



NanoCon® - 3 Pole Subminiature Connectors



NP3F-H



NSC3F



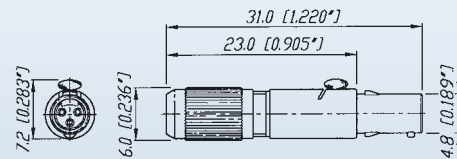
NR3M-S

- World's smallest circular lockable multipole connector
- Robust metal housing with gold plated contacts
- Male and female receptacles for vertical or horizontal PCB mount or solder termination
- Cable connector and receptacle with interchangeable male and female inserts
- Reliable and versatile in applications like medical equipment, control systems, sensors or audio applications such as miniature and wireless microphones and portable mixers
- Pre-mating contact 1

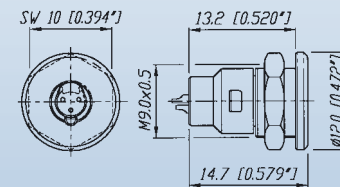
M 1:1



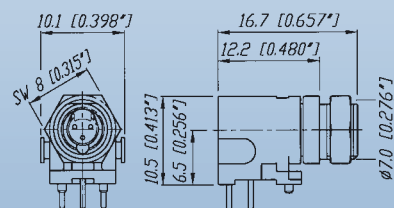
NSC3F(M)



NR3F(M)-S



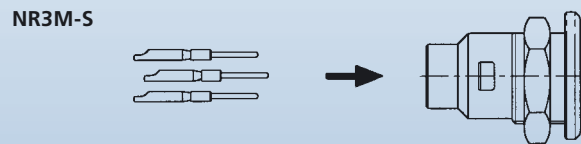
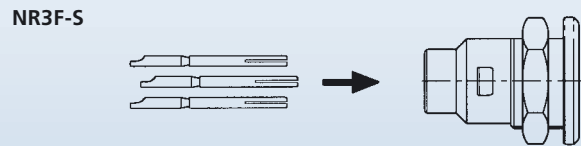
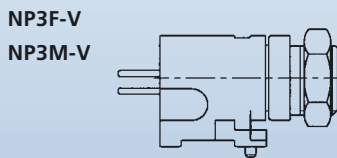
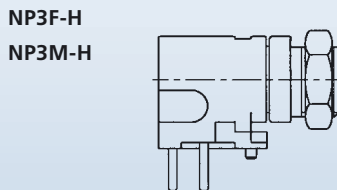
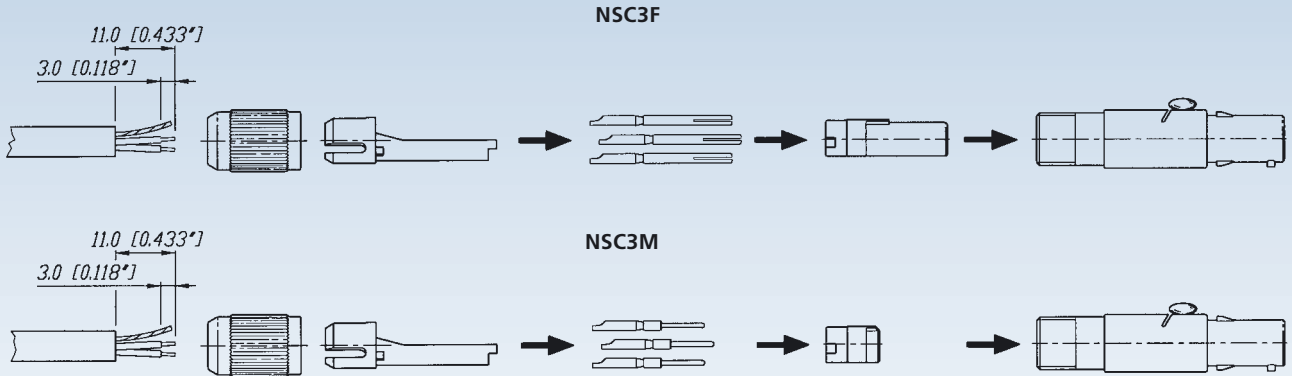
NP3F(M)-H



