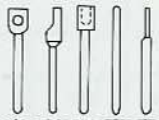
MIL-C-83723 HSC SERIES 800000

NUMBERING SYSTEM

S 8 10 79 1 – 12 B – 13 P 6 – * – *

- STD. PLATING, SHELL-FUSED TIN, CONTACTS-GOLD; FOR STNL'S STL SHELL-PASSIVATE
- SPECIAL CONFIGURATION
- ALTERNATE INSERT POSITION (NO NUMBER FOR NORMAL)
- CONTACT DESIGNATOR P-PIN, S-SOCKET
- INSERT ARRANGEMENT
- COUPLING B-BAYONET PINS, T-THREADED
- SHELL SIZE
- CONTACT TERMINATION:
  - 1-FLATTEN & PIERCE
  - 2-STD SOLDER POT
  - 3-SHORT SOLDER POT
  - 4-STRAIGHT
  - 5-TURNED DOWN
- MIL-C-83723 DASH NO.
- CONFIGURATION
- 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.

SEE SECTION 80-2 (MIL-C-26500) FOR INSERT ARRANGEMENTS



Hermetic Seal Corporation SERIES 800**0 Hermetically sealed Miniature Circular Connectors are manufactured and tested to the requirements of Mil-C-83723.

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

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

INSULATION RESISTANCE
GREATER THAN 5,000 MEGOHMS AT 500 VDC PER MIL-STD-1344 METHOD 3003.

INSERT RETENTION
INSERT WILL WITHSTAND 100 P.S.I. WITHOUT DAMAGE.

DIELECTRIC WITHSTANDING VOLTAGE
CONNECTORS SHOW NO EVIDENCE OF BREAKDOWN OR FLASHOVER WHEN TESTED AT VOLTAGES SHOWN PER MIL-STD-1344, METHOD 3001.

Altitude	TYPE B		TYPE T					
	Service Rating I	Service Rating II	INST	A	D	E	B	C
Sea level	1500	2300	100	2000	2800	3500	4500	7000
50,000	500	750	400	600	675	750	825	975
70,000	375	500	260	360	400	440	480	560
110,000	200	200	200	200	200	200	200	200

THERMAL SHOCK
NO EVIDENCE OF DAMAGE DETRIMENTAL TO THE OPERATION OF CONNECTOR AFTER TESTING AT LESS THAN 4°C (39°F) TO GREATER THAN 90°C (201°F).

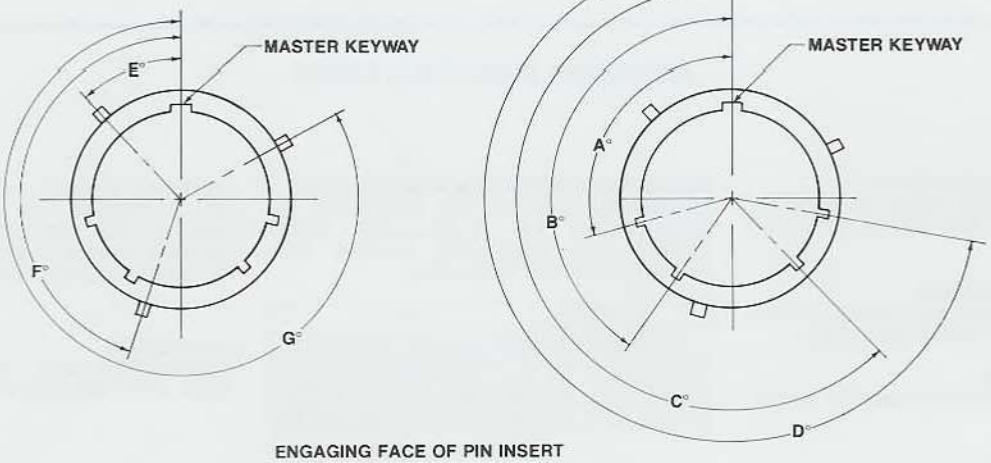
CORROSION
CONNECTOR WILL MEET SALT SPRAY TEST PER MIL-STD-1344 METHOD 1001.

