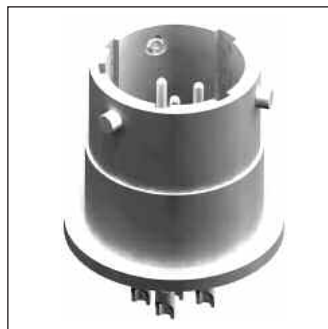


Conesys Europe Hermetic Connectors

AE833 Series per MIL-DTL-83723 Series III



AE833 Series Hermetic Connectors per MIL-DTL-83723 Series III



Features and Application

AE833 Series hermetic connector receptacles are manufactured to Conesys Europe standards and meet all the requirements of MIL-DTL-83723 Series III. These connectors combine the best features of MIL-DTL-26500 and NAS1599 miniature connector specifications and are available with bayonet and threaded coupling.

Box mounting, jam nut and solder mount receptacles are available in 9 shell sizes and insert arrangements utilizing sizes 20, 16, and 12 contacts for both bayonet and threaded coupling.

Customer specific design can be proposed for special applications – Consult factory for details.

AE833 Series hermetic connectors are available in passivated stainless steel, and tin-plated mild steel. Other materials can be proposed for special applications with commercial P/N – Please consult factory.

Insert Arrangement – AE833 Series hermetic connectors are designed with MIL-DTL-1554 insert arrangements. Other insert arrangements can be proposed with commercial P/N – Please consult factory.

Shell Polarization – Alternate key/keyway positions prevent cross mating of adjacent connectors having same insert arrangement.

Interfacial Pin Insert Seal – Raised moisture barriers around each receptacle pin, which mate into lead-in chamfers of the plug hard face socket insert, provide individual contact sealing.

Glass Insulator – These hermetic connectors are designed with sintered compression glass as an insulator.

Special Contacts – AE833 Series hermetic connectors are available with special contact, i.e., thermo couple (chromel, alumel, etc.). Commercial P/N Only.





Performance Specifications

Operating Temperature Range

Class Y: -65°C to +200°C (-85°F to +392°F)

Class H: -65°C to +150°C (-85°F to +302°F)

Material and Finish Data (Class)

Class Y:

| | | |
|------------|-----------|-----------------|
| RECEPTACLE | material: | stainless steel |
| | finish: | passivated |
| CONTACTS | material: | ferrous alloy |
| | finish: | gold plated |

Class H:

| | | |
|------------|-----------|---------------|
| RECEPTACLE | material: | mild steel |
| | finish: | tin plated |
| CONTACTS | material: | ferrous alloy |
| | finish: | gold plated |

Corrosion Resistance

Class Y: 48 hours

Class H: 48 hours

Durability

Minimum of 500 mating cycles.

Leakage

$< 1.10^{-7}$ atm.cm³.s⁻¹.

Shock and Vibration

Shock and vibration are in accordance with MIL-DTL-83723 specification.

Insulation Resistance

>5000 M Ω under 500 Vdc

(25°C – 65% HR max.)

Withstanding Voltage

At sea level: 1500 V rms

At 15 000 m altitude: 500 V rms

At 21 000 m altitude: 375 V rms

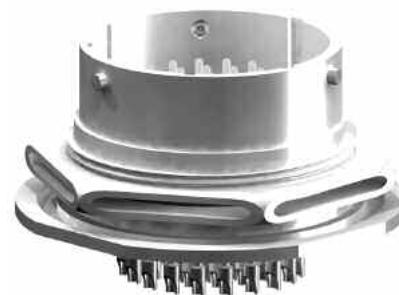
At 33 000 m altitude: 200 V rms

Maximum Current Rating per Contact

Size 20 5 Amp

Size 16 10 Amp

Size 12 17 Amp



AE833 Series
Hermetic Connectors – Bayonet Coupling
per MIL-DTL-83723 Series III



Military and Conesys Part Number Development

| | | | | | | | |
|---|----------------|-----------|----------|-----------|-----------|----------|-------------|
| Mil. Prefix | M83723/ | 79 | Y | 10 | 06 | N | |
| Conesys Prefix | AE833 | 79 | Y | 10 | 06 | N | -XXX |
| Shell Type and Contact Style | | | | | | | |
| 79 = Box mount receptacle with solder terminals | | | | | | | |
| 80 = Solder mount receptacle with solder terminals | | | | | | | |
| 81 = Jam nut receptacle with solder terminals | | | | | | | |
| 93 = Solder mount receptacle with pin tail for PCB | | | | | | | |
| 94 = Jam nut receptacle with pin tail for PCB | | | | | | | |
| Class (Material and Finish) | | | | | | | |
| Y = Shell – stainless steel, passivated (200°C) | | | | | | | |
| = Terminals – gold plated | | | | | | | |
| H = Shell – mild steel, tin plated (150°C) | | | | | | | |
| = Terminals – gold plated | | | | | | | |
| Shell Size | | | | | | | |
| 8 thru 24 | | | | | | | |
| Insert Arrangement | | | | | | | |
| See pages 82–84 | | | | | | | |
| Polarization (keying) | | | | | | | |
| N = Normal | | | | | | | |
| 6, 7, 8, 9, or Y (Alternate keyed positions; Y is not available in SS 8) | | | | | | | |
| Modification (applies to Conesys part numbers only) | | | | | | | |
| XXX = Modification (Available with Conesys P/N only – Please consult factory) | | | | | | | |

MIL-DTL-83723 S III





Terminal Configuration



Terminal Style P

Solder cup

Available in sizes 20, 16, and 12

For other sizes, please consult factory.



Terminal Style X

Eyelet – Available with Conesys P/N only

Available in sizes 20 and 16

For other sizes, please consult factory.



Terminal Style C

Pin tail for PCB

Available in sizes 22, 20, and 16

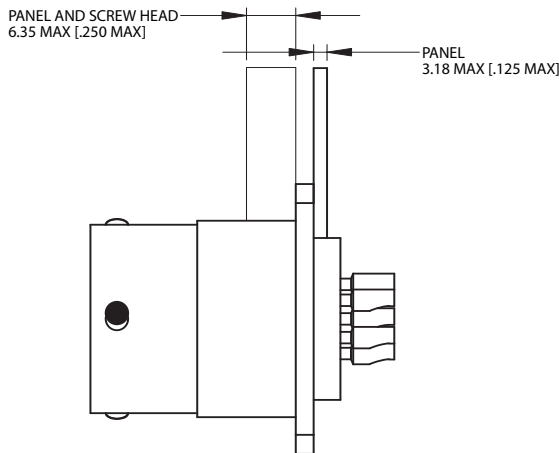
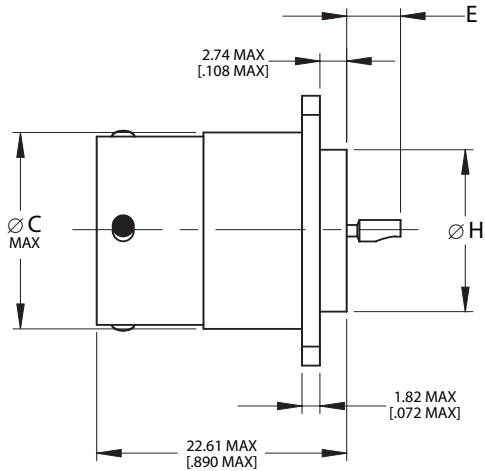
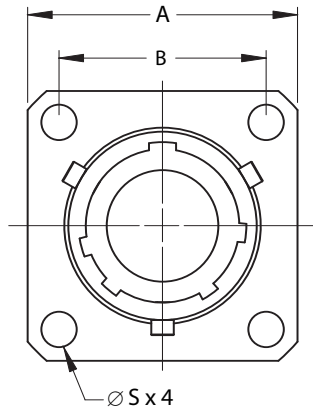
For other sizes or lengths, please consult factory.