- Quality Design

Ordering Information

| Female | | Male | |
|--------|---|--------|---|
| NSC3F | Cable connector, chuck principle, solder contacts | NSC3M | Cable connector, chuck principle, solder contacts |
| NR3F-S | Receptacle panel mount, solder contacts | NR3M-S | Receptacle panel mount, solder contacts |
| NP3F-H | Receptacle horizontal PCB mount | NP3M-H | Receptacle horizontal PCB mount |
| NP3F-V | Receptacle vertical PCB mount | NP3M-V | Receptacle vertical PCB mount |



Contact Arrangement



Look for the Logo





MiniCon - 12 Pole Miniature Connectors



MSCM12



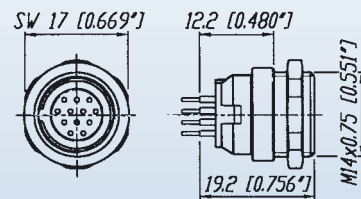
MRF12



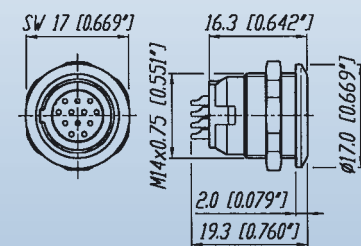
MMC* (no set)

- Up to 12 pole miniature connector
- Complete set or modular system
- Push-pull self-locking system
- Precisely machined, rugged all metal design
- Fully loaded male and female receptacles for horizontal or vertical PCB mount
- Gold plated contacts, crimp or solder
- Special crimp type strain relief establishes an ideal coaxial connection of the cable shield to the connector shell for best EMC shielding

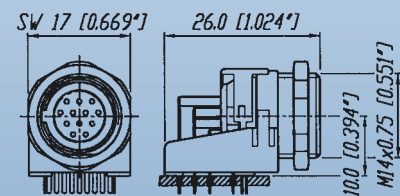
MPF(M)12-V



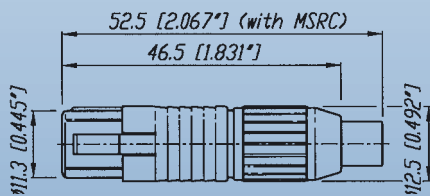
MRF(M)12



MPF(M)12-H



MSCF(M)12 (+MSRC)



t o i d e n t i f y t h e o r i g i n a l

Ordering Information for complete MiniCon set

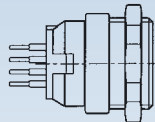
Complete set (consisting of housing, insert, 12 contacts and chuck for cable connector)

| Female | | Male | |
|---------|---|---------|---|
| MSCF12 | Cable connector, chuck principle, solder contacts | MSCM12 | Cable connector, chuck principle, solder contacts |
| MRF12 | Receptacle panel mount, solder contacts | MRM12 | Receptacle panel mount, solder contacts |
| MPF12-H | Receptacle horizontal PCB mount | MPM12-H | Receptacle horizontal PCB mount |
| MPF12-V | Receptacle vertical PCB mount | MPM12-V | Receptacle vertical PCB mount |

