

# ARINC 801 Technology

High Speed Fiber Optics Single and Multimode



# ARINC 801 Technology

## Single terminus design for all connector formats

The ARINC 801 fiber optic terminus is the next generation of butt-joint interconnect technology allowing for higher density multichannel connectors to be achieved. With its standard 1.25 mm ferrule and sleeve, the ARINC 801 terminus is designed for both multimode and singlemode applications and is compatible with standard LC termination processes. The terminus is available both as a pull-proof design and a general use design for tight jacketed cable.

For the pull-proof design, the cable jacket is crimped on an external body and a floating mechanism avoids any loss of performance when pulling on the cable. This feature allows for the use of the connector without a backshell.

Standard connector formats include MIL-DTL-38999 type, MIL-DTL-83527 type, ARINC 600 and ARINC 781.



## Features & Benefits

### Low loss, low back reflection

- Return loss -50 dB singlemode
- Low insertion loss 0.3 dB max mated pair

### General use design (no strain relief backshell needed)

### Optical disconnect style available

### PC, UPC or APC ferrule endface

### Genderless design (same contact on both sides of the connector)

### Compatible with multimode and singlemode fiber

### Standard 1.25 mm ferrule and sleeve

### Cable termination identical to LC connector process

### Easy cleaning access to the contact through removable alignment sleeve retainer

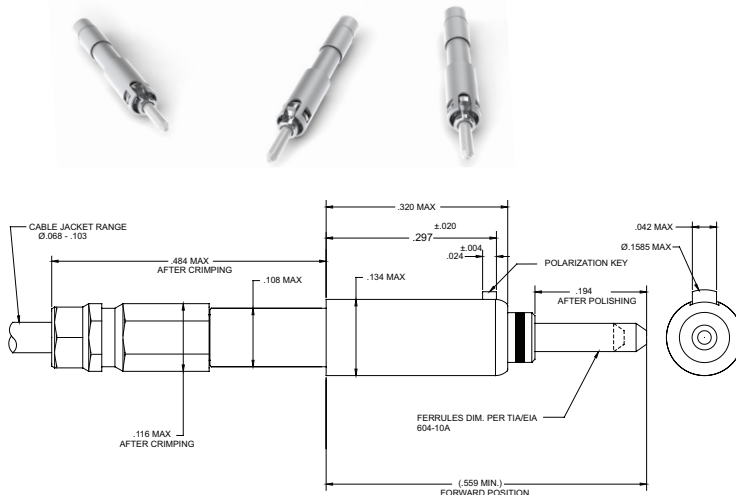
### Standard MIL-DTL-38999 and ARINC 600 Size 16 insertion/removal tool

# Size 16 ARINC 801 Terminus

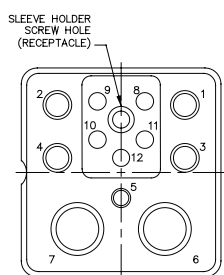
## Specifications & Insert Arrangements

### Size 16 ARINC 801 Contact

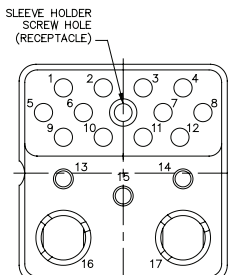
| Part Number | Mode   | Style                   | Polish |
|-------------|--------|-------------------------|--------|
| 238500-8000 | Multi  | Pull Proof Loose Jacket | PC     |
| 238500-8001 | Multi  | Tight Jacket            | PC     |
| 238500-8002 | Single | Pull Proof Loose Jacket | PC     |
| 238500-8003 | Single | Pull Proof Loose Jacket | APC    |
| 238500-8004 | Single | Tight Jacket            | PC     |
| 238500-8005 | Single | Tight Jacket            | APC    |