NOTE: SEE PAGE 80-2 FOR INSERT ARRANGEMENTS

ALTERNATE SHELL KEYING POSITIONS

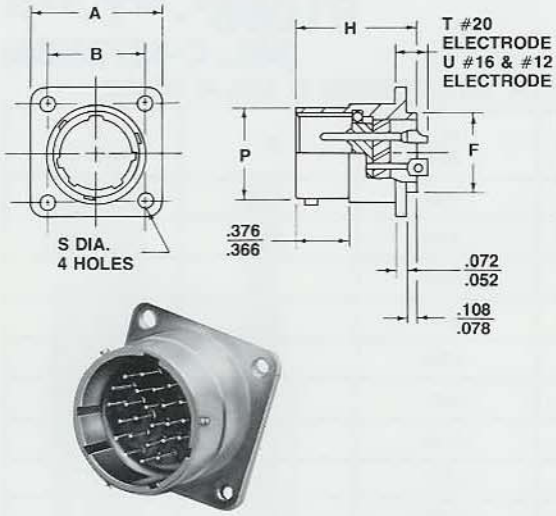
ALTERNATE KEYWAY POSITIONS												
POSITION	SIZE 8				SIZE 10				SIZE 12 THRU 24			
	A°	B°	C°	D°	A°	B°	C°	D°	A°	B°	C°	D°
NORMAL	105	140	215	265	105	140	215	265	105	140	215	265
6	102	132	248	320	102	132	248	320	18	149	192	259
7	80	118	230	312	80	118	230	312	92	152	222	342
8	35	140	205	275	35	140	205	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



81079*-**B-**P
(MIL-C-83723/79)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

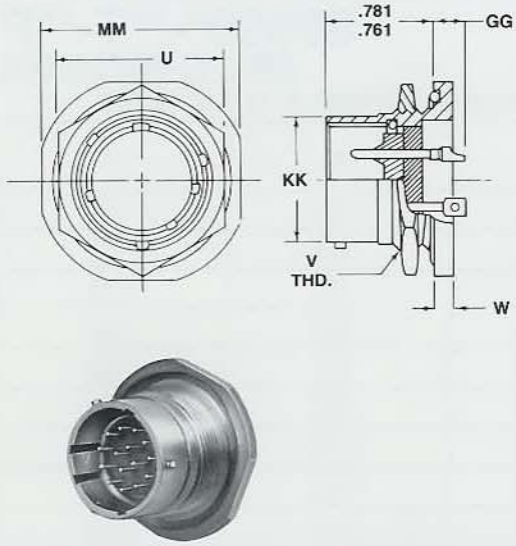
SHELL SIZE	A ±.005	B ±.005	F ±.005	H MAX.	P	S ±.005	T MAX.	U MAX.
8	.812	.594	.500	.890	.536 .531	.120	.330	.400
10	.937	.719	.562	↑	.659 .654	↑	↑	↑
12	1.031	.812	.750	↑	.829 .824	↑	↑	↑
14	1.125	.906	.812	↑	.898 .893	↑	↑	↑
16	1.250	.969	.937	↑	1.025 1.020	↑	↑	↑
18	1.343	1.062	1.062	↑	1.131 1.126	↑	↑	↑
20	1.437	1.156	1.187	↑	1.256 1.251	↓	↑	↑
22	1.562	1.250	1.312	↓	1.381 1.376	.120	↓	↓
24	1.703	1.375	1.437	.890	1.506 1.501	.149	.330	.400



80080*-**B-**P
(MIL-C-83723/80)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

SHELL SIZE	E	T MAX.	U MAX.	V ±.005	W
8	.536 .531	.330	.400	.500	.760 .720
10	.659 .654	↑	↑	.562	.860 .820
12	.829 .824	↑	↑	.750	1.065 1.025
14	.898 .893	↑	↑	.812	1.110 1.070
16	1.025 1.020	↑	↑	.937	1.230 1.190
18	1.131 1.126	↑	↑	1.062	1.360 1.320
20	1.256 1.251	↑	↑	1.187	1.450 1.410
22	1.381 1.376	↓	↓	1.312	1.610 1.570
24	1.506 1.501	.330	.400	1.437	1.730 1.690



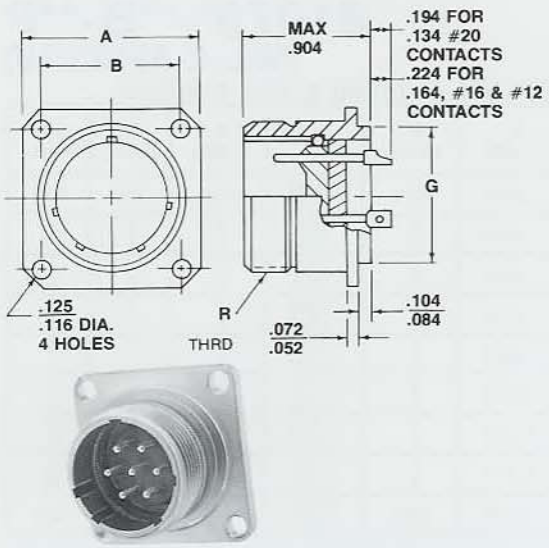
82081*-**B-**P
(MIL-C-83723/81)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

