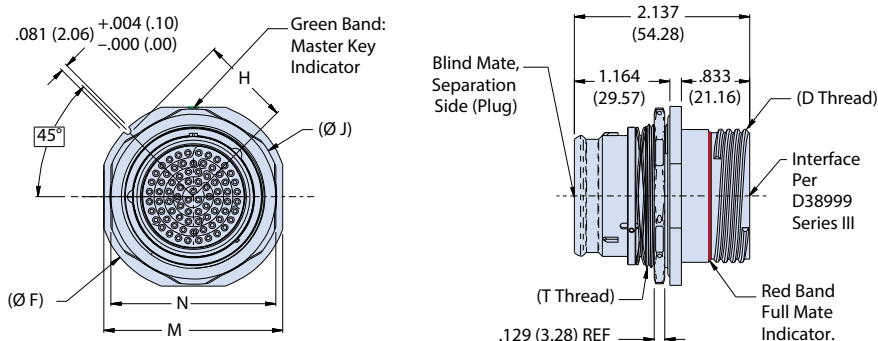


## MIL-DTL-38999 Series III Type space-grade blind-mate 253-018 bulkhead feed-thru, ZEF plug, D38999 B-side

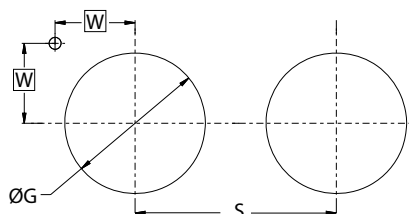
| Part Number Development        |                                                                                                                                                                                     |     |    |       |    |   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-------|----|---|
| Sample Part Number             | 253-018                                                                                                                                                                             | -07 | ME | 25-35 | PP | N |
| Series / Basic Part No.        | 253-018 = Blind-mate feed-thru                                                                                                                                                      |     |    |       |    |   |
| Connector Style                | -07 = Jam-nut mount, feed-thru plug (fixed) with rear D38999 type receptacle interface<br>-G6 = In-line plug with rear D38999 type plug interface and EMI spring                    |     |    |       |    |   |
| Material/Finish                | ME = Aluminum, electroless nickel    ZL = CRES, electrodeposited nickel<br>MT = Aluminum, nickel PTFE    Z1 = CRES, passivated                                                      |     |    |       |    |   |
| Shell Size-Insert Arrangement* | Per MIL-STD-1560                                                                                                                                                                    |     |    |       |    |   |
| Contact Type                   | PP = Pin on both sides    BSDP = Blind-mate side socket - D38999 side pin<br>SS = Socket on both sides    BPDS = Blind-mate side pin - D38999 side socket                           |     |    |       |    |   |
| Alternate Polarization*        | A = 40°, B = 65°, C = 80°, D = 210°, E = 250°, F = 280°, G = 310°, H = 330°, N = 135° (Normal) Per L°. G6 only<br>Refers to blind mate side. Plug/Receptacle side per MIL-DTL-38999 |     |    |       |    |   |

\*Refer to section A for complete details. Refer to Space-Grade Guidelines material (IAW NASA EEE INST-002) for outgassing and screening modification codes, on pages 60 and 61. Modification codes may be added directly to the end of any valid part number

### 253-018-07 BLIND-MATE FEED-THRU, JAM-NUT MOUNT PLUG WITH B-SIDE D38999 TYPE RECEPTACLE MATING INTERFACE AND ASSISTED KICK-OFF (SPRING FORCE)



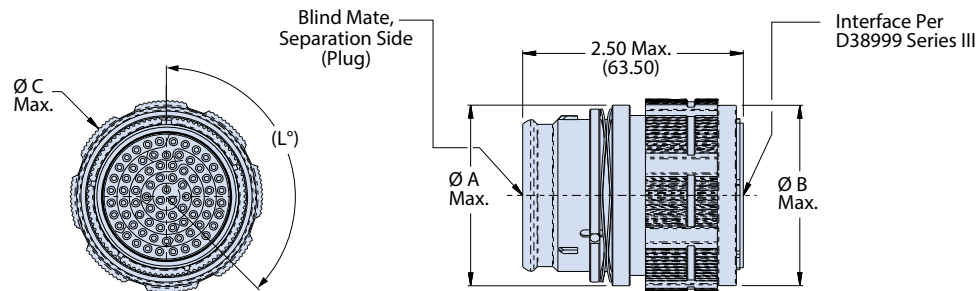
| Dimensions |               |                                    |               |                 |                              |                   |                         |
|------------|---------------|------------------------------------|---------------|-----------------|------------------------------|-------------------|-------------------------|
| Shell Size | F Flange      | H (End of Slot) [+0/-0.008 (-.20)] | Ø J, Jam Nut  | N, Jam Nut Flat | M, Flange Flats ±.010 (±.25) | T Thread Class 2A | D Thread 0.1P-0.3L-TS-2 |
| 13         | 1.515 (38.48) | .666 (16.92)                       | 1.375 (34.93) | 1.175 (29.85)   | 1.430 (36.32)                | 1.000-20 UNEF     | 0.875 (22.23)           |
| 15         | 1.636 (41.55) | .729 (18.52)                       | 1.500 (38.10) | 1.300 (33.02)   | 1.500 (38.10)                | 1.125-18 UNEF     | 1.000 (25.40)           |
| 21         | 2.065 (52.45) | .955 (24.26)                       | 1.875 (47.63) | 1.688 (42.88)   | 1.930 (49.02)                | 1.500-18 UNEF     | 1.375 (34.92)           |
| 23         | 2.200 (55.88) | 1.017 (25.83)                      | 2.063 (52.40) | 1.875 (47.63)   | 2.060 (52.32)                | 1.625-18 UNEF     | 1.500 (38.10)           |
| 25         | 2.316 (58.83) | 1.096 (27.84)                      | 2.141 (54.38) | 2.010 (51.05)   | 2.180 (55.37)                | 1.750-18 UNS      | 1.625 (41.28)           |



