

MIL-DTL-38999 Series I, II and III Type Environmental Class Connectors Insert Arrangements (IAW MIL-STD-1560)

								
Series I	9-35	9-98	11-2	11-4	11-5	11-35	11-98	11-99
Series II	8-35	8-98	10-2	10-4	10-5	10-35	10-98	10-99
Series III	A35	A98	B2	B4	B5	B35	B98	B99
Series IV	---	---	---	---	B5	B35	B98	B99

				
Series I	13-4	13-8	13-35	13-98
Series II	12-4	12-8	12-35	12-98
Series III	C4	C8	C35	C98
Series IV	C4	---	C35	C98

						
Series I	15-5	15-15	15-18	15-19	15-35	15-97
Series II	14-5	14-15	14-18	14-19	14-35	14-97
Series III	D5	D15	D18	D19	D35	D97
Series IV	D5	---	D18	D19	D35	D97

					
Series I	17-6	17-8	17-26	17-35	17-99
Series II	16-6	16-8	16-26	16-35	16-99
Series III	E6	E8	E26	E35	E99
Series IV	E6	E8	E26	E35	---

						
Series I	19-11	19-28	19-32	19-35	19-30	19-45
Series II	18-11	18-28	18-32	18-35	18-30	18-45
Series III	F11	F28	F32	F35	F30	F45
Series IV	F11	---	F32	F35	---	---

Consult factory for available insert arrangements.

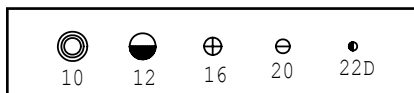


MIL-DTL-38999 Series I, II and III Type Environmental Class Connectors Insert Arrangements (IAW MIL-STD-1560)



Environmental
Connectors

Series I 21-11	21-16	21-35	21-41	
Series II 20-11	20-16	20-35	20-41	
Series III, IV G11, G11	G16, G16	G35, G35	G41, G41	
Series I 21-24	21-25	21-27	21-39	
Series II 20-24	20-25	20-27	20-39	
Series III, IV G24, G24	G25, ---	G27, ---	G39, ---	
Series I 23-21	23-35	23-53	23-55	23-32
Series II 22-21	22-35	22-53	22-55	22-32
Series III, IV H21, H21	H35, H35	H53, ---	H55, H55	H32, ---
Series I 23-34	23-36	23-97	23-99	
Series II 22-34	22-36	22-97	22-99	
Series III, IV H34, ---	H36, ---	H97, ---	H99, ---	
Series I 25-29	25-35	25-61	25-4	
Series II 24-29	24-35	24-61	24-4	
Series III, IV J29, J29	J35, J35	J61, J61	J4, J4	
Series I 25-43	25-19	25-24	J-11	
Series II 24-43	24-19	24-24	(Series IV Only)	
Series III, IV J43, J43	J19, J19	J24, J24		





MIL-DTL-38999 Series I, II and III Type Environmental Class Connectors Insert Arrangements (IAW MIL-STD-1560)

Shell Size and Insert Arrangements			Number of Pins			
MS Series I	MS Series II	D38999 Series III	22D	20	16	12
9-35	8-35	A35	6			
9-98	8-98	A98		3		
11-2	10-2	B2			2	
11-4	10-4	B4		4		
11-5	10-5	B5		5		
11-35	10-35	B35	13			
11-98	10-98	B98		6		
11-99	10-99	B99		7		
13-4	12-4	C4			4	
13-8	12-8	C8		8		
13-35	12-35	C35	22			
13-98	12-98	C98		10		
15-5	14-5	D5			5	
15-15	14-15	D15		14	1	
15-18	14-18	D18		18		
15-19	14-19	D19		19		
15-35	14-35	D35	37			
15-97	14-97	D97		8	4	
17-6	16-6	E6				6
17-8	16-8	E8			8	
17-26	16-26	E26		26		
17-35	16-35	E35	55			
17-99	16-99	E99		21	2	
19-11	18-11	F11			11	
19-28	18-28	F28		26	2	
19-30	18-30	F30		29	1	
19-32	18-32	F32		32		
19-35	18-35	F35	66			
19-45	18-45	F45	67			
21-11	20-11	G11				11
21-16	20-16	G16			16	
21-24	20-24	G24		24		
21-25	20-25	G25		25		
21-27	20-27	G27		27		
21-35	20-35	G35	79			
21-39	20-39	G39		37	2	
21-41	20-41	G41		41		
23-21	22-21	H21			21	
23-32	22-32	H32		32		
23-34	22-34	H34		34		
23-35	22-35	H35	100			
23-36	22-36	H36		36		
23-53	22-53	H53		53		
23-55	22-55	H55		55		
23-97	22-97	H97			16	
23-99	22-99	H99			11	
25-4	24-4	J4		48	8	
25-19	24-19	J19				19
25-24	24-24	J24			12	12
25-29	24-29	J29			29	
25-35	24-35	J35	128			
25-43	24-43	J43		23	20	
25-61	24-61	J61		61		

