## Military and Aero-Electric Part Number Development

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Mil. Prefix** | **D38999/** | **20** | **W** | **C** | **35** | **P** | **N** | |
| **Aero Prefix** | **AE3** | **20** | **W** | **C** | **35** | **P** | **N** | **-340** |

**Shell Type (Specification Sheet Number)**

**20** = Wall mount receptacle

**24** = Jam nut receptacle

**26** = Self-locking, RFI grounding plug

**Class (Material & Finish)**

**F** = Aluminum shell, electroless nickel finish

**W** = Aluminum shell, olive drab cadmium over electroless nickel base

**K** = Stainless steel shell, passivated, with firewall insert

**S** = Stainless steel shell, electrodeposited nickel, with firewall insert

**BZ*** = Aluminum nickel bronze shell with standard insert (Aero p/n only)

**ZC*** = Aluminum shell, zinc cobalt plating (Aero p/n only)

**Shell Size**

**A, B, C, D, E, F, G, H** or **J**

**Insert Arrangement**

See pages 15 thru 19

**Contact Style**

**P** = Pin

**S** = Socket

**A** = Pin connector less pins (with intent to use non-std pin contacts)

**B** = Socket connector less sockets (with intent to use non-std socket contacts)

**Polarization (Keying)**

**N** = Normal (Included in part number)

**A, B, C, D,** or **E**

**Modification (applies to Aero part numbers only)**

**01** = Less contacts (is not marked on the part)

**340** = Connector kitted with M85049/15-XXX

**341** = Connector kitted with M85049/38-XXX straight clamp

**342** = Connector kitted with M85049/39-XXX right angle clamp

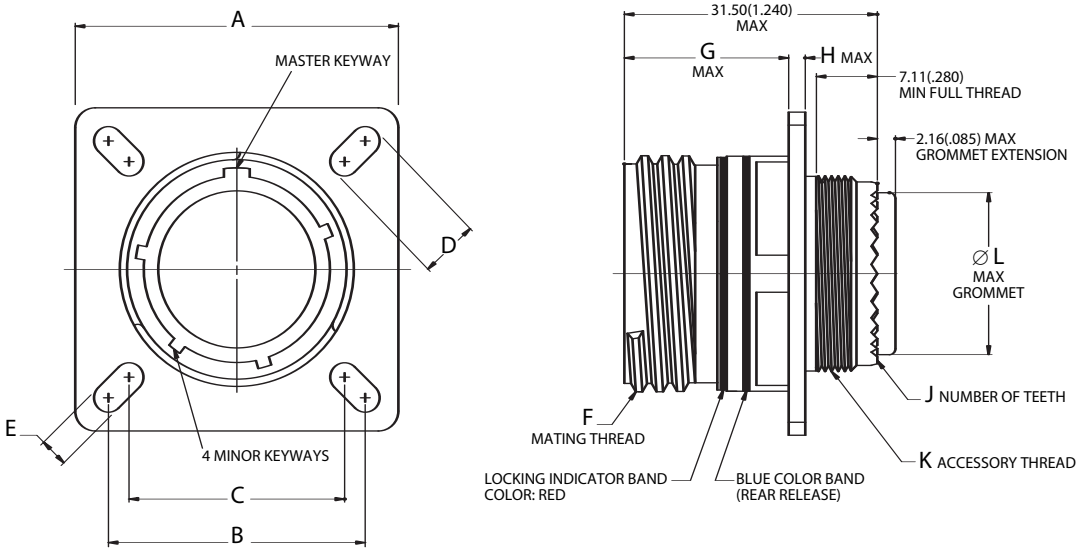
Consult factory for other modifications

* Not on QPL, can be supplied to Aero-Electric part number only.

**Note 1:** Each connector is furnished with contacts unless ordered less contacts (L/C) as follows: One spare contact for inserts requiring 2 through 26 of each contact and two spares for inserts with 27 or more contacts, and a minimum of one sealing plug up to 10% of the number contacts. Spare Coax and Twinax contacts are not supplied. One insertion/extraction tool for each contact size is also included.

**Note 2:** Proper part number marking has no "0" in front of single digit layout. Example: J D38999/20WB5SN. "N" for normal is included. In addition, J or JAN must be marked immediately in front of MIL part number.

Triple Start Threaded Coupling, Crimp Removable, Rear Release, Scoop-Proof






**Note 1:** "K" Accessory Thread for AE320 is same as AE326 ("D" Accessory Thread) on page 41.

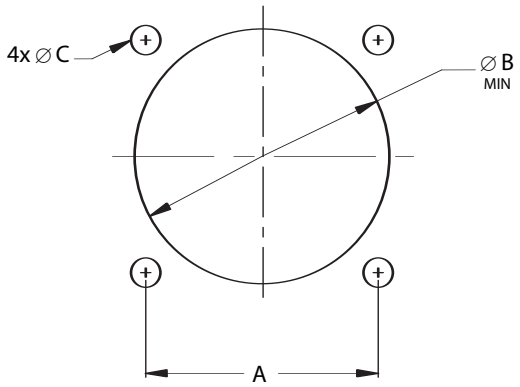
**Note 2:** "F" Mating Thread for AE320 is same as AE326 ("E" Mating Thread) on page 41 except it is Class 2A.

