

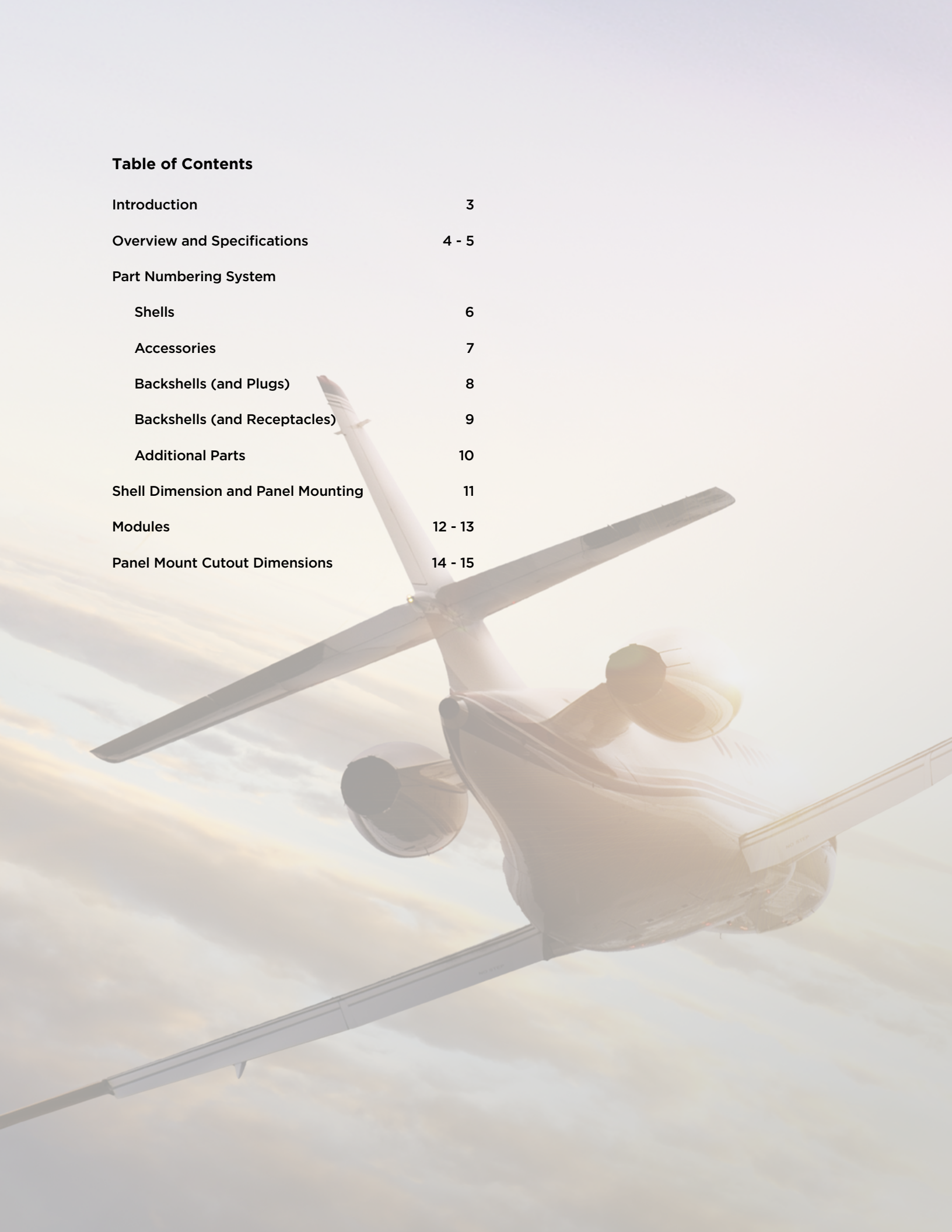
# DEUTSCH DMC-MD SERIES

SINGLE MODULE EN4165, ARINC 809,  
BACC65 CONNECTORS

Quick Change Modular Connector Solutions  
For Aircraft IFE and Cabin Systems

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# THE STANDARD CONNECTOR FOR 4TH GENERATION CABIN NETWORKS

ARINC 809, BACC65, EN4165



## QUALIFIED

- EN4165
- ARINC 809
- BACC65

## APPLICATIONS

- Cabin Systems
- In-Flight Entertainment
- Avionics



## Specifications

### MATERIALS

- **Housing:** Composite, nickel plated
- **Modules:** Thermoplastic and fluorinated silicone
- **Crimp Contacts:** Copper alloy, plated gold over nickel
- **PCB Contacts:** Copper alloy, plated gold over nickel, with lead or RoHS tinning option

