

# microphone connectors 91-Q series— audio connector

WPI now introduces the 91-Q Series connectors that effectively meet the rugged challenges of contemporary, sophisticated consumer and industrial electronics in a grounded-version connector.

## versatile

91-Q Series connectors can be used in a wide range of applications:

**audio equipment**—Microphones, amplifiers, pre-amps, mixers, speakers, record players, tape decks, recorders, inter-coms, 2-way radio equipment, broadcast studio equipment, sound movie projectors, film strip projectors, video recorder systems, patch cords, etc.

**test instruments**—Analyzers, bridges, comparators, decade, boxes, gauges and indicators, meters, standards, test probes, medical electronic instruments, x-ray equipment, scientific recording, measuring devices, etc.

## great performance electrical—

No. of Contacts	Test Voltage Rating	Current Rating	Wire Size AWG
3	1400	15A	12
4	1400	10A	16
5	1400	7.5A	18

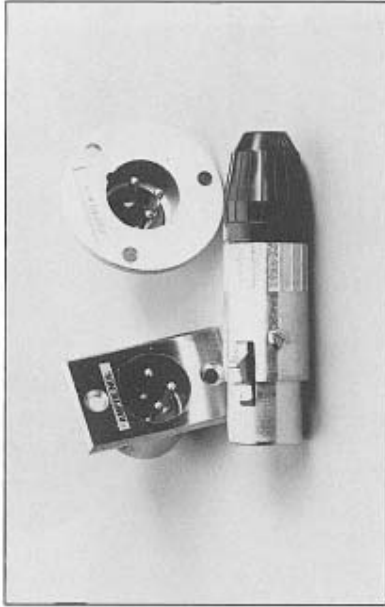
**temperature rating**—20°F to 160°F, (-30°C to 71°C).

**dielectric withstanding voltage**—1400 V at 60-Hz for one minute between any two contacts or between any contact and connector shell.

**durability**—Withstands 500 coupling cycles without any detrimental mechanical or electrical breakdowns.

**insulation resistance**—Exceeds 100 megohms.

**contact resistance**—Voltage drop is between 45-55 mV at rated current dependent upon contact and wire size.



**corrosion resistance**—Withstands standard MIL-STD-202 48-hour salt spray test without damage or corrosion.

**control systems**—Counters, detectors, alarms, transducers, servos, electric eyes, gauges, indicators, timers, regulators, etc.

**and others**—Computer peripheral equipment, educational equipment, entertainment systems, etc.

## application engineered

**rugged**—Solid die cast construction provides tough, high impact strength to withstand rugged use without the risk of failure from breakage.

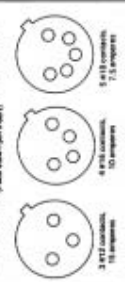
**attractive**—Satin nickel plating enhances the appeal of even the most sophisticated equipment. . . non-reflective finish is ideally suited for studio use. Also available in lustrous black chrome.

**compact**—Reduced shell length for minimum weight and bulk for easier handling.

## fully interchangeable and

**interchangeable** . . . with all present industry standard latch-lock type audio connectors.

## STANDARD CONTACT ARRANGEMENT



**quick, easy assembly/disassembly**—Unique set screw cable strain relief feature effectively grips wide range of cable diameters. Utilized inserts all combine to provide greater savings in connector assembly and termination.

**quality construction shells and latchlock**—Durable zinc die-cast with protective satin nickel plate.

**insert dielectric**—High strength reinforced thermoplastic.

**contacts**—Copper alloy with silver plating. Pins and sockets with solder cup termination are fixed in position for quick termination.