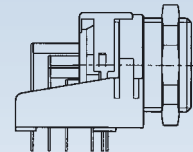
MSCF(M)12



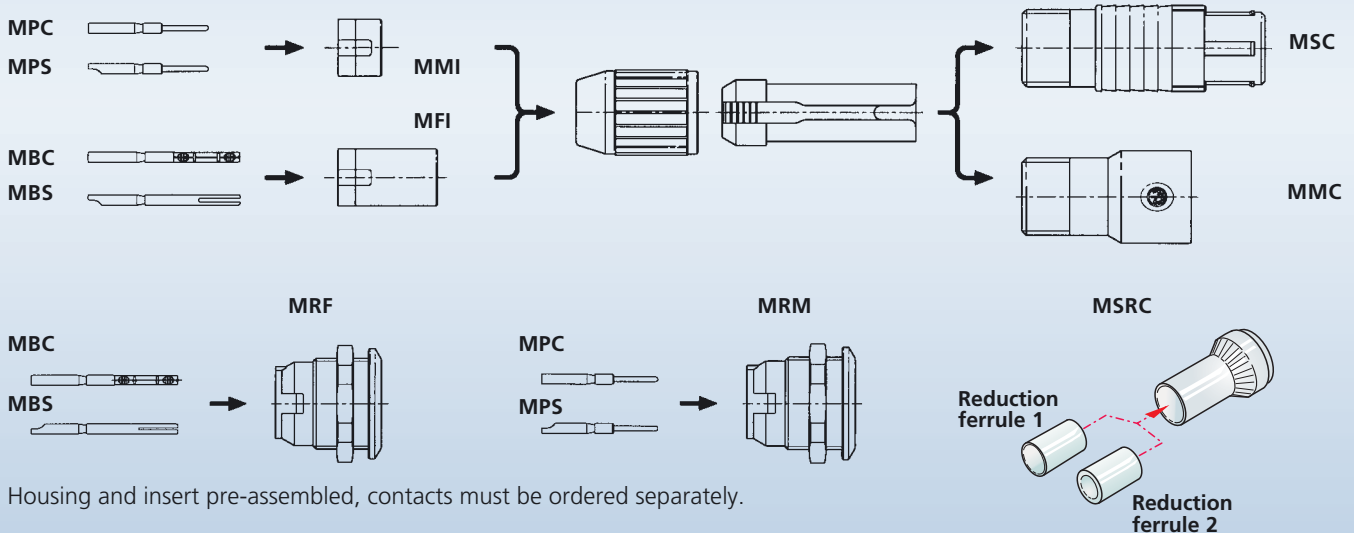
MPF(M)12-V



MPF(M)12-H



Ordering Information for modular MiniCon system



Modular system

| Female | | Male | |
|--------|---|------|--|
| MFI | Insert for cable connector | MMI | Insert for cable connector |
| MBC | Crimp contacts for cable connector and receptacle | MPC | Crimp contacts for cable connector and receptacle |
| MBS | Solder contacts for cable connector and receptacle | MPS | Solder contacts for cable connector and receptacle |
| MRF | Receptacle housing and insert pre-assembled | MRM | Receptacle housing and insert pre-assembled |
| MMC | Cable connector extension, incl. chuck (for male and female) | | |
| MSC | Cable connector housing, incl. chuck (for male and female) | | |
| MSRC | Set of strain relief crimp version (tools see page 15, crimp ferrule & reduction ferrule 1 + 2) | | |



Neutricon® - Versatile Circular Connectors



ORP8F-Ni



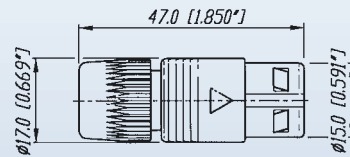
OSC8F



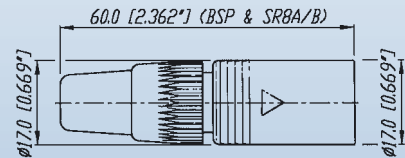
ORP8M

- Complete set or modular system for any desirable configuration
- Contact configuration can be selected from 1 to 8 contacts
- Special crimp type strain relief establishes an ideal circumferential connection of the cable shield to the connector shell as required by best EMC working practice
- Precise and robust all metal housing absorbs vibration forces and protects contact inserts
- Easy, fast and screwless assembly
- Push-pull self-locking system

OSC8F / OSC8M



MODULAR SYSTEM

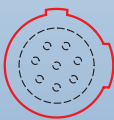


MC8 + SR8A/B + insert

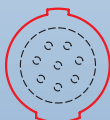
Polarization

Housing: Two variants of metal polarizing guides (90° and 180°).