**Note 3:** Maximum Grommet Extension for insert layouts incorporating size 8 and 10 contacts = **5.95**(.234).

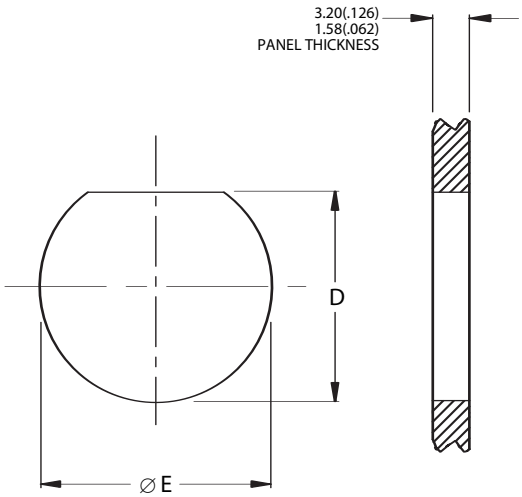
| Shell Size | A | | B | | C | | D | | E | | G | | H | | J | ∅L | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ±.012 | ±.30 | (TP) | | (TP) | | ±.008 | ±.20 | ±.008 | ±.20 | Maximum | | Maximum | | No. of Teeth | Maximum | |
| | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | | inch | mm |
| A | .937 | 23.80 | .719 | 18.26 | .594 | 15.09 | .216 | 5.49 | .128 | 3.25 | .820 | 20.83 | .098 | 2.50 | 12 | .299 | 7.59 |
| B | 1.031 | 26.20 | .812 | 20.62 | .719 | 18.26 | .194 | 4.93 | .128 | 3.25 | .820 | 20.83 | .098 | 2.50 | 16 | .427 | 10.85 |
| C | 1.126 | 28.60 | .906 | 23.01 | .812 | 20.62 | .194 | 4.93 | .128 | 3.25 | .820 | 20.83 | .098 | 2.50 | 20 | .541 | 13.74 |
| D | 1.220 | 31.00 | .969 | 24.61 | .906 | 23.01 | .173 | 4.39 | .128 | 3.25 | .820 | 20.83 | .098 | 2.50 | 24 | .666 | 16.92 |
| E | 1.311 | 33.30 | 1.062 | 26.97 | .969 | 24.61 | .194 | 4.93 | .128 | 3.25 | .820 | 20.83 | .098 | 2.50 | 28 | .791 | 20.09 |
| F | 1.437 | 36.50 | 1.156 | 29.36 | 1.062 | 26.97 | .194 | 4.93 | .128 | 3.25 | .820 | 20.83 | .098 | 2.50 | 32 | .897 | 22.78 |
| G | 1.563 | 39.70 | 1.250 | 31.75 | 1.156 | 29.36 | .194 | 4.93 | .128 | 3.25 | .790 | 20.07 | .126 | 3.20 | 36 | 1.022 | 25.96 |
| H | 1.689 | 42.90 | 1.375 | 34.93 | 1.250 | 31.75 | .242 | 6.15 | .154 | 3.91 | .790 | 20.07 | .126 | 3.20 | 40 | 1.147 | 29.13 |
| J | 1.811 | 46.00 | 1.500 | 38.10 | 1.375 | 34.93 | .242 | 6.15 | .154 | 3.91 | .790 | 20.07 | .126 | 3.20 | 44 | 1.272 | 32.31 |

## Panel Cutouts

FLANGE MOUNT




JAM NUT




**Note:** Diameter B cutout dimensions are listed separately for back and front of panel mounting.

| Shell Size | A (TP) | | ∅B For Back Mounting Minimum | | ∅B For Front Mounting Minimum | | ∅C ±.005 | ∅C ±.13 | D +.000 -.010 | D +.00 -.25 | ∅E +.010 -.000 | ∅E +.25 -.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| A (9) | .719 | 18.26 | .656 | 16.66 | .516 | 13.11 | .128 | 3.25 | .670 | 17.02 | .700 | 17.78 |
| B (11) | .812 | 20.62 | .796 | 20.22 | .625 | 15.88 | .128 | 3.25 | .771 | 19.59 | .825 | 20.96 |
| C (13) | .906 | 23.01 | .922 | 23.42 | .750 | 19.05 | .128 | 3.25 | .955 | 24.26 | 1.010 | 25.65 |
| D (15) | .969 | 24.61 | 1.047 | 26.59 | .906 | 23.01 | .128 | 3.25 | 1.085 | 27.56 | 1.135 | 28.83 |
| E (17) | 1.062 | 26.97 | 1.219 | 30.96 | 1.016 | 25.81 | .128 | 3.25 | 1.210 | 30.73 | 1.260 | 32.01 |
| F (19) | 1.156 | 29.36 | 1.297 | 32.94 | 1.141 | 28.98 | .128 | 3.25 | 1.335 | 33.91 | 1.385 | 35.18 |
| G (21) | 1.250 | 31.75 | 1.422 | 36.12 | 1.266 | 32.16 | .128 | 3.25 | 1.460 | 37.08 | 1.510 | 38.35 |
| H (23) | 1.375 | 34.93 | 1.547 | 39.29 | 1.375 | 34.93 | .154 | 3.91 | 1.585 | 40.26 | 1.635 | 41.53 |
| J (25) | 1.500 | 38.10 | 1.672 | 42.47 | 1.484 | 37.69 | .154 | 3.91 | 1.710 | 43.43 | 1.760 | 44.70 |

