-position single pole continuous switch with white numerals clearly visible in win-dow cap. Supplied with markings 1-2-3-4-5-6-7-8 or impedance markings 0-2-4-8-16-250-500, Side set serew locks switch-arm in position, preventing accidental tap changes.

BULB TESTER SOCKET — A standard 7-contact com-bination socket for large and small 7-prong tubes and has a large center contact for testing miniature bulbs, either screw or bayonet base types. 





**UNIVERSAL GRID CAP** — A grid cap of improved design, wired or unwired, for universal use with tube grid caps from  $\mathcal{M}_{4}^{\prime\prime}$  to  $\mathcal{H}_{4}^{\prime\prime}$  to induction to the second design of the second

-1W — Wired..... 20c list **UNWIRED ADAPTERS**—A simple way to make adapter units which may be used for modernizing tube checkers and analyzers, adapting new tubes to old circuits—for connections to output meter, phonograph pick-up, headphones, extra speakers, recorders and other adapter uses.

ADAPTER SOCKET TOPS ONLY-20c list
4-4 — 4-Contact — For Small Bases — 44-7S7 Small
4-5 — 5-Contact — For Small Bases — 44-88-Octal 14-6 — 6-Contact — For Small Bases — 44-L Loktal
4-7L - 7-Large - Fit Large Bases Only - 44-7C 7 Comb.

LOKTAL ADAPTER BASES - Similar to small bases above but have metal band and lock-in stud like loktal tubes. 44-13 Loktal Base (No side hole or side stud)......55c list

ADAPTER BASES ONLY in two styles — With  $\frac{5}{42}$  side hole for lead out wiring or with a side stud accommodating a metal tube grid cap clip. Both tops (above) and bases are drilled for self tapping screws which are supplied with bases.

Number of Prong	s													S		A	A	L,	L	1	Б,	A	S	E	s								Side Hole List 20c	Side Stud List 30c
4-Prong 5-Prong 6-Prong 7-Smali 8-Octal		•				•				•		• •		 		•	• •				•					•	• •	-	• • • •	•	· ·		50-4D 50-5D 50-6D 50-7SD 50-8SD	50-4G 50-5G 50-6G 50-7SG 50-8SG
7-Large 8-Octal	fo fo	r	44	4	 71	-	aa	n	d d	4	4	 70	sc	L kiki	ei ei	s	0	G I	Elyily	1	B /	A:	S	E	S				:	•	• •	•	50-7LD 50-8LD	50-7LG 50-8LG



**ADAPTER SHELL** — Of metal tubing, black japan finish, for snap in connection on either end of Amphenol "S" type sockets or "CP" type plugs. Connection is made quickly and socket or plug is held firmly but is easily removed. Combinations possible from 4-prong or contact to 11-prong or contact. May also be used with 110 volt plugs and receptacles for inserting small resistors or con-densers in a line. In two types — blank or side hole with rubber removed for brinzing out leads grom

3-14 3-14D

met	for	bringi	ng ou	t	le	ac	ls.																			
	Wit	hout Si	de Ho	le	١.													•	 						. 150	; li
) (	Wit	h Side	Hole.	•	• •	• •		• •	• •	•	•	• •	•	•	•	• •	•	• •	 •	•	•	•	•	• •	200	; li

MINIATURE TUBE ADAPTERS — Unwired for testing minia-ture tubes, 44-17-8 Socket top for 7-prong miniature tubes, 44-12-8 socket top for Hytron Bantam Jr. 5-contact tubes, and 44-26-8 socket top for Raytheon 5-prong miniature tubes. All have octal bases. 



**BLANK SOCKET** — "S" type socket as listed on another page for mounting in the standard  $1^{11}_{44}$ " "S" type socket hole. Used primarily as a dummy or spare socket on tube checkers and analyzers so a new "S" type socket can easily be added when a socket for new type tubes is required. May be used as a bak-lite bushing by drilling a hole in the center.

<b>SINGLE CONTACT SOCKETS</b> — Of molded bakelite for mounting in $\frac{6}{6}$ hole — held firmly in place by Amphenol Retainer Ring No. 2-11. Contacts recessed approximately $\frac{1}{6}$ below the top of the tip jacks prevent accidental shorts from contact to chassis. The bakelite body may be used as a feed thru bushing by removing the contact. Seven colors and 4 prong diameters for quick wir ng dentification.	
Red, green, blue, yellow, gray, walnut or black. If no color black will be furnished.	is specified,
78-1P — For .080' Phone Tip 78-1S — For \$24' Plug 78-1M — For ½' Plug 78-1M — For ½' Plug 78-1L — For \$24' Plug	
SINGLE PRONG PLUGS — A small but ext plug in colors, for connection with sockets listed Red, green, blue, yellow, gray, walnut or black.	remely useful above. If no coloris

			specified,	DI	1CR	. w	ш	pe	IU	rm	sn	a.								
71-1S ·	- For	3/32"	Socket										 			 		 	:5c	list
71-1 M ·	- For	1/8"	Socket										 			 	•. •	 	5c	list
71-1L	— For	5/32"	Socket	• • •		• •	•••		• • •	• •	• •	•••	 • •	• •	• •	 	•••	 • •	5c	list

# CABLES AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOLICIDE

## AMERICAN PHENOLIC CORPORATION

Chicago 50, Illinois

### IN TORONTO . AMPHENOL LIMITED







**LOW-LOSS COAXIAL CABLE CONNECTORS** -for cables up to 13 0.D. May be reamed out for cable up to  $\frac{7}{16}$  O.D. Shell machined from solid lass, plated in heavy polished chrome. Connector elements made of "912-A" (b). May be realised out for each of the second sec washer and nut.

8-M — Male Cable Connector	\$1.50 list
%F1 — Female Cable Connector	.\$1.50 list
8.F — Female Cable Connector	\$1.50 list
%-M1 Male Cable Connector	\$1.50 list
wini - male capie connector	

\$4.01 — Male Chassis Connector ...... \$1.25 list

#### HEAVY DUTY POWER

CONNECTORS - Has four, fat, heavy brass blades in the male molded bakelite unit for connection with set-back con-tests of phosphor bronze in the



was of phosphor bronze in the model akelitie female unit. Inquent use is possible over long periods without damage even with heavy current was of 15 amperes at 125 volts or 10 amperes at 250 volts. Full, body-tight havy brass hell—bright cadmium plate. Polarized with shell has ad keyways. Terminals of bakelite units are numbered for Full, body-tight

ΰĻ wek wiring. Strain is taken up by a strong cable clamp grip. Grounding screw in body for safe wiring. Threaded locking ring keps connections tight.

&M — Male......\$2.50 list &F1 — Female......\$2.50 list 



MINIATURE CABLE CONNECTORS - For shielded or unshielded cables using up to six conductors. Molded bakelite elements are housed in cadmium fated brass shells, only  $1^{3}/6^{"}$  long and  $1^{1}/6^{"}$  O.D. Bakelite element held in place wide set screw. Staggered contact spacing polarizes elements so that incorrect izertions are impossible.

	LO	NG ST	RAIGHT S	HELL				
FEMALE	MALE							List
#-MPF3L	91-MPM3L	3-Co	ntact Plug.					30c
1-MPF4L	91-MPM4L	4-Co	ntact Plug.					33c
1-MPF5L	91-MPM5L	5-Co	ntact Plug.					37c
II-MPF6L	91-MPM6L	6-Ca	ontact Plug.		• • • • • •		•••••	37c
FLANGED S	HELL STRA	IGHT S	HELL					
FEMAL	E N	IALE						List
91.MPF	3 91-	MPM3	3-Contact	Miniatu	re Cabi	ie Con	necto	r30c

91-MPF3	91-MPM3	3-Contact Miniature Cable Connector 300
91-MPF4	91-MPM4	4-Contact Miniature Cable Connector 33c
91-MPF5	91-MPM5	. 5-Contact Miniature Cable Connector 37c
91-MPF6	91-MPM6	6-Contact Miniature Cable Connector 37c



l plug is		6
4511	SHORT	STR

SHURI	STRAIGHT SHE	LL.
FEMALE	MALE	List
M-MPF3S	91-MPM3S	30c
II-MPF4S	91-MPM4S	33c







ig to contact number. Mounting centers 11/4".

MALE N-PCG3M	91-PCG3F	3-Contact
II-PCG4M	91-PCG4F	4-Contact
1-PCG5M	91-PCG5F	5-Contact
II-PCG6M	91-PCG6F	6-Contact

#### LOW-LOSS "912-A" COAXIAL CABLE END TERMI-

NAL CAP --- For connection to Antenna Cable End Terminal as listed below. Molec in an umberlal like design, of pure polystyrene, Amphenol h gh dielectric, low-loss material. A coat of Amphenol "912-A" liquid polystyrene on the cap threads



and wire opening will make the terminal connection weather-tight. Size  $-\frac{1}{2}$ 

90-15 End Terminal Cap as above..... For Liquid "912-A" See Synthetics Page.

#### LOW-LOSS COAXIAL CABLE END TERMINAL



For connection of coaxial cable to antennas, open wires and matching stubs. For a suspended connection or for connec-tion to bracket or insulator in <sup>25</sup>/<sub>26</sub><sup>2</sup> hole without strain on the aerial. May be sweated on copper tube cable and body solder lug may be used for connection to dipole and doublet aerials. When used with terminal cap listed above, connec-tion in weather think aerials. When used v

93-M5 Antenna Cable End Terminal ......\$1.50 list

HEAVY DUTY CHASSIS OR PANEL RECEP-	Allemon
<b>TACLE</b> — With male or female molded bakelite unit for use with Heavy Duty Power Connectors — Use 92-M with 92-C	
and 92-F1 with 92-C1. Mount in 134 hole in any material thickness up to 3/2". Complete with lock washer, spacer washer and hexagon nut. Can be covered with CCC8 cap and chain described below, when not in use.	
92-C — Female	

HEAVY DUTY FLUSH RECEPTACLES - With male or female bakelite



unit in strong, stor body name, ched with moury -		
Connectors - 92-F1 with 92-M2 and 92-M with 92-F2	— in re	gu-
ar wall switch boxes. Full, open connection end will	come t	hru
vall plate 1/8" for good connection to grip locking ring	or for	cap
nd chain described below for a closed outlet when not in	use.	
2.M2 — Male	\$2.60	list
2-F2 Female	\$2.60	list
A-2CH - Wall Plate for use with above	75c	list

**CAP AND CHAIN**—Heavy Duty Chrome Plated Brass Cap with bead chain similar to CCC1 and CCC3 but larger in size, to be used with chassis and flush receptacles above and chassis units of heavy duty radio connectors below.



#### HEAVY DUTY RADIO CONNECTORS

No. of Con-	Cable Co With Coun	nnector ling Ring	Cable Cor With Couplin	nnector na Thread	Chassis With Coupli	List	
tacts	Male	Female	Male	Female	Male	Female	Price
4	79-04M	79-04F1	79-04M1	79-04F	79-P04M	79-P04F	\$1.25
5	79-05M	79-05F1	79-05M1	79-05F	79-P05M	79-P05F	1.25
6	79-06 M	79-06F1	79-06M1	79-06F	79-P06M	79-P06F	1.25
ě	79-08M	79-08F1	79-08M1	79-08F	79-P08M	79-P08F	1.25
12	79-012M	79-012F1	79-012M1	79-012F	79-P012M	79-P012F	2.00



**RUBBER CUSHIONS** - Live rubber cushions for inserting in chassis or panel riveting holes to lessen vibration of an assembled part such as a tube socket. Molded from pure rubber. 22-6 — Rubber Cushion for  $\frac{3}{8}$ " Hole. 100 for \$3.00 22-10 — Rubber Cushion for  $\frac{1}{4}$ " Hole. 100 for 1.50







ANTI-MICROPHONIC KIT-- Socket cushions An II-MICHOFTUMIC NII — Socket cushions and all the necessary parts for making floating con-nections using Amphenol MIP sockets. Contents in an envelope with complete instructions consist of four live rubber cushions, metal wachers, mounting screws and nuts. Used to overcome tube micro-phonies wherever cushioned sockets are necessary, establishing in photo-eall work ultragensitive significaespecially in photo-cell work, ultra-sensitive circuits, and for some battery tubes. 



#### Standard Group





#### SINGLE CONTACT MICROPHONE CONNECTORS

SHIELDED CABLE TYPE - Unbreakable machined brass shell chrome-plated: with coupling ring for tight connections. Spring cord protectors accommodate cables to 1/2" diameter.



# **SIDE CABLE OUTLET** — Designed to be placed between a microphone and stand having $\frac{5}{20}$ 27 standard threads. Its purpose is to provide an outlet for the microphone cable where it is not de-sired to run it through the stand tubing. Efficient cable grip relieves strain. Heavy metal castings, finished in polished chrome.

57-SC03...... 75c list



CHASSIS UNIT ---- Use in holes .385" to ground to chassis or ½" for 2 independent circuits. Has extruded fibre washer, flat fibre washer, flat solder lug washer and locking nut. Use MCIF or MC1F-A cable connector.

