



High-Reliability, Lightweight, Compact Connectors  
Suited To Harsh Aerospace Environments

# DEUTSCH 369 SERIES CONNECTORS

Lightweight, Compact Connectors



## Versatile and Compact

DEUTSCH 369 series connectors from TE Connectivity (TE) have been designed to meet today's tightening industry regulations and Electrical Wiring Interconnect Systems (EWIS) best practices. Based on EN4165/ARINC 809 connectors, the lightweight, compact 369 series connectors, available in 3, 6, and 9 position standard, are suited for applications where fewer contacts are needed in each connector and shielding is unnecessary.

## Easy to Use

Installation and maintenance of cabling is simple, quick, and reliable with a range of individually color-coded keying options. 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 a system.

The connectors' rectangular shape permits space-efficient stacking, while cable ties allow versatile mounting without the need for additional fasteners. The scoop-proof interface is particularly suitable for blind-mating or low visibility conditions. A button-latching mechanism secures the mated connectors.

## Sealed and Safe

The connectors are fully sealed for use in areas with high levels of moisture. High-performance composite materials help meet the low smoke, toxicity and flammability requirements of the aerospace industry.

## Ideal for Cabin Applications

The 369 series connectors are suitable for commercial aerospace cabin applications, such as:

- Cabin lighting
- Oxygen mask systems
- Galley systems
- Seat actuation systems

The connectors also provide a solution for harsh environment applications, such as UAVs and commercial and military helicopter wiring systems.

## TE Components . . . TE Technology . . . TE Know-how . . .

AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Polamco | Raychem | Rochester | DEUTSCH  
SEACON Phoenix | L.L. Rowe | Phoenix Optix | SEACON

Get your product to market faster with a smarter, better solution.

### BACC QUALIFIED

- Qualified BACC65CP and BACC65CR

### RUGGED

- Low smoke, toxicity and flammability
- Excellent temperature, vibration and fluids resistance
- Triple barrier wire seals
- Cork-in-bottle interface seal

### WEIGHT AND SPACE SAVINGS

- Rectangular shape saves space
- Lightweight composite materials
- No fasteners to mount

### ROBUST DESIGN

- Based on existing ARINC 809/EN4165
- AS39029/EN3155 contacts

### CONVENIENT

- Color-coded keyed shells
- Scoop-proof interface for blindmating

### SECURE

- Cable tie "locks out" the mating button



## MECHANICAL CHARACTERISTICS

- **Operating Temperature:** -55°C to +175°C
- **Fluid Resistance:** EN2591-315
- **IP Rating:** IP67
- **Sealing:** 12.1 kPa (1.75 psi) @ 15 km (50,000 ft)
- **Vibration:** EN2591-403, Method B, Level E, 8 hr/axis
- **Shock:** EN2591-402, Method A, severity 100
- **Smoke and Toxicity:** FAR 25.853, Appendix F; ABD0031
- **Flammability:** FAR25.853 Appendix F; EN2591-317
- **Durability:** 500 mating cycles

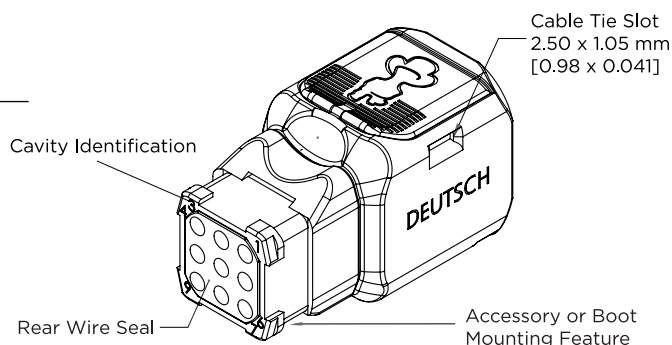
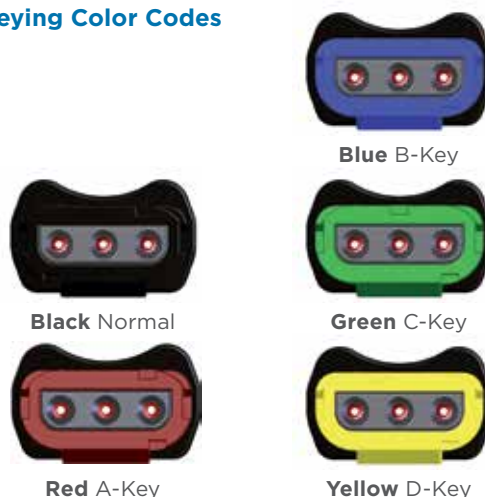
## MATERIALS

