



NC3FDX-EMC-Spec

3 pole female EMC-XLR cable connector for panel mount

The EMC-XLR Series is a specifically designed version of the XX series to give enhanced RF screening for critical applications in live performance and recording where there are particular problems with radio transmission or mobile phones. The design guarantees a continuous RF shield connection from the cable to the chassis connector housing via a circular capacitor around the cable shield. The circular capacitors act as high-pass filter with a cut-off frequency around 10 MHz. An EMI suppression ferrite bead with 24 Ohm at 1 MHz between pin 1 and the cable screen provides a low-pass filter for improved RF rejection.

For panel mount application of the EMC XLR we are offering a special cable version with D flange to mount it into a panel. This panel mountable connector is available as female cable connector only and features the same specifications as the NC3FXX-EMC. It includes the locking nut of the NC3FX-Spec for secure fastening of a gooseneck for instance. For larger panel openings an additional round flange with a diameter of 63.5 mm including mounting screws is available.

Features & Benefits

- ✓ 3 pole female XLR panel mount connector with integrated capacitive shield to shell connection

- ✓ Circular capacitor around the cable shield enables low-inductive shield connection to connector housing
- ✓ Circumferential ground spring providing an accurate connection to the mating shell
- ✓ Cable shield - Pin 1 connection includes EMI suppression bead to block high frequencies
- ✓ Avoid ground loops as there is no LF-shield connection to ground
- ✓ Rugged zinc diecast shell, long lasting and durable
- ✓ Chuck type strain relief system for secure clamping of cables
- ✓ Boot with rubber gland gives high protection against bending stresses

Technical Information

| Product | |
|-----------------|-----------------|
| Title | NC3FDX-EMC-SPEC |
| Connection Type | XLR |
| Gender | female |

| Electrical | |
|------------------------------|----------------------------------|
| Capacitance between contacts | $\leq 4 \text{ pF}$ |
| Contact resistance | $\leq 5 \text{ m}\Omega$ |
| Dielectric strength | 1,5 kVdc |
| Insulation resistance | $> 10 \text{ G}\Omega$ (initial) |
| Rated current per contact | 5 A |
| Rated voltage | $< 50 \text{ V}$ |

Mechanical

| | |
|------------------|----------------------|
| Insertion force | ≤ 20 N |
| Withdrawal force | ≤ 20 N |
| Lifetime | > 1000 mating cycles |
| Wiresize | |
| Wiring | Solder contacts |
| Locking device | Latch lock |
| Chassis shape | D |

Material

| | |
|-----------------|-----------------------------------|
| Contact plating | 0.2 µm Au hard alloy over 2 µm Ni |
| Contacts | Bronze (CuSn8) |
| Insert | PA66 |
| Locking element | Steel Ck67 |
| Shell | Zinc diecast (ZnAl4Cu1) |
| Shell coating | Black KTL |

Environmental

| | |
|---------------------|---------------------------|
| Flammability | UL 94 V-0 |
| Standard compliance | IEC 61076-2-103 |
| Protection class | IP 40 |
| Solderability | Complies with IEC 68-2-20 |
| Temperature range | -30 °C to +80 °C |