B SERIES

MIL-C-38999 Hermetic connectors were developed for application 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 American Micro Products, Inc. (AMPI / ACE) standards and meet the intermateability requirements of MIL-C-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 allow contacts; or stainless steel shells with gold plated contacts. Other materials and finishes can be supplied to meet specific application requirements.

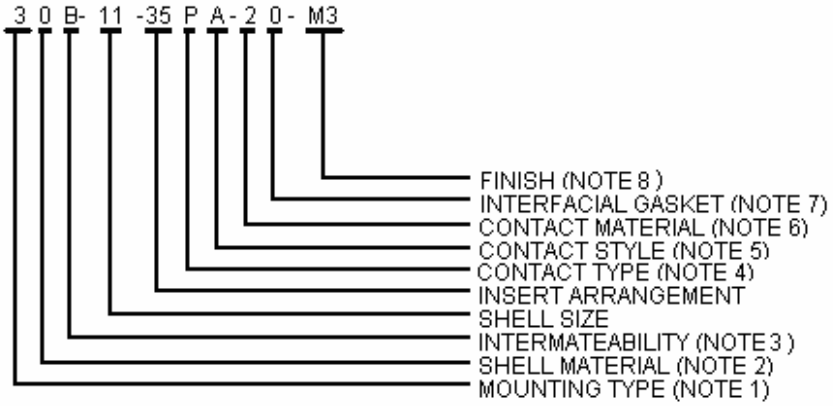
“B” Series receptacles meet the, voltage, salt spray, shock, and vibration requirements of MIL-C-38999.

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 108
Finish: 100 microinches minimum fused tin per MIL-T-10727 over suitable underplate

STAINLESS STEEL SHELLS

Material: Corrosion resistant steel per QQ-S-764, type 303 or as specified.
Finish: Passivated.

CONTACTS

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

BAYONET PINS

Material: Corrosion resistant steel per QQ-S-764, type 303

INSERTS

Material: Glass

INTERFACIAL SEALS

Material: Fluorosilicone rubber.

DESCRIPTION	MILITARY DESIGNATION	AMPI DESIGNATION
JAM NUT MOUNT	MS27470Y*D*P	50B-*-*P-20
	MS27470Y*D*X	50B-*-*P-10
	MS27470Y*E*P	51B-*-*P-20
	MS27470Y*E*X	51B-*-*P-10
SOLDER MOUNT	MS27471Y*D*P	20B-*-*P-20
	MS27471Y*D*X	20B-*-*P-10
	MS27471Y*E*P	21B-*-*P-20
	MS27471Y*E*X	21B-*-*P-10
BOX MOUNT	NO SPECIFIED HERMETIC	30B-*-*P-20
		30B-*-*P-10
		31B-*-*P-20
		31B-*-*P-10
MATING PLUG	MS27467	

HIGH POTENTIAL TEST VOLTAGE

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

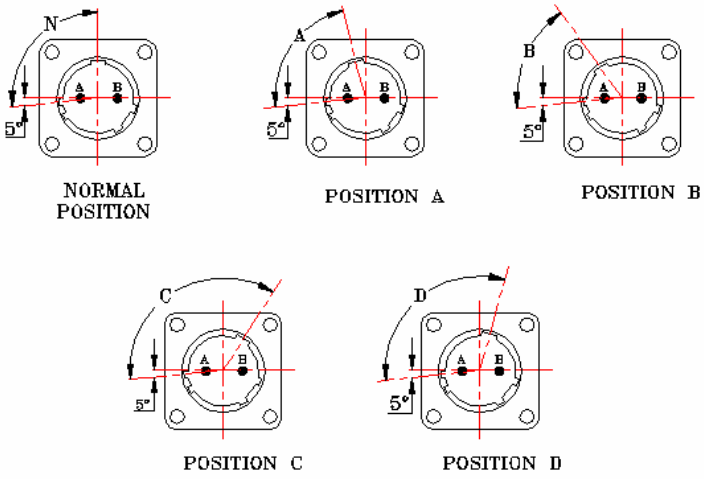
NOTES:

1.-- 2---Circular flange solder mount
3---Square flange box mount
5---Jam nut mount
2.-- 0---Ferrous alloy
1 thru 7- various stainless steel #303 thru #347
3.-- MIL-C-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--Contacts gold with shell passivated