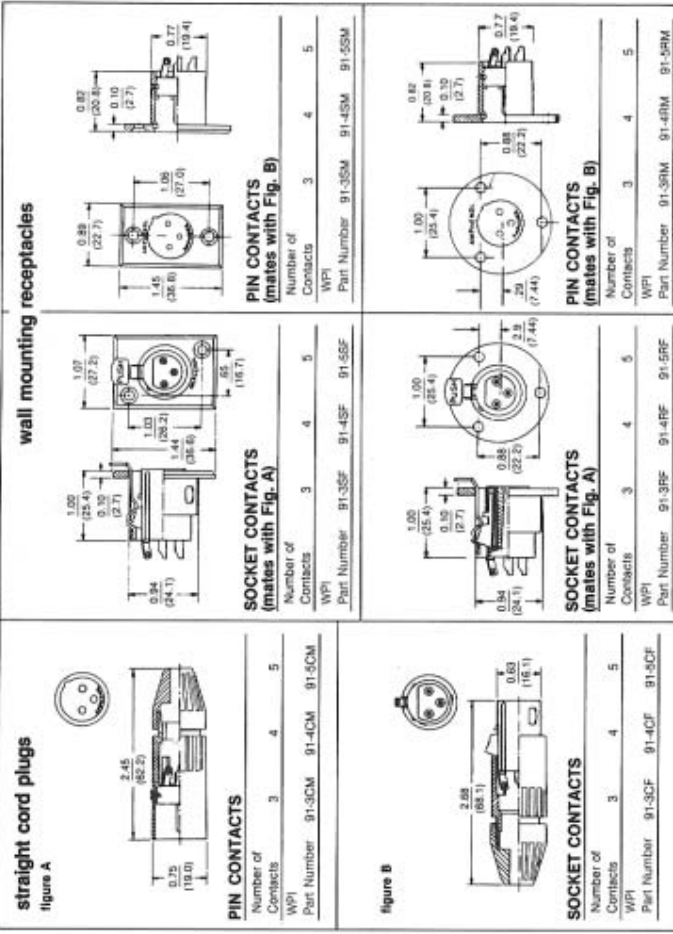
**cable clamp**—Internal set screw cable clamp and Noryl® nut accept commonly used 3/16" to 3/8" diameter cables.

Noryl® is a registered trademark of General Electric Co.



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country code 1

# 91-Q series— audio connector



## FULLY INTERCHANGEABLE WITH ALL LATCHLOCK AUDIO CONNECTORS

Select the right WPI connector from this cross reference guide.

All connectors shown are considered electrically equivalent and mechanically interchangeable.

WPI Part Number	Replaces Old Ampheed Number	Switchcraft	Cannon	Number of Contacts	Description Connector Type
91-3CF	91-454,91-654	A3F	XLR-3-11C	3 female	Cable Plug
91-3CM	91-453,91-653	A3M	XLR-3-12C	3 male	Cable Plug
91-3SF	91-456	D3F	XLR-3-31	3 female	Square Flange Receptacle
91-3SM	91-455	D3M	XLR-3-32	3 male	Square Flange Receptacle
91-3RF	91-656	C3F	XLR-3-13	3 female	Round Flange Receptacle
91-3RM	91-655	C3M	XLR-3-14	3 male	Round Flange Receptacle
91-4CF	91-458,91-658	A4F	XLR-4-11C	4 female	Cable Plug
91-4CM	91-457,91-657	A4M	XLR-4-12C	4 male	Cable Plug
91-4SF	91-460	D4F	XLR-4-31	4 female	Square Flange Receptacle
91-4SM	91-459	D4M	XLR-4-32	4 male	Square Flange Receptacle
91-4RF	91-660	C4F	XLR-4-13	4 female	Round Flange Receptacle
91-4RM	91-659	C4M	XLR-4-14	4 male	Round Flange Receptacle
91-5CF	91-462	A5F	XLR-5-11C	5 female	Cable Plug
91-5CM	91-461	A5M	XLR-5-12C	5 male	Cable Plug
91-5SF	91-664	D5F	XLR-5-31	5 female	Square Flange Receptacle
91-5SM	91-663	D5M	XLR-5-32	5 male	Square Flange Receptacle
91-5RF	—	C5F	XLR-5-13	5 female	Round Flange Receptacle
91-5RM	—	C5F	XLR-5-14	5 male	Round Flange Receptacle

NOTE: For black chrome finish add (436) to end of part number when ordering.