PRESSURE CABLE CONNECTOR-Like MC1M listed above but center insulated contact is enforced by The a heavy coil spring at the back for positive connection. Used for any unit fitting MC1M. Supplied with spring cord protector for cables to  $\frac{1}{4''}$ .

Special Group -01-Mild



**1 AND 2 CONTACT CONNECTORS** — **CABLE TYPE** — For small coaxial cables, microphone cables, speakers and other connections. Standard sleeve type contacts and male prongs for positive contact. Unbreakable brass shell, polished chrome finish. Molded element of high dielectric black bakelite. Screw type coup-ling ring for tight couperions and spring cord protector for cables ling ring for tight connections and spring cord protector for cables up to 5/16".

80-F	— 1-Contact Female	65c list
80- M	— 1-Prong Male	65c list
80-MC2F	- 2-Contact Female	80c list
80-MC2M	I — 2-Prong Male	80c list

FOR LARGER CABLES — Male connectors like 80-M and 80-MC2M above except has larger back shell for use of a larger spring cord protector which accommodates cables to .410" diameter. 80-81 — 1-Prong Male...... 65c list 80-85 

#### Deluxe Group





## 3 AND 4 CONTACT MICROPHONE CONNECTORS

Molded bakelite elements encased in unbreakable chrome-plated polarized brass shells. By removing cap and spring cord protector, connector can be screwed into microphone having  $\frac{9}{2}$ "-27 thread, standard for this industry. Screw type coupling ring prevents accidental disconnectons, 3-Contact connectors take cables up to  $\frac{1}{4}$ " diameter; 4-contact to  $\frac{3}{8}$ " diameter.

Male	Female		List
91-MC3M	91-MC3F	3-Contact	\$1.00
91-MC3M1	91-MC3F1	3-Contact	1.00
91-MC4M	91-MC4F	4-Contact	1.10
91-MC4M1	91-MC4F1	4-Contact	1.10



#### ANGLE CONNECTOR

UNIT-For cable connection at right angles to chas-sis. Used on amplifiers, transmitters, and other ap-paratus with PC1M, SP-PC1M or CL-PC1M. No pard for long bards in coble need for long bends in cable with this unit which prevents breakage of cable shields and center conduc-tors. Shell portion, polished chrome. With spring cord protector for cables to 1/4".

75-MC1F-A -- Female.....

Angle Connector..... 60c list



connectors and any standard phone jack - no soldering or wiring.

75-MC1P - Phone Plug..... 45c list

**CLOSED CIRCUIT CONNECTOR** Same as PC1M but circuit closes when cable connector is removed, eliminating open circuit grid howls. Same thread and hardware supplied as on PC1M. Contact is spring-actuated. Use MC1F the archie envergence. or MC1F-A as the cable connector.

75-CL-PC1M - Closed Circuit ...... 40c list

**PRESSURE CHASSIS UNIT** — Like PC1M Chassis Unit, but heavy coil spring enforces center contact. Fits same connectors as PC1M. 

> CHASSIS UNIT WITH COUPLING RING-For connection on chassis, panel or

HING — For connection on threading into microphone body with standard 5%"-27 thread. Coupling ring en-gages 80-F or MC2F Cable Connector. Brass shell, chrome plated. With hex nut, lock washer, and flat washer. Mounts in 5%" hole.





0000000 CAP AND CHAIN ---- Chrome 



75-CCC-1 - Cap and Chain..... 50c list

**CHASSIS CONNECTORS** For % hole in any panel or chassis up to ½" thick. Permanently fixed element in plated-brass shell. Com-plete with mounting ring, lock washer, and hexagon lock nut. lock nut.

91-PC3F - 3-Contact Female..... 50c list 91-PC3M — 3-Prong Male..... 91-PC4F — 4-Contact Female..... 50c list 55c list 91-PC4M — 4-Prong Male..... 55c list



Chrome-plated cap seals open chassis units against dust, eliminating noisy connections. Use with any 3 or 4 contact chassis unit with threads. 91-CCC-3-For PC3F, PC4F, etc......50c list







SPECIAL CHASSIS UNIT -Similar to regular chassis connector but for use on thick panels. Female units fit panels to 3/4" thick. Recessed solder lugs prevents physical dam-



Use MC3M or

91-SP-PC3F — 3-Contact Female...\$1.00 list 91-SP-PC4F — 4-Contact Female...\$1.10 list

Special male units fit panels up to 3%". Front ex-tends 1/2". Chrome plated shell with coupling ring. Use with MC3F or MC4F cable connector.



91-SP-PC3M — 3-Prong Male.... \$1.00 lix 91-SP-PC4M — 4-Prong Male.... \$1.10 lix

#### CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOL LTD.

has the FCIM installed, also be-tween amplifier and mike cable, or between two cables connected with MCIM and MCIF. PUSH-TO-TALK, and release the button for stand-by; or SLIDE SWITCH forward for permanent connection. Switch short-circuits mike. Shell machined from solid brass, chome plated. 75-MC1S — Switch...... \$1.00,list

#### STAND CONNECTOR -

**MICROPHONE SWITCH** Compact, unbreaks ble microphone switch. Male threads fit the MC1F and MC1F-A. Coupling ring fits any other 75 Series connector having coupling threads. No tools

or wiring is required. May be con-nected directly to any mike which has the PC1M installed, also be-

Screws on to top of any standard microphone stand. Female thread is  $\frac{5}{8}$  -27. Finished in polished chrome brass. Permits easy re-moval of mike.

91-SC3F - 3-Contact Female 91-SC4F — 4-Contact Female.

.....\$1.10 list

LOW-LOSS MICA FILLED IN-SERTS — Add "T" to catalog numbers and 6c to list for higher dielectric with im-proved power factor of low-loss mica filled bakelite inserts for connectors. NOTE; Not available in 75 Series.



#### **RIVETING PLATE** CHASSIS UNIT -

For fast mounting with rivets or replacement where units listed above are too small. 146 dia. plate part of entire unit, machined from solid from solid lated, 27/32" brass, chrome plated. mounting centers.



80-CR ---- 1-Pole Female...... 80-PC2-CR - 2-Pole Female..... 55c list



age and danger of shock. MC4M as cable connector.





dielectric material when perfectly dry. To protect this condition Amphenol Acorn Sockets are silicone treated all over. Under this condition the electrical properties are improved over the ceramic alone. Moisture collecting on the surface is isolated into drops that are well insulated from each other, thus insuring high resistivity.

Special and exclusively designed contacts in Acorn sockets hold the tube without requiring high insertion and withdrawal pressures which normally would break the glass seal to the pins. Amphenol Acorn Sockets use a rotary insertion and withdrawal guided by barriers to insure centering and making contact in the same groove, thus eliminating any change in external capacitances. Construction is such that contact is assured although tube pins may be slightly misaligned.

The contacts are made of Grade A phosphor bronze, heavily silver plated. For the military services beryllium copper contacts heat treated and heavily silver plated are also available. The ceramic bases are made of Grade G steatite silicone treated.

By-pass condensers for cathode and screen are built into the socket to keep the lead inductance low. The **151-001** Amphenol Acorn Socket design lends itself to mounting on the variable condenser shield plate so as to get short connections for the U.H.F. bands. The by-pass condenser can also be mounted to this same plate for further efficiency.

151-001 Amphenol Acorn Socket is designed for mounting with screen and cathode by-pass condensers on chassis punched to fit (see detailed cross section). Overall dimensions  $1'' \ge 1\%''$ , no mounting holes are provided in the ceramic part.

151-003, 151-017, 151-005 and 151-019 Amphenol Acorn Sockets have two mounting positions 60° apart on 13/16" centers and 5/32" diameter holes molded in raised bosses for strength. Underside of the socket is ground flat to insure perfect contact when self contained by-pass condenests are used integral with chassis. Size 1-13/32" x 1-13/32".



#### LISTED STYLES OF ACORN SOCKETS

- 151-001 5 Contact cathode and screen by-pass Acorn Socket — bronze contact — grounding plate cannot be used. For mounting directly on chassis. Size 1" x 1%".
- 151-003 5 Contact Acorn Socket bronze contact integral chassis mounting type. Size 1-13/32" x 1-13/32".
- 151-017 5 Contact cathode and screen by-pass Acorn Socket—bronze contact—complete with grounding plate. Size 1-13/32" x 1-13/32".
- 151-005 7 Contact Acorn Socket bronze contact. Size 1-13/32" x 1-13/32".
- 151-019 7 Contact cathode by-pass Acorn Socket—bronze contact — complete with grounding plate. Size 1-13/32" x 1-13/32".

## AMPHENOL Builds to the Auture of ELECTRONICS CABLES · CONNECTORS · SOCKETS PLASTICS · PLUGS

#### BETTER F-M AND TELEVISION RECEPTION WITH AMPHENOL DIPOLE ANTENNAS

AMPHENOL F-M & TELEVISION DIPOLE ANTENNA & REFLECTOR

Any array that is erected must be able to withstand the forces of the elements to which it is subjected. In designing the Antenna, Amphenol Engineers incorporated the following features:

- High electrical efficiency thru use of high dielectric insulation.
- Lightness and superior strength in tubular steel construction resisting extreme wind velocity, sway and damage caused by birds.
- Swivel feature of both types of antenna for reduction or omission of undesirable reflections resulting in multipath distortion in television reception.

Antenna or arrays are available to cover effectively the entire range of television and F-M Frequencies.



F-M reception at some distances from transmitter locations requires a better than ordinary antenna. The Amphenol F-M Dipole Antenna and Reflector Kit has been developed for postwar requirements and sale to meet this condition. It provides high gain resulting in greater pickup and affording finer reception than is possible with the ordinary aerial. The array is also directional which eliminates undesirable interference from the back or reflector side of the system. The Amphenol Kit consists of the necessary parts to assemble the complete antenna array excepting the guy wires. It is easy to put together, requiring the minimum of experience and time. It is electrically weatherproof and will give years of trouble-free service. Connection to the receiver is made thru the special, high-efficiency Amphenol low-loss transmission line.

## Amphenol Provides Special Transmission Line

To match the Amphenol Dipole Antennas, a special low-loss transmission line has been developed which will bring in the signal to the receiver with minimum attenuation. Amphenol low-loss transmission line is available with the kit in convenient 75 foot lengths or can be ordered separately in longer lengths to meet insulation requirements.

The Amphenol F-M Dipole Antenna, as well as the Antenna-Reflector shown above, is a self-supporting array which is engineered to provide good, trouble-free reception in the F-M bands where losses are a big factor. Constructed of metal, it is very light weight, yet strong, and installation is easy for the average person who is handy with the simplest tools. The Amphenol Dipole Kit is electrically weatherproof and when used in conjunction with Amphenol Low-Loss Transmission Line, gives the maximum reception efficiency for the bands to which it is intended. Special precautions have been taken in the design to insure the least wind resistance. The overall appearance of the array is such that it will not act to deface any structure on which it is to be installed.

Further details and price information upon request.

# CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOLUT.



#### **Characteristic Reference IMPHENOL 912A is POLYSTYRENE IMPHENOL 912B is ACRYLIC IMPHENOL 9746 is TRANSPARENT VINYL**

IMPHENOL "912-A" SHEET STOCK supplied is sizes per number listing below. 4" x 8" sizes have optical clarity suitable for dial window and gauge dass applications.

19-0624	4" x 4" x 1/16"	\$ .6
19-0934	4" x 4" x 3/6"	.6
18-1254	4" x 4" x 1/8"	.6
19-1874	4" x 4" x 3/16"	.7
19-2504	4" x 4" x 1/4"	1.00
19-0628	4" x 8" x 1/6"	1.03
19-0938	4" x 8" x 3/5"	1.11
19-1258	4" x 8" x 1/8"	1.19
19-1878	4" x 8" x 3/6"	1.41
19-2508	4" x 8" x 14"	1.78

AMPHENOL "912-A" RODS - Supplied in length is not specified, Regist of to 45 out i definite length is not specified, if lengths will be supplied per number listing below. For lengths shorter than 12° there is a small cutting darge. Also available in diameters  $-1/\xi'$  to  $4/\xi' -$ light of the state of the state

Number	Diameter	Per Foot
19R125	1/8"	\$ .15
19R187	3/16"	.20
19R250	1/4"	-40
19R312	5/16	.43
19R375	3/8"	.45
19R500	1/2"	.80
19R625	5,5"	1.25
19R750	3/1"	1.65
19R875	7%"	2.40
19R1000	1"	3.10

**IMPHENOL "912-A" TUBES** — Tolerances mintained suitable for radio coil form and electronic splications — supplied in 12° lengths in various di meters and per number listing below and also available in lengths up to 48".

	Overall	Wall	
Number	Diameter	Thickness	List
19T1-062	3/16	1/16"	\$ .08
19T2-062	1/4"	1/16"	.12
19T3-0C2	5/16"	1/16"	.16
19T4-062	3/8"	1/16"	.18
19T5-062	1/2"	1/16	.23
1976-062	5/8"	1/16	.32
19T7-062	3/1"	1/16"	.38
19T8-062	1″	1/16"	.52

AMPHENOL "912-B" ACRYLIC SHI **STOCK** — Supplied in standard sheets,  $12" \times 16"$ umber listing below  $\frac{1}{2}"$  to  $\frac{1}{2}"$  thickness. No a band charge is made for quark or or half sheets, unlable in sheets as large as  $20" \times 25"$ .

