DEUTSCH
DMC-M Series
PRINTED CIRCUIT BOARD MODULES

The Rugged, Modular Solution for Flexible, Reliable Aerospace Connectivity
CONTENTS

Introduction 04
DMC-M 30-23 modules presentation 05
TE part numbering system for DMC-M modules with straight PCB contacts 06
DMC-M modules with straight PCB contacts 07
TE part numbering system for DMC-M modules with bended PCB contacts 08
DMC-M modules with bended PCB contacts 09
High-speed DMC-M modules PCB contacts 10
Other TE DMC-M series connectors brochures 11
DEUTSCH DMC-M SERIES PCB MODULES

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. TE’s offering is one of the largest around the world.

Based on the EN4165 design, these connectors are available in Printed Circuit Board (PCB) version. Lightweight and compact, they offer a flexible and reliable solution.

**MATERIALS**
- **Module**: Thermoplastic and fluorinated silicone
- **Contact**: Copper alloy, plated gold over nickel (tinning with(out) lead also available)

**MECHANICAL/ENVIRONMENTAL**
- **Durability**: 500 mating cycles
- **Operating Temperature**: -55 °C to +175 °C
- **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)

**ELECTRICAL**
- **Withstand Voltage**:
  - At sea level:
    - Service I: 1000 Vrms 50 Hz, modules size 23 and 22
    - Service II: 1500 Vrms 50 Hz, modules size 20, 16 and 12
- **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

**SPACE AND WEIGHT OPTIMIZATION**
- **High-density**
- **Reverse design**
- **Designed for EN4165, BACC65 and ARINC 809 shells**
- **Second moment of area of sleeve on a socket contact is 8x stronger than a pin**
- **30% weight savings**

**TE Components...TE Technology...TE Know-how...**
- AMP | AGASTAT | CI | HARRIMAN | KLEIN | MICRODOT | NADIONICS | POLAMENT | Raychem | SEASON | Robeter | DEUTSCH
- Empower Engineers to Solve Problems, Moving the World Forward.

**DMC-M 30-23 Modules Presentation**

30-23 modules from TE Connectivity allow to achieve a higher density with a reverse design offering enhanced pin protection.

This 30-position module provides a 50% increase in contact counts over 20-22 modules. Two 30-23 modules will provide the same 60-contact density as three 20-22 modules. This reduces connector and harness sizes and weights. The use of plastic clip design increases density and saves weight.

These 30-23 modules can be used with DEUTSCH DMC-M multimodule and single-module connectors.

**Achieving 60 Contacts**
- **30% Weight Savings**

**DMC-M High-density 30-23 modules** help solve the issue of fragile contact pins being bent upon blind mating. Designed for EN4165, BACC65 and ARINC 809 shells, these new reverse design modules contain the pin contacts inside the modules to help prevent pin damage. The reason of the reverse design is based on the second moment of area of a socket contact which is 8x stronger than on a pin contact.

**Selected by EN4165 Users**
- **50% Higher Contact Density**
- **Stronger Design**
- **Equal Performance**
TE Part Numbering System For DMC-M Modules With Straight PCB Contacts

- **MODULE TYPE**
  - 55: 55 pin module
  - 60: socket module

- **CONTACT SIZE**
  - 23
  - 22
  - 20
  - 16
  - 99: size 16 and 22

- **CONTACTS FINISH**
  - Ø: no tinning
  - T: tinning with lead
  - R: tinning without lead

**DMC-M Modules With Straight PCB Contacts**

<table>
<thead>
<tr>
<th>Arrangement</th>
<th>Configuration</th>
<th>View</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-23</td>
<td>30 Contacts, Size 23</td>
<td>732-8255-23 X (reverse design)</td>
<td>732-8260-23 X (reverse design)</td>
</tr>
<tr>
<td>12-20</td>
<td>12 Contacts, Size 20</td>
<td>732-8255-20 X</td>
<td>732-8260-20 X</td>
</tr>
<tr>
<td>08-16</td>
<td>8 Contacts, Size 16</td>
<td>732-8255-16 X</td>
<td>732-8260-16 X</td>
</tr>
<tr>
<td>04-12</td>
<td>4 Contacts, Size 12</td>
<td>732-8255-12 X</td>
<td>732-8260-12 X</td>
</tr>
<tr>
<td>99-01</td>
<td>6 Contacts, Size 16</td>
<td>732-8255-99 X</td>
<td>732-8260-99 X</td>
</tr>
</tbody>
</table>