## Contacts, Plastic Insertion/Removal Tools and Seal Plugs

| Contact Size | Application | Pin Contacts | Socket Contacts | Seal Plugs | Insertion/Removal Tools |
|---|---|---|---|---|---|
| | | | | | Plastic |
| | Type | Military No. | Military No. | Military No. | Military No. |
| 22D | Power/Signal | M39029/58-360 | M39029/56-348 | MS27488-22-1 | M81969/14-01 |
| 20 | Power/Signal | M39029/58-363 | M39029/56-351 | MS27488-20-1 | M81969/14-10 |
| 16 | Power/Signal | M39029/58-364 | M39029/56-352 | MS27488-16-1 | M81969/14-03 |
| 12 | Power/Signal | M39029/58-365 | M39029/56-353 | MS27488-12-1 | M81969/14-04 |
| 12 Coax | Coax | M39029/28-211 | M39029/75-416 | | |
| 12 Coax | Coax | M39029/102-558 | M39029/103-559 | | |
| 10 (Power) | Power | M39029/58-528 | M39029/56-527 | M85049/81-10*** | M81969/14-05 |
| 8 Coax | Coax | M39029/60-367 | M39029/59-366 | MS27488-8-1 | M81969/14-06 |
| 8 Twinax | Twinax | M39029/90-529 | M39029/91-530 | MS27488-8-1 | M81969/14-12 |

## Crimping and Metal Insertion/Extraction Tools

| Contact Size/Type | Crimp Tool | Positioner | Positioner | Insertion Tool | Extraction Tool |
|---|---|---|---|---|---|
| | | For Pin Contacts | For Socket Contacts | Metal | Metal |
| | Military No. | Military No. | Military No. | Military No. | Military No. |
| 22D | M22520/2-01 | M22520/2-09 | M22520/2-07 | M81969/8-01 | M81969/8-02 |
| 20 | M22520/1-01 | M22520/1-04 | M22520/1-04 | M81969/8-05 | M81969/8-06 |
| | M22520/2-01 | M22520/2-10 | M22520/2-10 | | |
| 16 | M22520/1-01 | M22520/1-04 | M22520/1-04 | M81969/8-07 | M81969/8-08 |
| 12 | M22520/1-01 | M22520/1-04 | M22520/1-04 | M81969/8-09 | M81969/8-10 |
| 12 Coax Inner | M22520/2-01 | M22520/2-34 | M22520/2-34 | | |
| 12 Coax Outer | M22520/31-01 | M22520/31-02 | M22520/31-02 | | |
| 10 ( Power) | — | — | — | M81969/8-11 | M81969/8-12 |
| 8 Coax Inner | M22520/2-01 | M22520/2-31 | M22520/2-31 | M81969/8-13** | M81969/8-14 |
| 8 Coax Outer | M22520/5-01 | M22520/5-05 Die Closure B | M22520/5-05 Die Closure B | | |
| 8 Twinax Center | M22520/2-01 | M22520/2-37 | M22520/2-37 | — | — |
| 8 Twinax Outer & Intermediate | M22520/5-01 | M22520/5-200 | M22520/5-200 | | |

## Contact and Wire Data

| Contact Size | Test Current* | Voltage* | Crimp Well Data | | | Wire Range | | Finished Wire ∅ Range | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | DC Test | Max. Drop | Well Dia. | Minimum Well Dept | | | | Minimum | | Maximum | |
| | Amps | Millivolts | inch | inch | mm | AWG | $mm^2$ | inch | mm | inch | mm |
| 22D | 5.0 | 73 | .0345 ±.0010 | .141 | 3.58 | 28-22 | .08-.33 | .030 | .76 | .054 | 1.37 |
| 20 | 7.5 | 55 | .047 ±.001 | .209 | 5.31 | 24-20 | .20-.52 | .040 | 1.02 | .083 | 2.11 |
| 16 | 13.0 | 49 | .067 ±.001 | .209 | 5.31 | 20-16 | .52-1.31 | .065 | 1.65 | .109 | 2.77 |
| 12 | 23.0 | 42 | .100 ±.002 | .209 | 5.31 | 14-12 | 2.08-3.31 | .097 | 2.46 | .142 | 3.61 |
| 10 | 33.0 | 33 | .137 ±.003 | .355 | 9.02 | 12-10† | 3.31-5.26 | .135 | 3.42 | .162 | 4.12 |

† MS3348 bushing required with 12 gauge wire.
* When tested with silver-plated wire.
** Insertion tool is not required.
*** Dummy contact, used in lieu of unwired contact and seal plug.

