DEUTSCH CONNECTORS A Step Ahead

# MIL-C-83723 Series 1 & 3

***Deutsch Miniature Connectors with Bayonet or Threaded Coupling Mechanisms for MIL-C-26482-26500-38300***

# Mil-Spec Connectors & Accessories

DEUTSCH ECD

## Defense / Aerospace Operations . . .

*is the world's premier manufacturer of electrical interconnection devices for use in defense, aerospace, and commercial applications. Whether you need an interconnection device for a commercial or military aircraft, missile, tank, truck transmission or a host of other applications, Deutsch has the solution you're looking for.*

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# Introduction

Reflecting developments in connector technology, MIL-C-83723 is a comprehensive Air Force specification covering circular, electrical connectors. Intermateable and intermountable with earlier connector types, these devices make it feasible to upgrade many existing electrical connecting systems.

Deutsch produces three basic lines of connectors which are qualified to MIL-C-83723. They feature a high degree of standardization in that contacts, tools, accessories, materials, finishes, assembly procedures, and basic design and performance characteristics are common for all three Deutsch lines. Contributing to a lower total installed cost and increased operational efficiency, this "systems" approach provides the connector user with such benefits as:

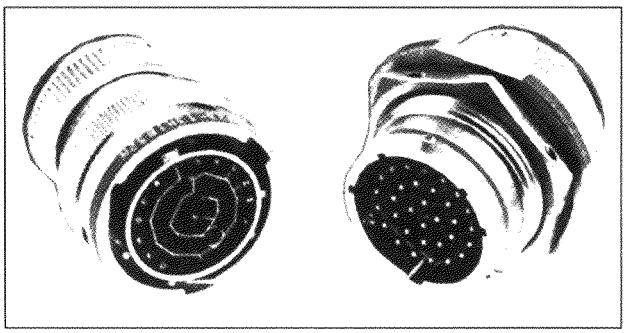
- Faster and simpler assembly and rework
- Greater standardization of tooling and procedures
- Reduced training and maintenance

First to qualify to MIL-C-83723, Deutsch connectors have been developed to withstand the extreme environmental conditions encountered by today's high-performance aircraft. They are particularly suited for applications such as: military and commercial aircraft, missiles and space vehicles and related ground support equipment.

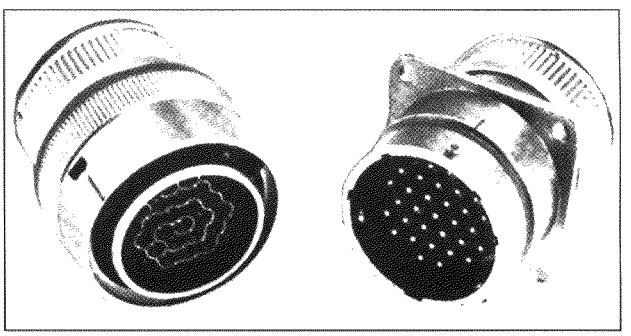
Compatible with the military's Integrated Wire Termination System (IWTS) and Common Termination System (CTS), these Deutsch connectors enable the user to implement a commonality program on an evolutionary basis.

Specifically designed to eliminate failure modes characteristic of many previous designs, almost any connecting system can be upgraded. MIL-C-83723 series 1 and series 3 connectors will mate with many of the connector types that are presently in field use.

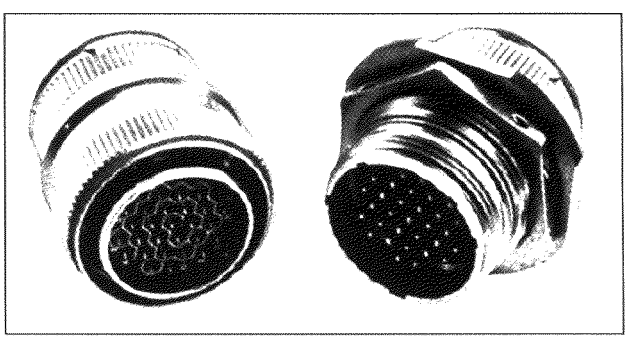
The series 1 connectors are intermateable and intermountable with existing MIL-C-26482 connector types.



**Series 1:** Miniature connector with bayonet coupling mechanism. Intermateable and intermountable with MIL-C-26482 type connectors.



**Series 3:** Miniature connector with bayonet coupling mechanism. Intermateable and intermountable with MIL-C-26500 and MIL-C-38300 bayonet coupling type connectors.



**Series 3:** Miniature connector with thread coupling mechanism. Intermateable and intermountable with MIL-C-26500 and MIL-C-38300 thread coupling type connectors.

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The bayonet coupling version of series 3 will intermate and intermount with MIL-C-26500 and MIL-C-38300 bayonet type connectors.

Thread coupling connectors of series 3 are intermateable and intermountable with thread coupling versions of MIL-C-26500 and MIL-C-38300.

Change over with a minimum of cost and difficulty is assured by this intermateable and intermountable feature.

Deutsch uses only high-grade materials and finishes in the fabrication of these connectors.

Aluminum components are available in either nickel or black anodize plating. Resilient components are made of fluid resistant silicone which resists a permanent set and will not revert upon exposure to temperature extremes. The plastic components of the connector are made of high-strength, electrical grade material. All components are processed, manufactured, and quality-controlled in-house from raw material to finished product to assure exacting performance and high reliability.

Deutsch MIL-C-83723 connectors utilize crimp-type contacts that are inserted, released and removed from the rear of the connector. All that is needed is one, simple, fail-safe insertion/removal tool to install or remove wired contacts. Because the entire assembly process is performed at the connector rear, the possibility of damaging the critical interface of the connector is greatly reduced. This rear release feature also permits the removal or installation of any number of contacts without uncoupling the connector.

## POSITIVE LOCKING CONTACTS

When the contact has been fully inserted into the insert cavity, the contact retention tines within the insert snap behind the shoulder of the contact. Once seated, contacts remain locked in place, resistant to shock and vibration. Retained between the dielectric insert and contact retention tines, contacts are safeguarded against failures due to contact pushout or pullout.

