



**THE DATASHEET OF  
D38999/24MA98PB**





# DEUTSCH MIL-DTL-38999 SERIES III CONNECTORS

RUGGED, HARSH ENVIRONMENT  
SUBMINIATURE CONNECTORS

## QUICK REFERENCE GUIDE

### Wide Range

- Mil spec, commercial, and composite
- Full line of finishes, including black zinc nickel and PTFE nickel

### High Performance

- Environmentally sealed

## MIL-DTL-38999 Series III Connectors

<b>Coupling Mechanism</b>	Threaded, 360° turn
<b>Shell Materials</b>	Stainless steel Aluminum Composite
<b>Features</b>	Scoop proof Environmentally sealed Hermetic versions Filter versions Spring fingers for EMI control
<b>Shell Platings</b>	Olive drab cadmium Passivated Electroless nickel Electrodeposited nickel Nickel PTFE Black zinc-nickel
<b>No. of Contact Sizes, Std.</b>	23, 22, 20, 16, 12, 10, 8
<b>Shell Sizes</b>	9, 11, 13, 15, 17, 19, 21, 23, 25
<b>No. of Signal Contacts, Max.</b>	187
<b>Contact Type</b>	AS39029
<b>Contact Styles</b>	Crimp Solder cup or eyelet PCB tail
<b>Operating Temperatures</b>	-65°C to +200°C -65°C to +175°C -65°C to +150°C (Depends on shell finish)
<b>Durability (Mating Cycles)</b>	500 (Higher durability versions available)
<b>Standard Configurations</b>	
<b>Plugs</b>	Straight, with EMI spring fingers Lanyard release
<b>Receptacles</b>	Box mounting, both front and rear panel mounting Wall mounting, both front and rear panel mounting Jam nut, rear panel mounting Solder mount Weld mount Through-hole bulkhead

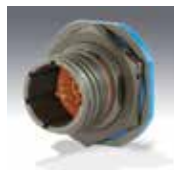
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Get your product to market faster with a smarter, better solution.

# DEUTSCH 38999 Series III Connectors

Aluminum • Stainless Steel • Composite

	Commercial Composite	ACT	26	M	D	35	P	N
	Commercial Al/SS	DTS	26	F	15	35	P	N
	Military	D38999	/26	F	D	35	P	N
<b>Commercial Composite</b>	<b>Commercial Alum./Stainless</b>	<b>Military</b>	<b>Description</b>					
<b>RANGE</b>								
ACT	DTS	D38999						
<b>STYLE</b>								
20	20	/20	Square Flange Receptacle					
24	24	/24	Jam Nut Receptacle					
26	26	/26	Straight Plug					
—	20	/21	Hermetic Square Flange Receptacle					
—	24	/23	Hermetic Jam Nut Receptacle					
—	21	/25	Hermetic Solder Flange					
—	23	/27	Hermetic Weld Flange					
<b>FINISH</b>								
<b>ALUMINUM SHELL</b>								
—	F	F	Electroless Nickel Plated (48-hr. Salt Spray)					
—	G	G	Space-Grade Electroless Nickel (48-hr. Salt Spray)					
—	T	T	Nickel PTFE (500-hr. Salt Spray)					
—	W	W	Olive Drab Cadmium (500-hr. Salt Spray)					
—	Z	Z	Black Zinc Nickel (500-hr. Salt Spray)					
<b>COMPOSITE SHELL</b>								
M	—	M	Electroless Nickel Plated (2000-hr. Salt Spray)					
J	—	J	Olive Drab Cadmium (2000-hr. Salt Spray)					
<b>STAINLESS STEEL SHELL</b>								
—	K	K	Corrosion-Resistant S.S. - Firewall (500-hr. Salt Spray)					
—	S	S	Nickel Plated (500-hr. Salt Spray)					
—	L	L	Electrodeposited Nickel (48-hr. Salt Spray)					
<b>HERMETIC</b>								
—	Y	Y	Stainless Steel, Passivated					
—	N	N	Stainless Steel, Nickel Plated					
—	H	H	Space Grade					
<b>SHELL SIZES</b>								
9 (A), 11 (B), 13 (C), 15 (D), 17 (E), 19 (F), 21 (G), 23 (H), 25 (J)			Numbers = DTS Commercial; (Letters) = Military/ACT Commercial					
<b>INSERT ARRANGEMENTS</b>			See Insert Arrangements Table					
<b>CONTACTS</b>								
P, A, H, S, B, J			P = Pin, A = Less Pin, H = 1500-Cycle Pin, S = Socket, B = Less Socket, J = 1500-Cycle Socket					
<b>CONTACTS FOR HERMETIC CONNECTORS</b>								
C, D, X, Z			C = PC Tail Pin, D = PC Tail Socket X = Eyelet Pin, Z = Eyelet Socket					
<b>KEYING</b>								
N, A, B, C, D, E			N = Normal					