SHELL SIZE	MM ±.005	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	1-1/4-18	↓	1.131	↑	↑
20	1.766	1.642	1-3/8-18	.117	1.256	↑	↑
22	1.954	1.705	1-1/2-18	.148	1.381	↓	↓
24	2.079	1.892	1-5/8-18	.148	1.506	.235	.165

△UN-2A

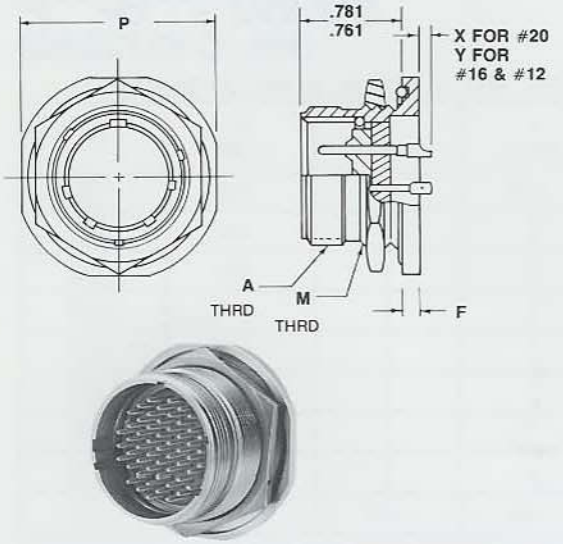
MIL-C-83723 HSC SERIES SA 80000



81088*-**T-**P (MIL-C-83723/88)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

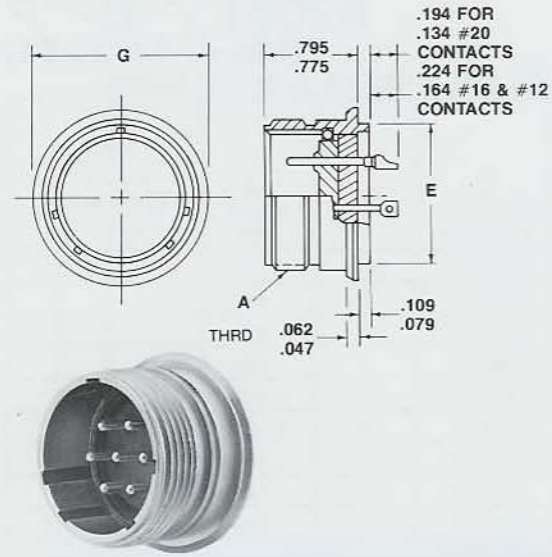
SHELL SIZE	A ±.005	B ±.005	G	R THREAD
8	.812	.594	.500 .494	9/16-24 UNEF-2A
10	.937	.719	.562 .556	11/16-24 UNEF-2A
12	1.031	.812	.750 .744	7/8-20 UNEF-2A
14	1.125	.906	.812 .806	15/16-20 UNEF-2A
16	1.250	.969	.937 .931	1-1/16-18 UNEF-2A
18	1.343	1.062	1.062 1.056	1-3/16-18 UNEF-2A
20	1.437	1.156	1.182 1.176	1-5/16-18 UNEF-2A
22	1.562	1.250	1.312 1.306	1-7/16-18 UNEF-2A
24	1.703	1.375	1.432 1.426	1-9/16-18 UNEF-2A



82089*-**T-**P (MIL-C-83723/89)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

