



DEUTSCH DTS SERIES CONNECTORS FOR MIL-DTL-38999 SERIES III

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

DEUTSCH 38999 Series III Connectors

Aluminum • Stainless Steel • Composite

			Commercial Composite	ACT	26	M	D	35	P	N	-6149
			Commercial Al/SS Military	DTS D38999	26 /26	F F	15 - D 35 35	P P	N N	-L/C	
Commercial Composite	Commercial Alum./Stainless	Military	Description								
RANGE											
ACT	DTS	D38999									
STYLE											
20	20	/20	Square Flange Receptacle								
24	24	/24	Jam Nut Receptacle								
26	26	/26	Straight Plug								
—	13	—	Box Mount Receptacle								
—	20	/21	Hermetic Square Flange Receptacle								
—	24	/23	Hermetic Jam Nut Receptacle								
—	21	/25	Hermetic Solder Flange								
—	23	/27	Hermetic Weld Flange								
CLASS											
ALUMINUM SHELL											
—	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)								
COMPOSITE SHELL											
M	—	M	Electroless Nickel Plated (2000-hr. Salt Spray)								
J	—	J	Olive Drab Cadmium (2000-hr. Salt Spray)								
STAINLESS STEEL SHELL											
—	K	K	Passivated S.S., Firewall (500-hr. Salt Spray)								
—	S	S	Electrodeposited Nickel S.S., Firewall (500-hr. Salt Spray)								
—	L	L	Electrodeposited Nickel (48-hr. Salt Spray)								
HERMETIC											
—	Y	Y	Stainless Steel, Passivated								
—	N	N	Stainless Steel, Electrodeposited Nickel Plated								
—	H	H	Space Grade								
SHELL SIZES											
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								
INSERT ARRANGEMENTS			See Insert Arrangements Table								
CONTACTS											
P, A, H, S, B, J			P = Pin, H = 1500-Cycle Pin S = Socket, J = 1500-Cycle Socket A = Less Pin (with intent to use nonstandard contacts), B = Less Socket (with intent to use nonstandard contacts)								
CONTACTS FOR HERMETIC CONNECTORS											
P, S, C, D, X, Z			P = Pin, Solder Cup, S = Socket, Solder Cup C = PC Tail Pin, D = PC Tail Socket X = Eyelet Pin, Z = Eyelet Socket								
KEYING											
N, A, B, C, D, E, U			N = Normal, U = Universal								
MODIFICATION CODE											
6149	6149	L/C	Less Contacts								



Jam Nut



Plug



MIL-SPEC



Square Flange Receptacle



PCB Type



Lanyard

Insert Arrangements



Insert	DTSS Commercial	Contact Size/Quantity						Includes K Class	Inactive: Superseded by	Uses 38999/62-8* Boots
		10	12	16	20	22D	23			
09-07	A7 (A07)						7			
09-23	A23						9			
09-35	A35						6	4		
09-98	A98						3	4		
11-02	B2 (B02)				2					
11-04	B4 (B04)						4			
11-05	B5 (B05)						5			
11-23	B23							19		
11-35	B35						13	4		
11-98	B98						6	4		
11-99	B99						7	4		
13-04	C4 (C04)				4					
13-08	C8 (C08)						8	4		
13-23	C23							32		
13-35	C35						22	4		
13-98	C98						10	4		
15-05	D5 (D05)				5					
15-15	D15					1	14			
15-18	D18						18	4		
15-19	D19						19	4		
15-23	D23							55		
15-26	D26				2		24			
15-35	D35						37	4		
15-97	D97				4	8				
17-02	E2 (E02)	1						38		17-03
17-03	E3 (E03)	1						38		4
17-06	E6 (E06)				6					4
17-08	E8 (E08)						8			4
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			4
17-35	E35							55		4
17-99	E99				2	21				4
19-11	F11					11				4
19-18	F18	4						14		19-19
19-19	F19	4						14		4
19-23	E23								88	
19-28	F28					2	26			



Insert DTS Commercial	Military (Commercial ACT)	Contact Size/Quantity						Includes K Class	Inactive/Superseded by
		19-32	19-35	21-11	21-16	21-20	21-23		
		F32						32	
		F35						66	4
		G11				11			
		G16					16		
		G20	2				18		
		G23						121	
		G35						79	4
		G39					2	37	4
		G41						41	4
		G48		4					
		G75	4						21-76
		G76	4						4
		H6 (H06)	6						
		H21					21		
		H23						151	
		H35						100	
		H53						53	4
		H54				4	9	40	
		H55						55	
		H63				4	4	49	
		J4 (J04)					8	48	4
		J7 (J07)	2					97	
		J8 (J08)	8						25-09
		J9 (J09)	2					97	4
		J10	8						25-10
		J11				9		2	
		J17	6					36	
		J19					19		
		J20	3		4		13	10	
		J21	3		4		13	10	25-21
		J23						187	4
		J24					12	12	
		J29						29	
		J35						128	4
		J37					37		
		J43					20	23	
		J46	2				4	40	
		J47	2				4	40	25-47
		J61						61	4
		J90	2				4	40	
		J91	2				4	40	25-91

Blue shaded entries are not Mil Spec.

Green shading indicates high-density inserts.

MIL-DTL-38999 Series III Connectors

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