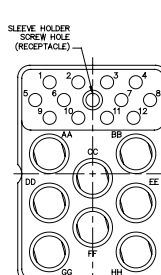
### ARINC 600 Insert Arrangements



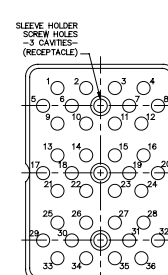
12F5C2



17F12Q2



20F12T8/20F12Q8



36F36

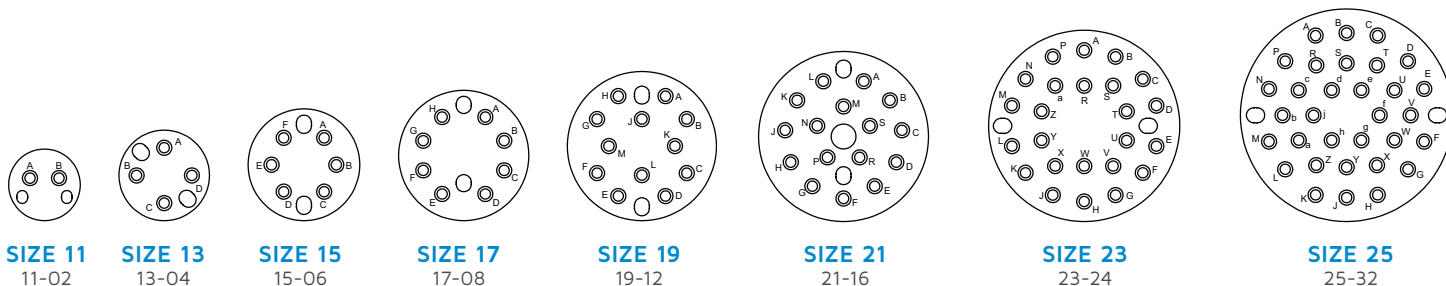
| QTY | Size | Contact         | Cavity ID |
|-----|------|-----------------|-----------|
| 4   | 12   | Electrical      | 1 to 4    |
| 1   | 16   | Electrical      | 5         |
| 2   | 5    | Quadrax         | 6 to 7    |
| 5   | 16   | Optical Termini | 8 to 12   |

| QTY | Size | Contact         | Cavity ID |
|-----|------|-----------------|-----------|
| 12  | 16   | Optical Termini | 1 to 12   |
| 3   | 16   | Electrical      | 13 to 15  |
| 2   | 8    | Quadrax         | 16 to 17  |

| QTY | Size | Contact         | Cavity ID |
|-----|------|-----------------|-----------|
| 12  | 16   | Optical Termini | 1 to 12   |
| 8   | 8    | Twinax/Quadrax  | AA to HH  |

| QTY | Size | Contact         | Cavity ID |
|-----|------|-----------------|-----------|
| 36  | 16   | Optical Termini | 1 to 36   |