AE83379

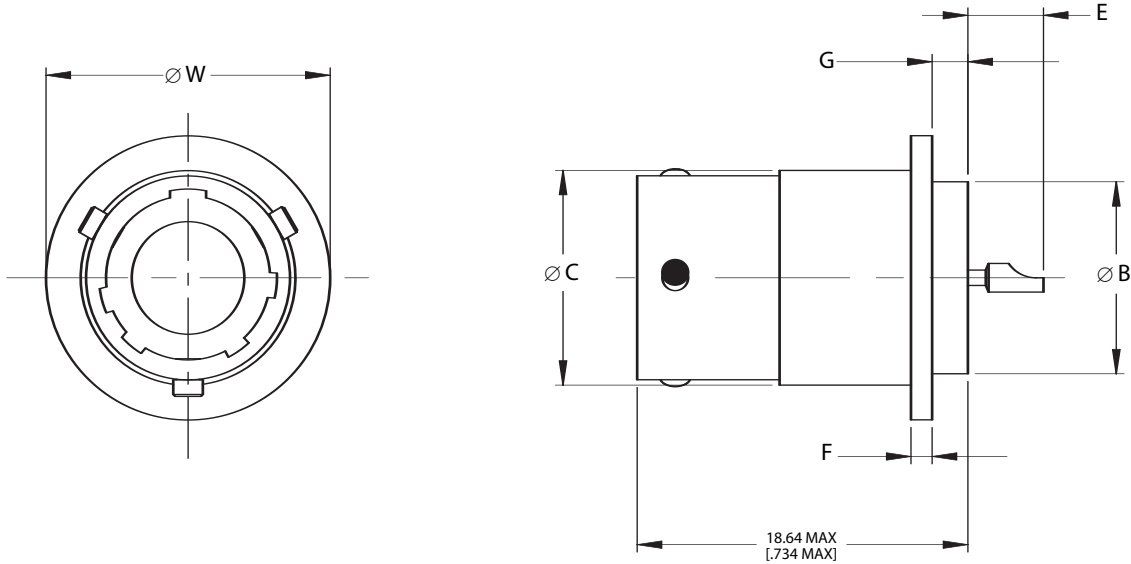
Box Mount Receptacle with Solder Terminals

83723/79



MIL-DTL-83723 S III

| Shell Size | A | | B | | ψC | | E | | | | ∅H | | ∅S | |
|------------|---------|-------|-------|-------|---------|-------|-------------|------|---------------------|------|---------|-------|-------|-------|
| | Maximum | | (TP) | | Maximum | | #20 Maximum | | #16 and #12 Maximum | | Maximum | | ±0.13 | ±.005 |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 8 | 20.75 | .817 | 15.09 | .594 | 14.25 | .561 | 5.08 | .200 | 6.86 | .270 | 12.70 | .500 | 3.05 | .120 |
| 10 | 23.93 | .942 | 18.26 | .719 | 17.68 | .696 | 5.08 | .200 | 6.86 | .270 | 14.27 | .562 | 3.05 | .120 |
| 12 | 26.32 | 1.036 | 20.62 | .812 | 22.23 | .875 | 5.08 | .200 | 6.86 | .270 | 19.05 | .750 | 3.05 | .120 |
| 14 | 28.71 | 1.130 | 23.01 | .906 | 23.75 | .935 | 5.08 | .200 | 6.86 | .270 | 20.62 | .812 | 3.05 | .120 |
| 16 | 31.88 | 1.255 | 24.61 | .969 | 26.97 | 1.062 | 5.08 | .200 | 6.86 | .270 | 23.80 | .937 | 3.05 | .120 |
| 18 | 34.24 | 1.348 | 26.97 | 1.062 | 30.15 | 1.187 | 5.08 | .200 | 6.86 | .270 | 26.97 | 1.062 | 3.05 | .120 |
| 20 | 36.63 | 1.442 | 29.36 | 1.156 | 33.32 | 1.312 | 5.08 | .200 | 6.86 | .270 | 30.15 | 1.187 | 3.05 | .120 |
| 22 | 39.80 | 1.567 | 31.75 | 1.250 | 36.50 | 1.437 | 5.08 | .200 | 6.86 | .270 | 33.32 | 1.312 | 3.05 | .120 |
| 24 | 43.39 | 1.708 | 34.92 | 1.375 | 39.67 | 1.562 | 5.08 | .200 | 6.86 | .270 | 36.50 | 1.437 | 3.78 | .149 |

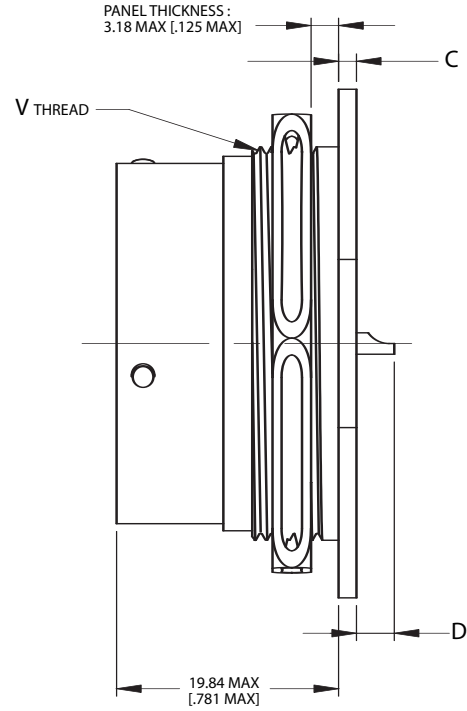
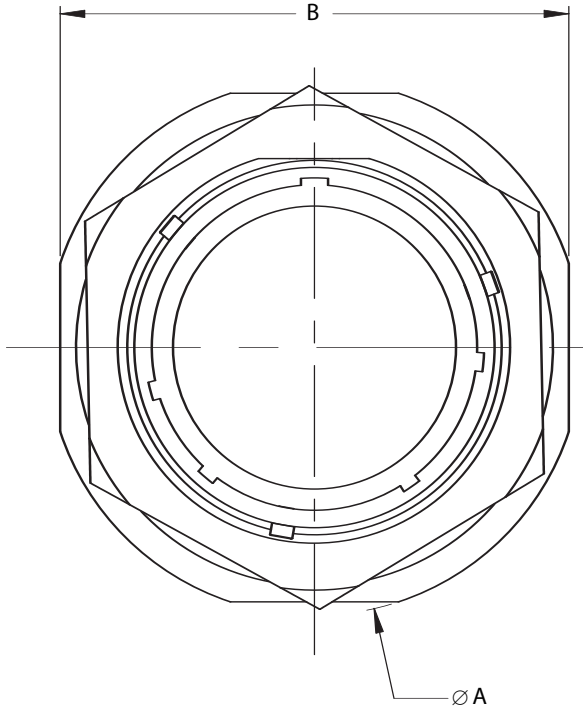


