

#### DESCRIPTION/APPLICATION

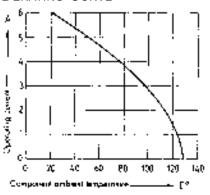
These heavy duty connectors are designed for the transmission of high currents and voltages in industrial environments. With their standard geometries, they fit into 19" subracks. Due to the robust design, a high degree of electrical and mechanical security is provided.

Using maximum dielectric spacing as well as optimum-sized contacts, these connectors are well suited for applications where downtime is extremely prohibitive in cost.

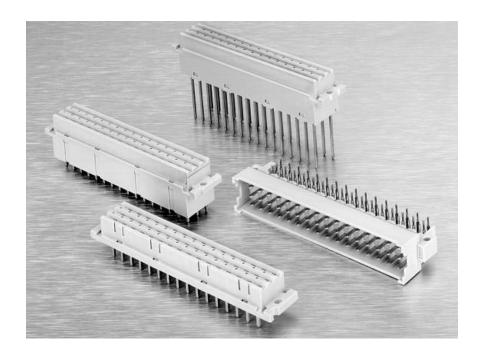
#### **DESIGN ADVANTAGES**

- Performance levels as per DIN 41612 part 5:
  - 1= 500 mating cycles
  - 2= 400 mating cycles
  - 3= 50 mating cycles
- Protected front entry of female insulator prevents stubbing of contacts.
- Preloaded female contact geometry provides for high normal forces with low insertion forces for higher reliability.
- Rugged design results in mechanical and electrical integrity, even under severe conditions.

#### **DERATING CURVE**



# TYPE F POWER DIN CONNECTORS



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### TYPE F MALE CONNECTOR WITH CODING DEVICE

#### PHYSICAL PROPERTIES

HOUSING MATERIAL: PBT Color: Beige FLAMMABILITY: UL94V-0

INSERTION AND WITHDRAWAL FORCE: 75 N max. for 48 contacts; 50 N max. for 32 contacts

#### **ELECTRICAL PROPERTIES**

Max. Operating Current: 6 A (according to

derating curve)

Test Voltage: 50 Hz; 1 min CONTACT TO MASS: 2500 V CONTACT TO CONTACT: 1550 V

CREEPING CURRENT STRENGTH: CTI275/CTI175M

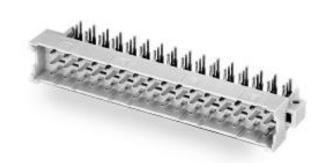
per DIN IEC 112

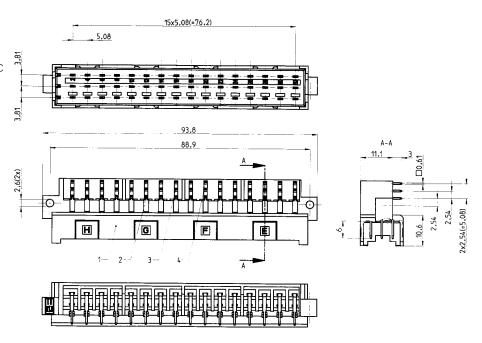
#### **ENIVIRONMENTAL PROPERTIES**

OPERATING TEMPERATURE RANGE: -55° C to 125° C

LEAKAGE PATH: ≥ 3mm CONTACT RESISTANCE: ≥15 mΩ

AIRSPACE: ≥ 1,6mm Insulation Resistance:  $\geq 10^{12} \ \Omega$ 





#### Ordering Information

| # OF     | PERFORMANCE | SOLDER PIN 90°                         | SOLDER PIN 90°                                  | DESCRIPTION                         |
|----------|-------------|--|---|-------------------------------------|
| CONTACTS | LEVEL       | W/O EXTENDED PIN                       | EXT. PIN POS. Z32                               |                                     |
| 48-Pin   | 1<br>2<br>3 | FM48 W1C<br>FM48 W2C<br>FM48 W2C       | FM48 W1Z32C<br>FM48 W2Z32C<br>FM48 W2Z32C       | 3 Rows<br>(marked z, b, d)          |
| 32-Pin   | 1<br>2<br>3 | FM32 ZBW1C<br>FM32 ZBW2C<br>FM32 ZBW3C | FM32 ZBW1Z32C<br>FM32 ZBW2Z32C<br>FM32 ZBW3Z32C | 2 Rows, 1 Blank<br>(marked z, d)    |
| 32-Pin   | 1           | FM32 ZDW1C                             | FM32 ZBW1Z32C                                   | 2 Rows, 1 Blank                     |
|          | 2           | FM32 ZDW2C                             | FM32 ZBW2Z32C                                   | (marked z, b)                       |
|          | 3           | FM32 ZDW3C                             | FM32 ZBW3Z32C                                   | Distance between z & b is 2.54 mm   |
| 32-Pin   | 1           | FM32 ZB-DW1C                           | FM32 ZB-DW1Z32C                                 | 2 Rows, b row on top routed to      |
|          | 2           | FM32 ZB-DW2C                           | FM32 ZB-DW2Z32C                                 | d row on bottom                     |
|          | 3           | FM32 ZB-DW3C                           | FM32 ZB-DW3Z32C                                 | Distance between z & b/d is 5.08 mm |

## **BUCHANAN**