### MECHANICAL/ENVIRONMENTAL

- **Temperature Range:** -55°C to +175°C
- **Vibration:** 20 g
- **Durability:** 500 mating cycles
- **Salt Spray:** 500 hours
- **Interfacial Sealing:** 1.1 x 10<sup>-2</sup> bar

### ELECTRICAL

- **Insulation Resistance:** 5000 MΩ
- **Contact Current Rating:**
  - Size 24: 3 A
  - Size 23: 5 A
  - Size 22: 5 A
  - Size 20: 7.5 A
  - Size 16: 13 A
  - Size 12: 23 A
  - Size 8: 46 A

### EMI SHIELDING PERFORMANCE

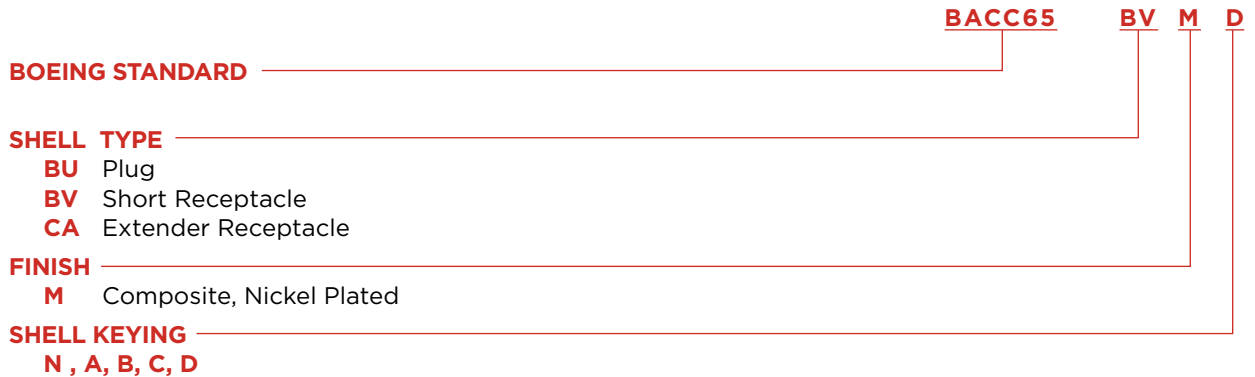
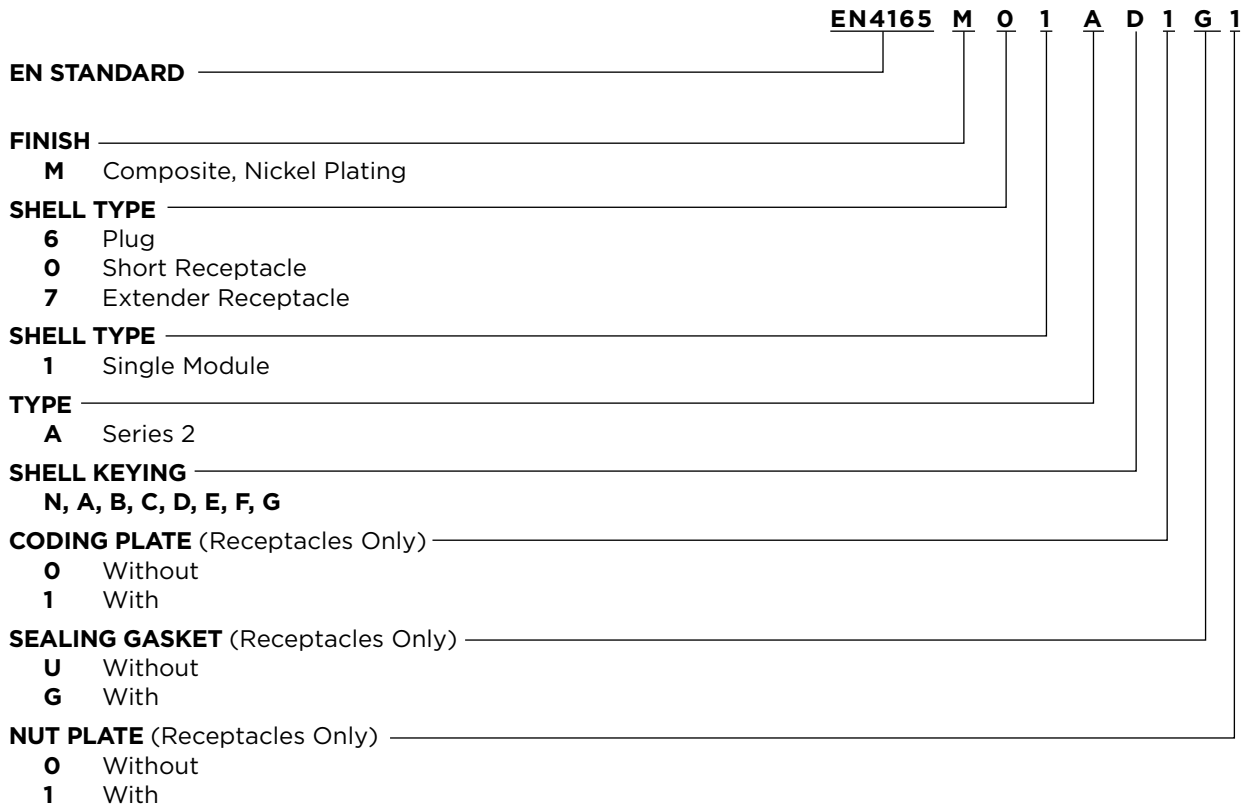
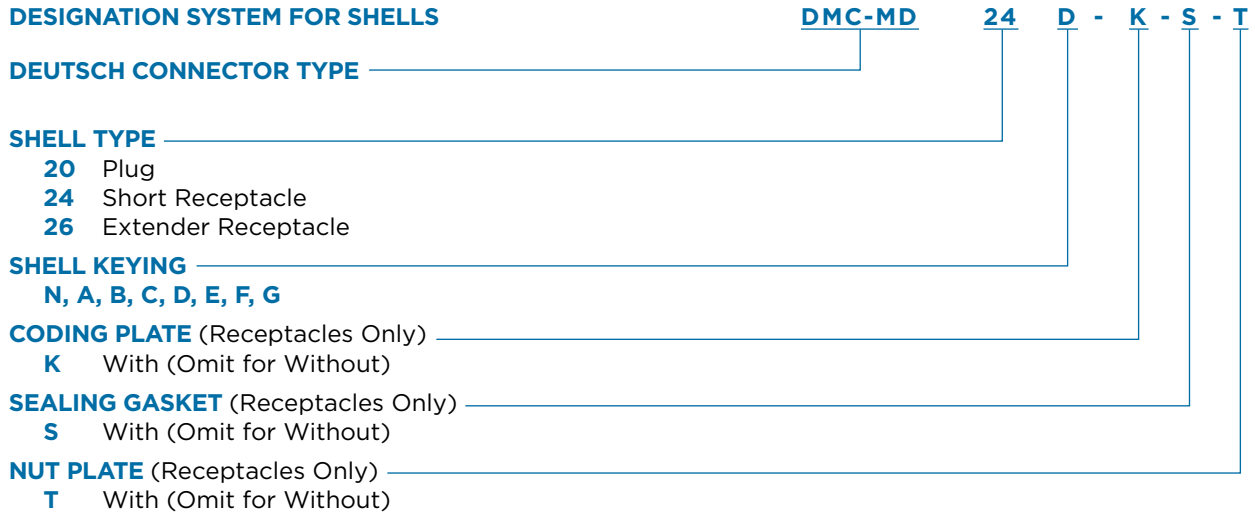
Frequency (MHz)	100	200	300	400	800	1000
Attenuation (dB)	50	45	45	40	35	30

### WEIGHT

Extender Receptacle	Short Receptacle	Plug	Backshell
7 gr	6 gr	9 gr	4 - 7 gr
0.015 lbs	0.013 lbs	0.020 lbs	0.009 - 0.015 lbs



