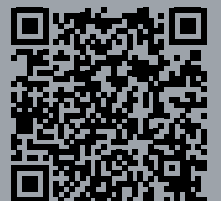




Circular Connectors



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NEUTRIK®, **opticalCON®**, **neutriCON®**, **miniCON®**, **nanoCON®**, **powerCON®**, **Profi®**, **speakON®**, **silentPLUG®**, **crystalCON®**, **etherCON®**, **rearTWIST®**, **XIRIUM®**, **DIWA®** are registered trademarks of Neutrik AG.



Introduction

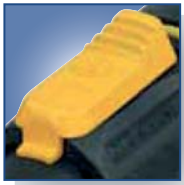
The Neutrik® circular connector program is a range of metal, multi-pole connectors specifically designed for industrial applications. These series provide a variety of male and female cable connectors and receptacles that can be terminated by soldering and crimping or to printed circuit boards. An easy to use and reliable quick-lock system ensures a perfect connection and cannot be released accidentally. The circular connectors offer Neutrik® unique chuck type strain relief and reinforced housing for robust dependability.

The Neutrik® industrial connector range also features a unique power connector for single phase applications up to 32 Amps.

Further features are:

- Number of contacts is 1 to 12
- Self-locking system
- Robust all-metal housing
- Front or rear mounting
- Chuck and crimp type strain relief
- Gold plated contacts
- Solder or crimp termination
- Printed circuit board mounting
- Excellent shielding (crimp type strain relief)

The main areas of applications are in the measurement, test and control, automotive and machine tool industry as well as medical technique.



Ergonomic quick lock



Bushing with secure key and sealing



Overmolded ready made cable



Screw terminals



1/4" flat tabs



ENEC certified

powerCON TRUE1 – Lockable 16 A single phase connector



NAC3FX-W



NAC3MX-W



NAC3FPX



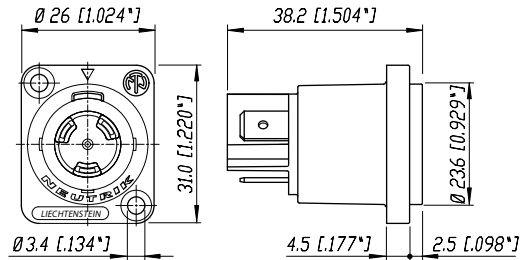
NAC3MPX



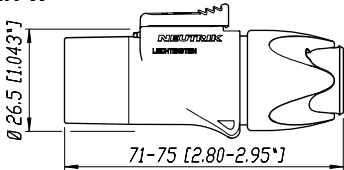
NAC3PX

- True mains connector with breaking capacity (CBC)
- Lockable 16 / 20 A single phase connector
- Complete system with inlet and outlet connectors
- Unique duplex chassis connector – combines inlet and outlet coupler
- IP 65 – water resistant ready-made cord sets
- ENEC certified according to IEC 60320
- Easy and reliable locking system
- UL recognized components

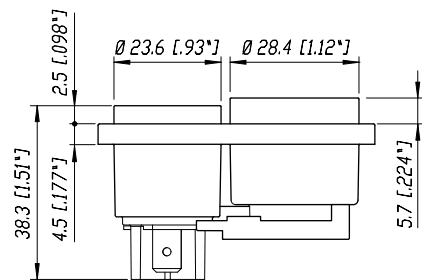
NAC3MPX



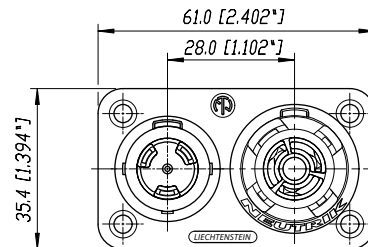
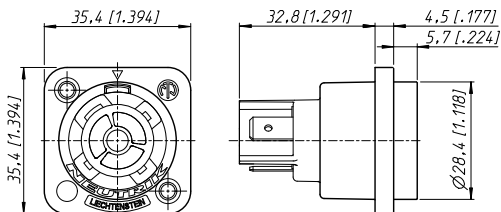
NAC3MX-W



NAC3PX



NAC3FPX



Ordering Information

Cable Connector

NAC3FX-W	Mains cable connector, female CBC, screw terminals, IP 65
NAC3MX-W	Mains cable connector, male CBC, screw terminals, IP 65