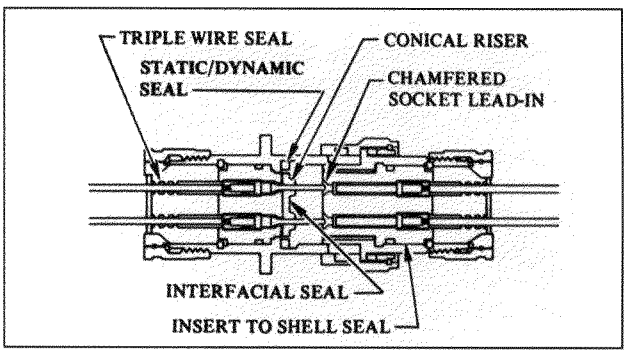
## POSITIVE CONTACT ENGAGEMENT

The shell design, the relation of the inserts within the shell, the location of the contact retention device within the inserts, and the contacts themselves, are all made to precise, controlled tolerances to assure proper pin and socket engagement under worst case conditions.

## MULTIPLE SEALS PROVIDE PROTECTION AGAINST CONTAMINATION

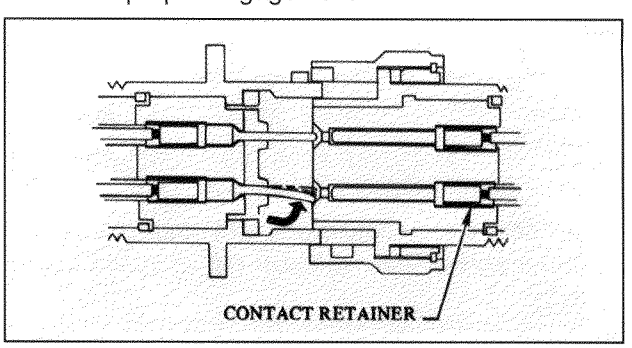
At the pin interface, contacts are surrounded by conical-shaped risers on the silicone blanket of the insert which fit into chamfered lead-ins of the socket insert upon connector mating. This “cork-in-bottle” sealing effect assures individual contact sealing at the connector interface.

In addition to individual contact sealing, these connectors incorporate additional protective seals to assure sealing against environmental extremes: interfacial compression seal, peripheral static/dynamic shell-to-shell seal, insert to shell seal, and redundant rear wire seals.




## PROTECTION AGAINST BENT CONTACTS IS BUILT INTO THE DESIGN

Contacts are of one basic configuration with improved geometry for greater bend resistance. The closely-toleranced contact cavity of the plastic insert will not accept a contact that is bent beyond pre-established limits. The closed-down design also prevents unacceptable splaying of contacts when side-loads are applied to the wire bundle. In addition, if a pin contact should become slightly bent, the lead-in chamfer of the hard plastic socket insert acts as a funnel, straightening the pin and guiding it into the socket for proper engagement.

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# General Specifications
# MIL-C-83723 Series 1 & 3

**Dielectric withstanding voltage (test voltage):**
At sea level: 1500 volts AC (RMS)

**Contact spacing (min. nominal):**
20 . . . . . 130 center to center
16 . . . . . 168 center to center
12 . . . . . 230 center to center

**Current rating:**
20 . . . . . 7.5 amps
16 . . . . . 13 amps
12 . . . . . 23 amps

**Silicone insert:**
Front and rear silicone insert are devoid of all organic matter.

**Corrosion:**
Meets MIL-STD 202E, Method 101, Condition "B"

**Contact millivolt drop:**
20 . . . . . 15 millivolts at 7.5 amps
16 . . . . . 21 millivolts at 20 amps
12 . . . . . 22 millivolts at 35 amps

**Vibration:**
Maintains continuity and exhibits no mechanical or physical damage after a total of 12 hours vibration (4 hours in each of three mutually perpendicular axes) when subjected to .06" D.A. or 20 G's from 10 to 2000 to 12 Hz. 50% of vibration time at ambient temperature, 25% of vibration time at -55°C and 25% of vibration time at +200°C.

**Physical shock:**
No unlocking, unmating or other unsatisfactory result after 100 G's in each of three mutually perpendicular planes.

**Dielectric strength:**
500 volts per mil, minimum on a .030" thick test specimen.

**Crimp retention:**
Meets requirements of MIL-C-83723.

**Moisture resistance:**
Insulation resistance in excess of 100 megohms after procedure in MIL-STD-202E, method 106.

**Temperature:**
Operative at temperatures from -55°C to +200°C.

**Contact retention:**
Contacts withstand a minimum load of:
20 lbs. for size 20
25 lbs. for size 16
30 lbs. for size 12
In either direction, contact displacement less than .012"

**Usable wire size:**
20 contacts — receive conductor AWG 20 though 245. Rear insert will seal on smooth insulation form .040" to .083" O.D.
16 contacts — receive conductor AWG 16 through 20. Rear insert will seal on smooth insulation form .053" to .103" O.D.
12 contacts — receive conductor AWG 12 through 14. Rear insert will seal on smooth insulation form .097" to .158" O.D.

**Insulation resistance:**
5000 megohms minimum at 25°C.

**Dielectric withstanding voltage (test voltage) altitude:**
Wired, assembled, unmated connectors will withstand:
500 VAC (RMS) at 50,000 ft.
375 VAC (RMS) at 70,000 ft.
200 VAC (RMS) at 110,000 ft.