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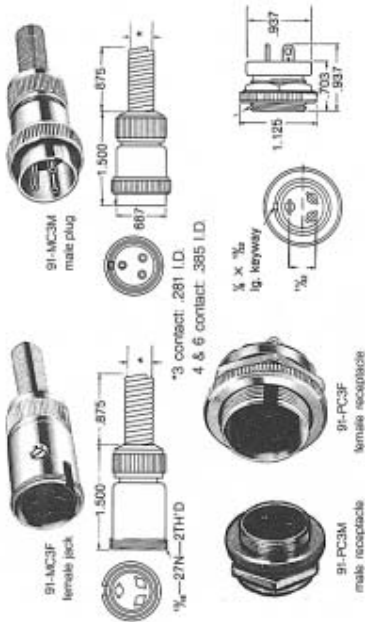


# microphone connectors

## 3, 4 or 6 Contacts

The connectors are designed primarily for audio equipment but are used extensively on all types of portable equipment.

Connectors feature positive screw-type coupling ring connection and squeeze type clamp cable grips.



## SPECIFICATIONS

Shells	Chrome plated brass
Dielectric	molDED black phenolic
Voltage rating	600 V (RMS)
Current rating	female contacts - 3 amps male contacts - 5 amps
Voltage breakdown (RMS) between terminal and ground	2000 V
Card protector spacing	3 contacts - .281" (7.14) I.D. 4-6 contacts - .385" (9.78) I.D.
Receptacle mounting hole	3/16" (.2144) up to 1/4" (.254) thick

## THREADED COUPLING - 3, 4, or 6 CONTACTS

No. Contacts	Description	WPI Number	Mates With WPI Number
3	Female Cable Jack	91-MC3F	91-MC3M
3	Female Cable Plug	91-MC3F1	91-MC3M1, 91-PC3M
3	Male Cable Plug	91-MC3M	91-MC3F(91-PC3F)
3	Male Cable Jack	91-MC3M1	91-MC3F1
3	Female Panel Receptacle	91-PC3F	91-MC3M
3	Male Panel Receptacle	91-PC3M	91-MC3F1
4	Female Cable Jack	91-MC4F	91-MC4M
4	Female Cable Plug	91-MC4F1	91-MC4M1, 91-PC4M
4	Male Cable Plug	91-MC4M	91-MC4F1, 91-PC4F
4	Male Cable Jack	91-MC4M1	91-MC4F1
4	Female Panel Receptacle	91-PC4F	91-MC4M
4	Contact #1 in Line with Key	91-PC4F-12	-
4	Male Panel Receptacle	91-PC4M	91-MC4F1
4	Female Cable Jack	91-MC5F	91-MC5M
6	Female Cable Plug	91-MC6F1	91-PC6M
6	Male Cable Plug	91-MC6M	91-MC6F1, 91-PC6F
6	Female Panel Receptacle	91-PC6F	91-MC6M
6	Male Panel Receptacle	91-PC6M	91-MC6F1
-	Cap & Chain for Receptacle	91-CCC3	-
-	Female Insert	91-3F	-
-	Male Insert	91-3M	-

## Single Contact

Standard type. Chrome plated machined brass with threaded coupling. Receptacles mount in .385" (9.78) holes when grounded; .500" (12.70) holes for ungrounded two circuit operation. Spring cord protection for 1/4" (6.35) cable.



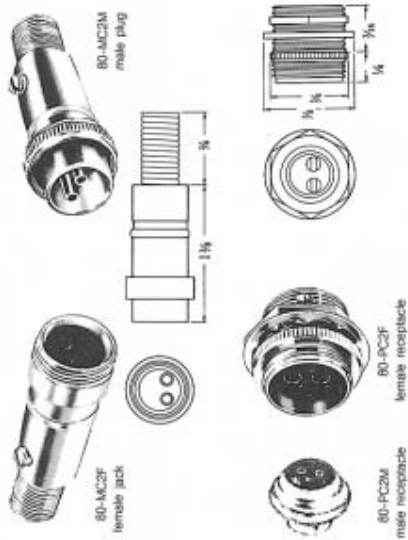
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## microphone connectors continued

### Single and Double Contact

Chrome plated machined brass shells with threaded coupling and black phenolic dielectric. For shielded cables, single and two conductor cables, etc. Mounting hole  $\frac{5}{16}$ " (15.88). Maximum chassis thickness for lock nut type receptacle:  $1\frac{11}{32}$ " (8.74). Cable dia: up to  $\frac{3}{16}$ " (7.92).