| Shell Size | Ø B | | Ø C | | F | | G | | E | | | | Ø W | |
|------------|---------|-------|---------|-------|-------|-------|-------|-------|----------------|----------------------|------|------|-------|-------|
| | Maximum | | Maximum | | ±0.17 | ±.007 | ±0.38 | ±.015 | #20 Maximum | #16 & #12 Maximum | | | ±0.50 | ±.020 |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 8 | 12.70 | .500 | 14.25 | .561 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 18.80 | .740 |
| 10 | 14.27 | .562 | 17.68 | .696 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 21.34 | .840 |
| 12 | 19.05 | .750 | 22.23 | .875 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 26.54 | 1.045 |
| 14 | 20.62 | .812 | 23.75 | .935 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 27.69 | 1.090 |
| 16 | 23.80 | .937 | 26.97 | 1.062 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 30.73 | 1.210 |
| 18 | 26.97 | 1.062 | 30.15 | 1.187 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 34.04 | 1.340 |
| 20 | 30.15 | 1.187 | 33.32 | 1.312 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 36.32 | 1.430 |
| 22 | 33.32 | 1.312 | 36.50 | 1.437 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 40.39 | 1.590 |
| 24 | 36.50 | 1.437 | 39.67 | 1.562 | 1.40 | .055 | 2.36 | .093 | 5.17 | .204 | 6.95 | .274 | 43.43 | 1.710 |

AE83381

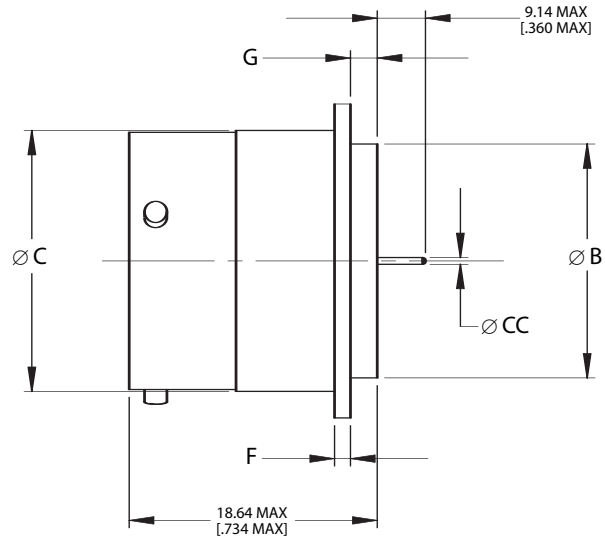
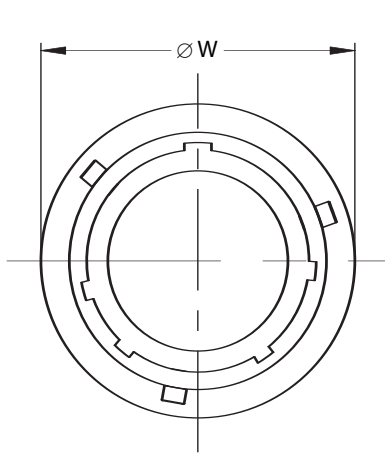
Jam Nut Receptacle with Solder Terminals

83723/81



MIL-DTL-83723 S III

| Shell Size | Ø A | | B | | C | | D | | | | V |
|------------|---------|-------|-------|-------|------|-------|-------------|------|-------------------|------|---------------|
| | Maximum | | ±0.13 | ±.005 | ±0.5 | ±.020 | #20 Maximum | | #16 & #12 Maximum | | Thread |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | Class 2A |
| 8 | 27.13 | 1.068 | 24.87 | .979 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 5/8-20 UN |
| 10 | 30.28 | 1.192 | 28.04 | 1.104 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 3/4-20 UNEF |
| 12 | 35.05 | 1.380 | 32.79 | 1.291 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 15/16-20 UNEF |
| 14 | 38.23 | 1.505 | 35.33 | 1.391 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 1-20 UNEF |
| 16 | 41.40 | 1.630 | 38.51 | 1.516 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 1-1/8-20 UN |
| 18 | 44.83 | 1.765 | 41.68 | 1.641 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 1-1/4 UN |
| 20 | 47.24 | 1.860 | 44.86 | 1.766 | 2.97 | .117 | 1.40 | .055 | 3.17 | .125 | 1-3/8-18 UNEF |
| 22 | 52.53 | 2.068 | 49.63 | 1.954 | 3.76 | .148 | 0.61 | .024 | 2.38 | .094 | 1-1/2-20 UN |
| 24 | 54.86 | 2.160 | 52.81 | 2.079 | 3.76 | .148 | 0.61 | .024 | 2.38 | .094 | 1-5/8-18 UNEF |



| Contact Size | Ø CC | |
|--------------|-------|-------|
| | mm | inch |
| | ±0.05 | ±.002 |
| 20 | 1.02 | .040 |
| 16 | 1.57 | .062 |
| 12 | 2.38 | .094 |

