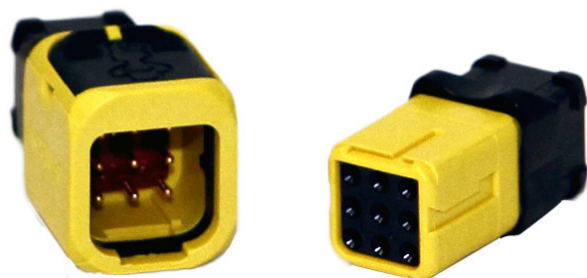


TE Connectivity DEUTSCH 369 Series Connectors



HARSH ENVIRONMENT CONNECTORS PERFECT FOR AIRCRAFT CABIN SYSTEMS

TE DEUTSCH 369 series connectors offer high reliability in a compact, lightweight, fully sealed and cost-effective composite design. These harsh environment connectors are perfect for use in commercial aircraft cabin systems and other aerospace applications. Based on the popular TE DEUTSCH ARINC 809/EN4165 single module connector, 369 series connectors are available in 3, 6 and 9 contacts. AS39029 contacts can be easily extracted and reinserted using standard tooling and cable installation and maintenance is simple, with individually color-coded keying options. A scoop-proof design prevents damage and permits mating in low visibility conditions.

APPLICATIONS

- Aerospace cabin systems
- Automotive safety & security system connectors
- Traffic control equipment
- Marine industrial connectors
- Truck accessory disconnects
- Mining ventilation systems
- Car interconnections
- RV interconnections

FEATURES

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

TECHNICAL
SPECIFICATIONS**MATERIALS AND FINISHES**

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

Designed to meet the requirements of RoHS

ELECTRICAL DATA

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

MECHANICAL DATA

Operating temperature	-55°C to +175°C (-67°F to +347°F)
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
Sealing Range size 22	.071 to 1.37mm (.028 to .054")

TE DEUTSCH 369 SERIES SELECT PART NUMBER

	1	2	3	4	5
	D369-	P	33	-N	P
SERIES PREFIX	SHELL STYLE	LAYOUT	KEYING	CONTACT TYPE	CONTACTS SUPPLIED

STEP 1: SELECT SHELL STYLE



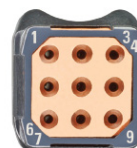
STEP 2: SELECT LAYOUT



33
3 contacts #22



66
6 contacts #22



99
9 contacts #22

NOTE: View of termination side

STEP 3: SELECT KEYING



N
Normal (BLACK)



A
A Keyed (RED)



B
B Keyed (BLUE)



C
C Keyed (GREEN)



D
D Keyed (YELLOW)

NOTE: Connectors are physically keyed and color coded. View on front of receptacle with female insert

STEP 4: SELECT CONTACT TYPE

P = Pin

S = Socket

STEP 5: SELECT CONTACT SUPPLIED

0 = Without Contacts

1 = With Contacts

TE DEUTSCH 369 SERIES SELECT BACC PART NUMBER

	1	2	3	4
	BACC65	CP	1	N
SERIES PREFIX	SHELL STYLE	LAYOUT	KEYING	CONTACT TYPE

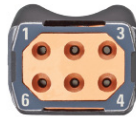
STEP 1: SELECT SHELL STYLE



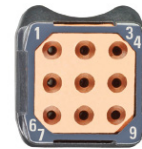
STEP 2: SELECT LAYOUT



1
3 contacts #22



2
6 contacts #22



3
9 contacts #22

NOTE: View of termination side

STEP 3: SELECT KEYING



N
Normal (BLACK)



A
A Keyed (RED)



B
B Keyed (BLUE)



C
C Keyed (GREEN)



D
D Keyed (YELLOW)

NOTE: Connectors are physically keyed and color coded. View on front of receptacle with female insert


