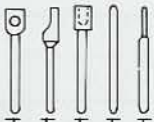
# MIL-C-26500 HSC SERIES 800000

## NUMBERING SYSTEM

S 8 0000 1 – 12 T – 3 P 6 – * – *

- STD. PLATING, SHELL-FUSED TIN, CONTACTS-GOLD; FOR STNL'S STL SHELL-PASSIVATE
- SPECIAL MODIFICATIONS
- ALTERNATE INSERT POSITION (NO NUMBER FOR NORMAL)
- CONTACT DESIGNATOR P-PIN, S-SOCKET
- INSERT ARRANGEMENT
- COUPLING T-THREADED, B-BAYONET PINS
- SHELL SIZE
- CONTACT TERMINATION:
  - 1-FLATTEN & PIERCE
  - 2-STD SOLDER POT
  - 3-SHORT SOLDER POT
  - 4-STRAIGHT
  - 5-TURNED DOWN
- SHELL STYLE
- SERIES NO.
- MATERIAL:
  - S-COLD ROLL STEEL
  - SS-STAINLESS STEEL
  - X-INCONEL
  - M-MONEL
  - OR AS SPECIFIED



ALL CONNECTOR SIZES SHOWN ARE COMPLETELY DESIGNED.
MOST STANDARD INSERT ARRANGEMENTS AND
INTERFACIAL SEALS ARE TOOLED.
PLEASE CONSULT FACTORY FOR FURTHER DETAILS.



Hermetic Seal Corporation SERIES 800000 Hermetically sealed Miniature Circular Connectors are manufactured and tested to the requirements of Mil-C-26500.

These connectors are supplied in both threaded and bayonet type coupling. There are three standard types of mounting flanges, weld or solder, square flange and jam nut. Special types of flanges and several types of materials are also available.

This connector series is used for electrical control and power circuits and is designed to meet the special environmental requirements needed for advanced aircraft, rockets, missiles and space vehicles.

## GENERAL SPECIFICATIONS

**INSERT RETENTION**
INSERT WILL WITHSTAND 5,000 P.S.I. WITHOUT DAMAGE.

**AIR LEAKAGE** (HERMETICITY)
LEAKAGE RATE LESS THAN .01 MICRON PER CUBIC FOOT PER HOUR ($1 \times 10^{-7}$ cc/sec) AT 15 P.S.I.

**TEMPERATURE LIFE**
CONNECTOR WILL PERFORM SATISFACTORILY AFTER EXPOSURE TO 200°C (392°F) FOR 1,000 HRS.

**INSULATION RESISTANCE**
GREATER THAN 5,000 MEGOHMS/500VDC, 25°C PER MIL-STD-202, METHOD 302.

**DIELECTRIC WITHSTANDING VOLTAGE**
CONNECTORS SHOW NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT VOLTAGES SHOWN IN ACCORDANCE WITH MIL-STD-202, METHOD 301.

| Altitude Feet | UNMATED | | MATED |
|---|---|---|---|
| | Style S | Style P | |
| Sea Level | 1500 | 1500 | 1500 |
| 10,000 | 1250 | 1250 | 1250 |
| 30,000 | 750 | 700 | 1000 |
| 50,000 | 500 | 450 | 1000 |
| 70,000 | 350 | 275 | 1000 |
| 90,000 | 250 | 200 | 1000 |
| 110,000 | 250 | 200 | 1000 |

**MOISTURE RESISTANCE**
MAINTAINS INSULATION RESISTANCE OF 1,000 MEGOHMS OR GREATER AT 100VDC.

**THERMAL SHOCK**
NO EVIDENCE OF DAMAGE DETRIMENTAL TO OPERATION OF CONNECTOR AFTER TESTING AT -65°C (-85°F) TO +260°C (+500°F).

