

# Mil-C-5015 PartCode Nomenclature + Visualisation

2nd Edition 8/8/25 (AWD)

## Preamble:

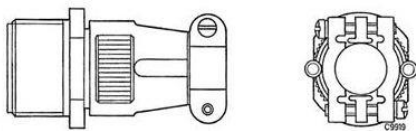
As we know (or are forced to learn), with the complexities inherent in a standard **AN9534** (Nov. 1939) as old as the 2<sup>nd</sup> WW, things either get complicated by the diversification adopted to meet new requirements, OR, new standards are created to supplant (sometimes confound) the old-school perceptions we think we can comprehend. ☺ The original US defence standard was **MIL-C-5015** (Jul. 1949) and technology etc. and engineering make new demands to meet our evolutionary needs.

After MIL-C-5015 Issue "G" (or later?) a newer standard MIL-DLT-5015 is now-a-days becoming dominant.

Environmental classifications, removable crimp contacts and some updated electrical ratings are amongst the improvements within later versions of the original standard.

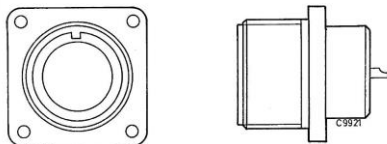
## Analysing 3 Typical Examples:

MS3101**F**28-22S-YEONHAB



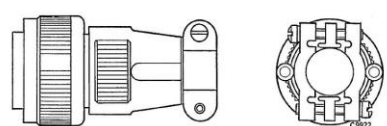
Cable connecting plug MS 3101E and F

MS3102**R**28-22S-YEONHAB



Box mounting receptacle MS 3102E and R

MS3106**F**28-22P-YEONHAB



Straight plug MS 3106E and F

**MS** = basically according to Mil-C-5015 or MIL-DLT-5015 (or permitted variants upon according to manufacturer's choice).

**310X** = the various connector body style/format (according to the standard and/or specials made by individual manufacturers).

**A~R** = letters to help define the contact-attachment/termination and the environmental classification afforded by dielectric, body, back-shell and associated accessories (that the mated connector can meet)

**28** = shell-size in units of 1/16" in the engagement thread size according to the size table from **size 8** (1/2" x 28tpi) to **size 48** (3" x 16tpi)

**22** = contact arrangement/pattern (these numbers, within the 5015 family, very rarely equate with the number of contacts)

**P/S** = the contact form (**P**= pin, **S** = socket)

**WXYZ** = other suffixes may be added to define special features including polarisation and finish.  
**YEONHAB** = CASA's brand or other suffix as adopted by CASA Modular Systems.

These typical letter codes **"A"** ~ **"R"** etc. define the 'Classification' relating to the environment and the appropriate styles of backshells and cable clamps that are appropriate to the 'service' conditions that the assembled connectors can meet (*but not exceed*). Of course, in the evolution and deviations of the original, some makers have their own interpretations/variations and, **there are newer environmental classifications** included in the updated standard now called **MIL-DLT-5015**

To describe the current **F** & **R** classifications in the above examples:

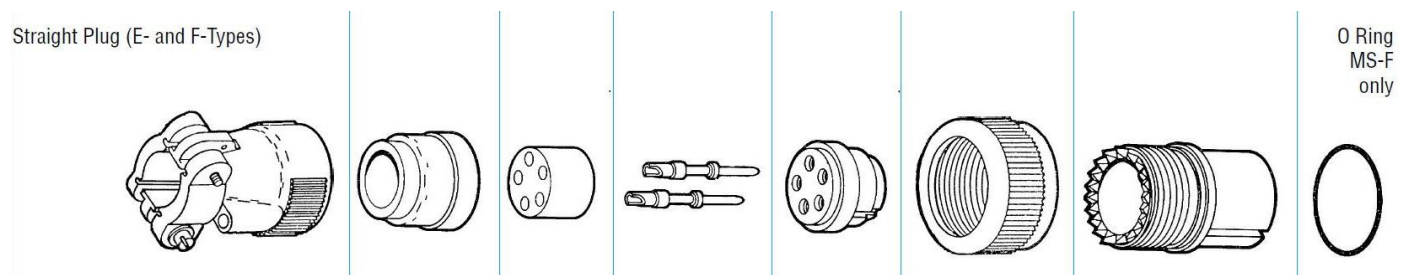
**"F"** = an improved version of the older **"E"** class (*now becoming obsolescent*) and this includes the **integrated back-shell** with cable clamp that you seem to prefer.

**"R"** = basically applies to the female (*with pin or socket contacts*) where an **o-ring** is provided (*installed*) to achieve the environmental classification.

In the choice adopted for expediting orders, connectors that exceed customer's environmental requirements may be offered where they are not available in current ex-stock delivery. Other options, including refurbished connectors, may be negotiated to expedite urgent-maintenance needs without suffering factory minimums and production-cycles or international shipping etc.

## Typical Mil-C-5015 Connector Parts:

Below is an expanded illustration of a typical **MS3106F** to help establish design and assembly visualisation:



## Enquiring & Ordering:

In making enquiries, please help us by supplying the following details wherever possible:

- 1) Full **part numbers** (*military or manufacturer's*) including any known options that may be considered.
- 2) **Quantity** required
- 3) **Delivery** time-line
- 4) Shipping **destination** (*if not to your registered address*)
- 5) Any specific details desired to qualify the product including data-sheets, drawings etc.

## Classification Letters:

**"A"** = an early version, sometimes with phenolic-moulding contact block and removable contacts (Amphenol industrial-grade without particular environmental rating) of the older **"E"** class (*now becoming obsolescent*) and this typically includes the ORIGINAL back-shell and early (*primitive*) cable-clamp.

**"B"** = a **split back-shell** (*enables checking the engaged/mated connector without major disassembly*)...

**"C"** = a **pressurised** rating for bulkhead sealing...

**"E"** = **environmental** grade ...

**"F"** = an improved version of the older **"E"** class (*now becoming obsolescent*) and this includes the **integrated back-shell** with cable clamp that you seem to prefer. This can achieve an IP67 rating (*or higher*).

**"K"** = a **fire-wall** rated connector...

**"M"** = replaced by **"E"**...

**"R"** = basically this applies to the female (with pin or socket contacts) where an **o-ring** is provided (*installed*) to achieve the environmental classification.

### **Crimp-Contact MIL-C-5015E:**

This generation provides removable (*front release*) crimpable contacts while retaining much of the range of configurations available with solder-contacts but drops most of the earlier service classes except "R" and adding "K" and "D" .

**MS** = basically according to Mil-C-5015 or MIL-DTL-5015 (*or permitted variants upon according to manufacturer's choice*).

**340X** = the various connector body style/format (*according to the standard and/or specials made by individual manufacturers*).

### **Crimp-Contact MIL-C-5015F:**

Rear release crimp-contacts and higher temperature rating etc.

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