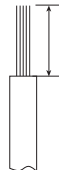

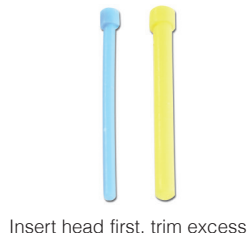
STEP 4: SELECT CONTACT TYPE

P = Pin

S = Socket


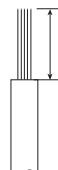


NOTE: Contacts are purchased separately
Pin - BACC47GC type

PINS

														
CONTACT SIZE	WIRE SIZE AWG	PIN PART NUMBER	COLOR BANDS			WIRE STRIP LENGTHS	WIRE INSULATION		WIRE HOLE FILLER	COLOR				
			1	2	3		MIN.	MAX.						
22	22,24,26 & 28	M39029/58-360	Orange	Blue	Black	.125 (3.18)	.028 (0.71)	.054 (1.37)	MS27488-22-2	Black				

All dimensions in inches (millimeters in parenthesis)

SOCKETS

											
CONTACT SIZE	WIRE SIZE AWG	SOCKET CONTACT PART NUMBER	COLOR BANDS			WIRE STRIP LENGTHS	WIRE RANGE		WIRE HOLE FILLER	COLOR	
			1	2	3		MIN.	MAX.			
22	22,24,26 & 28	M39029/57-354	Orange	Yellow	Gray	.125 (3.18)	.028 (0.71)	.054 (1.37)	MS27488-22-2	Black	

All dimensions in inches (millimeters in parenthesis)

CONTACT TOOLS

PINS



CONTACT SIZE	HAND-CRIMP TOOL	POWER- CRIMP TOOL	TURRET HEADS	USE LOCATOR COLOR	PLASTIC INSERTION/ EXTRACTION TOOL	INSERTION TIP COLOR	EXTRACTION TIP COLOR
22	M22520/2-01	WA22††	M22520/2-09	-	M81969/14-01	Green	White

†† Contact us for more tool accessories.

All dimensions in inches (millimeters in parenthesis)

SOCKETS



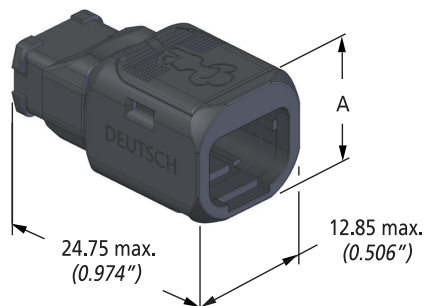
CONTACT SIZE	HAND-CRIMP TOOL	POWER- CRIMP TOOL	TURRET HEADS	USE LOCATOR COLOR	PLASTIC INSERTION/ EXTRACTION TOOL	INSERTION TIP COLOR	EXTRACTION TIP COLOR
22	M22520/2-01	WA22††	M22520/2-08	-	M81969/14-01	Green	White

†† Contact us for more tool accessories.

All dimensions in inches (millimeters in parenthesis)

DIMENSIONS

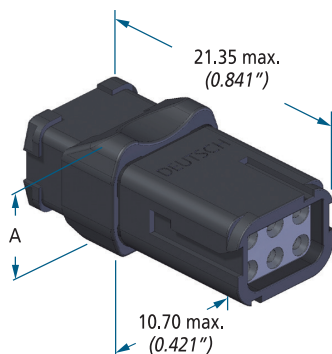
PLUG



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

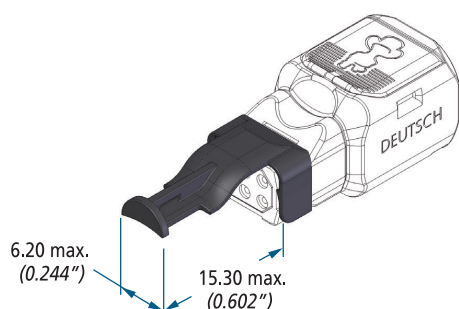
IN-LINE RECEPTACLE



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

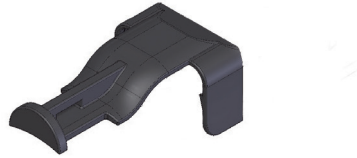
STRAIGHT FOR CABLE TIE BACKSHELL



SHELL SIZE	PART NUMBER	MASS
3	D369-STB-3	0.24 g
6	D369-STB-6	0.25 g
9	D369-STB-9	0.28 g

Recommended cable-tie: 2.5 mm (0.10")

STRAIGHT BACKSHELLS FOR CABLE TIE

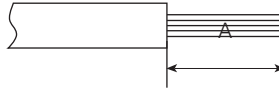


SHELL SIZE	STRAIGHT BACKSHELL
Size 3	D369-STB-3
Size 6	D369-STB-6
Size 9	D369-STB-9

ASSEMBLY

WIRE STRIPPING

Strip insulation from end of wire to be crimped. (See table for proper stripping dimensions.) Do not cut or damage wire strands.