INDEX OF INSERT ARRANGEMENTS
MIL-STD-1560

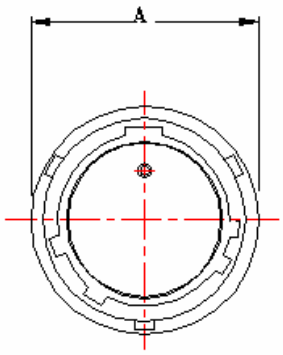
SHELL SIZE	INSERT ARRANGE-MENT	TOTAL CONTACTS	CONTACT SIZE				SERVICE RATING
			22	20	16	12	
9	35	6	6				M
	98	3		3			I
11	5	5		5			I
	35	13	13				M
	98	6		6			I
	99	7		7			I
13	4	4			4		II
	8	8		8			I
	35	22	22				M
	98	10		10			I
15	5	5			5		II
	15	15		14	1		I
	18	18		18			I
	19	19		19			I
	35	37	37				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
23	35	100	100				M
25	35	128	128				M
	61	61		61			I

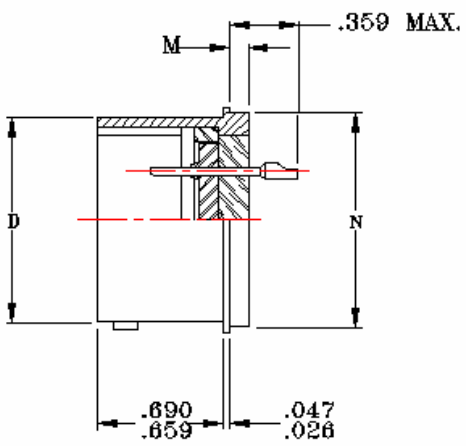
MASTER KEYWAY POSITIONS
FRONT FACE OF PIN INSERT SHOWN



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)

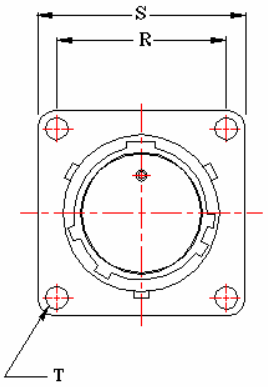


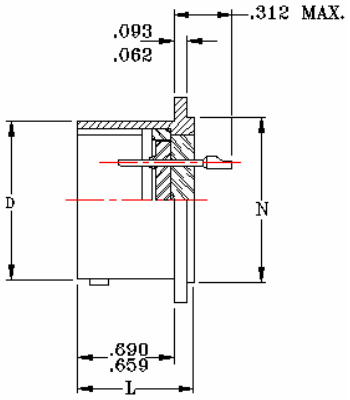


SHELL SIZE	PART NUMBER	A +.016 -.016	D +.001 -.005	M MAX	N +.001 -.005
9	20B-9-(*)P▼-(**)	0.750	0.572	.187	0.672
11	20B-11-(*)P▼-(**)	0.844	0.700		0.781
13	20B-13-(*)P▼-(**)	0.969	0.850		0.906
15	20B-15-(*)P▼-(**)	1.094	0.975		1.031
17	20B-17-(*)P▼-(**)	1.218	1.100		1.156
19	20B-19-(*)P▼-(**)	1.312	1.207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

