

# **DEUTSCH 983 Series Hermetic Connectors with Size 22 Contacts**

High-Density Connectors – Qualified and Certified to EN2997 Specification for Temperatures up to 260°C

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Space-Saving Connectors Qualified and Certified to EN2997



DEUTSCH 983 series connectors from TE Connectivity (TE) now include the first hermetic EN2997 connectors in the industry rated to 260°C and offering size 22 contacts. Designed to mate with standard plugs, the connector's high contact density makes it possible to reduce equipment size and allow more electrical connections in the same space.

Designed for reliable performance in extreme vibration, high-temperature environments in military and commercial aircraft engine and booster applications, 983 series connectors are qualified to the EN2997 specification for high-temperature engine connectors.

#### **HIGH DENSITY**

- Size 22 contacts for high contact density in the smallest space
- Reduced weight, same performance
- Allows more electrical connections in a smaller footprint

#### **HERMETIC**

- Ideal for connections with differential pressures
- High reliability

#### **HIGH PERFORMANCE**

- Operating temperatures up to 260°C
- High vibration resistance
- EN2997 qualified and certified
- Self-locking, anti-rotation, and shell-to-shell metal bottoming

# **APPLICATIONS**

- Commercial Air
- Helicopters
- Military
- Sensors

#### **MATERIALS**

- Shell: Stainless steel
- Insert: Sintered glass
- Contacts: Gold-plated ferrous alloy, solder type

#### **ENVIRONMENTAL/ MECHANICAL**

• Temperature Range:

Class Y: -65°C to 200°C Class YE: -65°C to 260°C • Durability: 500 mating cycles

• Salt Spray: 500 hours

• Vibration: 10 to 2000 Hz, 3 axes (EN2591-403, method B)

• **Shock:** 300 g/3 ms (EN2591-402)

# **ELECTRICAL**

• Insulation Resistance:

At 25°C and 65% RH: > 5000 M $\Omega$  At 260°C and 65% RH: > 1000 M $\Omega$ 

• Dielectric Withstanding Voltage (50 Hz, Mated Connectors):

At Sea Level: 1500 V<sub>rms</sub> At 15,000 m: 1000 V<sub>rms</sub> At 30,000 m: 1000 V<sub>rms</sub>

#### **Part Numbers**

For receptacles with pin contacts and normal (N) keying. Consult TE for other configurations.

Class	Size/ Insert	Receptacle Part No.						
		Square Flange	Round Flange Solder	Jam Nut				
	08-06	983-0Y 08-06 PN	983-1Y 08-06 PN	983-7Y 08-06 PN				
Υ -	10-12	983-0Y 10-12 PN	983-1Y10-12 PN	983-7Y 10-12 PN				
	12-21	983-0Y 12-21 PN	983-1Y 12-21 PN	983-7Y 12-21 PN				
	08-06	983-0YE 08-06 PN	983-1YE 08-06 PN	983-7YE 08-06 PN				
YE _	10-12	983-0YE 10-12 PN	983-1YE 10-12 PN	983-7YE 10-12 PN				
	12-21	983-0YE 12-21 PN	983-1YE 12-21 PN	983-7YE 12-21 PN				

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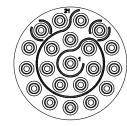
# **Insert Arrangements**







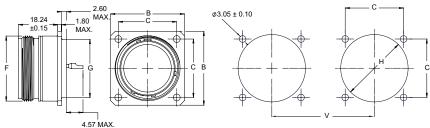
10-12



# 12-21

# **Dimensions**

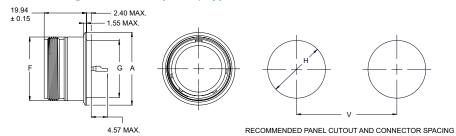
#### **Square Flange Receptacle, Type 0**



RECOMMENDED PANEL CUTOUT AND CONNECTOR SPACING

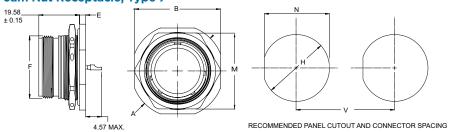
Shell Size	B Max.	C ±0.05	F Max.	G Max.	H Min.	V Min.	Mass Max. (g)
08	20.75	15.09	14.27	12.70	15.80	31.70	18
10	23.93	18.26	17.67	14.27	18.70	34.90	24
12	26.32	20.62	22.22	19.05	23.40	39.60	31

# **Round Flange Solder Receptacle, Type 1**



Shell Size	A +0/-0.2	F Max.	G Max.	H Min.	V Min.	Mass Max. (g)
08	18.36 17.86	14.27	12.70	12.96	31.70	15
10	21.59 21.08	17.67	14.27	14.53	34.90	21
12	26.80	22.22	19.05	19.30	39.60	31

# Jam Nut Receptacle, Type 7



Shell Size	A Max.	В Мах.	E Max.	F Max.	H Max.	M Max.	N	V Min.	Mass Max. (g)	Panel Nut Torque (m.N Max.)
08	27.38	24.89	3.48	14.27	16.26	21.06	15.50	31.70	29	7
10	30.28	28.04	3.48	17.67	19.43	24.23	18.67	34.90	37	10
12	35.05	32.79	3.48	22.22	24.18	29.01	23.42	39.60	50	12

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Consult TE for the latest dimensions and design specifications.

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