### SPECIFICATIONS

Voltage/current rating: single contact:	Male-1250 V, 5 amps Female-1000 V, 3 amps
Double contact:	Male-600 V, 3 amps Female-600 V, 3 amps
Voltage breakdown between terminals and ground:	Single contact male-4000 V Female-3000 V Double contact male-2000 V Female-2000 V

### THREADED COUPLING — 1 or 2 CONTACTS

Contacts	Description	WPI Number	Mates With
1	Male Cable Plug	80-M	80-C
1	Female Panel Receptacle	80-C	80-M
2	Male Cable Plug	80-MC2M	80-MC2F or 80-PC2F
2	Female Cable Plug	80-MC2F1	80-PC2M or 80-MC2M1
2	Female Cable Jack	80-MC2F	80-MC2M
2	Male Cable Jack	80-MC2M1	80-MC2F1
2	Female Panel Receptacle	80-PC2F	80-MC2M
2	Male Panel Receptacle	80-PC2M	80-MC2F1
—	Female Insert	80-ZF	—
—	Male Insert	80-2M	—
—	Cap & Chain for Receptacle	80-75-CDC1	—

### Miniature Connectors

Compact connectors for shielded or unshielded cables. Can be used for battery antenna or microphone applications

### SPECIFICATIONS

Shells	Cadmium plated brass
Dielectric	Black phenolic
Cable diameter	up to $\frac{1}{2}$ " (12.7)
Voltage rating	500 V, 3 amps

### CABLE SOCKETS

No. Contacts	Sockets $\frac{1}{16}$ " Long Shell	Mating Plugs $\frac{1}{16}$ " Long Shell
3	91-MPF3S	91-MPM3S
4	91-MPF4S	91-MPM4S
5	91-MPF5S	91-MPM5S
6	91-MPF6S	91-MPM6S



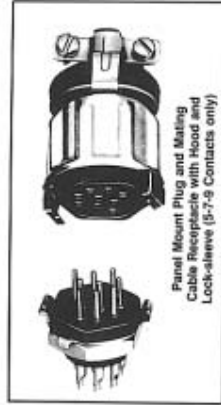
### CABLE PLUGS

No. Contacts	Plugs $\frac{1}{16}$ " Long Shell	Mating Socket $\frac{1}{16}$ " Shell	Chassis Unshielded
3	91-MPM3S	91-MPF3S	78-S3S
4	91-MPM4S	91-MPF4S	—
5	91-MPM5S	91-MPF5S	—
6	91-MPM6S	91-MPF6S	78-S6S



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# 126 series miniature hexagonal connectors



WPI miniature hexagonal connectors are available in four contact configurations with a variety of accessories to meet a wide range of applications.

The connectors can be used for rack and panel, cable to cable, and cable to panel connections.

Locking clips are available to prevent unmating caused by vibration or shock.

## Dimensions

**Overall Diameter** –  $\frac{3}{4}$ "

**Mated** –  $1\frac{15}{16}$ " (extended length to the back of the cable clamp)

## Specifications

**Dielectric** — thermoplastic

**Contact size** — #20 (except one #16 on 4 contact insert)

**Wire size** — #20 or smaller

**Temperature range** —  $-60^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$  to  $+257^{\circ}\text{F}$ )

**Current rating** — 7.5 amps

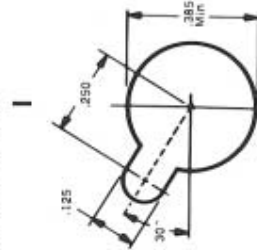
**Voltage rating** — 500 VAC (RMS) at Sea Level