**Durability:**
No electrical or mechanical defects after 500 cycles of engagement and disengagement per MIL-C-83723.

**Altitude immersion:**
Meets requirements of MIL-C-83723.

**Air leakage:**
Less than 0.01 micron cu/ft/hr at 14.7 psi diff. per MIL-C-83723

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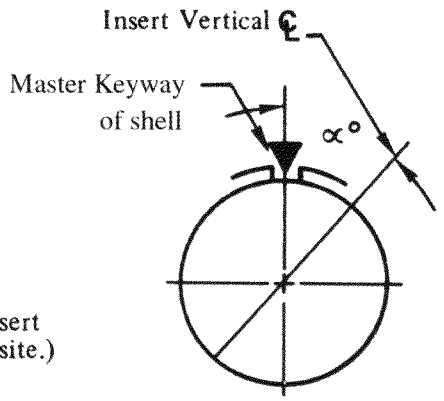
# Series 1 Insert Alternate Clocking Position

| SIZE AND ARRANGEMENT | ALTERNATE POSITIONS | | | | |
|---|---|---|---|---|---|
| | N | W | X | Y | Z |
| 8-3 | 0° | 60° | 210° | | |
| 8-4 | 0° | 45° | | | |
| 8-33 | 0° | 90° | | | |
| 8-98 | 0° | 90° | | | |
| 10-6 | 0° | 90° | | | |
| 12-3 | 0° | | | 180° | |
| 12-8 | 0° | 90° | 112° | 203° | 292° |
| 12-10 | 0° | 60° | 155° | 270° | 295° |
| 14-4 | 0° | 45° | | | |
| 14-5 | 0° | 40° | 92° | 184° | 273° |
| 14-12 | 0° | 43° | 90° | | |
| 14-15 | 0° | 17° | 110° | 155° | 234° |
| 14-18 | 0° | 15° | 90° | 180° | 270° |
| 14-19 | 0° | 30° | 165° | 315° | |
| 16-8 | 0° | 54° | 152° | 180° | 331° |
| 16-23 | 0° | 158° | 270° | | |
| 16-26 | 0° | 60° | | 275° | 338° |
| 18-8 | 0° | 180° | | | |
| 18-11 | 0° | 62° | 119° | 241° | 340° |
| 18-30 | 0° | 180° | 193° | 285° | 350° |
| 18-32 | 0° | 85° | 138° | 222° | 265° |
| 20-16 | 0° | 238° | 318° | 333° | 347° |
| 20-39 | 0° | 63° | 144° | 252° | 333° |
| 20-41 | 0° | 45° | 126° | 225° | |
| 22-12 | 0° | | | | |
| 22-21 | 0° | 16° | 135° | 175° | 349° |
| 22-32 | 0° | 72° | 145° | 215° | 288° |
| 22-41 | 0° | 39° | 135° | 264° | |
| 22-55 | 0° | 30° | 142° | 226° | 314° |
| 24-19 | 0° | 30° | 165° | 315° | |
| 24-31 | 0° | 90° | 225° | 255° | |
| 24-61 | 0° | 90° | 180° | 270° | 324° |

▼ Indicates ℄ of Shell

The symbol ∝° indicates insert rotation in degrees.




Pin Insert Face View (Socket Insert Face opposite.)

NOTES:

1. For alternate polarizing positions, the connector insert is rotated in respect to the shell.
2. In "Normal Position" (position "N") the insert vertical centerline coincides with the centerline of the master keyway of the shell.
3. In "Alternate Positions" (positions "W", "X", "Y", and "Z") the pin insert is rotated ∝ degrees clockwise relative to ℄ of the master Keyway of shell.
4. In "Alternate Positions" (positions "W", "X", "Y", and "Z") the socket insert is rotated ∝ degrees counterclockwise relative to the ℄ of the master keyway of shell.

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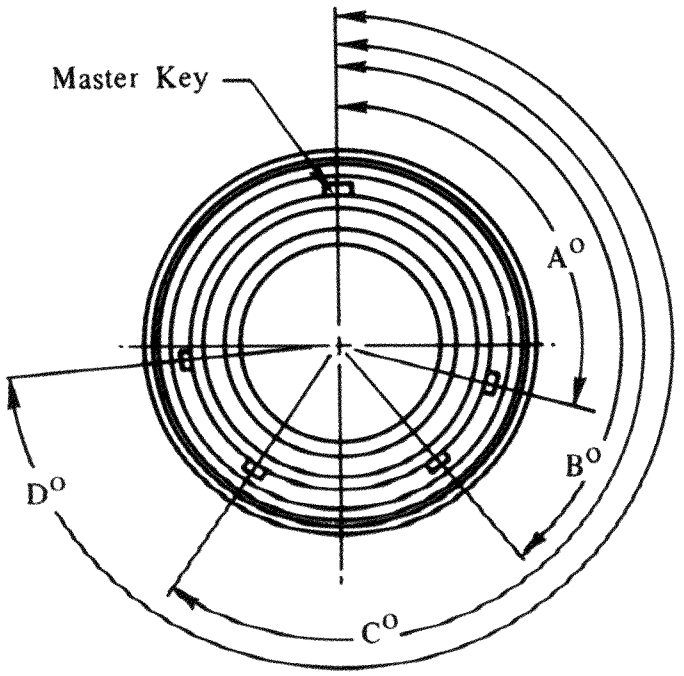
# Series 3 Shell Alternate Keying Position




Plug Face shown
(Keyways in Receptacle Shell are opposite.)

NOTES:

1. In the "Alternate Keying Position" (positions 6, 7, 8, 9, & 10), the keys are positioned as indicated in the chart below with reference to master key.

2. When the alternate shell keying positions are used, the applicable insert is always in the normal position.

**KEY/KEYWAY LOCATIONS**

| KEYING POSITION | SIZE 8 | | | | SIZE 10 | | | | SIZE 12 THRU 24 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A° | B° | C° | D° | A° | B° | C° | D° | A° | B° | C° | D° |
| NORMAL | 105 | 140 | 215 | 265 | 105 | 140 | 215 | 265 | 105 | 140 | 215 | 265 |
| 6 | 102 | 132 | 248 | 320 | 102 | 132 | 248 | 320 | 18 | 149 | 192 | 259 |
| 7 | 80 | 118 | 230 | 312 | 80 | 118 | 230 | 312 | 92 | 152 | 222 | 342 |
| 8 | 35 | 140 | 205 | 275 | 35 | 140 | 205 | 275 | 84 | 152 | 204 | 334 |
| 9 | 64 | 155 | 234 | 304 | 64 | 155 | 234 | 304 | 24 | 135 | 199 | 240 |
| 10 | | | | | 25 | 115 | 220 | 270 | 98 | 152 | 268 | 338 |