| Panel Cut-Out |                      |              |               |
|---------------|----------------------|--------------|---------------|
| Shell Size    | Ø G, Thru Hole ±.004 | W (Basic)    | S             |
| 13            | 1.009 (25.63)        | .504 (12.80) | 1.460 (37.08) |
| 15            | 1.134 (28.80)        | .549 (13.94) | 1.545 (39.24) |
| 21            | 1.509 (38.33)        | .709 (18.01) | 1.995 (50.67) |
| 23            | 1.634 (41.50)        | .753 (19.13) | 2.120 (53.85) |
| 25            | 1.759 (44.68)        | .809 (20.55) | 2.315 (58.80) |

## MIL-DTL-38999 Series III Type space-grade blind-mate 253-018 Bulkhead feed-thru, ZEF plug, D38999 B-side

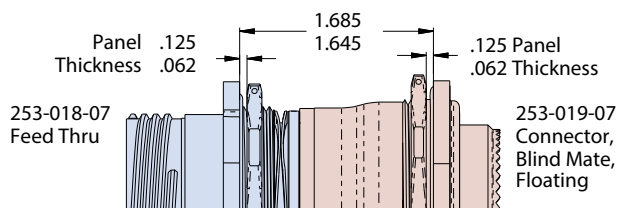
### 253-018-G6 BLIND-MATE IN-LINE PLUG WITH B-SIDE D38999 TYPE PLUG MATING INTERFACE AND ASSISTED KICK-OFF (SPRING FORCE)



| Dimensions for 253-018-G6 Plug |               |               |               |
|--------------------------------|---------------|---------------|---------------|
| Shell Size                     | Ø A Max       | Ø B Max.      | Ø C Max       |
| 11                             | .835 (21.21)  | .855 (21.72)  | 1.000 (25.40) |
| 13                             | 1.020 (25.91) | 1.025 (26.03) | 1.175 (29.85) |
| 15                             | 1.145 (29.08) | 1.155 (29.34) | 1.295 (32.89) |
| 23                             | 1.645 (41.78) | 1.645 (41.78) | 1.765 (44.83) |
| 25                             | 1.770 (44.96) | 1.770 (44.96) | 1.890 (48.01) |

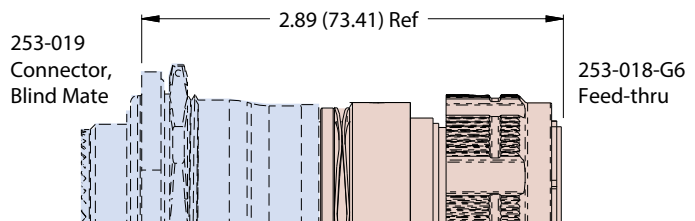
#### Distance between mated flanges.

For reference only (not deliverable)



#### Distance between mated connectors.

For reference only (not deliverable)



#### NOTES:

- Mates with 253-019 and D38999 series III connectors with same insert arrangement and polarization
- Distance between mated mounting flanges: 1.685/1.645. Consult manufacturer if other distance between mated mounting flanges is required
- Misalignment capabilities are possible with mated pair reference Glenair connector 253-019.
- See Space-Grade guidelines material, in this section, for outgassing/screening options available
- Stainless steel locating pin (Ø.079) shipped with each -07 jam-nut receptacle connector
- For feed-thru connector configurations that are either pin/pin or socket/socket, the position identification/ marking on the D38999 side of the connector will be as shown in MIL-STD-1560. The blind mate separation side will be the reverse identification marking
- Blind mate side mates with 253-019 with reverse silkscreen marking for contact type PP (pin on both sides) or SS (socket on both sides)
- Kick-off spring is not intended to offset all of the contact retention force for each insert arrangement
- Material/finish
  - Shell, jam-nut coupling nut: see part number development, finish
  - Spring: CRES/passivated
  - Insulators: high grade rigid dielectric/N.A.
  - O-ring: fluorosilicone blend
  - Contacts: copper alloy/gold plated