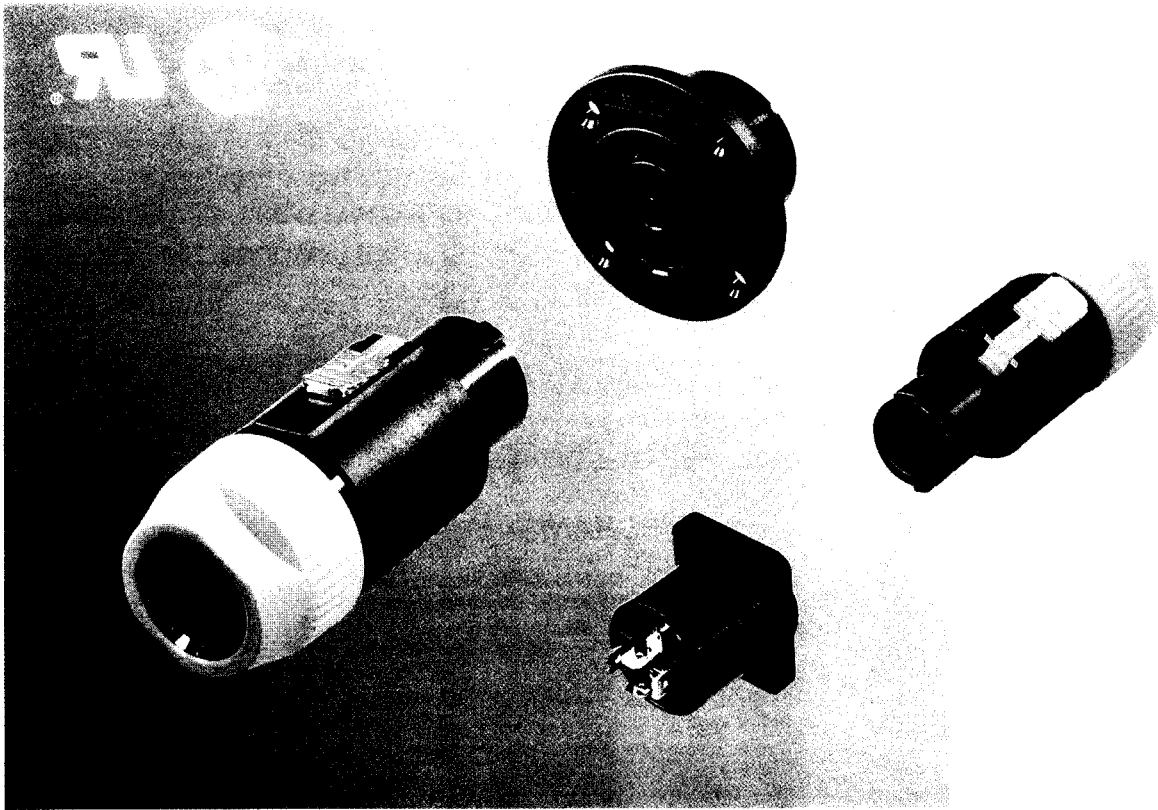


Speakon®

Loudspeaker
Amplifier Connectors



WE ARE SETTING STANDARDS

- **Reliable and extremely robust**
- **4- and 8-pole version with the new quicklock system**
- **NEUTRIK unique chuck type strain relief**
- **Cable connectors have solid contacts with screw-type terminals**
- **The chassis types are fast and reliable to wire with flat quick-connect terminations (e.g. FASTON®)**
- **Excellent price / performance ratio**



NEUTRIK
CONNECTING THE WORLD
CONNECTORS
AUDIO TEST SYSTEMS

FEATURES

- 4- and 8-pole version now available with new quicklock system.
- Much easier handling of the release mechanism with a locking lever.
- Only 2 variations of the connector in 4- and 8-pole configuration for simplicity: cable version and chassis-mount type
- All contacts on both connectors are touch proof, the connectors meet the safety requirements of IEC 65, IEC 348 and are UL Recognized and CSA listed
- Terminations are solderless, making the connectors field serviceable, and the chassis types are fast and reliable to wire with FASTON® terminals.
- Chassis connector for speakers is airtight and uses panel cutouts the same as existing audio connector types for flexibility and simplicity of metal/wood work tooling.
- Extremely robust, step-on proof, multiple contact finger for highest connecting integrity.
- Contacts are designed to prevent any damage from arcing when disconnected under load.