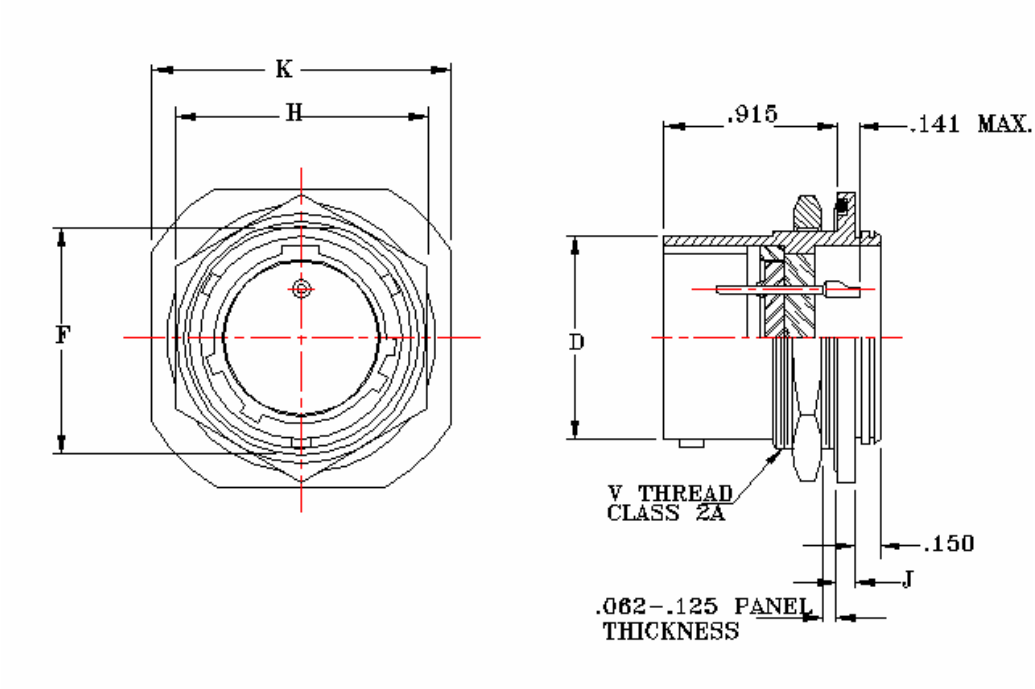




SHELL SIZE	PART NUMBER	D +.001 -.005	L REF	N -.001 -.005	R +.005 -.005	S +0.016 -0.016	T +0.010 -0.005
9	30B-9-(*)P▼-(**)	0.572	0.775	0.672	0.719	0.938	0.128
11	30B-11-(*)P▼-(**)	0.700		0.781	0.812	1.031	
13	30B-13-(*)P▼-(**)	0.850		0.906	0.906	1.125	
15	30B-15-(*)P▼-(**)	0.975		1.031	0.969	1.219	
17	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	
23	30B-23-(*)P▼-(**)	1.457	0.795	1.500	1.375	1.688	0.147
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 SIZE	PART NUMBER	D +0.001 -0.005	F +.000 -.010	H +.016 -.016	J +.016 -.016	K +.016 -.016	V THREAD CLASS 2A
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-C-38999 Hermetic connectors were developed for application 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 American Micro Products, Inc. (AMPI / ACE) standards and meet the intermateability requirements of MIL-C-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 nickel-iron alloy contacts and a final coat of tin plate gold plated nickel-iron alloy contacts or stainless steel shells with gold plated contacts. Other materials and finishes can be supplied to meet specific application requirements.

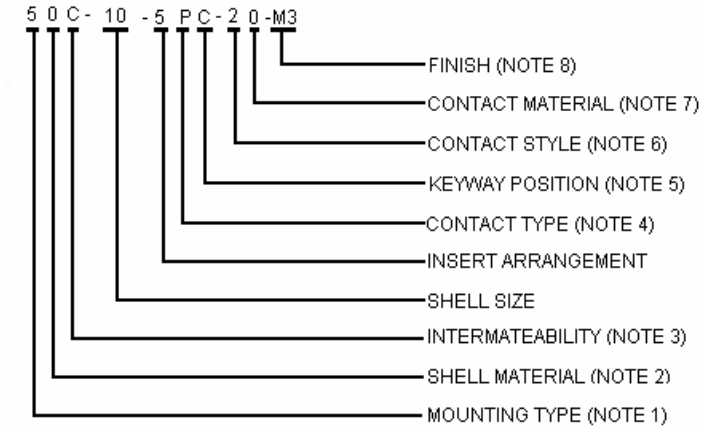
“C” Series receptacles meet the, voltage, salt spray, shock, and vibration requirements of MIL-C-38999.

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 108
Finish: 100 microinches minimum fused tin per MIL-T-10727 over suitable underplate

STAINLESS STEEL SHELLS

Material: Corrosion resistant steel per QQ-S-764, type 303 or as specified.
Finish: Passivated.

