



# PRODUCT CATALOG

/ DEEP WELL TO DEEP SPACE

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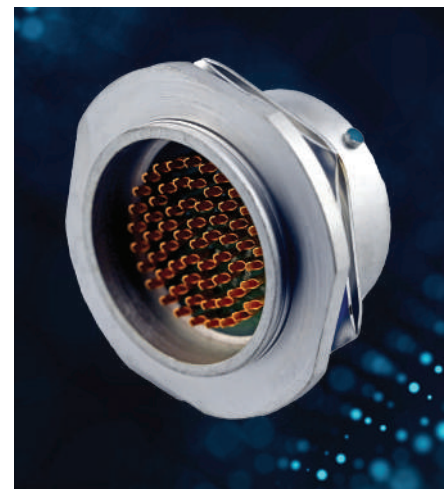


BoldX is a wise choice for your glass-to-metal needs. BoldX is a world-class manufacturer of circular, glass-to-metal, hermetically sealed connectors. Our Qualified Products List (QPL) consists of **MIL-DTL-83723** Series III, **MIL-DTL-38999** Series I, II and III. We build commercial equivalents to **MIL-DTL-26500**, **MIL-DTL-26482** Series I and II, as well as **MIL-DTL-5015** Series. We also supply your custom-design terminal seals, scoop-proof connectors, custom high-voltage applications, and harsh environment connectors. Whether your glass-to-metal requirement is standard or a special design, BoldX Industries is your wise choice.

Our facility contains state-of-the-art equipment, quality systems, and engineering. Our dedicated people will meet or exceed your expectations in a timely manner. Whether your applications call for mild steel or corrosion-resistant steels, we offer contacts in a variety of alloys including Alumel, Chromel and 52 alloy, as well as plating finishes to meet your design requirements.

Call BoldX for assistance with any of your projects or designs at **1-800-479-2193**.

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## A SERIES

MIL-DTL-5015 hermetic connectors were developed for applications where a controlled atmosphere such as inert gasses, partial vacuums, or constant environments are needed. These receptacles are designed for use in electronic, electrical power, and control circuits.

The "A" Series receptacles are manufactured to BoldX Industries standards and meet the intermateability requirements of MIL-DTL-5015 as defined by MS33678. They are hermetically sealed with individual compression glass seals around each contact to prevent air leakage, in excess of .1 micron cubic foot per hour at one atmosphere.

Standard hermetic receptacles are supplied with either solder cup or eyelet type contact terminations. Contacts for other applications such as thermocouple or flex prints are also available. Standard receptacles are steel shells with tin plate and nickel-iron alloy contacts with a final coat of gold plate. Other materials and finishes can be supplied to meet specific application requirements.

"A" Series receptacles meet the instrumentation voltage requirements of MIL-DTL-5015. Connector receptacles with higher voltage ratings are available upon request. Connectors are designed to meet salt spray, shock, and vibration requirements of MIL-DTL-5015

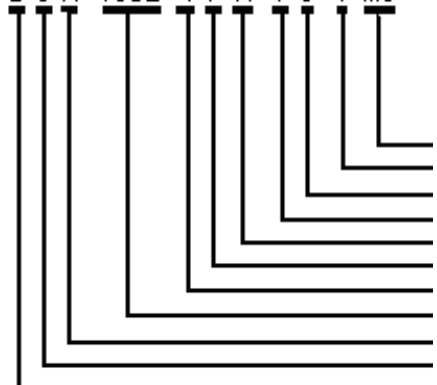
## ELECTRICAL SERVICE DATA

The maximum current to be carried by the connector, based on contact size, is the same as permitted by the wire bundle. Maximum current ratings and corresponding voltage drops under test condition, fully assembled, are shown below.

| CONTACT SIZE | TEST CURRENT (AMPS) | POTENTIAL DROP (MILLIVOLTS) |
|--------------|---------------------|-----------------------------|
| 16           | 10                  | 125                         |
| 12           | 17                  | 125                         |
| 8            | 33                  | 125                         |
| 4            | 60                  | 125                         |
| 0            | 100                 | 125                         |

## PART NUMBER EXPLANATION

2 0 A - 10SL - 4 P X - 1 0 - 1 M3



FINISH (NOTE 8)  
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MOUNTING TYPE (NOTE 1)

## STANDARD MATERIALS AND FINISHES

### FERROUS ALLOY SHELLS

**Material:** Cold Rolled Steel per ASTM A108  
**Finish:** 100 microinches minimum fused tin per ASTM B545 over suitable underplate

### STAINLESS STEEL SHELLS

**Material:** Corrosion-resistant steel SS304L per SAE AMS-QQ-S-763 or as specified  
**Finish:** Passivated

### CONTACTS

**Material:** Nickel-iron alloy per MIL-I-23011, class 2  
**Finish:** a. --Ferrous alloy shells; tin per ASTM B545 over copper per AMS 2418  
b. --Stainless steel shells; 50 microinches minimum gold plate per MIL-DTL-45204 over suitable underplate

### INSERTS

**Material:** Glass

### INTERFACIAL GASKETS

**Material:** Fluorosilicone rubber

| DESCRIPTION                     | MILITARY DESIGNATION    | BOLDX DESIGNATION      |
|---------------------------------|-------------------------|------------------------|
| BOX MOUNT                       | MS3142HS*C*P            | 3*A-*P-20              |
|                                 | MS3142HS*Y*P            | 3*A-*P-10              |
|                                 | MS3142HT*C*P            | 30A-*P-20              |
|                                 | MS3142HT*Y*P            | 30A-*P-10              |
| SOLDER MOUNT<br>CIRCULAR FLANGE | MS3143HS*C*P            | 2*A-*P-20              |
|                                 | MS3143HS*Y*P            | 2*A-*P-10              |
|                                 | MS3143HT*C*P            | 20A-*P-20              |
|                                 | MS3143HT*Y*P            | 20A-*P-10              |
| SOLDER MOUNT<br>FLANGELESS      | NO CLASS<br>H SPECIFIED | 10A-*P-20<br>10A-*P-10 |
| MATING PLUG                     | MS3106-MS3406-MS3456    |                        |

## HIGH-POTENTIAL TEST VOLTAGE

When specified, receptacles can be supplied to meet the requirements of MIL-DTL-5015. Standard receptacles are supplied to the Instrument Voltage rating. Consult factory for available tooling.

| SERVICE RATING | TEST VOLTAGE (RMS 60 CPS) |
|----------------|---------------------------|
| INSTRUMENT     | 1000                      |
| A              | 2000                      |
| D              | 2800                      |
| E              | 3500                      |
| B              | 4500                      |
| C              | 7000                      |

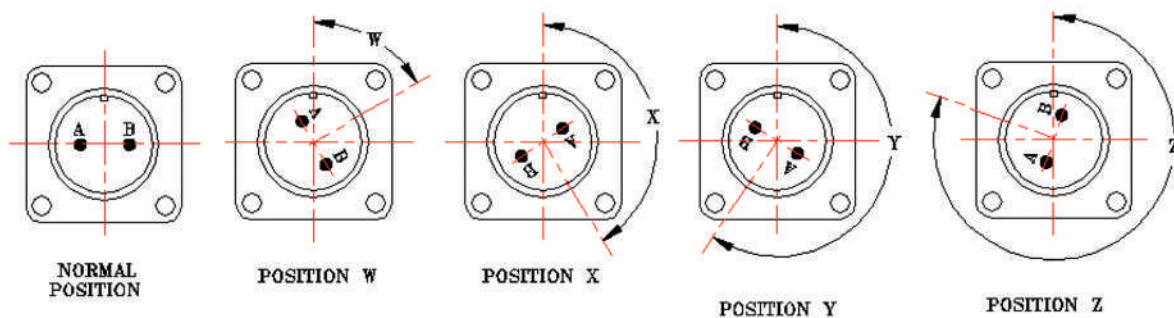
## NOTES:

- 1-- 1-- Flangeless solder mount.  
2-- Circular flange solder mount  
3-- Square flange box mount
- 2-- 1 CRES PER SAE AMS-QQ-S-764, TYPE 303  
2 CRES PER SAE AMS-QQ-S-763, TYPE 304  
3 CRES PER SAE AMS-QQ-S-763, TYPE 304L  
4 CRES PER SAE AMS-QQ-S-763, TYPE 316  
5 CRES PER SAE AMS-QQ-S-763, TYPE 316L  
6 CRES PER SAE AMS-QQ-S-763, TYPE 321  
7 CRES PER SAE AMS-QQ-S-763, TYPE 347
- 3-- MIL-DTL-5015 intermateability
- 4-- P-- Pin
- 5-- 1-- Eyelet  
2-- Solder cup  
3-- Short solder cup
- 6-- 0-- Nickel-iron alloy
- 7-- Blank-- Without interfacial gasket
- 8-- A1-- Fused tin over copper (25 hour salt spray)  
M3-- Fused tin over copper over nickel with gold on contacts  
M2-- Gold contacts with passivated shell

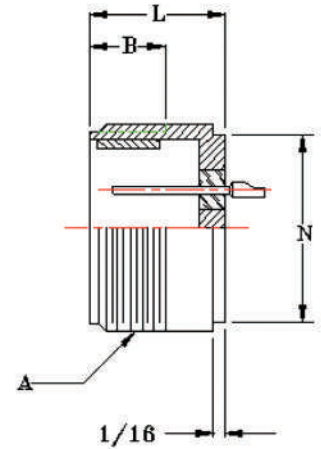
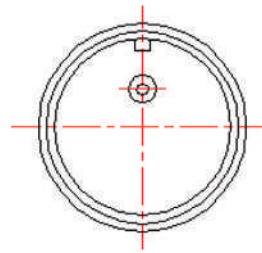
## INDEX OF INSERT ARRANGEMENTS MIL-STD-1651

| INSERT<br>ARRANGEMENT | TOTAL<br>CONTACTS | SERVICE RATING                                    | CONTACT SIZE |    |   |   |   | ALTERNATE INSERT<br>POSITIONS (DEGREES) |     |     |     |
|-----------------------|-------------------|---------------------------------------------------|--------------|----|---|---|---|-----------------------------------------|-----|-----|-----|
|                       |                   |                                                   | 16           | 12 | 8 | 4 | 0 | W                                       | X   | Y   | Z   |
| 10SL-3                | 3                 | A                                                 | 3            |    |   |   |   |                                         |     |     |     |
| 10SL-4                | 2                 | A                                                 | 2            |    |   |   |   |                                         |     |     |     |
| 12S-3                 | 2                 | A                                                 | 2            |    |   |   |   | 70                                      | 145 | 215 | 290 |
| 12S-10                | 4                 | A                                                 | 4            |    |   |   |   |                                         |     |     |     |
| 14S-2                 | 4                 | INSTRUMENT                                        | 4            |    |   |   |   |                                         | 120 | 240 |     |
| 14S-5                 | 5                 | INSTRUMENT                                        | 5            |    |   |   |   | 110                                     |     |     |     |
| 14S-6                 | 6                 | INSTRUMENT                                        | 6            |    |   |   |   |                                         |     |     |     |
| 14S-7                 | 3                 | A                                                 | 3            |    |   |   |   | 90                                      | 180 | 270 |     |
| 14S-9                 | 2                 | A                                                 | 2            |    |   |   |   | 70                                      | 145 | 215 | 290 |
| 16S-1                 | 7                 | A                                                 | 7            |    |   |   |   | 80                                      |     |     | 280 |
| 16S-5                 | 3                 | A                                                 | 3            |    |   |   |   | 70                                      | 145 | 215 | 290 |
| 16S-8                 | 5                 | A                                                 | 5            |    |   |   |   |                                         | 170 | 265 |     |
| 16-9                  | 4                 | A                                                 | 2            | 2  |   |   |   | 35                                      | 110 | 250 | 325 |
| 16-10                 | 3                 | A                                                 |              | 3  |   |   |   | 90                                      | 180 | 270 |     |
| 16-11                 | 2                 | A                                                 |              | 2  |   |   |   | 35                                      | 110 | 250 | 325 |
| 18-1                  | 10                | A FOR PINS: B,C,F&G INSTRUMENT FOR<br>BALANCE     | 10           |    |   |   |   | 70                                      | 145 | 215 | 290 |
| 18-4                  | 4                 | D                                                 | 4            |    |   |   |   | 35                                      | 110 | 250 | 325 |
| 18-8                  | 8                 | A                                                 | 7            | 1  |   |   |   | 70                                      |     |     | 290 |
| 18-9                  | 7                 | INSTRUMENT                                        | 5            | 2  |   |   |   | 80                                      | 110 | 250 | 280 |
| 18-11                 | 5                 | A                                                 |              | 5  |   |   |   |                                         | 170 | 265 |     |
| 20-4                  | 4                 | D                                                 |              | 4  |   |   |   | 45                                      | 110 | 250 |     |
| 20-14                 | 5                 | A                                                 |              | 3  | 2 |   |   | 80                                      | 110 | 250 | 280 |
| 20-15                 | 7                 | A                                                 |              | 7  |   |   |   | 80                                      |     |     | 280 |
| 20-16                 | 9                 | A                                                 | 7            | 2  |   |   |   | 80                                      | 110 | 250 | 280 |
| 20-22                 | 6                 | A                                                 | 3            |    | 3 |   |   | 80                                      | 110 | 250 | 280 |
| 20-24                 | 4                 | A                                                 | 2            |    | 2 |   |   | 35                                      | 110 | 250 | 325 |
| 20-27                 | 14                | A                                                 | 14           |    |   |   |   | 35                                      | 110 | 250 | 325 |
| 20-29                 | 17                | A                                                 | 17           |    |   |   |   | 80                                      |     |     | 280 |
| 20-33                 | 11                | A                                                 | 11           |    |   |   |   |                                         |     |     |     |
| 22-14                 | 19                | A                                                 | 19           |    |   |   |   | 80                                      | 110 | 250 | 280 |
| 22-22                 | 4                 | A                                                 |              |    | 4 |   |   |                                         | 110 | 250 |     |
| 22-27                 | 9                 | D FOR PIN J. A FOR BALANCE                        | 8            |    | 1 |   |   | 80                                      |     | 250 | 280 |
| 22-36                 | 8                 | D FOR PIN H. A FOR BALANCE                        |              | 8  |   |   |   | 90                                      |     | 270 |     |
| 24-2                  | 7                 | D                                                 |              | 7  |   |   |   | 80                                      |     |     | 280 |
| 24-7                  | 16                | A                                                 | 14           | 2  |   |   |   | 80                                      | 110 | 250 | 280 |
| 24-10                 | 7                 | A                                                 |              |    | 7 |   |   | 80                                      |     |     | 280 |
| 24-28                 | 24                | INSTRUMENT                                        | 24           |    |   |   |   | 80                                      | 110 | 250 | 280 |
| 28-1                  | 9                 | D FOR PINS A,E & J. A FOR BALANCE                 |              | 6  | 3 |   |   | 80                                      | 110 | 250 | 280 |
| 28-12                 | 26                | A                                                 | 26           |    |   |   |   | 90                                      | 180 | 270 |     |
| 28-17                 | 15                | B FOR PIN R. D FOR PINS: M,N,&P. A FOR<br>BALANCE | 15           |    |   |   |   | 80                                      | 110 | 250 | 280 |

## ALTERNATE INSERT POSITIONS FRONT FACE OF PIN INSERT SHOWN



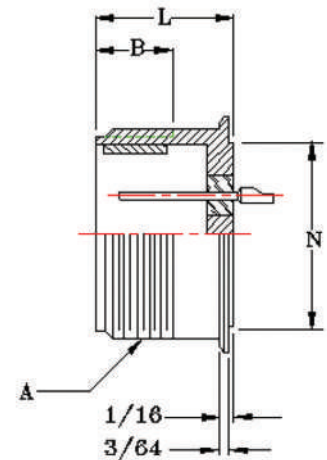
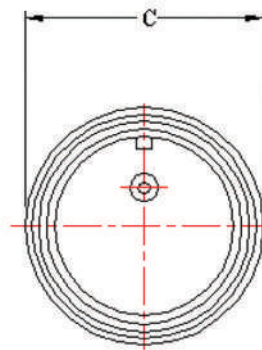
## FLANGELESS SOLDER MOUNT 10A RECEPTACLES



| SHELL SIZE | PART NUMBER         | A THREAD CLASS 2A | B MIN THD | L +.005<br>-.010 | N +.000<br>-.010 |
|------------|---------------------|-------------------|-----------|------------------|------------------|
| 8S         | 10A-8S-(*)P▼-(**)   | 0.500-28 UNEF     | 0.375     | 0.718            | 0.437            |
| 10SL       | 10A-10SL-(*)P▼-(**) | 0.625-24 UNEF     |           |                  | 0.500            |
| 12S        | 10A-12S-(*)P▼-(**)  | 0.750-20 UNEF     |           |                  | 0.656            |
| 14S        | 10A-14S-(*)P▼-(**)  | 0.875-20 UNEF     |           |                  | 0.718            |
| 16S        | 10A-16S-(*)P▼-(**)  | 1.000-20 UNEF     |           |                  | 0.844            |
| 16         | 10A-16-(*)P▼-(**)   | 1.000-20 UNEF     | 0.625     | 0.906            | 0.844            |
| 18         | 10A-18-(*)P▼-(**)   | 1.125-18 UNEF     |           |                  | 0.968            |
| 20         | 10A-20-(*)P▼-(**)   | 1.250-18 UNEF     |           |                  | 1.156            |
| 22         | 10A-22-(*)P▼-(**)   | 1.375-18 UNEF     |           |                  | 1.250            |
| 24         | 10A-24-(*)P▼-(**)   | 1.500-18 UNEF     |           |                  | 1.375            |
| 28         | 10A-28-(*)P▼-(**)   | 1.750-18 UNS      |           |                  | 1.625            |
| 32         | 10A-32-(*)P▼-(**)   | 2.000-18 UNS      |           |                  | 1.875            |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