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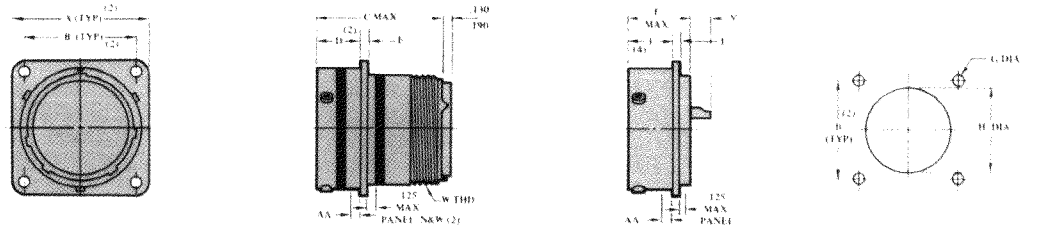
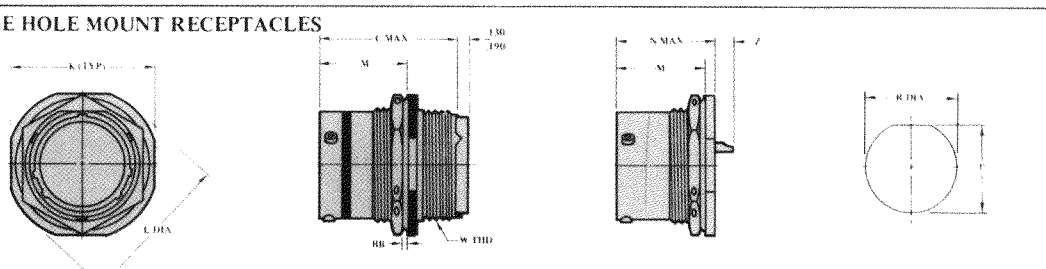
# MIL-C-83723 Series 1
# Bayonet Coupling Connectors

## SHELL STYLES

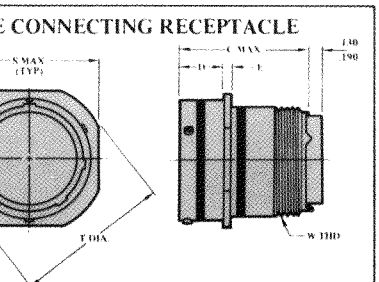
SQUARE FLANGE MOUNT RECEPTACLES



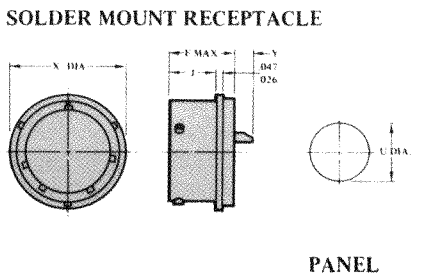

SINGLE HOLE MOUNT RECEPTACLES



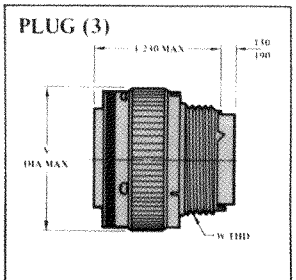

CABLE CONNECTING RECEPTACLE




SOLDER MOUNT RECEPTACLE




PLUG (3)




| SIZE | AA MAX PANEL | | BB MAX PANEL | (2) A MAX | | (2) B ±.005 | | C MAX | (2) D | | E | F MAX | G ±.005 | (6) H | (4) J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | W | | N | W | N | W | | N | W | | | | | |
| 8 | .087 | .118 | .187 | .828 | 1.065 | .594 | .734 | 1.215 | .462<br>.431 | .493<br>.462 | .078<br>.046 | .801 | .120 | .573<br>.563 | .598<br>.578 |
| 10 | .087 | .118 | .187 | .954 | 1.141 | .719 | .812 | 1.215 | .462<br>.431 | .493<br>.462 | .078<br>.046 | .801 | .120 | .690<br>.680 | .598<br>.578 |
| 12 | .087 | .118 | .187 | 1.047 | 1.266 | .812 | .938 | 1.215 | .462<br>.431 | .493<br>.462 | .078<br>.046 | .801 | .120 | .869<br>.859 | .598<br>.578 |
| 14 | .087 | .118 | .187 | 1.141 | 1.360 | .906 | 1.031 | 1.215 | .462<br>.431 | .493<br>.462 | .078<br>.046 | .801 | .120 | .994<br>.984 | .598<br>.578 |
| 16 | .087 | .118 | .187 | 1.234 | 1.453 | .969 | 1.125 | 1.215 | .462<br>.431 | .493<br>.462 | .078<br>.046 | .801 | .120 | 1.118<br>1.108 | .598<br>.578 |
| 18 | .087 | .118 | .187 | 1.328 | 1.532 | 1.062 | 1.203 | 1.215 | .462<br>.431 | .493<br>.462 | .078<br>.046 | .801 | .120 | 1.243<br>1.233 | .598<br>.578 |
| 20 | .212 | .212 | .250 | 1.453 | 1.688 | 1.156 | 1.297 | 1.275 | .587<br>.556 | .587<br>.556 | .110<br>.078 | .863 | .120 | 1.368<br>1.358 | .660<br>.640 |
| 22 | .212 | .212 | .250 | 1.578 | 1.766 | 1.250 | 1.375 | 1.275 | .587<br>.556 | .587<br>.556 | .110<br>.078 | .895 | .120 | 1.493<br>1.483 | .660<br>.640 |
| 24 | .212 | .212 | .219 | 1.703 | 1.891 | 1.375 | 1.500 | 1.275 | .620<br>.589 | .620<br>.589 | .110<br>.078 | .895 | .147 | 1.620<br>1.610 | .660<br>.640 |

NOTES:
1. All Dimensions in inches
2. N = Narrow Flange W = Wide Flange
3. Plugs with RFI Fingers Have Same Dimensional Control as Shown
4. "J" Dimension Same for Both Narrow and Wide Square Flange Connector
5. See Page 12 for Backshell Requirements.
6. For Front or Rear Mounting.