CONTACTS

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

INSERTS PINS

Material: Fluorosilicone rubber

INTERFACIAL SEALS

Material: Glass

BAYONET PINS

Material: Corrosion resistant steel per QQ-S-764 type 303

DESCRIPTION	MILITARY DESIGNATION	AMPI DESIGNATION
BOX MOUNT	MS27476Y*D*P	30C-*-*P-20
	MS27476Y*D*X	30C-*-*P-10
	MS27476Y*E*P	31C-*-*P-20
	MS27476Y*E*X	31C-*-*P-10
JAM NUT MOUNT	MS27477Y*D*P	50C-*-*P-20
	MS27477Y*D*X	50C-*-*P-10
	MS27477Y*E*P	51C-*-*P-20
	MS2747Y*E*X	51C-*-*P-10
SOLDER MOUNT	MS27478Y*D*P	20C-*-*P-20
	MS27478Y*D*X	20C-*-*P-10
	MS27478Y*E*P	21C-*-*P-20
	MS27478Y*E*X	21C-*-*P-10
MATING PLUG	MS27473 - MS27484	

HIGH POTENTIAL TEST VOLTAGE

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

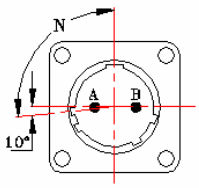
NOTES:

1.-- 2-- Circular flange solder mount
3-- Square flange box mount
5-- Jam nut mount
2.-- 0-- Ferrous alloy
1 thru 7- various stainless steel #303 thru #347
3.-- MIL-C-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-- Contacts gold with shell passivated

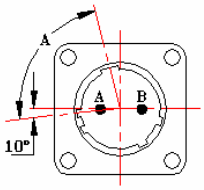
INDEX OF INSERT ARRANGEMENTS MIL-STD-1560

SHELL SIZE	INSERT ARRANGE-MENT	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

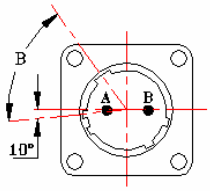
MASTER KEYWAY POSITIONS
FRONT FACE OF PIN INSERT SHOWN



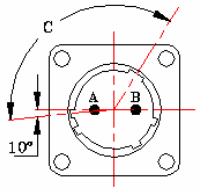
NORMAL POSITION



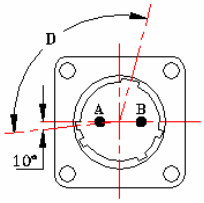
POSITION A



POSITION B



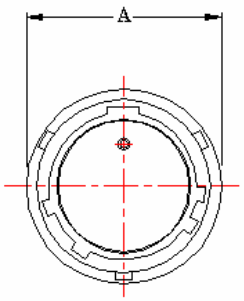
POSITION C

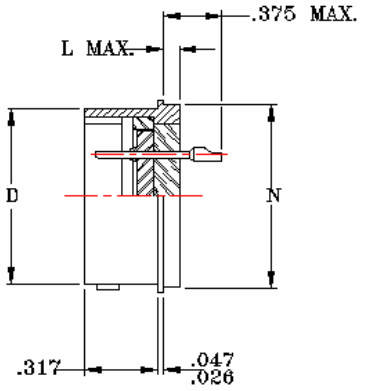


POSITION D

SHELL SIZE	NORMAL POSITION	LOCATION OF ALTERNATE MASTER KEYWAY POSITION IN 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)

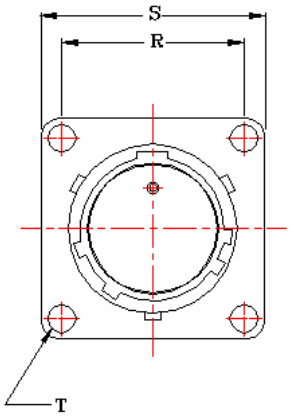


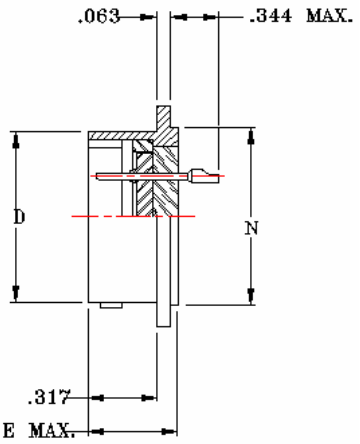


SHELL SIZE	PART NUMBER	A +.011 -.010	D +.001 -.005	L MAX	N +.001 -.005
8	20C-8-(*)P▼-(**)	0.687	0.473	0.125	0.562
10	20C-10-(*)P▼-(**)	0.797	0.590		0.672
12	20C-12-(*)P▼-(**)	0.906	0.750		0.781
14	20C-14-(*)P▼-(**)	1.031	0.875		0.906
16	20C-16-(*)P▼-(**)	1.156	1.000		1.031
18	20C-18-(*)P▼-(**)	1.281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

