Allen Electric Connector Sales, inc.

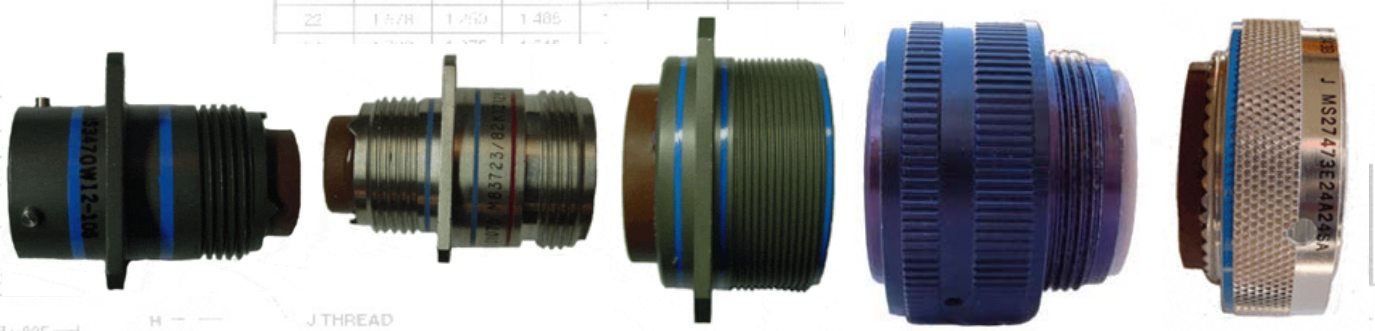
How to make a Connector Part Number!

MILITARY PART NUMBERING SYSTEM

MS27468 T 23 F 35 P C

- C — Polarization (not required for normal, A,B,C, or D for alternates)
- P — Contact Style (P for Pin, S for Socket)
- 35 — Insert Arrangement (Refer to MIL-C-38999 Insert Arrangements)
- F — Finish:
  - B= Aluminum, olive drab cadmium over nickel -65 C to +175C
  - C= Aluminum, Anodic (Non-Conductive) -65 C to +200 C
  - F= Aluminum, electroless nickel, -65 C to +200 C
- 23 — Shell Size: (odd numbers only, 9 thru 25)
- T — Class:
  - T= Environmental with accessory threads and teeth (with exeption of box mount version)
  - E= Environmental (box mount versions only)
- MS27468 — MS Number

First, look at the diagram above which shows a connector part number and the basic description of each sub classification that makes it complete. You start from the left and work your way to the right as you find the right sub classification to meet your circular electric connector requirements. Plug type connectors mate to receptacle type connectors if you need to mate them together from the same connector series.



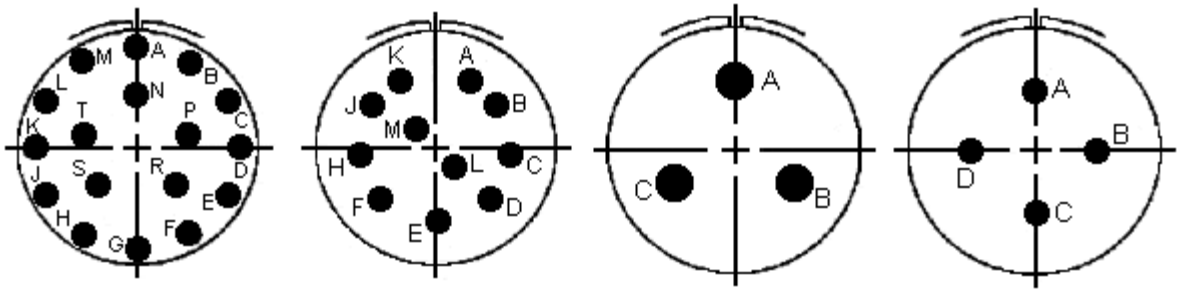
Starting from the left on the diagram at the top of the page, find out what family of connectors that you require to meet your need. For example, a MS27468 is a Jam Nut Receptacle that is a MIL-DTL-38999 Series I configuration that has a high contact density. Also, contact and wire sizes vary by the family of connectors so you must pay close attention to this to ensure that the connector contains the contact and wire sizes you require. The connectors shown above are just a very small sample of the connector families available. Connectors have bayonet or threaded couplings. Click on each family of connectors below to view the overall description to figure out which one makes the most sense for your application:

MIL-DTL-26482 Series II
MIL-DTL-83723 Series III
MIL-DTL-5015 Series III
MIL-DTL-26500
MIL-DTL-38999 Series I Connectors
MIL-DTL-38999 Series II Connectors
MIL-DTL-38999 Series III Connectors

Next, find the class for your connector usually either environmental with threads and teeth for plug type connectors or box mounts for those mounting on another surface. On many families of connectors, the environmental class also indicates the finish of the connector.