- **Shells, Insulators and Backshells:** PEI/PEEK
- **Contacts:** Copper alloy, gold plated
- **Seals:** Fluorosilicone rubber
- Designed to meet the requirements of RoHS

## ELECTRICAL CHARACTERISTICS

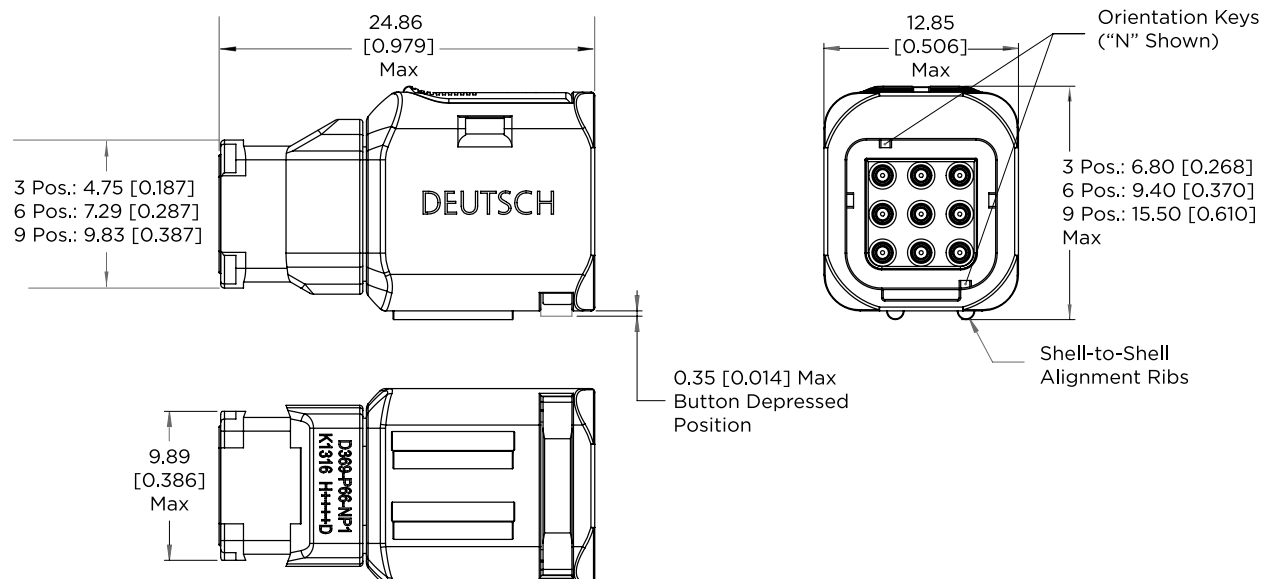
- **Dielectric Withstanding Voltage:** 1300 V<sub>rms</sub> mated, <2 mA leakage
- **Operating Current:** 5 A