Shell Size / Insert Arrangements	Number of Pins				
D38999 Series IV	22D	20	16	12	10
B5		5			
B35	13				
B98		6			
B99		7			
C4			4		
C35	22				
C98		10			
D5			5		
D18		18			
D19	37	19			
D35					
D97		8	4		
E6				6	
E8			8		
E26		26			
E35	55				
F11			11		
F32		32			
F35	66				
G11				11	
G16			16		
G35	79				
G41		41			
H21			21		
H35	100				
H55		55			
J4		48	8		
J11		2			9
J19				19	
J24			12	12	
J29			29		
J35	128				
J43		23	20		
J61		61			

MIL-DTL-38999 Series I, II, III and IV Pin Contact Selection Guide

AS39029 Pin Contacts										
	Contact Size	Type	Glenair Part Number	Military Part Number	Color Bands			BIN	Wire Size	Tool Code
					1st	2nd	3rd			
38999 Series I, II, III & IV	#10	S	850-002-10-528	M39029/58-528	GREEN	RED	GREY	528	#10 - #12	Consult Factory
		E	850-007-10-624	M39029/107-624	BLUE	RED	YELLOW	624		
	#12	S	850-002-12-365	M39029/58-365	ORANGE	BLUE	GREEN	365	#12 - #14	A, B
		E	850-007-12-623	M39029/107-623	BLUE	RED	ORANGE	623		
		C	852-002-12-211	M39029/28-211	RED	BROWN	BROWN	211	RG174 RG179 RG316	C, I (inner)
		C	852-002-12-409	M39029/28-409	YELLOW	BLACK	WHITE	409	RG180	N, P (outer)
	#16	S	850-002-16-364	M39029/58-364	ORANGE	BLUE	YELLOW	364	#16 - #20	A, B
		E	850-007-16-622	M39029/107-622	BLUE	RED	RED	622		
		C	852-008-16-424	M39029/76-424	YELLOW	RED	YELLOW	424	RG174 RG179 RG316	C, H (inner)
		C	852-008-16-425	M39029/76-425	YELLOW	RED	GREEN	425	RG178	Q, R (outer)
	#20	S	850-002-20-363	M39029/58-363	ORANGE	BLUE	ORANGE	363	#20 - #24	C, D
		E	850-007-20-621	M39029/107-621	BLUE	RED	BROWN	621		
	#22D	S	850-002-22-360	M39029/58-360	ORANGE	BLUE	BLACK	360	#22 - #28	C, E
		E	850-007-22-620	M39029/107-620	BLUE	RED	black	620		