Chassis Connector

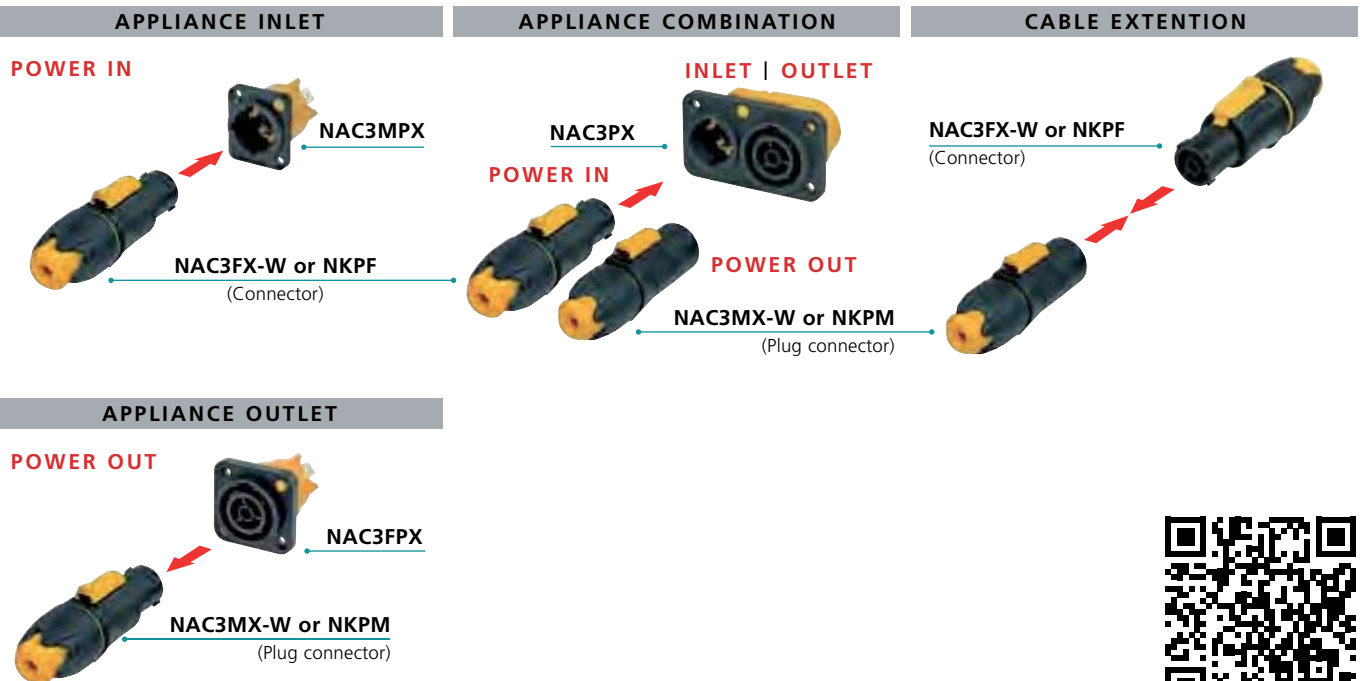
NAC3FPX	Mains chassis connector female CBC, 1/4" flat tab terminals, power outlet
NAC3FPX-ST	Mains chassis connector female CBC, screw terminals, power outlet
NAC3MPX	Mains chassis connector male CBC, 1/4" flat tab terminals, power inlet
NAC3PX	Mains chassis duplex, 1/4" flat tab terminals

Accessories



HTAC	Hand tool to tighten the powerCON TRUE1 bushing
SCDP-*	D-Size sealing gaskets, colour coding (*: 0- black, 2- red, 4- yellow, 5- green, 6- blue, 9- white)
SCNAC-PX	Sealing cover duplex IP 65
SCNAC-FPX	Sealing cover for NAC3FPX
SCNAC-MPX	Sealing cover for NAC3MPX

Connector Assignment



Specification

READY-MADE POWER CORDS

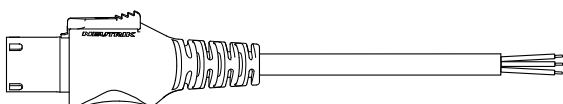
Ready-made overmolded power cord in protection class IP65. The cable utilizes standard duty cord with 3 conductors with cross section 1.5 mm² or 12 AWG.