Coding 90°

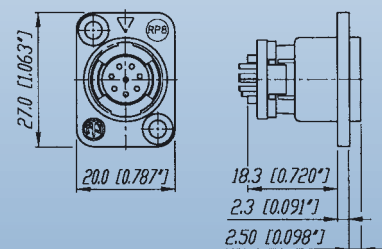


Coding 180°



Insert: The male and female insert can be assembled in all three housings.

ORP8F / ORP8M

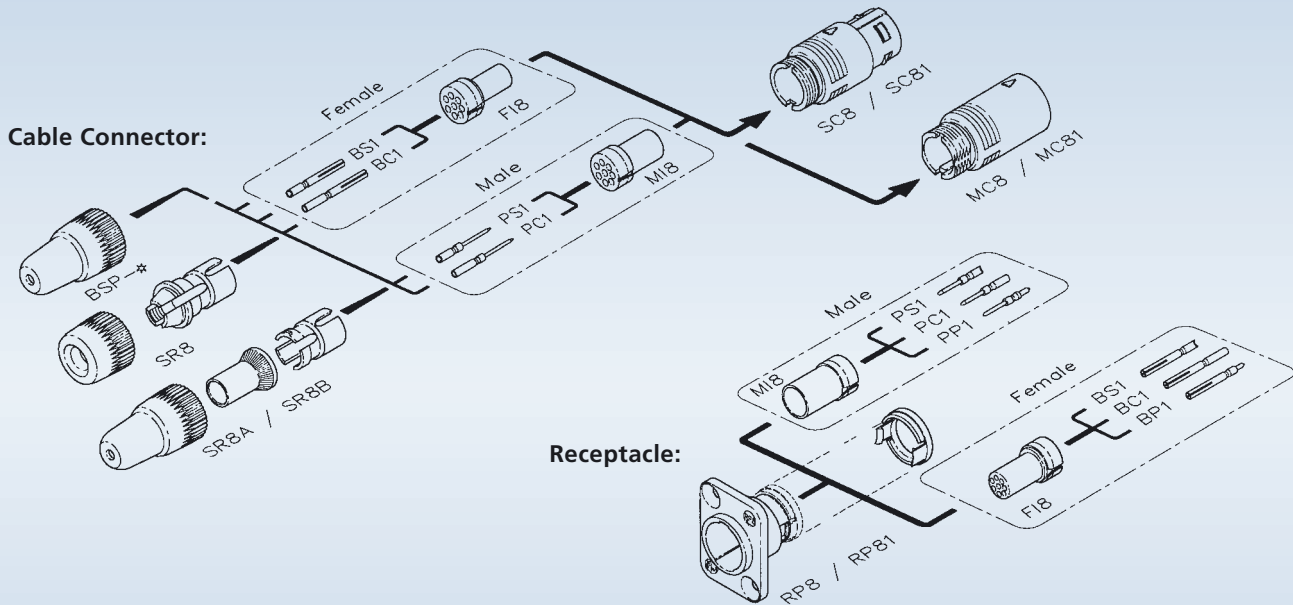


Ordering Information for complete Neutricon set

Complete set (consisting of housing, insert, 8 contacts and chuck for cable connector)

| | |
|----------|--|
| OSC8F | Female cable connector, chuck principle, black housing, solder contacts |
| OSC8F-Ni | Female cable connector, chuck principle, nickel housing, solder contacts |
| OSC8M | Male cable connector, chuck principle, black housing, solder contacts |
| OSC8M-Ni | Male cable connector, chuck principle, nickel housing, solder contacts |
| ORP8F | Female panel mount receptacle, black housing, solder contacts |
| ORP8F-Ni | Female panel mount receptacle, nickel housing, solder contacts |
| ORP8M | Male panel mount receptacle, black housing, solder contacts |
| ORP8M-Ni | Male panel mount receptacle, nickel housing, solder contacts |