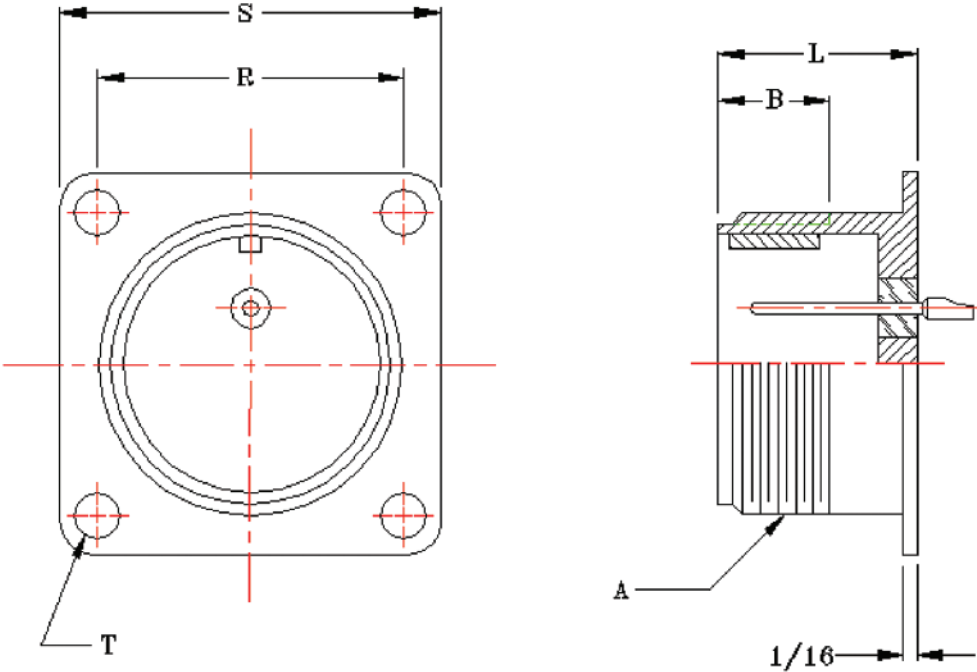
## CIRCULAR FLANGE SOLDER MOUNT 20A RECEPTACLES (REF. MS3143)



| SHELL SIZE | PART NUMBER         | A THREAD CLASS 2A | B MIN THD | C +.010<br>-.010 | L +.005<br>-.010 | N +.000<br>-.010 |
|------------|---------------------|-------------------|-----------|------------------|------------------|------------------|
| 8S         | 20A-8S-(*)P▼-(**)   | 0.500-28 UNEF     | 0.375     | 0.750            | 0.718            | 0.437            |
| 10SL       | 20A-10SL-(*)P▼-(**) | 0.625-24 UNEF     |           | 0.875            |                  | 0.500            |
| 12S        | 20A-12S-(*)P▼-(**)  | 0.750-20 UNEF     |           | 1.000            |                  | 0.656            |
| 14S        | 20A-14S-(*)P▼-(**)  | 0.875-20 UNEF     |           | 1.125            |                  | 0.718            |
| 16S        | 20A-16S-(*)P▼-(**)  | 1.000-20 UNEF     |           | 1.250            |                  | 0.844            |
| 16         | 20A-16-(*)P▼-(**)   | 1.000-20 UNEF     | 0.625     | 1.250            | 0.906            | 0.844            |
| 18         | 20A-18-(*)P▼-(**)   | 1.125-18 UNEF     |           | 1.375            |                  | 0.968            |
| 20         | 20A-20-(*)P▼-(**)   | 1.250-18 UNEF     |           | 1.500            |                  | 1.156            |
| 22         | 20A-22-(*)P▼-(**)   | 1.375-18 UNEF     |           | 1.625            |                  | 1.250            |
| 24         | 20A-24-(*)P▼-(**)   | 1.500-18 UNEF     |           | 1.750            |                  | 1.375            |
| 28         | 20A-28-(*)P▼-(**)   | 1.750-18 UNS      |           | 2.000            |                  | 1.625            |
| 32         | 20A-32-(*)P▼-(**)   | 2.000-18 UNS      |           | 2.250            |                  | 1.875            |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

BOX MOUNT  
30A RECEPTACLES (REF. MS3142)



| SHELL<br>SIZE | PART NUMBER         | A<br>THREAD<br>CLASS 2A | B<br>MIN<br>THD | L<br>+.005<br>-.010 | R<br>+.005<br>-.005 | S<br>+.031<br>-.031 | T<br>+.005<br>-.005 |
|---------------|---------------------|-------------------------|-----------------|---------------------|---------------------|---------------------|---------------------|
| 8S            | 30A-8S-(*)P▼-(**)   | 0.500-28 UNEF           | 0.375           | 0.718               | 0.594               | 0.875               | 0.120               |
| 10SL          | 30A-10SL-(*)P▼-(**) | 0.625-24 UNEF           |                 |                     | 0.718               | 1.000               |                     |
| 12S           | 30A-12S-(*)P▼-(**)  | 0.750-20 UNEF           |                 |                     | 0.812               | 1.094               |                     |
| 14S           | 30A-14S-(*)P▼-(**)  | 0.875-20 UNEF           |                 |                     | 0.906               | 1.188               |                     |
| 16S           | 30A-16S-(*)P▼-(**)  | 1.000-20 UNEF           |                 |                     | 0.968               | 1.281               |                     |
| 16            | 30A-16-(*)P▼-(**)   | 1.000-20 UNEF           | 0.625           | 0.906               | 0.968               | 1.281               | 0.147               |
| 18            | 30A-18-(*)P▼-(**)   | 1.125-18 UNEF           |                 |                     | 1.062               | 1.375               |                     |
| 20            | 30A-20-(*)P▼-(**)   | 1.250-18 UNEF           |                 |                     | 1.156               | 1.500               |                     |
| 22            | 30A-22-(*)P▼-(**)   | 1.375-18 UNEF           |                 |                     | 1.250               | 1.625               |                     |
| 24            | 30A-24-(*)P▼-(**)   | 1.500-18 UNEF           |                 |                     | 1.375               | 1.750               | 0.173               |
| 28            | 30A-28-(*)P▼-(**)   | 1.750-18 UNS            |                 |                     | 1.562               | 2.000               |                     |
| 32            | 30A-32-(*)P▼-(**)   | 2.000-18 UNS            |                 |                     | 1.750               | 2.25                |                     |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## B SERIES

MIL-DTL-38999 hermetic connectors were developed for applications where a controlled atmosphere such as inert gasses, partial vacuums, or constant environments are needed. These receptacles are designed for use in aerospace, electronic, electrical power, and control circuits.

The “B” Series receptacles are manufactured to BoldX Industries standards and meet the intermateability requirements of MIL-DTL-38999 Series I. They are hermetically sealed with an all-glass seal to prevent air leakage in excess of .01 micron cubic foot per hour at one atmosphere. They are manufactured with conductive finishes to provide electrical continuity between mated halves prior to contact engagement. Manufactured in the scoop-proof design, the contacts are located so as to prevent handling damage or inadvertent electrical contact.

Standard hermetic receptacles are supplied with either solder cup or eyelet type contact terminations. Contacts for other applications such as thermocouple or flex prints are also available. Standard receptacles are steel shells with nickel-iron alloy contacts and a final coat of tin plate and gold plated nickel-iron alloy contacts; or stainless steel shells passivated with gold plated contacts. Other materials and finishes can be supplied to meet specific application requirements.

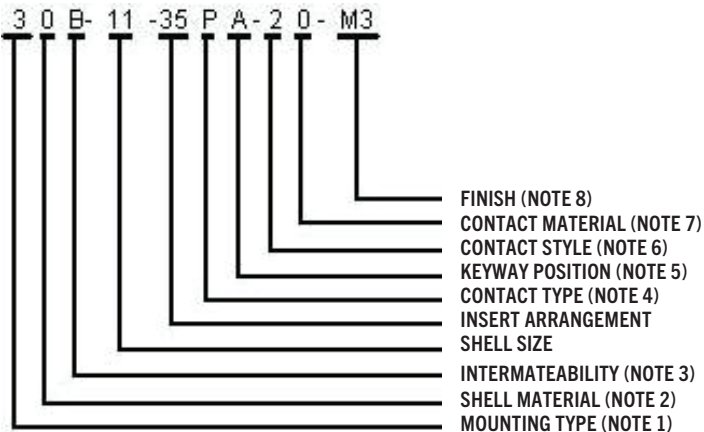
“B” Series receptacles meet the voltage, salt spray, shock, and vibration requirements of MIL-DTL-38999.

## ELECTRICAL SERVICE DATA

The maximum current to be carried by the connector, based on contact size, is the same as permitted by the wire bundle. Maximum current ratings and corresponding voltage drops under test condition, fully assembled, are shown below.

| CONTACT SIZE | TEST CURRENT (AMPS) | POTENTIAL DROP (MILLIVOLTS) |
|--------------|---------------------|-----------------------------|
| 22D          | 2                   | 85                          |
| 20           | 5                   | 60                          |
| 16           | 10                  | 85                          |
| 12           | 17                  | 85                          |

## PART NUMBER EXPLANATION



## STANDARD MATERIALS AND FINISHES

### FERROUS ALLOY SHELLS

**Material:** Cold Rolled Steel per ASTM A108

**Finish:** 100 microinches minimum fused tin per ASTM B545 over suitable underplate

### STAINLESS STEEL SHELLS

**Material:** Corrosion-resistant steel per SS304L per SAE AMS-QQ-S-763, type 303 or as specified

**Finish:** Passivated

### CONTACTS

**Material:** Nickel-iron alloy per MIL-I-23011, class 2

**Finish:** 50 microinches minimum gold per MIL-DTL-45204 over a suitable underplate

### BAYONET PINS

**Material:** Corrosion-resistant steel per SAE AMS-, type 303

### INSERTS

**Material:** Glass

### INTERFACIAL GASKETS

**Material:** Fluorosilicone rubber

| DESCRIPTION   | MILITARY DESIGNATION  | BOLDX DESIGNATION |
|---------------|-----------------------|-------------------|
| JAM NUT MOUNT | MS27470Y*D*P          | 50B-*.P-20        |
|               | MS27470Y*D*X          | 50B-*.P-10        |
|               | MS27470Y*E*P          | 5*B-*.P-20        |
|               | MS27470Y*E*X          | 5*B-*.P-10        |
| SOLDER MOUNT  | MS27471Y*D*P          | 20B-*.P-20        |
|               | MS27471Y*D*X          | 20B-*.P-10        |
|               | MS27471Y*E*P          | 2*B-*.P-20        |
|               | MS27471Y*E*X          | 2*B-*.P-10        |
| BOX MOUNT     | NO SPECIFIED HERMETIC | 30B-*.P-20        |
|               |                       | 30B-*.P-10        |
|               |                       | 3*B-*.P-20        |
|               |                       | 3*B-*.P-10        |
| MATING PLUG   | MS27467               |                   |

## HIGH-POTENTIAL TEST VOLTAGE

| SERVICE RATING | TEST VOLTAGE (RMS 60 CPS) |
|----------------|---------------------------|
| N              | 1000                      |
| M              | 1300                      |
| I              | 1800                      |
| II             | 2300                      |

## NOTES:

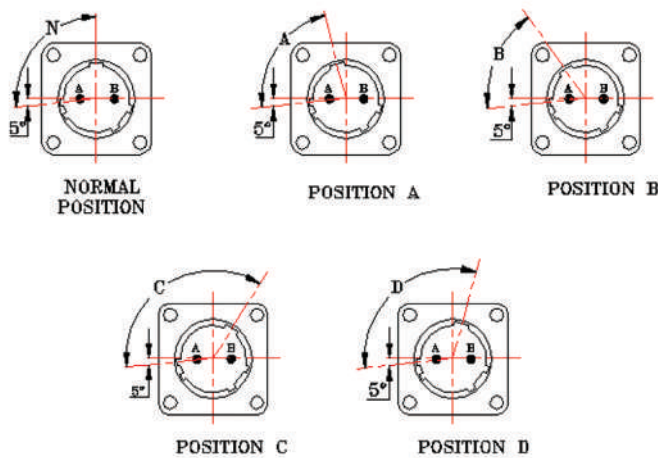
- 1.--- 2---Circular flange solder mount  
3---Square flange box mount  
5---Jam nut mount
- 2.--- 0 FERROUS ALLOY PER ASTM A108  
1 CRES PER SAE AMS-QQ-S-764, TYPE 303  
2 CRES PER SAE AMS-QQ-S-763, TYPE 304  
3 CRES PER SAE AMS-QQ-S-763, TYPE 304L  
4 CRES PER SAE AMS-QQ-S-763, TYPE 316  
5 CRES PER SAE AMS-QQ-S-763, TYPE 316L  
6 CRES PER SAE AMS-QQ-S-763, TYPE 321  
7 CRES PER SAE AMS-QQ-S-763, TYPE 347
- 3.--- MIL-DTL-38999 series I intermateability
- 4.--- P---Pin
- 5.--- Alternate keyway position
- 6.--- 1---Eyelet  
2---Solder cup
- 7.--- 0---Nickel-iron alloy
- 8.--- M3--Fused tin over copper over nickel with gold on contacts  
M2--Gold contacts with passivated shell  
M8--Gold contacts with nickel shell plated



## INDEX OF INSERT ARRANGEMENTS MIL-STD-1560

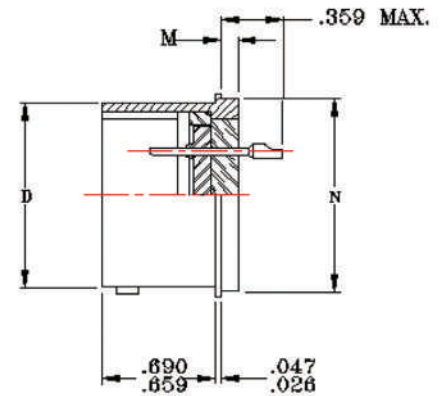
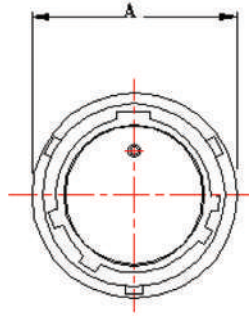
| SHELL SIZE | INSERT ARRANGEMENT | TOTAL CONTACTS | CONTACT SIZE |    |    |    | SERVICE RATING |
|------------|--------------------|----------------|--------------|----|----|----|----------------|
|            |                    |                | 22           | 20 | 16 | 12 |                |
| 9          | 35                 | 6              | 6            |    |    |    | M              |
|            | 98                 | 3              |              | 3  |    |    | I              |
| 11         | 5                  | 5              |              | 5  |    |    | I              |
|            | 35                 | 13             | 13           |    |    |    | M              |
|            | 98                 | 6              |              | 6  |    |    | I              |
|            | 99                 | 7              |              | 7  |    |    | I              |
| 13         | 4                  | 4              |              |    | 4  |    | II             |
|            | 8                  | 8              |              | 8  |    |    | I              |
|            | 35                 | 22             | 22           |    |    |    | M              |
|            | 98                 | 10             |              | 10 |    |    | I              |
| 15         | 5                  | 5              |              |    | 5  |    | II             |
|            | 15                 | 15             |              | 14 | 1  |    | I              |
|            | 18                 | 18             |              | 18 |    |    | I              |
|            | 19                 | 19             |              | 19 |    |    | I              |
|            | 35                 | 37             | 37           |    |    |    | M              |
|            | 97                 | 12             |              | 8  | 4  |    | I              |
| 17         | 8                  | 8              |              |    | 8  |    | II             |
|            | 26                 | 26             |              | 26 |    |    | I              |
|            | 35                 | 55             | 55           |    |    |    | M              |
| 19         | 30                 | 30             |              | 29 | 1  |    | I              |
|            | 32                 | 32             |              | 32 |    |    | I              |
|            | 35                 | 66             | 66           |    |    |    | M              |
| 21         | 16                 | 16             |              |    | 16 |    | II             |
|            | 35                 | 79             | 79           |    |    |    | M              |
|            | 39                 | 39             |              | 37 | 2  |    | I              |
|            | 41                 | 41             |              | 41 |    |    | I              |
|            | 35                 | 100            | 100          |    |    |    | M              |
| 23         | 35                 | 100            | 100          |    |    |    | M              |
| 25         | 35                 | 128            | 128          |    |    |    | M              |
|            | 61                 | 61             |              | 61 |    |    | I              |

## MASTER KEYWAY POSITIONS FRONT FACE OF PIN INSERT SHOWN



| SHELL SIZE | NORMAL POSITION | LOCATION OF ALTERNATE MASTER KEYWAY POSITION IN DEGREES |    |     |     |
|------------|-----------------|---------------------------------------------------------|----|-----|-----|
|            | N               | A                                                       | B  | C   | D   |
| 9          | 95              | 77                                                      | -  | -   | 113 |
| 11         |                 | 81                                                      | 67 | 123 | 109 |
| 13         |                 | 75                                                      | 63 | 127 | 115 |
| 15         |                 | 74                                                      | 61 | 129 | 116 |
| 17         |                 | 77                                                      | 65 | 125 | 113 |
| 19         |                 | 77                                                      | 65 | 125 | 113 |
| 21         |                 | 77                                                      | 65 | 125 | 113 |
| 23         |                 | 80                                                      | 69 | 121 | 110 |
| 25         |                 | 80                                                      | 69 | 121 | 110 |

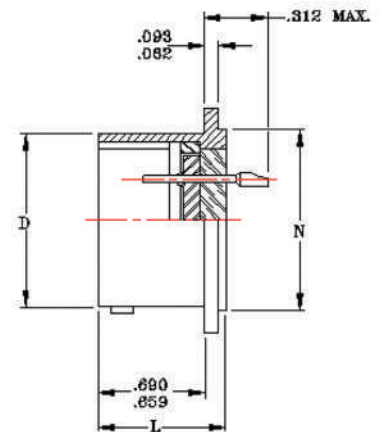
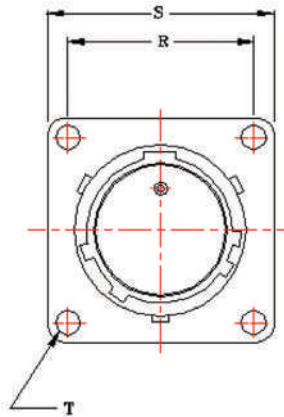
## SOLDER MOUNT 20B RECEPTACLES (REF. MS27471)



| SHELL SIZE | PART NUMBER       | A<br>+.016<br>-.016 | D<br>+.001<br>-.005 | M<br>MAX | N<br>+.001<br>-.005 |
|------------|-------------------|---------------------|---------------------|----------|---------------------|
| 9          | 20B-9-(*)P▼-(**)  | 0.750               | 0.572               | .187     | 0.672               |
| 11         | 20B-11-(*)P▼-(**) | 0.844               | 0.700               |          | 0.781               |
| 13         | 20B-13-(*)P▼-(**) | 0.969               | 0.850               |          | 0.906               |
| 15         | 20B-15-(*)P▼-(**) | 1.094               | 0.975               |          | 1.031               |
| 17         | 20B-17-(*)P▼-(**) | 1.218               | 1.100               |          | 1.156               |
| 19         | 20B-19-(*)P▼-(**) | 1.312               | 1.207               |          | 1.250               |
| 21         | 20B-21-(*)P▼-(**) | 1.438               | 1.332               | .218     | 1.375               |
| 23         | 20B-23-(*)P▼-(**) | 1.563               | 1.457               |          | 1.500               |
| 25         | 20B-25-(*)P▼-(**) | 1.688               | 1.582               |          | 1.625               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