**Note:** Size 8 coax contacts are used with M17/095-RG180 cable, while size 8 Twinax contacts are used with M17/176-00002 cable.

## Insert Availability and Contact Information

| Insert Arrangement | | | Aero-Electric Status | | Service | Total | Quantity of Contacts (by Size) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Series I | Series II | Series III | QPL'd | Tooled | Rating | No. of Contacts | 22D | 22M | 22 | 20 | 16 | 12 | 10 | 8 |
| 9-6* | 8-6* | — | Yes | Yes | M | 6 | | 6 | | | | | | |
| 9-35 | 8-35 | A35 | Yes | Yes | M | 6 | 6 | | | | | | | |
| 9-98 | 8-98 | A98 | Yes | Yes | I | 3 | | | | 3 | | | | |
| 11-2 | — | B2 | Yes | Yes | I | 2 | | | | | 2 | | | |
| 11-4 | — | B4 | Yes | Yes | I | 4 | | | | 4 | | | | |
| 11-5 | 10-5 | B5 | Yes | Yes | I | 5 | | | | 5 | | | | |
| 11-13* | 10-13* | — | Yes | Yes | M | 13 | | 13 | | | | | | |
| 11-35 | 10-35 | B35 | Yes | Yes | M | 13 | 13 | | | | | | | |
| 11-98 | 10-98 | B98 | Yes | Yes | I | 6 | | | | 6 | | | | |
| 11-99 | 10-99 | B99 | Yes | Yes | I | 7 | | | | 7 | | | | |
| — | 12-3 | — | Yes | Yes | II | 3 | | | | | 3 | | | |
| 13-4 | 12-4 | C4 | Yes | Yes | I | 4 | | | | | 4 | | | |
| 13-8 | 12-8 | C8 | Yes | Yes | I | 8 | | | | 8 | | | | |
| 13-22* | 12-22* | — | Yes | Yes | M | 22 | | 22 | | | | | | |
| 13-35 | 12-35 | C35 | Yes | Yes | M | 22 | 22 | | | | | | | |
| 13-98 | 12-98 | C98 | Yes | Yes | I | 10 | | | | 10 | | | | |
| 15-5 | 14-5 | D5 | Yes | Yes | II | 5 | | | | | 5 | | | |
| 15-15 | 14-15 | D15 | Yes | Yes | I | 15 | | | | 14 | 1 | | | |
| 15-18 | 14-18 | D18 | Yes | Yes | I | 18 | | | | 18 | | | | |
| 15-19 | — | D19 | Yes | Yes | I | 19 | | | | 19 | | | | |
| 15-35 | 14-35 | D35 | Yes | Yes | M | 37 | 37 | | | | | | | |
| 15-37* | 14-37* | — | Yes | Yes | M | 37 | | 37 | | | | | | |
| 15-97 | 14-97 | D97 | Yes | Yes | I | 12 | | | | 8 | 4 | | | |
| 17-6 | 16-6 | E6 | Yes | Yes | I | 6 | | | | | | 6 | | |
| 17-8 | 16-8 | E8 | Yes | Yes | II | 8 | | | | | 8 | | | |
| 17-26 | 16-26 | E26 | Yes | Yes | I | 26 | | | | 26 | | | | |
| 17-35 | 16-35 | E35 | Yes | Yes | M | 55 | 55 | | | | | | | |
| 17-55* | 16-55* | — | Yes | Yes | M | 55 | | 55 | | | | | | |
| 17-99 | 16-99 | E99 | Yes | Yes | I | 23 | | | | 21 | 2 | | | |
| 19-11 | 18-11 | F11 | Yes | Yes | II | 11 | | | | | 11 | | | |
| 19-28 | 18-28 | F28 | Yes | Yes | I | 28 | | | | 26 | 2 | | | |
| 19-30 | 18-30 | F30 | Yes | Yes | I | 30 | | | | 29 | 1 | | | |
| 19-32 | 18-32 | F32 | Yes | Yes | I | 32 | | | | 32 | | | | |
| 19-35 | 18-35 | F35 | Yes | Yes | M | 66 | 66 | | | | | | | |
| — | 18-53** | — | Yes | Yes | M | 53 | | | 53 | | | | | |
| 19-66* | 18-66* | — | Yes | Yes | M | 66 | | 66 | | | | | | |

**Please see next page for Shell Sizes 21/20/G thru 25/24/J layouts.**

* Not approved for new design. Tooled and qualified but their separate pictorials are not shown on pages 17 thru 19, as they are the same as corresponding (-35) layouts that take same qty of 22D instead of 22M contacts.