Ordering Information for modular Neutricon system



Modular system

| Female | | Male | |
|---------|---|---------|--|
| FI8 | Insert for cable connector and receptacle | MI8 | Insert for cable connector and receptacle |
| BS1 | Solder contact | PS1 | Solder contact |
| BC1 | Crimp contact | PC1 | Crimp contact |
| BP1 | PCB contact | PP1 | PCB contact |
| SC8 | Cable housing, black coated, 180° coding | MC8 | Mating cable housing, black coated, 180° coding |
| SC8-Ni | Cable housing, nickel coated, 180° coding | MC8-Ni | Mating cable housing, nickel coated, 180° coding |
| SC81 | Cable housing, black coated, 90° coding | MC81 | Mating cable housing, black coated, 90° coding |
| SC81-Ni | Cable housing, nickel coated, 90° coding | MC81-Ni | Mating cable housing, nickel coated, 90° coding |
| SC8W | Cable housing, black coated, 180° coding, waterproof multipin connector according IP54 | | |
| RP8 | Receptacle, black coated, 180° coding | | |
| RP8-Ni | Receptacle, nickel coated, 180° coding | | |
| RP81 | Receptacle, black coated, 90° coding | | |
| RP81-Ni | Receptacle, nickel coated, 90° coding | | |
| SR8 | Bushing and chuck type strain relief (standard) | | |
| SR8A | Crimp type strain relief for cable O.D. 3 - 3.8 mm (Hex crimp 5.41 mm acc. IEC 803, see also page 15) | | |
| SR8B | Crimp type strain relief for cable O.D. 6 - 7 mm (Hex crimp 7.01 mm acc. IEC 803, see also page 15) | | |
| SR8W | Bushing and chuck type strain relief for waterproof solution IP54 | | |
| BSP-* | Coloured boot, available in 10 resistor colours | | |

* color coding: 0 - Black, 1 - Brown, 2 - Red, 3 - Orange, 4 - Yellow, 5 - Green, 6 - Blue, 7 - Violet, 8 - Grey, 9 - White

Look for the Logo



Technical Data

| Specifications | PowerCon® Series | NanoCon® Series | MiniCon Series | Neutricon® Series |
|---|---|--|--|--|
| Electrical | | | | |
| Number of contacts: | 2 + PE | 3 | 12 (1-12 modular system) | 8 (1-8 modular system) |
| Rated current per contact: | 20 A rms | 2 A | 3 A | 7.5 A (solder), 5 A (crimp) |
| Rated voltage: | 250 V ac | 50 V ac | 50 V ac | 50 V ac |
| Dielectric strength: | 4000 V dc | 1000 V dc | 1000 V dc | 1500 Vdc |
| Contact resistance: | ≤ 3 mΩ | ≤ 12 mΩ | ≤ 8 mΩ | ≤ 5 mΩ |
| Insulation resistance after damp heat test (IEC 68-2-30): | > 100 MΩ | > 1 GΩ | > 500 MΩ | > 500 MΩ |
| Mechanical | | | | |
| Retention method: | latch lock | latch | Push-pull | Push-pull |
| Cable O.D. range: | 5 - 15 mm | 3.4 mm max. | 3 - 5 mm (grey chuck) 5 - 7 mm (white chuck) 2.5 - 6 mm (crimp version MSRC) | 3 - 7 mm 3 - 3.8 mm (SR8A) 6 - 7 mm (SR8B) |
| Wiring: | Cable: screw type terminals or soldering 2.5 mm ² / 14 AWG Chassis: flat tabs for FASTON® 4.8 x 0.5 mm or soldering | 0.2 mm ² / 24 AWG for solid wire 0.14 mm ² / 26 AWG for stranded wire | 0.5 mm ² / 20 AWG for solder 0.22 mm ² / 24 AWG for crimp | 1.0 mm ² / 18 AWG for solder 0.14 - 0.34 mm ² / 22-26 AWG for crimp |
| Solderability complies with IEC 68-2-20: | • | • | • | • |
| Materials | | | | |
| Housing cable connector: | PA 6 30% GR | CuSn4Pb4Zn4 | ZnAl4Cu1 / CuZn39Pb3 | ZnAl4Cu1 gal Ni or black chrome |
| Housing receptacle: | PA 6 30% GR | CuZn39Pb2 | ZnAl4Cu1 | ZnAl4Cu1, gal Ni or black chrome |
| Insert: | PA 6 30% GR | PETP | PA 6.6 | PBTP 15% GR |
| Contacts: | CuZn39Pb3 / CuSn6 | CuZn35Pb2 | CuZn35Pb2 (solder) CuZn39Pb3 (crimp) CuSn6 | CuZn35Pb2 (solder) CuZn39Pb3 (crimp) |
| Contact surface: | 4 μm / 20 μm Ag plated | 0.5 μm Au | 0.2 μm AuCo | 0.3 μm Au hard alloy over 2 μm Ni |
| Chuck POM: | • | • | • | • |
| Environmental | | | | |
| Flammability UL 94 HB: | • | UL 94 V-0 | UL 94 V-0 | • |
| Temperature range: -30°C to +80°C | • | • | • | • |
| Protection class (mated): | IP 20 | IP 40 | IP 5X | IP5X |
| Safety Requirements EN/IC61984: | • | - | - | - |