Jam Nut



Plug



MIL-SPEC



Square Flange Receptacle



PCB Type



Lanyard

# Insert Arrangements



Insert		Contact Size/Quantity											Includes K Class	Uses 38999/62-8* Boots	Inactive: Superseded by
DTS Commercial	Military and Commercial ACT	8 Twinax	8 Coax	8 Power	12 Twinax	12 Coax	10	12	16	20	22D	23			
09-07	A7 (A07)										7				
09-23	A23											9			
09-35	A35										6		✓		
09-98	A98									3			✓		
11-02	B2 (B02)								2						
11-04	B4 (B04)									4					
11-05	B5 (B05)									5					
11-23	B23											19			
11-35	B35										13		✓		
11-98	B98									6			✓		
11-99	B99									7			✓		
13-04	C4 (C04)								4						
13-08	C8 (C08)									8			✓		
13-23	C23											32			
13-35	C35										22		✓		
13-98	C98									10			✓		
15-05	D5 (D05)								5				✓		
15-15	D15								1	14					
15-18	D18									18			✓		
15-19	D19									19			✓		
15-23	D23											55			
15-26	D-26								2		24				
15-35	D35										37		✓		
15-97	D97								4	8			✓		
17-02	E2 (E02)	1									38				17-03
17-03	E3 (E03)	1									38			✓	
17-06	E6 (E06)							6					✓		
17-08	E8 (E08)								8				✓		
17-11	E11				2	1					8				
17-19	E19								4	11	4				
17-20	E20								4		16				
17-22	E22	2						2							
17-23	E23											73			
17-24	E24				2						22				
17-26	E26									26			✓		
17-35	E35										55		✓		
17-99	E99								2	21			✓		
19-11	F11								11				✓		
19-18	F18	4									14				19-19
19-19	F19	4									14			✓	
19-23	E23											88			
19-28	F28								2	26					



Insert		Contact Size/Quantity												Includes K Class	Uses 38999/62-8* Boots	Inactive: Superseded by
DTS Commercial	Military and Commercial ACT	8 Twirmax	8 Coax	8 Power	12 Twirmax	12 Coax	10	12	16	20	22D	23				
19-32	F32									32				↗		
19-35	F35										66			↗		
21-11	G11							11								
21-16	G16								16							
21-20	G20	2								18						
21-23	G23											121				
21-35	G35										79			↗		
21-39	G39								2	37				↗		
21-41	G41									41				↗		
21-48	G48			4												
21-75	G75	4														21-76
21-76	G76	4													↗	
23-06	H6 (H06)	6														
23-21	H21								21							
23-23	H23											151				
23-35	H35										100					
23-53	H53									53				✓		
23-54	H54							4	9	40						
23-55	H55									55						
23-63	H63							4	4	49						
25-04	J4 (J04)								8	48				✓		
25-07	J7 (J07)	2									97					25-09
25-08	J8 (J08)	8														25-10
25-09	J9 (J09)	2									97				↗	
25-10	J10	8													↗	
25-11	J11						9			2						
25-17	J17	6									36					
25-19	J19							19								
25-20	J20	3				4			13	10						25-21
25-21	J21	3				4			13	10					✓	
25-23	J23											187				
25-24	J24							12	12							
25-29	J29								29							
25-35	J35										128			✓		
25-37	J37								37							
25-43	J43								20	23						
25-46	J46		2						4	40						25-47
25-47	J47		2						4	40					✓	
25-61	J61									61				✓		
25-90	J90	2							4	40						25-91
25-91	J91	2							4	40					✓	

Blue shaded entries are not Mil Spec.  
Green shading indicates high-density inserts.

## For More Information

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Consult TE for the latest dimensions and design specifications.

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