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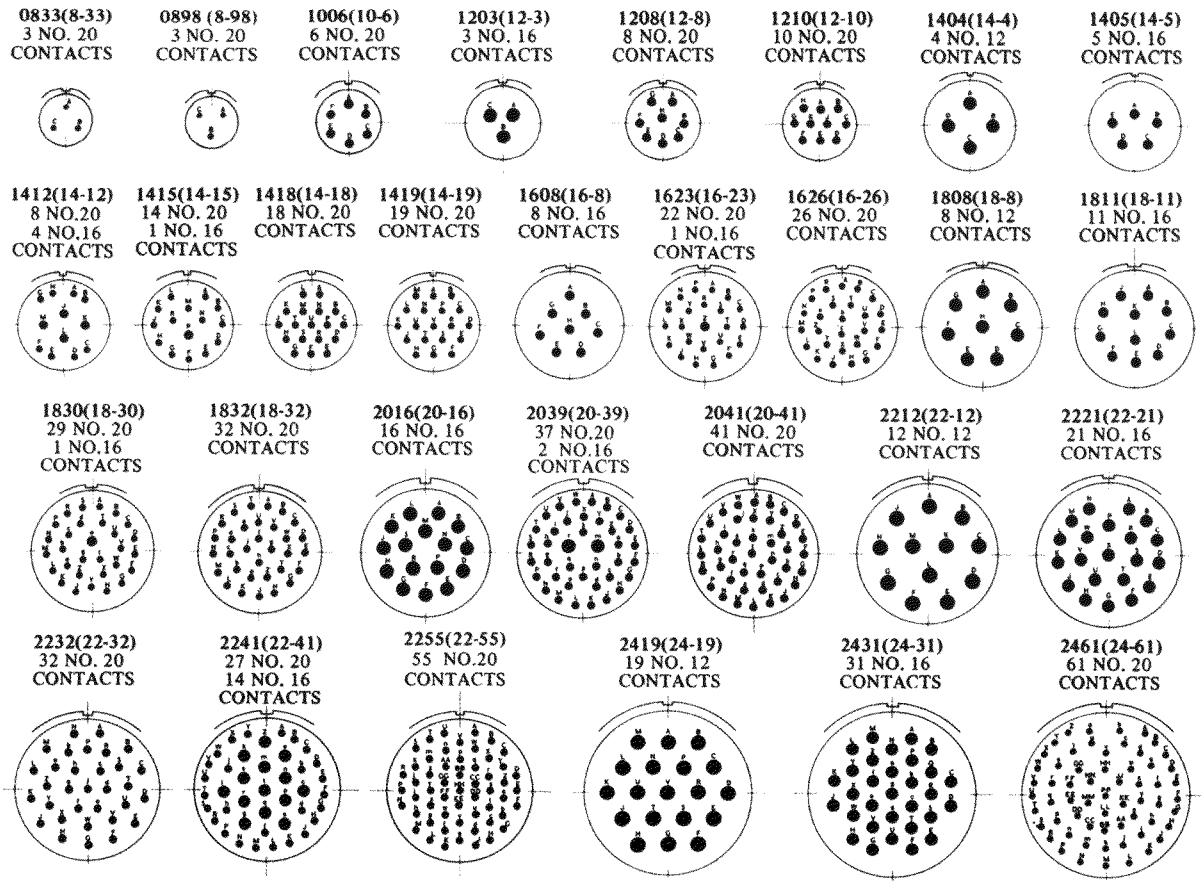
# Insert Arrangements




NOTES: 1. For Other Insert Arrangements Consult Factory.
2. Military Identification of Insert Arrangement Utilizes 4 Digits as Shown.
Deutsch Identification of Insert Arrangement is Shown in Parenthesis.
3. The 8-3 and 8-4 Arrangements are Available only as Pre-wired Connectors (Consult Factory).
4. Cavity Identification Shown here for Pin Insert Face (Socket Opposite) and is for Reference Only.
Actual Insert Marking Shall be in Accordance With Mil-C-83723.

| K | L | M | N MAX | P ±.005 | R ±.005 | S MAX | T | U ±.005 | V MAX | W THREAD-2A | X | Y CONTACT SIZE 20 | Y CONTACT SIZE 16 & 12 | Z CONTACT SIZE 20 | Z CONTACT SIZE 16 & 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| .954<br>.923 | 1.078<br>1.047 | .707<br>.691 | .820 | .536 | .572 | .828 | .958<br>.918 | .570 | .782 | 1/2-20 UNF | .635<br>.615 | .178<br>.118 | .248<br>.188 | .134<br>.074 | .204<br>.144 |
| 1.078<br>1.047 | 1.203<br>1.172 | .707<br>.691 | .820 | .661 | .697 | .954 | 1.082<br>1.042 | .680 | .926 | 5/8-24 UNEF | .760<br>.740 | .178<br>.118 | .248<br>.188 | .134<br>.074 | .204<br>.144 |
| 1.266<br>1.235 | 1.391<br>1.360 | .707<br>.691 | .820 | .824 | .895 | 1.047 | 1.176<br>1.136 | .789 | 1.043 | 3/4-20 UNEF | .854<br>.834 | .178<br>.118 | .248<br>.188 | .134<br>.074 | .204<br>.144 |
| 1.391<br>1.360 | 1.516<br>1.485 | .707<br>.691 | .820 | .948 | 1.010 | 1.141 | 1.270<br>1.230 | .914 | 1.183 | 7/8-20 UNEF | .979<br>.959 | .178<br>.118 | .248<br>.188 | .134<br>.074 | .204<br>.144 |
| 1.516<br>1.485 | 1.641<br>1.610 | .707<br>.691 | .820 | 1.072 | 1.135 | 1.234 | 1.364<br>1.324 | 1.039 | 1.305 | 1-20 UNEF | 1.104<br>1.084 | .178<br>.118 | .248<br>.188 | .134<br>.074 | .204<br>.144 |
| 1.641<br>1.610 | 1.766<br>1.735 | .707<br>.691 | .820 | 1.197 | 1.260 | 1.328 | 1.458<br>1.418 | 1.164 | 1.391 | 1 1/16-18UNEF | 1.228<br>1.208 | .178<br>.118 | .248<br>.188 | .134<br>.074 | .204<br>.144 |
| 1.828<br>1.797 | 1.954<br>1.923 | .772<br>.754 | .920 | 1.322 | 1.385 | 1.453 | 1.582<br>1.542 | 1.258 | 1.531 | 1 3/16-18UNEF | 1.322<br>1.302 | .178<br>.118 | .248<br>.188 | .099<br>.039 | .169<br>.109 |
| 1.954<br>1.923 | 2.078<br>2.047 | .772<br>.754 | 920 | 1.447 | 1.510 | 1.578 | 1.708<br>1.668 | 1.383 | 1.656 | 1 5/16-18UNEF | 1.448<br>1.428 | .146<br>.086 | .216<br>.156 | .099<br>.039 | .169<br>.109 |
| 2.078<br>2.047 | 2.203<br>2.172 | .772<br>.754 | .951 | 1.572 | 1.635 | 1.703 | 1.832<br>1.792 | 1.508 | 1.777 | 1 7/16-18UNEF | 1.574<br>1.554 | .146<br>.086 | .216<br>.156 | .099<br>.039 | .169<br>.109 |