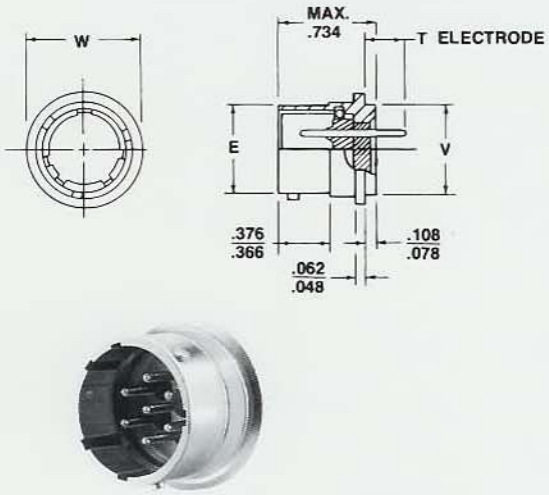
SHELL SIZE	A THREAD	F	M THREAD	P	X	Y
8	9/16-24 UNEF-2A	.137 .097	5/8-20 UN-2A	.980 .949	.180 .120	.210 .150
10	11/16-24 UNEF-2A	↑	3/4-20 UNEF-2A	1.104 1.073	↑	↑
12	7/8-20 UNEF-2A		15/16-20 UNEF-2A	1.291 1.260		
14	15/16-20 UNEF-2A		1-20 UNEF-2A	1.391 1.360		
16	1-1/16-18 UNEF-2A		1-1/8-18 UNEF-2A	1.516 1.485		
18	1-3/16-18 UNEF-2A	↓	1-1/4-18 UNEF-2A	1.641 1.610	↓	↓
20	1-5/16-18 UNEF-2A	.137 .097	1-3/8-18 UNEF-2A	1.766 1.735	.180 .120	.210 .150
22	1-7/16-18 UNEF-2A	.148 .128	1-1/2-18 UNEF-2A	1.954 1.923	.169 .109	.199 .139
24	1-9/16-18 UNEF-2A	.148 .128	1-5/8-18 UNEF-2A	2.078 2.047	.169 .109	.199 .139



80590*-**T-**P (MIL-C-83723/90)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

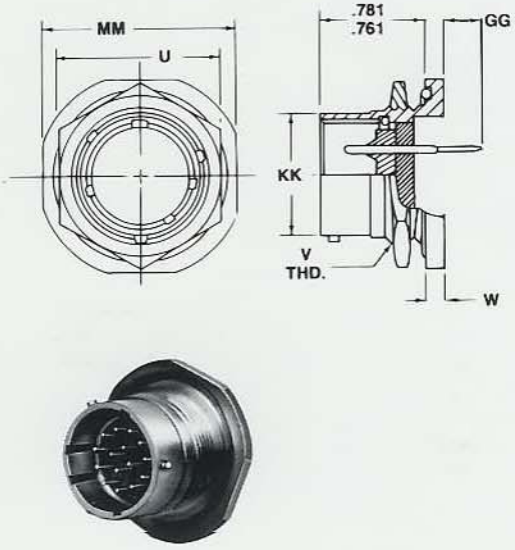
SHELL SIZE	A THREAD	E	G
8	9/16-24 UNEF-2A	.500 .494	.723 .703
10	11/16-24 UNEF-2A	.562 .556	.850 .830
12	7/8-20 UNEF-2A	.750 .744	1.055 1.035
14	15/16-20 UNEF-2A	.812 .806	1.100 1.080
16	1-1/16-18 UNEF-2A	.937 .931	1.220 1.200
18	1-3/16-18 UNEF-2A	1.062 1.056	1.350 1.330
20	1-5/16-18 UNEF-2A	1.182 1.176	1.485 1.765
22	1-7/16-18 UNEF-2A	1.312 1.306	1.600 1.580
24	1-9/16-18 UNEF-2A	1.432 1.426	1.735 1.715



800934-**B-**P
(MIL-C-83723/93)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

SHELL SIZE	E	T ±.015		V ±.005	W
8	.536 .531	.345		.500	.760 .720
10	.659 .654	↑		.562	.860 .820
12	.829 .824			.750	1.065 1.025
14	.898 .893			.812	1.110 1.070
16	1.025 1.020			.937	1.230 1.190
18	1.131 1.126			1.062	1.360 1.320
20	1.256 1.251			1.187	1.450 1.410
22	1.381 1.376	↓		1.312	1.610 1.570
24	1.506 1.501	.345		1.437	1.730 1.690



820945-**B-**P
(MIL-C-83723/94)

INTERMATEABLE WITH MIL-C-26500 & MIL-C-38300

SHELL SIZE	MM ±.005	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	.280	.280
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	1-1/4-18	↓	1.131		
20	1.766	1.642	1-3/8-18	.117	1.256		
22	1.954	1.705	1-1/2-18	.148	1.381	↓	↓
24	2.079	1.892	1-5/8-18	.148	1.506	.280	.280

△ UN-2A