**CORROSION**
CONNECTORS WILL MEET SALT SPRAY TEST PER MIL-STD-202, METHOD 101.

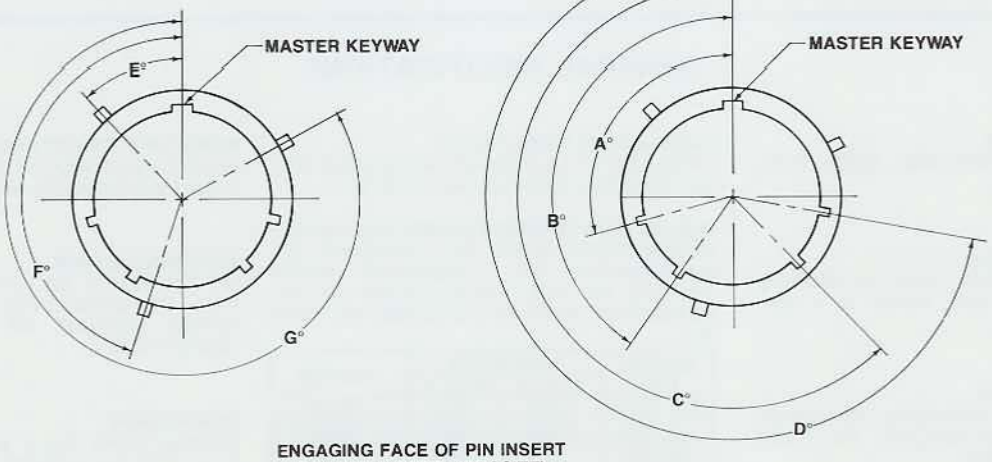
HERMETIC SEAL CORPORATION
4232 TEMPLE CITY BOULEVARD, ROSEMEAD, CALIFORNIA 91770

## NOTE: SEE PAGE 80-2 FOR INSERT ARRANGEMENTS

## ALTERNATE SHELL KEYING POSITIONS

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

| ALTERNATE BAYONET PIN POSITIONS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POSITION | SIZE 8 | | | SIZE 10 | | | SIZE 12 THRU 24 | | |
| | E° | F° | G° | E° | F° | G° | E° | F° | G° |
| NORMAL | 60 | 180 | 300 | 60 | 180 | 300 | 50 | 170 | 290 |
| 6 | 46 | 166 | 286 | 46 | 166 | 286 | | | |
| 7 | 46 | 166 | 286 | 46 | 166 | 286 | | | |
| 8 | 60 | 180 | 300 | 60 | 180 | 300 | | | |
| 9 | 89 | 209 | 329 | 89 | 209 | 329 | | | |
| 10 | — | — | — | 60 | 180 | 300 | 50 | 170 | 290 |




ENGAGING FACE OF PIN INSERT
(SOCKET INSERT OPPOSITE).