Number	3120	LIST	5
65-062	1/16"	\$ 4.00	ŧ
65-125	1/8"	8.00	ŧ
65-187	8/16	12.00	(
65-250	14"	16.00	ł
65-375	3/5"	24.00	ŧ
65-500	1/2"	32,00	ŧ
	, =		

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**AMPHENOL "912-B" ACRYLIC RODS** — Supplied in 12° lengths — 34° to 1° diameter per number listing below, unless a definite length is specified. Can be supplied in lengths up to 48°. Also available in diameters — 154° to 2° in 12° lengths and up to 48° length if specified. Price on request.

10 TonBen in pho	mous ario on requests	
Number	Diameter	Lis
65R250	1/4"	\$ .40
65R375	3/8"	.4!
65R500	1/2"	.80
65R625	5/8"	1.2
65R750	3/4"	1.65
65R875	7/8"	2.40
65R1000	1″	3.10

**AMPHENOL "912-B" ACRYLIC TUBING** — Supplied in 12" lengths diameters 1½" to 3" per num-ber listing below or in continuous lengths up to 48" if specified. Also available in 12" lengths and in con-tinuous lengths up to 48" if specified in diameters from 2½" to 3", Prices on request. No cutting charge for lengths exceeding 12" for lengths exceeding 12".

	Overall	Wall	
Number	Diameter	Thickness	List
65T1-125	11/2"	1/8"	\$2.40
65T1-187	1½″	\$ 16"	3.55
65T2-125	13/4"	1/8"	2.85
65T2-187	134"	8/16"	4.10
65T2-250	134"	1/4"	5,20
65T3-125	2″	1/8"	3.20
65T3-187	2″	3/16"	4.75
65T3-250	2″	1/4"	6.30

#### **AMPHENOL "912-B" ACRYLIC CUT STRIPS**

- Recommended for making most types of low-loss insulator - trimmer bases, terminal strips, bushings, open wire transmission line spreaders, mountings for binding posts and pin jacks, coil supports, etc. Sup-plied in 12" lengths per number listing below and also available in lengths up to 24".

5 .08	Number	Width	Thickness	List
.12	65TS1-250	1/4"	. 1/16"	\$ .26
.16	65TS1-500	1/2"	1/16"	.35
.18	65TS1-750	3/1"	1/16	.42
.23	65TS1-1000	1″	1/16"	.52
.32	65TS2-250	1/4"	1/8"	.38
38	65TS2-500	1/5"	1/0"	.57
.52	65TS2-750	3/1"	1/0"	.71
	65TS2-1000	1"	1/0"	.90
_	65TS3-250	1/4"	3/16"	.57
EET	65TS3-500	1/3"	8/10	.84
" ner	65TS3-750	3/1	8/10	1.05
di.	65TS3-1000	1"	\$ /"	1 34
Aleo	65TS4-250	1/1	1/10	72
1100	65TS4-500	1/2"	14"	1.08

65TS4-750	3/1"	1/"	1.36
65TS4-1000	17	14"	1.75
65TS6-250	1/4"	3/8"	1.96
65TS6-500	1/2"	3/8"	1.60
65TS6-750	3/4"	8/8"	2.00
65TS6-1000	1"	3/8"	2.60
65TS8-250	1/4"	1/2"	1.37
65TS8-500	1.6"	1/2"	2.10
65TS8-750	34"	1/2"	2.68
65TS8-1000	17	1/2"	3.45

#### AMPHENOL "9746" FLEXIBLE SYNTHETIC

**TUBING** — of clear vinyl, small sizes may be used as "spaghetti" and the larger sizes provide the newest type all-purpose conduit. Resists tearing and abra-sion, but may be cut. Very flexible and when stretched or flexed, readily returns to original form.

	A.S.T.M.	Nominal	Wall	
Number	Size	I.D.	Thickness	List
9746-034	20	.034"	.016"	\$22,22 M ft,
9746-038	19	.038″	.016"	22.22
9746-042	18	.042"	.016"	22.22
9746-047	17	.047"	.016"	22.22
9746-053	16	.053"	.016"	23,15
9746-059	15	.059"	.016"	23,15
9746-066	14	.066"	_016"	25.00
9746-076	13	.076"	.016"	25.00
9746-085	12	.085"	.016"	28.70
9746-095	11	.095"	.016"	28,70
9746-106	10	.106″	_016"	35,18
9746-118	9	.118″	.016"	37.96
9746-133	8	.133"	.016"	40.74
9476-148	7	.148″	.016"	44.44
9746-166	6	.166"	.016"	46.30
9746-2	1/8	1/8"	.030"	91.48
9746-3	*3 15	8/16	.040″	148.30
9746-4	*14	1/4"	.040″	171.88
9746-6	*3/8	3/8"	.060″	.51 ea. ft,
9746-8	*1/2	1/2"	.083″	.68
9746-10	*5/8	5/8"	.083″	.85
9746-12	*3/4	3/4"	.083″	.96
9746-14	7/8	7/8"	.083"	1.11
9746-16	*1	1″	.083″	1.33

\* Ferrules available for these sizes.

#### **FERRULES and FERRULE** CRIMPING MACHINE for use with Synthetic Tubing.

Standard one-step and two-step ferrules are available for synthetic tubing as indicated by asterisk. Fine construction for durability and easy application. There is also available a special ferruling machine for attaching these ferrules on a production basis.

Data and Prices upon Request.

#### AMPHENOL Builds to the Auture of ELECTRONICS CABLES . CONNECTORS . SOCKETS PLASTICS PLUGS .

A — PLUG-IN COIL FORMS — Amphenol "912-A" polystyrene superior coil forms. Prong spac-ing fits standard tube sockets. Diameter of coil 1¼"; length of body 2¼". Impregnate wound coils with Liquid "912-A". 24-4P - 4-Prong **B**— **MINIATURE PLUG-IN TYPES**— Small plug-in coil forms of Amphenol "912-A" poly-styrene. Only ¾" in diameter. For transceivers, low-power transmitters and receivers for UHF. For use with 54-5H and 54-6H Miniature sockets listed on socket page. 

D — COMPLETE UNIVERSAL INSULATOR — Of Amphenol "912-A" polystyrene with fit-tings, binding screws and soldering lugs. Over-all height of insulator is 31%". With assembled hardware, 4". Mounting holes on 11/2" centers. 66-60..... .....\$1.00 list

E — UNIVERSAL INSULATOR "D" AS STAND-OFF — FEED-THRU — LEAD-IN — Section construction for assembling insulators below or above surface. With additional insulating tubes, used as aerial lead-in thru walls for antenna feeders.

UNIVERSAL INSULATOR HARDWARE AND PARTS	_ist
66-167 — Center Rod 5% long, for stub insulator	150
66-168 — Center Rod 25% long for standard insulator with 1 tube	100
<b>66-169</b> — Center Rod 45% long for insulator with 2 tubes	100
66-170 — Center Rod 6 <sup>5</sup> / <sup>4</sup> long, for insulator with 3 tubes	200
66-165 — Top Brass Bushing with screw and solder-lug	200
66-166 — Bottom Hex. Fitting with screw and solder-lug	150
66-60T — J — Insulator Tube as described above can be fitted together and cemented with Liquid	190
"912-A" as feed-thru for H.F. and high voltage lines and as forms for B F Ant and F	
coils. Over-all ength 21/", diameter is 1/" for 2" of the length and 3/" for the remaining	
4". Has 4" hole thru center	250
66-60B — H — Insulator Base (Bushing) — Versatile type of feed-thru hushing for H E or high	-00
voltages. Used with tubes "J" and bardware above for assembling many types of insu-	
lators. Over-all length 1"	250
F STUR INSULATOR Similar to "D" No 66 60 but longth of found to the T	•
mounting coils condeners and other parts carrying H F or high voltage currents.	00

**G**— **K**— **LARGE AND SMALL STAND-OFF U.H.F. INSULATORS** — Of Amphenol "912-A" polystyrene. For indoor or outdoor use. Non-hygroscopic. Large type 3/4" in diameter. Small type 1/2" in diameter. Wire held in place by screw or solder-lug. Hex. screw for binding wire in place

Number	Length	Diameter	1 iet
66-1 — Small		1/6"	500
66-2 Small		1,6"	60c
66-3 — Large		1/"	1 10
66-4 — Large	47/8"	3/"	1 35
66-5 — Large			
		· · · · · · · · · · · · · · · · · · ·	



5/16" POLYSTYRENE BEADS — Widely used Amphenol insulating beads can be strung on wires up to No. 12 solid or No. 14 stranded. Hole diameter is .080°; length ½°; over-all diameter is ½°. When stringing cables figure 28 beads to the foot. 73 - Box of 250 Beads .....\$2.50 per box list



**TWO-WIRE POLYSTYRENE BEADS** — A two hole bead for making balanced lines strung on wires up to No. 18 solid. Hole diameters, .050"; length,  $\frac{1}{2}$ "; over-all diameter is  $\frac{11}{20}$ ". When stringing cables figure 27 beads to the foot. - Box of 250 Beads ..... 

3/16" HIGH TEMPERATURE BEADS - Like No. 73-1 beads above but of mica-filled bakelite 

Amphenol "POLYWELD" is the proven efficient coil dope and plastic cement and sealer-completely listed on a following page.



**U.H.F. ALIGNMENT TOOL** ----

Made of pure polystyrene Amphenol "912-A". Has no capacity effect when aligning critical circuits. A nec-essary tool for servicemen,



laboratory technicians, ama-teurs and anyone who must make adjustments on high and ultra-high frequency and critical circuits.

55 - U.H.F. Align-

#### CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOL LTD.

## AMERICAN PHENOLIC CORPORATION Chicago 50, Illinois IN TORONTO • AMPHENOL LIMITED



#### HIGH FREQUENCY CABLES

**AMPHENOL COAX AND TWINAX RG CABLES** are fully approved and produced in accordance with Army-Navy specifications (JAN-C-17 July 1944). These specifications utilize the very fine dielectric properties of polyethylene, proven most efficient as a low-loss flexible mechanically stable dielectric. The outer jacket in most of Amphenol's approved types is a tough resistant vinyl protective, non-hygroscopic, and impervious to exposure of acids, alkalis, oils and gasoline. Polyethylene is also used as outer jacket for some of the types listed.

Polyethylene is processed in strict accordance with Bureau of Ships Specification RE-9172. It should be emphasized that unusually strict standards are applied to every processing operation of Amphenol's RG cable types. They are produced for "quality plus." Rigid laboratory tests and other process checking, plus Amphenol's "O.K." certification and notarized affidavit on every unit shipment, is final assurance of extra quality and dependability.

Also illustrated, but not approved for military use without specific authorization, are two of Amphenol's beaded type cables. This polystyrene and mica filled bakelite type of beaded cable is one of Amphenol's early developments in U.H.F. cables and for specific uses, is still in popular demand. The beads, too, may be ordered in bulk and are illustrated and priced on the Synthetics page.

Chart below represents the characteristics of all types of RG cable approved for manufacture by Amphenol. Further specifications and prices upon request.