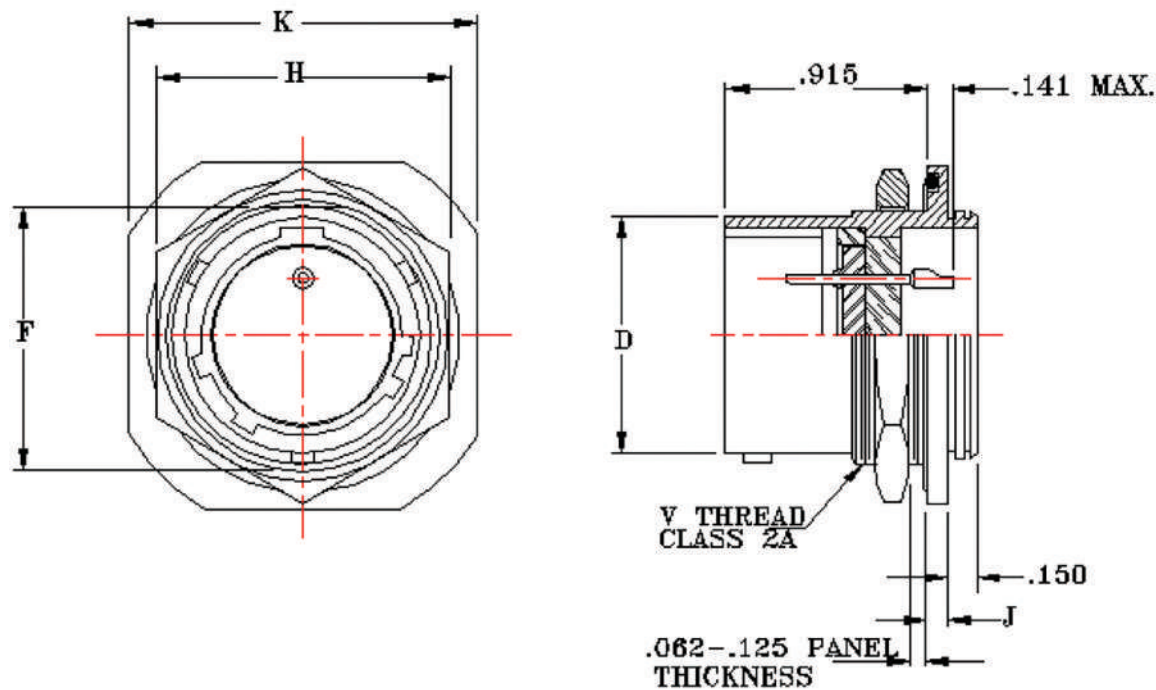
## BOX MOUNT 30B RECEPTACLES



| SHELL SIZE | PART NUMBER       | D<br>+.001<br>-.005 | L<br>REF | N<br>-.001<br>-.005 | R<br>+.005<br>-.005 | S<br>+.0016<br>-.0016 | T<br>+.0010<br>-.0005 |
|------------|-------------------|---------------------|----------|---------------------|---------------------|-----------------------|-----------------------|
| 9          | 30B-9-(*)P▼-(**)  | 0.572               | 0.775    | 0.672               | 0.719               | 0.938                 | 0.128                 |
| 11         | 30B-11-(*)P▼-(**) | 0.700               |          | 0.781               | 0.812               | 1.031                 |                       |
| 13         | 30B-13-(*)P▼-(**) | 0.850               |          | 0.906               | 0.906               | 1.125                 |                       |
| 15         | 30B-15-(*)P▼-(**) | 0.975               |          | 1.031               | 0.969               | 1.219                 |                       |
| 17         | 30B-17-(*)P▼-(**) | 1.100               |          | 1.156               | 1.062               | 1.312                 |                       |
| 19         | 30B-19-(*)P▼-(**) | 1.207               |          | 1.250               | 1.156               | 1.438                 |                       |
| 21         | 30B-21-(*)P▼-(**) | 1.332               | 0.781    | 1.375               | 1.250               | 1.562                 | 0.147                 |
| 23         | 30B-23-(*)P▼-(**) | 1.457               | 0.795    | 1.500               | 1.375               | 1.688                 |                       |
| 25         | 30B-25-(*)P▼-(**) | 1.528               | 0.805    | 1.625               | 1.500               | 1.812                 |                       |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

JAM NUT MOUNT  
50B RECEPTACLES (REF. MS27470)



| SHELL<br>SIZE | PART NUMBER       | D                | F                | H                | J                | K                | V<br>THREAD<br>CLASS 2A |
|---------------|-------------------|------------------|------------------|------------------|------------------|------------------|-------------------------|
|               |                   | +0.001<br>-0.005 | +0.000<br>-0.010 | +0.016<br>-0.016 | +0.016<br>-0.016 | +0.016<br>-0.016 |                         |
| 9             | 50B-9-(*)P▼-(**)  | 0.572            | 0.655            | 0.875            | 0.109            | 1.062            | .6875-24 UNEF           |
| 11            | 50B-11-(*)P▼-(**) | 0.700            | 0.755            | 1.000            |                  | 1.250            | .8125-20 UNEF           |
| 13            | 50B-13-(*)P▼-(**) | 0.850            | 0.942            | 1.188            |                  | 1.375            | 1.000-20 UNEF           |
| 15            | 50B-15-(*)P▼-(**) | 0.975            | 1.066            | 1.312            |                  | 1.500            | 1.1250-18 UNEF          |
| 17            | 50B-17-(*)P▼-(**) | 1.100            | 1.191            | 1.438            |                  | 1.625            | 1.2500-18 UNEF          |
| 19            | 50B-19-(*)P▼-(**) | 1.207            | 1.316            | 1.562            | 0.140            | 1.812            | 1.3750-18 UNEF          |
| 21            | 50B-21-(*)P▼-(**) | 1.332            | 1.441            | 1.688            |                  | 1.938            | 1.5000-18 UNEF          |
| 23            | 50B-23-(*)P▼-(**) | 1.457            | 1.566            | 1.812            |                  | 2.062            | 1.6250-18 UNEF          |
| 25            | 50B-25-(*)P▼-(**) | 1.582            | 1.691            | 2.000            |                  | 2.188            | 1.7500-18 UNS           |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## C SERIES

MIL-DTL-38999 hermetic connectors were developed for applications where a controlled atmosphere such as inert gasses, partial vacuums, or constant environments are needed. These receptacles are designed for use in aerospace, electronic, electrical power, and control circuits.

The “C” Series receptacles are manufactured to BoldX Industries standards and meet the intermateability requirements of MIL-DTL-38999 Series II. They are hermetically sealed with an all-glass seal to prevent air leakage in excess of .01 micron cubic foot per hour at one atmosphere. They are manufactured with conductive finishes to provide electrical continuity between mated halves prior to contact engagement. These connectors are manufactured in the low-silhouette design to minimize weight and size.

Standard hermetic receptacles are supplied with either solder cup or eyelet type contact terminations. Contacts for other applications such as thermocouple or flex prints are also available. Standard receptacles are steel shells with tin plating and gold plated, nickel-iron alloy contacts, or stainless steel shells passivated with gold plated, nickel-iron contacts. Other materials and finishes can be supplied to meet specific application requirements.

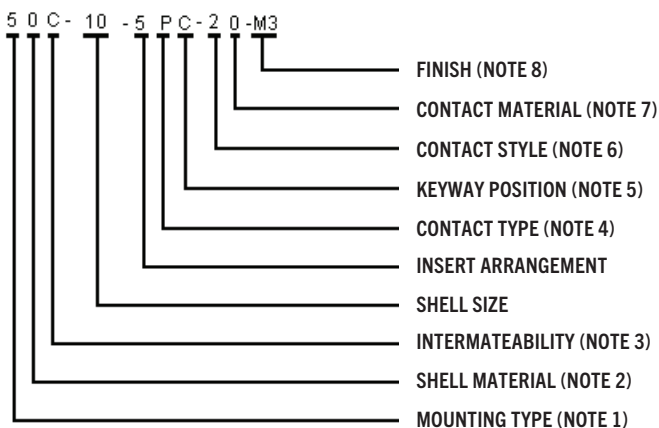
“C” Series receptacles meet the voltage, salt spray, shock, and vibration requirements of MIL-DTL-38999.

## ELECTRICAL SERVICE DATA

The maximum current to be carried by the connector, based on contact size, is the same as permitted by the wire bundle. Maximum current ratings and corresponding voltage drops under test condition, fully assembled, are shown below.

| CONTACT SIZE | TEST CURRENT (AMPS) | POTENTIAL DROP (MILLIVOLTS) |
|--------------|---------------------|-----------------------------|
| 22D          | 2                   | 85                          |
| 20           | 5                   | 60                          |
| 16           | 10                  | 85                          |
| 12           | 17                  | 85                          |

## PART NUMBER EXPLANATION



## STANDARD MATERIALS AND FINISHES

### FERROUS ALLOY SHELLS

**Material:** Cold Rolled Steel per ASTM A108

**Finish:** 100 microinches minimum fused tin per ASTM B545 over suitable underplate

### STAINLESS STEEL SHELLS

**Material:** Corrosion-resistant steel per SS304L per SAE AMS-QQ-S-763, type 303 or as specified

**Finish:** Passivated

### CONTACTS

**Material:** Nickel-iron alloy per MIL-I-23011, class 2

**Finish:** 50 microinches minimum gold per MIL-DTL-45204 over a suitable underplate

### INSERT PINS

**Material:** Fluorosilicone rubber

### INTERFACIAL SEALS

**Material:** Glass

### BAYONET PINS

**Material:** Corrosion-resistant steel per SAE AMS- type 303

| DESCRIPTION   | MILITARY DESIGNATION | BOLDX DESIGNATION |
|---------------|----------------------|-------------------|
| BOX MOUNT     | MS27476Y*D*P         | 30C-*P-20         |
|               | MS27476Y*D*X         | 30C-*P-10         |
|               | MS27476Y*E*P         | 3*C-*P-20         |
|               | MS27476Y*E*X         | 3*C-*P-10         |
| JAM NUT MOUNT | MS27477Y*D*P         | 50C-*P-20         |
|               | MS27477Y*D*X         | 50C-*P-10         |
|               | MS27477Y*E*P         | 5*C-*P-20         |
|               | MS27477Y*E*X         | 5*C-*P-10         |
| SOLDER MOUNT  | MS27478Y*D*P         | 20C-*P-20         |
|               | MS27478Y*D*X         | 20C-*P-10         |
|               | MS27478Y*E*P         | 2*C-*P-20         |
|               | MS27478Y*E*X         | 2*C-*P-10         |
| MATING PLUG   | MS27473 - MS27484    |                   |

## HIGH-POTENTIAL TEST VOLTAGE

| SERVICE RATING | TEST VOLTAGE (RMS 60 CPS) |
|----------------|---------------------------|
| M              | 1300                      |
| I              | 1800                      |
| II             | 2300                      |

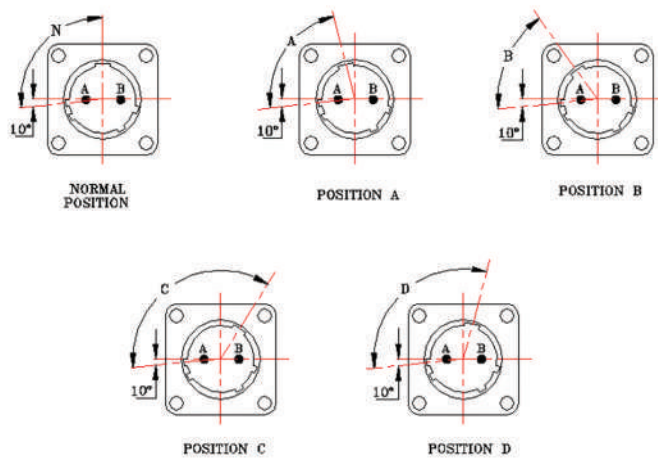
## NOTES:

- 1.-- 2-- Circular flange solder mount  
3-- Square flange box mount  
5-- Jam nut mount
- 2.-- 0 FERROUS ALLOY PER ASTM A108  
1 CRES PER SAE AMS-QQ-S-764, TYPE 303  
2 CRES PER SAE AMS-QQ-S-763, TYPE 304  
3 CRES PER SAE AMS-QQ-S-763, TYPE 304L  
4 CRES PER SAE AMS-QQ-S-763, TYPE 316  
5 CRES PER SAE AMS-QQ-S-763, TYPE 316L  
6 CRES PER SAE AMS-QQ-S-763, TYPE 321  
7 CRES PER SAE AMS-QQ-S-763, TYPE 347
- 3.-- MIL-DTL-38999 series II intermateability
- 4.-- P-- Pin
- 5.-- Alternate keyway position
- 6.-- 1-- Eyelet  
2-- Solder cup
- 7.-- 0-- Nickel-iron alloy
- 8.-- M3-- Fused tin over copper over nickel with Gold on contacts  
M2-- Gold contacts with passivated shell  
M8-- Gold contacts with nickel shell plated

## INDEX OF INSERT ARRANGEMENTS MIL-STD-1560

| SHELL SIZE | INSERT ARRANGEMENT | TOTAL CONTACTS | CONTACT SIZE |    |    |    | SERVICE RATING |
|------------|--------------------|----------------|--------------|----|----|----|----------------|
|            |                    |                | 22           | 20 | 16 | 12 |                |
| 8          | 35                 | 6              | 6            |    |    |    | M              |
|            | 98                 | 3              |              | 3  |    |    | I              |
| 10         | 5                  | 5              |              | 5  |    |    | I              |
|            | 35                 | 13             | 13           |    |    |    | M              |
|            | 98                 | 6              |              | 6  |    |    | I              |
|            | 99                 | 7              |              | 7  |    |    | I              |
| 12         | 4                  | 4              |              |    | 4  |    | II             |
|            | 8                  | 8              |              | 8  |    |    | I              |
|            | 35                 | 22             | 22           |    |    |    | M              |
|            | 98                 | 10             |              | 10 |    |    | I              |
| 14         | 5                  | 5              |              |    | 5  |    | II             |
|            | 15                 | 15             |              | 14 | 1  |    | I              |
|            | 18                 | 18             |              | 18 |    |    | I              |
|            | 19                 | 19             |              | 19 |    |    | I              |
|            | 35                 | 37             | 37           |    |    |    | M              |
|            | 97                 | 12             |              | 8  | 4  |    | I              |
| 16         | 8                  | 8              |              |    | 8  |    | II             |
|            | 26                 | 26             |              | 26 |    |    | I              |
|            | 35                 | 55             | 55           |    |    |    | M              |
| 18         | 30                 | 30             |              | 29 | 1  |    | I              |
|            | 32                 | 32             |              | 32 |    |    | I              |
|            | 35                 | 66             | 66           |    |    |    | M              |
| 20         | 16                 | 16             |              |    | 16 |    | II             |
|            | 35                 | 79             | 79           |    |    |    | M              |
|            | 39                 | 39             |              | 37 | 2  |    | I              |
|            | 41                 | 41             |              | 41 |    |    | I              |
| 22         | 35                 | 100            | 100          |    |    |    | M              |
| 24         | 35                 | 128            | 128          |    |    |    | M              |
|            | 61                 | 61             |              | 61 |    |    | I              |

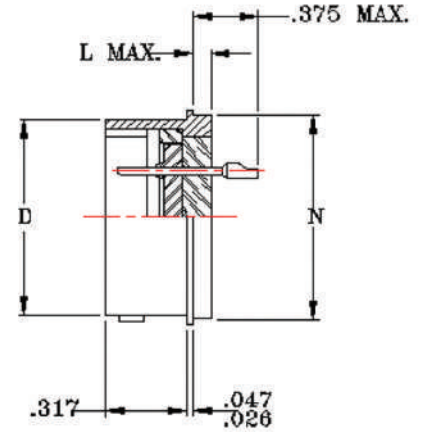
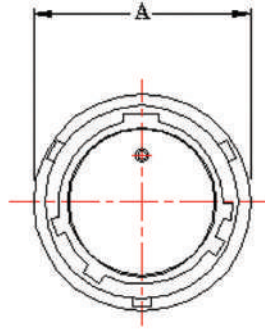
## MASTER KEYWAY POSITIONS FRONT FACE OF PIN INSERT SHOWN



| SHELL<br>SIZE | NORMAL<br>POSITION | LOCATION OF<br>ALTERNATE MASTER<br>KEYWAY POSITION IN<br>DEGREES |    |     |     |
|---------------|--------------------|------------------------------------------------------------------|----|-----|-----|
|               | N                  | A                                                                | B  | C   | D   |
| 8             | 100                | 82                                                               | -  | -   | 118 |
| 10            |                    | 86                                                               | 72 | 128 | 114 |
| 12            |                    | 80                                                               | 68 | 132 | 120 |
| 14            |                    | 79                                                               | 66 | 134 | 121 |
| 16            |                    | 82                                                               | 70 | 130 | 118 |
| 18            |                    | 82                                                               | 70 | 130 | 118 |
| 20            |                    | 82                                                               | 70 | 130 | 118 |
| 22            |                    | 85                                                               | 74 | 126 | 115 |
| 24            |                    | 85                                                               | 74 | 126 | 115 |



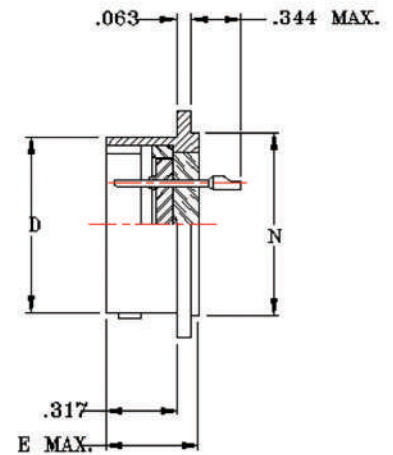
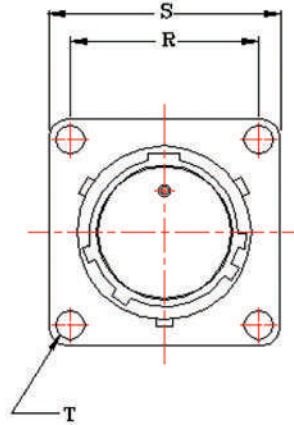
## SOLDER MOUNT 20C RECEPTACLES (REF. MS27478)



| SHELL SIZE | PART NUMBER       | A<br>+.011<br>-.010 | D<br>+.001<br>-.005 | L<br>MAX | N<br>+.001<br>-.005 |
|------------|-------------------|---------------------|---------------------|----------|---------------------|
| 8          | 20C-8-(*)P▼-(**)  | 0.687               | 0.473               | 0.125    | 0.562               |
| 10         | 20C-10-(*)P▼-(**) | 0.797               | 0.590               |          | 0.672               |
| 12         | 20C-12-(*)P▼-(**) | 0.906               | 0.750               |          | 0.781               |
| 14         | 20C-14-(*)P▼-(**) | 1.031               | 0.875               |          | 0.906               |
| 16         | 20C-16-(*)P▼-(**) | 1.156               | 1.000               |          | 1.031               |
| 18         | 20C-18-(*)P▼-(**) | 1.281               | 1.125               |          | 1.156               |
| 20         | 20C-20-(*)P▼-(**) | 1.375               | 1.250               | 0.156    | 1.250               |
| 22         | 20C-22-(*)P▼-(**) | 1.500               | 1.375               |          | 1.375               |
| 24         | 20C-24-(*)P▼-(**) | 1.625               | 1.500               |          | 1.500               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