INSERT ARRANGEMENT
DOES NOT ROTATE

# MIL-C-26500 HSC SERIES 800000

## REAR FACE OF PIN INSERT SHOWN



**8-2**
2 SIZE 20



**8-3**
3 SIZE 20



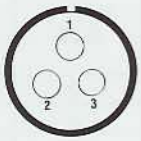
**10-2**
2 SIZE 20



**10-5**
5 SIZE 20



**10-20**
2 SIZE 16



**12-3**
3 SIZE 16



**12-12**
12 SIZE 20



**14-3**
2 SIZE 16
1 COAXIAL



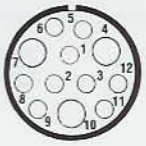
**14-4**
4 SIZE 12



**14-5**
COAXIAL:
1, 2, 3 AND 4



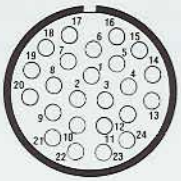
**14-7**
7 SIZE 16



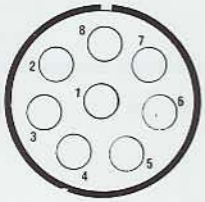
**14-12**
9 SIZE 20
3 SIZE 16



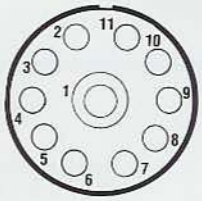
**14-15**
15 SIZE 20



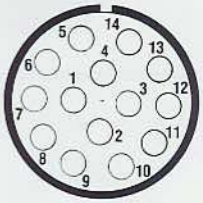
**16-24**
24 SIZE 20



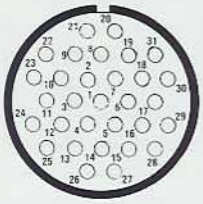
**18-8**
8 SIZE 12



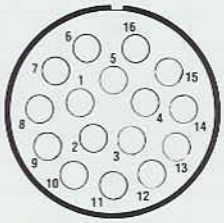
**18-11**
10 SIZE 16
1 COAXIAL



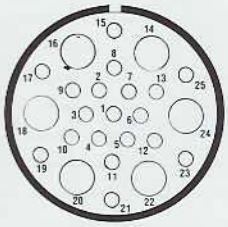
**18-14**
14 SIZE 16



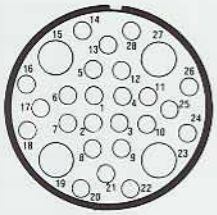
**18-31**
31 SIZE 20



**20-16**
16 SIZE 16



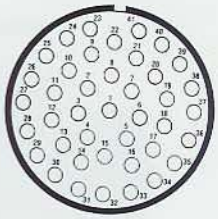
**20-25**
19 SIZE 20
6 SIZE 12



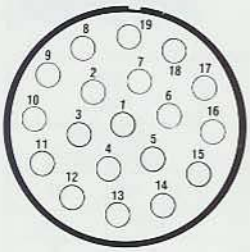
**20-28**
24 SIZE 20
4 SIZE 12



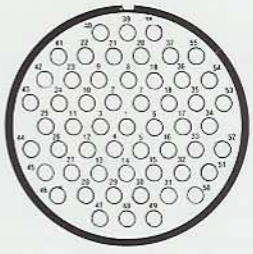
**20-39**
37 SIZE 20
2 SIZE 16



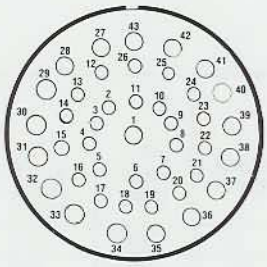
**20-41**
41 SIZE 20



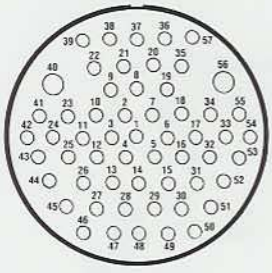
**22-19**
19 SIZE 16



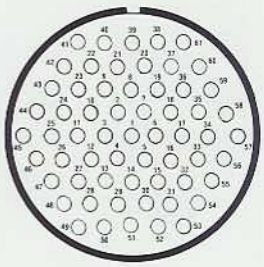
**22-55**
55 SIZE 20



**24-43**
23 SIZE 20
20 SIZE 16



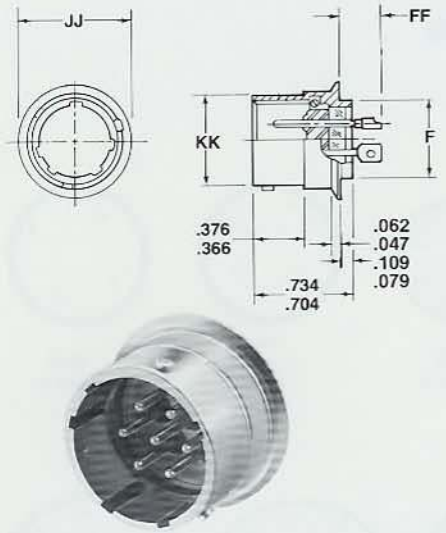
**24-57**
55 SIZE 20
2 SIZE 12



**24-61**
61 SIZE 20

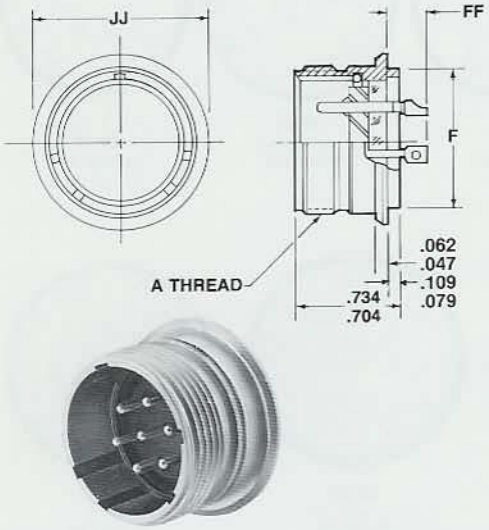
# MIL-C-26500 HSC SERIES 800000

## 80000*-**B-**P (MS 27034)



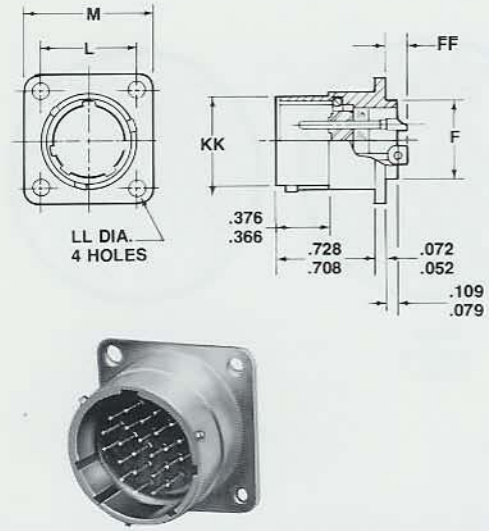

