



# 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  $\mu$ inches 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

Service Rating	Test Voltage ( $V_{rms}$ )		
	@ Sea Level	@ 50,000 ft.	@ 70,000 ft.
I	1500	500	375
II	2300	750	500

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## 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
- 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** \_\_\_\_\_

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 18 14 P 8 6116**

**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 Arrangements 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
- 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 - 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
- S** Socket

**Clocking Position** \_\_\_\_\_

Shell Clocking: **N, 6, 7, 8, 9, 10** (10 Not Available in Size 8 Shell)

**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.