**Hardware** — cold rolled steel, nickel plated

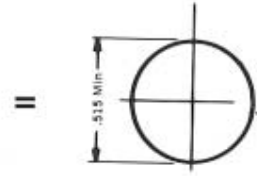
**Contacts** - copper alloy, gold over nickel plate

**Panel thickness** —  $\frac{3}{32}$ " (max)

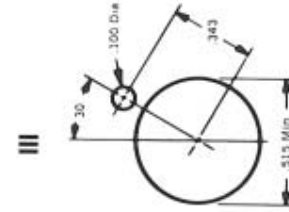
## Mounting Holes



Four-Contact  
126-214, 126-214-1001,  
126-233, 126-215-1002 only



5-7-9 Contact  
Hex Nut Type Without  
Panel Locking Clip



5-7-9 Contact  
Hex Nut Type With  
Panel Locking Clip

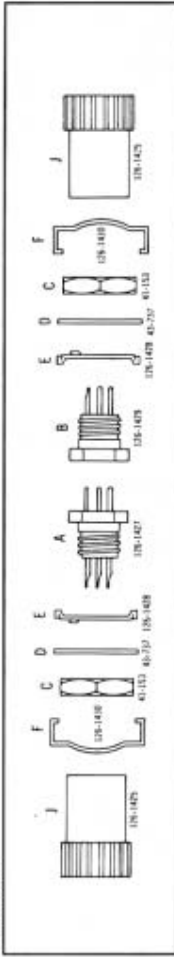
Design specifications subject to change. Consult WPI for the latest specifications.

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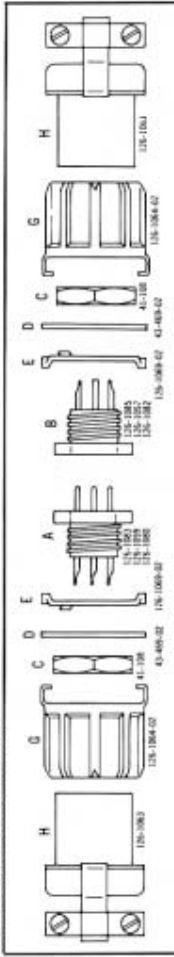


# 126 series connector assemblies

## 4-Contact



## 5-7-9 Contact Connectors



## order information

These connectors can be ordered in any combination to suit your needs. Please refer to the exploded view drawing above to determine the components you require. Note the identification letter. Then order by the WPI part.

number indicated along side the desired combination of components and the required number of contacts. For example, a male 5 contact connector with rear hood & cable clamp and lock sleeve requires components A, G and H. In the column for male 5 contact

assemblies, AGH indicates part number 126-217. If you order part #126-217, you will automatically receive all three components. They may also be ordered individually, if you prefer. Simply refer to the individual component part numbers shown below.

## connector assemblies

### 4-Contact

Key	MALE Part No.	Mfg.	Key	FEMALE Part No.	Mfg.
A	126-1427	—	B	126-1429	—
AC	126-1431 *	—	BC	126-3815 *	—
ACD	126-1432 *	—	BCD	126-3816 *	—
ACFJ	126-214-1000	—	BFJ	126-215	—
ACE	126-214	—	BCE	126-233	—
ACDE	126-214-1001 *	—	BCDE	126-215-1002 *	—
AEJ	126-214-1002 *	—	BEJ	126-215-1001 *	—

Backshells do not have cable clamps.

### 5-Contact

Key	MALE Part No.	Mfg.	Key	FEMALE Part No.	Mfg.
A	126-1083	—	B	126-1085	—
AC	126-010	—	BC	126-011	—
ACD	126-010-1000 *	—	BCD	126-011-1000 *	—
AGH	126-217	—	BGH	126-223	—
ACE	126-216	—	BCE	126-218	—
ACDE	126-216-1000 *	—	BCDE	126-218-1000 *	—
AEH	126-217-1000 *	—	BEH	126-223-1000 *	—

\*Non-stocking item — Consult factory for delivery.



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