## Keying Color Codes





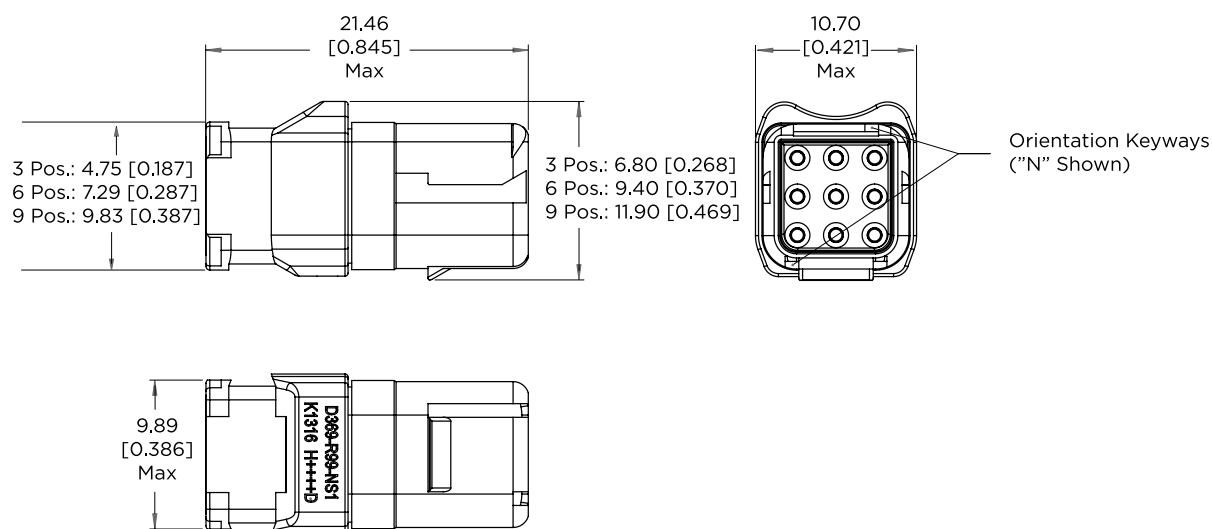
## Plug Connector



| Shell Size | Mass              |
|------------|-------------------|
| 3          | 1.90 g [0.067 oz] |
| 6          | 2.40 g [0.085 oz] |
| 9          | 3.00 g [0.105 oz] |

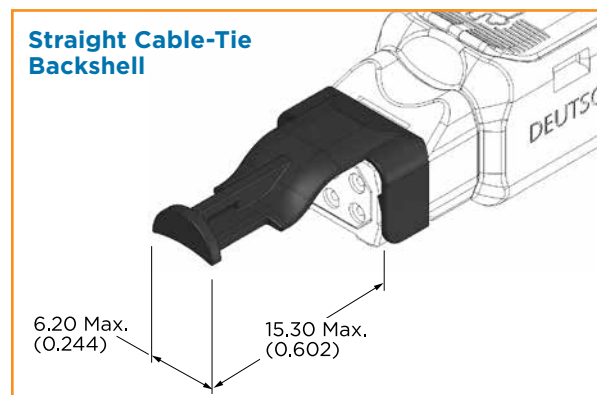
\*Mass based on plug less male contact configuration  
 Mass for 1 male contact = 0.073 g [0.0026]  
 Recommended cable-tie: 2.5 mm [0.10"]

## Receptacle



| Shell Size | Mass              |
|------------|-------------------|
| 3          | 1.00 g [0.035 oz] |
| 6          | 1.50 g [0.053 oz] |
| 9          | 2.00 g [0.070 oz] |

\*Mass based on receptacle less female contact configuration  
 Mass for 1 female contact = 0.112 g [0.004 oz]



| Shell Size | Part No.   | Mass             |
|------------|------------|------------------|
| 3          | D369-STB-3 | 0.24 g [0.85 oz] |
| 6          | D369-STB-6 | 0.25 g [0.88 oz] |
| 9          | D369-STB-9 | 0.28 g [0.99 oz] |

### TE Part Numbering System

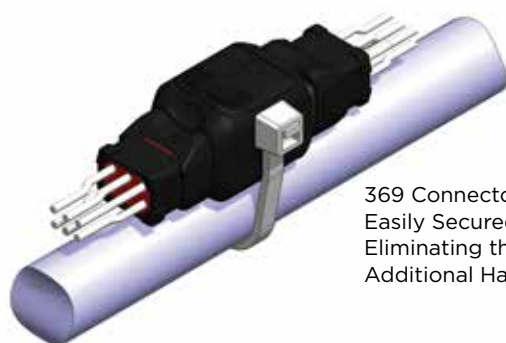
| D369 -        | P                                           | 6                            | 6 -                               | N                                       | P                                  | O                                                        |
|---------------|---------------------------------------------|------------------------------|-----------------------------------|-----------------------------------------|------------------------------------|----------------------------------------------------------|
| <b>Family</b> | <b>Shell Type</b><br>P Plug<br>R Receptacle | <b>Shell Size</b><br>3, 6, 9 | <b>No. of Contacts</b><br>3, 6, 9 | <b>Keying</b><br>N Normal<br>A, B, C, D | <b>Insert</b><br>P Pin<br>S Socket | <b>Contacts</b><br>O Without Contacts<br>1 With Contacts |