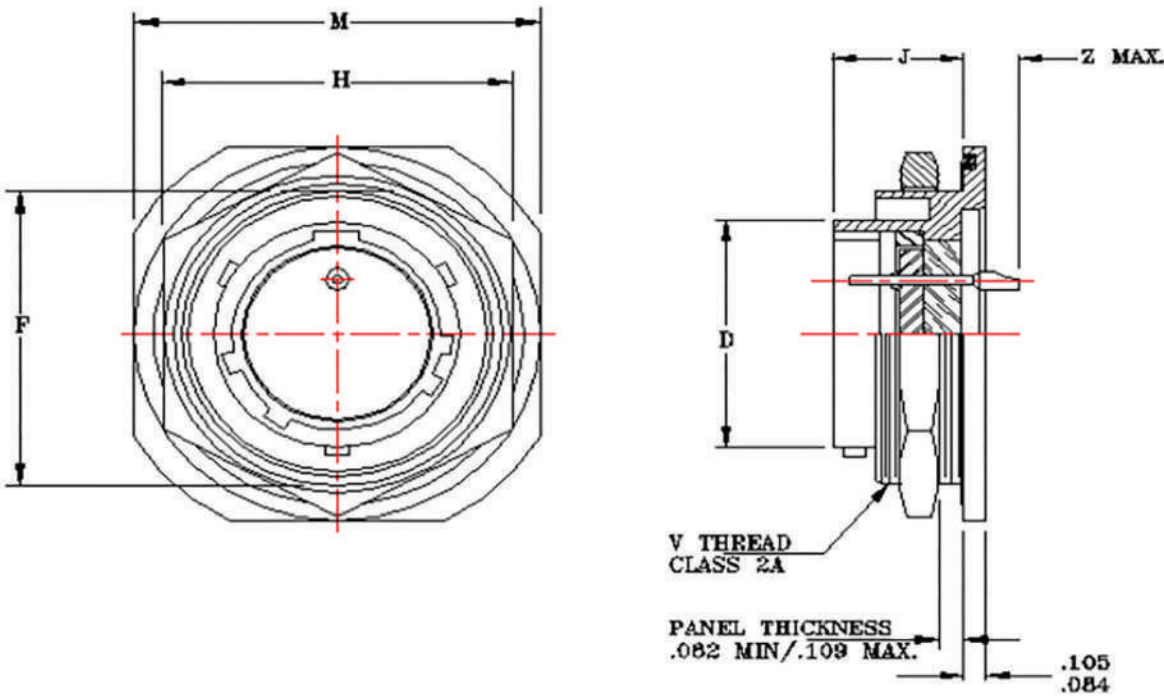
## BOX MOUNT 30C RECEPTACLES (REF. MS27476)



| SHELL SIZE | PART NUMBER       | D<br>+.001<br>-.005 | E<br>MAX | N<br>-.001<br>-.005 | R<br>+.005<br>-.005 | S<br>+.0015<br>-.0015 | T<br>+.001<br>-.0005 |
|------------|-------------------|---------------------|----------|---------------------|---------------------|-----------------------|----------------------|
| 8          | 30C-8-(*)P▼-(**)  | 0.473               | 0.453    | 0.562               | 0.594               | 0.812                 | 0.128                |
| 10         | 30C-10-(*)P▼-(**) | 0.590               |          | 0.672               | 0.719               | 0.938                 |                      |
| 12         | 30C-12-(*)P▼-(**) | 0.750               |          | 0.781               | 0.812               | 1.031                 |                      |
| 14         | 30C-14-(*)P▼-(**) | 0.875               |          | 0.906               | 0.906               | 1.125                 |                      |
| 16         | 30C-16-(*)P▼-(**) | 1.000               |          | 1.031               | 0.969               | 1.219                 |                      |
| 18         | 30C-18-(*)P▼-(**) | 1.125               |          | 1.156               | 1.062               | 1.312                 |                      |
| 20         | 30C-20-(*)P▼-(**) | 1.250               |          | 1.250               | 1.156               | 1.438                 |                      |
| 22         | 30C-22-(*)P▼-(**) | 1.375               |          | 1.375               | 1.250               | 1.562                 |                      |
| 24         | 30C-24-(*)P▼-(**) | 1.500               | 0.484    | 1.500               | 1.375               | 1.688                 | 0.147                |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

JAM NUT MOUNT  
50C RECEPTACLES (REF. MS27477)



| SHELL SIZE | PART NUMBER       | D<br>+0.001<br>-0.005 | F<br>+.001<br>-.006 | H<br>+.016<br>-.016 | J<br>+.005<br>-.005 | M<br>+.016<br>-.016 | V<br>THREAD<br>CLASS 2A | Z<br>MAX |
|------------|-------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|-------------------------|----------|
| 8          | 50C-8-(*)P▼-(**)  | 0.473                 | 0.817               | 1.062               | 0.438               | 1.250               | .8750-20 UNEF           | 0.281    |
| 10         | 50C-10-(*)P▼-(**) | 0.590                 | 0.941               | 1.188               |                     | 1.375               | 1.0000-20 UNEF          |          |
| 12         | 50C-12-(*)P▼-(**) | 0.750                 | 1.065               | 1.312               |                     | 1.500               | 1.1250-18 UNEF          |          |
| 14         | 50C-14-(*)P▼-(**) | 0.875                 | 1.190               | 1.438               |                     | 1.625               | 1.2500-18 UNEF          |          |
| 16         | 50C-16-(*)P▼-(**) | 1.000                 | 1.320               | 1.562               |                     | 1.781               | 1.3750-18 UNEF          |          |
| 18         | 50C-18-(*)P▼-(**) | 1.125                 | 1.440               | 1.688               |                     | 1.890               | 1.5000-18 UNEF          |          |
| 20         | 50C-20-(*)P▼-(**) | 1.250                 | 1.565               | 1.812               | 0.464               | 2.016               | 1.6250-18 UNEF          | 0.250    |
| 22         | 50C-22-(*)P▼-(**) | 1.375                 | 1.690               | 2.000               |                     | 2.140               | 1.7500-18 UNS           |          |
| 24         | 50C-24-(*)P▼-(**) | 1.500                 | 1.815               | 2.125               |                     | 2.265               | 1.8750-16 UN            |          |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

D SERIES

MIL-DTL-38999 hermetic connectors were developed for applications where a controlled atmosphere such as inert gasses, partial vacuums, or constant environments are needed. These receptacles are designed for use in aerospace, electronic, electrical power, and control circuits.

The “D” Series receptacles are manufactured to BoldX Industries standards and meet the intermateability requirements of MIL-DTL-38999 Series III. They are hermetically sealed with an all-glass seal to prevent air leakage in excess of 1. micron cubic foot per hour at one atmosphere.

They are manufactured with conductive finishes to provide electrical continuity between mated halves prior to contact engagement. Manufactured in scoop-proof design, the contacts are located so as to prevent handling damage or inadvertent electrical contact.

Standard hermetic receptacles are supplied with either solder cup or eyelet type contact terminations. Contacts for other applications such as thermocouple or flex prints are also available. Standard receptacles are stainless steel shells passivated with gold plated nickel-iron alloy contacts. Other materials and finishes can be supplied to meet specific application requirements.

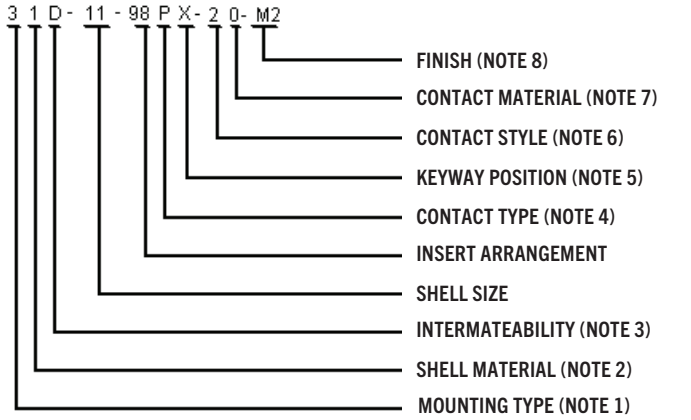
“D” Series receptacles meet the voltage, salt spray, shock, and vibration requirements of MIL-DTL-38999.

ELECTRICAL SERVICE DATA

The maximum current to be carried by the connector, based on contact size, is the same as permitted by the wire bundle. Maximum current ratings and corresponding voltage drops under test condition, fully assembled, are shown below.

| CONTACT SIZE | TEST CURRENT (AMPS) | POTENTIAL DROP (MILLIVOLTS) |
|--------------|---------------------|-----------------------------|
| 22D          | 2                   | 85                          |
| 20           | 5                   | 60                          |
| 16           | 10                  | 85                          |
| 12           | 17                  | 85                          |

PART NUMBER EXPLANATION



STANDARD MATERIALS AND FINISHES

STAINLESS STEEL SHELLS

Material: Corrosion-resistant steel per SS304L per SAE AMS-QQ-S-763, type 303 or as specified  
Finish: Passivated or nickel per AMS-QQ-N-290

CONTACTS

Material: Nickel-iron alloy per MIL-I-23011, class 2  
Finish: 50 microinches minimum gold per MIL-DTL-45204 over a suitable underplate

INSERT

Material: Glass

INTERFACIAL SEALS

Material: Fluorosilicone rubber

| DESCRIPTION   | MILITARY DESIGNATION | BOLDX DESIGNATION |
|---------------|----------------------|-------------------|
| BOX MOUNT     | D38999/21Y**PN       | 3*D-**-PN-20-M2   |
|               | D38999/21Y**XN       | 3*D-**-PN-10-M2   |
|               | D38999/21N**PN       | 3*D-**-PN-20-M8   |
|               | D38999/21N**XN       | 3*D-**-PN-10-M8   |
| JAM NUT MOUNT | D38999/23Y**PN       | 5*D-**-PN-20-M2   |
|               | D38999/23Y**XN       | 5*D-**-PN-10-M2   |
|               | D38999/23N**PN       | 5*D-**-PN-20-M8   |
|               | D38999/23N**XN       | 5*D-**-PN-10-M8   |
| SOLDER MOUNT  | D38999/25Y**PN       | 2*D-**-PN-20-M2   |
|               | D38999/25Y**XN       | 2*D-**-PN-10-M2   |
|               | D38999/25N**PN       | 2*D-**-PN-20-M8   |
|               | D38999/25N**XN       | 2*D-**-PN-10-M8   |
| WELD MOUNT    | D38999/27Y**PN       | 6*D-**-PN-20-M2   |
|               | D38999/27Y**XN       | 6*D-**-PN-10-M2   |
|               | D38999/27N**PN       | 6*D-**-PN-20-M8   |
|               | D38999/27N**XN       | 6*D-**-PN-10-M8   |
| MATING PLUG   | D38999/26            |                   |

HIGH-POTENTIAL TEST VOLTAGE

| SERVICE RATING | TEST VOLTAGE (RMS 60 CPS) |
|----------------|---------------------------|
| M              | 1300                      |
| I              | 1800                      |
| II             | 2300                      |

NOTES:

1. -- 2-- Circular flange solder mount  
3-- Square flange box mount  
5-- Jam nut mount  
6-- Circular flange weld mount

2. -- 1 CRES PER SAE AMS-QQ-S-764, TYPE 303  
2 CRES PER SAE AMS-QQ-S-763, TYPE 304  
3 CRES PER SAE AMS-QQ-S-763, TYPE 304L  
4 CRES PER SAE AMS-QQ-S-763, TYPE 316  
5 CRES PER SAE AMS-QQ-S-763, TYPE 316L  
6 CRES PER SAE AMS-QQ-S-763, TYPE 321  
7 CRES PER SAE AMS-QQ-S-763, TYPE 347

3. -- MIL-DTL-38999 Series III intermateability  
4. -- P--Pin  
5. -- Keyway position
6. -- 1--Eyelet  
2--Solder cup

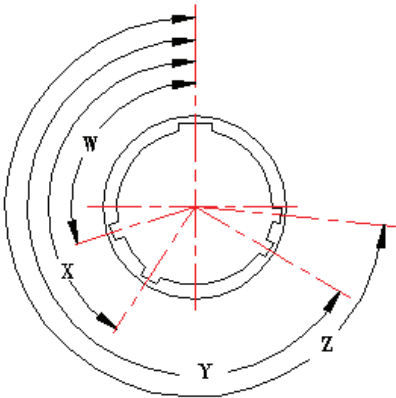
7. -- 0--Nickel-iron alloy

8. -- M2-- Gold contacts with shell passivated  
M8-- Gold contacts with shell nickel plated

INDEX OF INSERT ARRANGEMENTS  
MIL-STD-1560

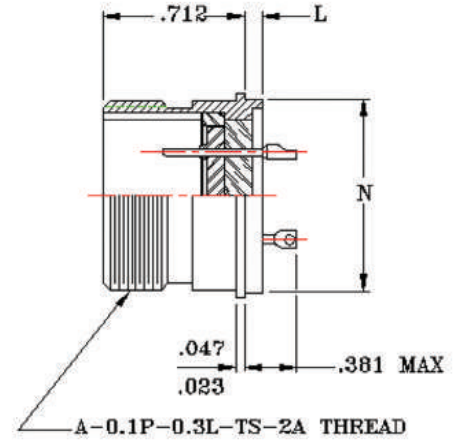
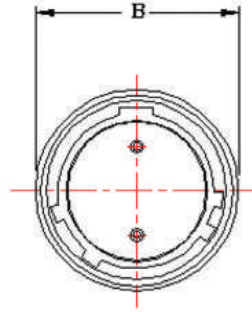
| SHELL SIZE | INSERT ARRANGEMENT | TOTAL CONTACTS | CONTACT SIZE |    |    |    | SERVICE RATING |
|------------|--------------------|----------------|--------------|----|----|----|----------------|
|            |                    |                | 22           | 20 | 16 | 12 |                |
| 9          | 35                 | 6              | 6            |    |    |    | M              |
|            | 98                 | 3              |              | 3  |    |    | I              |
| 11         | 5                  | 5              |              | 5  |    |    | I              |
|            | 35                 | 13             | 13           |    |    |    | M              |
|            | 98                 | 6              |              | 6  |    |    | I              |
|            | 99                 | 7              |              | 7  |    |    | I              |
| 13         | 4                  | 4              |              |    | 4  |    | II             |
|            | 8                  | 8              |              | 8  |    |    | I              |
|            | 35                 | 22             | 22           |    |    |    | M              |
|            | 98                 | 10             |              | 10 |    |    | I              |
| 15         | 5                  | 5              |              |    | 5  |    | II             |
|            | 15                 | 15             |              | 14 | 1  |    | I              |
|            | 18                 | 18             |              | 18 |    |    | I              |
|            | 19                 | 19             |              | 19 |    |    | I              |
|            | 35                 | 37             | 37           |    |    |    | M              |
|            | 97                 | 12             |              | 8  | 4  |    | I              |
| 17         | 8                  | 8              |              |    | 8  |    | II             |
|            | 26                 | 26             |              | 26 |    |    | I              |
|            | 35                 | 55             | 55           |    |    |    | M              |
| 19         | 30                 | 30             |              | 29 | 1  |    | I              |
|            | 32                 | 32             |              | 32 |    |    | I              |
|            | 35                 | 66             | 66           |    |    |    | M              |
|            | 16                 | 16             |              |    | 16 |    | II             |
| 21         | 35                 | 79             | 79           |    |    |    | M              |
|            | 39                 | 39             |              | 37 | 2  |    | I              |
|            | 41                 | 41             |              | 41 |    |    | I              |
| 23         | 35                 | 100            | 100          |    |    |    | M              |
| 25         | 35                 | 128            | 128          |    |    |    | M              |
|            | 61                 | 61             |              | 61 |    |    | I              |

MASTER KEYWAY POSITIONS  
FRONT FACE OF PIN INSERT SHOWN



| SHELL SIZE         | KEYWAY POSITION | W°  | X°  | Y°  | Z°  |
|--------------------|-----------------|-----|-----|-----|-----|
| 9                  | N               | 105 | 140 | 215 | 265 |
|                    | A               | 102 | 132 | 248 | 320 |
|                    | B               | 80  | 118 | 230 | 312 |
|                    | C               | 35  | 140 | 205 | 275 |
|                    | D               | 64  | 155 | 234 | 304 |
| 11, 13, and 15     | E               | 91  | 131 | 197 | 240 |
|                    | N               | 95  | 141 | 208 | 236 |
|                    | A               | 113 | 156 | 182 | 292 |
|                    | B               | 90  | 145 | 195 | 252 |
|                    | C               | 53  | 156 | 220 | 255 |
| 17, 19, 23, and 25 | D               | 119 | 146 | 176 | 298 |
|                    | E               | 51  | 141 | 184 | 242 |
|                    | N               | 80  | 142 | 196 | 293 |
|                    | A               | 135 | 170 | 200 | 310 |
|                    | B               | 49  | 169 | 200 | 244 |
|                    | C               | 66  | 140 | 200 | 257 |
|                    | D               | 62  | 145 | 180 | 280 |
|                    | E               | 79  | 153 | 197 | 272 |

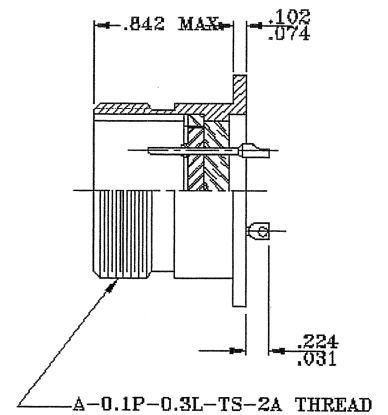
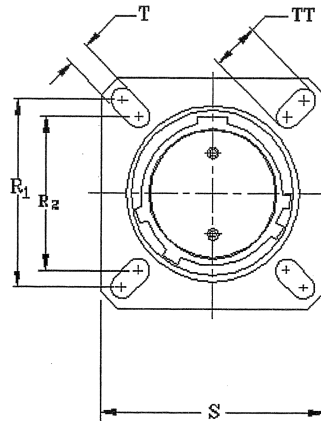
## SOLDER MOUNT 21D RECEPTACLES (REF. D38999/25)



| SHELL SIZE | PART NUMBER       | A<br>THREAD | B<br>+.010<br>-.010 | L<br>MAX | N<br>+.001<br>-.005 |
|------------|-------------------|-------------|---------------------|----------|---------------------|
| 9          | 2*D-9-(*)P▼-(**)  | 0.6250      | 0.750               | 0.200    | 0.672               |
| 11         | 2*D-11-(*)P▼-(**) | 0.7500      | 0.844               |          | 0.781               |
| 13         | 2*D-13-(*)P▼-(**) | 0.8750      | 0.969               |          | 0.906               |
| 15         | 2*D-15-(*)P▼-(**) | 1.0000      | 1.094               |          | 1.031               |
| 17         | 2*D-17-(*)P▼-(**) | 1.1875      | 1.218               |          | 1.156               |
| 19         | 2*D-19-(*)P▼-(**) | 1.2500      | 1.312               |          | 1.25                |
| 21         | 2*D-21-(*)P▼-(**) | 1.3750      | 1.438               | 0.232    | 1.375               |
| 23         | 2*D-23-(*)P▼-(**) | 1.5000      | 1.563               |          | 1.500               |
| 25         | 2*D-25-(*)P▼-(**) | 1.6250      | 1.688               |          | 1.625               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## BOX MOUNT 31D RECEPTACLES (REF. D38999/21)