**DESIGNATION SYSTEM FOR SHELLS**

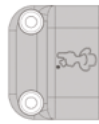




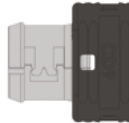
**BACKSHELLS**

**PLUGS**

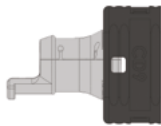
STRAIGHT CLAMPSHELL  
787-8055-11M  
Screws delivered



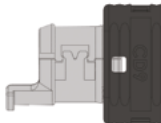
STRAIGHT CHIMNEY  
787-8055-10M  
EN4165-026M10



STRAIGHT CHIMNEY  
TIE WRAP Ø 7  
787-8055-12M



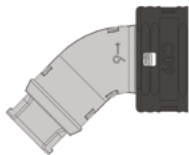
STRAIGHT CHIMNEY  
TIE WRAP Ø 10  
787-8055-13M  
EN4165-026M10A



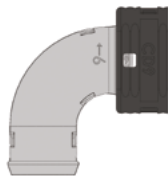
45° INDEXABLE CHIMNEY  
787-8055-20M  
EN4165-026M20



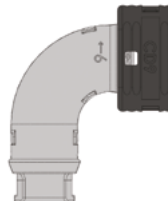
45° INDEXABLE CHIMNEY  
TIE WRAP  
787-8055-21M  
EN4165-026M20A



90° INDEXABLE CHIMNEY  
787-8055-30M  
EN4165-026M30



90° INDEXABLE CHIMNEY  
TIE WRAP  
787-8055-31M  
EN4165-026M30A



DMC-MD 20 N  
BACC65BUMN  
EN4165M61AN



DMC-MD 20 A  
BACC65BUMA  
EN4165M61AA



DMC-MD 20 B  
BACC65BUMB  
EN4165M61AB



DMC-MD 20 C  
BACC65BUMC  
EN4165M61AC



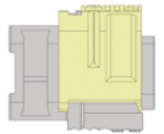
DMC-MD 20 D  
BACC65BUMD  
EN4165M61AD



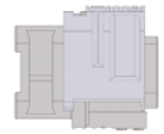
DMC-MD 20 E  
EN4165M61AE



DMC-MD 20 F  
EN4165M61AF



DMC-MD 20 G  
EN4165M61AG

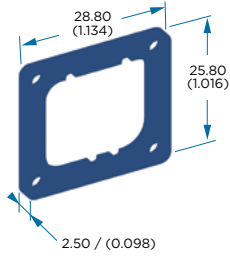


TE/DEUTSCH Part Numbers (DMC-MD / 787)  
BOEING Part Numbers (BACC65)  
STANDARD Part Numbers (EN4165)



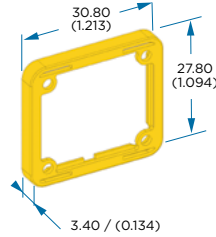
### OPTIONAL PARTS FOR RECEPTACLE

#### Keying Plate



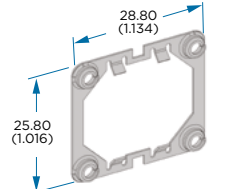
- N: 787-0015-00 EN4165-25CN
- A: 787-0015-01 EN4165-25CA
- B: 787-0015-02 EN4165-25CB
- C: 787-0015-03 EN4165-25CC
- D: 787-0015-04 EN4165-25CD
- E: 787-0015-05 EN4165-25CE
- F: 787-0015-06 EN4165-25CF
- G: 787-0015-07 EN4165-25CG