Approved R-G CABLES with Characteristics and Dimensions           AN         NOMINAI         CONDUCTOR         O.D. OF         INNEE         OUTER         JACKET         ARMOR           NO.         IMPEDENCE         MMPD PT.         WHE SIZE         DIELECTRIC         SHIELD         MATEBIAL         O.D.														
A N NO.	NOMINAL IMPEDENCE	NOMINAL MMFD FT.	CONDUCTOR WIRE SIZE	O D. OF DIELECTRIC	INNER	OUTER	JACKET	O.D.	ARMOR MAX. O.D.					
RG-5/U	53.5	28	16	.185	COPPER	COPPER	BLACK VINYL	.332						
RG-6/U	76.	20	21CW	.185	SILVER"	COPPER	GREY VINYL	.332						
RG-7/U	97.5	12.5	19	.250*	COPPER		BLACK VINYL	.370						
RG-8/U	52.	29	7-21	.285	COPPER		BLACK VINYL	.405						
RG-9/U	51.	29	7-21 SILVER*	.280	SILVER*	COPPER	GREY VINYL	.420						
RG-10/U	52.	29	7-21	.285.	COPPER		GREY VINYLT	.405	ARMOR .475					
RG-11/U	75.	20	7-26 TINNED	.285	COPPER		BLACK VINYL	.405						
RG-12/U	75.	20	7-26 TINNED	.285	COPPER		GREY VINYL	.405	ARMOR					
RG-13/U	74.	20	7-26 TINNED	.280	COPPER	COPPER	BLACK VINYL	.420						
RG-14/U	52.	29	10	.370 .	COPPER	COPPER	GREY VINYLT	.545						
RG-15/U	76.	19	15CW	.370	COPPER	COPPER	BLACK VINYL	.545						
RG-17/U	52.	29	.188	.680	COPPER		GREY VINYL	.870						
RG-18/U	52.	29	.188	.680	COPPER		GREY VINYLT	.870	ARMOR .945					
RG-21/U	53.	29	16 NICHROME	.185	SILVER"	COPPER	GREY VINYLT	.332						
RG-22/U	95.	16	TWO 70152	.285	TINNED		BLACK VINYL	.405						
RG-29/U	\$3.5	28	20	.116	TINNED		POLYETHYLENE	.184 MAX.						
RG-34/U	71.	21	7-21	.455	COPPER		BLACK VINYL	.625						
RG-42/U	76.	20	21 NICHROME	.196	SILVER*	COPPER	GREY VINYLT	.342						
RG-54A/U	58.	27	70152	.178	TINNED		POLYETHYLENE	.250 MAX.						
RG-55/U	53.5	28	20	.116	TINNED	TINNED	POLYETHYLENE:	.206 MAX.						
RG-57/U	95.	17	TWO 7-21	.472	TINNED		BLACK VINYL	.625						
RG-58/U	53.5	28	20	.116	TINNED		BLACK VINYL	.195						
RG-59/U	73.	22	22CW	.146	COPPER		BLACK VINYL	.242						
RG-62/U	93.	14	22CW	.146*	COPPER		BLACK VINYL	.242						
RG-71/U	93.	14	22CW	.146*	COPPER	TINNED	POLYETHYLENE	.250 MAX.						
RG-74/U	52.	29	10	.370	COPPER	COPPER	GREY VINYL	.545	ARMOR .615					
*Semi-Salid D	ielectric	tNon-6	Contaminating V	'inyl Jacket	‡Palyet	hylene Jacket	*Silver	Cooted Cop	per Wire					

This chart dated Jan. 1, 1945 - Subject to changes and additions.

#### MPHENOL Builds to the Juture of ELECTRONICS CABLES . CONNECTORS . SOCKETS CILP! LASTICS • PLUGS

#### LOW-LOSS 83 SERIES CONNECTORS --- U.H.F.

This complete line of low-loss connectors and adapters for use with RG type cables serves all practical applications and they are made in both small and large sizes for coax and twinax cables. They are a very rugged construction, die cast zinc and machined brass shells, heavily silver plated. Low-loss inserts are of mica filled bakelite and polystyrene, and their construction provides for easy assembly and positive connection. Fully Army-Navy approved for use with U.H.F. cables.

Number         SMALL SINGLE CONTACT CONNECTORS         List           83-15P         STRAIGHT PLUG—With molded low-loss mice filled insert
Number SMALL TWIN CONTACT CONNECTORS List
83.225P       TWIN PLUG — With low-loss mica filled dielectric insert.       \$1.74         83.227       TWIN RECEPTACLE CHASSIS OR BOX TYPE — For 83-22SP connector       1.37         83.222P       TWIN ANGLE PLUG ADAPTER — For straight 83-22SP plug.       2.74         83.221       TWIN INCTION — Double end contact — for use with 83-22SP.       1.96         83.225       TWIN FEED THRU ADAPTER — Pressure tight to 20 lbs. per sq. inch.       2.63
HOODS FOR SMALL CONNECTORS
83-1H         — HOOD—For RG cables 8/U, 10/U, 11/U, 12/U, 22/U, 63/U, 65/U\$.44           83-1H         — HOOD—For use with double shield braid wire — RG9/U, 13/U\$.56           83-765         — HOOD—For effective shielding of smaller diameter cables
List
83-1AC       CAP       For 83-1R, 83-1RY, 83-1RTY and 83-22R connectors.       \$.85         83-1BC       CAP       For 83-1SP, 83-1SPN and 2 pole plug       83*22SP connectors.       1.00         83-168       ADAPTER       For small cable       RG59/U, 83-1SP connector.       .67         83-185       ADAPTER       For small cable       RG-58/U, use with 83*1SP connector.       .67
List
83-21SP — PLUG — With low-loss mica filled insert and rubber gasket       \$3.78         83-21R — RECEPTACLE — With two piece low-loss mica filled insert       1.56         83-21AP — ANGLE PLUG ADAPTER — With waterproofing rubber gasket       2.89         83-21J — JUNCTION — Polystyrene insert — waterproof — dust tight.       On Request
Number LARGE TWIN CONTACT CONNECTORS List
<ul> <li>83.25P — TWIN PLUG — Low-loss mica filled insert — waterproofing gasket</li></ul>

Number	LARGE HOOD and LARGE CAP	List
83-2H - HOOD-	-For effective shielding, used with 83-2R and 83-21R receptacles	.\$.48
83-2AC - CAP-F	or sealing large 83-2R and 83-21R	. 1.11

#### BRITISH TYPE CONNECTORS

Number **83-1M** — ADAPTER — 83-1SP — SO-153 (110H 585) to 83-1R — PL-P173 (110H 584) . **53.63 83-764** — ADAPTER — 83-1SP — 10H 528 to 83-1R — 10H 529, 10H 701, 10H 702... **3.52 83-1D** — ADAPTER — SO-153 (110H 585) — 83-1R to PL-P173 (110H 584) — 83-1SP **4.44** 

SMALL SINGLE CONTACT CONNECTORS 83-1AP 83-1SP 83-1SPN 83-1B 83-1J 83-1F 83-1T Units above for RG cables — 8/U, 10/U, 11/U, 12/U, 63/U, 65/U — and 58/U, 59/U using 83-168 and 83-185 with 83-18P. SMALL TWIN CONTACT CONNECTORS 83-22J 83-22B 83-22SP 83-22AP 83-22F Units above for twinax cable - RG-22/U or any twin conductor cable of approximate .405" O.D. HOOD for SMALL CONNECTORS 83-765 83-1HP 83-1H ADAPTER **CAPS** and **CHAINS** List

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#### AMPHENOL POLYWELD "912" (Coil Dope) FOR R.F.-U.H.F & V.H.F. APPLICATIONS

Amphenol POLYWELD "912" is pure liquid Polystyrene. It is designed for "doping," coating, impregnating and sealing in most Radio Frequency applications in the *Ultra-High* and *Very-High* frequency ranges.

POLYWELD is moisture-repellent because it is non-hygroscopic and will not normally support fungus growth. It may therefore be used where these conditions are encountered with a resultant improvement in the performance of radio equipment.

#### FAST-DRYING • STRONG-ADHERING • LOW-LOSS • UNIFORM IN APPLICATION

Wherever critical components (coils, coil forms, capacitors, ceramics, bakelite, connectors, etc.) must be coated or sealed, Amphenol POLY-WELD "912" can be accepted as the standard to obtain high dielectric functioning together with moisture-repellent qualities which will give excellent service within the temperature range of  $-70^{\circ}$  F. to  $160^{\circ}$  F. In addition, the low power factor of POLYWELD "912" is a distinct asset wherever it is used in radio frequency circuits.



POLYWELD "912" when used in conjunction with "912-A" Polystyrene products, and ACRYWELD "901" with "912-B" Acrylic products (being specially designed for use with these materials), will actually "weld" the parts negether so as to create a homogeneous unit.



#### Will Not Harm Silk, Celanese, Enamel or Cotton Coverings

POLYWELD "912" has high density and a relatively heavy body with low viscosity which creates a substance easy to apply in both thin and thick coatings. Usually only a thin coating is required. It is heavily bodied and may be diluted 30 to 40% with No. 916 Thinner, thus making the use of POLYWELD extremely economical. It has high resistance and minimum surface leakage at *Ultra-High* and *Very-High* R.F. frequencies and can be used for almost all radio frequency applications. Its high potential breakdown makes it substantially puncture-proof while its unusual flexibility develops an ideal material for use in high-voltage R.F. circuits.

The use of POLYWELD "912" will not affect the electrical characteristics of coils within most frequency ranges.

#### AMPHENOL POLYWELD "912" (Liquid Coil Dope) and AMPHENOL ACRYWELD "901" CEMENTS & THINNERS

#### Non-Returnable Containers-Net Wt. per Gal. 7.85 Lbs.-Gross Wt.

#### 1-Gal. Can: 8.75 Lbs.-5-Gal. Can: 41.75 Lbs.-30-Gal. Drum: 265 Lbs.

Number	×	List	Price
53-912-2	2-oz. Bottle Polyweld		\$ .50
53-912-4	4-oz. Bottle Polyweld		.65
53-912-P	Pint Container Polyweld		2.25
53-912-Q	Quart Container Polyweld		4.00
53-912-G	1-Gallon Can Polyweld		13.35
53-912-5G	5-Gallon Drum Polyweldper	gal.	12.26
53-912-30G	30-Gallon Drum Polyweldper	gal.	11.31
53-916-2T	2-oz. Bottle Thinner		.25
53-916-GT	1-Gallon Can Thinner		2.00
* For spigot u	se.		
'Add "901" i	n place of "912" and "916" in the above	numb	ers for

ACRYWELD "901" Cement and ACRYWELD Cement Thinner for quantities indicated at same list prices.

## AMPHENOL Builds to the Juture of ELECTRÓNICS CABLES · CONNECTORS · SOCKETS PLASTICS · PLUGS



## "AN" and "97" CONNECTORS

Amphenol electrical connectors provide a means of quickly connecting or disconnecting one or many electrical circuits in aircraft, marine and other mechanized equipment where dependable weather-proof and vibrationproof service is required. All of the (AN) types are built to Army-Navy specifications. The Amphenol 97 Series connectors were developed for special applications and are built under the same general specifications, designed primarily to supplement the standard AN types.

The eight shell types shown in the left column are representative of the most popular types altho Amphenol builds these same connectors and others to special requirements of weather-proofing, pressurizing, tropicalization — all in accordance with the high quality specifications of the Army and Navy.

Amphenol connectors are produced in a great variety of combinations of shells and inserts, dielectric materials and finishes and it will be found advisable to follow recommended procedure in ordering. To clarify specification, we break down a typical item order number explaining the reference of each digit or letter.

#### TYPICAL NUMBER



**AN or 97.** The "AN" prefix applies to all units which have been assigned an official Army-Navy part number in the prevailing "AN" specification. The "97" prefix is used on all Amphenol items manufactured in accordance with Army-Navy specifications but not yet assigned official part numbers.

**3100.** This number designates the shell type with no relation to the insert. The eight basic shell types are shown at the left. Angle receptacle or plug may be had in split or solid shell. Designation is explained under type 101 below.

16. This dash number performs a double function. Coupled with the shell style designation — in this case AN3100 — it indicates the shell style and size. That is, AN3100-16 indicates that a receptacle shell in size 16 is required.

**11P.** As a second function, the above dash number "16" when coupled with the number immediately following — in this case 11PY — indicates the contact layout required. The letter "P" in this number indicates a pin (male) insert and the letter "S" indicates a socket (female) type insert. See copy and illustrations at bottom of page for detailed clarification.

Y. This letter designation after the standard insert is one of several suffix letters ordinarily employed to specify other than standard dielectric material.

101. Refers to the style shell. There are many variables in the complete Amphenol line, but in this condensation, use a designation here only when ordering angle plugs in which case 101 specifies the solid shell angle housing and 102 the split shell angle housing.

8M. This dash number indicates the type of finish required. Standard finish in accordance with specification is furnished unless otherwise specified.

A complete electrical connection requires a receptacle and a plug. Receptacles are usually mounted rigidly on the electrical equipment. Because of this they are designed with a solid base for mounting on a panel, bulkhead, wall, instrument, and so on. Plugs are usually used on the end of a flexible conduit or cable. The receptacle is always indicated as the shell with the external threads and the plug as the shell with the loose coupling ring. Standard shell plugs and receptacles are built to Army-Navy specifications. Receptacles for special applications are designed to accomplish various purposes such as preventing moisture entering instruments or equipment, pressure-proofing in high altitude flying, for use in hazardous locations, unusual space requirements, additional mounting holes for flush installations, vibration-proof for use on machines, instruments and other equipment, mounting on curved surface, light proof on aerial cameras and similar applications. Shell plugs are neat in appearance, simple and easy to assemble. Solid shell provides protection against moisture and dust. Split shells provide easy access for soldering, wire testing and are stocked in most sizes.

Complete listing of inserts with shells sizes on the following ten pages.



It should be clarified for the benefit of those ordering AN connectors for the first time that the classification receptacles and plugs have no relation to the insert classification of pin (male) and sockets (female). Either the receptacle or the plug can be specified with pin or socket inserts. All inserts listed on the following ten pages are interchangeable in any other shell types within the same size specification. Amphenol inserts comply in layout, contact sizes and use of dielectric materials with prevailing AN specifications.



#### CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO PLASTICS

### LISTING OF APPROVED SHELL AND INSERT COMBINATIONS

An insert is considered to be the contacts and the supporting dielectric element and as indicated may be ordered as plug (P) or socket (S) for use in any of the shell types. All Amphenol plug and socket inserts are interchangeable in the shells of same size with exception of 10SL-3, 10SL-4. Amphenol elements have heavier sections and are provided

with barriers to further increase insulation between contacts. This listing consisting of ten pages is very comprehensive. For special requirements there are many more inserts available in alternate positioning and of the shorting and grounding types. The dielectric or insulation material is molded according to prevailing Army-Navy specificatons.