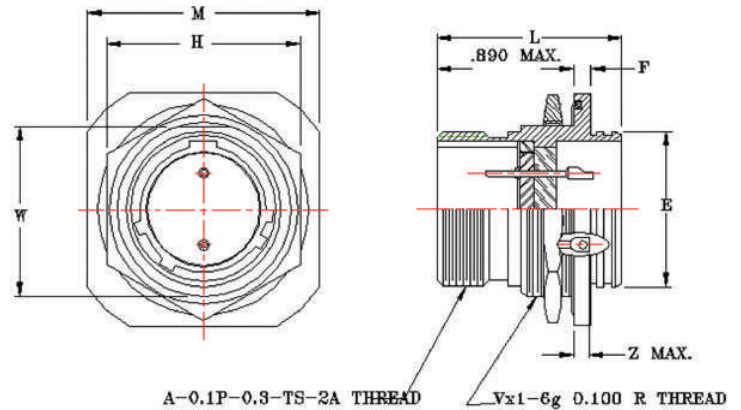


| SHELL SIZE | PART NUMBER       | A<br>THREAD | R1<br>+.005<br>-.005 | R2<br>+.005<br>-.005 | S<br>+.011<br>-.011 | T<br>+.008<br>-.008 | TT<br>+.008<br>-.008 |
|------------|-------------------|-------------|----------------------|----------------------|---------------------|---------------------|----------------------|
| 9          | 3*D-9-(*)P▼-(**)  | 0.6250      | 0.719                | 0.594                | 0.937               | 0.128               | 0.216                |
| 11         | 3*D-11-(*)P▼-(**) | 0.7500      | 0.812                | 0.719                | 1.031               |                     | 0.194                |
| 13         | 3*D-13-(*)P▼-(**) | 0.8750      | 0.906                | 0.812                | 1.126               |                     | 0.194                |
| 15         | 3*D-15-(*)P▼-(**) | 1.0000      | 0.969                | 0.906                | 1.220               |                     | 0.173                |
| 17         | 3*D-17-(*)P▼-(**) | 1.1875      | 1.062                | 0.969                | 1.311               |                     | 0.194                |
| 19         | 3*D-19-(*)P▼-(**) | 1.2500      | 1.156                | 1.062                | 1.437               |                     | 0.194                |
| 21         | 3*D-21-(*)P▼-(**) | 1.3750      | 1.250                | 1.156                | 1.563               | 0.154               | 0.194                |
| 23         | 3*D-23-(*)P▼-(**) | 1.5000      | 1.375                | 1.250                | 1.689               |                     | 0.242                |
| 25         | 3*D-25-(*)P▼-(**) | 1.6250      | 1.500                | 1.375                | 1.811               |                     | 0.242                |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL



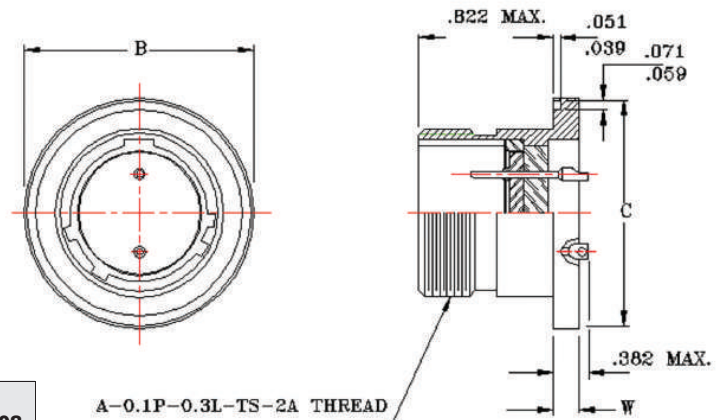
## JAM NUT MOUNT 51D RECEPTACLES (REF. D38999/23)



| SHELL SIZE | PART NUMBER       | A<br>THREAD | E<br>+.012<br>-.000 | F<br>+.012<br>-.004 | H<br>+.010<br>-.010 | L<br>+.015<br>-.015 | M<br>+.015<br>-.015 | V<br>THREAD | W<br>+.000<br>-.010 | Z<br>MAX |
|------------|-------------------|-------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------|---------------------|----------|
| 9          | 5*D-9-(*)P▼-(**)  | 0.6250      | 0.642               | 0.102               | 0.875               | 1.125               | 1.063               | M17         | 0.655               | 0.208    |
| 11         | 5*D-11-(*)P▼-(**) | 0.7500      | 0.764               |                     | 1.000               | 1.125               | 1.252               | M20         | 0.755               | 0.208    |
| 13         | 5*D-13-(*)P▼-(**) | 0.8750      | 0.894               |                     | 1.250               | 1.133               | 1.374               | M25         | 0.942               | 0.200    |
| 15         | 5*D-15-(*)P▼-(**) | 1.0000      | 1.020               |                     | 1.312               | 1.133               | 1.500               | M28         | 1.066               | 0.200    |
| 17         | 5*D-17-(*)P▼-(**) | 1.1875      | 1.142               |                     | 1.437               | 1.133               | 1.626               | M32         | 1.191               | 0.200    |
| 19         | 5*D-19-(*)P▼-(**) | 1.2500      | 1.268               |                     | 1.562               | 1.165               | 1.811               | M35         | 1.316               | 0.200    |
| 21         | 5*D-21-(*)P▼-(**) | 1.3750      | 1.394               | 0.134               | 1.750               | 1.165               | 1.937               | M38         | 1.441               | 0.200    |
| 23         | 5*D-23-(*)P▼-(**) | 1.5000      | 1.520               |                     | 1.875               | 1.165               | 2.063               | M41         | 1.566               | 0.200    |
| 25         | 5*D-25-(*)P▼-(**) | 1.6250      | 1.642               |                     | 2.000               | 1.165               | 2.189               | M44         | 1.691               | 0.200    |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## WELD MOUNT 61D RECEPTACLES (REF. D38999/27)



| SHELL SIZE | PART NUMBER       | A<br>THREAD | B<br>+.011<br>-.000 | C<br>+.000<br>-.011 | W<br>+.008<br>-.008 |
|------------|-------------------|-------------|---------------------|---------------------|---------------------|
| 9          | 6*D-9-(*)P▼-(**)  | 0.6250      | 0.972               | 0.941               | 0.126               |
| 11         | 6*D-11-(*)P▼-(**) | 0.7500      | 1.094               | 1.063               |                     |
| 13         | 6*D-13-(*)P▼-(**) | 0.8750      | 1.220               | 1.189               |                     |
| 15         | 6*D-15-(*)P▼-(**) | 1.0000      | 1.346               | 1.315               |                     |
| 17         | 6*D-17-(*)P▼-(**) | 1.1875      | 1.433               | 1.401               |                     |
| 19         | 6*D-19-(*)P▼-(**) | 1.2500      | 1.578               | 1.547               |                     |
| 21         | 6*D-21-(*)P▼-(**) | 1.3750      | 1.720               | 1.689               | 0.157               |
| 23         | 6*D-23-(*)P▼-(**) | 1.5000      | 1.885               | 1.854               |                     |
| 25         | 3*D-25-(*)P▼-(**) | 1.6250      | 1.972               | 1.941               |                     |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## J & K SERIES

MIL-DTL-83723 hermetic connectors were developed for applications where a controlled atmosphere such as inert gasses, partial vacuums, or constant environments are needed. These receptacles are designed for use in aerospace, electronic, electrical power, and control circuits.

The “J” & “K” Series receptacles are manufactured to BoldX Industries standards and meet the intermateability requirements of MIL-DTL-83723 Series III types B and T respectively. They are hermetically sealed with a single compression glass seal around all contacts to prevent air leakage in excess of 1x10<sup>-7</sup> cc/sec of helium at one atmosphere.

The “J” series receptacles have a bayonet coupling mechanism and the “K” series have the threaded coupling type. Standard hermetic receptacles are supplied with either solder cup or eyelet type contact terminations. Contacts for other applications such as thermocouple or flex prints are also available. Standard receptacles are tin plated steel shells or passivated stainless steel shells with gold plated nickel-iron alloy contacts. Other materials and finishes can be supplied to meet specific application requirements. Both series are supplied with interfacial seals and O-rings.

## ELECTRICAL SERVICE DATA

The maximum current to be carried by the connector, based on contact size, is the same as permitted by the wire bundle. Maximum current ratings and corresponding voltage drops under test condition, fully assembled, are shown below.

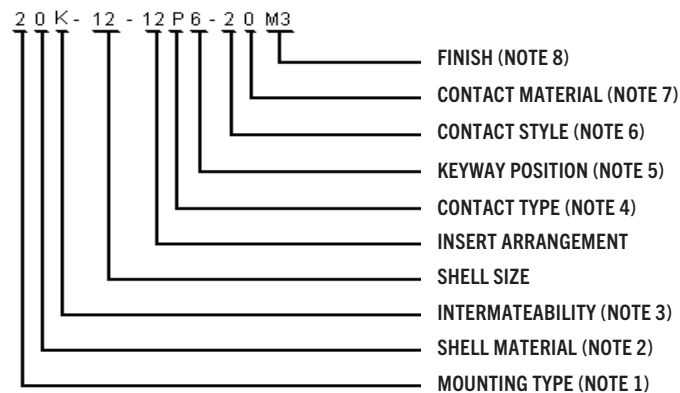
| CONTACT SIZE | TEST CURRENT (AMPS) | POTENTIAL DROP (MILLIVOLTS) |
|--------------|---------------------|-----------------------------|
| 20           | 5                   | 100                         |
| 16           | 10                  | 95                          |
| 12           | 17                  | 95                          |

## HIGH-POTENTIAL TEST VOLTAGE

Unmated connectors tested per method 3001 of MIL-STD-1344 shall have a maximum leakage of 2 milliamperes and show no evidence of electrical breakdown or flashover.

| SERVICE RATING | TEST VOLTAGE (RMS 60 CPS) |
|----------------|---------------------------|
| I              | 1500                      |

## PART NUMBER EXPLANATION



## STANDARD MATERIALS AND FINISHES

### FERROUS ALLOY SHELLS

**Material:** Cold Rolled Steel per ASTM A108

**Finish:** 100 microinches minimum fused tin per ASTM B545 over a suitable underplate

### STAINLESS STEEL SHELLS

**Material:** Corrosion-resistant steel per SS304L per SAE AMS-QQ-S-763, type 303 or as specified

**Finish:** Passivated

### CONTACTS

**Material:** Nickel-iron alloy per MIL-I-23011, class 2

**Finish:** 50 microinches minimum gold per MIL-DTL-45204 over a suitable underplate

### BAYONET PINS

**Material:** Corrosion-resistant steel per SAE AMS- type 303

### INSERTS INTERFACIAL SEALS

**Material:** Glass **Material:** Fluorosilicone rubber

| BAYONET COUPLING |                                            |                   |
|------------------|--------------------------------------------|-------------------|
| DESCRIPTION      | MILITARY DESIGNATION                       | BOLDX DESIGNATION |
| BOX MOUNT        | M83723/79H**N                              | 30J*.*PN-20       |
|                  | M83723/79Y**N                              | 3*J*.*PN-20       |
| SOLDER MOUNT     | M83723/80H**N                              | 20J*.*PN-20       |
|                  | M83723/80Y**N                              | 2*J*.*PN-20       |
|                  | M83723/93H**N                              | 20J*.*PN-40       |
|                  | M83723/93Y**N                              | 2*J*.*PN-40       |
| JAM NUT MOUNT    | M83723/81H**N                              | 50J*.*PN-20       |
|                  | M83723/81Y**N                              | 5*J*.*PN-20       |
|                  | M83723/94H**N                              | 50J*.*PN-80       |
|                  | M83723/94Y**N                              | 5*J*.*PN-80       |
| MATING PLUG      | M83723/75 - M83723/77                      |                   |
| THREAD COUPLING  |                                            |                   |
| BOX MOUNT        | M83723/88H**N                              | 30K*.*PN-20       |
|                  | M83723/88Y**N                              | 3*K*.*PN-20       |
| JAM NUT MOUNT    | M83723/89H**N                              | 50K*.*PN-20       |
|                  | M83723/89Y**N                              | 5*K*.*PN-20       |
| SOLDER MOUNT     | M83723/90H**N                              | 20K*.*PN-20       |
|                  | M83723/90Y**N                              | 2*K*.*PN-20       |
| MATING PLUG      | M83723/86, M83723/91, M83723/95, M83723/97 |                   |

## NOTES:

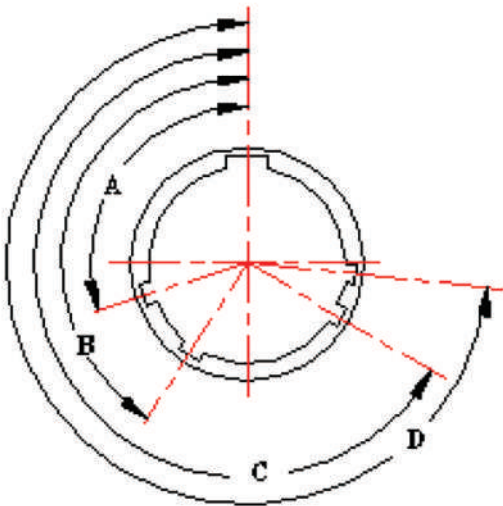
1. -- 2--Circular flange solder mount  
3--Square flange box mount  
5--Jam nut mount
2. -- 0 FERROUS ALLOY PER ASTM A108  
1 CRES PER SAE AMS-QQ-S-764, TYPE 303  
2 CRES PER SAE AMS-QQ-S-763, TYPE 304  
3 CRES PER SAE AMS-QQ-S-763, TYPE 304L  
4 CRES PER SAE AMS-QQ-S-763, TYPE 316  
5 CRES PER SAE AMS-QQ-S-763, TYPE 316L  
6 CRES PER SAE AMS-QQ-S-763, TYPE 321  
7 CRES PER SAE AMS-QQ-S-763, TYPE 347
3. -- J--MIL-DTL-83723, series III  
type B intermateability  
K-- MIL-DTL-83723, series III  
type T intermateability
4. -- P---Pin
5. -- Alternate keyway position
6. -- 1--Eyelet  
2--Solder cup
7. -- 0--Nickel-iron alloy
8. -- M2-- Gold contacts with shell passivated  
M3-- Fused tin contacts over nickel with gold on contacts

INDEX OF INSERT ARRANGEMENTS MIL-STD-1554

| SHELL SIZE | INSERT ARRANGEMENT | TOTAL CONTACTS | CONTACT SIZE |    |    |      |
|------------|--------------------|----------------|--------------|----|----|------|
|            |                    |                | 20           | 16 | 12 | COAX |
| 8          | 2                  | 2              | 2            |    |    |      |
|            | 3                  | 3              | 3            |    |    |      |
|            | 98                 | 3              | 3            |    |    |      |
| 10         | 2                  | 2              | 2            |    |    |      |
|            | 5                  | 5              | 5            |    |    |      |
|            | 6                  | 6              | 6            |    |    |      |
|            | 20                 | 2              |              | 2  |    |      |
| 12         | 3                  | 3              |              | 3  |    |      |
|            | 12                 | 12             | 12           |    |    |      |
| 14         | 4                  | 4              |              |    | 4  |      |
|            | 7                  | 7              |              | 7  |    |      |
|            | 15                 | 15             | 15           |    |    |      |
| 16         | 10                 | 10             |              | 10 |    |      |
|            | 24                 | 24             | 24           |    |    |      |
| 18         | 14                 | 14             |              | 14 |    |      |
|            | 31                 | 31             | 31           |    |    |      |
| 20         | 16                 | 16             |              | 16 |    |      |
|            | 41                 | 41             | 41           |    |    |      |
| 22         | 19                 | 19             |              | 19 |    |      |
|            | 55                 | 55             | 55           |    |    |      |
| 24         | 61                 | 61             | 61           |    |    |      |

ALL ARRANGEMENTS ARE SERVICE RATING I

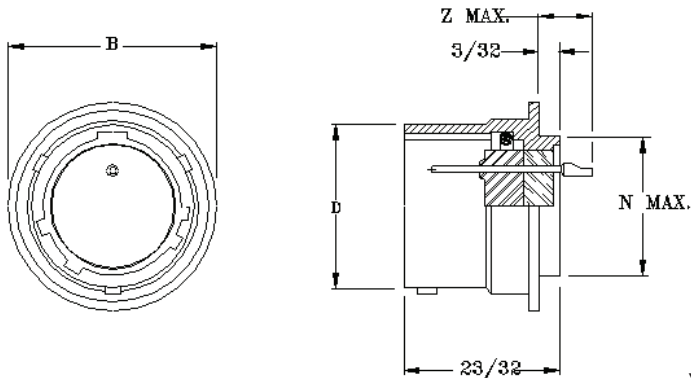
MASTER KEYWAY POSITIONS  
FRONT FACE OF PIN INSERT SHOWN



| SHELL SIZE       | KEYWAY POSITION | A°  | B°  | C°  | D°  |
|------------------|-----------------|-----|-----|-----|-----|
| 8<br>10          | NORMAL          | 105 | 140 | 215 | 265 |
|                  | 6               | 102 | 132 | 248 | 320 |
|                  | 7               | 80  | 118 | 230 | 312 |
|                  | 8               | 35  | 140 | 205 | 275 |
|                  | 9               | 64  | 155 | 234 | 304 |
|                  | Y               | 25  | 115 | 220 | 270 |
| 12<br>THRU<br>24 | NORMAL          | 105 | 140 | 215 | 265 |
|                  | 6               | 18  | 149 | 192 | 259 |
|                  | 7               | 92  | 152 | 222 | 342 |
|                  | 8               | 84  | 152 | 204 | 334 |
|                  | 9               | 24  | 135 | 199 | 240 |
|                  | Y               | 98  | 152 | 268 | 338 |

Y POSITION NOT AVAILABLE FOR SHELL SIZE 8

## SOLDER MOUNT 20J RECEPTACLES (REF. M83723/80)

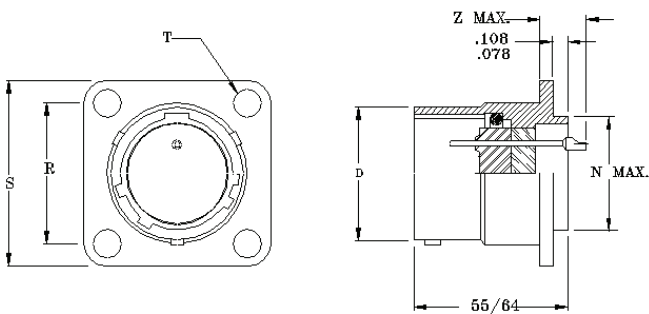


| CONTACT SIZE | Y MAX |
|--------------|-------|
| 20           | 0.330 |
| 16           | 0.400 |
| 12           | 0.400 |

| SHELL SIZE | PART NUMBER       | B<br>+.020<br>-.020 | D<br>+.000<br>-.005 | N<br>MAX |
|------------|-------------------|---------------------|---------------------|----------|
| 8          | 20J-8-(*)P▼-(**)  | 0.740               | 0.536               | 0.500    |
| 10         | 20J-10-(*)P▼-(**) | 0.840               | 0.659               | 0.562    |
| 12         | 20J-12-(*)P▼-(**) | 1.045               | 0.829               | 0.750    |
| 14         | 20J-14-(*)P▼-(**) | 1.090               | 0.898               | 0.812    |
| 16         | 20J-16-(*)P▼-(**) | 1.210               | 1.025               | 0.937    |
| 18         | 20J-18-(*)P▼-(**) | 1.340               | 1.131               | 1.062    |
| 20         | 20J-20-(*)P▼-(**) | 1.430               | 1.256               | 1.187    |
| 22         | 20J-22-(*)P▼-(**) | 1.590               | 1.381               | 1.312    |
| 24         | 20J-24-(*)P▼-(**) | 1.710               | 1.506               | 1.437    |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## BOX MOUNT 30J RECEPTACLES (REF. M83723/79)