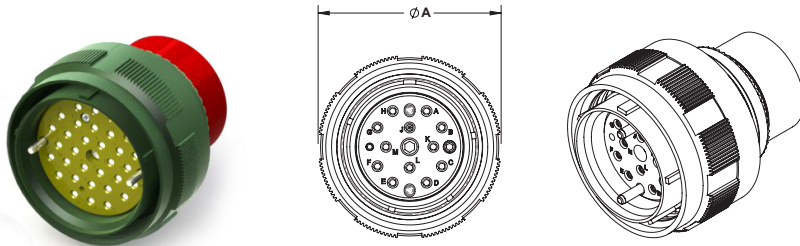
### MIL-DTL-38999 Insert Arrangements



# Connector Shells

## Specifications & Dimensions

### MIL-DTL-38999 Plug

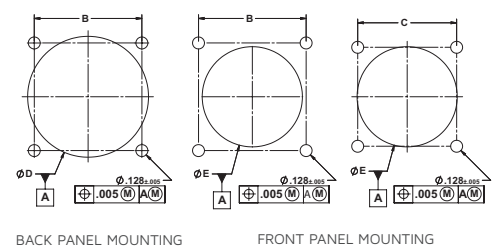
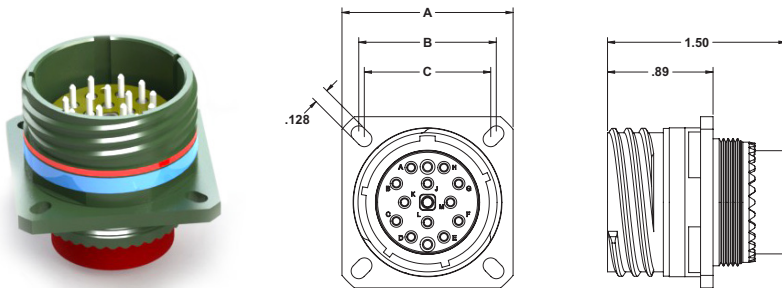


| PART NUMBER*<br>Olive Drab Cadmium | PART NUMBER*<br>Electroless Nickel | POLARIZATION     | SIZE | CONTACTS | INSERT | A MAX<br>(inches) |
|------------------------------------|------------------------------------|------------------|------|----------|--------|-------------------|
| 236400-2064-X                      | 236400-2030-X                      | N, A, B, C, D, E | 11   | 2        | 11-02  | 0.984             |
| 236400-2047-X                      | 236400-2000-X                      | N, A, B, C, D, E | 13   | 4        | 13-04  | 1.157             |
| 236400-2033-X                      | 236400-2008-X                      | N, A, B, C, D, E | 15   | 6        | 15-06  | 1.280             |
| 236400-2017-X                      | 236400-2046-X                      | N, A, B, C, D, E | 17   | 8        | 17-08  | 1.406             |
| 236400-2048-X                      | 236400-2018-X                      | N, A, B, C, D, E | 19   | 12       | 19-12  | 1.516             |
| 236400-2062-X                      | 236400-2031-X                      | N, A, B, C, D, E | 21   | 16       | 21-16  | 1.642             |
| 236400-2049-X                      | 236400-2045-X                      | N, A, B, C, D, E | 23   | 24       | 23-24  | 1.768             |
| 236400-2063-X                      | 236400-2035-X                      | N, A, B, C, D, E | 25   | 32       | 25-32  | 1.890             |

\*-X denotes polarization. Ex: 236400-2064-C for Plug, Size 11, O.D. Cadmium Plated, C Polarization