** Not approved for new design. Pictorial is shown on page 18.

— above means "not available" for that series.

# MIL-DTL-38999 Series I, II and III
## Insert Availability and Contact Information
## per MIL-STD-1560

conesys

### Insert Availability and Contact Information *(continued)*

| Insert Arrangement | | | Aero-Electric Status | | Service | Total No. of | Quantity of Contacts (by Size) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Series I | Series II | Series III | QPL'd | Tooled | Rating | Contacts | 22D | 22M | 22 | 20 | 16 | 12 | 10 | 8 |
| 21-1* | 20-1* | — | Yes | Yes | M | 79 | | 79 | | | | | | |
| 21-11 | — | G11 | Yes | Yes | I | 11 | | | | | | 11 | | |
| 21-16 | 20-16 | G16 | Yes | Yes | II | 16 | | | | | 16 | | | |
| 21-35 | 20-35 | G35 | Yes | Yes | M | 79 | 79 | | | | | | | |
| 21-39 | 20-39 | G39 | Yes | Yes | I | 39 | | | | 37 | 2 | | | |
| 21-41 | 20-41 | G41 | Yes | Yes | I | 41 | | | | 41 | | | | |
| 21-48** | — | G48** | N/A | Yes | I | 4 | | | | | | | | 4 (Power) |
| 21-75 | — | G75 | Yes | Yes | Twinax | 4 | | | | | | | | 4 (Twinax) |
| 23-1* | 22-1* | — | Yes | Yes | M | 100 | | 100 | | | | | | |
| 23-2*** | 22-2*** | — | Yes | Yes | M | 85 | | | 85 | | | | | |
| 23-21 | 22-21 | H21 | Yes | Yes | II | 21 | | | | | 21 | | | |
| 23-32 | 22-32 | H32 | Yes | Yes | I | 32 | | | | 32 | | | | |
| 23-35 | 22-35 | H35 | Yes | Yes | M | 100 | 100 | | | | | | | |
| 23-53 | 22-53 | H53 | Yes | Yes | I | 53 | | | | 53 | | | | |
| 23-55 | 22-55 | H55 | Yes | Yes | I | 55 | | | | 55 | | | | |
| 25-1* | 24-1* | — | Yes | Yes | M | 128 | | 128 | | | | | | |
| 25-4 | 24-4 | J4 | Yes | Yes | I | 56 | | | | 48 | 8 | | | |
| — | — | J8 | Yes | Yes | Twinax | 8 | | | | | | | | 8 (Twinax) |
| — | — | J11 | Yes | Yes | N | 11 | | | | 2 | | | 9 | |
| 25-19 | 24-19 | J19 | Yes | Yes | I | 19 | | | | | | 19 | | |
| — | — | J20 | Yes | Yes | N, Coax, Twinax | 30 | | | | 10 | 13 | 4 (Coax) | | 3 (Twinax) |
| 25-24 | 24-24 | J24 | Yes | Yes | I | 24 | | | | | 12 | 12 | | |
| 25-29 | 24-29 | J29 | Yes | Yes | I | 29 | | | | | 29 | | | |
| 25-35 | 24-35 | J35 | Yes | Yes | M | 128 | 128 | | | | | | | |
| 25-43 | — | J43 | Yes | Yes | I | 43 | | | | 23 | 20 | | | |
| 25-46 | — | J46**** | Yes | Yes | I, Coax | 46 | | | | 40 | 4 | | | 2 (Coax) |
| 25-61 | 24-61 | J61 | Yes | Yes | I | 61 | | | | 61 | | | | |
| — | — | J90 | Yes | Yes | I, Twinax | 46 | | | | 40 | 4 | | | 2 (Twinax) |

* Not approved for new design. Tooled and qualified but their separate pictorials are not shown on pages 17 thru 19, as they are same as corresponding (-35) layouts that take same quantity of 22D instead of 22M contacts.

** 21-48/G48 layout is not to MIL-STD-1560. It is tooled and intended for comm'l use only.

*** Not approved for new design. Pictorial is shown on page 18.

**** J46 in Series III is not QPL'd but can be purchased to comm'l number (Size 8 Coax contact must be used).

— above means "not available" for that series

**Note 1:** J20P uses 4 size 12 coax contacts as follows: 2 ea M39029/28-211 and 2 ea of M39029/102-558; J20S uses 4 size 12 coax contacts as follows: 2 ea M39029/75-416 and 2 ea of M39029/103-559.

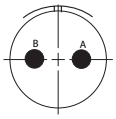
**Note 2:** Layouts (G75, J8, J20, J46 and J90) that take twinax or coax contacts should not be used for firewall applications (Classes K & S) in Series III.

**Note 3:** H and J contact styles (in lieu of P & S) are meant for Composite (classes J & M) Series III only. Aluminum (classes A, B, F & W) and Firewall (classes K & S) are rated for 500 cycles regardleess what contacts are used.

