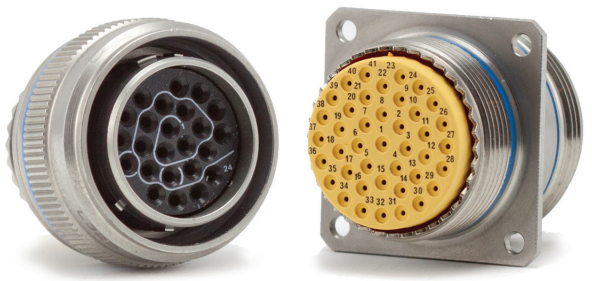
TE Connectivity DEUTSCH 983 Series/EN2997 Series Connectors



HIGH-PERFORMANCE AEROSPACE CONNECTORS FOR AIRCRAFT ENGINES & BOOSTERS

TE DEUTSCH 983 series / EN2997 series connectors are enhanced over standard MIL-DTL-83723 mil spec connectors. TE DEUTSCH 983 / EN2997 connectors have improvements such as anti-rotation, reduced elastomer barriers for use with newer and older generation wires and shell-to-shell metal bottoming. These TE DEUTSCH aerospace connectors are designed for military and commercial aircraft engines and boosters. For full product details on TE DEUTSCH 983 series / EN2997 series connectors, please see the specifications below.

APPLICATIONS

- High-performance military aircraft
- Commercial aircraft
- Communications equipment
- Armored personnel carriers & tanks
- High temperature industrial equipment

FEATURES

- High-reliability
- EMI-shielding protection
- Operates at extreme temperatures
- High vibration applications
- Meets and exceeds MIL-DTL-83723 specification
- EN2997 qualified

TECHNICAL SPECIFICATIONS

MATERIALS AND FINISHES

Shell	Aluminium Alloy or Stainless Steel
Shell Plating	Nickel, Olive Drab Cadmium, Black Anodized
Contacts	Copper Alloy
Contact Platings	Gold plating
Insulator	Themo-setting, Hermetic - Sintered Glass
Seals	Silicone

ELECTRICAL DATA

Wire Range Sizes	12-24AWG
Insulation Resistance	5000 Megaohms minimum at +260C (500F) and 65% Relative Humidity

Test Voltage

SEA LEVEL	SEA LEVEL VAC RMS
Sea Level	1500Vrms @ 50Hz mated connectors
15,000M (49,212 feet)	1000Vrms @ 50Hz mated connectors
30,000M (98,425 feet)	200Vrms @ 50Hz mated connectors

Current Rating

WIRE SIZE	CONTACT SIZE	MAX. CURRENT RATING PER CONTACT AMPS	HERMETIC
24	20	3	5
22	20	5	-
20	20	7.5	-
18	20	7.5	-
20	16	7.5	-
18	16	11	-
16	16	13	10
14	12	17	-
12	12	23	17

MECHANICAL DATA

Operating Temperature	W & WS - +175ºC (+347°F) A, R, RS, K, S, Y - +200°C (+392°F) KE, SE, YE - +260°C cyclic (+500°F)

Wire Sealing Range

CONTACT SIZE	MINIMUM		MAXIMUM	
	IN	MM	IN	MM
20	0.033	0.85	0.083	2.10
16	0.047	1.20	0.106	2.70
12	0.075	1.90	0.157	4.00
8 (8 AWG)	0.161	4.10	0.173	4.40

Insulation Strip Length

CONTACT SIZE	STRIP LENGTH	
	IN	MM
20	0.188	4.77
16	0.283	7.18
12	0.283	7.18
8	0.354	8.99

Mating Life	A, W, WS, R, RS - 250 cycles; K, S, Y, KE, SE, YE - 500 cycles
Salt Spray	A, R, RS - 48 hours per EN 2591-307 W, WS, K, S, Y, KE, SE, YE - 500 hours per EN2591-307
Vibration	10 - 2000 Hz along 2 axis per EN2591 test 403, method B
Shock	300 g/ 3ms per EN2591-402
Shielding efficiency as per EN 2591-213	
Fire resistance	K, S, KE, SE per EN2591-318
Sealed	16.10^-6 m^3/h / 100 kPa
Contact Type	Crimp, Power, Quadrax
Number of Circuits	3 to 61
Contact Insertion	Rear Insertion/Rear Extraction with simple plastic tool
Polarization	Five keyways with optional keyway orientation
Approvals	EN2997