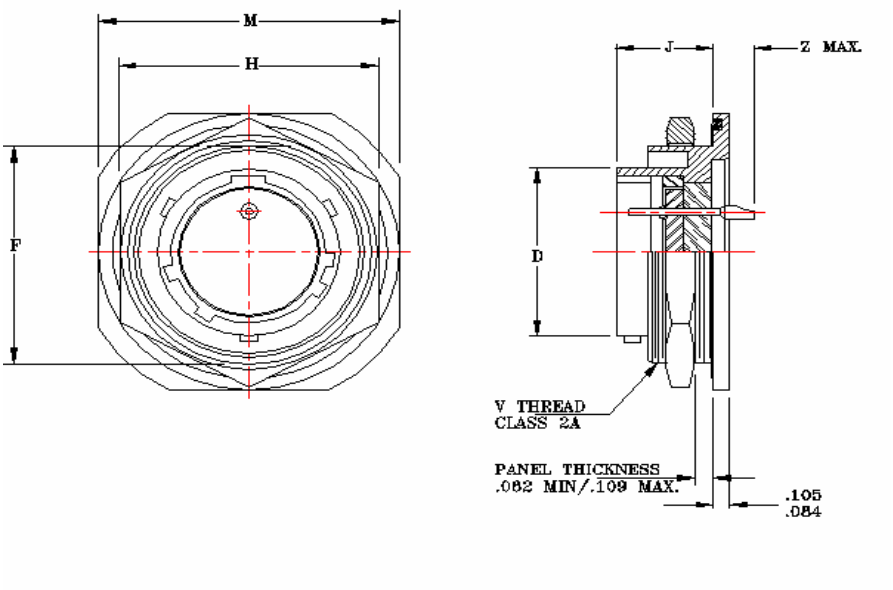




SHELL SIZE	PART NUMBER	D +.001 -.005	E MAX	N -.001 -.005	R +.005 -.005	S +0.015 -0.015	T +0.01 -0.005
8	30C-8-(*)P▼-(**)	0.473	0.453	0.562	0.594	0.812	0.128
10	30C-10-(*)P▼-(**)	0.590		0.672	0.719	0.938	
12	30C-12-(*)P▼-(**)	0.750		0.781	0.812	1.031	
14	30C-14-(*)P▼-(**)	0.875		0.906	0.906	1.125	
16	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	0.484	1.375	1.250	1.562	0.147
24	30C-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
50C RECEPTACLES (REF. MS27477)



SHELL SIZE	PART NUMBER	D +0.001 -0.005	F +.001 -.006	H +.016 -.016	J +.005 -.005	M +.016 -.016	V THREAD CLASS 2A	Z 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-C-38999 Hermetic connectors were developed for application 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 American Micro Products, Inc. (AMPI / ACE) standards and meet the intermateability requirements of MIL-C-38999 Series III. 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 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 with gold plated nickel-iron alloy contacts. Other materials and finishes can be supplied to meet specific application requirements.

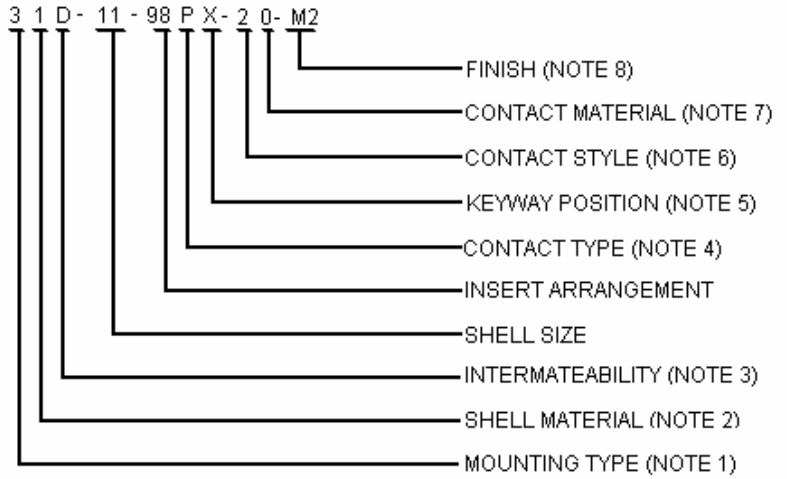
"D" Series receptacles meet the, voltage, salt spray, shock, and vibration requirements of MIL-C-38999.