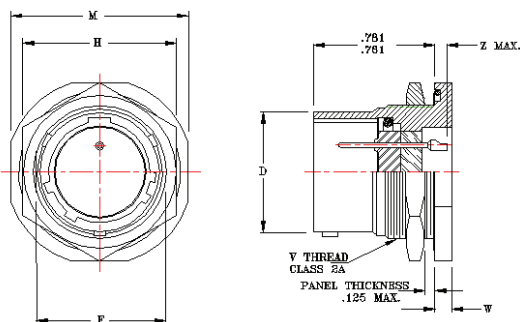


| CONTACT SIZE | Z MAX |
|--------------|-------|
| 20           | 0.330 |
| 16           | 0.400 |
| 12           | 0.400 |

| SHELL SIZE | PART NUMBER       | D<br>+.000<br>-.005 | N<br>MAX | R<br>+.005<br>-.005 | S<br>+.005<br>-.005 | T<br>+.000<br>-.009 |
|------------|-------------------|---------------------|----------|---------------------|---------------------|---------------------|
| 8          | 30J-8-(*)P▼-(**)  | 0.536               | 0.500    | 0.594               | 0.812               | 0.125               |
| 10         | 30J-10-(*)P▼-(**) | 0.659               | 0.562    | 0.719               | 0.937               |                     |
| 12         | 30J-12-(*)P▼-(**) | 0.829               | 0.750    | 0.812               | 1.031               |                     |
| 14         | 30J-14-(*)P▼-(**) | 0.898               | 0.812    | 0.906               | 1.125               |                     |
| 16         | 30J-16-(*)P▼-(**) | 1.025               | 0.937    | 0.969               | 1.250               |                     |
| 18         | 30J-18-(*)P▼-(**) | 1.131               | 1.062    | 1.062               | 1.343               |                     |
| 20         | 30J-20-(*)P▼-(**) | 1.256               | 1.187    | 1.156               | 1.437               |                     |
| 22         | 30J-22-(*)P▼-(**) | 1.381               | 1.312    | 1.250               | 1.562               |                     |
| 24         | 30J-24-(*)P▼-(**) | 1.506               | 1.437    | 1.375               | 1.703               |                     |
|            |                   |                     |          |                     |                     | 0.154               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## JAM NUT MOUNT 50J RECEPTACLES (REF. M83723/81)



| CONTACT SIZE | Z MAX |
|--------------|-------|
| 2            | 0.165 |
| 16           | 0.235 |
| 12           | 0.235 |

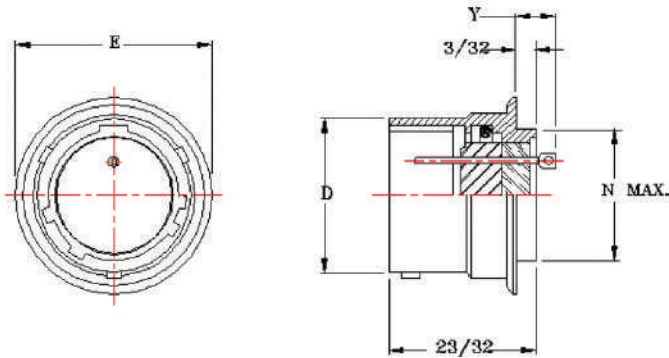
| SHELL SIZE | PART NUMBER       | D<br>+.000<br>-.005 | F<br>+.003<br>-.003 | H<br>+.017<br>-.017 | M<br>+.005<br>-.005 | V THREAD<br>CLASS 2 A | W<br>+.020<br>-.020 |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|
| 8          | 50J-8-(*)P▼-(**)  | 0.536               | 0.593               | 0.812               | 0.979               | 0.6250-20 UN          | 0.117               |
| 10         | 50J-10-(*)P▼-(**) | 0.659               | 0.718               | 0.937               | 1.104               | 0.7500-20 UNEF        |                     |
| 12         | 50J-12-(*)P▼-(**) | 0.829               | 0.905               | 1.123               | 1.291               | 0.9375-20 UNEF        |                     |
| 14         | 50J-14-(*)P▼-(**) | 0.898               | 0.968               | 1.188               | 1.391               | 1.0000-20 UNEF        |                     |
| 16         | 50J-16-(*)P▼-(**) | 1.025               | 1.093               | 1.312               | 1.516               | 1.1250-20 UN          |                     |
| 18         | 50J-18-(*)P▼-(**) | 1.131               | 1.217               | 1.438               | 1.641               | 1.2500-20 UN          |                     |
| 20         | 50J-20-(*)P▼-(**) | 1.256               | 1.342               | 1.562               | 1.766               | 1.3750-18 UNEF        | 0.148               |
| 22         | 50J-22-(*)P▼-(**) | 1.381               | 1.467               | 1.688               | 1.954               | 1.5000-20 UN          |                     |
| 24         | 50J-24-(*)P▼-(**) | 1.506               | 1.592               | 1.812               | 2.079               | 1.6250-18 UNEF        |                     |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

# MIL-DTL-83723 (SERIES III)



## SOLDER MOUNT 20K RECEPTACLES (REF. M83723/90))

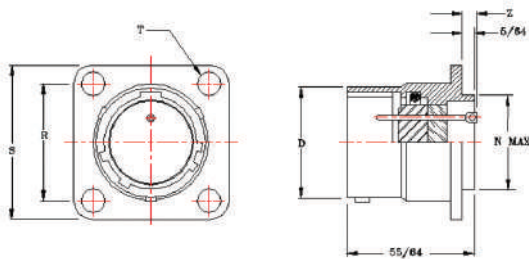


| CONTACT SIZE | Z+/- .30 |
|--------------|----------|
| 20           | 0.164    |
| 16           | 0.194    |
| 12           | 0.194    |

| SHELL SIZE | PART NUMBER       | A<br>THREAD<br>UNEF 2A | B<br>+.010<br>-.010 | N<br>+.000<br>-.006 |
|------------|-------------------|------------------------|---------------------|---------------------|
| 8          | 20K-8-(*)P▼-(**)  | 0.5625-24              | 0.713               | 0.500               |
| 10         | 20K-10-(*)P▼-(**) | 0.6875-24              | 0.840               | 0.562               |
| 12         | 20K-12-(*)P▼-(**) | 0.8750-20              | 1.045               | 0.750               |
| 14         | 20K-14-(*)P▼-(**) | 0.9375-20              | 1.090               | 0.812               |
| 16         | 20K-16-(*)P▼-(**) | 1.0625-18              | 1.210               | 0.937               |
| 18         | 20K-18-(*)P▼-(**) | 1.1875-18              | 1.340               | 1.062               |
| 20         | 20K-20-(*)P▼-(**) | 1.3125-15              | 1.475               | 1.187               |
| 22         | 20K-22-(*)P▼-(**) | 1.4375-18              | 1.590               | 1.312               |
| 24         | 20K-24-(*)P▼-(**) | 1.5625-18              | 1.725               | 1.437               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## BOX MOUNT 30K RECEPTACLES (REF. M83723/88)

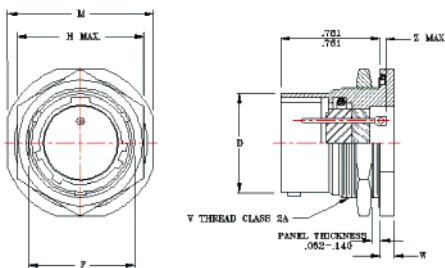


| CONTACT SIZE | Z+/- .30 |
|--------------|----------|
| 20           | 0.164    |
| 16           | 0.194    |
| 12           | 0.194    |

| SHELL SIZE | PART NUMBER       | A<br>THREAD<br>UNEF 2A | N<br>+.000<br>-.006 | R<br>+.005<br>-.005 | S<br>+.005<br>-.005 | T<br>+.000<br>-.009 |
|------------|-------------------|------------------------|---------------------|---------------------|---------------------|---------------------|
| 8          | 30K-8-(*)P▼-(**)  | 0.5625-24              | 0.500               | 0.594               | 0.812               | 0.125               |
| 10         | 30K-10-(*)P▼-(**) | 0.6875-24              | 0.562               | 0.719               | 0.937               |                     |
| 12         | 30K-12-(*)P▼-(**) | 0.8750-20              | 0.750               | 0.812               | 1.031               |                     |
| 14         | 30K-14-(*)P▼-(**) | 0.9375-20              | 0.812               | 0.906               | 1.125               |                     |
| 16         | 30K-16-(*)P▼-(**) | 1.0625-18              | 0.937               | 0.969               | 1.25                |                     |
| 18         | 30K-18-(*)P▼-(**) | 1.1875-18              | 1.062               | 1.062               | 1.343               |                     |
| 20         | 30K-20-(*)P▼-(**) | 1.3125-15              | 1.187               | 1.156               | 1.437               |                     |
| 22         | 30K-22-(*)P▼-(**) | 1.4375-18              | 1.312               | 1.250               | 1.562               |                     |
| 24         | 30K-24-(*)P▼-(**) | 1.5625-18              | 1.437               | 1.375               | 1.703               | 0.154               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## JAM NUT MOUNT 50K RECEPTACLES (REF. M83723/89)



| CONTACT SIZE | Z+/- .30   |         |
|--------------|------------|---------|
|              | SHELL SIZE |         |
|              | 8-20       | 22 & 24 |
| 20           | 0.150      | 0.139   |
| 16           | 0.180      | 0.169   |
| 12           | 0.180      | 0.169   |

| SHELL SIZE | PART NUMBER       | A<br>THREAD<br>UNEF 2A | F<br>+.0003<br>-.0003 | H<br>+.017<br>-.017 | L<br>MAX<br>REF | M<br>+.015<br>-.015 | V THREAD<br>CLASS 2 A |
|------------|-------------------|------------------------|-----------------------|---------------------|-----------------|---------------------|-----------------------|
| 8          | 50K-8-(*)P▼-(**)  | 0.5625-24              | 0.593                 | 0.812               | 0.918           | 0.964               | 0.6250-20 UN          |
| 10         | 50K-10-(*)P▼-(**) | 0.6875-24              | 0.718                 | 0.937               |                 | 1.088               | 0.7500-20 UNEF        |
| 12         | 50K-12-(*)P▼-(**) | 0.8750-20              | 0.905                 | 1.125               |                 | 1.275               | 0.9375-20 UNEF        |
| 14         | 50K-14-(*)P▼-(**) | 0.9375-20              | 0.968                 | 1.187               |                 | 1.375               | 1.0000-20 UNEF        |
| 16         | 50K-16-(*)P▼-(**) | 1.0625-18              | 1.093                 | 1.312               |                 | 1.500               | 1.1250-18 UNEF        |
| 18         | 50K-18-(*)P▼-(**) | 1.1875-18              | 1.217                 | 1.437               | 0.929           | 1.625               | 1.2500-18 UNEF        |
| 20         | 50K-20-(*)P▼-(**) | 1.3125-15              | 1.342                 | 1.562               |                 | 1.750               | 1.3750-18 UNEF        |
| 22         | 50K-22-(*)P▼-(**) | 1.4375-18              | 1.467                 | 1.687               |                 | 1.938               | 1.5000-18 UNEF        |
| 24         | 50K-24-(*)P▼-(**) | 1.5625-18              | 1.592                 | 1.812               |                 | 2.063               | 1.6250-18 UNEF        |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT  
INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## R & S SERIES

MIL-DTL-26482 hermetic connectors were developed for applications where a controlled atmosphere such as inert gasses, partial vacuums, or constant environments are needed. These receptacles are designed for use in aerospace, electronic, electrical power, and control circuits.

The “R” & “S” Series receptacles are manufactured to BoldX Industries standards and meet the intermateability requirements of MIL-DTL-26482 Series 1 and Series 2 respectively. They are hermetically sealed with a single compression glass seal around all contacts to prevent air leakage in excess of 1x10<sup>-6</sup> cc/sec of helium at one atmosphere.

Standard hermetic receptacles are supplied with either solder cup or eyelet type contact terminations. Contacts for other applications such as thermocouple or flex prints are also available. Standard “R” series receptacles are tin plated steel shells with gold plated nickel-iron alloy. Standard “S” series receptacles are tin plated steel shells with gold plated nickel-iron alloy contacts. Other materials and finishes can be supplied to meet specific application requirements. Series 1 and 2 are supplied with interfacial gaskets and peripheral seals. Series 2 are supplied with raised seal barriers around each contact. Series 1 can be supplied with O-rings.

## ELECTRICAL SERVICE DATA

The maximum current to be carried by the connector, based on contact size, is the same as permitted by the wire bundle. Maximum current ratings and corresponding voltage drops under test condition, fully assembled, are shown below.

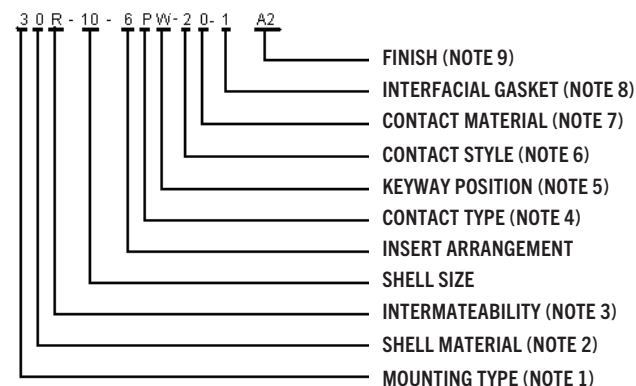
| CONTACT SIZE | TEST CURRENT (AMPS) | POTENTIAL DROP (MILLIVOLTS) |
|--------------|---------------------|-----------------------------|
| 20           | 5                   | 100                         |
| 16           | 10                  | 95                          |
| 12           | 17                  | 95                          |

## HIGH-POTENTIAL TEST VOLTAGE

Unmated connectors tested per method 3001 of MIL-STD-1344 shall have a maximum leakage of 2 milliamperes and show no evidence of electrical breakdown or flashover.

| SERVICE RATING | TEST VOLTAGE (RMS 60 CPS) |
|----------------|---------------------------|
| I              | 1500                      |
| II             | 2300                      |

## PART NUMBER EXPLANATION



## STANDARD MATERIALS AND FINISHES

### FERROUS ALLOY SHELLS

**Material:** Cold Rolled Steel per ASTM A108

**Finish:** R receptacles (series 1) fused tin over copper.

S receptacles (series 2)

100 microinches minimum fused tin per ASTM B545 over copper per AMS 2418 over nickel per AMS-QQ-N-290

### STAINLESS STEEL SHELLS

**Material:** Corrosion-resistant steel per SS304L per SAE AMS-QQ-S-763, type 303 or as specified

**Finish:** Passivated

### CONTACTS

**Material:** Nickel-iron alloy per MIL-I-23011, class 2

**Finish:** R receptacles (series 1)

50 microinches minimum gold per ASTM

B488 over nickel per AMS-QQ-N-290

S receptacles (series 2)

50 microinches minimum gold per ASTM B488 over nickel per AMS-QQ-N-290

### BAYONET PINS

**Material:** Corrosion-resistant steel per SAE AMS- type 303

### INSERTS

**Material:** Glass

### INTERFACIAL SEALS

**Material:** Fluorosilicone rubber

| SERIES 1      |                       |                        |
|---------------|-----------------------|------------------------|
| DESCRIPTION   | MILITARY DESIGNATION  | BOLDX DESIGNATION      |
| SOLDER MOUNT  | MS3113H*A*P           | 2*R-*P-20              |
|               | MS3113H*B*P           | 2*R-*P-10              |
|               | MS3113H*C*P           | 20R-*P-20              |
|               | MS3113H*Y*P           | 20R-*P-10              |
| JAM NUT MOUNT | MS3114H*A*P           | 5*R-*P-20              |
|               | MS3114H*B*P           | 5*R-*P-10              |
|               | MS3114H*C*P           | 50R-*P-20              |
|               | MS3114H*Y*P           | 50R-*P-10              |
| BOX MOUNT     | CLASS H NOT SPECIFIED | 30R-*P-20<br>30R-*P-10 |
| MATING PLUG   | MS3116                |                        |
| SERIES 2      |                       |                        |
| BOX MOUNT     | MS3440H*C*PN          | 30S-*PN-20             |
| SOLDER MOUNT  | MS3443H*C*PN          | 20S-*PN-20             |
| JAM NUT MOUNT | MS3449H*C*PN          | 50S-*PN-20             |
| MATING PLUG   | MS3476                |                        |

## NOTES:

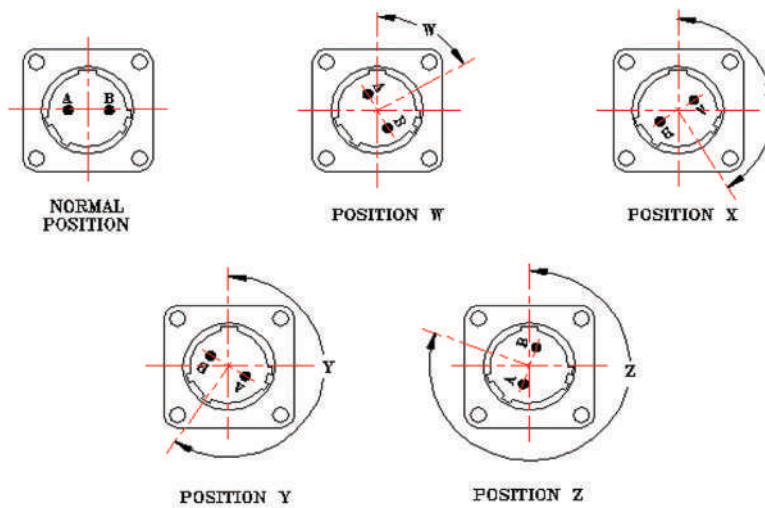
1. -- 2-- Circular flange solder mount  
3-- Square flange box mount  
5-- Jam nut mount
2. -- 0 FERROUS ALLOY PER ASTM A108  
1 CRES PER SAE AMS-QQ-S-764, TYPE 303  
2 CRES PER SAE AMS-QQ-S-763, TYPE 304  
3 CRES PER SAE AMS-QQ-S-763, TYPE 304L  
4 CRES PER SAE AMS-QQ-S-763, TYPE 316  
5 CRES PER SAE AMS-QQ-S-763, TYPE 316L  
6 CRES PER SAE AMS-QQ-S-763, TYPE 321  
7 CRES PER SAE AMS-QQ-S-763, TYPE 347
3. -- R-- MIL-DTL-26482, series I intermateability  
S-- MIL-DTL-26482, series II intermateability
4. -- P---Pin
5. -- Insert position indicator
6. -- 1--Eyelet  
2--Solder cup
7. -- 0--Nickel-iron alloy
8. -- Blank -- Fluorosilicone gaskets  
1- Silicone O-ring series I only
9. -- R series:  
M3- Fused tin over copper over nickel with gold on contacts  
M2- Gold contacts with shell passivated  
S series:  
M3- Fused tin over copper over nickel with gold on contacts  
M2- Gold contacts with shell passivated