| SHELL SIZE | F MAX. DIA. | JJ FLANGE DIA. ±.020 | KK +.000 −.005 | FF MAX. SIZE OF CONTACTS 12 16 | FF MAX. SIZE OF CONTACTS 20 |
|---|---|---|---|---|---|
| 8 | .437 | .705 | .536 | .400 | .330 |
| 10 | .562 | .840 | .659 | ↑ | ↑ |
| 12 | .750 | 1.045 | .829 | | |
| 14 | .812 | 1.090 | .898 | | |
| 16 | .937 | 1.210 | 1.025 | | |
| 18 | 1.062 | 1.340 | 1.131 | | |
| 20 | 1.182 | 1.475 | 1.256 | | |
| 22 | 1.312 | 1.590 | 1.381 | | |
| 24 | 1.432 | 1.725 | 1.506 | .400 | .330 |

## 80000*-**T-**P (MS 27034)




| SHELL SIZE | A COUPLING THREAD UNEF-2A | F MAX. DIA. | JJ FLANGE DIA. ±.020 | FF MAX. SIZE OF CONTACTS 12 16 | FF MAX. SIZE OF CONTACTS 20 |
|---|---|---|---|---|---|
| 8 | 9/16-24 | .437 | .705 | .400 | .330 |
| 10 | 11/16-24 | .562 | .840 | ↑ | ↑ |
| 12 | 7/8-20 | .750 | 1.045 | | |
| 14 | 15/16-20 | .812 | 1.090 | | |
| 16 | 1-1/16-18 | .937 | 1.210 | | |
| 18 | 1-3/16-18 | 1.062 | 1.340 | | |
| 20 | 1-5/16-18 | 1.182 | 1.475 | | |
| 22 | 1-7/16-18 | 1.312 | 1.590 | | |
| 24 | 1-9/16-18 | 1.432 | 1.725 | .400 | .330 |

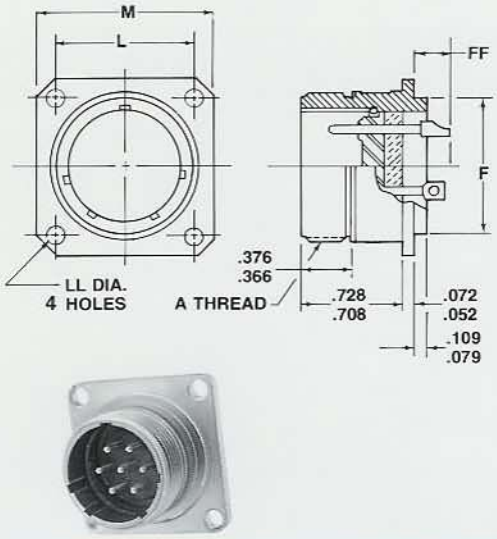
## 81000*-**B-**P (MS 24264)




| SHELL SIZE | F MAX. DIA. | L ℄ - ℄ MTG. HOLE | LL DIA. +.000 −.009 | M LENGTH SIDE | KK DIA. +.000 −.005 | FF MAX. SIZE OF CONTACTS 12 16 | FF MAX. SIZE OF CONTACTS 20 |
|---|---|---|---|---|---|---|---|
| 8 | .437 | .594 | .125 | .812 | .536 | .400 | .330 |
| 10 | .562 | .719 | ↑ | .937 | .659 | ↑ | ↑ |
| 12 | .750 | .812 | | 1.031 | .829 | | |
| 14 | .812 | .906 | | 1.125 | .898 | | |
| 16 | .938 | .969 | | 1.250 | 1.025 | | |
| 18 | 1.062 | 1.062 | | 1.343 | 1.131 | | |
| 20 | 1.182 | 1.156 | | 1.437 | 1.256 | | |
| 22 | 1.312 | 1.250 | .125 | 1.562 | 1.381 | | |
| 24 | 1.432 | 1.375 | .154 | 1.703 | 1.506 | .400 | .330 |