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	3	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 QQ-S-764, type 303 or as specified.
Finish: Passivated or nickel per QQ-N-290

CONTACTS

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

INSERTS

Material: Glass

INTERFACIAL SEALS

Material: Fluorosilicone rubber.

DESCRIPTION	MILITARY DESIGNATION	AMPI DESIGNATION
BOX MOUNT	D38999/21Y**PN	31D-*-*PN-20-M2
	D38999/21Y**XN	31D-*-*PN-10-M2
	D38999/21N**PN	31D-*-*PN-20-M8
	D38999/21N**XN	31D-*-*PN-10-M8
JAM NUT MOUNT	D38999/23Y**PN	51D-*-*PN-20-M2
	D38999/23Y**XN	51D-*-*PN-10-M2
	D38999/23N**PN	51D-*-*PN-20-M8
	D38999/23N**XN	51D-*-*PN-10-M8
SOLDER MOUNT	D38999/25Y**PN	21D-*-*PN-20-M2
	D38999/25Y**XN	21D-*-*PN-10-M2
	D38999/25N**PN	21D-*-*PN-20-M8
	D38999/25N**XN	21D-*-*PN-10-M8
WELD MOUNT	D38999/27Y**PN	62D-*-*PN-20-M2
	D38999/27Y**XN	62D-*-*PN-10-M2
	D38999/27N**PN	62D-*-*PN-20-M8
	D38999/27N**XN	62D-*-*PN-10-M8
MATING PLUG	D38999/26	

HIGH POTENTIAL TEST VOLTAGE

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

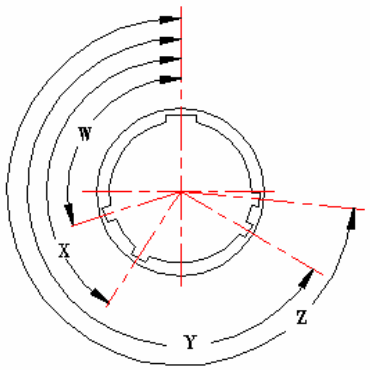
NOTES:

1. -- 2-- Circular flange solder mount
   3-- Square flange box mount
   5-- Jam nut mount
   6-- Circular flange weld mount
2. -- 1 thru 7- various stainless steel #303 thru #347
3. -- MIL-C-38999 Series III intermateability
4. -- P--Pin
5. -- Keyway position
6. -- 1--Eyelet
   2--Solder cup
7. -- 0--Nickel-iron alloy
8. – M2-- Contacts gold with shell passivated
   M8--Gold contacts with shell nickel plated

INDEX OF INSERT ARRANGEMENTS MIL-STD-1560

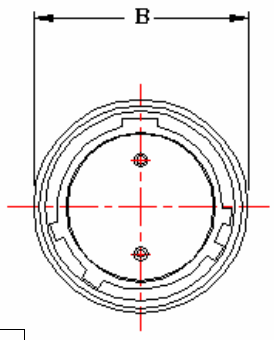
SHELL SIZE	INSERT ARRANGE-MENT	TOTAL CONTACTS	CONTACT SIZE				SERVICE RATING
			22	20	16	12	
9	35	6	6				M
	98	3		3			I
11	5	5		5			I
	35	13	13				M
	98	6		6			I
	99	7		7			I
13	4	4			4		II
	8	8		8			I
	35	22	22				M
	98	10		10			I
15	5	5			5		II
	15	15		14	1		I
	18	18		18			I
	19	19		19			I
	35	37	37				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
23	35	100	100				M
25	35	128	128				M
	61	61		61			I

