

DEUTSCH DMC-M Series

Multicavity EN4165 Connectors

The Rugged, Modular Solution for
Flexible, Reliable Aerospace Connectivity

DEUTSCH DMC-M Multicavity Connectors



**Flexible Modularity
Rugged for Harsh Environments
EN4165 Compliant**

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DEUTSCH DMC-M Series Multicavity EN4165

MODULARITY

- Crimp and PCB contacts size 24 to size 08
- Signal, coaxial, microcoax, Quadrax, power, optical, thermocouple contacts
- High-speed Ethernet modules
- Aluminum cable compliant

FLEXIBLE

- Easily replaced modules for fast reconfiguration
- Allows mixing of male and female modules in each connector half
- Wide range of modules allows great flexibility in input/output configurations

WEIGHT OPTIMIZATION

- Nickel or cadmium-plated composite shells
- Compact solution

EASY TO INSTALL

- 36 keying possibilities
- Quick-install coupling

RELIABLE

- Environmental sealing
- Vibration resistant
- EMI protection as per EN4165 standard
- Meets FAA flammability, smoke, and toxicity requirements
- EN4165 and BACC65 compliant

Modular, Compact, and Weight Saving

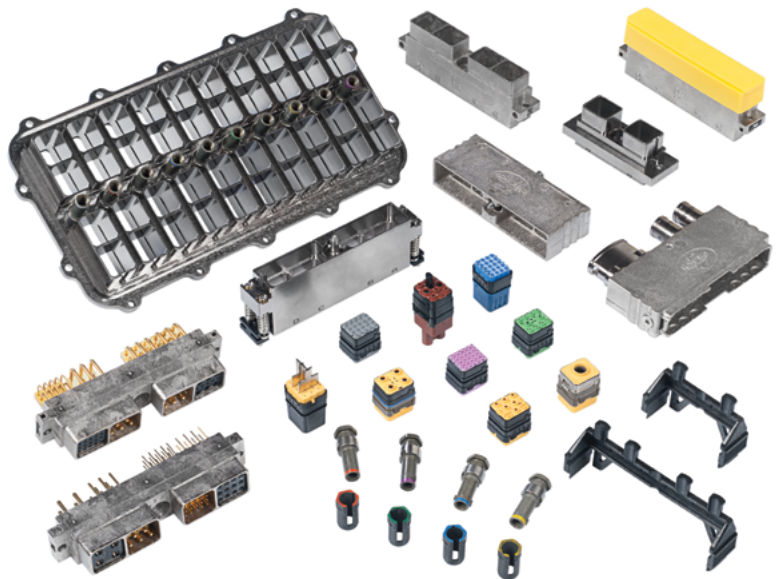
Originally designed in the 1980s, DEUTSCH DMC-M connectors from TE Connectivity (TE) have evolved into one of the most widely used connector styles for cabin applications in commercial aerospace. Standardized in European Standard EN4165, DMC-M connectors provide a modular, flexible, and reliable system. The connectors are available in both multi-cavity and single-module configurations, using the same modules, to provide compact, lightweight connectivity.

Gain Flexibility

Today this connector continues to attract new users and applications because of its modularity, space/weight savings and robustness. In addition, it has evolved to include composite housings, aluminum wire capability, fiber optics, higher densities, and shunting configurations.

Save Weight

The DMC-M shells are available in lightweight aluminum alloy or composite, with nickel or cadmium plating, to withstand harsh environments. For EMI protection, the connectors use 360° shielding on the shell interfaces.



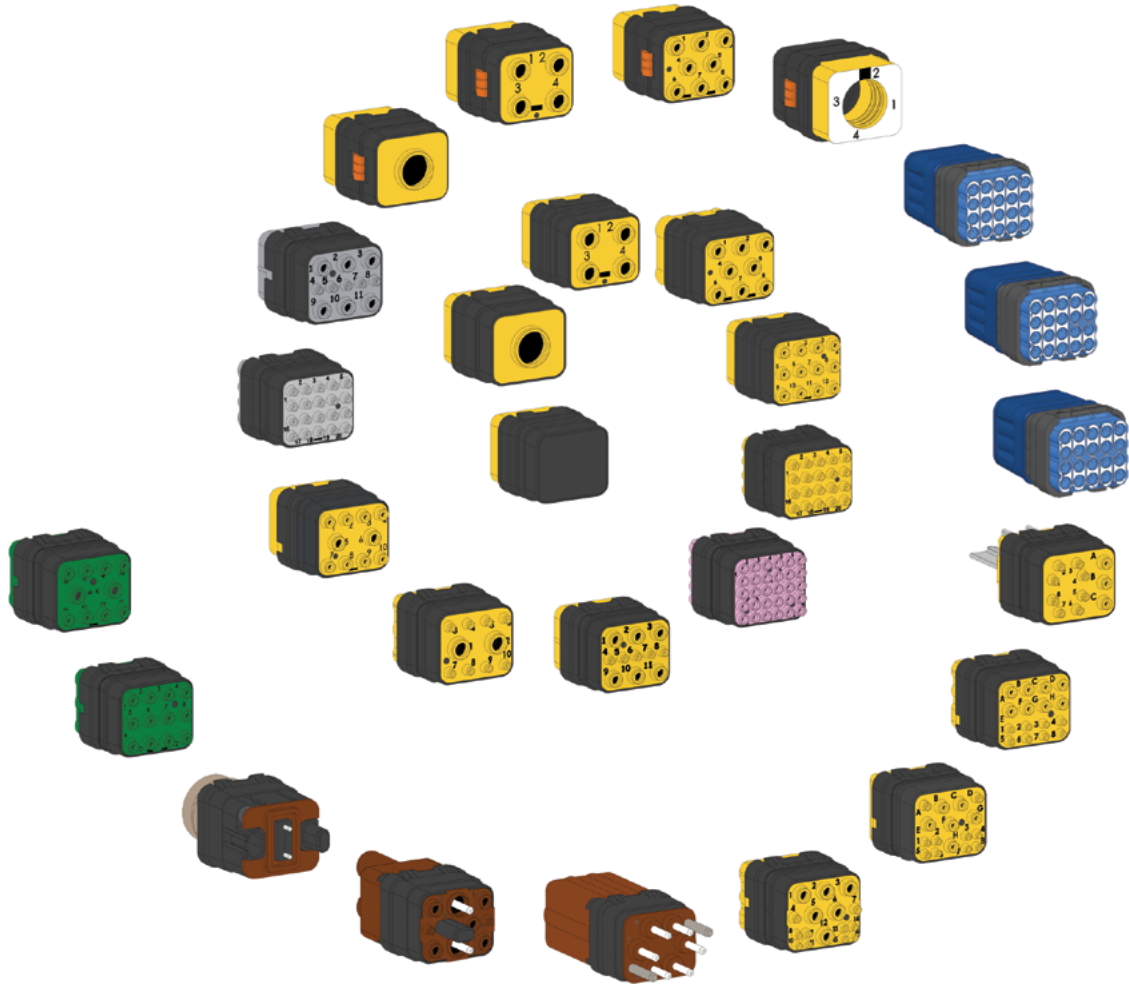
TE Components . . . TE Technology . . . TE Know-how . . .

AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH
SEACON Phoenix | LL ROWE | Phoenix Optix | AFP | SEACON

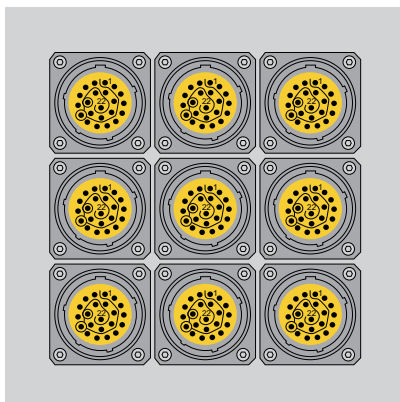
Get your product to market faster with a smarter, better solution.



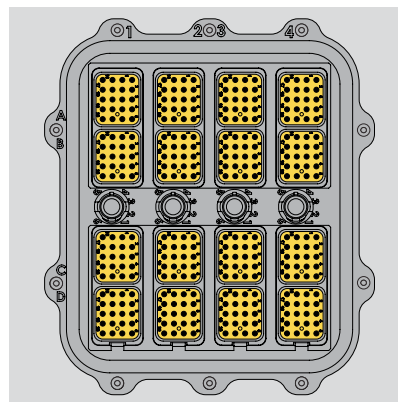
FLEXIBLE MODULARITY



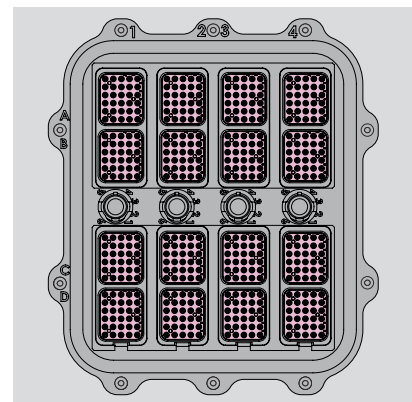
Space Savings



Circular Connectors
Insert 13-35
Size 22 Contacts, 5A
 198 contacts
 309 g (without panel)
 36 mounting screws
 9 panel cutouts



DMC-M Connectors
Insert 20-22
Size 22 Contacts, 5A
 320 contacts
 149 g (without panel)
 10 mounting screws
 1 panel cutout

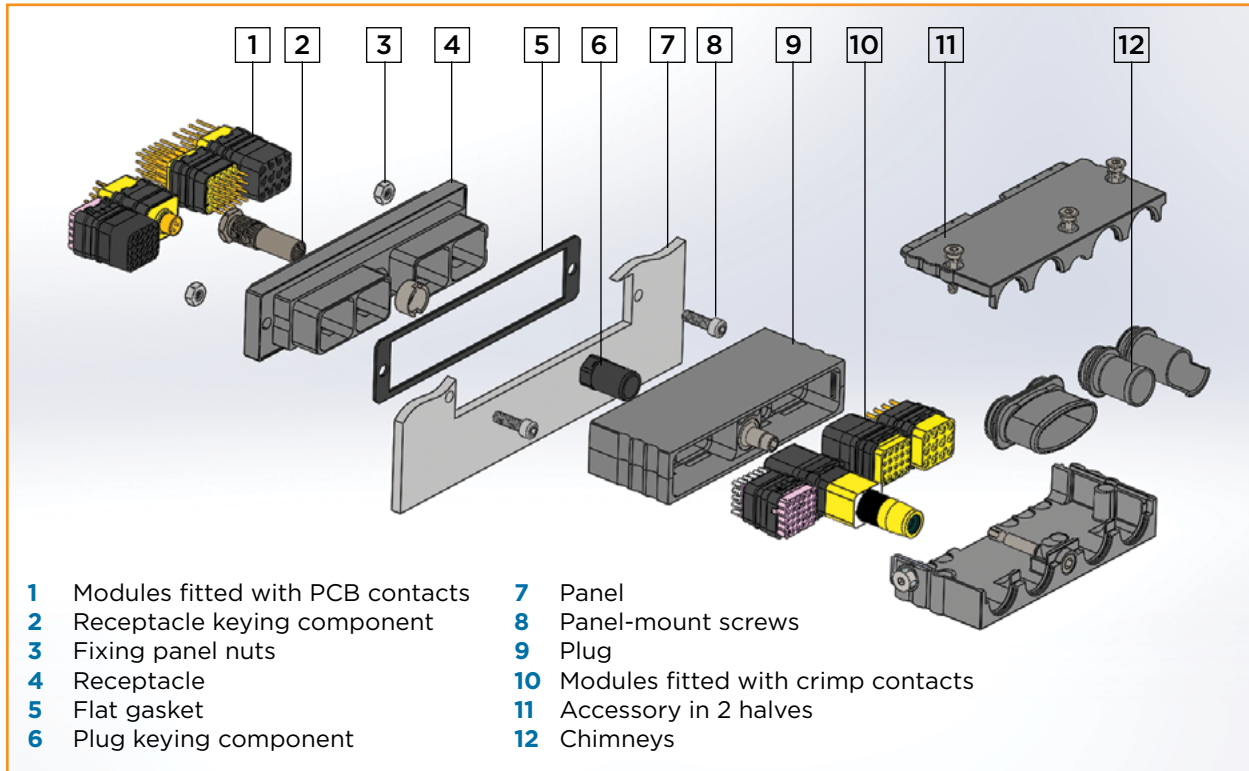


DMC-M Connectors
Insert 30-23
Size 23 Contacts, 5A
 480 contacts
 175 g (without panel)
 10 mounting screws
 1 panel cutout

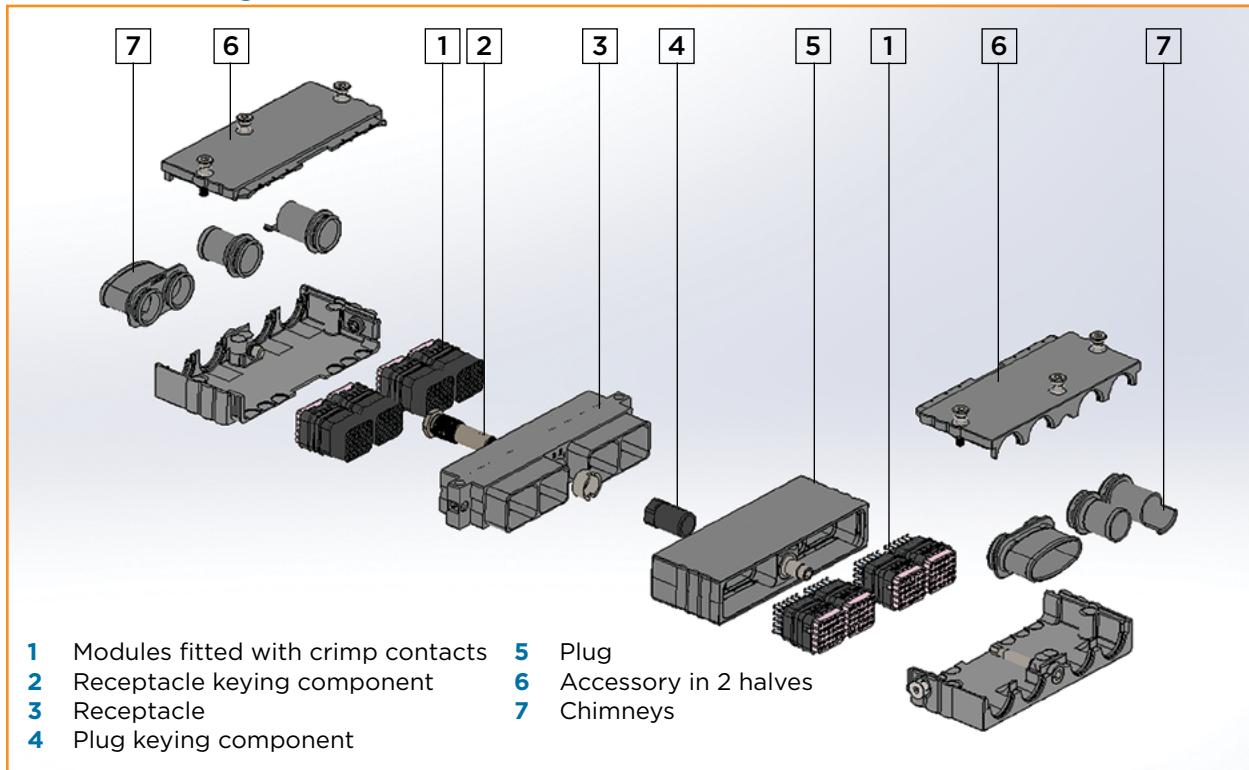


TYPICAL CONFIGURATIONS

Wire-to-Board Configuration



Wire-to-Wire Configuration





SPECIFICATIONS

MATERIALS

- **Shell:** Aluminum alloy or composite, with electroless nickel or olive drab cadmium finish
- **Module:** Thermoplastic and fluorinated silicone
- **Contact:** Copper alloy, plated gold over nickel
- **Key:** Aluminum alloy, with stainless steel lock nut

