



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

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

TE Components . . . TE Technology . . . TE Know-how . . .
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SEACON Phoenix | L.L. Rowe | Phoenix Optix | AFP | SEACON

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

DEUTSCH 38999 Series III Connectors

Aluminum • Stainless Steel • Composite

Commercial Composite	Commercial Alum./Stainless	Military	Description	Commercial Composite	ACT	26	M	D	35	P	N	-6149
				Commercial Al/SS Military	DTS D38999	26 /26	F F	15 - D 35	P P	N N	-6149 -L/C	
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		Contact Size/Quantity											Includes K Class	Uses 38999/62-8* Boots	Inactive: Superseded by
DTS Commercial	Military (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	D26								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 (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.

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