SPECIFICATION AND TECHNICAL DATA

UL-, CSA-listed

ELECTRICAL

Rated current/contact: 20 A rms continuous,
40 A rms 1 min.
Dielectric strength: 4240 V pp
Rated voltage: 250 V ac
Contact resistance: $\leq 3 \text{ m}\Omega$ after 5000
insertion-withdrawal operations
Insulation resistance - initial: $> 2 \cdot 10^9 \Omega$
- after damp heat test: $> 10^8 \Omega$
Inrush/outrush current capability (12 V source):
300/30 A/200 ms
Creepage distance: according to IEC 664-1

MECHANICAL

Retention method: Quicklock with securing lever
Cable anchoring: NEUTRIK chuck principle
Cable OD range: 5 – 15 mm (4-pole)
8 – 20 mm (8-pole)
Cable retention force:
 $\geq 220 \text{ N}$, depending on cable dia and material
Wiring:
• Cable: screw-type terminals (use with end sleeves for strands) or soldering.
Max. wire size/contact:
4 mm²/12 AWG (stranded)
• Chassis: flat tabs for FASTON 0.187" x 0.02"
(4.8 mm x 0.5 mm)
or PCB-version with pins 1.6 mm x 0.5 mm

MATERIALS

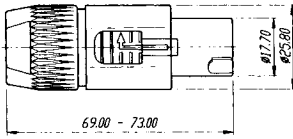
Contact: ZnAl4Cu1 / CuSn8
4 μm Ag plated
Securing element:
ZnAl4Cu1,
CuNi plated
Spring element: Neoprene ring
Housing: PA 6.6 30% GR
Insert (FC part): PBT 20% GR
Bushing: PA 6.6 15% GR
Chuck: POM
Temperature range: -30°C to +80°C

ORDERING INFORMATION

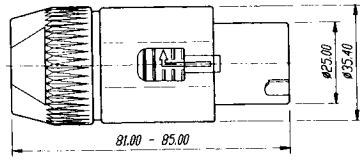
	4-pole	8-pole
Cable connector, quicklock with securing lever	NL4FC	NL8FC
with gold plated contacts and securing lever	NL4FC-B	-
Chassis connector, air tight	NL4MP	-
with gold plated contacts	NL4MP-B	-
NEUTRIK D- and G-series compatible		
Chassis connector, air tight, round flange,	NL4MPR	NL8MPR
Cannon EP 13/14 compatible		
Vertical PCB-version, air tight	NL4MD-V	NL8MD-V
Horizontal PCB-version, air tight	NL4MD-H	
Coupler for linking (extending) cables	NL4MM	NL8MM
Adapter to 1/4" 2 pole jack (6.3 mm)	NA4LJ	
(Connects „1+“ to Tip, „1-“ to Sleeve of 1/4" Jack. Same Dimensional of NL4FC.)		

DIMENSIONAL DRAWINGS

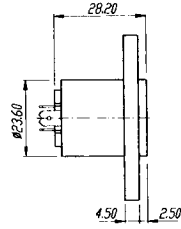
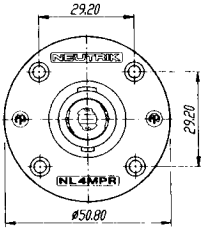
NL4FC



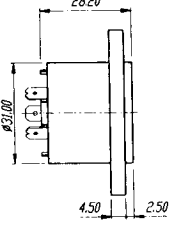
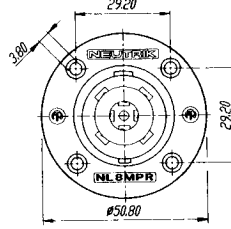
NL8FC



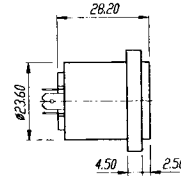
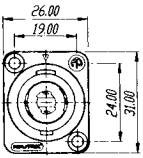
NL4MPR



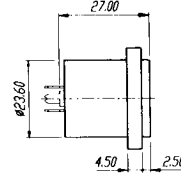
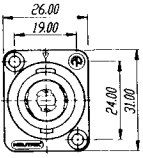
NL8MPR



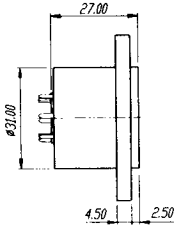
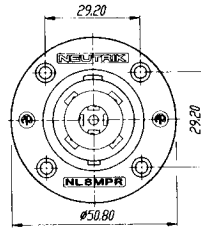
NL4MP



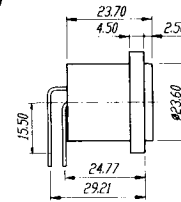
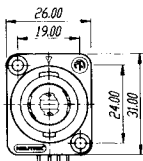
NL4MD-V



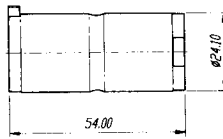
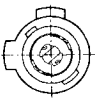
NL8MD-V



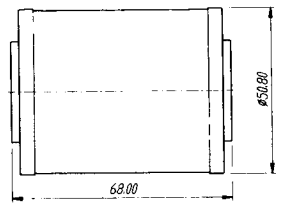
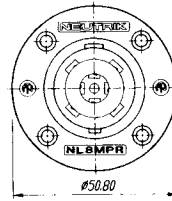
NL4MD-H