MECHANICAL/ENVIRONMENTAL

- **Durability:** 500 mating cycles
- **Operating Temperature:** -55°C to +175°C
- **Module Retention In Housing:** ≥ 25.4 daN (57.1 lb.)
- **Contact Retention:**
 - Size 24: 2.7 daN (6.1 lb.)
 - Size 23: 4.5 daN (10.1 lb.)
 - Size 22: 4.5 daN (10.1 lb.)
 - Size 20: 9.0 daN (20.2 lb.)
 - Size 16: 11.0 daN (24.7 lb.)
 - Size 12: 13.0 daN (29.2 lb.)
 - Size 08: 15.6 daN (35.1 lb.)
- **Salt Spray:**
 - Aluminum cadmium finish: 500 hours
 - Aluminum nickel finish: 96 hours
 - Composite nickel finish: 500 hours

ELECTRICAL

- **Withstand Voltage:**
 - At Sea Level:
 - Service I: 1300 V_{rms} 50 Hz, module size 24, 23 and 22
 - Service II: 1500 V_{rms} 50 Hz, module sizes 20, 16, 12 and 08
 - Altitude Immersion to 11 hPa (30,000 m/100,000 ft): 1000 V_{rms} 50 Hz (all module sizes)
- **Insulation Resistance**
 - At Sea Level: ≥ 5000 M Ω
 - Altitude Immersion to 11 hPa (30,000 m/100,000 ft): ≥ 1000 M Ω
- **Contact Current Rating (Sealed Connectors):**
 - 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 08: 46 A (up to 90 A with specific contacts)
- **Shielding Effectiveness:**
 - (With conductive shell finish and RFI spring fingers)

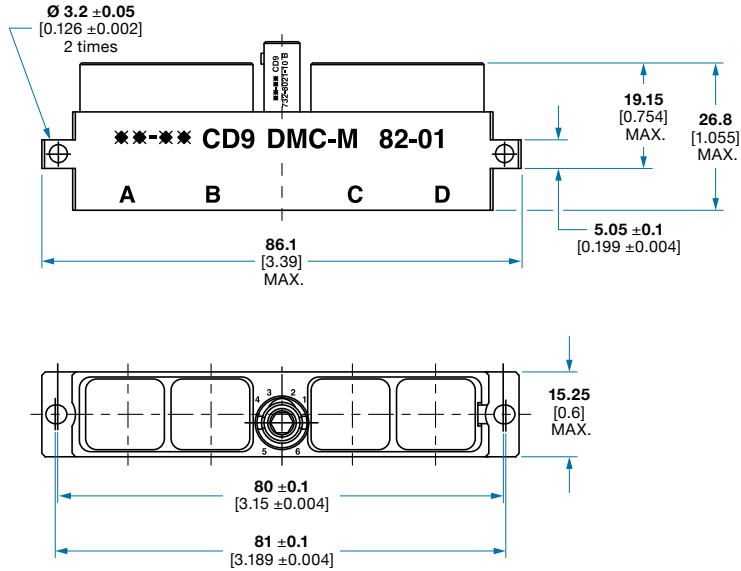
| Frequency (MHz) | Attenuation, Min. (dB) | |
|-----------------|------------------------|-----------------|
| | Aluminum Shell | Composite Shell |
| 100 | 80 | 65 |
| 200 | 78 | 60 |
| 300 | 78 | 55 |
| 400 | 77 | 55 |
| 800 | 75 | 45 |
| 1000 | 75 | 45 |
| 1500 | 59 | 43 |
| 2000 | 55 | 40 |
| 3000 | 51 | 37 |
| 4000 | 48 | 35 |
| 6000 | 45 | 33 |
| 10,000 | 40 | 30 |



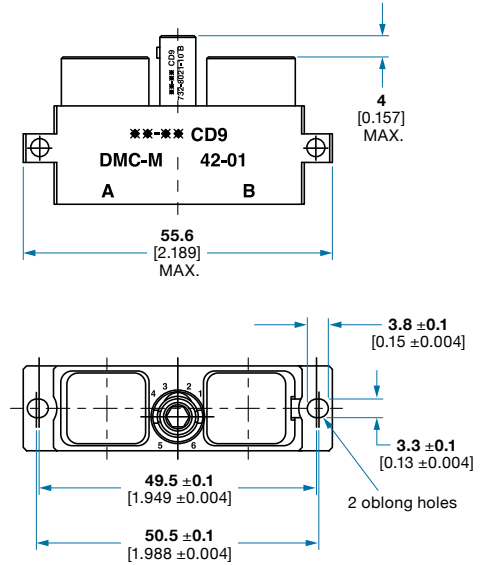
RECEPTACLES

STACKABLE RECEPTACLES

DMC-M 82-01: 4 Modules

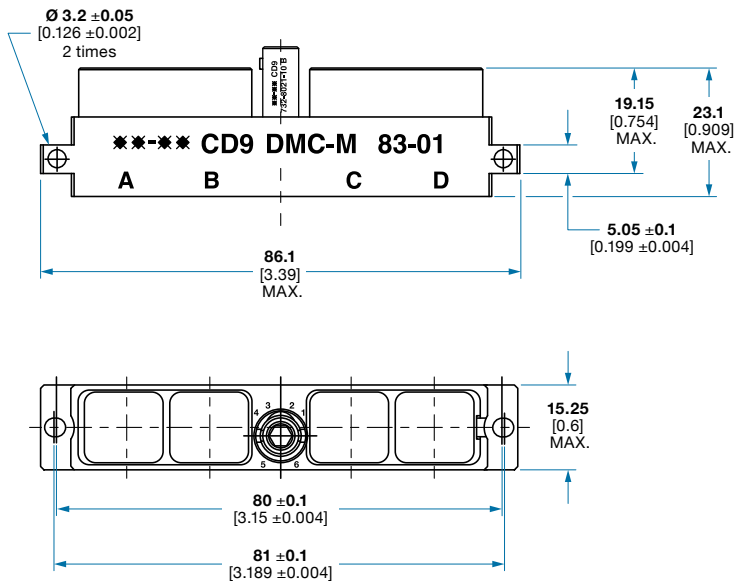


DMC-M 42-01: 2 Modules

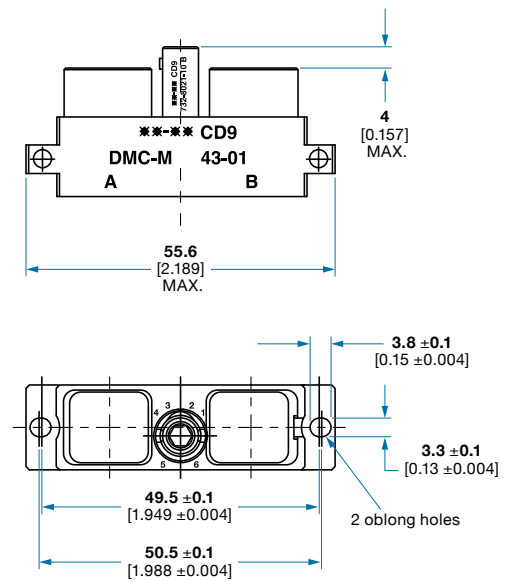


SHORT STACKABLE RECEPTACLES

DMC-M 83-01: 4 Modules



DMC-M 43-01: 2 Modules



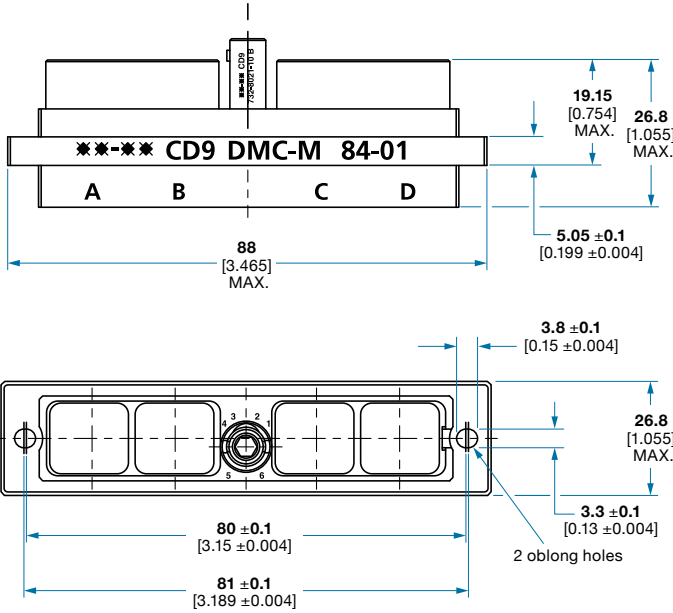
Note: No accessory can be mounted on the rear of short receptacle shell.



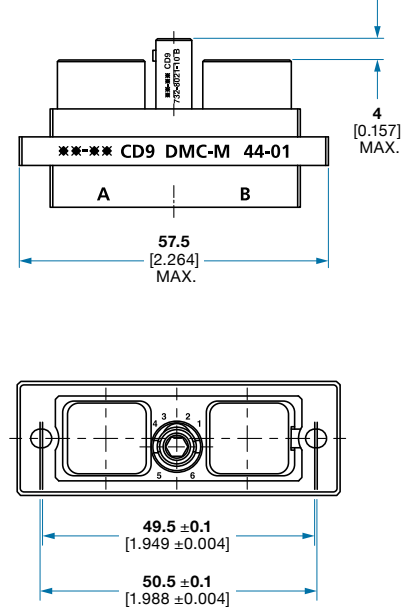
RECEPTACLES

FLANGE-MOUNT RECEPTACLES

DMC-M 84-01: 4 Modules

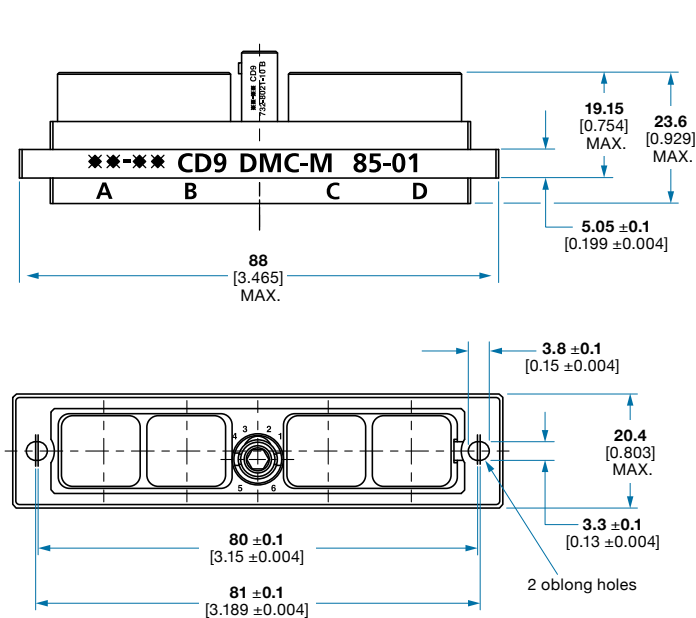


DMC-M 44-01: 2 Modules

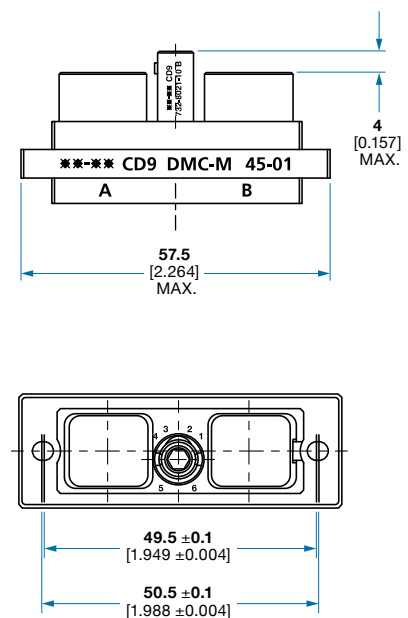


SHORT FLANGE-MOUNT RECEPTACLES

DMC-M 85-01: 4 Modules



DMC-M 45-01: 2 Modules



Note: No accessory can be mounted on the rear of short receptacle shell.

DMC-MD shielded versions are delivered with a conductive flat gasket (part no. 108-0019-00 A1142 for 4-module receptacles and 108-0019-01 A1142 for 2-module receptacles). A sealing flat gasket (part no. 108-0019-00 for 4-module receptacles and 108-0019-01 for 2-module receptacles) is also available but not supplied with receptacles.



RECEPTACLES

TE PART NUMBERING SYSTEM

DMC-MD 84 B 3 5 W 01 ****

CONNECTOR TYPE

- DMC-M** Standard
- DMC-MD** Shielded

HOUSING TYPE

- Two-Module Receptacle**
 - 42** Standard
 - 43** Short
 - 44** Flange Mount Standard
 - 45** Flange Mount Short
- Four-Module Receptacle**
 - 82** Standard
 - 83** Short
 - 84** Flange Mount Standard
 - 85** Flange Mount Short

SHELL DELIVERY CONFIGURATION (Optional)

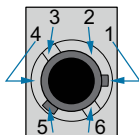
- Omit for Standard Keying Component Not Mounted
- A** Without Keying Component
- B** With Keying Component Coded, Mounted or Not Mounted

KEYING COMPONENT TYPE (Optional: B Configuration Only)

- 0** Type 0 (Black)
- 1** Type 1 (Purple)
- 2** Type 2 (Yellow)
- 3** Type 3 (Green)
- 4** Type 4 (Blue)
- 5** Type 5 (Orange)
- 6** Type 6 (White)

KEYING COMPONENT ORIENTATION IN THE RECEPTACLE (Optional)

- Omit - Not mounted
- 1, 2, 3, 4, 5, 6**



Keying Component Orientation
Viewed from front face of receptacle housing
Largest keyway indicates orientation

PLATING/FINISH (Optional)

- Aluminum Alloy Shell**
 - Omit - Black Nickel
 - W** Olive Drab Cadmium
- Composite Shell**
 - M** Nickel (Shell Types 82 and 83 Only)
 - J** Olive Drab Cadmium (Shell Types 82 and 83 Only)

ISSUE

01

MODIFICATIONS (Optional)

- A1064** Bright Nickel Finish
- Consult TE for additional modifications



RECEPTACLES

EN4165 PART NUMBERING SYSTEM

EN4165 W 7 A 4 3 5

CONNECTOR TYPE

EN4165

PLATING/FINISH (Optional)

Aluminum Alloy Shell

F Black Nickel

W Olive Drab Cadmium

Composite Shell

M Nickel (EN4165*0A4** Only)

J Olive Drab Cadmium (EN4165*0A4** Only)

HOUSING TYPE

0 Receptacle Housing

7 Flange-Mount Receptacle Housing

SERIES

A Series 2

B Series 3 (Consult TE)

COMPOSITION

2 2 Modules

4 4 Modules

KEYING COMPONENT TYPE

A Standard Keying Component (Black)

0 Without Keying Component

1 Type 1 (Purple)

2 Type 2 (Yellow)

3 Type 3 (Green)

4 Type 4 (Blue)

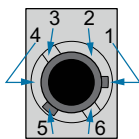
5 Type 5 (Orange)