WIRE SIZE	A
22	.125 (3.18)

All dimensions in inches
(millimeters in parenthesis)

CONTACT CRIMPING

correct crimp



incorrect crimp

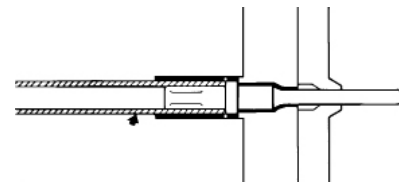
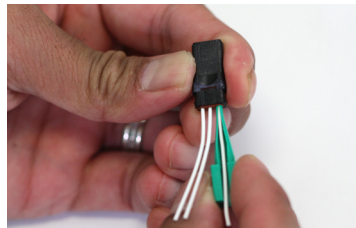
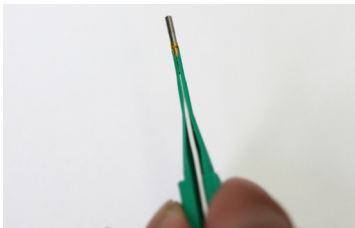


STEP 1: Strip wires. See above for correct strip length for contact. Insert wire into rear of contact. Wire insulation must push against rear of contact. Wire must be visible through inspection hole.

STEP 2: M22520 series crimp tool and locator is recommended. ➔ See page 112 for choice of turret head and selection setting according to correct size, part number and wire gauge size.

STEP 3: Insert contact and wire into tool jaws. To crimp, squeeze handles together fully until ratchet releases and allows handles to expand; otherwise, contact cannot be extracted from tool jaws. Maintain slight insertion pressure on wire while crimping contact to wire.

CONTACT INSERTION



STEP 1: Using proper plastic insertion tool for corresponding contact, position wire in tip of the tool so that the tool tip presses against the contact shoulder. Use lubrication, Isopropyl Alcohol to aid with contact insertion/extraction.

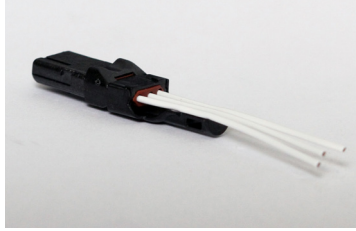
STEP 2: Press tool against contact shoulder and, with firm and even pressure, insert wired contact and tool tip into center contact cavity.

STEP 3: When contact bottoms, a slight "click" can be heard as tines of retaining clip snap into place behind contact shoulder. Do not rotate insertion/extraction tool in the connector. It can cause damage to the retention tines.

CONTACT INSERTION (CONT.)

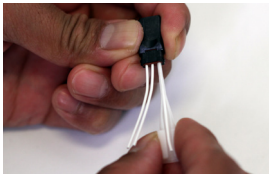


STEP 4 : Remove tool and pull back lightly on wire to make sure contact is properly seated. Repeat operation with remainder of contacts to be inserted.

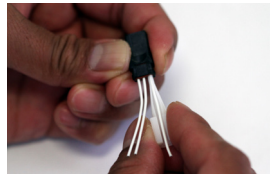


STEP 5 : After all contacts are inserted, fill any empty cavities with wire sealing plugs.

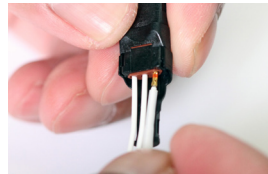
CONTACT EXTRACTION



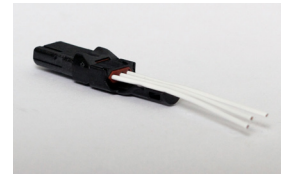
STEP 1: Using plastic extraction tool with proper color code corresponding to contact size, place wire in tool.



STEP 2: Insert tool into contact cavity until tool tip bottoms against the contact shoulder, expanding clip retaining tines.