### MIL-DTL-38999 Flange Mount Receptacle

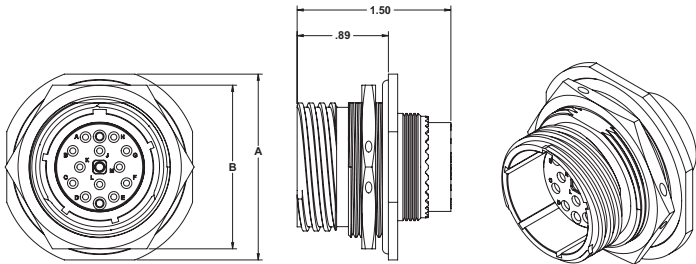
#### PANEL CUTOUTS



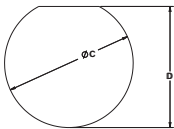
| PART NUMBER*<br>Olive Drab Cadmium | PART NUMBER*<br>Electroless Nickel | POLARIZATION     | SIZE | CONTACTS | INSERT | A<br>(inches) | B<br>(inches) | C<br>(inches) | D Min<br>(inches) | E Min<br>(inches) |
|------------------------------------|------------------------------------|------------------|------|----------|--------|---------------|---------------|---------------|-------------------|-------------------|
| 236400-3062-X                      | 236400-3049-X                      | N, A, B, C, D, E | 11   | 2        | 11-02  | 1.031         | 0.812         | 0.719         | 0.796             | 0.625             |
| 236400-3063-X                      | 236400-3000-X                      | N, A, B, C, D, E | 13   | 4        | 13-04  | 1.126         | 0.906         | 0.812         | 0.922             | 0.750             |
| 236400-3038-X                      | 236400-3013-X                      | N, A, B, C, D, E | 15   | 6        | 15-06  | 1.220         | 0.969         | 0.906         | 1.047             | 0.906             |
| 236400-3064-X                      | 236400-3052-X                      | N, A, B, C, D, E | 17   | 8        | 17-08  | 1.311         | 1.062         | 0.969         | 1.219             | 1.016             |
| 236400-3079-X                      | 236400-3022-X                      | N, A, B, C, D, E | 19   | 12       | 19-12  | 1.437         | 1.156         | 1.062         | 1.297             | 1.141             |
| 236400-3080-X                      | 236400-3026-X                      | N, A, B, C, D, E | 21   | 16       | 21-16  | 1.563         | 1.250         | 1.156         | 1.422             | 1.266             |
| 236400-3066-X                      | 236400-3023-X                      | N, A, B, C, D, E | 23   | 24       | 23-24  | 1.689         | 1.375         | 1.250         | 1.547             | 1.375             |
| 236400-3067-X                      | 236400-3053-X                      | N, A, B, C, D, E | 25   | 32       | 25-32  | 1.811         | 1.500         | 1.375         | 1.672             | 1.484             |

\*-X denotes polarization. Ex: 236400-3062-N for Flange Mount Receptacle, Size 11, O.D. Cadmium Plated, N Polarization

MIL-DTL-38999 Jam Nut Receptacle



PANEL CUTOUTS



| PART NUMBER*<br>Olive Drab Cadmium | PART NUMBER*<br>Electroless Nickel | POLARIZATION     | SIZE | CONTACTS | INSERT | A<br>(inches) | B Max<br>(mm) | C<br>(+0.01, -0.00)<br>(inches) | D Min<br>(+0.00 -0.003)<br>(inches) |
|------------------------------------|------------------------------------|------------------|------|----------|--------|---------------|---------------|---------------------------------|-------------------------------------|
| 236400-3081-X                      | 236400-3025-X                      | N, A, B, C, D, E | 11   | 2        | 11-02  | 1.252         | 27            | 0.825                           | 0.771                               |
| 236400-3082-X                      | 236400-3032-X                      | N, A, B, C, D, E | 13   | 4        | 13-04  | 1.374         | 32            | 1.010                           | 0.945                               |
| 236400-3083-X                      | 236400-3051-X                      | N, A, B, C, D, E | 15   | 6        | 15-06  | 1.500         | 36            | 1.135                           | 1.085                               |
| 236400-3084-X                      | 236400-3011-X                      | N, A, B, C, D, E | 17   | 8        | 17-08  | 1.626         | 37            | 1.260                           | 1.210                               |
| 236400-3065-X                      | 236400-3034-X                      | N, A, B, C, D, E | 19   | 12       | 19-12  | 1.811         | 41            | 1.385                           | 1.335                               |
| 236400-3085-X                      | 236400-3006-X                      | N, A, B, C, D, E | 21   | 16       | 21-16  | 1.937         | 46            | 1.510                           | 1.460                               |
| 236400-3086-X                      | 236400-3037-X                      | N, A, B, C, D, E | 23   | 24       | 23-24  | 2.063         | 50            | 1.635                           | 1.585                               |
| 236400-3087-X                      | 236400-3040-X                      | N, A, B, C, D, E | 25   | 32       | 25-32  | 2.189         | 51            | 1.760                           | 1.710                               |

\*-X denotes polarization. Ex: 236400-3081-N for Jam Nut Receptacle, Size 11, O.D. Cadmium Plated, N Polarization

ARINC 600 Shell Size 2

Please consult factory for ordering information