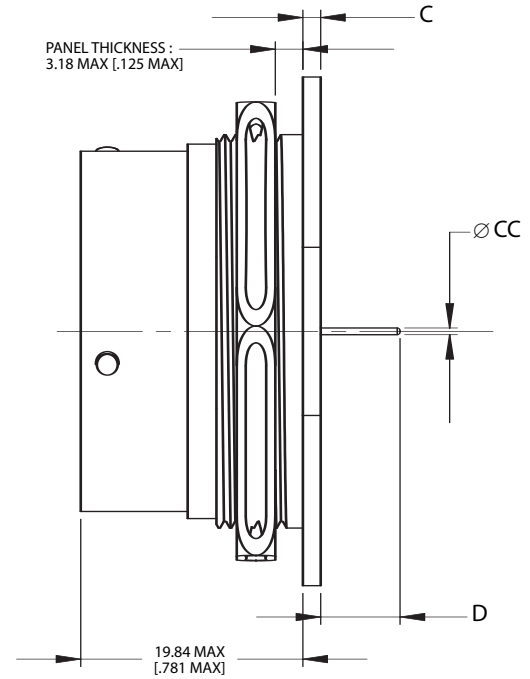
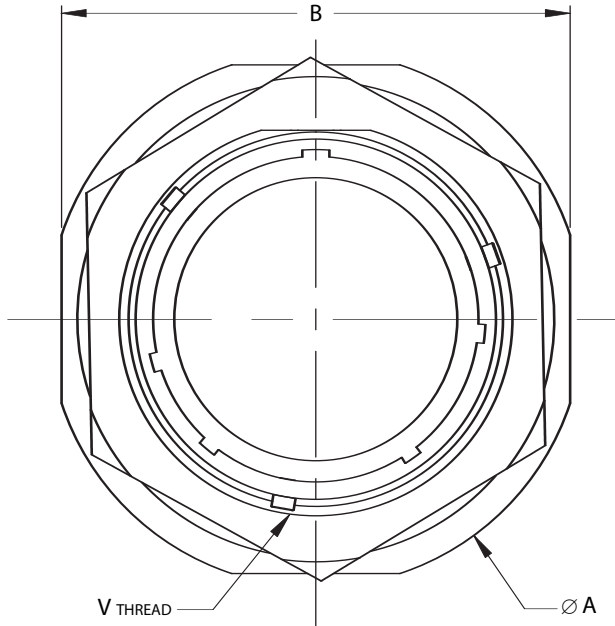


MIL-DTL-83723 S III

| Shell Size | Ø B | | Ø C | | F | | G | | Ø W | |
|------------|---------|-------|---------|-------|-------|-------|-------|-------|-------|-------|
| | Maximum | | Maximum | | ±0.17 | ±.007 | ±0.38 | ±.015 | ±0.50 | ±.020 |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 8 | 12.70 | .500 | 14.25 | .561 | 1.40 | .055 | 2.36 | .093 | 18.80 | .740 |
| 10 | 14.27 | .562 | 17.68 | .696 | 1.40 | .055 | 2.36 | .093 | 21.34 | .840 |
| 12 | 19.05 | .750 | 22.23 | .875 | 1.40 | .055 | 2.36 | .093 | 26.54 | 1.045 |
| 14 | 20.62 | .812 | 23.75 | .935 | 1.40 | .055 | 2.36 | .093 | 27.69 | 1.090 |
| 16 | 23.80 | .937 | 26.97 | 1.062 | 1.40 | .055 | 2.36 | .093 | 30.73 | 1.210 |
| 18 | 26.97 | 1.062 | 30.15 | 1.187 | 1.40 | .055 | 2.36 | .093 | 34.04 | 1.340 |
| 20 | 30.15 | 1.187 | 33.32 | 1.312 | 1.40 | .055 | 2.36 | .093 | 36.32 | 1.430 |
| 22 | 33.32 | 1.312 | 36.50 | 1.437 | 1.40 | .055 | 2.36 | .093 | 40.39 | 1.590 |
| 24 | 36.50 | 1.437 | 39.67 | 1.562 | 1.40 | .055 | 2.36 | .093 | 43.43 | 1.710 |

AE83394

**Jam Nut Receptacle with Pin Tail for PCB
per MIL-DTL-83723 Series III**



MIL-DTL-83723 S III

| Contact Size | Ø CC | |
|--------------|-----------------|------|
| | mm | inch |
| 20 | 0.84 | .033 |
| 16 | Consult factory | |
| 12 | Consult factory | |

| Shell Size | Ø A | | B | | C | | D | | V |
|------------|---------|-------|-------|-------|------|-------|---------|------|---------------|
| | Maximum | | ±0.13 | ±.005 | ±0.5 | ±.020 | Maximum | | Thread |
| | mm | inch | mm | inch | mm | inch | mm | inch | Class 2A |
| 8 | 27.13 | 1.068 | 24.87 | .979 | 2.97 | .117 | 4.64 | .183 | 5/8-20 UN |
| 10 | 30.28 | 1.192 | 28.04 | 1.104 | 2.97 | .117 | 4.64 | .183 | 3/4-20 UNEF |
| 12 | 35.05 | 1.380 | 32.79 | 1.291 | 2.97 | .117 | 4.64 | .183 | 15/16-20 UNEF |
| 14 | 38.23 | 1.505 | 35.33 | 1.391 | 2.97 | .117 | 4.64 | .183 | 1-20 UNEF |
| 16 | 41.40 | 1.630 | 38.51 | 1.516 | 2.97 | .117 | 4.64 | .183 | 1-1/8-20 UN |
| 18 | 44.83 | 1.765 | 41.68 | 1.641 | 2.97 | .117 | 4.64 | .183 | 1-1/4 UN |
| 20 | 47.24 | 1.860 | 44.86 | 1.766 | 2.97 | .117 | 4.64 | .183 | 1-3/8-18 UNEF |
| 22 | 52.53 | 2.068 | 49.63 | 1.954 | 3.76 | .148 | 3.85 | .152 | 1-1/2-20 UN |
| 24 | 54.86 | 2.160 | 52.81 | 2.079 | 3.76 | .148 | 3.85 | .152 | 1-5/8-18 UNEF |