All Prices are List.

INSERT	AN3100	AN3102	AN3106	AN3108	AN3101	97-5105	97-5107	97-5109	TOTAL	MECHI		CO	NTA	CT S	IZE	
				Anoro	Altoror	51-5105	51-5101	51-5105	TACTS	SPACING	#0	#4	#8	#12	#16	#2
85-15 85-1P	1.19 1.15	.89 .89	1.37 1.37	1.96 2.00	1.22 1.19	1.56 1.56	2.07 2.04	2.48 2.48	} 1	1/16					1	
0S-2S 10S-2P	1.11 1.07	.81 .81	1.19 1.15	2.00 2.07	1.15 1.11	1.33 1.33	2.00 2.00	2.44 2.41	} 1	3/32					1	
IOSL-3S	1.30	1.07	1.67	2.00	1.33	}			3	1/16					3	
IOSL-4S	1.19	.89	1.33	2.07	1.22	}			2	1/16					2	
12S-3S 12S-3P	1.33 1.26	.96 .93	1.56 1.48	2.22 2.15	1.30 1.26	1.78 1.70	2.19 2.07	2.96 2.93	2	1/16					2	
12S-4S 12S-4P	1.26 1.15	.89 .81	1.48 1.37	2.15 2.04	1.26 1.15	1.70 1.59	2.19 1.96	2.89	} 1	1/8					1	
12-5S 12-5P	1.37 1.26	1.04 .93	1.59 1.52	2.26 2.11	1.44	1.85	2.44	3.11	} 1	1/8				1		
14S-1S 14S-1P	1.56 1.56	1.15 1.15	1.78 1.74	2.67 2.67	1.52	2.00	3.11	3.07	3	1/16					3	
14S-2S 14S-2P	1.63 1.78	1.22 1.37	1.89 2.04	2.74	1.59	2.07	2.70	3.15	} 4	1/16					4	
14S-4S 14S-4P	1.44 1.22	1.07 .81	1.70	2.56 2.33	1.48	1.89	2.56	3.00	} 1	3/16					1	
14S-5S 14S-5P	1.78 1.85	1.37 1.63	2.04 2.11	3.19 2.93	1.74	1.59	2.85	3.30	5	1/16					5	-
14S-6S 14S-6P	1.93 1.96	1.63 1.56	2.30	3.15 3.07	1.85	2.48	3.15	3.59	6	1/32					6	
14S-7S 14S-7P	1.67 1.48	1.37	2.15	3.00	1.93	2.37	3.00	3.48	3	1/16					3	
14S-9S 14S-9P	1.56	1.15	1.78	2.67	1.56	2.00	2.67	3.11	2	3/32					2	
14-3S 14-3P	1.52	1.11	1.89	3.11	1.56	2.07	2.59	3.11	} 1	1/8			1			
16S-1S 16S-1P	1.96 2.15	1.67 1.67	2.41	3.30	2.15	2.78	3.56	4.44	7	1/16					7	
16S-3S 16S-3P	1.37	.93	1.67	2.56	1 44	2.04	2.96	3.70	} 1	1/4					1	<u>_</u>



OL Builds to the Juture of P Ξ N Ц R S CKETS ONNEC S • C C T OR 50 (A TICS S UGS P L A Ð L

(continued from preceding page)												~				
INSERT	AN2100	AN2102	AN2106	AN2100	AN2101	97 5105	07 5107	07 5100	TOTAL	MEOLIN	1	CO	NTA	CT S	IZE	
INSENT	A143100	ANGIOL	ANSTOO	ANSIUS	ANSIUI	91-9109	91-9101	31-5109	TACTS	SPACING	#0	#4	#8	#12	#16	#20
16S-4S 16S-4P	1.44 1.44	1.04 1.04	1.78 1.74	2.67 2.67	1.52 1.52	2.11 2.11	3.07 3.07	3.78 3.78	} 2	1/8					2	
16S-5S 16S-5P	1.63 1.63	1.30 1.19	2.07 1.93	2.93 2.82	1.78 1.67	2.41 2.30	3.19 3.22	4.07 3.96	} 3	1/8					3	
16S-6S 16S-6P	1.63 1.59	1.30 1.15	2.07 1.89	2.93 2.78	1.78 1.63	2.41 2.26	3.19 3.19	4.07 3.93	3	1/16					3	
16S-8S 16S-8P	1.78 1.96	1.56 1.44	2.30 2.15	3.19 3.07	2.04 1.85	2.59 2.48	3.37 3.48	4.33 4.19	5	1/16					5	
16-2 <b>S</b> 16-2 <b>P</b>	1.70 1.56	1.26 1.11	2.04 1.85	2.67 2.67	1.74 1.59	2.37 2.22	3.26 3.08	4.04 3.89	} 1	3/16				1		
16-7 <b>S</b> 16-7 <b>P</b>	2.00 1.78	1.56 1.74	1.96 2.11	3.11 2.93	2.04 1.89	2.67 2.48	3.59 3.37	4.33 4.15	3	1/16			1		2	
16-9 <b>S</b> 16-9P	2.04 1.93	1.67 1.52	2.44 2.26	3.22 3.04	2.15 2.00	2.78 2.59	3.67 3.52	4.41 4.30	} 4	1/16				2	2	
16-10S 16-10P	1.96 1.70	1.59 1.30	2.33 2.04	3.15 2.89	2.07 1.78	2.70 2.37	3.59 3.33	4.37 4.07	3	1/16		~		3		
16-11S 16-11P	1.78 1.70	1.37 1.30	2.11 2.04	2.93 2 85	1.89 1.78	2.44 2.37	3.37 3.33	4.15 4.07	2	1/16				2		-
16-12S 16-12P	2.00 1.78	1.56 1.33	2.30 2.07	3.11 2.89	2.04 1.85	2.67 2.44	3.56 3.33	4.33 4.11	} 1	3/32		1			_	
18-1S 18-1P	2.74 3.00	2.15 2.70	2.93 3.63	3.89 4.59	2.85 3.52	3.41 3.96	4.52 5.22	5.15 5.67	} 10	1/16					10	
18-2 <b>S</b> 18-2P	2.56 2.26	1.52 1.19	3.19 2.41	3.48 3.15	2.33 1.96	2.78 2.44	4.04 3.70	4.52 4.19	3	1/16						
18-3S 18-3P	2.37 2.04	1.30 1.26	2.74 2.22	3.33 3.19	2.11 2.07	2.56 2.48	4.19 3.74	4.30 4.22	2	1/8				2		
18-4S 18-4P	2.15 2.30	1.37 1.70	2.33 2.44	3.30 3.41	2.19 2.35	2.67 2.96	3.85 4.00	- 4.37 4.70	4	1/8					4	
18-5S 18-5P	2.44 2.22	1.37 1.48	2.85 2.41	3.33 3.33	2.19 2.30	2.67 2.74	3.89 3.96	4.37 4.48	} 3	1/8				2	1	
18-6S 18-6P	2.44 2.04	1.37 1.30	2.67 2.22	3.30 3.19	2.19 2.11	2.67 2.56	3.93 3.78	4.37 4.30	} 1	1/8		1				
18-7S 18-7P	2.52 2.15	1.52 1.56	2.70 2.37	3.48 3.41	2.33 2.01	2.78 2.59	4.04 3.67	4.30 4.37	1	1/4			1			
18-8S 18-8P	2.85 2.89	2.22 2.07	3.00 3.04	4.00 4.00	3.00 2.85	3.48 3.33	4.67 4.63	5.19 5.11	8	1/16				1	7	
18-9S 18-9P	3.00 3.07	2.56 2.19	3.67 3.26	3.93 4.19	2.67 3.15	3.22 3.48	4.48 4.70	4.93 5.22	7	1/32				2	5	
18-10 <b>S</b> 18-10P	3.00 2.67	1.96 1.63	3.63 2.85	3.93 3.56	2.78 2.44	3.22 2.89	4.48 4.15	4.93 4.59	} 4	3/32			1	4		



(continued on next page)

CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOLICI.

#### M-16

## AMERICAN PHENOLIC CORPORATION Chicago 50, Illinois

IN TORONTO . AMPHENOL LIMITED

(continued from preceding page)

INCERT	AN2100	AN2102	AN2100	A N/2100	AN2101	07 5105	07 5107	07 5100	TOTAL	MEOLIN		ĊO	NTA	CT S	IZE	
INJEN I	ANSIU	ANSIUZ	ANSIUO	ANSIUS	ANSIUI	31-5105	91-9101	31-2103	TACTS	SPACING	#0	#4	#8	#12	#16	#20
8-11S 18-11P	3.15 2.82	2.07 1.74	3.74 3.07	4.04 3.70	2.85 2.56	3.33 3.00	4.59 4.22	5.04 4.74	5	1/16				5		
18-12S 18-12P	2.33 2.78	2.00 1.78	2.52 2.96	3.48 3.74	2.43 2.59	3.04 3.07	4.09 4.33	4.78 4.78	} 6	1/16					6	
8-13 <b>S</b> 8-13 <b>P</b>	3.85 2.78	2.96 1.93	4.07 2.96	5.15 3.89	3.70 2.59	4.19 3.19	5.39 4.27	5.96 4.93	4	1/16			1	3		
8-14S 8-14P	2.89 2.52	1.89 1.74	3.07 2.70	3.82 3.74	2.70 2.37	3.15 2.96	4.41 4.02	4.85 4.70	2	1/16		1			1	
8-16S 8-16P	2.30 2.15	1.52 1.37	2.44 2.33	3.41 3.30	2.33 2.22	2.78 2.70	4.04 3.85	4.48 4.44	} 1	5/16				1		
8-20S 8-20P	2.26 2.63	1.63 1.78	2.41 2.82	3.37 3.74	2.33 2.59	2.89 3.07	3.96 4.30	4.59 4.78	} 5	1/8					5	
8-22S 8-22P	2.63 2.30	1.56 1.22	3.15 2.85	3.52 3.19	2.37 2.04	2.82 2.48	4.04 3.70	4.48 4.19	3	5/32					3	
8-29S 8-29P	2.70 2.85	1.63 1.78	3.30 3.44	3.59 3.74	2.44 2.59	2.89 3.04	4.15 4.33	4.59 4.82	5	1/16					5	
20-1S 20-1P	3.33 4.22	2.70 3.37	3.56 4.44	4.00 4.48	3.52 4.74	4.11 4.82	5.19 5.96	6.41 6.70	} 14 °	1/16					14	
20-2S 20-2P	2.44 2.33	1.44 1.37	3.04 2.59	3.19 3.15	2.52 2.48	2.89 2.85	4.00 3.96	5.15 5.15	1	5/32		1				
0-3 <b>S</b> 0-3P	2.78 2.56	1.74 1.52	3.67 2.85	3.52 3.63	2.82 2.67	3.22 3.04	4.30 4.11	5.44 5.26	3	1/8				3		
0-4S 0-4P	2.85 2.56	1.78 2.19	3.74 2.78	3.93 3.74	2.89 2.78	3.26 3.15	4.37 4.22	5.56 5.37	4	1/8				4		
0-5S 0-5P	2.30 2.15	1.26 1.07	2.59 2.67	3.30 3.15	2.37 2.19	2.74 2.56	3.82 3.67	4.96 4.85	2	3/16					2	
0-6S 0-6P	2.44 2.44	1.56 1.37	2.70 2.70	3.30 3.15	2.59 2.48	2.96 2.85	3.96 3.96	5.26 4.89	3	3/16					3	
0-7S 0-7P	2.63 3.26	2.15 2.44	2.85 3.48	3.80 4.19	3.11 3.52	3.63 3.89	4.41 4.96	5.85 6.15	8	1/8 1/16					4 4	
0-8S 0-8P	3.30 3.15	2.26 2.11	4.00 3.67	4.00 3.89	3.33 3.22	3.70 3.56	4.82 4.70	6.00 5.82	6	1/16			2		4	
0-9S 0-9P	3.22 3.11	2.19 2.07	3.59 3.48	3.96 3.82	3.30 3.15	3.70 3.56	4.78 4.59	5.93 5.78	8	1/8			_	1	7	
0-11S 0-11P	3.56 3.56	3.15 2.52	3.82 4.37	4.85 4.26	3.74 3.63	4.30 4.00	5.07 5.11	6.82 6.22	13	1/32					3	10
0-12S 0-12P	2.67 2.52	1.63 1.52	3.33 2.85	3.37 3.26	2.70 2.59	3.07 2.96	4.07 4.07	5.33 5.22	2	1/8		1			1	



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#### Builds to the Juture of CS D Ε Н E N 0 L L -NNECTORS SOCKETS CA BL 0 . E c S TICS UGS P L A P Ł

(continued from preceding page)