#### Sealing Gasket



787-0011-00  
EN4165-25E

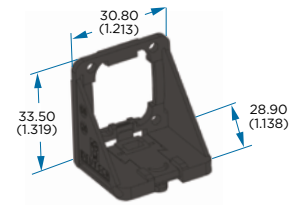
#### Nut Plate



Recommended Screw Torque  
0.5 ±0.1 N.m or 4.4 ±0.9 in.lbf

787-0016-00  
EN4165-25D

#### Panel Mounting Bracket



787-8014-00

### PROTECTIVE CAPS

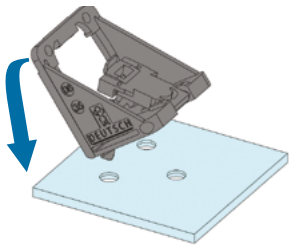


Protection Level	Plug Cap	Receptacle Cap	ESD Receptacle Cap	Receptacle and Extender Cap	Plug Flight Cap	Receptacle and Extender Flight Cap
	104-0236-00	104-0235-00	104-0334-00	With Lanyard: 787-8011-00 W/O Lanyard: 787-8009-00	787-8010-00	With Lanyard: 787-8017-00 EN4165M3C W/O Lanyard: 787-8016-00
Shipping	X	X	X	-	-	-
Dust	X	X	X	X	X	X
EMI	-	-	X	-	X	X
Low Pressure Sealing	-	-	-	-	X	X

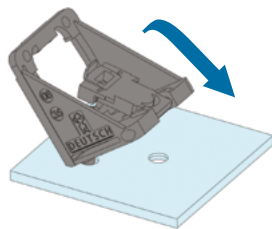


### MOUNTING BRACKETS

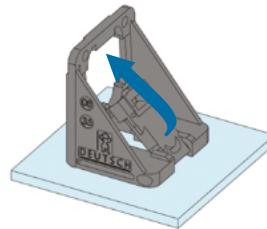
- Locate mating parts



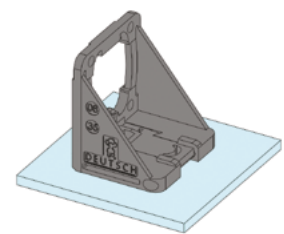
- Install rear dowels



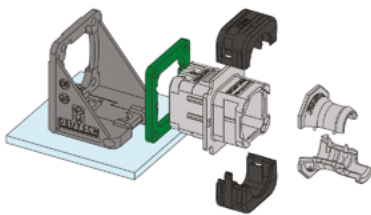
- Fix and snap in position



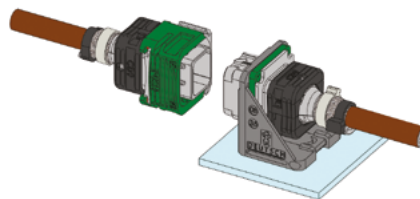
- Installed



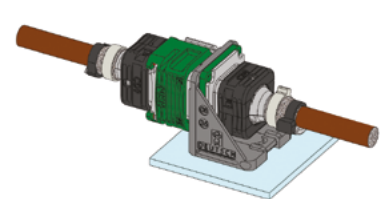
- Align receptacle with bracket



- Install and fix in position



- Assembled





**ELECTRICAL MODULES / AS39029/57 AND /58 AND EN3155 CONTACT COMPLIANT**

Configuration	Pin Contacts		Socket Contacts	
	View	Part No.	View	Part No.
30 Size 23 Contacts		DMC-MR 30-23 AN		DMC-MR 30-23 BN
20 Size 22 Contacts		DMC-M 20-22 AN BACI10BC2022PNB EN4165A20-221NA		DMC-M 20-22 BN BACI10BC2022SNB EN416520-22 A1NB
20 Size 22 Contacts		DMC-MA 20-22 AN EN4165A20A221NA		DMC-MA 20-22 BN EN4165A20A221NB
12 Size 20 Contacts		DMC-M 12-20 AN BACI10BC1220PNB EN4165A12-201NA		DMC-M 12-20 BN BACI10BC1220SNB EN4165A12-201NB
8 Size 16 Contacts		DMC-M 08-16 AN BACI10BC0816PNB EN4165A08-161NA		DMC-M 08-16 BN BACI10BC0816SNB EN4165A08-161NB
4 Size 12 Contacts		DMC-M 04-12 AN EN4165A04-121NA		DMC-M 04-12 BN EN4165A04-121NB
1 Size 8 Contact		DMC-M 01-08 AN EN4165A01-081NA		DMC-M 01-08 BN EN4165A01-081NB
6 Size 16 Contacts 5 Size 22 Contacts		DMC-M 99-01 AN BACI10BC1622PNB EN4165A99-011NA		DMC-M 99-01 BN BACI10BC1622SNB EN4165A99-011NB
8 Size 22 Contacts 2 Size 12 Contacts		DMC-M 99-06 AN BACI10BC1001PNB		DMC-M 99-06 BN BACI10BC1001SNB
8 Size 20 Contacts 2 Size 16 Contacts		DMC-M 99-10 AN EN4165A99-101NA		DMC-M 99-10 BN EN4165A99-101NB
6 Size 16 Contacts 5 Size 22 Contacts		DMC-MA 99-01 AN EN4165A99A011NA		DMC-MA 99-01 BN EN4165A99A011NB