6 Type 6 (White)

KEYING COMPONENT ORIENTATION IN THE RECEPTACLE

0 Not mounted

1, 2, 3, 4, 5, 6



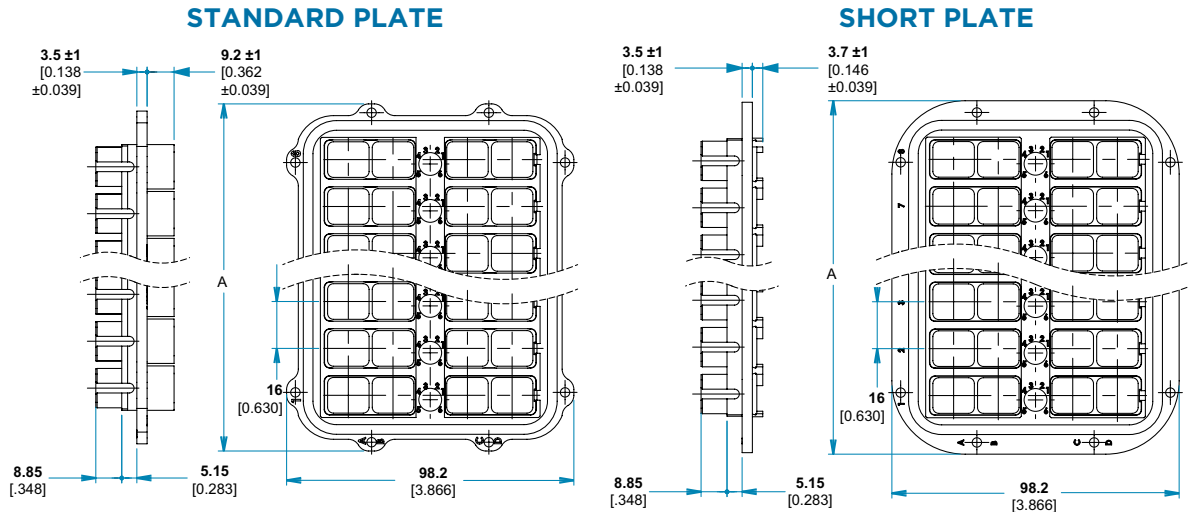
Keying Component Orientation

Viewed from front face of receptacle housing
Largest keyway indicates orientation



MULTI-RECEPTACLE PLATES

These multi-receptacle plates receive 4-module rack and panel plugs or free plugs. No accessory can be mounted on the rear of the lightweight multi-receptacle versions.



| No. of Rows | 13 | 12 | 10 | 8 | 6 | 4 | 3 | 2 |
|-------------|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|
| Version | 1044 | 0964 | 0804 | 0644 | 0484 | 0324 | 0244 | 0164 |
| Dim A | 232.2 (9.142) | 216.2 (8.512) | 184.2 (7.252) | 152.2 (5.992) | 120.2 (4.732) | 68.6 (2.701) | 52.6 (2.071) | 36.6 (1.437) |

Dimensions are mm (inches)

TE PART NUMBERING SYSTEM

DMC-MD 0484 A W 01 A

CONNECTOR TYPE

- DMC-M** Standard
- DMC-MD** Shielded (Includes Conductive Gasket)

SIZE/CAPACITY

- 1044** 52 modules (13 rows)
 - 0964** 48 modules (12 rows)
 - 0804** 40 modules (10 rows)
 - 0644** 32 modules (8 rows)
 - 0484** 24 modules (6 rows)
 - 0324** 16 modules (4 rows)
 - 0244** 12 modules (3 rows)
 - 0164** 8 modules (2 rows)
- Consult TE for other sizes

KEYING COMPONENT (Optional)

- Omit - With Keying Component
- A** Without Keying Component

PLATING/FINISH (Optional)

- Aluminum Alloy Shell**
- Omit - Black Nickel
- W** Olive Drab Cadmium

ISSUE

- 01**

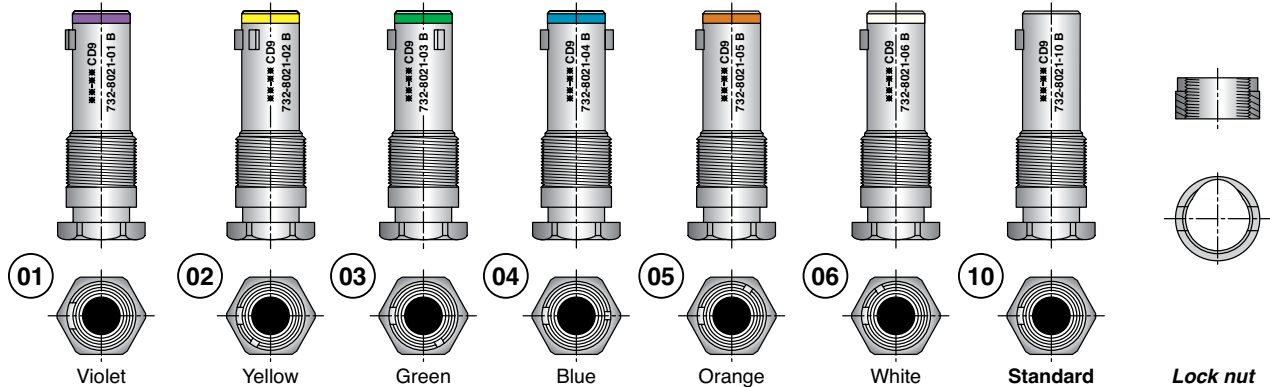
TYPE (Optional)

- Omit - Standard Plate
- A** Short Plate (No Backshell Mount)



RECEPTACLE KEYING

DMC-M receptacles use keying components to allow 6 mating possibilities. An additional 6 keying orientations are possible providing a total of 36 keying options thereby preventing connector misalignment and mismatching. Keying is especially useful for rack and multiconnector applications. The keys are provided in sealed and unsealed versions.



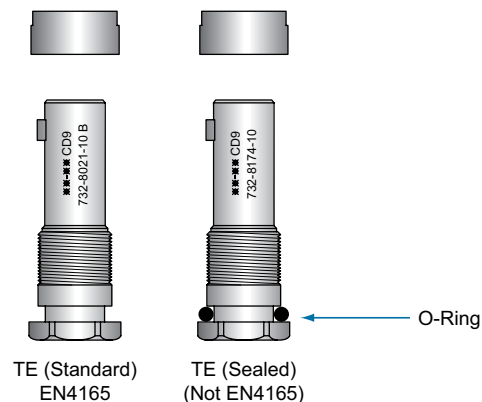
Unsealed EN4165-Compliant Keying

| Type | 01 | 02 | 03 | 04 | 05 | 06 | 10 |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| TE (Standard) | 732-8021-01 B | 732-8021-02 B | 732-8021-03 B | 732-8021-04 B | 732-8021-05 B | 732-8021-06 B | 732-8021-10 B |
| EN4165 | EN4165R01 | EN4165R02 | EN4165R03 | EN4165R04 | EN4165R05 | EN4165R06 | EN4165R10 |

The assembly coupling mechanism requires the use of the tool part no. 057-0590-80. It is delivered with a removable lock nut (coupling torque 0.15 ±0.02 daN.m (13.3 ±6.1 in. lbf.)).

Sealed Keying

| Type | 01 | 02 | 03 | 04 | 05 | 06 | 10 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TE (Sealed) | 732-8174-01 | 732-8174-02 | 732-8174-03 | 732-8174-04 | 732-8174-05 | 732-8174-06 | 732-8174-10 |

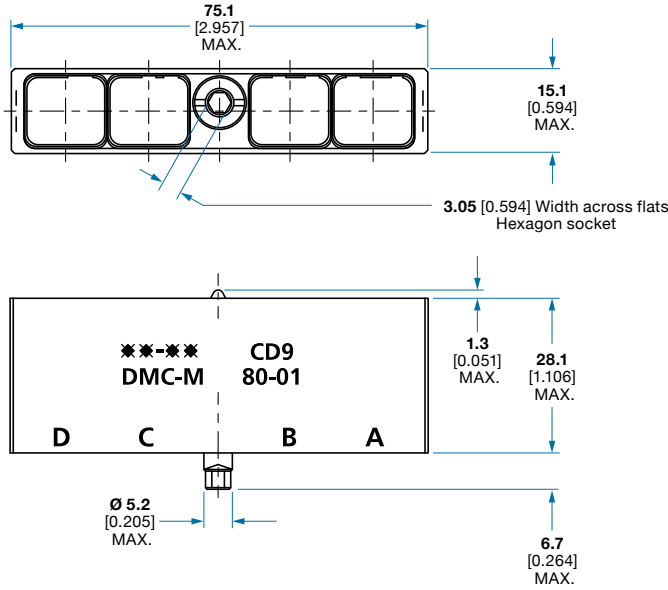




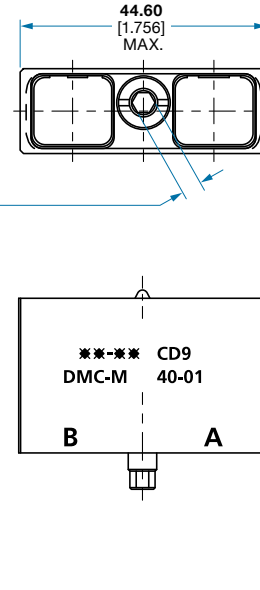
PLUGS

FREE PLUGS

DMC-M 80-01: 4 Modules



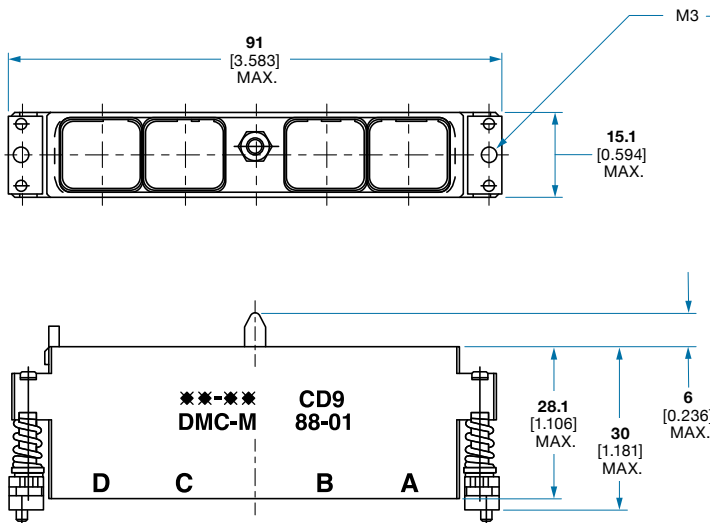
DMC-M 40-01: 2 Modules



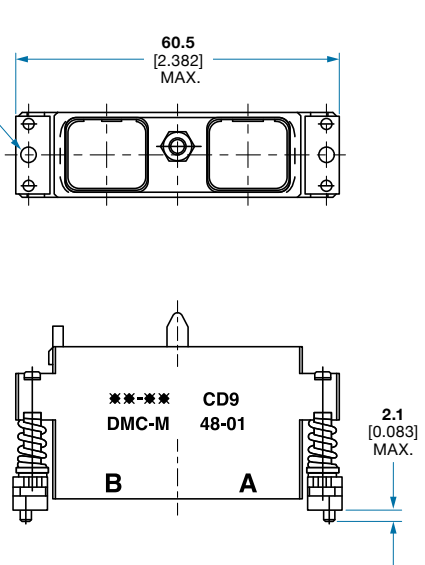
The receptacle/plug coupling is done with the tool 057-0592-80 or a standard Allen wrench (coupling torque 0.1 ±0.03 daN.m [8.8 ±2.6 in. lbf.]).

RACK AND PANEL PLUGS

DMC-M 88-01: 4 Modules



DMC-M 48-01: 2 Modules



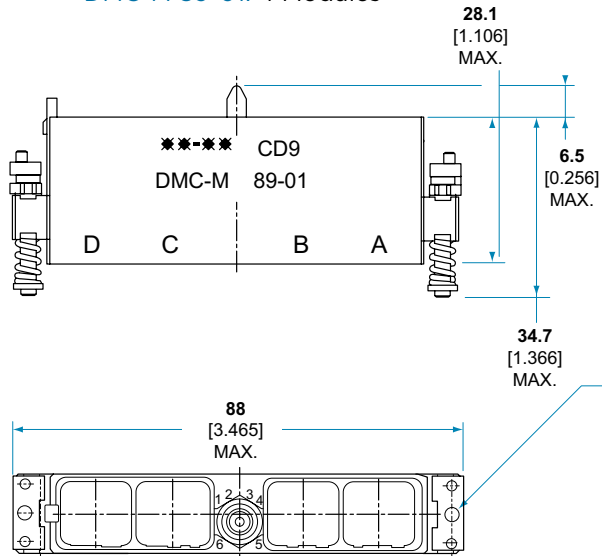
See page 40 for panel cutouts.



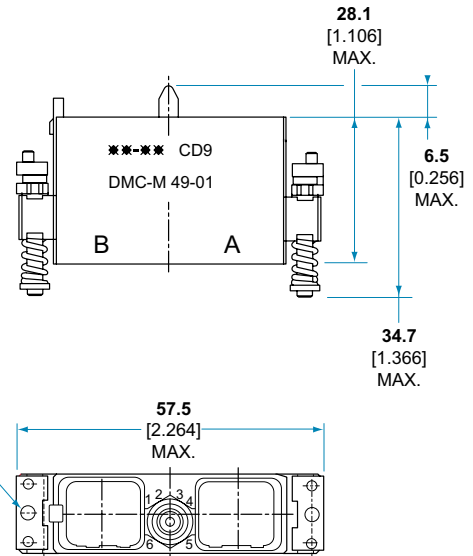
PLUGS

REVERSE RACK AND PANEL PLUGS

DMC-M 89-01: 4 Modules



DMC-M 49-01: 2 Modules



See page 40 for panel cutouts.