INSERT	AN2100	AN3102	AN2106	AN2109	AN2101	97-5105	97-5107	97.5100	TOTAL	MECHA		CO	NTA	CT S	ZE	_
MOLINI	ANSIO	ANGTOL	AN3100	ANJIO	ANOIUI	31-3103	31-5101	31-5105	TACTS	SPACING	#0	#4	#8	#12	#16	#20
20-14 <b>S</b> 20-14 <b>P</b>	3.30 2.93	2.33 2.19	4.19 3.11	4.04 3.96	3.33 3.33	3.74 3.67	4.82 4.74	6.00 5.93	5	1/16			2	3		
20-15 <b>S</b> 20-15 <b>P</b>	3.41 2.96	2.41 1.96	4.33 3.67	4.15 3.70	3.52 3.07	3.89 3.41	4.93 4.52	6.11 5.67	7	1/8				7		
20-16S 20-16 <b>P</b>	3.41 3.33	2.48 2.33	3.67 3.67	4.22 4.07	3.59 3.37	3.96 3.74	5.04 4.85	6.22 6.04	9	1/16				2	7	-
20-17 <b>S</b> 20-17 <b>P</b>	3.33 3.15	2.33 2.11	4.22 3.44	4.07 3.89	3.41 3.22	3.78 3.59	4.89 4.70	6.07 5.85	6	1/16	•			5	1	and said
20-18S 20-18P	3.63 3.19	2.56 2.11	4.37 4.07	4.37 3.93	3.70 3.22	4.07 3.59	5.19 4.70	5.96 5.85	9	1/16				3	6	
20-19 <b>S</b> 20-19 <b>P</b>	3.15 2.93	2.11 2.04	4.04 3.16	3.89 3.78	3.19 3.11	3.56 3.52	4.63 4.44	5.82 5.74	3	1/16			3			
20-20S 20-20P	3.19 2.85	2.11 1.81	4.07 3.30	3.93 3.59	3.22 2.93	3.59 3.30	4.67 4.41	5.85 5.56	4	1/16	·	1		3		
20-21 <b>S</b> 20-21 <b>P</b>	3.44 3.33	2.44 2.33	3.70 4.07	4.22 4.07	3.56 3.33	4.00 3.78	4.96 4.89	6.19 6.04	9	1/16				1	8	
20-22 <b>S</b> 20-22 <b>P</b>	3.33 3.19	2.33 2.15	4.07 3.41	4.07 3.93	3.41 3.26	3.78 3.63	4.89 4.74	6.04 5.85	6	1/16			3		3	
20-23 <b>S</b> 20-23 <b>P</b>	2.78 2.52	1.74 1.52	3.48 2.85	3.52 3.26	2.85 2.59	3.22 2.96	4.30 4.07	5.44 5.22	2	3/32	<u> </u>		2			
20-24 <b>S</b> 20-24 <b>P</b>	2.93 2.78	1.93 1.74	3.78 3.26	3.67 3.52	3.00 2.85	3.37 3.22	4.48 4.30	5.26 5.44	4	3/32			2	-	2	
22-1 <b>S</b> 22-1 <b>P</b>	2.78 2.56	1.63 1.56	3.37 3.00	3.78 3.59	2.78 2.59	3.26 3.11	4.37 4.19	5.52 5.30	2	1/8			2		_	
22-2 <b>S</b> 22-2 <b>P</b>	3.22 2.96	2.15 1.93	3.93 3.30	4.22 4.00	3.26 3.00	3.70 3.52	4.82 4.48	5.96 5.70	3	1/8			3			
22-3 <b>S</b> 22-3 <b>P</b>	2.78 2.52	1.74 1.48	3.59 2.96	3.78 3.56	2.82 2.52	3.30 3.00	4.41 4.11	5.52 5.26	2	1/8		1			1	
22-4S 22-4P	3.00 2.78	2.00 1.89	3.96 3.07	4.04 3.96	3.07 2.93	3.56 3.41	4.63 4.52	5.74 5.67	} 4	1/8			2	2		
22-5 <b>S</b> 22-5 <b>P</b>	2.96 2.78	1.93 1.70	3.52 3.26	4.00 3.82	2.96	3.48 3.26	4.56 4.37	5.70 5.52	6	1/8				2	4	
22-6 <b>S</b> 22-6 <b>P</b>	2.85 2.67	1.78 1.59	3.78 3.22	3.89 2.67	2.89 2.67	3.37 3.15	4.48 4.22	5.59 5.37	3	1/8			2		1	
22-7 <b>S</b> 22-7 <b>P</b>	2.89 2.56	1.85 1.52	3.56 3.00	3.93 3.59	2.89 2.56	3.37 3.07	4.48 4.15	5.63 5.26	} 1	3/16	1					_















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CABLES CONNECTORS PLASTICS **AMERICAN PHENOLIC CORPORATION** Chicago 50 IN TORONTO AMPHENOL LTD.

## AMERICAN PHENOLIC CORPORATION Chicago 50, Illinois

IN TORONTO . AMPHENOL LIMITED.

					(co	ntinued fro	om precedi	ng page)	-							
INSERT	AN3100	AN3102	AN3106	AN3108	AN3101	97-5105	97-5107	97-5109	TOTAL CON-	MECH'L		CO	NTA	CT S	ZE	
									TACTS	SPACING	#0	#4	<b>#8</b>	#12	#16	#20
2-8S 2-8P	2.78 2.22	1.89 1.26	3.11 2.56	3.93 3.33	2.93 2.33	3.41 2.96	4.52 3.93	5.63 5.04	<b>2</b>	3/16				2		
2-9S 2-9P	2.78 2.41	1.70 1.44	3.70 3.00	3.78 3.41	2.82 2.44	3.30 2.93	3.96 4.07	5.52 5.15	} 3	3/16				3		
2-10S 2-10P	2.37 2.56	1.70 1.52	2.67 2.93	3.63 3.59	2.82 2.59	3.30 3.11	4.15 4.19	5.52 5.30	} 4	3/16					4	
2-11S 2-11P	2.59	1.59	3.07 2.44	3.63 3.37	2.67	3.15 3.00	4.22	5.33 5.26	2	1/4				 	2	
2-12S	3.15 2.89	2.07	3.59 3.44	4.15	3.22	3.67 3.41	4.78	5.85 5.63	5	1/8	1		2		3	
22-13 <b>S</b> 22-13 <b>P</b>	3.22 2.70	2.15	4.00 3.04	4.22	3.22	3.70 3.48	4.82	5.96 5.70	5	1/8				4	1	
22-14S 22-14P	3.89 4.41	3.48 3.33	4.19 5.30	5.11 5.41	4.48	5.00 4.89	5.82 6.00	7.22	} 19	1/16					19	<b>-</b>
22-15S 22-15P	3.89 2.96	2.82 2.00	4.78 3.26	4.89 4.04	3.93 3.07	4.41 3.56	5.44 4.63	6.59 5.74	6	1/8 3/16				5	1	
22-16S 22-16P	3.70 3.26	2.63 2.26	4.56 4.19	4.74 4.30	3.74 3.30	4.19 3.78	5.30 4.89	6.44 6.00	} 9	1/8				3	6	
22-17S 22-17P	3.19 3.33	2.48 2.30	3.48 3.82	4.41 4.37	3.59 3.37	4.07 3.89	5.04 4.96	6.26 5.78	9	1/8				1	8	
22-18S 22-18P	3.07 2.93	2.15 1.89	3.41 3.82	4.22 3.96	3.26 2.93	3.74 3.41	4.59 4.52	5.96 5.67	8	1/8					8	
22-19S 22-19P	3.37 3.67	3.00 2.59	3.67 4.56	4.63 4.70	3.93 3.70	4.59 4.19	5.26 5.26	6.82 6.22	} 14	1/8	-				14	
22-20S 22-20P	2.89 3.07	2.30 2.00	3.19 3.41	4.11 4.07	3.33 3.11	3.82 3.59	4.70 4.63	6.04 5.78	9	3/32					9	
22-21S 22-21P	3.41 3.07	2.67 2.04	3.78 3.41	4.74 4.11	3.59 3.15	4.19 3.63	4.93 4.59	6.44 5.82	3	1/16	1				2	
22-22S 22-22P	3.26 3.15	2.19 2.07	3.93 3.59	4.26 4.11	3.30 3.15	3.78 3.63	4.89 4.74	6.00 5.82	} 4	1/16			4			
22-23S 22-23P	3.74 3.30	2.70 2.26	4.63 4.00	4.78 4.33	3.78 3.30	4.30 3.78	5.33 4.89	6.48 6.04	8	1/16				8		
22-24S	3.11	2.04	3.52	4.11	3.07	3.59	4.70	5.82	· · ·	1/16				2		
22-24P	2.74	1.67	3.26	3.74	2.68	3.26	4.37	5.44	} 6 {	1/8 1/4					2	
22-25S 22-25P	3.11 2.85	2.04 1.78	3.93 3.30	4.11 3.89	3.15 2.85	3.63 3.33	4.70 4.41	5.93 5.63	} 3	1/8	1				2	

















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22-24 22-25 (continued on next page)

#### ENOL Builds to the Auture of ELECTRO РН ICS SOCKETS CONNECTORS • 1 16 2] C S S ĩ Π I. U GS

						And in case of the second seco	the second s									
INSERT	AN3100	AN2102	AN2106	AN2100	AN2101	07 5105	07 5107	07 5100	TOTAL	MEOUN		CO	NTA	CT S	IZE	
moenn	ANGIOU	ANSTUL	ANSIO	ANJIUO	ANSIU	91-9109	97-5107	91-5109	TACTS	SPACING	#0	#4	#8	#12	#16	#20
22-26 <b>S</b> 22-26 <b>P</b>	3.37 3.15	2.33 2.11	3.59 3.56	4.37 4.15	3.37 3.19	3.89 3.67	4.96 4.73	6.07 5.85	7	1/8			<u> </u>	2	5	<u>"</u>
22-27 <b>S</b> 22-27 <b>P</b>	3.67 3.22	2.78 2.48	4.00 3.56	4.82 4.44	3.82 3.63	4.37 4.07	5.41 5.07	6.52 6.26	9 {	1/8 3/32			1	_	8	
22-28 <b>S</b> 22-28 <b>P</b>	3.41 2.85	2.37 1.78	4.33 3.74	4.44 3.89	3.41 2.89	3.96 3.37	5.00 4.44	6.15 5.59	7	3/32				7		
22-29 <b>S</b> 22-29 <b>P</b>	3.59 3.37	2.56 2.33	4.04 4.07	4.59 4.37	3.63 3.37	4.11 3.89	5.22 4.96	6.33 6.11	7 {	1/16 1/8		1			6	
22-33 <b>S</b> 22-33 <b>P</b>	2.96 3.15	2.33 2.11	3.30 3.85	4.33 4.15	3.15 3.19	3.81 3.67	4.48 4.78	6.07 5.85	7 {	1/16 5/32					3 4	
22-34 <b>S</b> 22-34 <b>P</b>	3.11 2.85	2.04 1.89	3.67 3.22	4.11 3.96	3.15 2.96	3.63 3.48	4.70 4.37	5.82 5.67	5	1/8				3	2	
24-1S 24-1P	3.33 2.78	2.00 1.93	3.96 3.41	4.19 4.11	3.26 3.00	3.93 3.89	5.26 4.48	6.56 6.52	2	1/8	1			1		
24-2 <b>S</b> 24-2P	3.67 3.07	2.30 1.93	4.22 3.63	4.48 4.11	3.59 3.22	4.22 3.89	5.74 5.07	6.89 6.52	7	1/8				7		
24-3 <b>S</b> 24-3P	3.22 2.85	2.26 1.96	3.78 3.37	4.41 4.15	3.52 2.85	4.30 3.89	5.26 4.82	6.82 6.52	7	5/32				2	5	
24-4S 24-4P	3.48 3.04	2.30 1.93	4.22 3.63	4.48 4.11	3.59 3.19	4.19 3.82	5.44 4.70	6.85 6.48	} 4	1/8	1				3	
24-5 <b>S</b> 24-5 <b>P</b>	3.52 4.30	3.30 2.93	4.04 4.89	5.00 5.15	4.07 4.22	5.15 4.85	5.56 6.37	7.67 7.48	16	1/16			_		16	_
24-7 <b>S</b> 24-7 <b>P</b>	4.11 4.56	3.52 3.22	4.67 5.19	5.59 5.41	4.78 4.52	5.41 5.15	6.22 6.67	8.11 7.82	16	1/16	_			2	14	
24-9S 24-9P	3.70 2.89	3.00 1.85	4.33 3.48	5.22 4.04	3.93 3.07	4.93 3.74	5.41 4.56	7.52 6.44	2	1/16		2				
24-10S 24-10P	4.15 4.07	2.82 2.74	4.78 4.70	5.15 4.93	4.11 4.04	4.74 4.63	6.26 5.85	7.41 7.30	7	1/16			7			
24-11S 24-11P	4.52 3.67	3.19 2.67	5.11 4.26	5.37 4.85	4.44 3.96	5.11 4.59	6.59 5.78	7.74 7.26	9	1/16		_	3	6		
4-12S 4-12P	3.78 3.48	3.56 2.30	4.33 4.07	5.26 4.48	4.37 3.59	5.41 4.19	5.85 5.19	7.96 6.85	5	1/16		2	_	3		_
4-14S 4-14P	3.74 3.00	2.41 2.04	4.37 3.59	4.59 4.22	3.70 3.19	4.37 3.96	5.85 4.67	7.00 6.59	3	3/32	1			2		_
24-16S 24-16P	3.96 3.15	2.59 2.11	4.56 3.67	4.82 4.33	3.89 3.41	4.52 4.04	6.04 5.19	7.19 6.74	7	1/8			1	3	3	_

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#### BLES ECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO CON AMPHENOL LTD.



