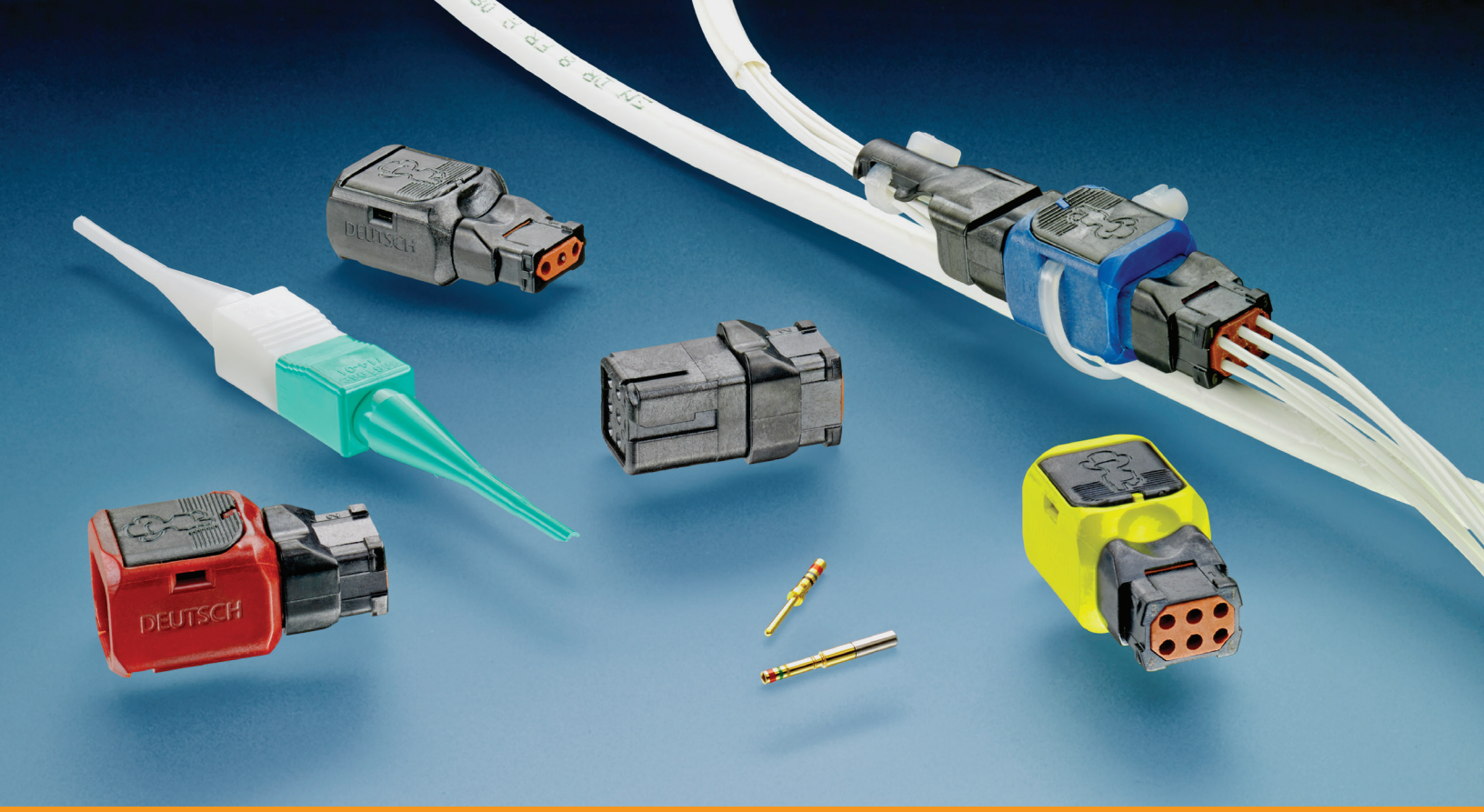


369 Series Connectors

TE connectivity

DEUTSCH

KEY FEATURES

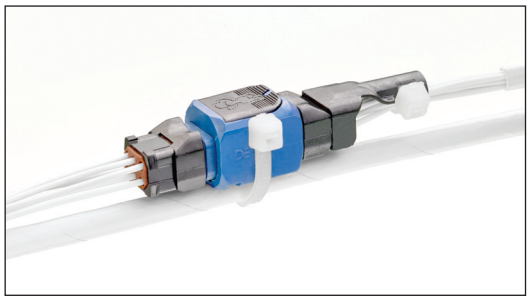
- 3, 6 and 9 way configurations
- Based on existing ARINC 809 / EN4165
- Composite materials
- Robust design
- Fully sealed cable and mating interface
- Mounting of inline with cable-tie
- Button latching mechanism
- Color-coded keyed shells
- Scoop-proof interface
- Military standard AS39029 contacts
- Latch security feature