NL4MM



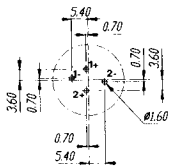
NL8MM



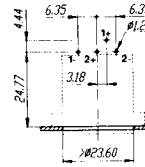
PCB - Layout

Component Side

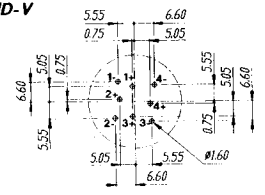
NL4MD-V



NL4MD-H



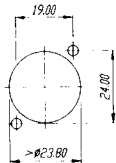
NL8MD-V



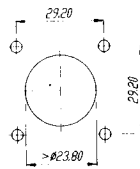
Panel Cutout

Rear Side

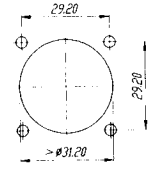
**NL4MP
NL4MD-V, NL4MD-H**



NL4MPR



**NL8MPR
NL8MD-V**



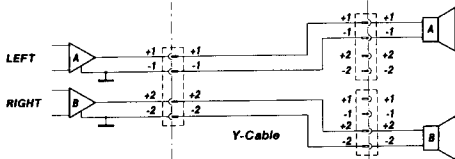
WIRING

Positive signal on speaker pin „+“ produces positive waveform from driver (moves cone outwardly)
 „+“ = In phase (high) „-“ = Ground (out of phase, low) Lower numbers for lower frequencies

	AMPLIFIER	CABLE	SPEAKER
Stereo („HiFi“)	one NL4MP socket left channel pins 1+/1- right channel pins 2+/2-	NL4FC on amplifier end, four conductor cable splits into two pairs with NL4FC on each end	one NL4MP per speaker left speaker pins 1+/1- right speaker pins 2+/2-
POWER („PA“) Standard	three NL4MP sockets „A“ socket: left channel pins 1+/1- „B“ socket: right channel pins 1+/1- „M“ socket: left channel pins 1+/1- right channel pins 2+/2-	a two-conductor cable for each channel with NL4FC on both ends	NL4MP pin 1+ to speaker coil „+“ NL4MP pins 1- and 2+ to speaker coil „-“
Bridged mono	„M“ socket: left channel pins 1+/1- right channel pins 2+/2-	a special two-conductor cable, on both ends wired to pins 1+/2+ of NL4FC	NL4MP pin 1+ to speaker coil „+“ NL4MP pins 1- and 2+ to speaker coil „-“
Bi-Amp	one NL4MP socket low frequency pins 1+/1- high frequency pins 2+/2-	a four-conductor cable on both ends wired to pins 1+/1-, 2+/2- of NL4FC	one NL4MP socket low frequency pins 1+/1- high frequency pins 2+/2-

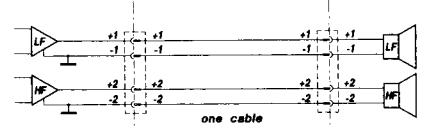
Amplifier Cable Loudspeaker

Stereo "HiFi"



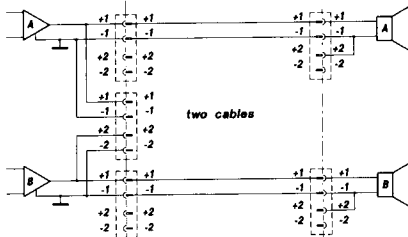
Amplifier Cable Loudspeaker

Bi-Amp



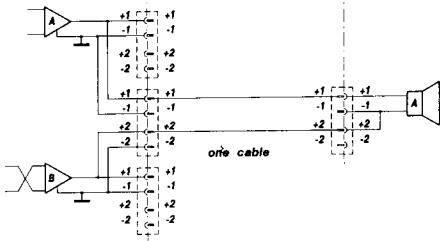
Power "PA"

Connector arrangement
• 2 channel wiring

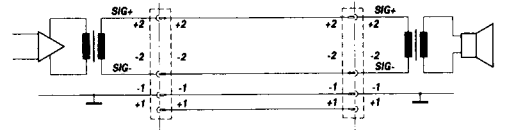


Power "PA"

Connector arrangement
• Mono bridged wiring



"100V application"



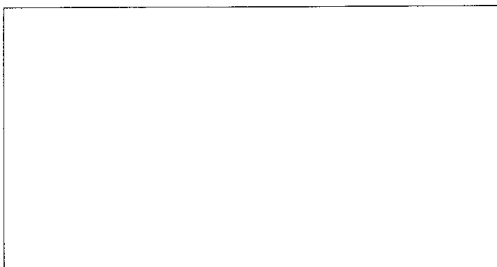
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