24-11

## AMERICAN PHENOLIC CORPORATION

Chicago 50, Illinois



							-		TOTAL			CO	NTA	CT S	IZE	
INSERT	AN3100	AN3102	AN3106	AN3108	AN3101	97-5105	97-5107	97-5109	CON- TACTS	MECH'L SPACING	#0	#4	#8	#12	#16	#20
24-17 <b>S</b> 24-17 <b>P</b>	4.30 2.85	2.93 1.89	4.89 3.44	5.15 4.07	4.22 3.04	4.89 3.82	6.04 4.52	7.56 6.44	} 5	3/16				2	3	
24-19S 24-19P	4.19 3.41	2.85 2.48	4.82 4.00	5.04 4.70	4.15 3.78	4.63 4.41	6.33 5.48	7.45 7.07	} 12	1/16					12	
28-1 <b>S</b> 28-1P	4.96 4.04	3.26 2.67	5.67 4.70	5.96 5.33	4.96 4.37	5.30 4.70	6.33 5.70	7.82 7.22	} 9	1/8			3	6		
28-2S 28-2P	4.74 4.11	3.07 2.67	5.41 4.82	5.74 5.33	4.82 4.41	5.15 4.70	6.15 5.70	7.67 7.22	} 14	1/8				2	12	
28-3 <b>S</b> 28-3P	4.15 3.26	2.56 1.89	4.93 4.04	5.22 4.52	4.30 3.48	4.59 3.93	5.63 4.93	7.07 6.44	3.	3/16			3			
28-4S 28-4P	3.82 3.44	2.67 2.19	4.48 4.11	5.33 4.85	4.37 3.93	4.70 4.22	5.70 5.22	7.22 6.78	9 <	1/8 3/16				2	43	
28-5S 28-5P	4.41 3.67	2.70 2.19	5.11 4.41	5.37 4.89	4.41 3.85	4.74 4.22	5.74 5.26	7.26 6.78	5	1/8		2		1	2	
28-6S 28-6P	4.52 3.56	2.82 2.30	5.22 4.33	5.52 4.93	4.52 3.78	4.85 4.33	5.85 5.30	7.37 6.85	3	1/8		3				
28-7S 28-7P	4.00 3.19	2.26 1.93	4.63 3.93	4.93 4.59	4.00 3.37	4.30 3.96	5.33 4.89	6.82 6.48	2	5/32		2				
28-8S 28-8P	4.11 3.85	3.00 2.74	4.78 4.56	5.70 5.41	4.74 4.41	5.04 4.82	6.07 5.78	7.59 7.30	} 12	3/16 1/8				2	10	
28-9S 28-9P	4.74 4.04	4.07 2.78	5.41 4.70	6.48 5.41	5.44 4.48	6.11 5.67	7.00 5.82	8.63 7.30	} ′ 12	1/8				6	6	
28-10S 28-10P	4.85 4.48	3.15 2.85	5.56 5.22	5.82 5.52	4.85 4.56	5.19 4.89	6.19 5.93	7.70 7.37	7	1/8		2	2	3		
28-11S 28-11P	6.07 5.26	4.37 3.70	6.78 5.93	7.00 6.37	6.07 5.41	6.41 5.74	7.41 6.78	8.93 8.22	22	1/16				4	18	
28-12S 28-12P	4,89 5.82	4.44 4.11	5.59 6.52	6.63 6.78	5.63 5.82	6.63 6.15	7.15 7.19	9.04 8.63	26	1/16					26	
28-15S 28-15P	6.41 6.96	5.37 5.26	7.15 7.67	8.07 7.96	6.59 6.96	7.41 7.30	8.15 8.30	9.93 9.82	35	1/16					35	
28-16S 28-16P	4.33 5.15	3.85 4.67	5.00 5.82	6.04 6.07	4.96 5.15	5.96 5.44	6.48 6.48	8.37 8.00	20	3/32					20	
28-17S 28-17P	3.82 4.63	3.33 2.93	4.48 5.33	5.56 5.59	4.41 4.63	5.41 4.96	5.96 6.00	7.82 7.48	} 15	{ 1/4 1/16					4	
28-18S	4.59	3.41	5.33	6.11	4.78	5.44	6.33	8.00	12	{ 1/16 1/8					47	
28-18P	4.19	2.78	4.93	5.41	4.37	4.78	5.78	7.30	)	( 5/16					1	1



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#### MPHENOL Builds to the Juture of EL ECTRON ICS CONNECTORS SOCKETS • C BLF S . $(\circ)$ UG S P 1 S T CS A Р L

INSERT	AN3100	AN3102	AN3106	AN3108	AN3101	97-5105	97-5107	97-5109	TOTAL	MECHA		CO	NTA	CT S	IZE	
			Allotoc	Anoro	ANOIOI	51-5105	51-5101	51-5105	TACTS	SPACING	#0	#4	#8	#12	#16	#20
28-19 <b>S</b>	4.63	2.89	5.30	5.56	4.59	4.93	5.96	7.41		1/16				4		
28-19 <b>P</b>	4.04	2.33	4.70	4.96	4.04	4.33	5.37	6.85	10 {	1/8 1/4					4	
28-20 <b>S</b> 28-20 <b>P</b>	5.44 4.67	3.74 3.00	6.11 5.33	6.41 5.67	5.44 4.74	5.78 5.00	6.82 6.07	8.26 7.56	14	1/16				10	4	
28-22 <b>S</b> 28-22P	5.11 4.78	3.37 2.82	5.74 5.22	6.04 5.44	5.11 4.48	5.37 4.85	6.44 5.85	7.89 7.37	6	1/8		3			3	-
32-1 <b>S</b> 32-1 <b>P</b>	5.00 4.37	3.30 2.93	5.93 5.04	6.26 5.82	5.15 4.74	5.93 5.52	6.74 6.22	8.59 8.19	5	1/8	2	_		3	-	-
32-2 <b>S</b> 32-2 <b>P</b>	5.74 4.56	4.15 2.96	6.48 5.30	7.07 5.93	5.93 4.74	6.74 5.56	7.11 5.93	9.37 8.19	5	3/16		3	-		2	
32-3 <b>S</b> 32-3 <b>P</b>	5.44 4.93	3.70 3.33	6.26 5.59	6.67 6.26	5.56 5.11	6.33 5.93	7.15 6.78	8.41 8.59	9	1/8	1	2		2	4	-
32-4 <b>S</b> 32-4P	5.48 5.19	4.44 3.48	6.22 6.04	7.07 6.41	5.67 5.26	6.48 6.04	6.85 6.85	9.15 8.70	} 14 {	1/8 3/16				2	75	
32-5 <b>S</b> 32-5 <b>P</b>	4.74 3.82	3.19 2.52	5.41 4.52	6.15 5.26	5.44 4.33	5.78 5.22	6.59 5.63	8.48 7.82	2	1/8	2				-	
32-6 <b>S</b> 32-6P	8.07 7.00	6.33 5.30	8.93 7.85	9.30 8.22	8.15 7.07	8.93 7.85	9.74 8.70	11.63 10.59	23	1/16		2	3	2	16	
32-7 <b>S</b> 32-7P	7.96 7.30	6.22 5.59	8.82 8.15	9.22 8.56	8.04 7.37	8.82 8.15	9.67 9.00	11.52 10.89	35	1/16				7	28	
32-8 <b>S</b> 32-8P	7.30 6.74	5.59 5.00	8.15 7.59	8.56 8.00	7.41 6.85	8.19 7.63	9.00 8.45	10.93 10.22	30	1/16				6	24	
32-9 <b>S</b> 32-9P	6.30 5.59	4.96 3.82	7.04 6.41	7.85 6.82	6.48 5.67	7.30 6.44	7.67 7.04	9.93 9.11	14	1/8	_	2			12	_
32-10 <b>S</b> 32-10P	5.85 4.67	4.30 3.26	6.52 5.33	7.26 6.07	6.11 5.04	6.89 5.82	7.70 6.52	9.59 8.52	7 {	1/8 1/4		2	2		3	
32-12 <b>S</b> 32-12 <b>P</b>	5.82 5.15	4.11 3.41	6.67 6.04	7.04 6.41	5.93 5.26	6.67 6.04	7.56 6.85	9.41 8.70	5 15	1/16 1/8				5	64	-

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# CABLES CONNECTORS AMERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO AMPHENOLUTO.

## AMERICAN PHENOLIC CORPORATION

Chicago 50, Illinois

AMPHENOL LIMITED IN TORONTO .

					(ca	ntinued fro	om precedi	ng page)									
INSERT	AN3100	AN3102	AN3106	AN3108	AN3101	97-5105	97-5107 97-5109					CONTACT SIZE					
MULTI	ANSIO	ANDIOL	ANSIO	ANSIO	ANSIOI	51-5105	51-5101	51-5105	TACTS	SPACING	#0	#4	#8	#12	#16	#20	
36-1S 36-1P	6.63 6.15	5.22 4.56	7.33 7.19	8.22 7.56	6.96 6.26	7.74 7.00	8.56 7.82	10.45 9.74	22	1/8				4	18		
36-2S 36-2P	5.70 5.44	4.59 4.00	6.78 6.26	7.48 6.96	6.22 5.67	6.96 6.41	7.82 7.11	9.70 9.00	5	3/16	3			2			
36-3S 36-3P	6.33 5.67	4.82 4.15	7.33 6.44	7.52 7.07	6.44 5.85	7.19 6.59	8.00 7.33	9.30 9.19	6	3/16	3			3			
36-4S 36-4P	6.00 5.04	4.44 3.74	6.93 5.85	7.30 6.82	6.07 5.26	6.78 6.00	7.63 6.70	9.48 8.59	3	. 1/8	3						
36-5 <b>S</b> 36-5P	5.96 5.22	4.44 3.63	6.96 6.22	7.33 6.59	6.07 5.33	6.82 6.07	7.67 6.93	9.52 8.82	} 4	1/16	4						
36-6S 36-6P	7.07 6.26	5.70 4.78	8.07 7.04	8.48 7.63	7.22 6.44	7.96 7.07	8.78 7.93	10.67 9.82	6	1/16	2	4					
36-7 <b>S</b> 36-7P	9.67 8.82	8.11 7.41	10.67 9.82	11.04 10.19	9.78 8.93	10.52 9.67	11.33 10.48	13.26 12.37	} 47	1/16				7	40		
36-8S 36-8P	8.19 8.63	7.48 7.26	8.93 9.67	10.67 10.11	9.30 8.78	10.04 9.48	10.74 10.30	12.63 12.22	} 47	1/16				1	46		
36-9S 36-9P	9.45 8.15	7.89 6.33	10.48 9.11	10.85 9.52	9.59 8.26	10.30 9.00	11.11 9.82	13.04 11.74	31	1/16		1	2	14	14		
36-13S 36-13P	6.44 5.70	4.59 3.82	7.45 6.67	7.82 5.26	6.56 5.82	7.30 6.56	8.11 7.37	10.04 9.30	} 17 {	1/8 1/4				2	10 5		
36-14S 36-14P	7.22 5.15	5.37 3.26	8.14 6.11	8.59 6.48	7.33 5.26	8.11 6.00	8.93 6.89	10.82 8.67	} 16	1/8			5	5	6		
86-15S 86-15P	6.67 7.59	6.00 5.74	7.41 8.37	8.30 8.96	7.63 7.70	8.37 8.45	9.07 9.26	10.96 11.15	35	1/8					35		





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## Essential Quality Parts for the RADIO-ELECTRONIC Industry