PLUGS

TE PART NUMBERING SYSTEM

DMC-MD 89 B 3 5 W 01 ****

CONNECTOR TYPE

- DMC-M Standard
- DMC-MD Shielded

HOUSING TYPE

- Two-Module Receptacle**
- 40 Free Plug
- 48 Rack and Panel Plug
- 49 Reversed Rack and Panel Plug
- Four-Module Receptacle**
- 80 Free Plug
- 88 Rack and Panel Plug
- 89 Reversed Rack and Panel Plug

SHELL DELIVERY CONFIGURATION (Optional)

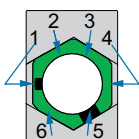
- Omit for Standard Keying Component Not Mounted
- A Without Keying Component
- B With Keying Component Coded, Mounted or Not Mounted

KEYING COMPONENT TYPE (Optional: B Configuration Only)

- 0 Type 0 (Black)
- 1 Type 1 (Purple)
- 2 Type 2 (Yellow)
- 3 Type 3 (Green)
- 4 Type 4 (Blue)
- 5 Type 5 (Orange)
- 6 Type 6 (White)

KEYING COMPONENT ORIENTATION IN THE RECEPTACLE (Optional)

- Omit - Not Mounted
- 1, 2, 3, 4, 5, 6



Keying Component Orientation

Viewed from front face of plug housing
Largest keyway indicates orientation

PLATING/FINISH (Optional)

- Aluminum Alloy Shell**
- Omit - Black Nickel
- W Olive Drab Cadmium
- Composite Shell**
- M Nickel (Shell Type 80 Only)
- J Olive Drab Cadmium (Shell Type 80 Only)

ISSUE

- 01

MODIFICATIONS (Optional)

- A1064 Bright Nickel Finish
- Consult TE for additional modifications



PLUGS

EN4165 PART NUMBERING SYSTEM

EN4165 W 9 A 4 R 3 5

CONNECTOR TYPE

EN4165

PLATING/FINISH)

Aluminum Alloy Shell

F Black Nickel

W Olive Drab Cadmium

Composite Shell

M Nickel (EN4165*6A4** Only)

J Olive Drab Cadmium (EN4165*6A4** Only)

HOUSING TYPE

6 Free Plug

9 Rack and Panel Plug

SERIES

A Series 2

B Series 3 (Consult TE)

SIZE

2 2 Modules

4 4 Modules

RACK AND PANEL ORIENTATION (Optional)

Omit - Standard

R Reversed

KEYING COMPONENT TYPE (B Configuration Only)

A Standard Keying Component (Black)

0 Without Keying Component

1 Type 1 (Purple)

2 Type 2 (Yellow)

3 Type 3 (Green)

4 Type 4 (Blue)

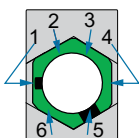
5 Type 5 (Orange)

6 Type 6 (White)

KEYING COMPONENT ORIENTATION IN THE RECEPTACLE

0 Not Mounted

1, 2, 3, 4, 5, 6



Keying Component Orientation

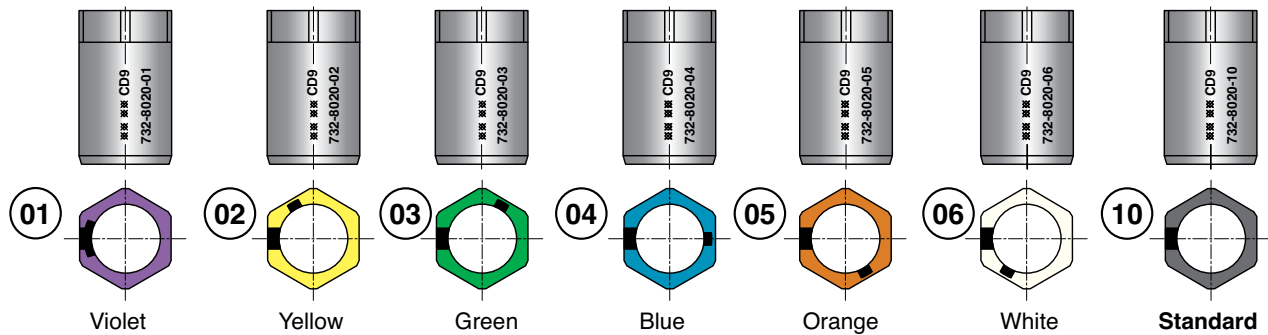
Viewed from front face of plug housing
Largest keyway indicates orientation



PLUG KEYING

DMC-M plugs use an optional keying component to allow 6 mating possibilities. An additional 6 keying orientations are possible providing a total of 36 keying options thereby preventing connector misalignment and mismatching. Keying is especially useful for rack and multiconnector applications.

The assembly of these keys is toolless. Once clipped into their cavities, keys must be broken to be removed.



| Type | 01 | 02 | 03 | 04 | 05 | 06 | 10 |
|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TE | 732-8020-01 | 732-8020-02 | 732-8020-03 | 732-8020-04 | 732-8020-05 | 732-8020-06 | 732-8020-10 |
| EN4165 | EN4165P01 | EN4165P02 | EN4165P03 | EN4165P04 | EN4165P05 | EN4165P06 | EN4165P10 |



MODULES

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

| Arrangement | Configuration | Pin Contacts | | Socket Contacts | |
|-------------|--|--------------|---|-----------------|---|
| | | View | Part No. | View | Part No. |
| 30-23 | 30 Contacts, Size 23 | | DMC-MR 30-23 AN | | DMC-MR 30-23 BN |
| 20-22 | 20 Contacts, Size 22 | | DMC-M 20-22 AN BAC10BC2022PNB EN4165A20-221NA | | DMC-M 20-22 BN BAC10BC2022SNB EN4165A20-221NB |
| 20-22* | 20 Contacts, Size 22 | | DMC-MA 20-22 AN EN4165A20A221NA | | DMC-MA 20-22 BN EN4165A20A221NB |
| 12-20 | 12 Contacts, Size 20 | | DMC-M 12-20 AN BAC10BC1220PNB EN4165A12-201NA | | DMC-M 12-20 BN BAC10BC1220SNB EN4165A12-201NB |
| 08-16 | 8 Contacts, Size 16 | | DMC-M 08-16 AN BAC10BC0816PNB EN4165A08-161NA | | DMC-M 08-16 BN BAC10BC0816SNB EN4165A08-161NB |
| 04-12 | 4 Contacts, Size 12 | | DMC-M 04-12 AN EN4165A04-121NA | | DMC-M 04-12 BN EN4165A04-121NB |
| 01-08 | 1 Contact, Size 08 | | DMC-M 01-08 AN EN4165A01-081NA | | DMC-M 01-08 BN EN4165A01-081NB |
| 99-01 | 6 Contacts, Size 16 5 Contacts, Size 22 | | DMC-M 99-01 AN BAC10BC1622PNB EN4165A99-011NA | | DMC-M 99-01 BN BAC10BC1622SNB EN4165A99-011NB |
| 99-01* | 6 Contacts, Size 16 5 Contacts, Size 22 | | DMC-MA 99-01 AN EN4165A99A011NA | | DMC-MA 99-01 BN EN4165A99A011NB |
| 99-06 | 8 Contacts, Size 22 2 Contacts, Size 12 | | DMC-M 99-06 AN BAC10BC1001PNB | | DMC-M 99-06 BN BAC10BC1001SNB |
| 99-10 | 8 Contacts, Size 20 2 Contacts, Size 16 | | DMC-M 99-10 AN EN4165A99-101NA | | DMC-M 99-10 BN EN4165A99-101NB |

ELECTRICAL MODULES / BACC47 CONTACT COMPLIANT

| Arrangement | Configuration | Pin Contacts | | Socket Contacts | |
|-------------|--|--------------|------------------------------------|-----------------|------------------------------------|
| | | View | Part No. | View | Part No. |
| 99-10 | 8 Size 20 Contacts 2 Size 16 Contacts | | DMC-MB 99-10 AN BAC10BC0910PNB | | DMC-MB 99-10 BN BAC10BC0910SNB |
| 12-20 | 12 Size 20 Contacts | | DMC-MB 12-20 AN BAC10BC1220APNB | | DMC-MB 12-20 BN BAC10BC1220ASNB |

*DMC-MA connector modules are compatible with aluminium cable contacts and with EN3155-070 / 071 size 22 contacts (for copper cable)




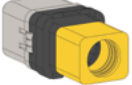
Aluminium cable technology possible with size 22 contacts

DEUTSCH Part Numbers (DMC-M)
BAC10BC Part Numbers
EN4165 Part Numbers



MODULES

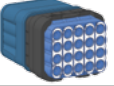
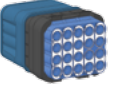
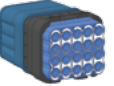
GROUNDING MODULES

| Arrangement | Configuration | Pin Contacts | |
|-------------|--------------------|---|-------------------------------------|
| | | View | Part No. |
| 08-16 | 8 Size 16 Contacts |  | DMC-M 08-16 AN-G EN4165A08G161NA |
| 04-12 | 4 Size 12 Contacts |  | DMC-M 04-12 AN-G EN4165A04G121NA |
| 01-08 | 1 Size 08 Contact |  | DMC-M 01-08 AN-G EN4165A02G081NA |
| | |  | DMC-M 01-08 BN-G EN4165A02G081NB |

BLANKING MODULES









| Configuration | View | Part No. |
|-----------------|---|-----------------------------|
| Blanking Module |  | DMC-M 00-00 PN EN4165-1N |

SHUNT MODULES



| Arrangement | Configuration | View | Part No. |
|-------------|--|--|-----------------------------------|
| 22-05 | 20 Contacts, Size 22 5 Shunts 4 Ways |  | DMC-M 22-05 BN EN4165A20Y221NB |
| 22-07 | 20 Contacts, Size 22 3 Shunts 4 Ways 4 Shunts 2 Ways |  | DMC-M 22-07 BN EN4165A2AY221NB |
| 22-10 | 20 Contacts, Size 22 10 Shunts 2 Ways |  | DMC-M 22-10 BN EN4165A2BY221NB |

Distribution shunt modules use dedicated contacts based on standard AS39029. The shunt modules can only be mated with DMC-M 20-22 AN or DMC-MA 20-22 AN modules.

HIGH-SPEED ETHERNET MODULES

| Arrangement | Configuration | Pin Contacts | | Socket Contacts | |
|-------------|---|---|-----------------------------|---|----------------------------|
| | | View | Part No. | View | Part No. |
| 16-02 | 6 Contacts, Size 16 2 Contacts, Size 22 8 Contacts, Size 24 |  | 2226454-1 DMC-M 16-02 AN |  | 266455-1 DMC-M 16-02 BN |
| 99-02 | 8 Contacts, Size 22 3 Contacts, Size 20 |  | DMC-M 99-02 AN |  | DMC-M 99-02 BN |
| 99-03 | 8 Contacts, Size 20 8 Contacts, Size 24 |  | DMC-M 99-03 AN |  | DMC-M 99-03 BN |
| 99-04 | 6 Contacts, Size 20 2 Contacts, Size 22 8 Contacts, Size 24 |  | DMC-M 99-04 AN |  | DMC-M 99-04 BN |

QUADRAX MODULES

| Arrangement | Configuration | Pin Contacts | | Socket Contacts | |
|-------------|-------------------|---|--------------------------------------|---|--------------------------------------|
| | | View | Part No. | View | Part No. |
| 01-09 | 1 Quadrax Contact |  | DMC-M 01-08 AN-GQ EN4165A01Q281NA |  | DMC-M 01-08 BN-GQ EN4165A01Q281NB |

DEUTSCH Part Numbers (DMC-M)
BAC10BC Part Numbers
EN4165 Part Numbers



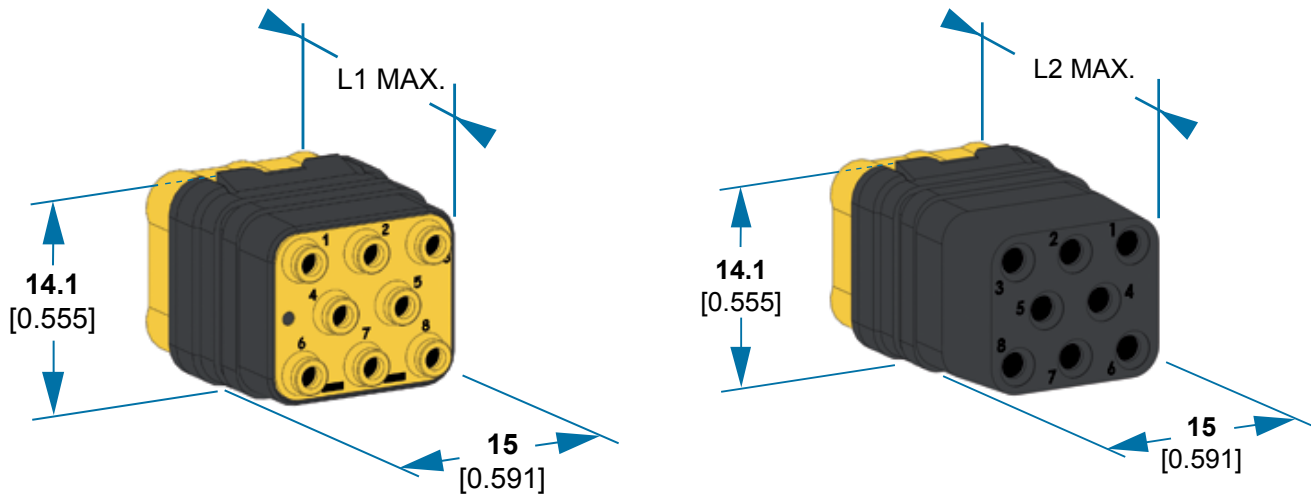
MODULES

FIBER OPTIC AND HYBRID MODULES

| Configuration | Module Part No. | | Socket | Part No. | Alignment Sleeve |
|---|-----------------|--|--------|--|--|
| | Pin | Part No. | | | |
| 6 MC5 Termini | | 458235 | | 458238 | 458237-C (Ceramic) 458237-M (Metal) |
| 1 MT Ferrule (12 or 24 Fibers) | | DMC-M01-MC6N | | DMC-M01-MC6N | Not required |
| 2 ARINC 801 Termini 5 Contacts, Size 16 2 Contacts, Size 22 | | 459736 459736-P (With Contacts) 459823 (Right Angle) | | 459737 (Ceramic Sleeve) 459737-S (Ceramic Sleeve with Contacts) 459737-M (Metal Sleeve) 459737-M-S (Metal Sleeve with Contacts) | Included with socket module |

Module Dimensions (Except Fiber Optic Modules)

SERIES 2 MODULES

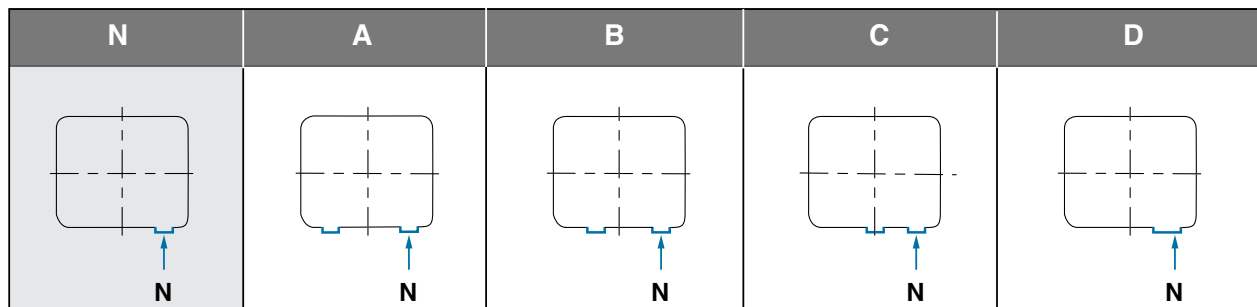


| Modules for Contact Size | L1 (Short) | L2 (Long) |
|--------------------------|---------------|---------------|
| 24, 23, 22, 20, 16, 12 | 16.46 (0.648) | 22.40 (0.882) |
| 08 | 18.70 (0.736) | 33.20 (1.307) |

Module extraction is done with the tool part no. 057-0289-00 A or B. The module insertion into the plug or receptacle is done manually.

Polarization Keys

(Module viewed from front face)



Each module can have a specific polarization key A, B, C or D. The polarized modules must be installed in a similarly polarized shell cavity. N-keyed modules will fit into all shells.



MODULES

TE PART NUMBERING SYSTEM

Standard Modules

CONNECTOR TYPE _____
DMC-M

ARRANGEMENT _____
 See Pages 19 - 21

CONTACTS* _____
P Standard Male Contact
S Standard Female Contact
A Without Male Contact
B Without Female Contact
C Male Contact, Enlarged Crimp Barrel
D Female Contacts, Enlarged Crimp Barrel

POLARIZATION _____
N, A, B, C, D

SEALING (Optional) _____
 Omit - Standard (No Sealing)
E Sealed

DMC-M **20-22** **A** **N** **E**

EN4165 PART NUMBERING SYSTEM

Standard Modules

CONNECTOR TYPE _____
EN4165

MODULE SERIES _____
A Series 2
B Series 3 (Consult TE)

ARRANGEMENT _____
 See Pages 19 - 21

SEALING _____
1 Unsealed
2 Sealed

POLARIZATION _____
N, A, B, C, D

CONTACTS* _____
F Standard Female Contact
M Standard Male Contact
A Without Male Contact
B Without Female Contact
C Male Contact, Enlarged Crimp Barrel
D Female Contacts, Enlarged Crimp Barrel

EN4165 **A** **20-22** **2** **N** **A**

*Standard contacts compliant with AS39029 and EN3155



MODULES

TE PART NUMBERING SYSTEM

Aluminum Cable Compliant Modules

CONNECTOR TYPE
DMC-MA

ARRANGEMENT
20-22
99-01

CONTACTS
A Without Male Contact
B Without Female Contact

POLARIZATION
N, A, B, C, D

DMC-MA 20-22 A N

EN4165 PART NUMBERING SYSTEM

Aluminum Cable Compliant Modules

CONNECTOR TYPE
EN4165

MODULE SERIES
A Series 2
B Series 3 (Consult TE)

ARRANGEMENT
20A22
99A01

SEALING
1 Unsealed

POLARIZATION
N, A, B, C, D

CONTACTS
A Without Male Contact
B Without Female Contact

EN4165 A 20A22 1 N A

Note: DMC-MA connector modules are compatible with aluminum cable contacts and with EN4165-070/071 size 22 contacts for copper cable.