### BACC Part Numbering System

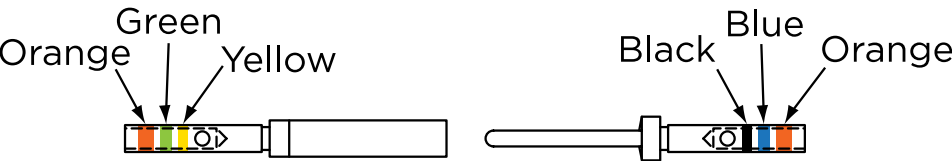
| BACC65CP                                              | 2                                                                 | P                                  | N                                       |
|-------------------------------------------------------|-------------------------------------------------------------------|------------------------------------|-----------------------------------------|
| <b>Family</b><br>BACC65CP Plug<br>BACC65CR Receptacle | <b>Shell Size</b><br>1 3 Position<br>2 6 Position<br>3 9 Position | <b>Insert</b><br>P Pin<br>S Socket | <b>Keying</b><br>N Normal<br>A, B, C, D |

**D369-P66-NP0 = BACC65CP2PN**

6-Position Plug for Pin (Male) Contacts, Normal Keying, Supplied without Contacts



369 Connectors Can Be Easily Secured with Cable Ties, Eliminating the Need for Additional Hardware or Cutouts



Contacts

|  | Contact Size | Wire Range  | Type   | Part No.  |               |          |
|-----------------------------------------------------------------------------------|--------------|-------------|--------|-----------|---------------|----------|
|                                                                                   |              |             |        | TE        | Mil-Spec      | BACC     |
|                                                                                   | 22           | 26 - 22 AWG | Pin    | 38941-22L | M39029/58-360 | BACC47GC |
|                                                                                   |              |             | Socket | 38946-22L | M39029/57-354 | —        |

Tooling

|                                                                                    |                                     |                                                           |                                                              |
|------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------|
|  |                                     |                                                           |                                                              |
| <b>Insertion/Extraction Tool</b>                                                   | <b>Crimp Tool</b>                   | <b>Crimp Positioners</b>                                  |                                                              |
| M81969/14-01                                                                       | M22520/2-01<br>TE Part No. 601966-1 | <b>Pin Contact</b><br>M22520/2-09<br>TE Part No. 601966-6 | <b>Socket Contact</b><br>M22520/2-06<br>TE Part No. 601966-4 |

Cavity Identification

(Plug or Receptacle. Viewed from Rear of Connector)