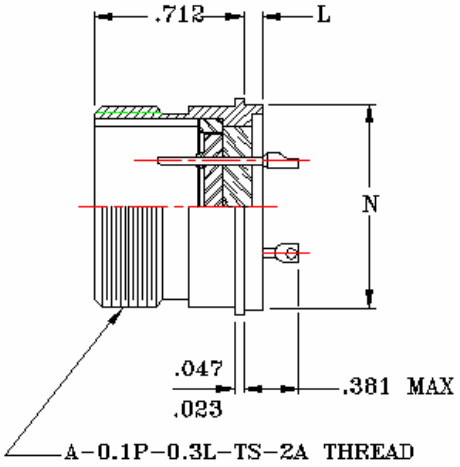
MASTER KEYWAY POSITIONS
FRONT FACE OF PIN INSERT SHOWN



SHELL SIZE	KEYWAY POSITION	Wº	Xº	Yº	Zº
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
	E	91	131	197	240
11, 13, and 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
17, 19, 23, and 25	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)

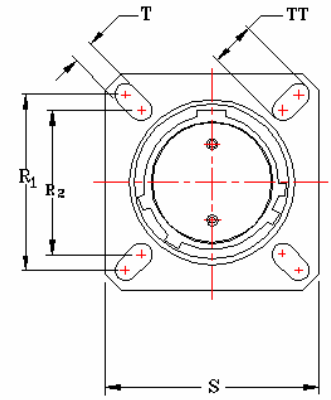


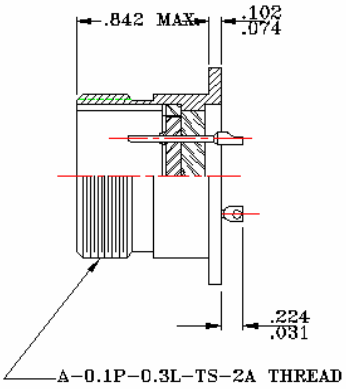


SHELL SIZE	PART NUMBER	A THREAD	B +.010 -.010	L MAX	N +.001 -.005
9	21D-9-(*)P▼-(**)	0.6250	0.750	0.200	0.672
11	21D-11-(*)P▼-(**)	0.7500	0.844		0.781
13	21D-13-(*)P▼-(**)	0.8750	0.969		0.906
15	21D-15-(*)P▼-(**)	1.0000	1.094		1.031
17	21D-17-(*)P▼-(**)	1.1875	1.218		1.156
19	21D-19-(*)P▼-(**)	1.2500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

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR /(*) REPLACE WITH PIN ARRANGEMENT
NORMAL POSITION INDICATOR REQUIRED IS N /(**) REPLACE WITH CONTACT STYLE AND MATERIAL

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

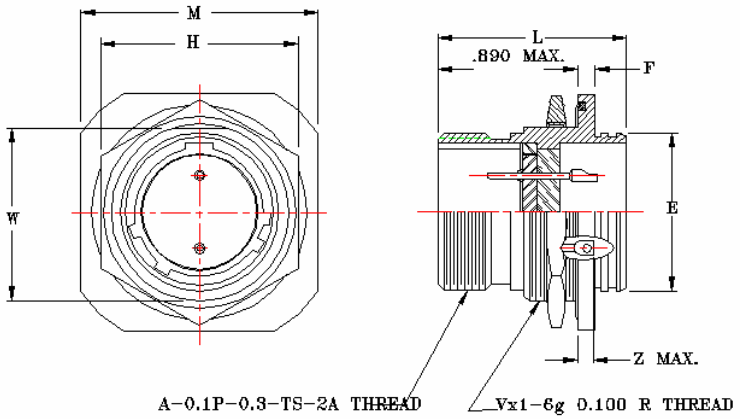




SHELL SIZE	PART NUMBER	A THREAD	R1 +.005 -.005	R2 +.005 -.005	S +.011 -.011	T +.008 -.008	TT +.008 -.008
9	31D-9-(*)P▼-(**)	0.6250	0.719	0.594	0.937	0.128	0.216
11	31D-11-(*)P▼-(**)	0.7500	0.812	0.719	1.031		0.194
13	31D-13-(*)P▼-(**)	0.8750	0.906	0.812	1.126		0.194
15	31D-15-(*)P▼-(**)	1.0000	0.969	0.906	1.220		0.173
17	31D-17-(*)P▼-(**)	1.1875	1.062	0.969	1.311		0.194
19	31D-19-(*)P▼-(**)	1.2500	1.156	1.062	1.437		0.194
21	31D-21-(*)P▼-(**)	1.3750	1.250	1.156	1.563		0.194
23	31D-23-(*)P▼-(**)	1.5000	1.375	1.250	1.689	0.154	0.242
25	31D-25-(*)P▼-(**)	1.6250	1.500	1.375	1.811		0.242