MODULES

TE PART NUMBERING SYSTEM

DMC-M 01-08 B N - G W

Grounding Modules

CONNECTOR TYPE
DMC-M

MODULE TYPE
01-08
04-12
08-16

CONTACTS
P Standard Male Contact
S Standard Female Contact
A Without Male Contact
B Without Female Contact

POLARIZATION
N, A, B, C, D

GROUNDING
G

PLATING/FINISH (Optional)
Aluminum Alloy
Omit - Black Nickel
W Olive Drab Cadmium

EN4165 PART NUMBERING SYSTEM

EN4165 A 01G08 2 N B

Grounding Modules

CONNECTOR TYPE
EN4165

MODULE SERIES
A Series 2
B Series 3 (Consult TE)

ARRANGEMENT
01G08
04G12
08G16

SEALING
1 Unsealed
2 Sealed

POLARIZATION
N, A, B, C, D

CONTACTS
F Standard Female Contact
M Standard Male Contact
A Without Male Contact
B Without Female Contact
C Male Contact, Enlarged Crimp Barrel
D Female Contacts, Enlarged Crimp Barrel



MODULES

TE PART NUMBERING SYSTEM

Quadrax Modules

CONNECTOR TYPE
DMC-M

ARRANGEMENT
01-08 Only

CONTACT TYPE
A Without Male Contact
B Without Female Contact

POLARIZATION
N, A, B, C, D

GROUNDING
G

QUADRAX
Q

PLATING/FINISH (Optional)
Aluminum Alloy
Omit - Black Nickel
W Olive Drab Cadmium

DMC-M 01-08 B N-G Q W

EN4165 PART NUMBERING SYSTEM

Quadrax Modules

FAMILY
EN4165

MODULE SERIES
A Series 2
B Series 3 (Consult TE)

ARRANGEMENTS
1Q28

SEALING
1 Unsealed
2 Sealed

POLARIZATION
N, A, B, C, D

CONTACTS
A Without Male Contact
B Without Female Contact

EN4165 A 01Q28 2 N B



MODULES

TE PART NUMBERING SYSTEM

Shunt Modules

CONNECTOR TYPE
DMC-M

ARRANGEMENTS

- 22-05** 5 Shunts 4 Ways
- 22-07** 3 Shunts 4 Ways and 4 Shunts 2 Ways
- 22-10** 10 Shunts 2 Ways

CONTACT TYPE

- S** Female Contact
- B** Without Female Contact

POLARIZATION

- N, A, B, C, D**

DMC-M 22-05 B N

EN4165 PART NUMBERING SYSTEM

Shunt Modules

FAMILY
EN4165

MODULE SERIES

- A** Series 2
- B** Series 3 (Consult TE)

ARRANGEMENTS

- 20Y22** 5 Shunts 4 Ways
- 2AY22** 3 Shunts 4 Ways and 4 Shunts 2 Ways
- 2BY22** 10 Shunts 2 Ways

SEALING

- 1** Unsealed

POLARIZATION

- N, A, B, C, D**

CONTACT TYPE

- B** Without Female Contact
- F** With Female Contact

EN4165 A 20Y22 1 N B

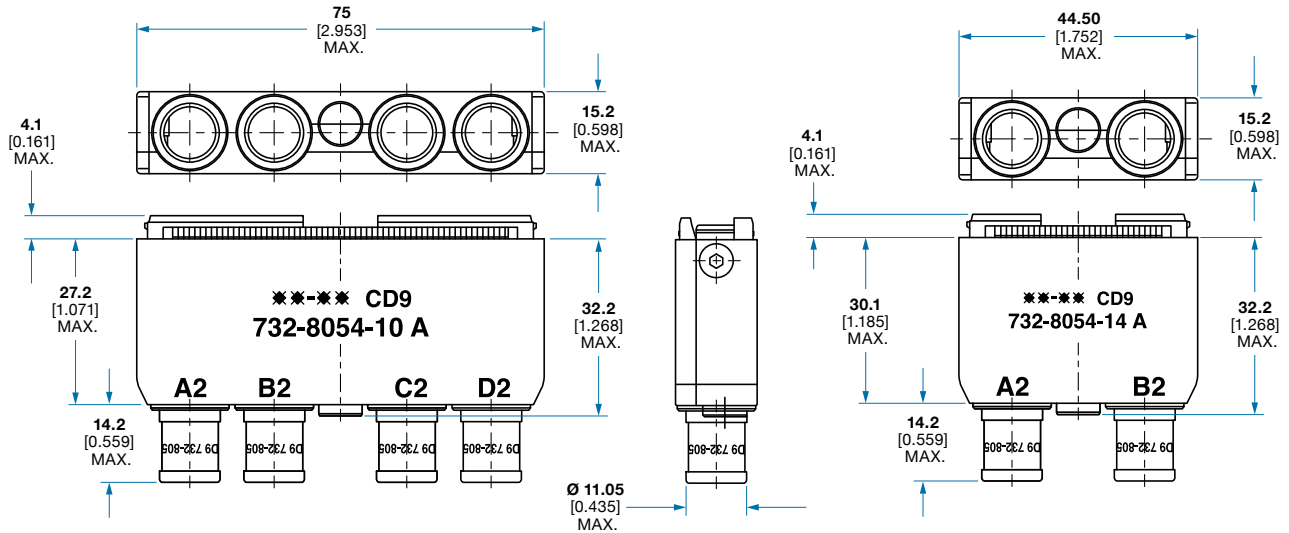


ACCESSORIES

SHIELDED ACCESSORY BODIES

732-8054-10 A: 4 Modules

732-8054-14 A: 2 Modules



TE PART NUMBERING SYSTEM

732 - 8052 - 00 W A

FAMILY _____

732

TYPE (Used With) _____

- 8052 Free Plug
- 8053 Rack and Panel Plug
- 8054 Receptacle

SHELL _____

- Two-Module Accessory**
- 01 2 Round Chimneys
- 14 No Chimney
- Four-Module Accessory**
- 00 4 Round Chimneys
- 10 No Chimney

PLATING/FINISH (Optional) _____

- Aluminum Alloy Body**
- Omit - Black Nickel
- W Olive Drab Cadmium
- Composite Body**
- M Nickel (For Shell Types 00 and 10 Only)
- J Olive Drab Cadmium (For Shell Types 00 and 10 Only)

ISSUE _____

A



ACCESSORIES

EN PART NUMBERING SYSTEM

EN4165 **F** **14** **P** **4**

FAMILY

EN4165

PLATING/FINISH

Aluminum Alloy Body

F Black Nickel

W Olive Drab Cadmium

Composite Body

M Nickel (For Shell Types P4 and R4 Only)

J Olive Drab Cadmium (For Shell Types P4 and R4 Only)

BODY

14 Shielded Accessory Body

TYPE (Used With)

P Free Plug

R Receptacle and Rack and Panel Plug

SHELL

2 2 Modules

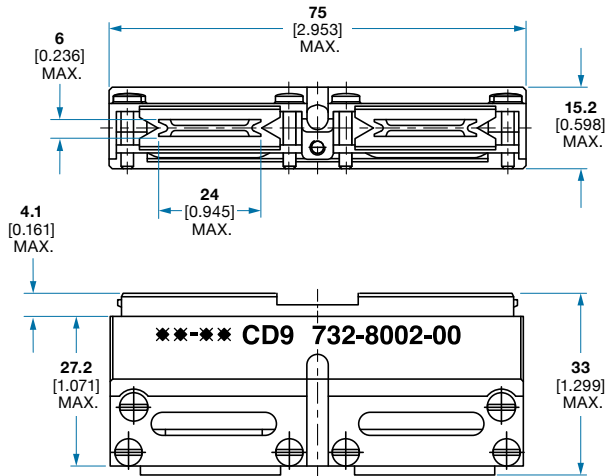
4 4 Modules



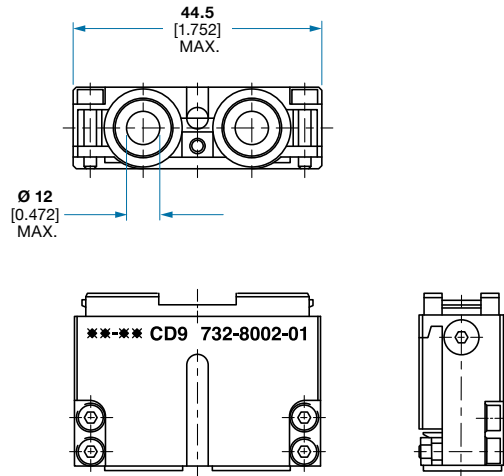
ACCESSORIES

NONSHIELDED CABLE CLAMPS

732-8002-00: 4 Modules



732-8002-01: 2 Modules



TE PART NUMBERING SYSTEM

732 - 8002 - 00 W

FAMILY
732

MATERIAL
8002 Metal
8040 PEI Plastic

SIZE
00 4 Module (Metal)
00A 4 Module (PEI)
01 2 Module (Metal and PEI)

PLATING/FINISH (Optional: Metal Clamps Only)
Omit - Black Nickel
W Olive Drab Cadmium

EN PART NUMBERING SYSTEM

EN4165 F 13 A 4

FAMILY
EN4165

PLATING/FINISH
F Black Nickel
W Olive Drab Cadmium

TYPE
13 Cable Clamp

SERIES
A Series 2
B Series 3 (Consult TE)

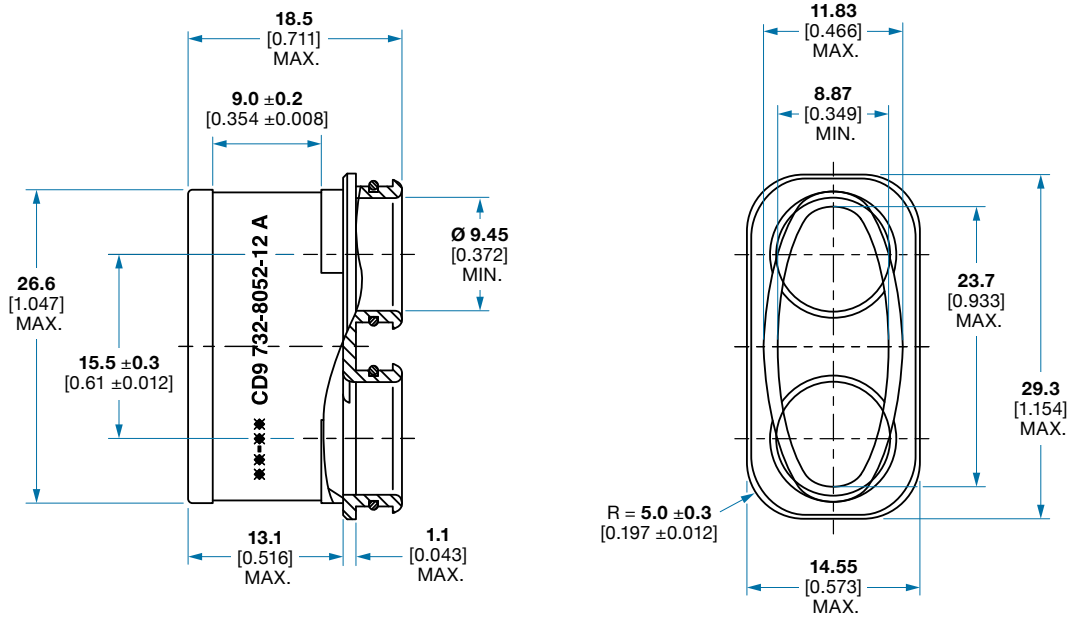
SIZE
2 2 Modules
4 4 Modules



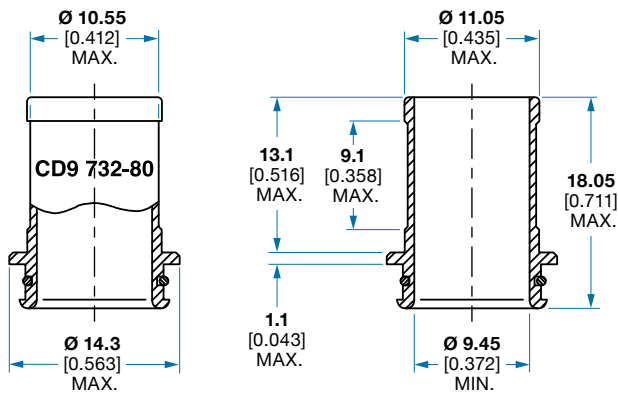
ACCESSORIES

CHIMNEYS FOR SHIELDED ACCESSORIES

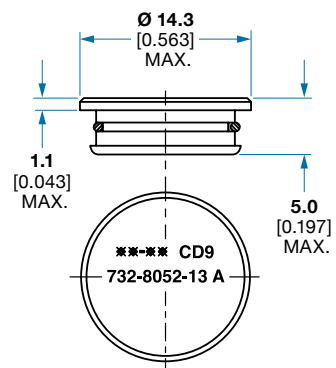
732-8052-12 A: Double Oval Chimney (1 for 2 cavities, for 4-module accessories only)



732-8052-11 A:
Round Chimney (1 per cavity)



732-8052-13 A:
Blank Chimney (1 per cavity)



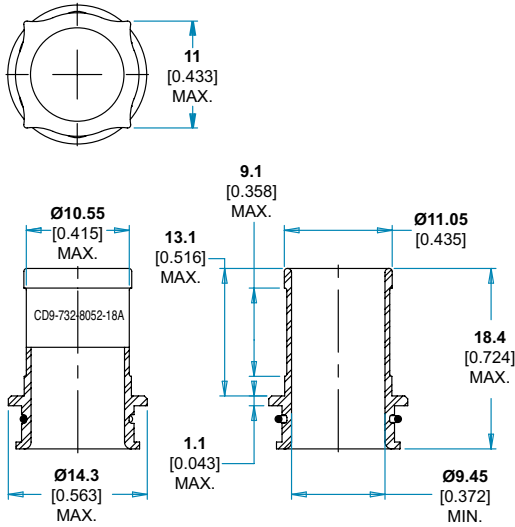


ACCESSORIES

CHIMNEYS FOR SHIELDED ACCESSORIES

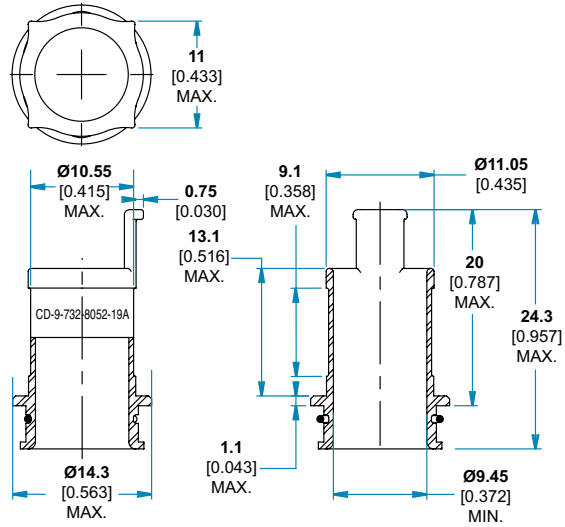
732-8052-18 A:

Anti-Rotational Round Chimney



732-8052-19 A

Anti-Rotational Round Chimney with Tie Wrap Option



TE PART NUMBERING SYSTEM

732-8052 - 11 W A

FAMILY

732-8052

TYPE

- 11 Round Chimney
- 12 Double Oval Chimney
- 13 Blank Chimney
- 18 Anti-Rotational Round Chimney
- 19 Anti-Rotational Round Chimney with Tie Wrap Option

PLATING/FINISH

- Omit for Black Nickel
- W Olive Drab Cadmium

ISSUE

A

EN PART NUMBERING SYSTEM

EN4165 16 F

STANDARD

EN4165

TYPE

- 15 Round Chimney
- 15A Anti-Rotational Round Chimney with Tie Wrap Option
- 16 Double Oval Chimney
- 17 Blank Chimney

PLATING/FINISH

- F Black Nickel
- W Olive Drab Cadmium



MASSES

Receptacles

| Type | Nickel Finish | | Olive Drab Cadmium Finish | | Mass, Max. (g) | Page |
|-----------------------------|-----------------|--------------|---------------------------|--------------|----------------|------|
| | TE Part No. | EN Part No. | TE Part No. | EN Part No. | | |
| 2-Module Receptacles | | | | | | |
| Standard | DMC-M 42 A 01 | EN4165FOA200 | DMC-M 42 AW 01 | EN4165WOA200 | 17 | 8 |
| Short | DMC-M 43 A 01 | — | DMC-M 43 AW 01 | — | 15 | 8 |
| Flange Mount | DMC-M 44 A 01 | EN4165F7A200 | DMC-M 44 AW 01 | EN4165W7A200 | 22 | 9 |
| Short, Flange Mount | DMC-M 45 A 01 | — | DMC-M 45 AW 01 | — | 21 | 9 |
| 4-Module Receptacles | | | | | | |
| Standard (Aluminum) | DMC-M 82 A 01 | EN4165FOA400 | DMC-M 82 AW 01 | EN4165WOA400 | 22 | 8 |
| Standard (Composite) | DMC-MD 82 AM 01 | EN4165MOA400 | DMC-MD 82 AJ 01 | EN4165JOA400 | 15 | 8 |
| Short (Aluminum) | DMC-M 83 A 01 | — | DMC-M 83 AW 01 | — | 20 | 8 |
| Short (Composite) | DMC-MD 83 AM 01 | — | DMC-MD 83 AJ 01 | — | 14 | 8 |
| Flange Mount | DMC-M 84 A 01 | EN4165F7A400 | DMC-M 84 AW 01 | EN4165W7A400 | 28 | 9 |
| Short, Flange Mount | DMC-M 85 A 01 | — | DMC-M 85 AW 01 | — | 27 | 9 |

Multi-Receptacle Housings

| Size (No. of Modules) | Type | TE Part No. | Mass (g) | Page |
|-----------------------|-------------|-----------------|----------|------|
| 8 | Standard | DMC-M 0164-01 | 98 | 12 |
| | Lightweight | DMC-M 0164-01 A | 55 | 12 |
| 12 | Standard | DMC-M 0244-01 | 127 | 12 |
| | Lightweight | DMC-M 0244-01 A | 75 | 12 |
| 16 | Standard | DMC-M 0324-01 | 156 | 12 |
| | Lightweight | DMC-M 0324-01 A | 95 | 12 |
| 24 | Standard | DMC-M 0484-01 | 214 | 12 |
| | Lightweight | DMC-M 0484-01 A | 131 | 12 |
| 32 | Standard | DMC-M 0644-01 | 273 | 12 |
| | Lightweight | DMC-M 0644-01 A | 171 | 12 |
| 40 | Standard | DMC-M 0804-01 | 331 | 12 |
| | Lightweight | DMC-M 0804-01 A | 211 | 12 |
| 48 | Standard | DMC-M 0964-01 | 390 | 12 |
| | Lightweight | DMC-M 0964-01 A | 251 | 12 |
| 52 | Standard | DMC-M 1044-01 | 419 | 12 |
| | Lightweight | DMC-M 1044-01 A | 271 | 12 |

Receptacle Keying Component

| Type | TE Part No. | EN Part No. | Mass, Max. (g) | Page |
|--------|---------------|-------------|----------------|------|
| Keying | 732-8021-** B | EN4165R** | 2.5 | 13 |

Plugs

| Type | Nickel Finish | | Olive Drab Cadmium Finish | | Mass, Max. (g) | Page |
|--------------------------|---------------|---------------|---------------------------|---------------|----------------|------|
| | TE Part No. | EN Part No. | TE Part No. | EN Part No. | | |
| 2-Module Plugs | | | | | | |
| Free Hanging (Aluminum) | DMC-M 40 A 01 | EN4165F6A200 | DMC-M 40 AW 01 | EN4165W6A200 | 22 | 14 |
| Rack and Panel | DMC-M 48 A 01 | EN4165F9A200 | DMC-M 48 AW 01 | EN4165W9A200 | 33 | 14 |
| Reversed Rack and Panel | DMC-M 49 A 01 | EN4165F9A2R00 | DMC-M 49 AW 01 | EN4165W9A2R00 | 33 | 15 |
| 4-Module Plugs | | | | | | |
| Type | Nickel Finish | | Olive Drab Cadmium Finish | | Mass, Max. (g) | Page |
| | TE Part No. | EN Part No. | TE Part No. | EN Part No. | | |
| Free Hanging (Aluminum) | DMC-M 80 A 01 | EN4165F6A400 | DMC-M 80 AW 01 | EN4165W6A400 | 22 | 14 |
| Free Hanging (Composite) | DMC-MD 80 AM | EN4165M6A400 | DMC-MD 80 AJ | EN4165J6A400 | 19 | 14 |
| Rack and Panel | DMC-M 88 A 01 | EN4165F9A400 | DMC-M 88 AW 01 | EN4165W9A400 | 38 | 14 |
| Reversed Rack and Panel | DMC-M 89 A 01 | EN4165F9A4R00 | DMC-M 89 AW 01 | EN4165W9A4R00 | 38 | 15 |



MASSES

Plug Keying Component

| Type | TE Part No. | EN Part No. | Mass, Max. (g) | Page |
|--------|-------------|-------------|----------------|------|
| Keying | 732-8020-** | EN4165P** | 0.7 | 18 |

Modules

| Insert | Contact Type | TE Part No. | EN Part No. | Mass, Max. (g) | Page |
|--|--------------|-------------------|-----------------|----------------|------|
| Standard Modules | | | | | |
| 00-00 (Blank) | — | DMC-M 00-00 PN | EN4165-1N | 3.0 | 20 |
| 01-08 | Male | DMC-M 01-08 A* | EN4165A01-081*A | 2.9 | 19 |
| | Female | DMC-M 01-08 B* | EN4165A01-081*B | 4.4 | 19 |
| 04-12 | Male | DMC-M 04-12 A* | EN4165A04-121*A | 2.8 | 19 |
| | Female | DMC-M 04-12 B* | EN4165A04-121*B | 3.7 | 19 |
| 08-16 | Male | DMC-M 08-16 A* | EN4165A08-161*A | 2.9 | 19 |
| | Female | DMC-M 08-16 B* | EN4165A08-161*B | 3.9 | 19 |
| 12-20 | Male | DMC-M 12-20 A* | EN4165A12-201*A | 3.2 | 19 |
| | Female | DMC-M 12-20 B* | EN4165A12-201*B | 4.1 | 19 |
| 20-22 | Male | DMC-M 20-22 A* | EN4165A20-221*A | 3.1 | 19 |
| | Female | DMC-M 20-22 B* | EN4165A20-221*B | 4.1 | 19 |
| 99-01 | Male | DMC-M 99-01 A* | EN4165A99-011*A | 2.4 | 19 |
| | Female | DMC-M 99-01 B* | EN4165A99-011*B | 3.2 | 19 |
| 99-06 | Male | DMC-M 99-06 A* | | ?? | 19 |
| | Female | DMC-M 99-06 B* | | ?? | 19 |
| 99-10 | Male | DMC-M 99-10 A* | EN4165A99-101*A | 3.2 | 19 |
| | Female | DMC-M 99-10 B* | EN4165A99-101*B | 4.2 | 19 |
| High-Density Modules | | | | | |
| 30-23 | Male | DMC-MR 30-23 A* | — | 3.4 | 19 |
| | Female | DMC-MR 30-23 B* | — | 2.5 | 19 |
| Aluminum Cable Compatible Modules | | | | | |
| 20-22 | Male | DMC-MA 20-22 A* | EN4165A20A221*A | 2.9 | 19 |
| | Female | DMC-MA 20-22 B* | EN4165A20A221*B | 3.2 | 19 |
| 99-01 | Male | DMC-MA 99-01 A* | EN4165A99A011*A | 2.9 | 19 |
| | Female | DMC-MA 99-01 B* | EN4165A99A011*B | 3.7 | 19 |
| Grounding Modules | | | | | |
| 01-08 | Male | DMC-M 01-08 A*-G* | EN4165A01G081*A | 3.6 | 20 |
| | Female | DMC-M 01-08 B*-G* | EN4165A01G081*B | 7.5 | 20 |
| 04-12 | Male | DMC-M 04-12 A*-G* | EN4165A04G121*A | 3.8 | 20 |
| | Female | DMC-M 04-12 B*-G* | EN4165A04G121*B | 6.7 | 20 |
| 08-16 | Male | DMC-M 08-16 A*-G* | EN4165A08G161*A | 3.9 | 20 |
| | Female | DMC-M 08-16 B*-G* | EN4165A08G161*B | 6.9 | 20 |
| BACC47 Contact Compliant | | | | | |
| 99-10 | Male | DMC-MB 99-10 A* | — | 2.9 | 19 |
| | Female | DMC-MB 99-10 B* | — | 4.1 | 19 |
| 12-20 | Male | DMC-MB 12-20 A* | — | 2.9 | 19 |
| | Female | DMC-MB 12-20 B* | — | 4.1 | 19 |



MASSES

Modules (continued)

| Insert | Contact Type | TE Part No. | EN Part No. | Mass, Max. (g) | Page |
|---|----------------|-------------------------------|-----------------|----------------|------|
| Quadrax Modules | | | | | |
| 01-08 (Ni) | Male | DMC-M 01-08 A*-GQ | EN4165A01Q281*A | 3.5 | 20 |
| | Female | DMC-M 01-08 B*-GQ | EN4165A01Q281*B | 7.4 | 20 |
| 01-08 (Cd) | Male | DMC-M 01-08 A*-GQW | — | 3.5 | 20 |
| | Female | DMC-M 01-08 B*-GQW | — | 7.4 | 20 |
| Shunt Modules | | | | | |
| 20-22 (5 Shunts 4 Ways) | Female | DMC-M 22-05 B* | EN4165A20Y221*B | 3.8 | 20 |
| 20-22 (3 Shunts 4 Ways and 4 Shunts 2 Ways) | Female | DMC-M 22-07 B* | EN4165A2AY221*B | 3.7 | 20 |
| 20-22 (10 Shunts 2 Ways) | Female | DMC-M 22-10 B* | EN4165A2BY221*B | 3.7 | 20 |
| High-Speed Modules | | | | | |
| 99-02 | Male | DMC-M 99-02 A* | — | 3.6 | 20 |
| | Female | DMC-M 99-02 B* | — | 4.4 | 20 |
| 99-03 | Male | DMC-M 99-03 A* | — | 2.5 | 20 |
| | Female | DMC-M 99-03 B* | — | 3.35 | 20 |
| 99-04 | Male | DMC-M 99-04 A* | — | 2.9 | 20 |
| | Female | DMC-M 99-04 B* | — | 3.4 | 20 |
| 16-02 | Male | 2226454-1 / DMC-M 16-02 A* | — | 2.5 | 20 |
| | Female | 2226455-1 / DMC-M 16-02 B* | — | 3.4 | 20 |
| Optical and Hybrid Modules | | | | | |
| MC5 | Male | 458235 | — | 5.5 | 21 |
| | Female | 458238 | — | 8.9 | 21 |
| T47 Hybrid | Male | 459736-x | — | 4.3 | 21 |
| | Female | 459739-x | — | 5.3 | 21 |
| MC6 | Hermaphroditic | DMC-M01-MC6N | — | 12.5 | 21 |



MASSES

Shielded Accessory Bodies

| Type | Nickel Finish | | Olive Drab Cadmium Finish | | Mass, Max. (g) | Page |
|-----------------------------|---------------|-------------|---------------------------|-------------|----------------|------|
| | TE Part No. | EN Part No. | TE Part No. | EN Part No. | | |
| 2-Module Plugs | | | | | | |
| Free Hanging | 732-8052-14 A | EN4165F14P2 | 732-8052-14 WA | EN4165W14P2 | 25 | 27 |
| Rack and Panel | 732-8053-14 A | — | 732-8053-14 | | 23 | 27 |
| 4-Module Plugs | | | | | | |
| Free Hanging (Aluminum) | 732-8052-10 A | EN4165F14P4 | 732-8052-10 WA | EN4165W14P4 | 34 | 27 |
| Free Hanging (Composite) | 732-8052-10 M | EN4165M14P4 | 732-8052-10 J | EN4165J14P4 | 26 | 27 |
| Rack and Panel | 732-8053-10 A | — | 732-8053-10 WA | — | 32 | 27 |
| 2-Module Receptacles | | | | | | |
| Standard and Short | 732-8054-14 A | EN4165F14R2 | 732-8054-14 WA | EN4165W14R2 | 23 | 27 |
| 4-Module Receptacles | | | | | | |
| Standard and Short | 732-8054-10 A | EN4165F14R4 | 732-8054-10 WA | EN4165W14R4 | 32 | 27 |

Non-Shielded Cable Clamps

| Type | Nickel Finish | | Olive Drab Cadmium Finish | | Mass, Max. (g) | Page |
|-----------------|---------------|-------------|---------------------------|-------------|----------------|------|
| | TE Part No. | EN Part No. | TE Part No. | EN Part No. | | |
| 4-Module Shells | 732-8002-00 | EN4165F13A4 | 732-8002-00 W | EN4165W13A4 | 34 | 29 |
| 2-Module Shells | 732-8002-01 | EN4165F13A2 | 732-8002-01 W | EN4165W13A2 | 22 | 29 |

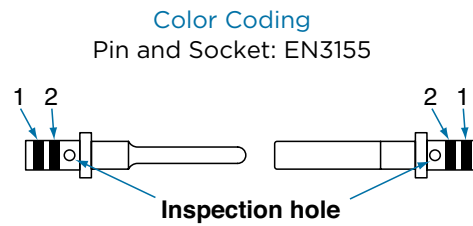
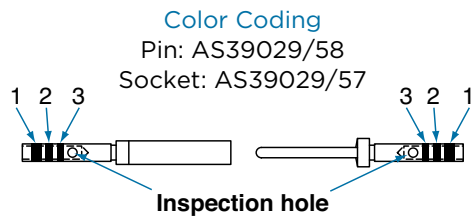
Chimneys for Shielded Accessories

| Type | Nickel Finish | | Olive Drab Cadmium Finish | | Mass, Max. (g) | Page |
|------------------------------|---------------|-------------|---------------------------|-------------|----------------|------|
| | TE Part No. | EN Part No. | TE Part No. | EN Part No. | | |
| Round | 732-8052-11 A | EN4165F15 | 732-8052-11 WA | EN4165W15 | 1.5 | 30 |
| Double Oval | 732-8052-12 A | EN4165F16 | 732-8052-12 WA | EN4165W16 | 3.5 | 30 |
| Blank | 732-8052-13 A | EN4165F17 | 732-8052-13 WA | EN4165W17 | 2 | 30 |
| Anti-Rotation Round | 732-8052-18 A | — | 732-8052-18 WA | — | 1.55 | 31 |
| Anti-Rotation Round/Tie Wrap | 732-8052-19 A | EN4165F15A | 732-8052-19 WA | EN4165W15A | 1.7 | 30 |



