















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

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 . . .
AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Polamco | Raychem | Rochester | DEUTSCH
SEACON Phoenix | L.L. Rowe | Phoenix Optix | SEACON

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**

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
—	20	/21	Hermetic Square Flange Receptacle
—	24	/23	Hermetic Jam Nut Receptacle
—	21	/25	Hermetic Solder Flange
—	23	/27	Hermetic Weld Flange
FINISH			
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	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)
HERMETIC			
—	Y	Y	Stainless Steel, Passivated
—	N	N	Stainless Steel, 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, A = Less Pin, H = 1500-Cycle Pin, S = Socket, B = Less Socket, J = 1500-Cycle Socket
CONTACTS FOR HERMETIC CONNECTORS			
C, D, X, Z			C = PC Tail Pin, D = PC Tail Socket X = Eyelet Pin, Z = Eyelet Socket
KEYING			
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													
DTS Commercial	Military and Commercial ACT	8 Twinax	8 Coax	8 Power	12 Twinax	12 Coax	10	12	16	20	22D	23	Includes K Class	Uses 38999/62-8* Boots	Inactive: Superseded by
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													
DTS Commercial	Military and Commercial ACT	8 Twinax	8 Coax	8 Power	12 Twinax	12 Coax	10	12	16	20	22D	23	Includes K Class	Uses 38999/62-8* Boots	Inactive: Superseded by
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

TE Technical Support Center

North America	+1 800 522 6752
Asia Pacific	+86 0 400 820 6015
Austria	+43 1 905 601 228
Baltic Regions	+46 8 5072 5000
Benelux	+31 73 6246 999
Czech Republic	+420 800 701 462
France	+33 1 34 20 86 86
Germany	+49 6251 133 1999
Hungary	+36 809 874 04
Italy	+39 011 401 2632
Nordic	+46 8 5072 5000
Poland	+48 800 702 309
Russia	+7495 790 790 2
Spain/Portugal	+34 93 2910366
Switzerland	+41 52 633 66 26
United Kingdom	+44 800 267 666

Follow us on Twitter for all the latest product news @TEConnectivity, and on Facebook, TEConnectivity.

te.com/38999

© 2015 TE Connectivity Ltd. family of companies. All Rights Reserved.

1-1773860-8 ADM/RRD 1M 10/2015

DEUTSCH, TE Connectivity and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies.

Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information herein, nothing herein constitutes any guarantee that such information is error-free, or any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. The TE entity issuing this publication reserves the right to make any adjustments to the information contained herein at any time without notice. All implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose are expressly disclaimed. The dimensions herein are for reference purposes only and are subject to change without notice.
Specifications are subject to change without notice.

Consult TE for the latest dimensions and design specifications.