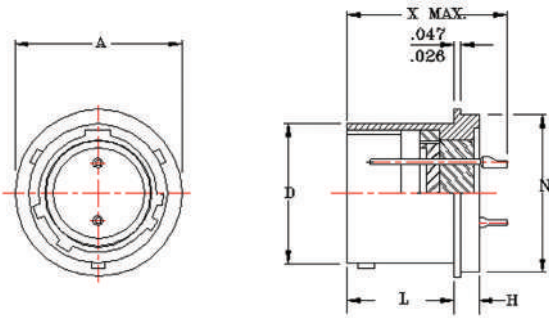
## INDEX OF INSERT ARRANGEMENTS MIL-STD-1669

| SHELL SIZE | INSERT ARRANGEMENT | TOTAL CONTACTS | CONTACT SIZE |    |    |   | SERVICE RATING | ALTERNATE INSERT POSITIONS (DEGREES) |     |     |     |
|------------|--------------------|----------------|--------------|----|----|---|----------------|--------------------------------------|-----|-----|-----|
|            |                    |                | 20           | 16 | 12 | 8 |                | W                                    | X   | Y   | Z   |
| 8          | 2                  | 2              | 2            |    |    |   | I              | 58                                   | 122 | -   | -   |
|            | 3                  | 3              | 3            |    |    |   | I              | 60                                   | 210 | -   | -   |
|            | 4                  | 4              | 4            |    |    |   | I              | 45                                   | -   | -   | -   |
|            | 33                 | 3              | 3            |    |    |   | I              | 90                                   | -   | -   | -   |
|            | 98                 | 3              | 3            |    |    |   | I              | -                                    | -   | -   | -   |
| 10         | 6                  | 6              | 6            |    |    |   | I              | 90                                   | -   | -   | -   |
|            | 98                 | 6              | 6            |    |    |   | I              | 90                                   | 180 | 240 | 270 |
| 12         | 3                  | 3              |              | 3  |    |   | II             | -                                    | -   | 180 | -   |
|            | 8                  | 8              | 8            |    |    |   | I              | 90                                   | 112 | 203 | 292 |
|            | 10                 | 10             | 10           |    |    |   | I              | 60                                   | 155 | 270 | 295 |
| 14         | 4                  | 4              |              |    | 4  |   | I              | 45                                   | -   | -   | -   |
|            | 5                  | 5              |              | 5  |    |   | II             | 40                                   | 92  | 184 | 273 |
|            | 12                 | 12             | 8            | 4  |    |   | I              | 43                                   | 90  | -   | -   |
|            | 15                 | 15             | 14           | 1  |    |   | I              | 17                                   | 110 | 155 | 234 |
|            | 18                 | 18             | 18           |    |    |   | I              | 15                                   | 90  | 180 | 270 |
|            | 19                 | 19             | 19           |    |    |   | I              | 30                                   | 165 | 315 | -   |
| 16         | 8                  | 8              |              | 8  |    |   | II             | 54                                   | 152 | 180 | 331 |
|            | 26                 | 26             | 26           |    |    |   | I              | 60                                   | -   | 275 | 338 |
| 18         | 8                  | 8              |              |    | 8  |   | I              | 180                                  | -   | -   | -   |
|            | 11                 | 11             |              | 11 |    |   | II             | 62                                   | 119 | 241 | 340 |
|            | 32                 | 32             | 32           |    |    |   | I              | 85                                   | 138 | 222 | 265 |
| 20         | 16                 | 16             |              | 16 |    |   | II             | 238                                  | 318 | 333 | 347 |
|            | 41                 | 41             | 41           |    |    |   | I              | 45                                   | 126 | 225 | -   |
| 22         | 21                 | 21             |              | 21 |    |   | II             | 16                                   | 135 | 175 | 349 |
|            | 55                 | 55             | 55           |    |    |   | I              | 30                                   | 142 | 226 | 314 |
| 24         | 61                 | 61             | 61           |    |    |   | I              | 90                                   | 180 | 270 | 324 |

## MASTER KEYWAY POSITIONS FRONT FACE OF PIN INSERT SHOWN



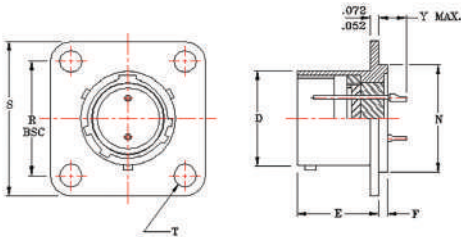
## SOLDER MOUNT 20R RECEPTACLES (REF. MS3113)



| SHELL SIZE | PART NUMBER       | A<br>+.015<br>-.015 | D<br>+.001<br>-.005 | H<br>+.010<br>-.010 | L<br>+.031<br>-.000 | N<br>+.001<br>-.005 | X<br>MAX |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------|
| 8          | 20R-8-(*)P▼-(**)  | 0.625               | 0.473               | 0.094               | 0.411               | 0.562               | 0.828    |
| 10         | 20R-10-(*)P▼-(**) | 0.750               | 0.590               |                     |                     | 0.672               |          |
| 12         | 20R-12-(*)P▼-(**) | 0.844               | 0.750               |                     |                     | 0.781               |          |
| 14         | 20R-14-(*)P▼-(**) | 0.968               | 0.875               |                     |                     | 0.906               |          |
| 16         | 20R-16-(*)P▼-(**) | 1.094               | 1.000               |                     |                     | 1.031               |          |
| 18         | 20R-18-(*)P▼-(**) | 1.218               | 1.125               |                     |                     | 1.156               |          |
| 20         | 20R-20-(*)P▼-(**) | 1.312               | 1.250               | 0.125               | 0.473               | 1.250               | 0.891    |
| 22         | 20R-22-(*)P▼-(**) | 1.438               | 1.375               |                     | 0.506               | 1.375               | 0.921    |
| 24         | 20R-24-(*)P▼-(**) | 1.563               | 1.500               |                     |                     | 1.500               |          |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## BOX MOUNT 30R RECEPTACLES (REF. MS3112)

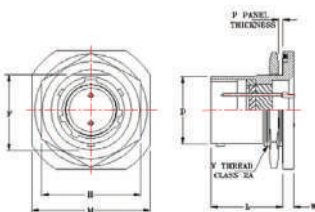


| CONTACT SIZE | Y MAX  |            |
|--------------|--------|------------|
|              | EYELET | SOLDER POT |
| 20           | 0.231  | 0.278      |
| 16           | 0.293  | 0.340      |
| 12           | 0.293  | 0.340      |

| SHELL SIZE | PART NUMBER       | D<br>+.001<br>-.005 | E<br>+.010<br>-.010 | F<br>+.010<br>-.010 | N<br>+.001<br>-.005 | R<br>BSC | S<br>+.010<br>-.010 | T<br>+.005<br>-.005 |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|----------|---------------------|---------------------|
| 8          | 30R-8-(*)P▼-(**)  | 0.473               | 0.500               | 0.047               | 0.562               | 0.594    | 0.812               | 0.120               |
| 10         | 30R-10-(*)P▼-(**) | 0.590               |                     |                     | 0.672               | 0.719    | 0.938               |                     |
| 12         | 30R-12-(*)P▼-(**) | 0.750               |                     |                     | 0.781               | 0.812    | 1.031               |                     |
| 14         | 30R-14-(*)P▼-(**) | 0.875               |                     |                     | 0.906               | 0.906    | 1.125               |                     |
| 16         | 30R-16-(*)P▼-(**) | 1.000               |                     |                     | 1.031               | 0.969    | 1.219               |                     |
| 18         | 30R-18-(*)P▼-(**) | 1.125               |                     |                     | 1.156               | 1.062    | 1.312               |                     |
| 20         | 30R-20-(*)P▼-(**) | 1.250               | 0.562               | 0.078               | 1.250               | 1.156    | 1.438               | 0.147               |
| 22         | 30R-22-(*)P▼-(**) | 1.375               |                     |                     | 1.375               | 1.250    | 1.562               |                     |
| 24         | 30R-24-(*)P▼-(**) | 1.500               |                     |                     | 1.500               | 1.375    | 1.688               |                     |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

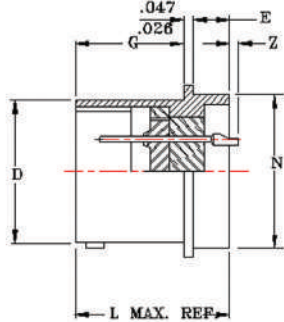
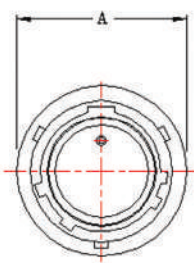
## JAM NUT MOUNT 50R RECEPTACLES (REF. MS3114)



| SHELL SIZE | PART NUMBER       | D<br>+.001<br>-.005 | F<br>+.000<br>-.010 | H<br>+.016<br>-.016 | L<br>+.031<br>-.000 | M<br>+.010<br>-.010 | P     |       | W<br>+.015<br>-.015 | V<br>THREAD<br>UNE2 2A |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------|-------|---------------------|------------------------|
|            |                   |                     |                     |                     |                     |                     | MIN   | MAX   |                     |                        |
| 8          | 50R-8-(*)P▼-(**)  | 0.472               | 0.530               | 0.750               | 0.691               | 0.938               | 0.062 | 0.125 | 0.117               | 0.5625-24              |
| 10         | 50R-10-(*)P▼-(**) | 0.590               | 0.655               | 0.875               |                     | 1.062               |       |       |                     | 0.6875-24              |
| 12         | 50R-12-(*)P▼-(**) | 0.750               | 0.818               | 1.062               |                     | 1.250               |       |       |                     | 0.8750-20              |
| 14         | 50R-14-(*)P▼-(**) | 0.875               | 0.942               | 1.188               |                     | 1.375               |       |       |                     | 1.000-20               |
| 16         | 50R-16-(*)P▼-(**) | 1.000               | 1.066               | 1.312               |                     | 1.500               |       |       |                     | 1.1250-18              |
| 18         | 50R-18-(*)P▼-(**) | 1.125               | 1.191               | 1.438               |                     | 1.625               |       |       |                     | 1.2500-18              |
| 20         | 50R-20-(*)P▼-(**) | 1.250               | 1.316               | 1.562               | 0.879               | 1.812               | 0.250 | 0.148 |                     | 1.3750-18              |
| 22         | 50R-22-(*)P▼-(**) | 1.375               | 1.441               | 1.688               |                     | 1.938               |       |       |                     | 1.5000-18              |
| 24         | 50R-24-(*)P▼-(**) | 1.500               | 1.566               | 1.812               |                     | 2.062               |       |       |                     | 1.6250-18              |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## SOLDER MOUNT 20S RECEPTACLES (REF MS3443)

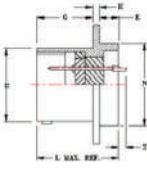
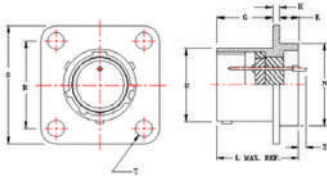


| CONTACT SIZE | Z+/- .30   |         |
|--------------|------------|---------|
|              | SHELL SIZE |         |
|              | 8-20       | 22 & 24 |
| 20           | 0.148      | 0.116   |
| 16           | 0.218      | 0.186   |
| 12           | 0.218      | 0.186   |

| SHELL SIZE | PART NUMBER       | A<br>+.010<br>-.010 | D<br>+.001<br>-.005 | E<br>+.020<br>-.020 | G<br>+.010<br>-.010 | L<br>MAX<br>REF | N<br>+.001<br>-.005 |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|-----------------|---------------------|
| 8          | 20S-8-(*)P▼-(**)  | 0.625               | 0.473               | 0.136               | 0.588               | 0.801           | 0.562               |
| 10         | 20S-10-(*)P▼-(**) | 0.750               | 0.590               |                     |                     |                 | 0.672               |
| 12         | 20S-12-(*)P▼-(**) | 0.844               | 0.750               |                     |                     |                 | 0.781               |
| 14         | 20S-14-(*)P▼-(**) | 0.969               | 0.875               |                     |                     |                 | 0.906               |
| 16         | 20S-16-(*)P▼-(**) | 1.094               | 1.000               |                     |                     |                 | 1.031               |
| 18         | 20S-18-(*)P▼-(**) | 1.218               | 1.125               |                     |                     |                 | 1.156               |
| 20         | 20S-20-(*)P▼-(**) | 1.312               | 1.250               | 0.168               | 0.650               | 0.863           | 1.250               |
| 22         | 20S-22-(*)P▼-(**) | 1.438               | 1.375               |                     |                     |                 | 1.375               |
| 24         | 20S-24-(*)P▼-(**) | 1.564               | 1.500               |                     |                     |                 | 1.500               |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## BOX MOUNT 30S RECEPTACLES (REF MS3440)

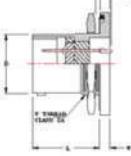
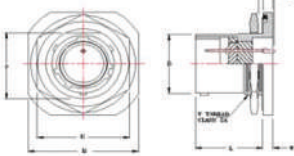


| CONTACT SIZE | Z+/- .30   |         |
|--------------|------------|---------|
|              | SHELL SIZE |         |
|              | 8-20       | 22 & 24 |
| 20           | 0.148      | 0.116   |
| 16           | 0.218      | 0.186   |
| 12           | 0.218      | 0.186   |

| SHELL<br>SIZE | PART NUMBER       | D<br>+.001<br>-.005 | E<br>+.010<br>-.010 | G<br>+.010<br>-.010 | H<br>+.016<br>-.016 | L<br>MAX<br>REF | N<br>+.001<br>-.005 | R<br>+.005<br>-.005 | S<br>+.015<br>-.015 | T<br>+.005<br>-.005 |  |  |
|---------------|-------------------|---------------------|---------------------|---------------------|---------------------|-----------------|---------------------|---------------------|---------------------|---------------------|--|--|
| 8             | 30S-8-(*)P▼-(**)  | 0.473               | 0.115               | 0.588               | 0.062               | 0.801           | 0.562               | 0.594               | 0.812               | 0.120               |  |  |
| 10            | 30S-10-(*)P▼-(**) | 0.590               |                     |                     |                     |                 | 0.672               | 0.719               | 0.937               |                     |  |  |
| 12            | 30S-12-(*)P▼-(**) | 0.750               |                     |                     |                     |                 | 0.781               | 0.812               | 1.031               |                     |  |  |
| 14            | 30S-14-(*)P▼-(**) | 0.875               |                     |                     |                     |                 | 0.906               | 0.906               | 1.125               |                     |  |  |
| 16            | 30S-16-(*)P▼-(**) | 1.000               |                     |                     |                     |                 | 1.031               | 0.968               | 1.218               |                     |  |  |
| 18            | 30S-18-(*)P▼-(**) | 1.125               |                     |                     |                     |                 | 1.156               | 1.062               | 1.312               |                     |  |  |
| 20            | 30S-20-(*)P▼-(**) | 1.250               | 0.083               | 0.650               | 0.094               | 0.863           | 1.250               | 1.156               | 1.437               | 0.147               |  |  |
| 22            | 30S-22-(*)P▼-(**) | 1.375               | 0.115               |                     |                     | 0.895           | 1.375               | 1.250               | 1.562               |                     |  |  |
| 24            | 30S-24-(*)P▼-(**) | 1.500               |                     |                     |                     |                 | 1.500               | 1.375               | 1.687               |                     |  |  |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## JAM NUT MOUNT 50S RECEPTACLES (REF MS3449)



| CONTACT SIZE | Z+/- .30   |       |       |
|--------------|------------|-------|-------|
|              | SHELL SIZE |       |       |
|              | 8-18       | 20-22 | 24    |
| 20           | 0.104      | 0.069 | 0.039 |
| 16           | 0.174      | 0.139 | 0.109 |
| 12           | 0.174      | 0.139 | 0.109 |

| SHELL SIZE | PART NUMBER       | D<br>+.001<br>-.005 | F<br>+.005<br>-.005 | H<br>+.015<br>-.015 | L<br>+.008<br>-.008 | M<br>+.015<br>-.015 | P     |       | V<br>THREAD<br>UNEF 2A | W<br>+.008<br>-.008 |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------|-------|------------------------|---------------------|
|            |                   |                     |                     |                     |                     |                     | MIN   | MAX   |                        |                     |
| 8          | 50S-8-(*)P▼-(**)  | 0.473               | 0.525               | 0.750               | 0.699               | 0.938               | 0.062 | 0.187 | 0.5625-24              | 0.105               |
| 10         | 50S-10-(*)P▼-(**) | 0.590               | 0.650               | 0.875               |                     | 1.062               |       |       | 0.6875-24              |                     |
| 12         | 50S-12-(*)P▼-(**) | 0.750               | 0.813               | 1.062               |                     | 1.250               |       |       | 0.8750-20              |                     |
| 14         | 50S-14-(*)P▼-(**) | 0.875               | 0.937               | 1.188               |                     | 1.375               |       |       | 1.0000-20              |                     |
| 16         | 50S-16-(*)P▼-(**) | 1.000               | 1.061               | 1.312               |                     | 1.500               |       |       | 1.1250-18              |                     |
| 18         | 50S-18-(*)P▼-(**) | 1.125               | 1.186               | 1.438               |                     | 1.625               |       |       | 1.2500-18              |                     |
| 20         | 50S-20-(*)P▼-(**) | 1.250               | 1.311               | 1.562               | 0.764               | 1.812               | 0.250 | 0.250 | 1.3750-18              | 0.138               |
| 22         | 50S-22-(*)P▼-(**) | 1.375               | 1.436               | 1.688               |                     | 1.938               |       |       | 1.5000-18              |                     |
| 24         | 50S-24-(*)P▼-(**) | 1.500               | 1.561               | 1.812               |                     | 2.062               |       |       | 1.6250-18              |                     |

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR / (\*) REPLACE WITH PIN ARRANGEMENT INDICATOR NOT REQUIRED FOR NORMAL POSITION / (\*\*) REPLACE WITH CONTACT STYLE AND MATERIAL