**Pin Contacts Modules**

**Socket Contacts Modules**

- **Module Type**
  - 55 pin module
  - 60 socket module

- **Contact Size**
  - 23
  - 22
  - 20
  - 16
  - 99: size 16 and 22

- **Contacts Finish**
  - Ø: no tinning
  - T: tinning with lead
  - R: tinning without lead
TE Part Numbering System for DMC-M Modules
With Bended PCB Contacts

732 - 82 XX - XX X XXXXX

**MODULE TYPE**
- 54 pin module
- 56 socket module

**CONTACT SIZE**
- 23
- 22
- 20
- 16
- 12
- 99 size 16 and 22

**CONTACTS FINISH**
- Ø no tinning
- T tinning with lead
- R tinning without lead

**KEY ORIENTATION**
- A PCB contacts opposed to the key module

DMC-M Modules With Bended PCB Contacts

<table>
<thead>
<tr>
<th>Arrangement</th>
<th>Configuration</th>
<th>View</th>
<th>Part No.</th>
<th>View</th>
<th>Part No.</th>
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<tbody>
<tr>
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<td>30 Contacts, Size 23</td>
<td><img src="image1.png" alt="Image" /></td>
<td>732-8254-23 X XXXXX</td>
<td><img src="image2.png" alt="Image" /></td>
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<td>20-22</td>
<td>20 Contacts, Size 22</td>
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<td>732-8254-22 X XXXXX</td>
<td><img src="image4.png" alt="Image" /></td>
<td>732-8256-22 X XXXXX</td>
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<tr>
<td>12-20</td>
<td>12 Contacts, Size 20</td>
<td><img src="image5.png" alt="Image" /></td>
<td>732-8254-20 X XXXXX</td>
<td><img src="image6.png" alt="Image" /></td>
<td>732-8256-20 X XXXXX</td>
</tr>
<tr>
<td>08-16</td>
<td>8 Contacts, Size 16</td>
<td><img src="image7.png" alt="Image" /></td>
<td>732-8254-16 X XXXXX</td>
<td><img src="image8.png" alt="Image" /></td>
<td>732-8256-16 X XXXXX</td>
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<tr>
<td>04-12</td>
<td>4 Contacts, Size 12</td>
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<td>732-8254-12 X XXXXX</td>
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<tr>
<td>99-01</td>
<td>6 Contacts, Size 16 5 Contacts, Size 22</td>
<td><img src="image11.png" alt="Image" /></td>
<td>732-8254-99 X XXXXX</td>
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### High-Speed DMC-M Modules PCB Contacts

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<th>View</th>
<th>Part No.</th>
<th>View</th>
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<tr>
<td>16-02 Straight PCB</td>
<td>6 Contacts, Size 16</td>
<td>2828645</td>
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<td>16-02 Bended PCB</td>
<td>6 Contacts, Size 16</td>
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<td>2226983</td>
<td><img src="image4.png" alt="Image" /></td>
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<td>99-03 Straight PCB</td>
<td>8 Contacts, Size 20</td>
<td>732-8308-01</td>
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<td>732-8307-01</td>
<td><img src="image6.png" alt="Image" /></td>
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<tr>
<td>99-03 Bended PCB</td>
<td>8 Contacts, Size 20</td>
<td>732-8298-05</td>
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<td>732-8299-05</td>
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<td>99-04 Straight PCB</td>
<td>6 Contacts, Size 20</td>
<td>732-8301-04</td>
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<td>732-8302-04</td>
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</table>

### Other TE DMC-M Series Connectors Brochures

#### MULTICAVITY

![Image](image11.png)

#### SINGLE MODULE

![Image](image12.png)

#### 30-23

![Image](image13.png)
LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit www.te.com/industrial to chat with a Product Information Specialist.

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