BENEFITS

- Suitable for broad range of applications
- High reliability in aerospace environment
- Extremely compact and lightweight with low smoke, toxicity and flammability
- Excellent temperature, vibration and fluids resistance
- Suitable for areas where high moisture levels are present
- Simple quick mounting
- Quick positive and audible locking
- Quick and accurate installation of cabling
- Prevents damage to contacts in blind-mating conditions
- Standard termination tooling and wire
- Cable-tie helps prevent inadvertent un-mating

Introduction

TE Deutsch 369 series connectors has been developed to provide a range of high reliability, lightweight, compact and cost efficient connectors suited to aerospace and other harsh environment applications. The product is particularly suited to civil aerospace cabin systems applications and is based on the successful Deutsch ARINC 809/EN4165 single module connector. The 369 series is designed for applications where fewer contacts are needed in each connector and shielding is unnecessary.



Connectors are available with 3, 6, and 9 contacts. Installation and maintenance of cabling is quick and easy with a range of individually color-coded keying options. Furthermore, each mated half of the connector can be configured with either male or female contacts, doubling the keying configurations available and electrically protecting contacts on the powered-side of your system. Aerospace standard AS39029 contacts can be easily extracted and reinserted from the rear of the connector with standard tooling. The 369 is suitable for blindmating or low visibility conditions with the scoop-proof interface preventing damage to contacts. The connectors are fully sealed for use in areas with high levels of moisture and are manufactured from high performance composite materials which conform to the low smoke, toxicity and flammability requirements of FAR 25. The 369 series is complemented by a range of accessories including easy-fit backshells.

Technical Characteristics

MECHANICAL CHARACTERISTICS

Operating temperature :	-55°C to +175°C
Fluid resistance :	I.A.W. EN2591-315
Sealing :	12.1 kPa (1.75 psi) [≈15 km/(50,000 ft) altitude] / IP67
Vibration :	EN2591-403, Method B, Level E, 8h/axis
Smoke & Toxicity :	I.A.W. FAR 25.853, Appendix F
Flammability :	I.A.W. FAR25.853 Appendix F; EN2591-317
Durability :	500 mating cycles
Shock :	EN2591-402, Method A, severity 100

MATERIAL CHARACTERISTICS

Shells, Insulators and backshells :	High performance thermoplastic
Contacts :	Copper alloy, gold plated
Seals :	Fluorosilicone rubber

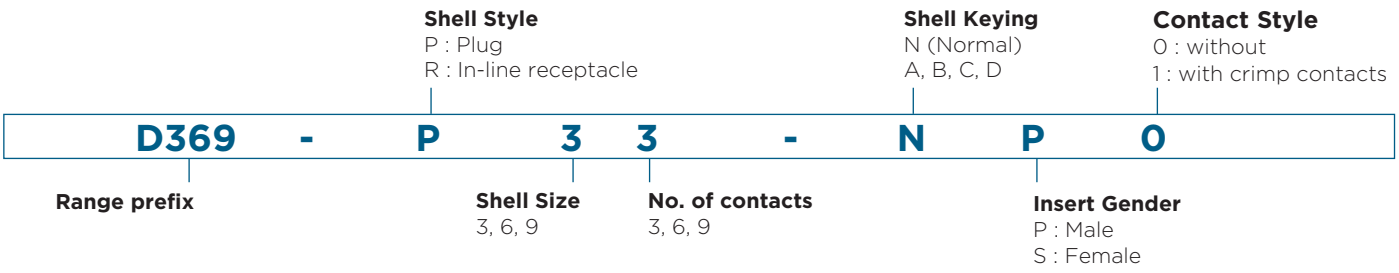
Designed to meet the requirements of RoHS