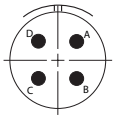
## Insert Arrangements Views

9-35/8-35
A35,
6 # 22D, M

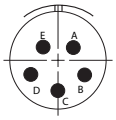
9-98/8-98
A98,
3 # 20, I



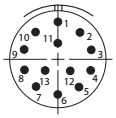
11-2
B2,
2 # 16, I



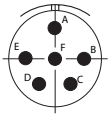
11-4
B4,
4 # 20, I



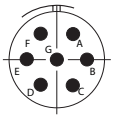
11-5/10-5
B5,
5 # 20, I



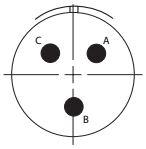
11-35/10-35
B35,
13 # 22D, M



11-98/10-98
B98,
6 # 20, I

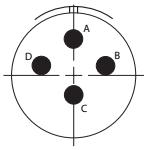


11-99/10-99
B99,
7 # 20, I

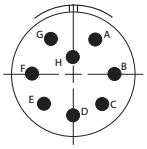


12-3

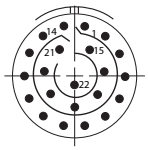
3 # 16, II



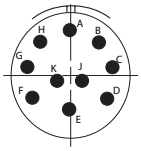
13-4/12-4
C4,
4 # 16, I



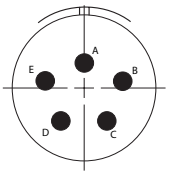
13-8/12-8
C8,
8 # 20, I



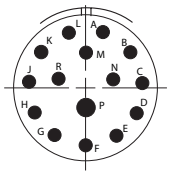
13-35/12-35
C35,
22 # 22D, M



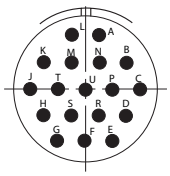
13-98/12-98
C98,
10 # 20, I



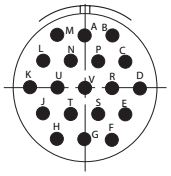
15-5/14-5
D5,
5 # 16, II



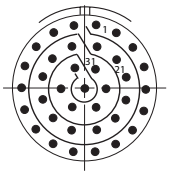
15-15/14-15
D15,
1 # 16, 14 # 20, I



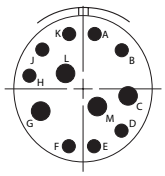
15-18/14-18
D18,
18 # 20, I



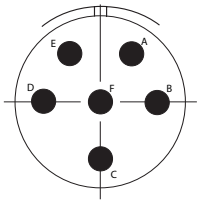
15-19
D19,
19 # 20, I



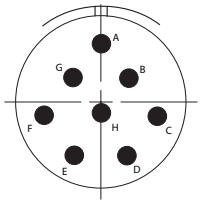
15-35/14-35
D35,
37 # 22D, M



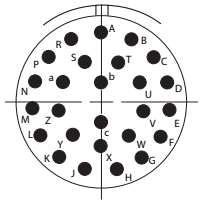
15-97/14-97
D97,
4 # 16, 8 # 20, I



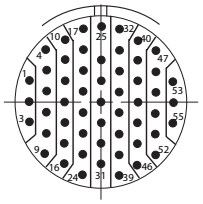
17-6/16-6
E6,
6 # 12, I



17-8/16-8
E8,
8 # 16, II