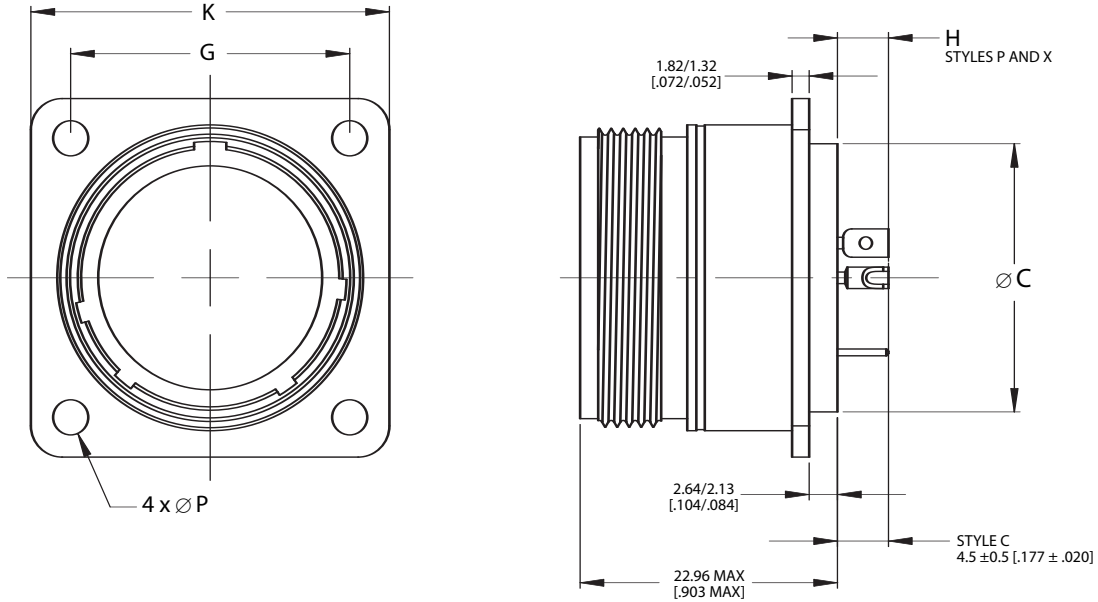


Military and Conesys Part Number Development

| | | | | | | | |
|---|----------------|-----------|----------|-----------|-----------|----------|-------------|
| Mil. Prefix | M83723/ | 88 | Y | 10 | 06 | N | |
| Conesys Prefix | AE833 | 88 | Y | 10 | 06 | N | -XXX |
| Shell Type and Contact Style | | | | | | | |
| 88 = Box mount receptacle with solder terminals | | | | | | | |
| 89 = Jam nut receptacle with solder terminals | | | | | | | |
| 90 = Solder mount receptacle with solder terminals | | | | | | | |
| Class (Material and Finish) | | | | | | | |
| Y = Shell – stainless steel, passivated (200°C) | | | | | | | |
| = Terminals – gold plated | | | | | | | |
| H = Shell – mild steel, tin plated (150°C) | | | | | | | |
| = Terminals – gold plated | | | | | | | |
| Shell Size | | | | | | | |
| 8 thru 24 | | | | | | | |
| Insert Arrangement | | | | | | | |
| See pages 82–84 | | | | | | | |
| Polarization (keying) | | | | | | | |
| N = Normal | | | | | | | |
| 6, 7, 8, 9, or Y (Alternative keyed positions; Y is not available in SS 8) | | | | | | | |
| Modification (applies to Conesys part numbers only) | | | | | | | |
| XXX = Modification (Available with Conesys P/N only – Please consult factory) | | | | | | | |

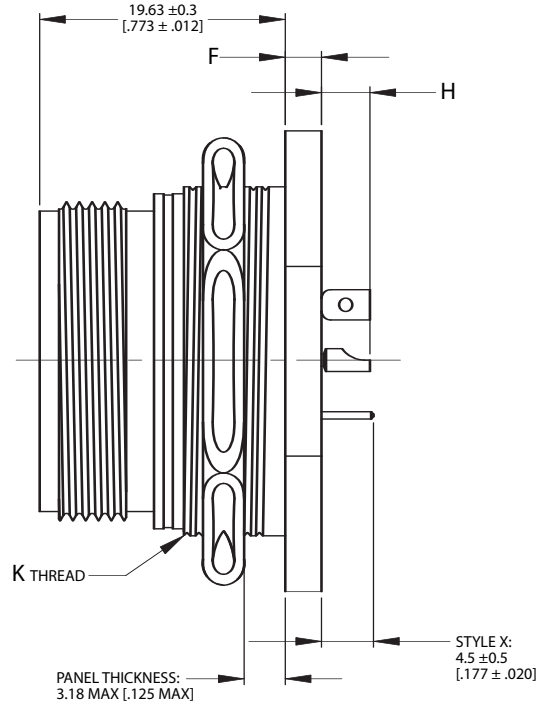
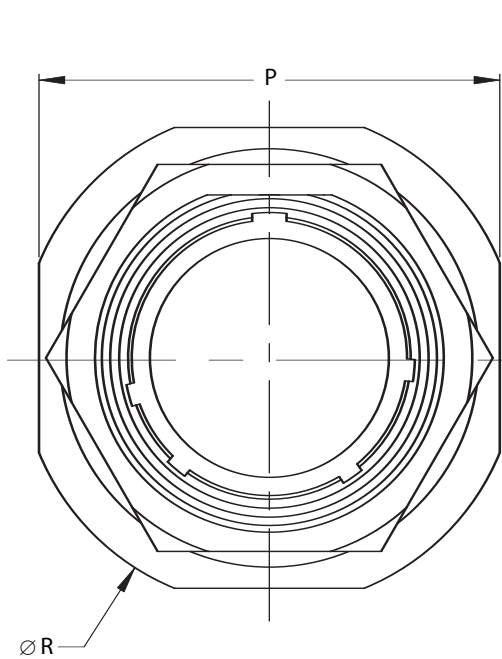


AE83388
Box Mount Receptacle
83723/88



MIL-DTL-83723 S III

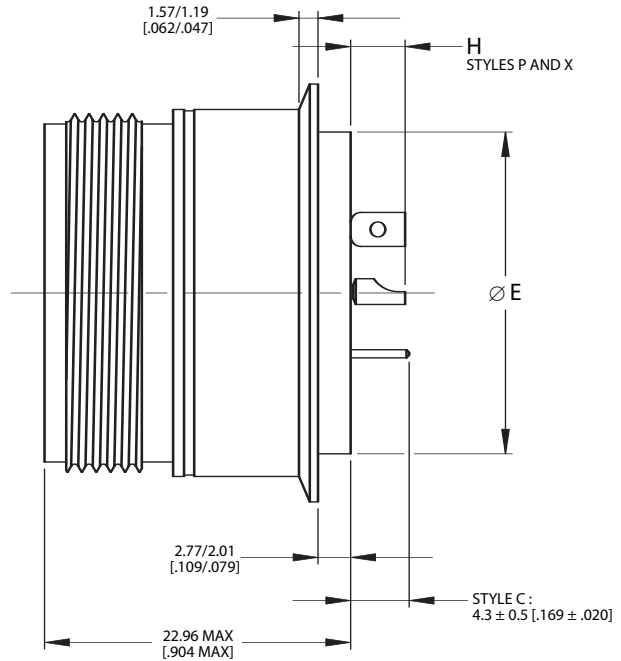
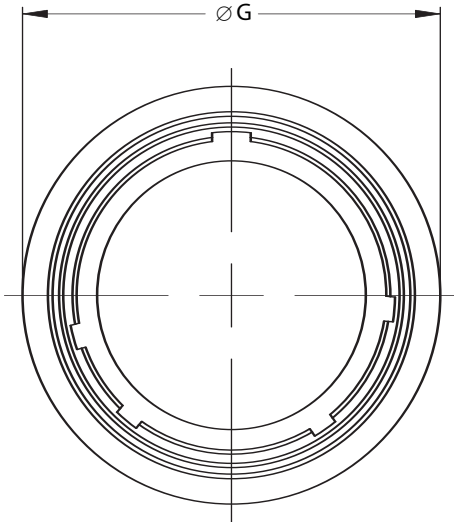
| Shell Size | Ø C | | H | | | | K | | G | | Ø P | |
|------------|---------|-------|-------------|------|-------------------|------|---------|-------|-------|-------|-------|-------|
| | Maximum | | #20 Maximum | | #16 & #12 Maximum | | Maximum | | (TP) | | ±0.13 | ±.005 |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 8 | 12.70 | .500 | 4.93 | .194 | 5.69 | .224 | 20.75 | .817 | 15.09 | .594 | 3.05 | .120 |
| 10 | 14.27 | .562 | 4.93 | .194 | 5.69 | .224 | 23.93 | .942 | 18.26 | .719 | 3.05 | .120 |
| 12 | 19.05 | .750 | 4.93 | .194 | 5.69 | .224 | 26.32 | 1.036 | 20.62 | .812 | 3.05 | .120 |
| 14 | 20.62 | .812 | 4.93 | .194 | 5.69 | .224 | 28.71 | 1.130 | 23.01 | .906 | 3.05 | .120 |
| 16 | 23.80 | .937 | 4.93 | .194 | 5.69 | .224 | 31.88 | 1.255 | 24.61 | .969 | 3.05 | .120 |
| 18 | 26.97 | 1.062 | 4.93 | .194 | 5.69 | .224 | 34.24 | 1.348 | 26.97 | 1.062 | 3.05 | .120 |
| 20 | 30.15 | 1.187 | 4.93 | .194 | 5.69 | .224 | 36.63 | 1.442 | 29.36 | 1.156 | 3.05 | .120 |
| 22 | 33.32 | 1.312 | 4.93 | .194 | 5.69 | .224 | 39.80 | 1.567 | 31.75 | 1.250 | 3.05 | .120 |
| 24 | 36.50 | 1.437 | 4.93 | .194 | 5.69 | .224 | 43.39 | 1.708 | 34.92 | 1.375 | 3.78 | .149 |