## HERMETIC CONNECTOR PRODUCT GUIDE AND CROSS REFERENCE

| MIL-SPEC     | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|--------------|--------------|------------|-------------|
| MIL-DTL-5015 | A Series     | COMMERCIAL | 2-5         |

| MILITARY PART NUMBER | BOLDX      | AMPHENOL AEROSPACE | CONNECTOR INDUSTRIES | DETORONICS | ELECTRONIC SEALS | GLASSEAL | HERMETIC SEAL CORP. | ITT CANNON | SEALTRON   |
|----------------------|------------|--------------------|----------------------|------------|------------------|----------|---------------------|------------|------------|
| MS3142HS*C*          | 3*A-.*P-20 | -                  | A31*.-20             | -          | S31H*-214        | -        | SSR2102*.           | -          | A6003*.-SP |
| MS3142HS*Y*          | 3*A-.*P-10 | 172-3*3*           | A31*.-10             | -          | S31H*-204        | -        | SSR2101*.           | -          | A6003*.-FP |
| MS3142HT*C*          | 30A*.-P-20 | 172-3*2*           | A30*.-20             | DS02H*112  | 31H*-0114        | GSP2*SF2 | SR2102*.            | GS02*.-112 | 6003*.-SP  |
| MS3142HT*Y*          | 30A*.-P-10 | -                  | A30*.-10             | DS02H*111  | 31H*-0014        | GSP2*SF1 | SR2101*.            | GS02*.-111 | 6003*.-FP  |
| MS3143HS*C*          | 2*A-.*P20  | -                  | A21*.-20             | -          | S33H*-214        | -        | SSR2152*.           | -          | A6002*.-SP |
| MS3143HS*Y*          | 2*A-.*P10  | 172-2*3*           | A21*.-10             | -          | S334*.-204       | -        | SSR2151*.           | -          | A6002*.-FP |
| MS3143HT*C*          | 20A*.-P20  | 172-2*2*           | A20*.-20             | DS02H*252  | 33H*-0114        | GSP2*RF2 | SR2052*.            | GS02*.-252 | 6002*.-SP  |
| MS3143HT*Y*          | 20A*.-P10  | -                  | A20*.-10             | DS02H*251  | 33H*-0014        | GSP2*RF1 | SR2051*.            | GS02*.-251 | 6002*.-FP  |

| MIL-SPEC               | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|------------------------|--------------|------------|-------------|
| MIL-DTL-38999 SERIES I | B SERIES     | QUALIFIED  | 6-9         |

| MILITARY PART NUMBER | BOLDX       | AMPHENOL/ BENDIX | AMPHENOL/ MATRIX | DEUTSCH | GLASSEAL | HERMETIC SEAL | HI-REL      | ITT CANNON | SEALTRON  |
|----------------------|-------------|------------------|------------------|---------|----------|---------------|-------------|------------|-----------|
| MS27470Y*D*P         | 50B*.-*P-20 | LJT07Y*          | MB914Y*D*        | DJT14H* | 9705H*D* | S922002*      | 74000Y*.-D* | KJL7Y*D*   | A9705*134 |
| MS27470Y*D*X         | 50B*.-*P-10 | LJT07Y*          | MB914Y*D*        | DJT14H* | 9705H*D* | S922002*      | 74000Y*.-D* | KJL7Y*D*   | A9705*134 |
| MS27470Y*E*P         | 5*B*.-*P-20 | LJTS07Y*         | MB914Y*E*        | -       | 9705H*E* | SS922002*     | 74000Y*E*   | KJ7LY*E*   | A9705*136 |
| MS27470Y*E*X         | 5*B*.-*P-10 | LJTS07Y*         | MB914Y*E*        | -       | 9705H*E* | SS922002*     | 74000Y*E*   | KJL7Y*E*   | A9705*136 |
| MS27471Y*D*P         | 20B*.-*P-20 | LJTIY*           | MB915Y*D*        | DJT11H* | -        | S900002*      | 75000Y*.-D* | KJL1Y*D*   | A9702*134 |
| MS27471Y*D*X         | 20B*.-*P-10 | LJTIY*           | MB915Y*D*        | DJT11H* | -        | S900002*      | 75000Y*.-D* | KJL1Y*D*   | A9702*134 |
| MS27471Y*E*P         | 2*B*.-*P-20 | LJTSIY*          | MB915Y*E*        | -       | -        | SS900002*     | 75000Y*E*   | KJL1Y*E*   | A9702*136 |
| MS27471Y*E*X         | 2*B*.-*P-10 | LJTSIY*          | MB915Y*E*        | -       | -        | SS900002*     | 75000Y*E*   | KJL1Y*E*   | A9702*136 |

| MIL-SPEC                | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|-------------------------|--------------|------------|-------------|
| MIL-DTL-38999 SERIES II | C SERIES     | QUALIFIED  | 10-13       |

| MILITARY PART NUMBER | BOLDX     | AMPHENOL/ BENDIX | DETORONICS | GLASSEAL | HERMETIC SEAL | HI-REL      | ITT CANNON | SEALTRON  |
|----------------------|-----------|------------------|------------|----------|---------------|-------------|------------|-----------|
| MS27476Y*D           | 50C*.-*P* | JT02Y*           | DJT02Y*    | -        | S91002*       | 5300Y*.-D*  | KJ2Y*D*    | M9813*134 |
| MS27476Y*E           | 5*C*.-*P* | JTS02Y*          | -          | -        | SS91002*      | 53000Y*.-E* | KJ2Y*E*    | M9813*136 |
| MS27477Y*D           | 20C*.-*P* | JT07Y*           | DJT07Y*    | 9805H*D* | S925002*      | 54000Y*.-D* | KJ7Y*D*    | A9805*134 |
| MS27477Y*E           | 2*C*.-*P* | JTS07Y*          | -          | 9805H*E* | SS925002*     | 54000Y*.-E* | KJ7Y*E*    | A9805*136 |
| MS27478Y*D           | 30C*.-*P* | JT1Y*            | DJT1Y*     | -        | S900002*      | 52000Y*.-D* | KJ17*D*    | M9802*134 |
| MS27478Y*E           | 3*C*.-*P* | JTS1Y*           | -          | -        | SS900002*     | 52000Y*.-E* | KJ1Y*E*    | M9802*136 |

| MIL-SPEC                 | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|--------------------------|--------------|------------|-------------|
| MIL-DTL-38999 SERIES III | D SERIES     | QUALIFIED  | 14-17       |

| MILITARY PART NUMBER | BOLDX             | AMPHENOL/ BENDIX | AMPHENOL/ PYLE-NATIONAL | CONNECTOR INDUSTRIES | DEUTSCH | HERMETIC SEAL | HI-REL  | ITT CANNON | SEALTRON  | TEC     |
|----------------------|-------------------|------------------|-------------------------|----------------------|---------|---------------|---------|------------|-----------|---------|
| D38999/21Y*          | 3*D*.-*PN-20*.-M2 | TVPS02Y*         | T3Y-17H*                | P31*.-0P             | DTS20Y* | HR-SS-910002* | 85000Y* | KJA2Y*K*   | A9903*146 | VTT02Y* |
| D38999/21N*          | 3*D*.-*PN-20*.-M8 | TVPS02YN*        | T3N-17H*                | P31*.-E8             | DTS20N* | HR-SSN-91002* | 85000N* | KJA2Y*N*   | A9903*136 | -       |
| D38999/23Y*          | 5*D*.-*PN-20*.-M2 | TVS07Y*          | T3Y-19H*                | P51*.-0P             | -       | HR-SS-92200*  | 86000Y* | KJA7Y*K*   | A9905*146 | VTT07Y* |
| D38999/23N*          | 5*D*.-*PN-20*.-M8 | TVS07YN*         | T3N-19H*                | P51*.-E8             | -       | HR-SSN-92200* | 8600N*  | KJA7Y*N*   | A9905*136 | -       |
| D38999/25Y*          | 2*D*.-*PN-20*.-M2 | TVSIY*           | T3Y-14H*                | P21*.-09             | -       | HR-SS-90000*  | 84000Y* | KJA1Y*K*   | A9902*146 | VTT1Y*  |
| D38999/25N*          | 2*D*.-*PN-20*.-M8 | YVSIYN*          | T3N-14H*                | P21*.-E8             | -       | HR*SSN-90000* | 84000N* | KJA1Y*N*   | A9902*136 | -       |
| D38999/27Y*          | 6*D*.-*PN-20*.-M2 | TVSHIY*          | T3Y-15H*                | P63*.-0P             | -       | HR-SS-90540*  | 87000Y* | KJA5Y*K*   | B9912*146 | -       |
| D38999/27N*          | 6*D*.-*PN-20*.-M8 | TVSHIYN*         | T3N-15H*                | P63-E8               | -       | HR-SSN-90540* | 87000N* | KJA5Y*N*   | B9912*136 | -       |

| MIL-SPEC      | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|---------------|--------------|------------|-------------|
| MIL-DTL-26500 | G SERIES     | QUALIFIED  | 18-20       |

| MILITARY PART NUMBER | BOLDX        | HERMETIC SEAL | AMPHENOL/ PYLE-NATIONAL |
|----------------------|--------------|---------------|-------------------------|
| MS24265H*B*CN        | 50G*.-*PN-20 | HR-82000*.-B* | -                       |
| MS24265H*B*EN        | 50G*.-*PN-10 | HR-8200*.-B*  | -                       |
| MS27034H*B*CN        | 20G*.-*PN-20 | HR-80000*.-B* | ZZB-HC-14*              |
| MS27034H*B*EN        | 20G*.-*PN-10 | HR-80000*.-B* | ZZB-HC-14*              |

## HERMETIC CONNECTOR PRODUCT GUIDE AND CROSS REFERENCE

| MIL-SPEC | BOLDX SERIES  | QPL STATUS | PAGE NUMBER |
|----------|---------------|------------|-------------|
| H SERIES | MIL-DTL-26500 | QUALIFIED  | 18-21       |

| MILITARY PART NUMBER | BOLDX      | SEALTRON    | DETORONICS | GLASSEAL   | HERMETIC SEAL CORP. | CONNECTOR INDUSTRIES |
|----------------------|------------|-------------|------------|------------|---------------------|----------------------|
| MS24265H*T*CN        | 50H-*PN-20 | 8505*SPM121 | -          | 507H*T*PC* | 802102*T*P          | F50*20               |
| MS24265H*T*EN        | 50H-*PN-10 | 8505*FPM121 | -          | 507H*T*PY* | 802101*T*P          | F50*10               |
| MS27034H*T*CN        | 20H-*PN-20 | 8502*SPM121 | -          | 501H*T*PC* | 800002*T*P          | F20*20               |
| MS27034H*T*EN        | 20H-*PN-10 | 8502*FPM121 | DX1H*T*    | 501H*T*PY* | 800001*T*P          | F20*10               |

| MIL-SPEC                 | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|--------------------------|--------------|------------|-------------|
| MIL-DTL-83723 SERIES III | J / K SERIES | QUALIFIED  | 22-24       |

| MILITARY PART NUMBER | BOLDX      | ANPHENOL/ PLYE-NATIONAL | CONNECTOR INDUSTRIES | DEUTSCH   | HERMETIC SEAL   | HI-REL       | SEALTRON    |
|----------------------|------------|-------------------------|----------------------|-----------|-----------------|--------------|-------------|
| M83723/79H**N        | 30J-*PN-20 | -                       | M30*20               | DL60H*    | HR-810792*B*P   | 70000H-*B*   | 6603*SPM134 |
| M83723/79Y**N        | 3*J-*PN-20 | -                       | M31*20               | -         | HR-SS810792*B*P | 70000Y-*B*   | 6603*SPM136 |
| M83723/80H**N        | 20J-*PN-20 | -                       | M20*20               | DL61H*    | HR-800802*B*P   | 69000H-*B*   | 6602*SPM134 |
| M83723/80Y**N        | 2*J-*PN-20 | -                       | M21*20               | -         | HR-SS800802*B*P | 69000Y-*B*   | 6602*SPM136 |
| M83723/81H**N        | 50J-*PN-20 | -                       | M50*20               | DL64H*    | HR-820812*B*P   | -            | 6605*SPM134 |
| M83723/81Y**N        | 5*J-*PN-20 | -                       | M51*20               | -         | HR-SS820812*B*P | -            | 6605*SPM136 |
| M83723/88H**N        | 30K-*PN-20 | BFH17*P1B               | L30*20               | DBC30H*   | HR-810882*T*P   | 70000H-*T*   | 6503*SPM134 |
| M83723/88Y**N        | 3*K-*PN-20 | BFH17*P1D               | L31*20               | -         | HR-22810882*T*P | 70000Y-*T*   | 6503*SPM136 |
| M83723/89H**N        | 50K-*PN-20 | BFH19*P1B               | L50*20               | DBC34H*   | HR-820892*T*P   | 71000H-*T*   | 6505*SPM134 |
| M83723/89Y**N        | 5*K-*PN-20 | BFH19*P1D               | L51*20               | -         | HR-SS820892*T*P | 71000Y-*T*   | 6505*SPM136 |
| M83723/90H**N        | 20K-*PN-20 | BFH148P1B               | L20*20               | DBC33H*   | HR-805902*T*P   | 69000H-*T*   | 6502*SPM134 |
| M83723/90Y**N        | 2*K-*PN-20 | BFH14*P1D               | L21*20               | -         | HR-SS805902*T*P | 69000Y-*T*   | 6502*SPM136 |
| M83723/93H**N        | 20J-*PN-40 | -                       | M20*40               | DL61H*830 | HR-800934*B*P   | 69000H-*B*C* | 6612*SPM136 |
| M83723/93Y**N        | 2*J-*PN-40 | -                       | M21*40               | -         | HR-SS800934*B*P | 69000Y-*B*C* | 6612*SPM136 |
| M83723/94H**N        | 50J-*PN-80 | -                       | M50-40               | DL64H*829 | HR-820945*B*P   | 71000H-*B*C* | 6615*SPM134 |
| M83723/94Y**N        | 5*J-*PN-80 | -                       | M51*50               | -         | HR-AA820945*B*P | 71000Y-*B*C* | 6615*SPM136 |

| MIL-SPEC               | BOLDX SERIES | QPL STATUS | PAGE NUMBER |
|------------------------|--------------|------------|-------------|
| MIL-DTL-26482 SERIES 1 | R SERIES     | COMMERCIAL | 26-28       |

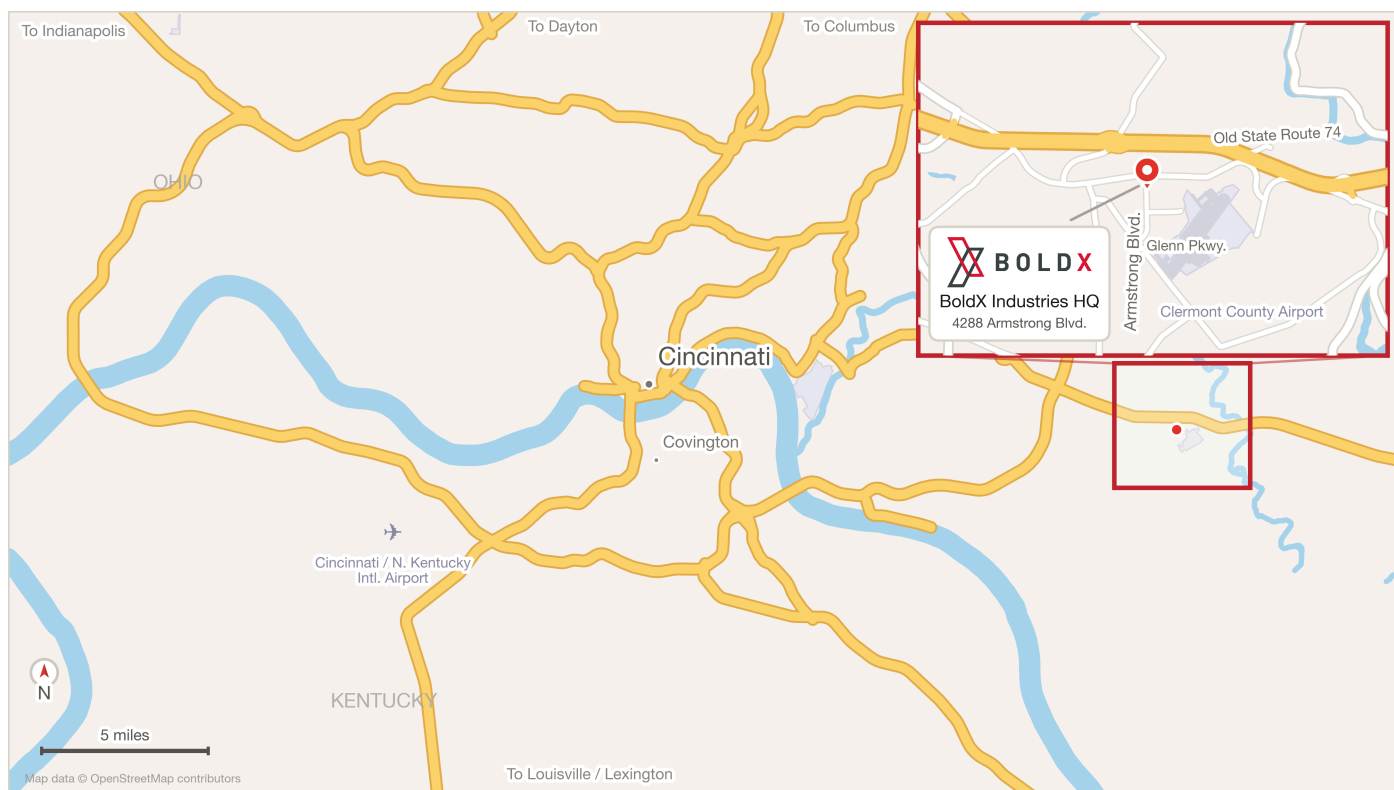
| MILITARY PART NUMBER | BOLDX     | AMPHENOL/ BENDIX | CONNECTOR INDUSTRIES | DETORONICS | DEUTSCH | GLASSEAL | HERMETIC SEAL CORP. | ITT CANNON | SEALTRON     |
|----------------------|-----------|------------------|----------------------|------------|---------|----------|---------------------|------------|--------------|
| MS3113H*A*           | 2*R-*P-20 | -                | C21-**20             | -          | -       | GB1H-*A* | HR-SS7002-*         | KPT1H-*A*  | 8312*SP-M136 |
| MS3113H*B*           | 2*R-*P-10 | PTIY-*           | C21-**10             | -          | -       | GB1H-*B* | HR-SS7001-*         | KPT1H-*B*  | 8312*FP-M136 |
| MS3113H*C*           | 20R-*P-20 | PTIY-*           | C20-**20             | DT1H-*     | 22628*  | GB1H-*C* | HR-S7002-*          | KPT1H-*C*  | 8312*SP-M134 |
| MS3113H*Y*           | 20R-*P-10 | -                | C20-**10             | -          | 22628*  | GB1H-*Y* | HRS7001-*           | KPT1H-*Y*  | 8312*FP-M134 |
| MS3114H*A*           | 5*R-*P-20 | -                | C51-**20             | -          | -       | GB7H-*A* | HR-SS7201-*         | KPT07H-*A* | 8315*SP-M136 |
| MS3114H*B*           | 5*R-*P-10 | PT07Y-*          | C51-**10             | -          | -       | GB7H-*B* | HR-SS7201-*         | KPT07H-*B* | 8315*FP-M136 |
| MS3114H*C*           | 50R-*P-20 | PT07Y-*          | C50-**20             | DT07H-*    | 22630*  | GB7H-*C* | HR-S7202-*          | KPT07H-*C* | 8315*SP-M134 |
| MS3114H*Y*           | 50R-*P-10 | -                | C50-**10             | -          | 22630*  | GB7H-*Y* | HR-S7210-*          | KPT07H-*Y* | 8315*FP-M134 |

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| MIL-DTL-26482 SERIES 2 | S SERIES     | COMMERCIAL | 26-29       |

| MILITARY PART NUMBER | BOLDX      | MATRIX | CONNECTOR INDUSTRIES | DEUTSCH | FCI/SOURIAU | GLASSEAL | HERMETIC SEAL  | SEALTRON     |
|----------------------|------------|--------|----------------------|---------|-------------|----------|----------------|--------------|
| MS3440H*C*PN         | 30S-*PN-20 | MB10*  | K30-*20              | DBC50H* | 8526-2H*    | 440H*    | HR-S9A-7102-*  | 6313*SP-M134 |
| MS3443H*C*PN         | 20S-*PN-20 | MB15*  | K20-*20              | DBC53H* | 8526*1H*    | 443H*    | HR-S11A*7002-* | 6312*SP-M134 |
| MS3449H*C*PN         | 50S-*PN-20 | MB14*  | K50-*20              | DBC54H* | 8526-7H*    | 449H*    | HR-S12A-7202-* | 6315*SP-M134 |







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