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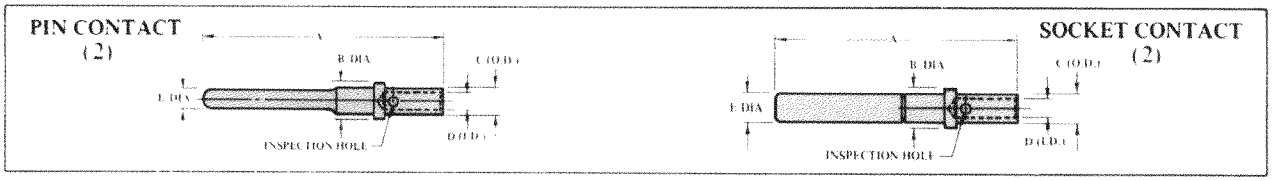
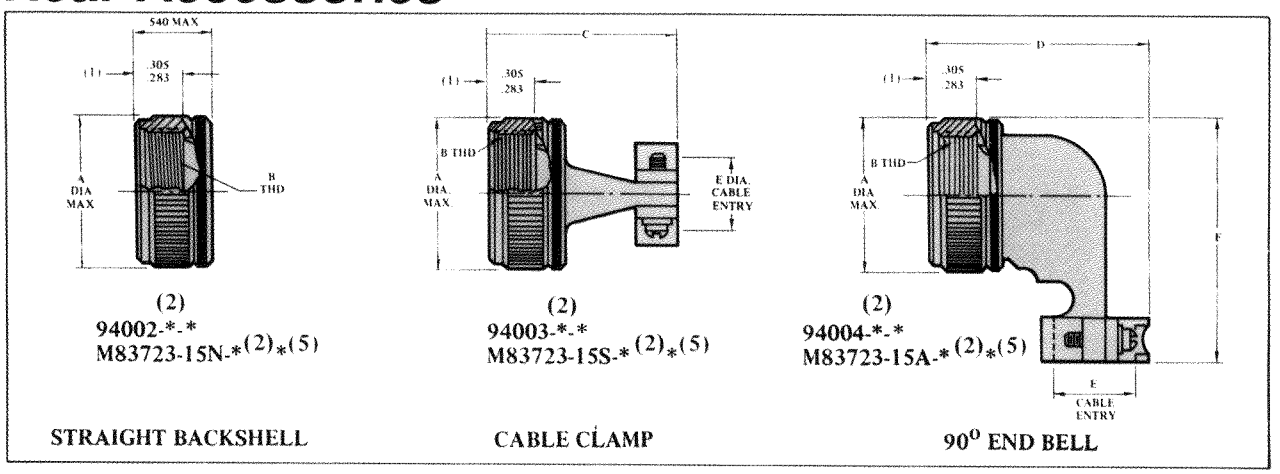
# Contact & Tooling Information




| CONTACTS (1) | | | | | | | | | | SEALING PLUG | | INSERTION/REMOVAL TOOL (3) | | WIRE STRIP LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEUTSCH PART NO. | MILITARY PART NO. | STYLE | COLOR CODE (4) | SIZE | MAX. A | MAX. B | MAX. C | MIN. D | MAX. E | DEUTSCH PART NO. | MILITARY PART NO. | DEUTSCH PART NO. | MILITARY PART NO. | |
| 0641-1-2031 | M39029/4-110 | PIN | RED | 20 | .720 | 103 | 078 | .048 | .041 | M527488-20-2 | M527488-20-2 | M15570-20 | M83723-31-20 | 5/32" to 7/32" |
| 100503 | M39029/5-115 | SOC | RED | 20 | .656 | .103 | .078 | .048 | .078 | | | | | |
| 0641-2-1631 | M39029/4-111 | PIN | BLUE | 16 | .821 | .133 | .103 | .066 | .0635 | M527488-16-2 | M527488-16-2 | M15570-16 | M83723-31-16 | 1/4" to 5/16" |
| 100504 | M39029/5-116 | SOC | BLUE | 16 | .759 | .133 | .103 | .066 | .113 | | | | | |
| 0641-3-1231 | M39029/4-113 | PIN | YELLOW | 12 | .821 | .190 | .151 | .098 | .095 | M527488-12-2 | M527488-12-2 | M15570-12 | M83723-31-12 | 1/4" to 5/16" |
| 100505 | M39029/5-118 | SOC | YELLOW | 12 | .759 | .190 | .151 | .098 | .161 | | | | | |

NOTES: (1) Use Crimp Tool M22520/1-01 Positioner Part No. M22520/1-02.
(2) Size 8 Power Contacts, Coax Contacts,and Size 12 Shielded Contacts are Available (Consult Factory).
(3) A Tool for Removal of Unwired Contacts is Available Under Part No. M15571.
(4) Crimp Barrel is Color Coded per Tabulation, Consult Factory for Correct Code since two color bands are used. One denoting Contact Size , the second denoting crimp barrel size.