Now find the shell size for your connector. This is very important, as you want to ensure that the size fits your requirement without taking up too much space (if space is a consideration in your application) or not large enough to meet your electrical requirements (doesn't have enough contacts or contact sizes). Please note that shell sizes depend on the family of connectors that you are interested in. If there is no indication of odd or even sizes, then the connectors come in both odd and even shell sizes.

Finish is next and just as important as shell size. Finishes come in a wide variety to fit the most diverse connector requirements from olive drab over cadmium to electroless nickel aluminum to black anodized to stainless steel as shown above from left to right. If the finish is part of the environmental class for the connector family, you have already done this.



Insert arrangements (a very basic example is shown above) show you the arrangement of the socket or pin contacts, the number of contacts in the insert arrangement and the size of the contacts allowed in the insert arrangement. Contacts are chosen based on the service rating for voltage, number of contacts required and wire size required. The letters and/or numbers in each shell designate the electrical arrangement. Insert arrangement numbers are made by combining shell size (first two numbers) and the insert arrangement number (last two numbers). For example, a MS27468T23F35PC connector combines shell size 23 with the insert 35 for a 2335 insert arrangement in the MIL-DTL-38999 insert arrangement page. Diagrams of the insert arrangements are given below for each class of connector. Click on the insert arrangement page below for the connector and browse through them until you find the one that meets your requirements.

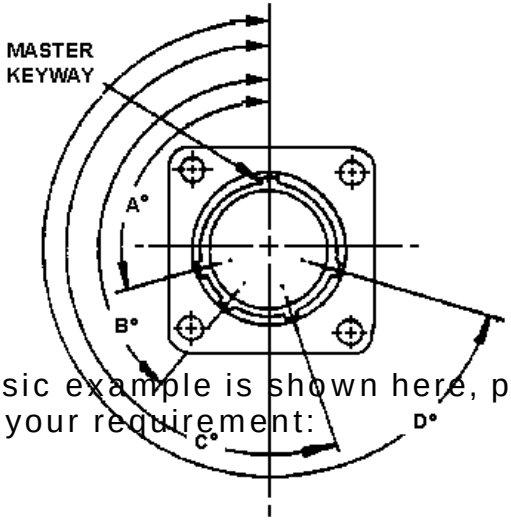
MIL-DTL-26482 Insert Arrangements
MIL-DTL-83723 Insert Arrangements
MIL-DTL-5015 Insert Arrangements
MIL-DTL-26500 Insert Arrangements
MIL-DTL-38999 Insert Arrangements

PIN CONTACTS

SOCKET CONTACTS

SEALING PLUGS

Contact style usually means either a P for Pin (male) or S for Socket (female) contact. If you require a mating connector to one that has male Pin contacts, then you need female Socket contacts. Contacts normally come with each connector that you purchase along with Sealing Plugs. Sealing Plugs are used to plug contact holes where contacts are not required. They are color coded for each contact size are typically blue, red, yellow or black in color. Some applications may not require contacts in which case you can order the connector without them.



Finally, the polarization or clocking position for each connector is vital to ensure that your clocking is correct. If you are using normal clocking then you can leave this blank or put a "N" at the end. A very basic example is shown here, please click below on the connector family that applies to your requirement:

MIL-DTL-26482 Series II Polarizing Positions
MIL-DTL-83723 Series III Polarizing Locksmith Keyed Positions
MIL-DTL-5015 Insert Contacts, Service Rating & Clocking Positions
MIL-DTL-26500 Polarizing Locksmith Keyed Positions
MIL-DTL-38999 Series I Locksmith Keying Polarization
MIL-DTL-38999 Series II Polarization & Shell Keying
MIL-DTL-38999 Series III Polarization & Shell Keying

If you need any other information, please E-Mail aecs@aecsinc.com

phone (703) 425-3815 fax (703) 425-3814

We look forward to hearing from you!

Home Site Map - PDF file

A Woman Owned Small Business, CAGE Code 07BG6