#### PHENOL Builds to the Guture of ELECTRONICS SOCKETS CONNECTORS CABLES ٠ AN ENOD ASTICS LUGS P L 0 P

					(ca	ntinued fro	om precedi	ng page)								
NOFR	410400	A.N.0100	A NI010C	A N/04 00	4 10101	07 5405	07 5407		TOTAL	MEALIN		CO	NTA	CT S	IZE	
INSERI	ANJIUU	AN3102	ANSIU	AN3108	ANJIUI	97-5105	97-5107	97-5109	TACTS	SPACING	#0	#4	#8	#12	#16 #	¥20
40-1 <b>S</b> 40-1 <b>P</b>	9.22 8.11	6.78 5.67	10.37 9.59	11.00 10.04	9.37 8.26	}			30	1/8				6	24	
40-2 <b>S</b> 40-2 <b>P</b>	7.74 7.30	5.63 4.78	8.15 8.78	8.85 9.22	7.93 7.41	}			23 {	1/8 3/16	_				18 5	
40-3S 40-3P	8.89 7.96	6.22 5.30	10.22 8.85	10.96 9.59	9.04 8.11	} .			23	1/8		1		4	18	_
40-4S 40-4P	9.52 8.78	7.00 6.11	11.04 10.19	11.48 10.67	9.70 8.89	}			23	3/16		2	3	2	16	
40-5S 40-5P	10.41 9.07	7.74 6.44	11.85 10 <b>.00</b>	12.30 10.74	10.56 9.26	}			15	1/.16	3	2	4	6		
40-6S 40-6P	9.07 8.41	6.59 5.74	9.48 9.85	10.19 10.30	9.26 7.33	}			26	1/8	1			, 1	24	
40-9S 40-9P	12.93 11.07	10.26 8.45	14.41 12.59	14.89 13.04	13.08 11.26	}			47	1/16			1	22	24	
40-10S 40-10P	11.45 10.45	8.82 7.78	12.96 11.89	13.41 12.37	11.82 10.59	}			29	1/16		4	9		16	
40-11S 40-11P	9.78 8.90	7.96 6.26	12.33 10.37	12.78 10.82	11.00 9.04	}			25	1/8	1	1	1	4	18	_
44-1S 44-1P	11.04 11.30	8.15 7.00	11.37 11.30	12.41 11.85	12.41 11.48	}			42	1/8				6	36	
44-2S 44-2P	13.78 10.41	7.85 6.33	12.89 10.59	12.70 11.74	12.33 10.82	}			31	1/8		1	2	14	14	
44-3S 44-3P	11.93 10.89	7.63 6.56	11.93 10.89	6.48 11.45	9.26 11.04	}			31	1/8		2	2	3	24	
48-1S 48-1P	11.96 10.48	7.19 6.15	14.89 11.52	13.85 12.70	12.22 10.67	16.30 15.19	17.33 11.93	23.71 22.67	} 15	1/8	3	2	4	6		





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#### AMERICAN PHENOLIC CORPORATION Chicago 50 CABLES CONNECTORS PLASTICS IN TORONTO AMPHENOL LTD.

ARBHENOD Gittings

#### FLEXIBLE CONDUIT FERRULES



STANDARD	ONE-S	TEP TWO	STEP
AN Number	List	AN Number	List
and Size	Price	and Size	Price
AN-3050-3	\$.09	AN-3050-16	.16
AN-3051-3	.09	AN-3051-16	
AN-3050-4	.09	AN-3052-18	.19
AN-3051-4	.09	AN-3050-20	
AN-3052-4	.12	AN-3051-20	
AN-3050-6	.10	AN-3052-20	.22
AN-3051-6	.10	AN-3050-24	
AN-3052-6	.13	AN-3051-24	
AN-3050-8	.10	AN-3052-24	.25
AN-3051-8	.10	AN-3050-28	
AN-3052-8	.13	AN-3051-28	
AN-3050-10	.12	AN-3052-28	.33
AN-3051-10	.12	AN-3050-32	.28
AN-3052-10	.15	AN-3051-32	.32
AN-3050-12 AN-3051-12 AN-3052-12	.12 .12 .15	AN-3050-40	.33

CONDUIT COUPLING NUT AN-3054-6 AN-3054-8 AN-3054-10 AN-3054-12 AN-3054-16 AN-3054-20

AN-3054 AN-3054-3 \$.09 AN-3054-4 .09

FERRULE CRIMPING MACHINE

companies each Amphenol Ferrule Crimping

The popular Amphenol Ferrule Crimping Machine readily equips any operator for skilled, expert crimping of ferrules. A complete set of standard collets and mandrels, together with instruc-

tions for operation, ac-

AN-3054-24

AN-3054-28

AN-3054-32

AN-3054-40

AN Number List Price AN-3053-3 \$\*20

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AN-3053

**RIGID CONDUIT** 

FERRULE

MI4-3033-4	
AN-3053-6	.14
AN-3053-8	.15
AN-3053-10	.15
AN-3053-12	.19
AN-3053-16	.23
AN-3053-20	.29
AN-3053-24	.33
AN-3053-28	.35
AN-3053-32	.40
AN-3053-40	.50
CONDU	IT

· COUPLING (RIGID TO FLEXIBLE)

.13

.15

.22

.26

.29

47

.60

75

.85

1.00



AN-3056

AN Number and Size	List Price
AN-3056-3	\$.23
AN-3056-4	.25
AN-3056-6	.25
AN-3056-8	.25
AN-3056-10	.30
AN-3056-12	.30
AN-3056-16	.40
AN-3056-20	.55
AN-3056-24	.55
AN-3056-28	.65
AN-3056-32	.75
AN-3056-40	.90

ADAPTER FOR "AN" CONNECTORS

AN-3055



AN Number List and Size Price AN-3055-8-3 \$.80 AN-3055-12-3 .90 .90 AN-3055-12-4 AN-3055-14-1.20 AN-3055-16-4 1.60 AN-3055-14-6 1.20 AN-3055-16-6 1.60 AN-3055-18-6 1.80 AN-3055-16-8 1.60 AN-3055-18-8 AN-3055-22-8 1.80 AN-3055-18-10 1 80 AN-3055-22-10 2.00 AN-3055-28-10 2 20 AN-3055-22-12 AN-3055-28-12 2 00 2.20 AN-3055-32-12 2.40 AN-3055-28-16 2.20 AN-3055-32-16 2 40 AN-3055-36-16 2.60 AN-3055-32-20 2.40 AN-3055-36-20 AN-3055-40-20 2.60 2.80 AN-3055-36-24 2.60 AN-3055-40-24 AN-3055-44-24 2.80 3.00 AN-3055-40-28 AN-3055-44-28 2.80 3.00 AN-3055-48-28 3.20 AN-3055-44-32 AN-3055-48-32 3.00 3.20 AN-3055-48-40 3.20

Specify Amphenol "AN" Fittings for a most functional use in connection with Amphenol "AN" Connectors.



AN-3057	
AN Number and Size	List Price
AN-3057-3	\$.60
AN-3057-4	.60
AN-3057-6	.60
AN-3057-8	.70
AN-3057-10	.70
AN-3057-12	.75
AN-3057-16	.80
AN-3057-20	1.50
AN-3057-24	1.60
AN-3057-28	1.75
AN-3057-32	1.90
AN-3057-40	2.00

#### STRAIGHT CONDUIT COUPLING



AN-305	B
AN-3058-3	\$.32
AN-3058-4	.32
AN-3058-6	.33
AN-3058-8	.40
AN-3058-10	.40
AN-3058-12	.45
AN-8-30516	.55
AN-3058-20	.70
AN-3058-24	.75
AN-3058-28	1.00
AN-3058-32	1.20
AN-3058-40	1.75

#### CONDUIT BOX CONNECTOR



AN Numbe and Size	r Lis. Price
AN-3064-3	\$.18
AN-3064-4	.18
AN-3064-6	.18
AN-3064-8	.20
AN-3064-10	.22
AN-3064-12	.25
AN-3064-16	.30
AN-3064-20	.60
AN-3064-24	.60
AN-3064-28	.70
AN-3064-32	.80
AN-3064-40	1.00
CONDUIT	COUP-



AN-306	6
AN-3066-3	\$.07
AN-3066-4	.09
AN-3066-6	.10
AN-3066-8	.15
AN-3066-10	.18
AN-3066-12	.20
AN-3066-16	.23
AN-3066-20	.33
AN-3066-24	.35
AN-3066-28	.60
AN-3066-32	.80
AN-3066-40	1 10

Essential Quality Parts for the RADIO-ELECTRONIC Industry

Machine. Write for Details.

AN-3060



AN-306



AN-3062



AN Number and Size	List Price	AN Number and Size	List Price	AN Number and Size	List Price	AN Nur and Si
AN-3060-3	\$.65	AN-3061-3	\$1.00	AN-3062-3	\$.70	AN-3063-
AN-3060-4	.65	AN-3061-4	1.00	AN-3062-4	.75	AN-3063-
AN-3060-6	.65	AN-3061-6	1.00	AN-3062-6	.80	AN-3063-
AN-3060-8	.70	AN-3061-8	1.00	AN-3062-8	.90	AN-3063-
AN-3060-10	.75	AN-3061-10	1.15	AN-3062-10	1.00	AN-3063-
AN-3060-12	.80	AN-3061-12	1.15	AN-3062-12	1.10	AN-3063-
AN-3060-16	.85	AN-3061-16	1.30	AN-3062-16	1.25	AN-3063-
AN-3060-20	1.10	AN-3061-20	1.55	AN-3062-20	1.40	AN-3063-
AN-3060-24	1.20	AN-3061-24	1.75	AN-3062-24	2.00	AN-3063-
AN-3060-28		AN-3061-28		AN-3062-28		AN-3063-
AN-3060-32		AN-3061-32		AN-3062-32	····	AN-3063-
AN-3060-40		AN-3061-40		AN-3062-40		AN-3063-

AN Number and Size	List Price
AN-3063-3	\$1.00
AN-3063-4	1.00
AN-3063-6	1.00
AN-3063-8	1.00
AN-3063-10	1.15
AN-3063-12	1.20
AN-3063-16	1.20
AN-3063-20	1.40
AN-3063-24	2.10
AN-3063-28	
AN-3063-32	
AN-3063-40	

	2003	6
9760		
Amphenol Number Receptacle	List Price	
9760-8	\$1.00	9

1.50 2.00

9760-10

9760-12

9760-14

9760-16

9760-18

9760-20

9760-22

9760-24

9760-28

9760-32

9760-36

9760-40

9760-44

9760-48

List Price	Amphenol Number Plug	List Price
51.00	9760-8P	1
1.00	9760-10P	-
1.00	9760-12P	
1-00	9760-14P	-
1.00	9760-16P	-
1.10	9760-18P	CES.
1.10	9760-20P	EQ -
1.20	9760-22P	N
1.20	9760-24P	- S
1.30	9760-28P	- III
1.30	9760-32P	- •
1.40	9760-36P	-
1.40	9760-40P	-
1.50	9760-44P	-
2.00	9760-48P	

#### **ASSEMBLY DATA "AN" CONDUIT FITTINGS**

In accordance with Army and Navy Specifications AN-9534 and AN-W-C-591, electrical ("AN") connectors are required in the installation of electrical and radio equipment on aircraft, marine and other motorized units. In most cases the use of these connectors in the radio and electronic industries involve installation of rigid or flexible conduit. A comprehensive line of conduit fittings have been designed for use in properly joining connectors to conduit and provides for runs, turns, couplings and other devices needed in complete installations of radio and electrical equipment.

Amphenol "AN" Conduit Fittings are fabricated in accordance with Army-Navy specifica-tions. The material is aluminum alloy of specified strength. Due to manufacturing process, parts are completely interchangeable and have the official Army-Navy "AN" part number stamped or cast on them. This facilitates easy handling, reduces errors, definitely saves time and labor in reordering fittings as well as making actual replacements.

Threads are coated with Permalub to prevent binding of the coupled parts. Further lubri-cation on the threads at the time of assembly is unnecessary in that the adherent quality of Permalub to the aluminum is sufficient.

Ferrules for synthetic tubing are in common use today and are illustrated on the synthetics page in this catalog together with the tubing.

Altho more types are manufactured and stocked, this condensed presentation of the complete line represents all of the popular fittings commonly used and specified.

#### TYPICAL ASSEMBLY CHARTS

Fitting assemblies are classified under four groups: Straight Terminations, Angle Terminations, Straight Couplings and Angle Couplings. Write for Section B of our Amphenol No. 70 Catalog which lists complete fitting assemblies approved by Army-Navy. Illustrations below are sug-gested applications and usages, typical of diagrams which will enable an engineer or produc-tion man to take off materials for each given junction with a minimum of time and effort. Further, the use of such charts promotes accuracy in ordering and maintaining stocks.

#### SIZE INFORMATION

The following chart provides information as to associated sizes of connector shells and conduits in relation to fitting sizes.

Dash Number Size	Nominal I. D. of Conduit	For Use With Connector Size	Fitting Thread
AN-0000-3	\$/16	8S, 10S	1/2 - <b>28</b>
AN-0000-4	1⁄4	12, 12\$	<sup>5</sup> / <sub>8</sub> — 24
AN-0000-6	3/8	14, 14\$	<sup>8</sup> / <sub>4</sub> — 20
AN-0000-8	1/2	16, 165	7/8-20
AN-0000-10	• <sup>5</sup> /8	18	1 20
AN-0000-12	3⁄4	20, 22	1 <sup>8</sup> / <sub>16</sub> - 18
AN-0000-16	1	24, 28	1 <sup>7</sup> /16 - 18
AN-0000-20	11/4	32	13/4 18
AN-0000-24	11/2	36	2 - 18
AN-0000-28	13/4	40	21/4 16
AN-0000-32	2	44	21/2-16
AN-0000-40	21/2	48	3 - 16



#### ERICAN PHENOLIC CORPORATION Chicago 50 IN TORONTO CABLES ECTORS AMPHENOL LTD.