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR /(*) REPLACE WITH PIN ARRANGEMENT
NORMAL POSITION INDICATOR REQUIRED IS N /(**) REPLACE WITH CONTACT STYLE AND MATERIAL

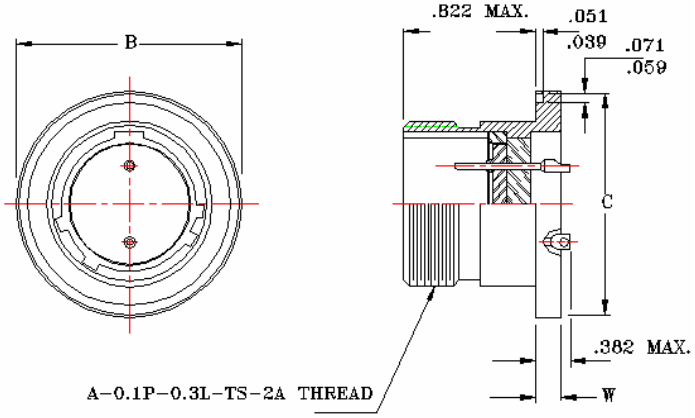
JAM NUT MOUNT
51D RECEPTACLES (REF. D38999/23)



SHELL SIZE	PART NUMBER	A THREAD	E +.012 -.000	F +.012 -.004	H +.010 -.010	L +.015 -.015	M +.015 -.015	V THREAD	W +.000 -.010	Z MAX
9	51D-9-(*)P▼-(**)	0.6250	0.642	0.102	0.875	1.125	1.063	M17	0.655	0.208
11	51D-11-(*)P▼-(**)	0.7500	0.764		1.000	1.125	1.252	M20	0.755	0.208
13	51D-13-(*)P▼-(**)	0.8750	0.894		1.250	1.133	1.374	M25	0.942	0.200
15	51D-15-(*)P▼-(**)	1.0000	1.020		1.312	1.133	1.500	M28	1.066	0.200
17	51D-17-(*)P▼-(**)	1.1875	1.142		1.437	1.133	1.626	M32	1.191	0.200
19	51D-19-(*)P▼-(**)	1.2500	1.268		1.562	1.165	1.811	M35	1.316	0.200
21	51D-21-(*)P▼-(**)	1.3750	1.394		1.750	1.165	1.937	M38	1.441	0.200
23	51D-23-(*)P▼-(**)	1.5000	1.520	0.134	1.875	1.165	2.063	M41	1.566	0.200
25	51D-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
NORMAL POSITION INDICATOR REQUIRED IS N /(**) REPLACE WITH CONTACT STYLE AND MATERIAL

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



SHELL SIZE	PART NUMBER	A THREAD	B +0.011 -0.000	C +.000 -0.011	W +0.008 -0.008
9	61D-9-(*)P▼-(**)	0.6250	0.972	0.941	0.126
11	61D-11-(*)P▼-(**)	0.7500	1.094	1.063	
13	61D-13-(*)P▼-(**)	0.8750	1.220	1.189	
15	61D-15-(*)P▼-(**)	1.0000	1.346	1.315	
17	61D-17-(*)P▼-(**)	1.1875	1.433	1.401	
19	61D-19-(*)P▼-(**)	1.2500	1.578	1.547	
21	61D-21-(*)P▼-(**)	1.3750	1.720	1.689	
23	61D-23-(*)P▼-(**)	1.5000	1.885	1.854	0.157
25	31D-25-(*)P▼-(**)	1.6250	1.972	1.941	

▼ REPLACE WITH ALTERNATE INSERT POSITION INDICATOR /(*) REPLACE WITH PIN ARRANGEMENT
NORMAL POSITION INDICATOR REQUIRED IS N /(**) REPLACE WITH CONTACT STYLE AND MATERIAL