| Shell Size | F | | H | | | | K | P | | Ø R | |
|------------|--------|--------|-------------|------|-------------------|------|---------------|-------|-------|-------|-------|
| | ±0.51 | ±.020 | #20 Maximum | | #16 & #12 Maximum | | Thread | ±0.39 | ±.015 | ±0.39 | ±.015 |
| | mm | inch | mm | inch | mm | inch | Class 2A | mm | inch | mm | inch |
| 8 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 5/8-20 UN | 24.50 | .965 | 26.99 | 1.063 |
| 10 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 3/4-20 UNEF | 27.65 | 1.089 | 29.89 | 1.177 |
| 12 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 15/16-20 UNEF | 32.40 | 1.276 | 34.66 | 1.365 |
| 14 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 1-20 UNEF | 34.94 | 1.376 | 38.12 | 1.501 |
| 16 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 1-1/8-20 UN | 38.12 | 1.501 | 41.29 | 1.626 |
| 18 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 1-1/4 UN | 41.29 | 1.626 | 44.47 | 1.751 |
| 20 | 2.97 | .117 | 4.57 | .180 | 5.33 | .210 | 1-3/8-18 UNEF | 44.47 | 1.751 | 49.24 | 1.939 |
| 22 | 3.51 * | .138 * | 4.57 | .180 | 5.33 | .210 | 1-1/2-20 UN | 49.24 | 1.939 | 52.39 | 2.063 |
| 24 | 3.51 * | .138 * | 4.57 | .180 | 5.33 | .210 | 1-5/8-18 UNEF | 52.42 | 2.064 | 55.04 | 2.167 |

* ±0.26 * ±.010

AE83390
Solder Mount Receptacle
83723/90



MIL-DTL-83723 S III

| Shell Size | Ø E | | Ø G | | H | | | |
|------------|---------|-------|--------|-------|--------|-------|-------------|-------|
| | Maximum | | ± 0.25 | ±.010 | #20 | | #16 and #12 | |
| | mm | inch | mm | inch | ± 0.76 | ±.030 | ± 0.76 | ±.030 |
| 8 | 12.70 | .500 | 18.11 | .713 | 4.17 | .164 | 4.93 | .194 |
| 10 | 14.27 | .562 | 21.34 | .840 | 4.17 | .164 | 4.93 | .194 |
| 12 | 19.05 | .750 | 26.55 | 1.045 | 4.17 | .164 | 4.93 | .194 |
| 14 | 20.62 | .812 | 27.69 | 1.090 | 4.17 | .164 | 4.93 | .194 |
| 16 | 23.80 | .937 | 30.74 | 1.210 | 4.17 | .164 | 4.93 | .194 |
| 18 | 26.97 | 1.062 | 34.09 | 1.342 | 4.17 | .164 | 4.93 | .194 |
| 20 | 30.15 | 1.187 | 37.09 | 1.460 | 4.17 | .164 | 4.93 | .194 |
| 22 | 33.32 | 1.312 | 40.39 | 1.590 | 4.17 | .164 | 4.93 | .194 |
| 24 | 36.50 | 1.437 | 43.43 | 1.710 | 4.17 | .164 | 4.93 | .194 |



Tightening Torque of Jam Nut



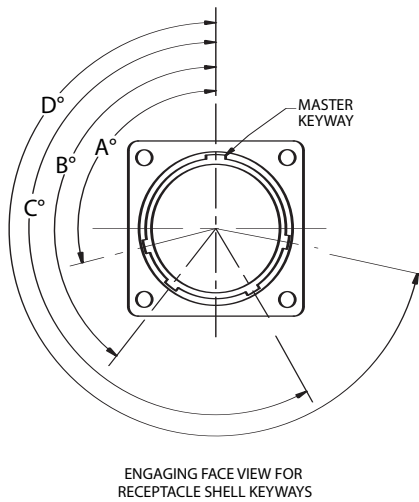
Note: For recommended service use, torque settings to be in accordance with the table below.

| Shell Size | Torque | |
|------------|------------|------------|
| | $\pm 10\%$ | $\pm 10\%$ |
| | N.m | in.lbs |
| 8 | 7 | 62 |
| 10 | 10 | 89 |
| 12 | 12 | 106 |
| 14 | 15 | 133 |
| 16 | 18 | 160 |
| 18 | 22 | 195 |
| 20 | 25 | 222 |
| 22 | 27 | 239 |
| 24 | 29 | 257 |

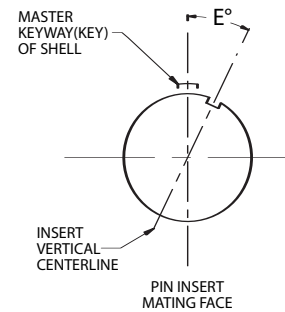
AE833 Series
Hermetic Connectors
per MIL-DTL-83723 Series III



Shell Keying



Insert Clocking



Notes:

1. In the normal position (N), the insert centerline coincides with the centerline of the master keyway (key) of the shell. $E = 0^\circ$
2. In the alternate keying positions (6, 7, 8, 9 and Y), the minor keyways (keys) are positioned with reference to master keyway (key) as indicated in the keying position table below.