# MIL-C-26500 HSC SERIES 800000

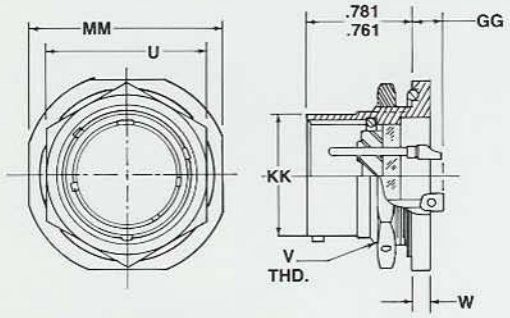
## 81000*-**T-**P
### (REF MS24264)






| SHELL SIZE | A COUPLING THREAD UNEF-2A | F MAX. DIA. | ±.005 L ℄–℄ MTG. HOLE | LL DIA. +.000 -.009 | M ±.005 LENGTH SIDE | FF MAX. SIZE OF CONTACTS 12 16 | FF MAX. SIZE OF CONTACTS 20 |
|---|---|---|---|---|---|---|---|
| 8 | 9/16-24 | .437 | .594 | .125 | .812 | .400 | .330 |
| 10 | 11/16-24 | .562 | .719 | ↑ | .937 | ↑ | ↑ |
| 12 | 7/8-20 | .750 | .812 | | 1.031 | | |
| 14 | 15/16-20 | .812 | .906 | | 1.125 | | |
| 16 | 1-1/16-18 | .938 | .969 | | 1.250 | | |
| 18 | 1-3/16-18 | 1.062 | 1.062 | | 1.343 | | |
| 20 | 1-5/16-18 | 1.182 | 1.156 | ↓ | 1.437 | | |
| 22 | 1-7/16-18 | 1.312 | 1.250 | .125 | 1.562 | ↓ | ↓ |
| 24 | 1-9/16-18 | 1.432 | 1.375 | .154 | 1.703 | .400 | .330 |

## 82000*-**B-**P
### (MS 24265)

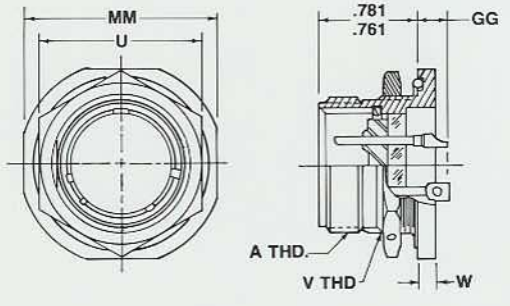





| SHELL SIZE | MM ±.015 | U MAX. HEX. | V UNEF-2A THREAD | W ±.020 | KK +.000 -.005 | GG MAX. SIZE OF CONTACTS 12 16 | GG MAX. SIZE OF CONTACTS 20 |
|---|---|---|---|---|---|---|---|
| 8 | .979 | .828 | 5/8-20△ | .117 | .536 | .235 | .165 |
| 10 | 1.104 | .953 | 3/4-20 | ↑ | .659 | ↑ | ↑ |
| 12 | 1.291 | 1.140 | 15/16-20 | | .829 | | |
| 14 | 1.391 | 1.250 | 1-20 | | .898 | | |
| 16 | 1.516 | 1.329 | 1-1/8-20△ | | 1.025 | | |
| 18 | 1.641 | 1.455 | 1-1/4-20△ | ↓ | 1.131 | | |
| 20 | 1.766 | 1.642 | 1-3/8-18 | .117 | 1.256 | | |
| 22 | 1.954 | 1.705 | 1-1/2-20△ | .148 | 1.381 | ↓ | ↓ |
| 24 | 2.079 | 1.892 | 1-5/8-18 | .148 | 1.506 | .235 | .165 |

△UN-2A

## 82000*-**T-**P
### (MS 24265)






| SHELL SIZE | A COUPLING THREAD UNEF-2A | MM ±.015 | U MAX. HEX. | V UNEF-2A THREAD | W ±.020 | GG MAX. SIZE OF CONTACTS 12 16 | GG MAX. SIZE OF CONTACTS 20 |
|---|---|---|---|---|---|---|---|
| 8 | 9/16-24 | .979 | .828 | 5/8-20△ | .117 | .235 | .165 |
| 10 | 11/16-24 | 1.104 | .953 | 3/4-20 | ↑ | ↑ | ↑ |
| 12 | 7/8-20 | 1.291 | 1.140 | 15/16-20 | | | |
| 14 | 15/16-20 | 1.391 | 1.250 | 1-20 | | | |
| 16 | 1-1/16-18 | 1.516 | 1.329 | 1-1/8-20△ | | | |
| 18 | 1-3/16-18 | 1.641 | 1.455 | 1-1/4-20△ | ↓ | | |
| 20 | 1-5/16-18 | 1.766 | 1.642 | 1-3/8-18 | .117 | | |
| 22 | 1-7/16-18 | 1.954 | 1.705 | 1-1/2-20△ | .148 | ↓ | ↓ |
| 24 | 1-9/16-18 | 2.079 | 1.892 | 1-5/8-18 | .148 | .235 | .165 |

△UN-2A