

## DEUTSCH DL AND DBA SERIES CONNECTORS

QUALIFIED TO MIL-DTL-83723 SERIES III

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



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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**

Samilas Datina	Test Voltage (\	100	
Service Rating	@ Sea Level	@ 50,000 ft.	@ 70,000 ft.
I to a	1500	500	375
II This pure	2300	750	500

TE Components . . . TE Technology . . . TE Know-how . .

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



#### **Bayonet Coupling Connectors** MIL-DTL-83723 Series III System M83723/ 72 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 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** $\mathsf{DL}$ 66 R 18 14 Ρ 6116 8 **Connector Series Shell Mounting Style 60** Square Flange 64 Jam Nut 66 Straight Plug 68 RFI Plug Class 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 -	No. of Contacts		
	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 M83723 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 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 - 22-55 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 Socket **Clocking Position -**Shell Clocking: N, 6, 7, 8, 9, 10 (10 Not Available in Size 8 Shell) 6116 Aluminum Shell, Black Anodized Finish 6106 Aluminum Shell, Electroless Nickel Finish

6117 Aluminum Shell, Olive Drab Cadmium over Nickel Base

#### For More Information

#### TE Technical Support Center

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Consult TE for the latest dimensions and design specifications.