## Rear Accessories (4)




| SIZE | DEUTSCH PART NUMBER FOR CLASS A (3) | DEUTSCH PART NUMBER FOR CLASS R (3) | MILITARY PART NO. (3)(5) | A MAX | B THREAD-2B | C ±.031 | D MAX | E ±.016 | F MAX |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 9400*-8 | 9400*-8-3014 | M83723-15*8* | .617 | 1/2-20 UNF | .859 | 1.069 | .188 | 1.139 |
| 10 | 9400*-10A | 9400*-10A-3014 | M83723-15*-10* | .734 | 5/8-24 UNEF | .859 | 1.163 | .270 | 1.247 |
| 12 | 9400*-12 | 9400*-12-3014 | M83723-15*-12* | .858 | 3/4-20 UNEF | .859 | 1.298 | .400 | 1.379 |
| 14 | 9400*-14 | 9400*-14-3014 | M83723-15*-14* | .984 | 7/8-20 UNEF | 1.093 | 1.388 | .460 | 1.502 |
| 16 | 9400*-16 | 9400*-16-3014 | M83723-15*-16* | 1.112 | 1-20 UNEF | 1.093 | 1.523 | .610 | 1.626 |
| 18 | 9400*-18 | 9400*-18-3014 | M83723-15*-18* | 1.218 | 1 1 16-18 UNEF | 1.093 | 1.622 | .690 | 1.739 |
| 20 | 9400*-20 | 9400*-20-3014 | M83723-15*-20* | 1.345 | 1 3/16-18 UNEF | 1.093 | 1.755 | .815 | 1.863 |
| 22 | 9400*-22 | 9400*-22-3014 | M83723-15*-22* | 1.468 | 1 5 16-18 UNEF | 1.093 | 1.878 | .940 | 1.994 |
| 24 | 9400*-24 | 9400*-24-3014 | M83723-15*-24* | 1.593 | 1 7/16-18 UNEF | 1.093 | 2.000 | 1.065 | 2.117 |

(1) Dimension From Front of Coupling Nut to Front of Teeth. (2)* Denotes Shell Size. (3)* Denotes Backshell Style. (4). Resilient Connectors Must Have Backshells In Order to Meet Moisture Sealing Requirements. (5)* Denotes Class.

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*SERIES 1 BAYONET COUPLING*

| Description | Contact Style | Military Part Number Class (A) Finish | DEUTSCH Part Number Class (A) Finish | Military Part Number Class (R) Finish |
|---|---|---|---|---|
| Square Flange Receptacle | Socket | M83723-01A**N | AFD50-*-*SN-6116 | M83723-01R**N |
| | Pin | M83723-02A**N | AFD50-*-*PN-6116 | M83723-02R**N |
| Wide Sq. Flange Receptacle | Socket | M83723-03A**N | AFD58-*-*SN-6116 | M83723-03R**N |
| | Pin | M83723-04A**N | AFD58-*-*PN-6116 | M83723-04R**N |
| Single Hole Receptacle | Socket | M83723-05A**N | AFD54-*-*SN-6116 | M83723-05R**N |
| | Pin | M83723-06A**N | AFD54-*-*PN-6116 | M83723-06R**N |
| Cable Connecting Receptacle | Socket | M83723-07A**N | AFD51-*-*SN-6116 | M83723-07R**N |
| | Pin | M83723-08A**N | AFD51-*-*PN-6116 | M83723-08R**N |
| Square Flange, Hermetic | Pin | N/A | N/A | M83723-09H**N |
| Wide Square Flange, Hermetic | Pin | N/A | N/A | M83723-10H**N |
| Solder Flange, Hermetic | Pin | N/A | N/A | M83723-11H**N |
| Single Hole , Hermetic | Pin | N/A | N/A | M83723-12H**N |
| Plug | Socket | M83723-13A**N | AFD56-*-*SN-6116 | M83723-13H**N |
| | Pin | M83723-14A**N | AFD56-*-*PN-6116 | M83723-14H**N |
| Pre-Wired Plug | Socket | M83723-37A**N | 88009-8-*S-6116 | M83723-37R**N |
| | Pin | M83723-36A**N | 88009-8-*P-6116 | M83723-36R**N |
| Pre-Wired Narrow Square Flange Receptacle | Socket | M83723-39A**N | 88008-8-*S-6116 | M83723-39R**N |
| | Pin | M83723-38A**N | 88008-8-*P-6116 | M83723-38R**N |
| Pre-Wired Wide Square Flange Receptacle | Socket | M83723-41A**N | 88019-8-*S-6116 | M83723-41R**N |
| | Pin | M83723-40A**N | 88019-8-*P-6116 | M83723-40R**N |

*SERIES 3 BAYONET COUPLING*

| Description | Contact Style | Military Part Number Class (A) Finish | DEUTSCH Part Number Class (A) Finish | Military Part Number Class (R) Finish |
|---|---|---|---|---|
| Square Flange Receptacle | Socket | M83723-71A**N | DL60R*-*SN-6116 | M83723-71R**N |
| | Pin | M83723-72A**N | DL60R*-*PN-6116 | M83723-72R**N |
| Single Hole Receptacle | Socket | M83723-73A**N | DL64R*-*SN-6116 | M83723-73R**N |
| | Pin | M83723-74A**N | DL64R*-*PN-6116 | M83723-74R**N |
| Plug | Socket | M83723-75A**N | DL66R*-*SN-6116 | M83723-75R**N |
| | Pin | M83723-76A**N | DL66R*-*PN-6116 | M83723-76R**N |
| Plug, R.F.I. Grounding | Socket | N/A | N/A | M83723-77R**N |
| | Pin | N/A | N/A | M83723-78R**N |
| Square Flange, Hermetic | Pin | N/A | N/A | M83723-79R**N |
| Solder Flange, Hermetic | Pin | N/A | N/A | M83723-80R**N |
| Single Hole , Hermetic | Pin | N/A | N/A | M83723-81R**N |
| Solder Mount Receptacle with Extended Pins, Hermetic | Pin | N/A | N/A | M83723-93R**N |
| Single Hole Mount Receptacle with Extended Pins, Hermetic | Pin | N/A | N/A | M83723-94R**N |