**ELECTRICAL MODULES / BACC47 CONTACT COMPLIANT**

Configuration	Pin Contacts		Socket Contacts	
	View	Part No.	View	Part No.
8 Size 20 Contacts 2 Size 16 Contacts		DMC-MB 99-10 AN BACI10BC0910PNB		DMC-MB 99-10 BN BACI10BC0910SNB
12 Size 20 Contacts		DMC-MB 12-20 AN BACI10BC1220APNB		DMC-MB 12-20 BN BACI10BC1220ASNB

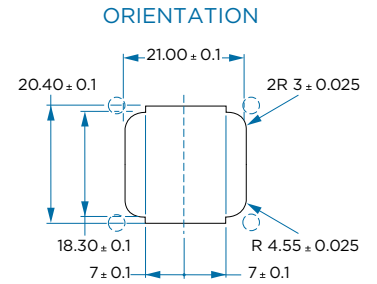
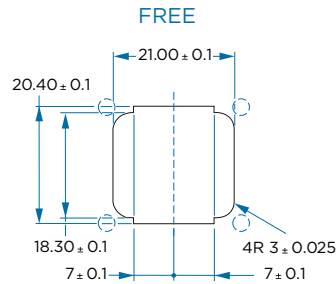
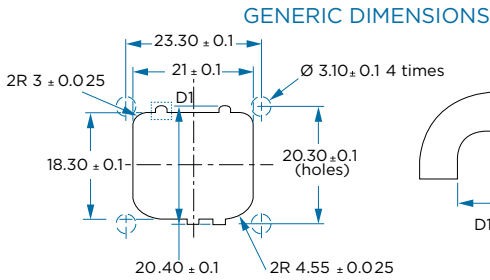
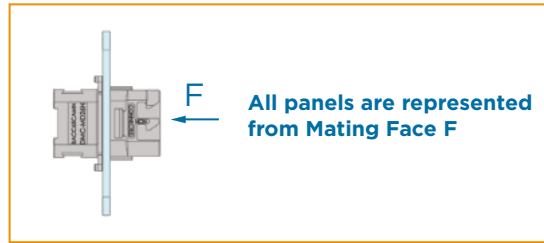
Note : DMC-MD connector modules are compatible with aluminium cable contacts and with EN3155-70 / 71 size 22.

Aluminium cable technology possible with size 22 contacts

TE/DEUTSCH Part Numbers (DMC-MD / 787)  
BOEING Part Numbers (BACI10BC)  
STANDARD Part Numbers (EN4165)



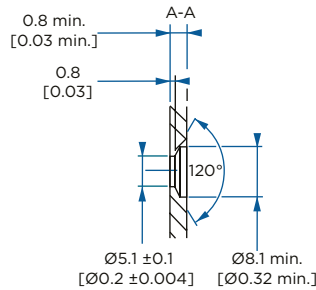
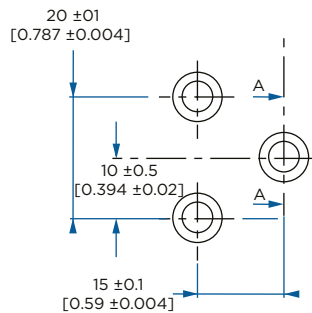
# Panel Mounting Cutout Details



Note: Dimensions are in millimeters. Each hole  $\text{Ø}\ 3.1\ \text{mm}$  must receive a No. 4-40 screw (not supplied)  
 Recommended thickness panel: 0.8 mm min. - 2 mm max.

Recommended screw torque is  $0.5 \pm 0.1\ \text{N.m}$  or  $4.4 \pm 0.9\ \text{in.lbf}$

## PANEL MOUNTING BRACKET CUTOUT DETAILS



Overall dimensions and characteristics are given for indication guidance only. TE Connectivity reserves the right to modify them for production improvement reasons.



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