Type	Crimp Style
S	Standard-Duty Crimp
E	Extended-Duty Crimp
C	Coaxial Crimp

BIN Color Coding									
0 BLACK	1 BROWN	2 RED	3 ORANGE	4 YELLOW	5 GREEN	6 BLUE	7 VIOLET	8 GREY	9 WHITE

MIL-DTL-38999
Series I, III and IV
Socket Contact Selection Guide



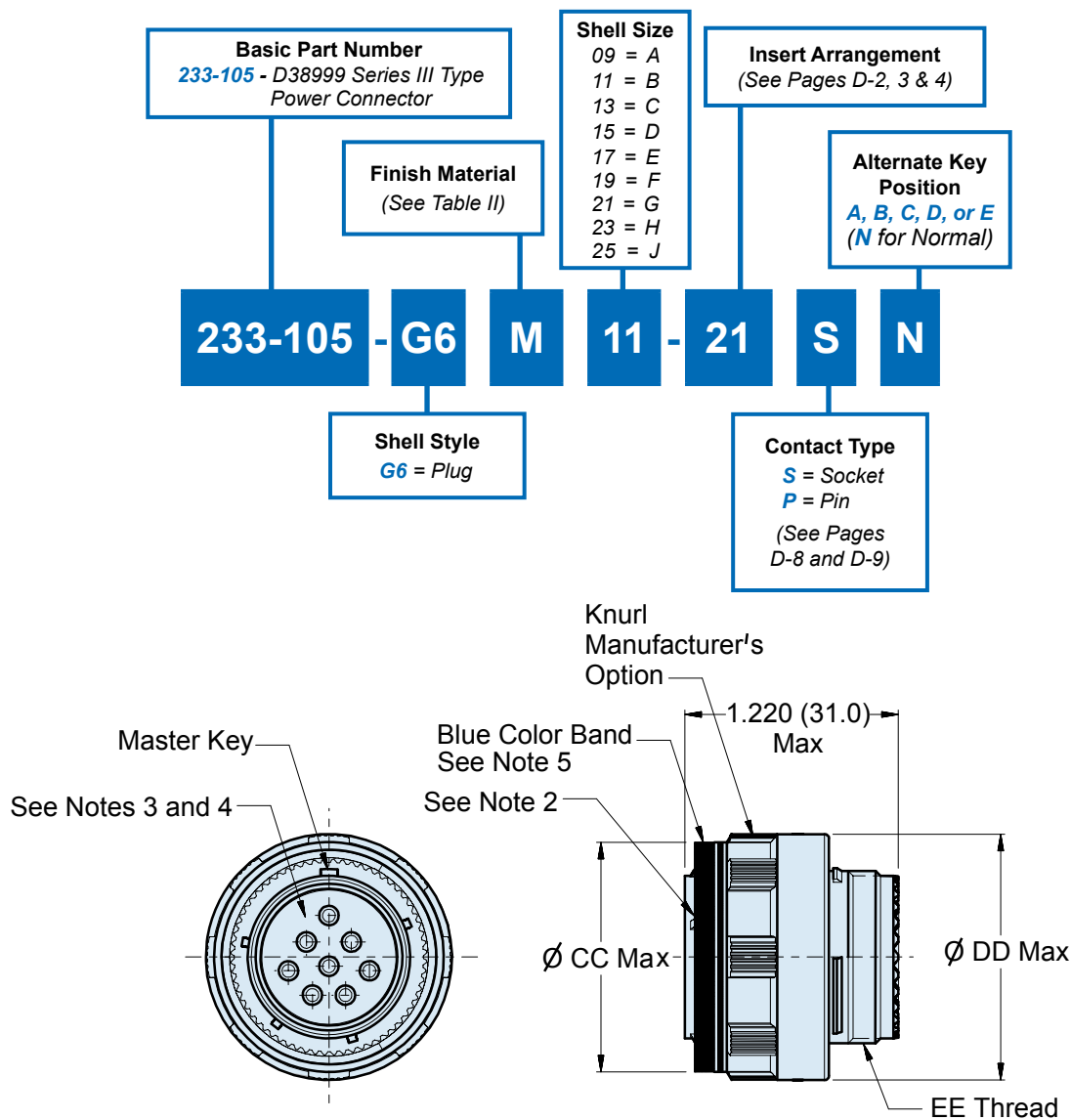
Environmental
Connectors

AS39029 Socket Contacts										
38999 Series I, III & IV	Contact Size	Type	Glenair Part Number	Military Part Number	Color Bands			BIN	Wire Size	Tool Code
					1st	2nd	3rd			
	#10	S	850-001-10-527	M39029/56-527	GREEN	RED	VIOLET	527	#10 - #12	Consult Factory
		E	850-006-10-618	M39029/106-618	BLUE	BROWN	GREY	618		
	#12	S	850-001-12-353	M39029/56-353	ORANGE	GREEN	ORANGE	353	#12 - #14	A, B
		E	850-006-12-617	M39029/106-617	BLUE	BROWN	VIOLET	617		
		C	852-003-12-416	M39029/75-416	YELLOW	BROWN	BLUE	416	RG174 RG179 RG316	C, I (inner)
		C	852-003-12-417	M39029/75-417	YELLOW	BROWN	VIOLET	417	RG180	N, P (outer)
	#16	S	850-001-16-352	M39029/56-352	ORANGE	GREEN	RED	352	#16 - #20	A, B
		E	850-006-16-616	M39029/106-616	BLUE	BROWN	BLUE	616		
C		852-009-16-428	M39029/77-428	YELLOW	RED	GREY	428	RG174 RG179 RG316	C, H (inner)	
C		852-009-16-429	M39029/77-429	YELLOW	RED	WHITE	429	RG178	Q, R (outer)	
#20	S	850-001-20-351	M39029/56-351	ORANGE	GREEN	BROWN	351	#20 - #24	C, D	
	E	850-006-20-615	M39029/106-615	BLUE	BROWN	GREEN	615			
#22D	S	850-001-22-348	M39029/56-348	ORANGE	YELLOW	GREY	348	#22 - #28	C, F	
	E	850-006-22-614	M39029/106-614	BLUE	BROWN	YELLOW	614			

Type	Crimp Style
S	Standard-Duty Crimp
E	Extended-Duty Crimp
C	Coaxial Crimp

BIN Color Coding									
0 BLACK	1 BROWN	2 RED	3 ORANGE	4 YELLOW	5 GREEN	6 BLUE	7 VIOLET	8 GREY	9 WHITE

233-105-G6 MIL-DTL-38999 Series III Type Environmental Plug Connector



