

DEUTSCH DL AND DBA SERIES CONNECTORS QUALIFIED TO MIL-DTL-83723 SERIES III

Weight-saving aluminum connectors designed for rugged use and high temperatures





DEUTSCH DL AND DBA SERIES CONNECTORS

Weight-saving connectors designed for rugged use and high temperatures



WITHSTAND HARSH ENVIRONMENTS

- Triple wire sealed for sealing over a wide range of wire diameters
- Raised moisture barriers around each pin for individual contact sealing

EASY INSTALLATION

- Bayonet and threaded coupling options
- Closed-entry socket insert for positive pin alignment
- Scoop proof
- Rear release crimp contact system for excellent contact stability
- Visual confirmation of complete coupling

APPLICATIONS

- Military Aircraft
- Commercial Aircraft
- Communications Equipment
- High-Temperature Industrial Applications

DEUTSCH DL Series bayonet coupling and DBA Series threaded coupling connectors are built to withstand extreme environmental conditions and are qualified to the MIL-DTL-83723 Series III standard.

MATERIALS

• Shell

- Class A: Aluminium shell, black anodized finish
- Class R: Aluminum shell, electroless nickel finish
- Class W: Aluminum shell, olive drab cadmium over nickel base
- Contacts: Copper alloy, plated 50 µinches selective gold
- Bayonet Pins: Passivated stainless steel
- Insulator: Rigid plastic dielectric
- Seals: Silicone-based elastomer

ENVIRONMENTAL

- Temperature: -65°C to +200°C (Class W -55°C to +175°C)
 Durability:
- 500 mating cycles for all bayonet receptacles (M83723/71 through /76) 250 mating cycles for plugs with RFI fingers (M83723/77 and /78) 250 mating cycles for threaded connectors (M83723/82 through /87)
- Vibration: Meets performance requirements of MIL-DTL-83723
- Shock: Meets performance requirements of MIL-DTL-83723
- Shielding: RFI shielding as per MIL-DTL-83723
- Conductivity (Voltage Drop):
- 5 mV max. (with RFI shielding)
- 200 mV max. (without RFI shielding)
- Contact Retention:
- Size 20: 20 lb.
- Size 16: 25 lb.
- Size 12: 30 lb.
- Shell Styles: Square flange, jam nut, straight plug, and RFI plug (RFI plug in Bayonet series only)

VOLTAGE RATING

Comulas Dating	Test Voltage (Vrms)					
Service Rating	@ Sea Level	@ 70,000 ft.				
11.0	1500	500	375			
	2300	750	500			

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

Bayonet Coupling Connectors

MIL-DTL-83723 Series III System <u>M83723/ 72</u> R 22 55 N Military Designation Shell Type 71 Square Flange Mount Receptacle, Socket Contacts 72 Square Flange Mount Receptacle, Pin Contacts 73 Jam Nut Receptacle, Socket Contacts 74 Jam Nut Receptacle, Pin Contacts 75 Straight Plug, Socket Contacts 76 Straight Plug, Pin Contacts 77 RFI Grounding Plug, Socket Contacts (Not Available in A Class) 78 RFI Grounding Plug, Pin Contacts (Not Available in A Class) Class (Material and Finish) -A Aluminum Shell, Black Anodized Finish Aluminum Shell, Electroless Nickel Finish R W Aluminum Shell, Olive Drab Cadmium over Nickel Base Shell Size 8, 10, 12, 14, 16, 18, 20, 22, 24 Insert Arrangement -See insert arrangement table **Clocking/Keying Position**

N Normal

6, 7, 8, 9, Y (Y Not Available in Size 8 Shell)

DEUTSCH DL Series System	DL	66	R	<u>18</u>	<u>14</u>	P	8	<u>6116</u>
Connector Series Shell Mounting Style 60 Square Flange 64 Jam Nut 66 Straight Plug 68 RFI Plug								
Class R Nonconductive Finish (Black Anodized) G Conductive Finish (Nickel) Shell Size 8, 10, 12, 14, 16, 18, 20, 22, 24								
Insert Arrangement See insert arrangement table								
Contact Style P Pin S Socket								
Clocking/Keying Position N, 6, 7, 8, 9, 10 (10 Not Available in Size 8 Shell) (Consult TE for available alternate clocking) Modification								

6116 Black Anodized Finish, Blue Color Bands, Less Backshell

6106 Electroless Nickel Finish, Blue Color Bands, Less Backshell

6117 Olive Drab Cadmium over Nickel Base, Blue Color Bands, Less Backshell

Insert Arrangments For Bayonet Connectors

Inserts are QPL and available in 6, 7, 8, 9, or Y polarization (Insert 8-3 is not available with Y polarization)

Consult TE for insert arrangements for threaded connectors.

Arrangement –			
	Size 20	Size 16	Size 12
8-3	4		
10-2	3		
10-5	6		
10-6	7		
10-20		3	
12-3		4	
12-12	14		
14-04			5
14-07		8	
14-12		4	
14-15	17		
16-10		11	
16-24	27		
18-8			9
18-14		16	
18-31	35		
20-16		18	
20-25	21		1
20-28	27		5
20-39	41	3	
20-41	46		
22-12			14
22-19		21	
22-32	29		7
22-39	30	14	
22-55	61		
24-19			21
24-43	26	22	
24-57	61		3
24-61	68		

Threaded Connectors

MIL-DTL-83723 Series III System	<u>M83723</u>	84	R	22	55	N
Military Designation						
Shell Type						
82 Square Flange Mount Receptacle, Socket Contacts						
83 Square Flange Mount Receptacle, Pin Contacts						
84 Jam Nut Receptacle, Socket Contacts						
85 Jam Nut Receptacle, Pin Contacts						
86 Straight Plug, Socket Contacts						
87 Straight Plug, Pin Contacts						
Class (Material and Finish)						
A Aluminum Shell, Black Anodized Finish						
R Aluminum Shell, Electroless Nickel Finish						
W Aluminum Shell, Olive Drab Cadmium over Nickel Base						
Shell Size						
8, 10, 12, 14, 16, 18, 20, 22, 24						
Insert Arrangement						
Consult TE						
Clocking/Keying Position						
N Normal						
6, 7, 8, 9, Y (Y Not Available in Size 8 Shell)						

DEUTSCH DBA Series System	DBA	34	-	<u>22-55</u>	P	N	6116
Connector Series							
 Style 30 Square Flange Receptacle (/82, Socket; /83, Pin) 34 Jam Nut Receptacle (/84, Socket; /85, Pin) 36 Plug (/86, Socket; /87, Pin) 							
Shell Size 8, 10, 12, 14, 16, 18, 20, 22, 24							
Insert Arrangement Consult TE							
Pin or Socket P Pin S Socket							
Clocking Position Shell Clocking: N, 6, 7, 8, 9, 10 (10 Not Available in Size 8 She)						
Modification							

- Modification
 - 6116 Aluminum Shell, Black Anodized Finish
 - 6106 Aluminum Shell, Electroless Nickel Finish
 - 6117 Aluminum Shell, Olive Drab Cadmium over Nickel Base

For More Information

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Consult TE for the latest dimensions and design specifications.