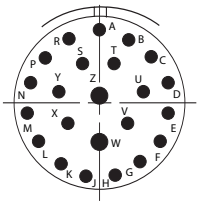
17-26/16-26
E26,
26 # 20, I



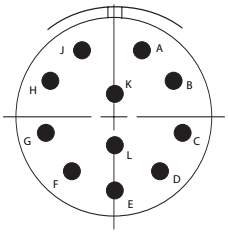
17-35/16-35
E35,
55 # 22D, M

# MIL-STD-1560
## Insert Arrangements (Pin Front View)
## for MIL-DTL-38999 Series I, II and III Connectors

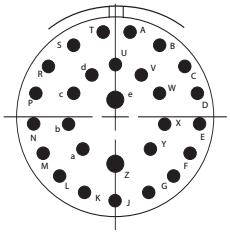
### Insert Arrangements Views



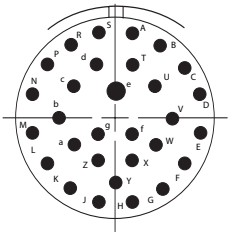
17-99/16-99
E99,
2 # 16, 21 # 20, I



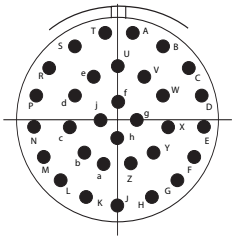
19-11/18-11
F11,
11 # 16, II



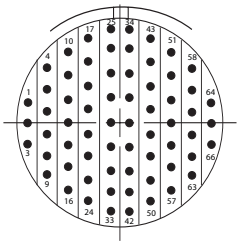
19-28/18-28
F28,
2 # 16, 26 # 20, I



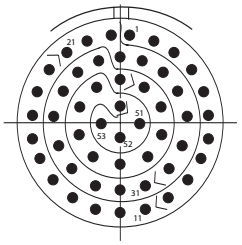
19-30/18-30
F30,
1 # 16, 29 # 20, I



19-32/18-32
F32,
32 # 20, I

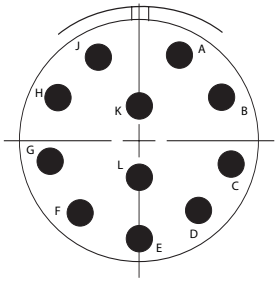


19-35/18-35
F35,
66 #22D, M

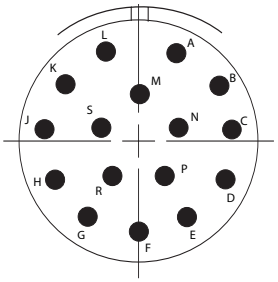


18-53*

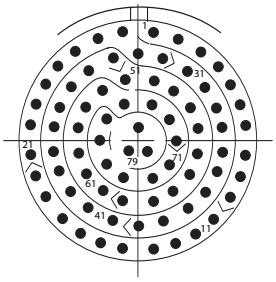
53 #22, M



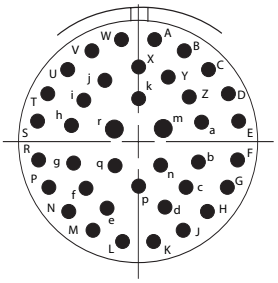
21-11
G11,
11 # 12, I



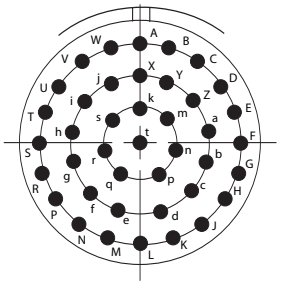
21-16/20-16
G16,
16 # 16, II



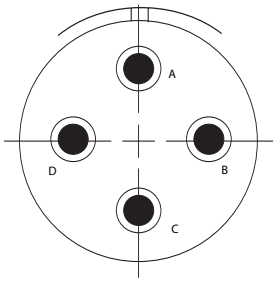
21-35/20-35
G35,
79 # 22D, M



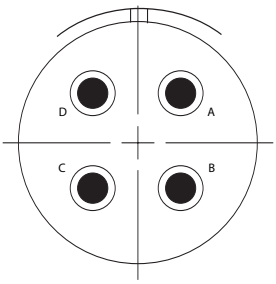
21-39/20-39
G39,
2 # 16, 37 # 20, I



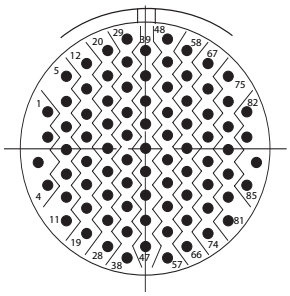
21-41/20-41
G41,
41 # 20, I



21-48**
G48**,
4 # 8 Power, I

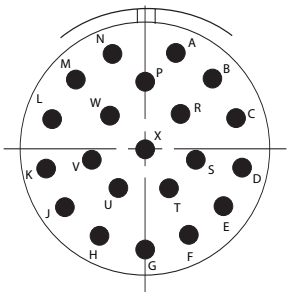


21-75
G75,
4 # 8 Twinax, Twinax



23-2*/22-2*

85 # 22, M

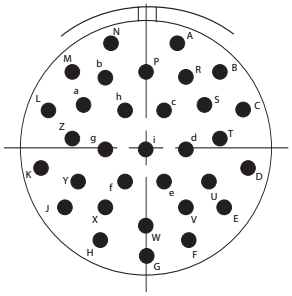


23-21/22-21
H21,
21 # 16, II

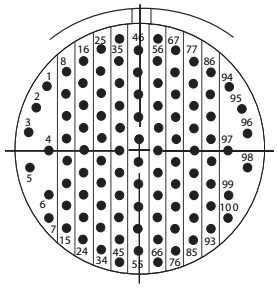
* Inactive for new design.