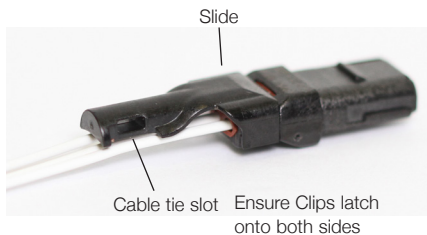


STEP 3: Hold wire firmly in tool and extract wired contact and tool. Repeat operation for all contacts to be extracted.

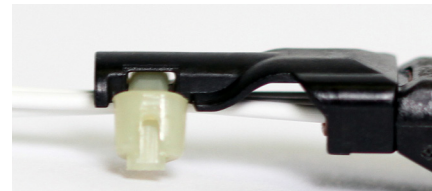


STEP 4: Fill any empty cavities with wire sealing plugs. Reassemble plug or receptacle hardware.

BACKSHELL ASSEMBLY

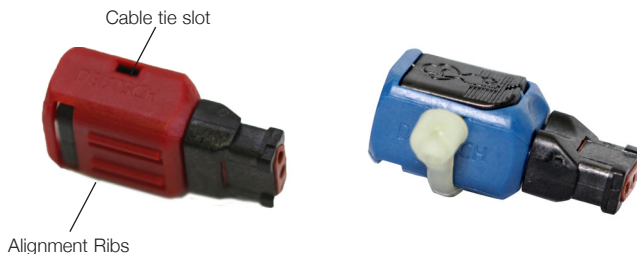


STEP 1: Backshell clips to the rear of the connector, fitting from either the top of the underside of the connector. Slide into position ensuring the side clips have latched into position.



STEP 2: Bundle the wires together under the backshell, ensuring the wires remain as straight as possible where they enter the wire seal. Secure wires with cable tie <.10" (2.5mm) width x .04" (1.05) thick through the cable tie slot.

CONNECTOR MOUNTING



OPTION 1: Can mount connectors using cable tie <.10" (2.5mm) width x .04" (1.05) thick through the connector cable tie slot.



OPTION 2: Connectors can be nested with adjacent 369 connectors. Pass one cable tie through both connectors to secure.

BACC CROSS REFERENCE

BACC P/N X-REF (LESS CONTACTS)	TE DEUTSCH PART NUMBER (LESS CONTACTS)
BACC65CP1SN	D369-P33-NS0
BACC65CP1PN	D369-P33-NP0
BACC65CR1PN	D369-R33-NP0
BACC65CR1SN	D369-R33-NS0
BACC65CP2SN	D369-P66-NS0
BACC65CP2PN	D369-P66-NP0
BACC65CR2PN	D369-R66-NP0
BACC65CR2SN	D369-R66-NS0
BACC65CP3SN	D369-P99-NS0
BACC65CP3PN	D369-P99-NP0
BACC65CR3PN	D369-R99-NP0
BACC65CR3SN	D369-R99-NS0
BACC65CP1PA	D369-P33-AP0
BACC65CR1SA	D369-R33-AS0
BACC65CP2PA	D369-P66-AP0
BACC65CR2SA	D369-R66-AS0
BACC65CP3PA	D369-P99-AP0
BACC65CR3SA	D369-R99-AS0
BACC65CP1PB	D369-P33-BP0
BACC65CR1SB	D369-R33-BS0
BACC65CP2PB	D369-P66-BP0
BACC65CR2SB	D369-R66-BS0
BACC65CP3PB	D369-P99-BP0
BACC65CR3SB	D369-R99-BS0
BACC65CP1PC	D369-P33-CP0
BACC65CR1SC	D369-R33-CS0
BACC65CP2PC	D369-P66-CP0
BACC65CR2SC	D369-R66-CS0
BACC65CP3PC	D369-P99-CP0
BACC65CR3SC	D369-R99-CS0
BACC65CP1PD	D369-P33-DP0
BACC65CR1SD	D369-R33-DS0
BACC65CP2PD	D369-P66-DP0
BACC65CR2SD	D369-R66-DS0
BACC65CP3PD	D369-P99-DP0
BACC65CR3SD	D369-R99-DS0
CONTACTS	
BACC47GC1A	M39029/58-360 (Pin)

Socket not available as BACC callout from TE DEUTSCH.