



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 μ 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

Empower Engineers to Solve Problems, Moving the World Forward.



Bayonet Coupling Connectors

MIL-DTL-83723 Series III System

	<u>M83723/</u>	<u>72</u>	<u>R</u>	<u>22</u>	<u>55</u>	<u>N</u>
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

	<u>DL</u>	<u>66</u>	<u>R</u>	<u>18</u>	<u>14</u>	<u>P</u>	<u>8</u>	<u>6116</u>
CONNECTOR SERIES	_____							
SHELL MOUNTING STYLE	_____							
60	Square Flange Receptacle (/71 Socket; /72 Pin)							
64	Jam Nut Receptacle (/73 Socket; /74 Pin)							
66	Straight Plug (/75 Socket; /76 Pin)							
68	RFI Plug (/77 Socket; /78 Pin)							
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	3		
10-2	2		
10-5	5		
10-6	6		
10-20		2	
12-3		3	
12-12	12		
14-04			4
14-07		7	
14-12	9	3	
14-15	15		
16-10		10	
16-24	24		
18-8			8
18-14		14	
18-31	31		
20-16		16	
20-25	19		6
20-28	24		4
20-39	37	2	
20-41	41		
22-12			12
22-19		19	
22-32	26		6
22-39	27	12	
22-55	55		
24-19			19
24-43	23	20	
24-57	55		2
24-61	61		



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

Tel: +44(0) 1793616700 • Fax: +44(0) 1793 644304
uksales@is-rayfast.com • export@is-rayfast.com

www.is-rayfast.com

2 Lydiard Fields, Swindon, Wiltshire, SN5 8UB