ELECTRICAL CHARACTERISTICS

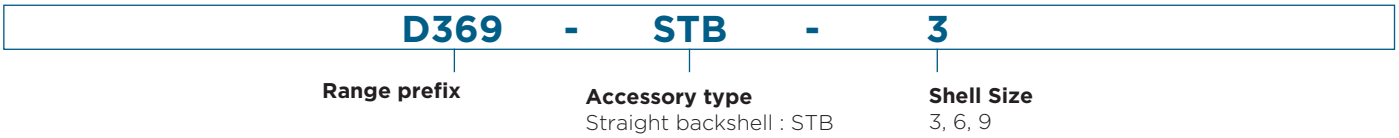
Dielectric withstanding voltage :	1300 Vrms mated, <2 mA leakage
Operating current :	5 A (size 22)

Part Numbering System

CONNECTOR ORDERING EXAMPLE



ACCESSORY ORDERING EXAMPLE



Contacts & Tooling

Crimp Contact (Male/Pin) :
Mil Standard: M39029/58-360
TE-Deutsch equivalent: 38941-22

Crimp Contact (Female/Socket) :
Mil Standard: M39029/57-354
TE-Deutsch equivalent: 38946-22

Contact Insertion/Extraction Tool :
M81969/14-01

Keying & Arrangements

SHELL KEYING

Connectors are physically keyed and color-coded

N-Keying Black

A-Keying Red

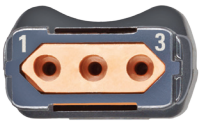
B-Keying Blue

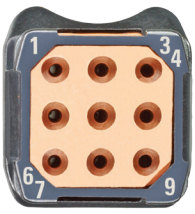
C-Keying Green

D-Keying Yellow

CONTACT ARRANGEMENTS

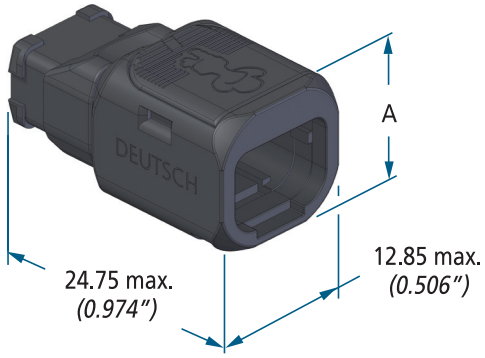
View on rear of receptacle with female insert





Dimensions

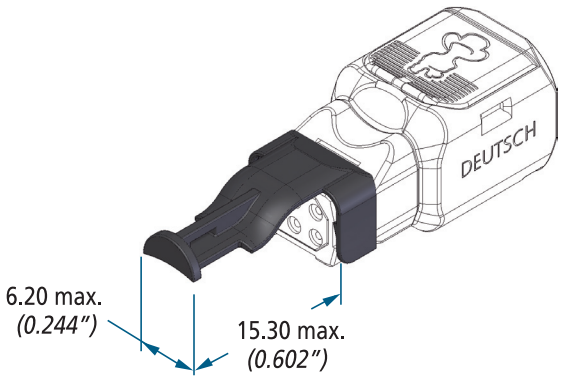
PLUG



Shell size	A max.	Mass*
3	10.41 mm (0.410")	1.90 g
6	12.95 mm (0.510")	2.40 g
9	15.49 mm (0.610")	3.00 g

*Mass based on plug less male contact configuration
Mass for 1 male contact = 0.073 g
Recommended cable-tie: 2.5 mm (0.10")

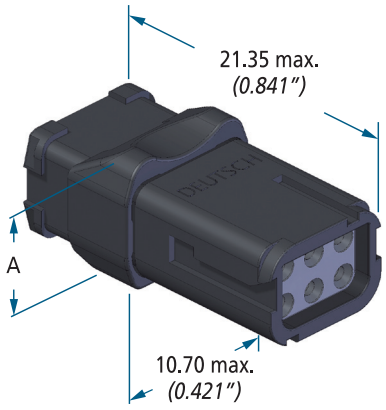
STRAIGHT CABLE-TIE BACKSHELL



Shell size	Mass
3	0.24 g
6	0.25 g
9	0.28 g

Recommended cable-tie: 2.5 mm (0.10")

INLINE RECEPTACLE



Shell size	A max.	Mass*
3	6.52 mm (0.257")	1.00 g
6	9.06 mm (0.357")	1.50 g
9	11.60 mm (0.457")	2.00 g

*Mass based on receptacle less female contact configuration
Mass for 1 female contact = 0.112 g

FOR MORE INFORMATION

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Consult TE for the latest dimensions and design specifications.

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