CONTACTS

ELECTRICAL CONTACTS



| Size | Part No. | Type | Color Bands | | Wire Range | |
|------------|--------------------|--------|---------------------|---------------|---------------|-----------------|
| | | | AS39029 | EN3155 | AWG | mm ² |
| 24/24 | 724-0001-24 | Pin | — | — | 26-24 | 0.15 - 0.25 |
| | 724-0003-24 | Socket | — | — | | |
| 23/22 | 182-4043-23 | Pin | — | Green-Purple | 26-22 | 0.15 - 0.4 |
| | 182-4042-23 | Socket | — | Green-Purple | | |
| 22/22 | 724-0001-22 | Pin | Orange-Blue-Black | Green-Green | 26-22 | 0.15 - 0.40 |
| | 724-0003-22 | Socket | Orange-Green-Yellow | | | |
| 22/20 | 182-0860-22 | Pin | — | Red-Green | 24-20 | 0.25 - 0.60 |
| | 182-0862-22 | Socket | — | | | |
| 20/20 | 724-0001-20 | Pin | Orange-Blue-Orange | Red-Red | 24-20 | 0.25 - 0.60 |
| | 724-0003-20 | Socket | Orange-Green-Purple | | | |
| 20/18 | 724-1063-20 | Pin | — | Brown-Red | 24-18 | 0.25 - 1.00 |
| | 724-1064-20 | Socket | — | | | |
| 16/16 | 724-0001-16 | Pin | Orange-Blue-Yellow | Blue-Blue | 20-16 | 0.60 - 1.20 |
| | 724-0003-16 | Socket | Orange-Green-Gray | | | |
| 16/14 | 724-1063-16 | Pin | — | White-Blue | 20-14 | 0.60 - 2.00 |
| | 724-1064-16 | Socket | — | | | |
| 12/12 | 724-0001-12 | Pin | Orange-Blue-Green | Yellow-Yellow | 14-12 | 2.00 - 3.00 |
| | 724-0003-12 | Socket | Orange-Green-White | | | |
| 12/10 | 724-1063-12 | Pin | — | White-Yellow | 12-10 | 3.00 - 5.00 |
| | 724-1064-12 | Socket | — | | | |
| 08 (Power) | 724-0001-08 | Pin | — | — | 08 | 5.30 - 8.98 |
| | 724-0003-08 | Socket | — | | | |
| 08 (Power) | 182-0001-08 | Pin | — | — | 08 | |
| | 182-0003-08 | Socket | — | | | |
| Microcoax | 724-0004-16 | Pin | Yellow-Red-Yellow | — | KX 22 | 0.057 - 0.158 |
| | 724-0005-16 | Socket | Yellow-Orange-Red | | | |
| 08 (Coax) | 182-0125-08 | Pin | — | — | ALPEN A 26 DT | |
| | 182-0126-08 | Socket | — | | | |
| 08 | 182-0048-08 | Pin | — | — | SMA Interface | |
| | 182-0044-08 | Socket | — | | | |
| 22 (Shunt) | 724-1272-22 | Socket | — | — | 26-22 | 0.15 - 0.40 |

Bold part numbers are standard contacts delivered with modules.

Databus Contacts (Twisted Pair) As Per AS39029

| Cable Type | Part No. | Type | Color Bands | Conductor Size, Max. | Braid OD, Max. |
|--------------|--------------------|------|-------------|--------------------------|----------------|
| Single Braid | 182-0034-03 | Pin | Brown-Red | 2 x 0.34 mm ² | 3.48 |
| | 182-0035-03 | Skt | | | |
| Double Braid | 182-0034-04 | Pin | Red-Red | 2 x 0.34 mm ² | 3.91 |
| | Olive Drab Cadmium | Skt | | | |



CONTACTS

TOOLING



| Part No. | Crimp Tool | | Positioner | | Insertion/Extraction Tool |
|--|---|--------------|---|----------------------------|----------------------------|
| | Part No. | Mil Part No. | Part No. | Mil Part No. | |
| 724-0001-24 724-0003-24 | 057-0463-12 | M22520/2-01 | 057-1030-02 057-1030-01 | — | 605837-22 |
| 182-4043-23 182-4042-23 | 057-0463-12 | M22520/2-01 | 057-0467-32 057-0515-32 | M22520/2-09 M22520/2-06 | M81969/14-01 |
| 724-0001-22 724-0003-22 | 057-0463-12 | M22520/2-01 | 057-0467-32 057-0515-32 | M22520/2-09 M22520/2-06 | M81969/14-01 |
| 182-0860-22 182-0862-22 | 057-0463-12 | M22520/2-01 | 057-0467-32 057-0515-32 | M22520/2-09 M22520/2-06 | M81969/14-01 |
| 724-0001-20 724-0003-20 | 057-0461-11 | M22520/1-01 | 057-0466-21 | M22520/1-04 | M81969/14-10 |
| 724-1063-20 724-1064-20 | 057-0461-11 | M22520/1-01 | 056-0466-21 | M22520/1-04 | M81969/14-10 |
| 724-0001-16 724-0003-16 | 057-0461-11 | M22520/1-01 | 057-0466-21 | M22520/1-04 | M81969/14-03 |
| 724-1063-16 724-1064-16 | 057-0461-11 | M22520/1-01 | 056-0466-21 | M22520/1-04 | M81969/14-03 |
| 724-0001-12 724-0003-12 | 057-0461-11 | M22520/1-01 | 057-0466-21 | M22520/1-04 | M81969/14-04 |
| 724-1063-12 724-1064-12 | 057-0461-11 | M22520/1-01 | 056-0466-21 | M25520/1-04 | — |
| 724-0001-08 724-0003-08 | 057-0064-05 A | N/A | 057-0065-05 A | N/A | 114-008 or M81969/14-06 |
| 182-0001-08 182-0003-08 | 057-0064-05 A | N/A | 057-0065-05 A | N/A | 114-008 or M81969/14-06 |
| 724-0004-16 724-0005-16 | 057-0463-12 (Center Contact) 057-0509-14 (Outer Contact) | N/A | 057-0539-32 (Center Contact) 057-0511-34 (Outer Contact) | N/A | M15570-16 |
| 182-0125-08 182-0126-08 | N/A | N/A | N/A | N/A | 114-008 or M81969/14-06 |
| 182-0048-08 182-0044-08 | N/A | N/A | N/A | N/A | 114-008 or M81969/14-06 |
| 724-1272-22 | 057-0463-12 | M22520/2-01 | 057-0515-32 | M22520/2-06 | M81969/14-01 |

Bold part numbers are standard contacts delivered with modules.

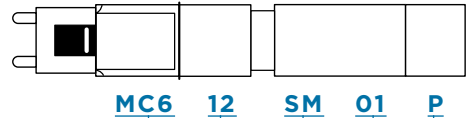
Tooling for Databus Contacts

| Cable Type | Sleeve Type | Center Conductor | Ferrule | Insertion/Extraction Tool |
|--------------|----------------------------|------------------|---------------------|----------------------------|
| Single Braid | Thermoplastic and Silicone | TDB-CY-08 | TDB-CT-HEX Mark C | 114-008 or M81969/14-06 |
| Double Braid | Thermoplastic and Silicone | TDB-CT-08 | TDB-CT-08HEX Mark D | |



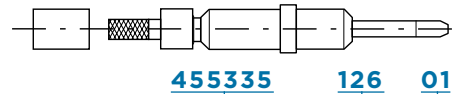
FIBER OPTIC TERMINI

MC6 Termini



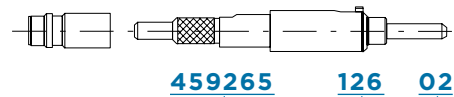
- FAMILY** ————— MC6
- NUMBER OF FIBERS** ————— 12
- FIBER TYPE** ————— SM Single Mode
MM Multimode
- CABLE TYPE** ————— 01 Ruggedized Oval Aerospace Multifiber Cable, 3.95 mm x 1.60 mm max. Jacket
02 Round Multifiber Cable, Ø 3.96 mm max. Jacket
- FERRULE TYPE** ————— P Male, with Alignment Pins
S Female, without Alignment Pins

MC5 Termini



- FAMILY** ————— 455335 MC5
- OPTICAL HOLE DIAMETER** ————— 126 126 µm
127 127 µm
- CABLE TYPE** ————— 00 900 µm buffered fiber
01 2.1 mm cable OD
02 1.8 mm cable OD
03 2.5 mm cable OD
04 2.4 mm cable OD
05 1.2 mm cable OD

ARINC 801 Termini for T47 Modules



- FAMILY** ————— 459265 ARINC 801
- OPTICAL HOLE DIAMETER** ————— 126 126 µm
- CABLE TYPE** ————— 00 900 µm buffered fiber
02 1.8 mm cable OD



FIBER OPTIC TOOL KITS AND TRAINING



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We offer tool kits to meet a range of needs, including emergency field terminations, workshop termination, fusion splicing, and testing and inspection. Kit can cover a generic range of connectors or can be tailored to specific products.

FIBER OPTIC TRAINING

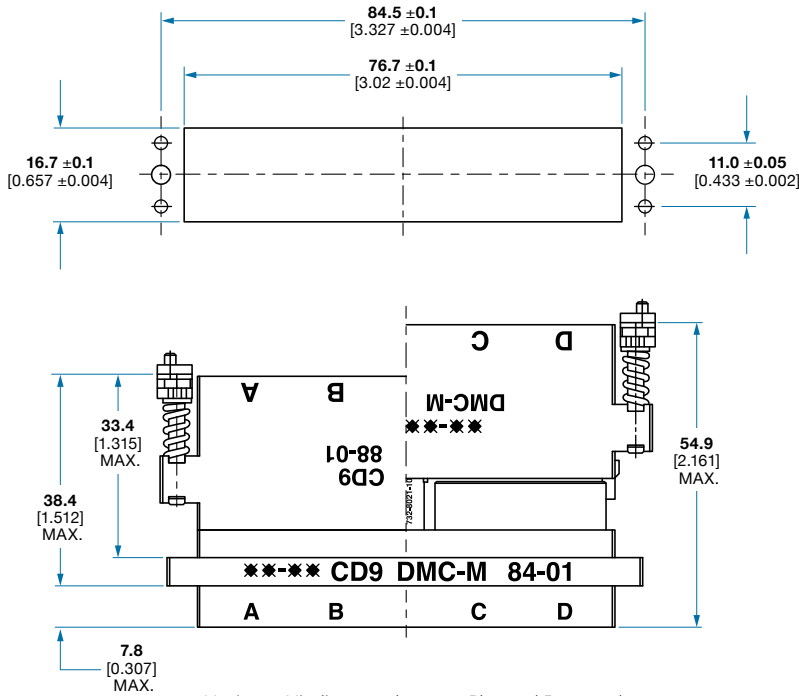
Our training equips technicians with best practices for handling fiber and termination it in a range of TE connectors. Contact TE for further details.



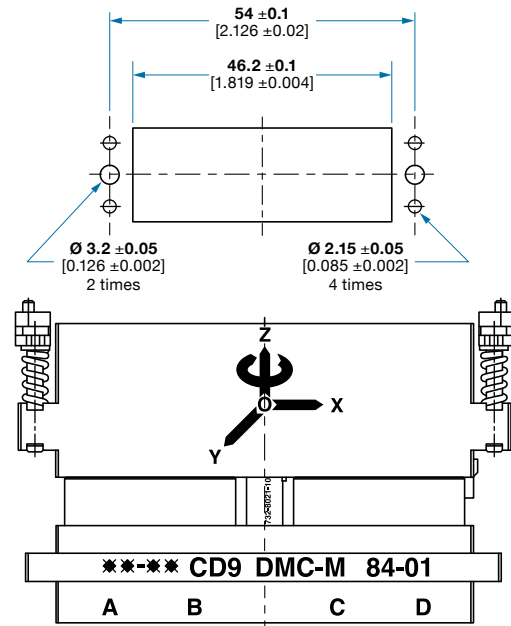
PANEL CUTOUTS

Panel Cutouts for Rack and Panel Plugs

TYPES 88, 89



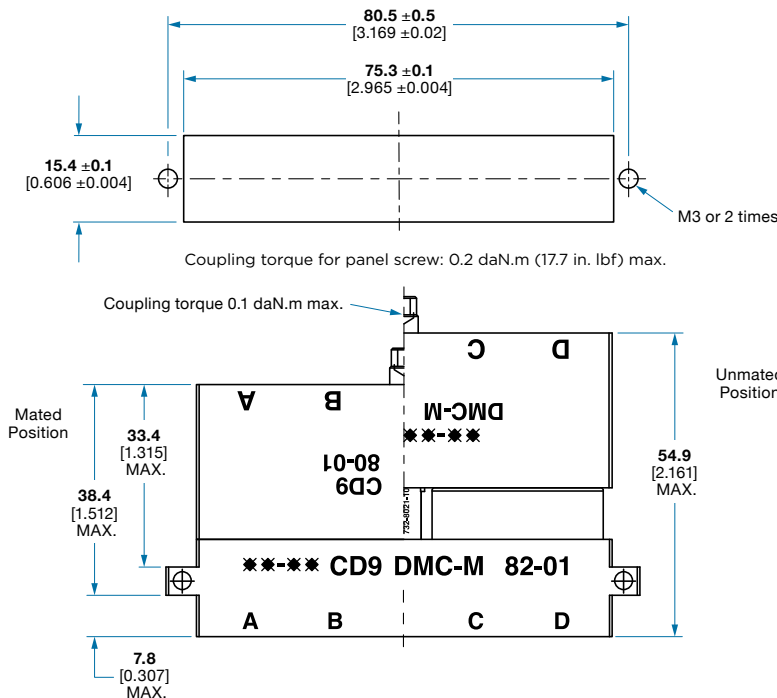
TYPES 48, 49



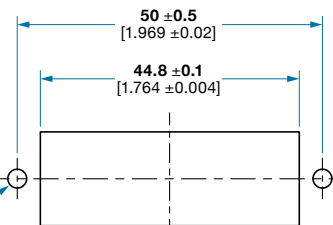
Maximum Misalignment between Plug and Receptacle
 OZ: ±2 mm (±0.79 in.) OY: ±0.75 mm (±0.030 in.) OX: ±0.75 mm (±0.030 in.) ∅: ±1°