| Shell Size | Position | Key/Keyway Positions | | | | Insert position |
|------------|----------|----------------------|-----|-----|-----|-----------------|
| | | A | B | C | D | E |
| 8*, 10 | N | 105 | 140 | 215 | 265 | 0 |
| | 6 | 102 | 132 | 248 | 320 | 0 |
| | 7 | 80 | 118 | 230 | 312 | 0 |
| | 8 | 35 | 140 | 205 | 275 | 0 |
| | 9 | 64 | 155 | 234 | 304 | 0 |
| 10 only | Y | 25 | 115 | 220 | 270 | 0 |
| 12 thru 24 | N | 105 | 140 | 215 | 265 | 0 |
| | 6 | 18 | 149 | 192 | 259 | 0 |
| | 7 | 92 | 152 | 222 | 342 | 0 |
| | 8 | 84 | 152 | 204 | 334 | 0 |
| | 9 | 24 | 135 | 199 | 240 | 0 |
| | Y | 98 | 152 | 268 | 338 | 0 |

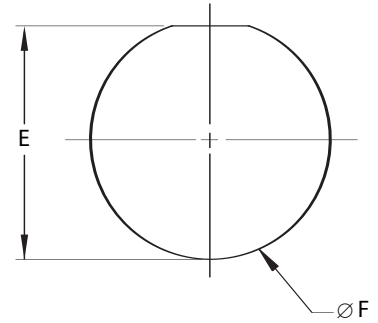
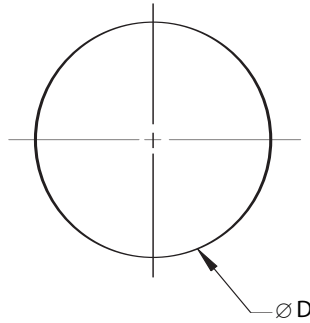
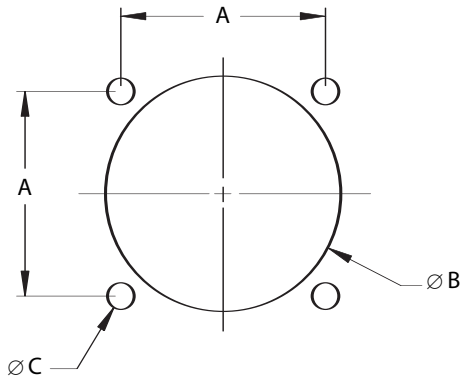
* Per MIL-STD-1554; keyed position Y is not available in shell size 8.

Panel Cutouts

AE83379 / AE83388
 Box Mount Receptacle

AE83380 / AE83393 / AE83390
 Solder Mount Receptacle

AE83381 / AE83394 / AE83389
 Jam Nut Receptacle



MIL-DTL-83723 S III

| Shell Size | A | | Ø B | | Ø B | | Ø C | | Ø D | | E | | Ø F | |
|------------|-------|-------|-----------------------|-------|------------------------|-------|------|------|-------|-------|-------|-------|-------|-------|
| | (TP) | | Back Mounting Minimum | | Front Mounting Minimum | | 0.00 | .000 | ±0.13 | ±.005 | ±0.13 | ±.005 | ±0.13 | ±.005 |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 8 | 15.09 | .594 | 15.75 | .620 | 12.95 | .510 | 3.18 | .125 | 12.96 | .510 | 15.37 | .605 | 16.13 | .635 |
| 10 | 18.26 | .719 | 19.00 | .750 | 16.13 | .635 | 3.18 | .125 | 14.53 | .572 | 18.54 | .730 | 19.30 | .760 |
| 12 | 20.62 | .812 | 23.32 | .918 | 19.30 | .760 | 3.18 | .125 | 19.30 | .760 | 23.29 | .917 | 24.05 | .947 |
| 14 | 23.01 | .906 | 25.10 | .988 | 22.48 | .885 | 3.18 | .125 | 20.88 | .822 | 24.89 | .980 | 25.65 | 1.010 |
| 16 | 24.61 | .969 | 28.30 | 1.114 | 25.65 | 1.010 | 3.18 | .125 | 24.05 | .947 | 28.07 | 1.105 | 28.83 | 1.135 |
| 18 | 26.97 | 1.062 | 30.99 | 1.220 | 27.23 | 1.072 | 3.18 | .125 | 27.23 | 1.072 | 31.12 | 1.225 | 32.00 | 1.260 |
| 20 | 29.36 | 1.156 | 34.19 | 1.346 | 30.40 | 1.197 | 3.18 | .125 | 30.40 | 1.197 | 34.29 | 1.350 | 35.18 | 1.385 |
| 22 | 31.75 | 1.250 | 37.34 | 1.470 | 33.58 | 1.322 | 3.18 | .125 | 33.58 | 1.322 | 37.46 | 1.475 | 38.35 | 1.510 |
| 24 | 34.92 | 1.375 | 40.54 | 1.596 | 36.63 | 1.442 | 3.91 | .154 | 36.75 | 1.447 | 40.64 | 1.600 | 41.53 | 1.635 |