*SERIES 3 THREAD COUPLING*

| Description | Contact Style | Military Part Number Class (A) Finish | DEUTSCH Part Number Class (A) Finish | Military Part Number Class (R) Finish |
|---|---|---|---|---|
| Square Flange Receptacle | Socket | M83723-82A**N | DBA30*-*SN-6116 | M83723-82R**N |
| | Pin | M83723-83A**N | DBA30*-*PN-6116 | M83723-83R**N |
| Single Hole Receptacle | Socket | M83723-84A**N | DBA34*-*SN-6116 | M83723-84R**N |
| | Pin | M83723-85A**N | DBA34*-*PN-6116 | M83723-85R**N |
| Plug | Socket | M83723-86A**N | DBA36*-*SN-6116 | M83723-86R**N |
| | Pin | M83723-87A**N | DBA36*-*PN-6116 | M83723-87R**N |
| Square Flange, Hermetic | Pin | N/A | N/A | M83723-88H**N |
| Single Hole, Hermetic | Pin | N/A | N/A | M83723-89H**N |
| Solder Flange, Hermetic | Pin | N/A | N/A | M83723-90H**N |

NOTE: "N" IN PART NUMBER DENOTES NORMAL POLARIZATION

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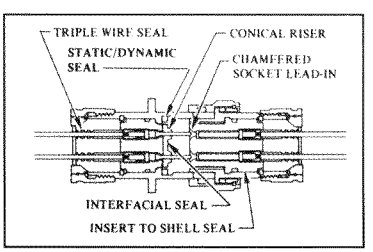
# Ordering information

| DEUTSCH Part Number Class (A) Finish | Military Part Number Class (W) Finish | DEUTSCH Part Number Class (W) Finish |
|---|---|---|
| | M83723-01W**N | AFD50-*-*SN-6117 |
| AFD50-*-*PN-1A | M83723-02W**N | AFD50-*-*PN-6117 |
| AFD58-*-*SN-1A | M83723-03W**N | AFD58-*-*SN-6117 |
| AFD58-*-*PN-1A | M83723-04W**N | AFD58-*-*PN-6117 |
| AFD54-*-*SN-1A | M83723-05W**N | AFD54-*-*SN-6117 |
| AFD54-*-*PN-1A | M83723-06W**N | AFD54-*-*PN-6117 |
| AFD51-*-*SN-1A | M83723-07W**N | AFD51-*-*SN-6117 |
| AFD51-*-*PN-1A | M83723-08W**N | AFD51-*-*PN-6117 |
| DBC50H-*-*PN | N/A | N/A |
| DBC58H-*-*PN | N/A | N/A |
| DBC53H-*-*PN | N/A | N/A |
| DBC54H-*-*PN | N/A | N/A |
| AFD56-*-*SN-1A | M83723-13W**N | AFD56-*-*SN-6117 |
| AFD56-*-*PN-1A | M83723-14W**N | AFD56-*-*PN-6117 |
| 88009-8-*S-1A | M83723-37W**N | 88009-8-*S-6117 |
| 88009-8-*P-1A | M83723-36W**N | 88009-8-*P-6117 |
| 88008-8-*S-1A | M83723-39W**N | 88008-8-*S-6117 |
| 88008-8-*P-1A | M83723-38W**N | 88008-8-*P-6117 |
| 88019-8-*S-1A | M83723-41W**N | 88019-8-*S-6117 |
| 88019-8-*P-1A | M83723-40W**N | 88019-8-*P-6117 |

| DEUTSCH Part Number Class (R) Finish | Military Part Number Class (W) Finish | DEUTSCH Part Number Class (W) Finish |
|---|---|---|
| DL60R-*-*SN-6106 | M83723-71W**N | DL60R-*-*SN-6117 |
| DL60R-*-*PN-6106 | M83723-72W**N | DL60R-*-*PN-6117 |
| DL64R-*-*SN-6106 | M83723-73W**N | DL64R-*-*SN-6117 |
| DL64R-*-*PN-6106 | M83723-74W**N | DL64R-*-*PN-6117 |
| DL66R-*-*SN-6106 | M83723-75W**N | DL66R-*-*SN-6117 |
| DL66R-*-*PN-6106 | M83723-76W**N | DL66R-*-*PN-6117 |
| DL68G-*-*SN-6106 | M83723-77W**N | DL68G-*-*SN-6117 |
| DL68R-*-*PN-6106 | M83723-78W**N | DL68G-*-*PN-6117 |
| DL60H-*-*PN | N/A | N/A |
| DL61H-*-*PN | N/A | N/A |
| DL64H-*-*PN | N/A | N/A |
| DL61H-*-*PN-830 | N/A | N/A |
| DL64H-*-*PN-829 | N/A | N/A |




| | Military Part Number Class (W) Finish | DEUTSCH Part Number Class (W) Finish |
|---|---|---|
| DBA30-*-*SN-6106 | M83723-82W**N | DBA30-*-*SN-6117 |
| DBA30-*-*PN-6106 | M83723-83W**N | DBA30-*-*PN-6117 |
| DBA34-*-*SN-6106 | M83723-84W**N | DBA34-*-*SN-6117 |
| DBA34-*-*PN-6106 | M83723-85W**N | DBA34-*-*PN-6117 |
| DBA36-*-*SN-6106 | M83723-86W**N | DBA36-*-*SN-6117 |
| DBA36-*-*PN-6106 | M83723-87W**N | DBA36-*-*PN-6117 |
| DBC30H-*-*PN | N/A | N/A |
| DBC34H-*-*PN | N/A | N/A |
| DBC33H-*-*PN | N/A | N/A |

## Military Part Numbering System

M83723 02 R 22 55 N

- M83723 — Military Designation
- 02 — Shell and Contact Style See Chart Below
- R — Class - 200°C, Fluid-resistant
  - A = Resilient, Non-Conductive Finish
  - H = Hermetic, Conductive Finish
  - R = Resilient, Conductive Finish
- 22 — Shell Size 8, 10, 12, 14, 16, 18, 20, 22, 24
- 55 — Insert Arrangement See Pages 7, 9, & 11
- N — Clocking/Keying Position See Page 5

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