Panel Cutouts for Receptacles

TYPES 82, 83, 84, 85

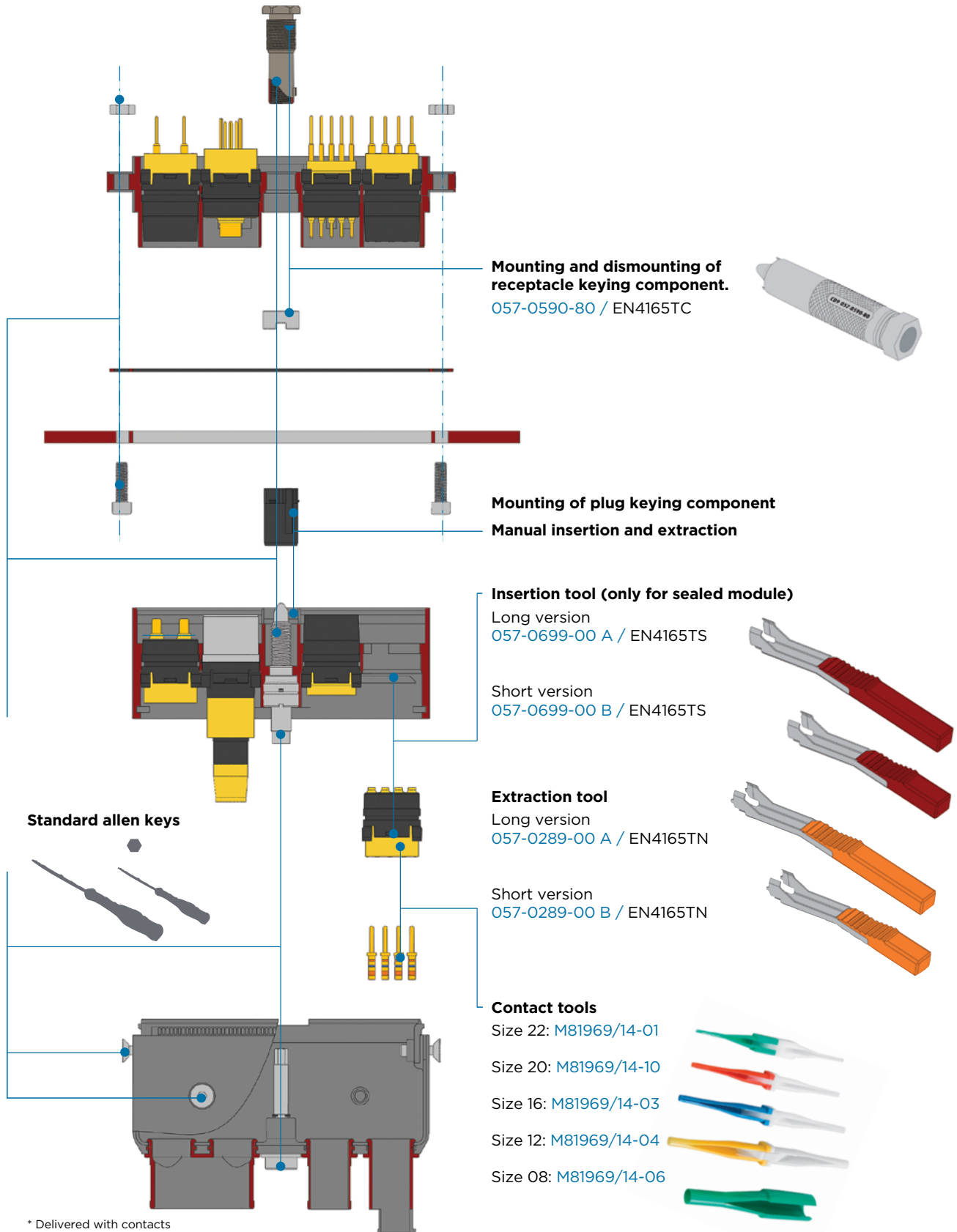


TYPES 42, 43, 44, 45





CONNECTOR TOOLING



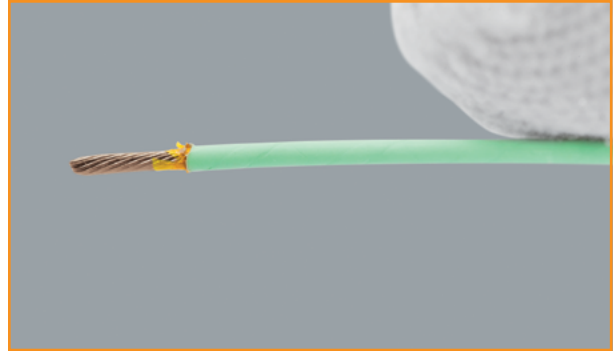


USER MANUAL

Contact Crimping



Use a crimping tool with the appropriate pilot stop.



Strip the insulation from the copper wire, with 5 mm maximum strip length. (For aluminum wire, consult TE.)



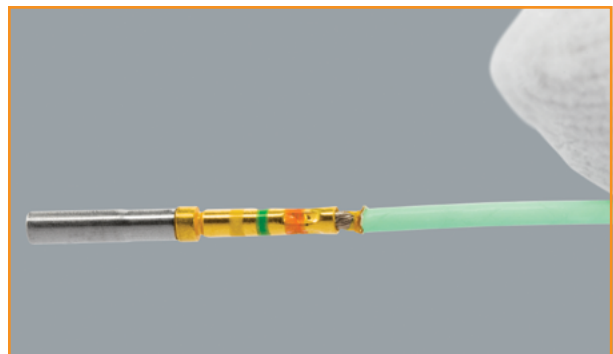
Insert the contact into the crimping tool.



Insert the wire into the contact.



Tighten the crimping tool fully. The handles will not release until the tool is fully bottomed.



Remove and inspect the completed termination. The contact must have 8 markings, and the wire must be seen in the contact side hole.

For the use of a shielded version, do not forget to slide the cables in the chimney before crimping the contacts.



USER MANUAL

Contact Insertion and Withdrawal



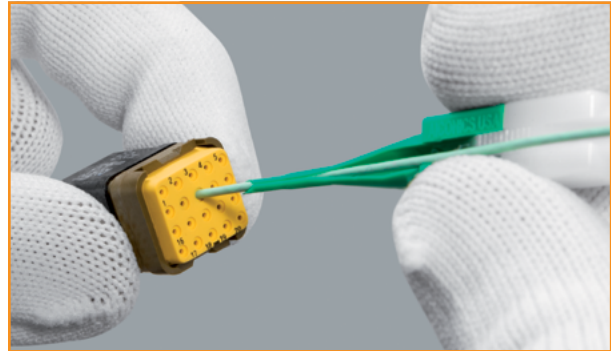
Use the appropriate plastic tool. There is one tool for each contact size.

| Part Number | Contact Size |
|-------------------------|--------------|
| M81969/14-01 | 22 |
| M81969/14-10 | 20 |
| M81969/14-03 | 16 |
| M81969/14-04 | 12 |
| 114-008 or M81969/14-06 | 08 |

CONTACT INSERTION

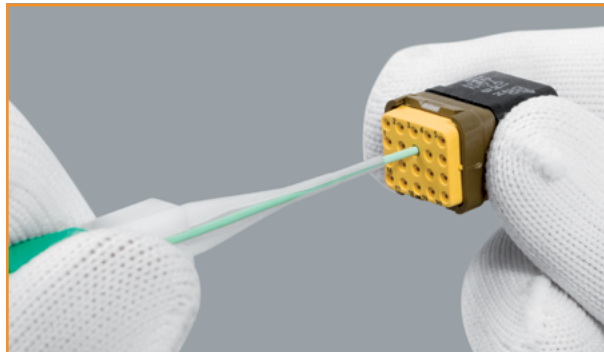


Insert the wire into the slot of the colored end of tool. Pull the wire until the contact butts against the tool.

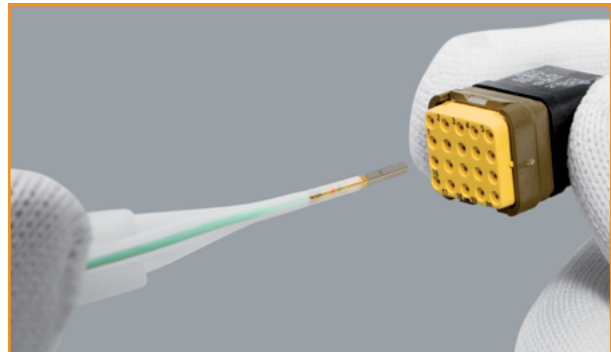


Insert the contact in the module cavity. Push the contact fully home. Then remove the tool and lightly pull back on the wire to make sure that the contact is fully seated.

CONTACT WITHDRAWAL



For extraction, insert the wire in the slot of the white end of the tool. Slide the tool into the cavity and push it in until butts against the contact shoulder.



Press the wire between the fingers and the tool. Then pull the overall wire and tool back.



USER MANUAL

Module Insertion and Extraction

MODULE INSERTION

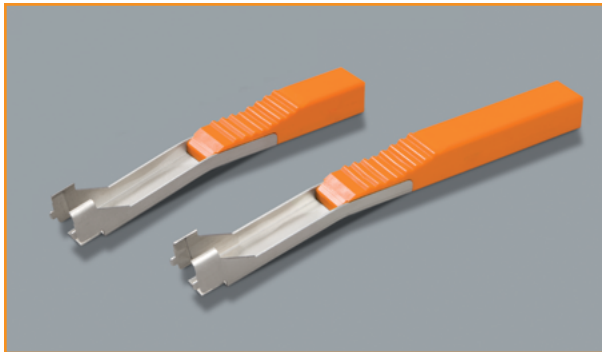


The module must be inserted from the rear side of the housing. The module polarization key must be visible from the marked side of the housing.



Manually push the module into the cavity until the module's rear should butt against the shell. For sealed modules, use the insertion tool part number 057-0699-00 A or B. Check that the module is properly seated either by pulling back the wires or by pushing the module from the front of the housing.

MODULE EXTRACTION



For extraction use the tool part number 057-0289-00 A or B.



Slide the tool around the cable. Then push the tool inside the cavity until the tool butts against the shell.



Note the tool's different orientation depending on the A, B, C or D cavities.

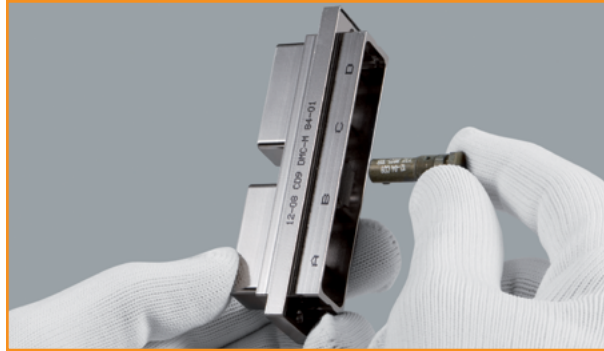


Press the cable between the tool and the fingers and pull back. If the module is not wired, use the same tool, but push the module from the front of the housing.

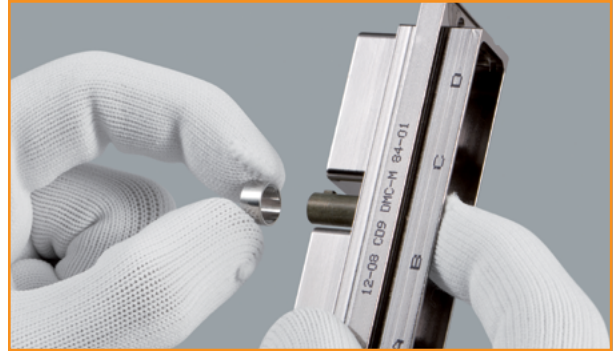


USER MANUAL

Mounting the Receptacle Keying Component



The receptacle keying component must be inserted from the rear side of the receptacle housing. The component can be rotated in 60° increments. Orientation is indicated by the largest keyway.



Insert the nut from the front of the receptacle housing.



For mounting and dismounting, use the tool 057-0590-80.



Tighten the nut with the tool, by applying a 0.15 ± 0.02 daN.m (13.3 ± 6.1 in. lbf.) coupling torque.

Mounting the Plug Keying Component



Use the plug keying component corresponding to the receptacle keying component (same color code).

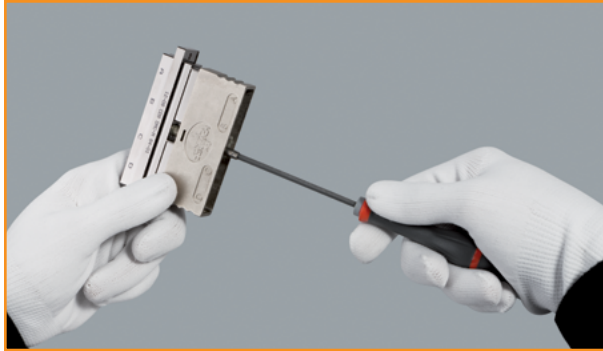


Insert the plug keying component in the front side of the plug housing. Make sure that it has the same orientation as the receptacle key. Then seat the plug keying component manually by pushing it fully into the cavity.



USER MANUAL

Free Plug/Receptacle Coupling

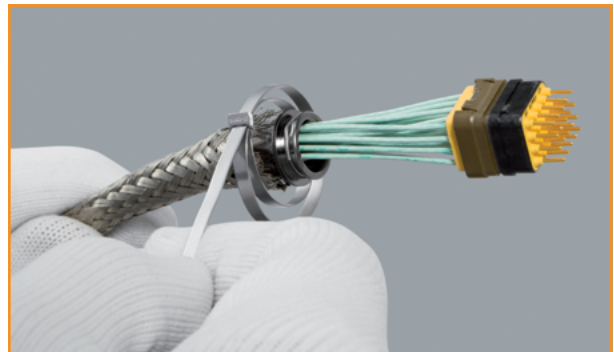


Use the tool part number 057-0592-80 or a standard allen key and apply a 0.1 ± 0.03 daN.m (8.8 ± 2.6 in. lbf.) coupling torque.

Mounting Shielded Braid on Chimney



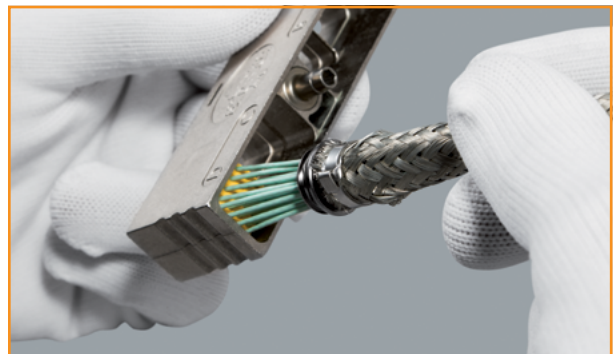
Slide the chimney and the shielded braid around the cable.



Slide the shielded braid and the 3 mm band strap ring over the chimney.



Use the tool 05 7-0450-00 to tighten the ring around the shielded braid over the chimney.

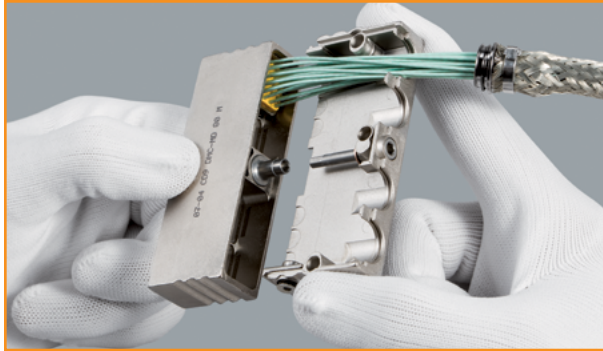


Insert the module in the housing.



USER MANUAL

Shielded Accessories Assembly



Choose the appropriate plug or receptacle accessory. Insert the accessory in the housing. Make sure that the marking of the accessory is in front of the respective housing's cavities.



Insert the chimneys in their cavities.



Fit the accessory cover, and tighten the overall screws by applying a 0.05 +0.02 daN.m (4.4 +1.7 in. lbf.) coupling torque with a standard allen key.



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[33526M11-08PC](#) [33526M11-08PE](#) [3355-5869-000](#) [DMC-M99-01AN](#) [Y59113WE20PNV00300](#) [ZPF000000000106310](#) [105979-31](#)
[MTCPK1PJC02S](#) [SIM2N40NC1](#) [SIM2N40NC2](#) [SIM2S110A](#) [SIME2022PNR](#) [787-0015-02](#) [TMN2N009SC2DM018T](#)
[TMN2N025PC2DM018S](#) [ZPF000000000106308](#) [ZPF000000000102759](#) [CTG-20-08-513](#) [5634-201-03158](#)