AE833 Series
Insert Arrangement and Contact Information
per MIL-STD-1554



Insert Arrangement and Contact Information

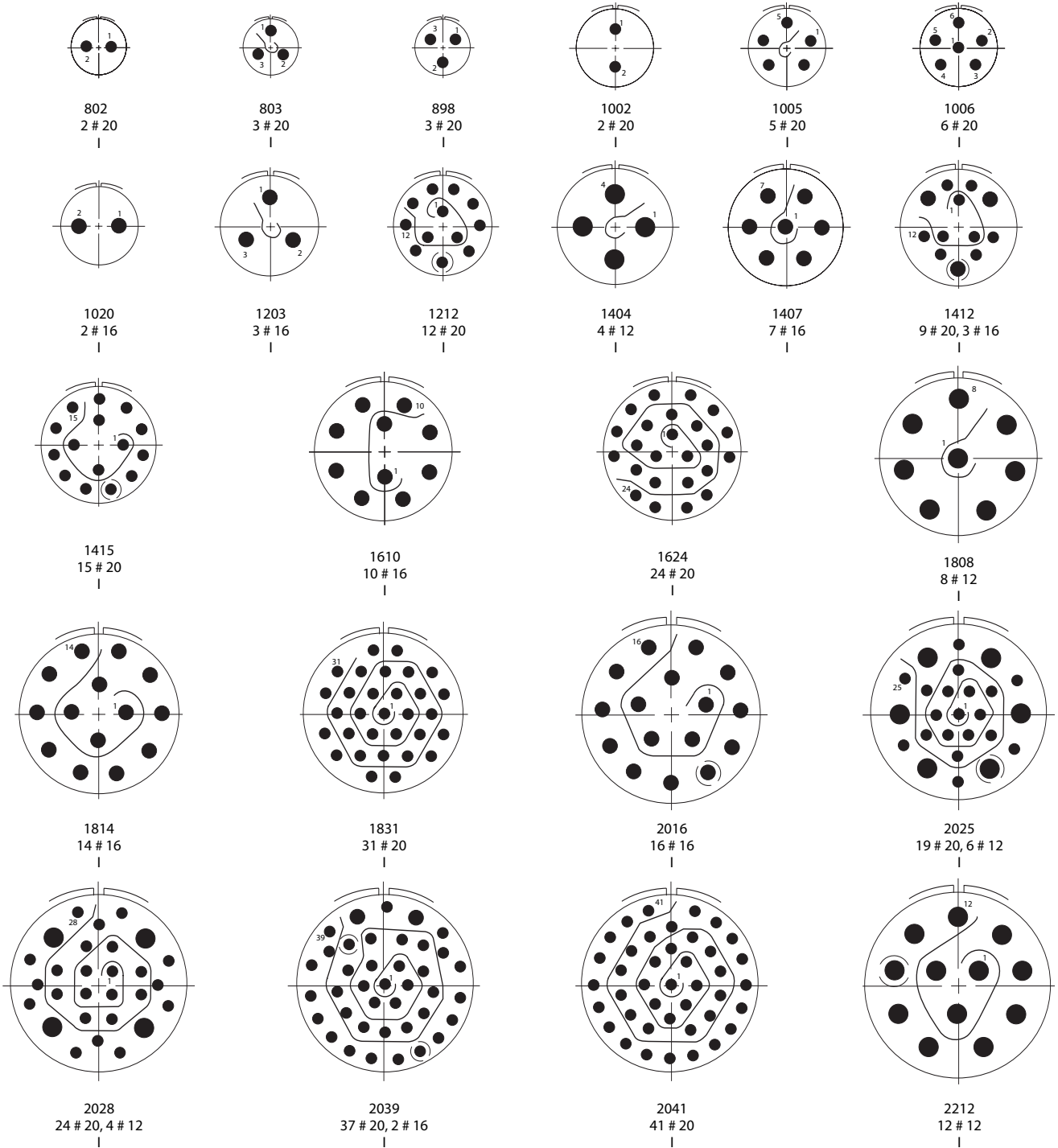
| Insert Arrangement | Service Rating | Total | Quantity of Contacts | | |
|--------------------|----------------|----------|----------------------|----|----|
| | | No. of | By size | | |
| | | Contacts | 20 | 16 | 12 |
| 8-2 | I | 2 | 2 | | |
| 8-3 | I | 3 | 3 | | |
| 8-98 | I | 3 | 3 | | |
| 10-2 | I | 2 | 2 | | |
| 10-5 | I | 5 | 5 | | |
| 10-6 | I | 6 | 6 | | |
| 10-20 | I | 2 | | 2 | |
| 12-3 | I | 3 | | 3 | |
| 12-12 | I | 12 | 12 | | |
| 14-4 | I | 4 | | | 4 |
| 14-7 | I | 7 | | 7 | |
| 14-12 | I | 12 | 9 | 3 | |
| 14-15 | I | 15 | 15 | | |
| 16-10 | I | 10 | | 10 | |
| 16-24 | I | 24 | 24 | | |
| 18-8 | I | 8 | | | 8 |
| 18-14 | I | 14 | | 14 | |
| 18-31 | I | 31 | 31 | | |
| 20-16 | I | 16 | 16 | | |
| 20-25 | I | 25 | 19 | | 6 |
| 20-28 | I | 28 | 24 | | 4 |
| 20-39 | I | 39 | 37 | 2 | |
| 20-41 | I | 41 | 41 | | |
| 22-12 | I | 12 | | | 12 |
| 22-19 | I | 19 | | 19 | |
| 22-32 | I | 32 | 26 | | 6 |
| 22-39 | I | 39 | 27 | 12 | |
| 22-55 | I | 55 | 55 | | |
| 24-30* | I | 30 | | 30 | |
| 24-43 | I | 43 | 23 | 20 | |
| 24-57 | I | 57 | 55 | | 2 |
| 24-61 | I | 61 | 61 | | |

* Non MIL-STD-1554 layout
Please consult factory for insert arrangement availability.

MIL-DTL-83723 S III



Insert Arrangement Views

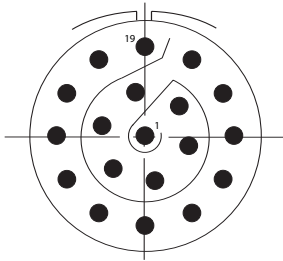


MIL-DTL-83723 S III

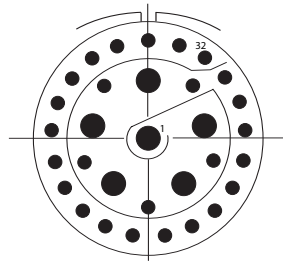
AE833 Series
Insert Arrangement (Pin Front View)
 per MIL-DTL-1554



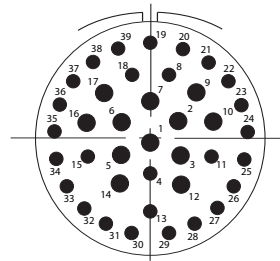
Insert Arrangement Views



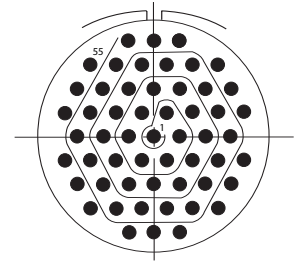
2219
19 # 16



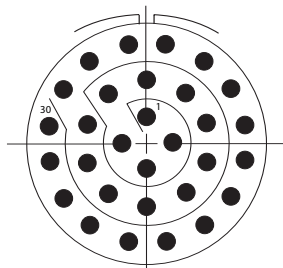
2232
26 # 20, 6 # 12



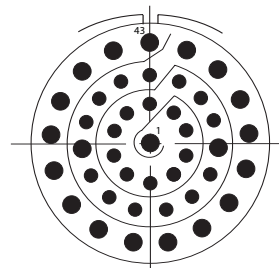
2239
27 # 20, 12 # 16



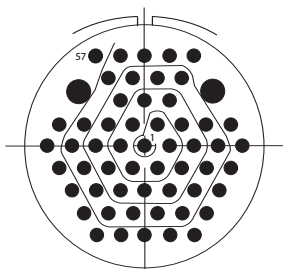
2255
55 # 20



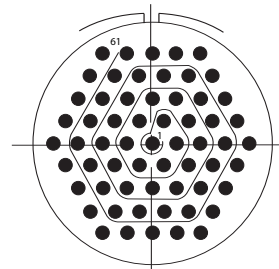
2430*
30 # 16



2443
23 # 20, 20 # 16



2457
55 # 20, 2 # 12



2461
61 # 20

MIL-DTL-83723 S III

* Non MIL-STD-1554 layout
 Please consult factory for insert arrangement availability.