FASTON® is a trademark of AMP Inc.

t o i d e n t i f y t h e o r i g i n a l

Assembly Tools

Crimptool HX-CONTACT



DMC crimpool AFM8
acc. M22520/2-01



MPOS-*



Modified DMC positioner (K155)
Contact positioner holds contact in
position when crimping.

Contact and connector assembly

Crimptool HX-R-BNC



Neutrik® HEX crimpool



DIE-R-BNC-*



Neutrik® DIE's for various HEX sizes.

Neutricon® - Ordering Information Assembly Tools

| | | Cable O.D. / Wire | Crimptool | Die/Positioner | HEX-Size/Standard |
|------|----------------------|-------------------|------------|----------------|---------------------|
| SR8A | Strain relief | 3 - 3.8 mm | HX-R-BNC | DIE-R-BNC-PJ | 5.41 mm / IEC 803 |
| SR8B | Strain relief | 6 - 7 mm | HX-R-BNC | DIE-R-BNC-PS | 7.01 mm / IEC 803 |
| BC1 | Female crimp contact | AWG 22 -26 | HX-CONTACT | MPOS-BC1 | No. 5 / M22520/2-01 |
| PC1 | Male crimp contact | AWG 22 -26 | HX-CONTACT | MPOS-PC1 | No. 5 / M22520/2-01 |

MiniCon® - Ordering Information Assembly Tools

| | | Cable O.D. / Wire | Crimptool | Die/Positioner | HEX-Size/Standard |
|------|-------------------------------------|-----------------------------|------------|----------------|---------------------|
| MSRC | Crimp ferrule only | 4.5 - 6 mm | HX-R-BNC | DIE-R-BNC-PDC* | 6.47 mm / IEC 803 |
| MSRC | Crimp ferrule & reduction ferrule 1 | 3.3 - 4.4 mm | HX-R-BNC | DIE-R-BNC-PDC* | 6.47 mm / IEC 803 |
| MSRC | Crimp ferrule & reduction ferrule 2 | 2.5 - 3.2 mm | HX-R-BNC | DIE-R-BNC-PDC* | 6.47 mm / IEC 803 |
| MBC | Female crimp contact | 24 AWG/0.22 mm ² | HX-CONTACT | MPOS-MBC | No. 5 / M22520/2-01 |
| MPC | Male crimp contact | 24 AWG/0.22 mm ² | HX-CONTACT | MPOS-MPC | No. 5 / M22520/2-01 |

* DIE-R-BNC-PJ or PS also possible