Consult factory for available insert arrangements.

APPLICATION NOTES

1. Material/ Finishes:
Barrel, Coupling Nut - See Table II
(Composite Coupling Nut - No Plating Required).
Insulators- High Grade Rigid Dielectric/ N.A
Seals- Fluorosilicone/ N.A.
2. Assembly to be identified with Glenair's name, part number and date code space permitting.
3. Insert arrangement in accordance with MIL-STD-1560.
4. Insert arrangement shown is for reference only.
5. Blue Color Band indicates rear release retention system.
7. Metric Dimensions (mm) are indicated in parentheses.

233-105-G6
MIL-DTL-38999 Series III Type
Environmental Plug Connector



TABLE II: FINISH			
SYM	MATERIAL	FINISH	MIL SYM
M	Aluminum	Electroless Nickel	F
NF		Cadmium O.D. Over Electroless Nickel	W
ZN		Zinc Ni, Olive Drab	Z
ZE		Zinc Ni, No Chromate	
ZR		Zinc Ni, Black (Tri-Valent CR)	
AL		Pure-Dense Electro-Deposited Aluminum	P
MT		Ni-PTFE 1000 Hour Grey™	T
XM	Composite	Electroless Nickel	M
XMT		Ni-PTFE 1000 Hour Grey™	
XO		No Finish	
XW		Cadmium O.D. over Electroless Nickel	J
Z1	Stainless Steel	Passivate	
ZC		Zinc Colbalt	
ZL		Electro-Deposited Nickel	
ZW		Cadmium O.D. over Nickel	
AB	Marine Bronze	None (Clean Only)	

*Consult Factory for Additional Plating Options

TABLE III: SHELL SIZE				
Shell Size Code	Shell Size	CC Max Dia	DD Max Dia	EE Thread
A	09	.811 (20.6)	.858 (21.8)	M12 x 1.0-6g 0.100R
B	11	.929 (23.6)	.984 (25.0)	M15 x 1.0-6g 0.100R
C	13	1.110 (28.2)	1.157 (29.4)	M18 x 1.0-6g 0.100R
D	15	1.232 (31.3)	1.280 (32.5)	M22 x 1.0-6g 0.100R
E	17	1.358 (34.5)	1.406 (35.7)	M25 x 1.0-6g 0.100R
F	19	1.469 (37.3)	1.516 (38.5)	M28 x 1.0-6g 0.100R
G	21	1.594 (40.5)	1.642 (41.7)	M31 x 1.0-6g 0.100R
H	23	1.720 (43.7)	1.768 (44.9)	M34 x 1.0-6g 0.100R
J	25	1.843 (46.8)	1.890 (48.0)	M37 x 1.0-6g 0.100R