Using Pin (Male) Contacts



Using Socket (Female) Contacts



## Part Numbers

| No. of Positions          | Housing Type | Insert | Part No.         |               |               |
|---------------------------|--------------|--------|------------------|---------------|---------------|
|                           |              |        | Without Contacts |               | With Contacts |
|                           |              |        | TE               | BACC          | TE            |
| N-Key (Black Color Code)  |              |        |                  |               |               |
| 3                         | Plug         | Pin    | D369-P33-NP0     | BACC65 CP 1PN | D369-P33-NP1  |
|                           |              | Socket | D369-P33-NS0     | BACC65 CP 1SN | D369-P33-NS1  |
|                           | Receptacle   | Pin    | D369-R33-NP0     | BACC65 CR 1PN | D369-R33-NP1  |
|                           |              | Socket | D369-R33-NS0     | BACC65 CR 1SN | D369-R33-NS1  |
| 6                         | Plug         | Pin    | D369-P66-NP0     | BACC65 CP 2PN | D369-P66-NP1  |
|                           |              | Socket | D369-P66-NS0     | BACC65 CP 2SN | D369-P66-NS1  |
|                           | Receptacle   | Pin    | D369-R66-NP0     | BACC65 CR 2PN | D369-R66-NP1  |
|                           |              | Socket | D369-R66-NS0     | BACC65 CR 2SN | D369-R66-NS1  |
| 9                         | Plug         | Pin    | D369-P99-NP0     | BACC65 CP 3PN | D369-P99-NP1  |
|                           |              | Socket | D369-P99-NS0     | BACC65 CP 3SN | D369-P99-NS1  |
|                           | Receptacle   | Pin    | D369-R99-NP0     | BACC65 CR 3PN | D369-R99-NP1  |
|                           |              | Socket | D369-R99-NS0     | BACC65 CR 3SN | D369-R99-NS1  |
| A-Key (Red Color Code)    |              |        |                  |               |               |
| 3                         | Plug         | Pin    | D369-P33-AP0     | BACC65 CP 1PA | D369-P33-AP1  |
|                           | Receptacle   | Socket | D369-R33-AS0     | BACC65 CR 1SA | D369-R33-AS1  |
| 6                         | Plug         | Pin    | D369-P66-AP0     | BACC65 CP 2PA | D369-P66-AP1  |
|                           | Receptacle   | Socket | D369-R66-AS0     | BACC65 CR 2SA | D369-R66-AS1  |
| 9                         | Plug         | Pin    | D369-P99-AP0     | BACC65 CP 3PA | D369-P99-AP1  |
|                           | Receptacle   | Socket | D369-R99-AS0     | BACC65 CR 3SA | D369-R99-AS1  |
| B-Key (Blue Color Code)   |              |        |                  |               |               |
| 3                         | Plug         | Pin    | D369-P33-BP0     | BACC65 CP 1PB | D369-P33-BP1  |
|                           | Receptacle   | Socket | D369-R33-BS0     | BACC65 CR 1SB | D369-R33-BS1  |
| 6                         | Plug         | Pin    | D369-P66-BP0     | BACC65 CP 2PB | D369-P66-BP1  |
|                           | Receptacle   | Socket | D369-R66-BS0     | BACC65 CR 2SB | D369-R66-BS1  |
| 9                         | Plug         | Pin    | D369-P99-BP0     | BACC65 CP 3PB | D369-P99-BP1  |
|                           | Receptacle   | Socket | D369-R99-BS0     | BACC65 CR 3SB | D369-R99-BS1  |
| C-Key (Green Color Code)  |              |        |                  |               |               |
| 3                         | Plug         | Pin    | D369-P33-CP0     | BACC65 CP 1PC | D369-P33-CP1  |
|                           | Receptacle   | Socket | D369-R33-CS0     | BACC65 CR 1SC | D369-R33-CS1  |
| 6                         | Plug         | Pin    | D369-P66-CP0     | BACC65 CP 2PC | D369-P66-CP1  |
|                           | Receptacle   | Socket | D369-R66-CS0     | BACC65 CR 2SC | D369-R66-CS1  |
| 9                         | Plug         | Pin    | D369-P99-CP0     | BACC65 CP 3PC | D369-P99-CP1  |
|                           | Receptacle   | Socket | D369-R99-CS0     | BACC65 CR 3SC | D369-R99-CS1  |
| D-Key (Yellow Color Code) |              |        |                  |               |               |
| 3                         | Plug         | Pin    | D369-P33-DP0     | BACC65 CP 1PD | D369-P33-DP1  |
|                           | Receptacle   | Socket | D369-R33-DS0     | BACC65 CR 1SD | D369-R33-DS1  |
| 6                         | Plug         | Pin    | D369-P66-DP0     | BACC65 CP 2PD | D369-P66-DP1  |
|                           | Receptacle   | Socket | D369-R66-DS0     | BACC65 CR 2SD | D369-R66-DS1  |
| 9                         | Plug         | Pin    | D369-P99-DP0     | BACC65 CP 3PD | D369-P99-DP1  |
|                           | Receptacle   | Socket | D369-R99-DS0     | BACC65 CR 3SD | D369-R99-DS1  |

## For More Information

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Consult TE for the latest dimensions and design specifications.