** Not MIL-STD-1560 layout (not QPL'd.).

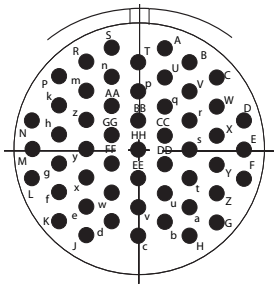
## Insert Arrangements Views



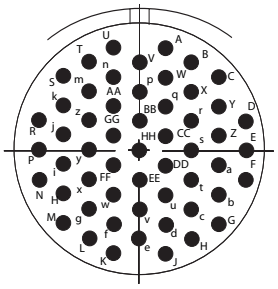
23-32/22-32
H32,
32 # 20, I



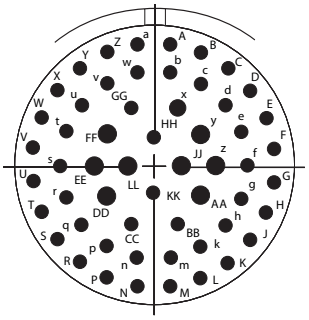
23-35/22-35
H35,
100 # 22D, M



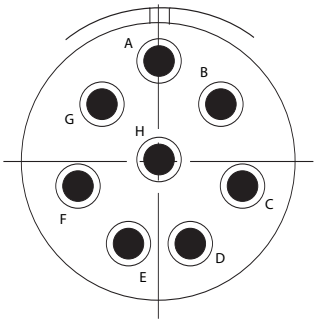
23-53/22-53
H53,
53 # 20, I



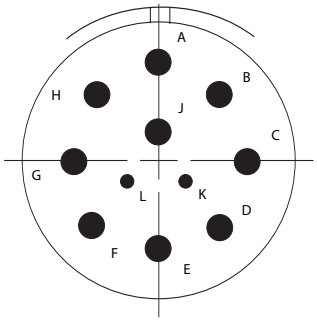
23-55/22-55
H55,
55 # 20, I



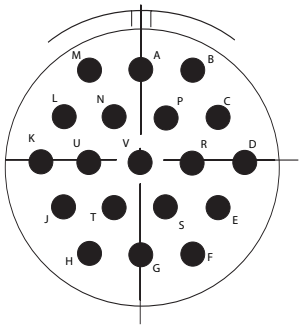
25-4/24-4
J4,
8 # 16, 48 # 20, I



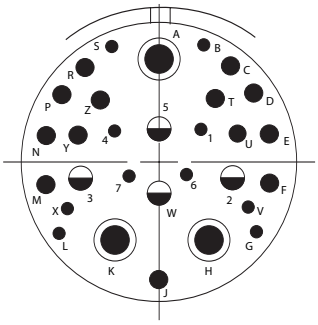
J8
8 # 8 Twinax,
Twinax



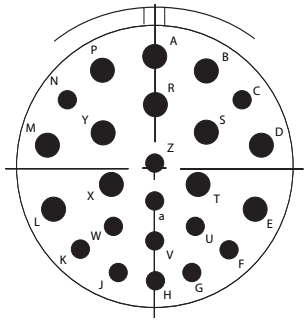
J11
9 # 10, 2 # 20,
N



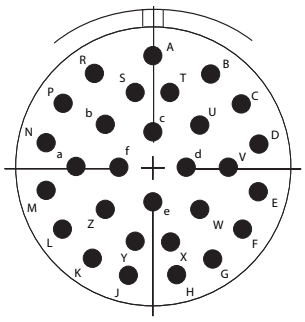
25-19/24-19
J19,
19 # 12, I



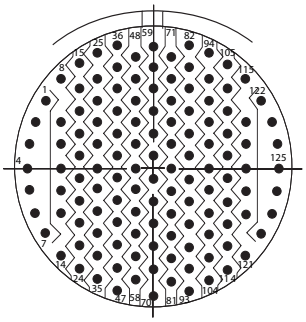
J20
10 # 20,13 # 16, 4 # 12, 3 # 8 Twinax,
N / Coax / Twinax



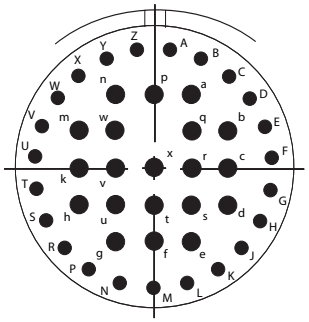
25-24/24-24
J24,
12 # 12, 12 # 16, I



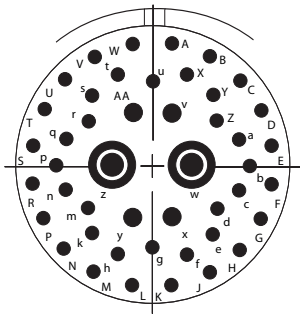
25-29/24-29
J29,
29# 16, I



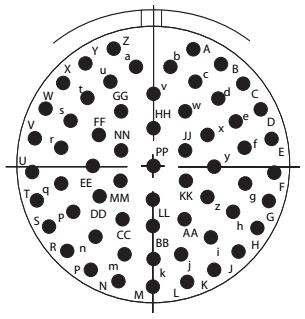
25-35/24-35
J35,
128 # 22D, M



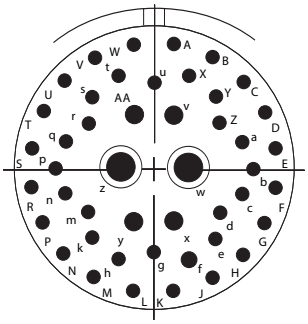
25-43
J43,
20 # 16, 23 # 20, I



25-46
J46,
40 # 20, 4 # 16, 2 # 8 Coax, I / Coax



25-61/24-61
J61,
61 # 20, I



J90,
40 # 20, 4 # 16, 2 # 8 Twinax,
I / Twinax