Cables are equipped with Neutrik TRUE1 powerCON NAC3FXW and NAC3MXW for extension cables or with an open end for termination of local connectors for "power in" supply cables. Overmolded local connectors on request.

Cables are available in different lengths.

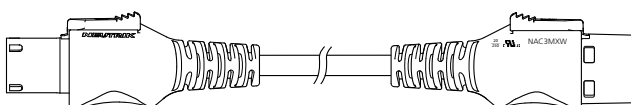
International Cord

International Power Cord 16 A / 250 VAC



Plug / end termination	Neutrik NAC3FXW / stripped open end
Approvals	ENEC, VDE
Standard length	1 m, 1.5 m, 2 m, 3 m, 5 m
Conductor size	3 x 1.5 mm ²
Cable type / color / Nom. O.D.	H07RN-F3G1.5 / black / 9.6 mm
Part Number e.g.	NKPF-NC-A-3
Cable type / color / Nom. O.D.	H05VV-F3G1.5 / black / 8.3 mm
Part Number e.g.	NKPF-NC-B-1

International Extension Cord 16 A / 250 VAC



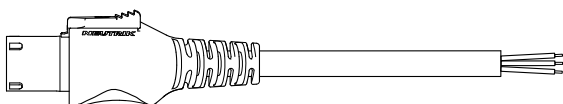
Plug / end termination	Neutrik NAC3FXW / Neutrik NAC3MXW
Approvals	ENEC, VDE
Standard length	0.5 m, 1 m, 1.5 m
Conductor size	3 x 1.5 mm ²
Cable type / color / Nom. O.D.	H07RN-F3G1.5 / black / 9.6 mm
Part Number e.g.	NKPF-M-A-0.5
Cable type / color / Nom. O.D.	H05VV-F3G1.5 / black / 8.3 mm
Part Number e.g.	NKPF-M-B-1

Cable Part Number Breakdown

N	K	P	F	-	X	-	Y	-	3
Neutrik Power Cord									LENGTH in m
F NAC3FXW									CABLE TYPE
M NAC3MXW									
TERMINATION 2. END									A H07RN-F3G1.5
M NAC3MXW									B H05VV-F3G1.5
NC Stripped open end									C SJTOW 12AWG
									D SJOOW 12AWG

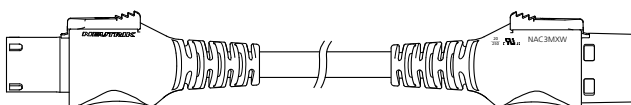
US Cord

US Power Cord 20 A / 250 VAC



Plug / end termination	Neutrik NAC3FXW / stripped open end
Approvals	UL, cUL
Standard length	1 m, 1.5 m, 2 m, 3 m, 5 m
Conductor size	3 x 12 AWG
Cable type / color / Nom. O.D.	SJTOW / black / 11.3 mm
Part Number e.g.	NKPF-NC-C-5
Cable type / color / Nom. O.D.	SJOOW / black / 11.3 mm
Part Number e.g.	NKPF-NC-D-3

US Extension Cord 20 A / 250 VAC



Plug / end termination	Neutrik NAC3FXW / Neutrik NAC3MXW
Approvals	UL, cUL
Standard length	0.5 m, 1 m, 1.5 m
Conductor size	3 x 12 AWG
Cable type / color / Nom. O.D.	SJTOW / black / 11.3 mm
Part Number e.g.	NKPF-M-C-1
Cable type / color / Nom. O.D.	SJOOW / black / 11.3 mm
Part Number e.g.	NKPF-M-D-1



Quick lock



Neutrik hologram



3/16" flat tabs



Locking area on chassis connector



powerCON – Locking 3 Pole Power Connectors



NAC3FCA



NAC3MPA-1



NAC3FCB



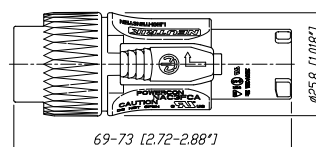
NAC3MPB-1



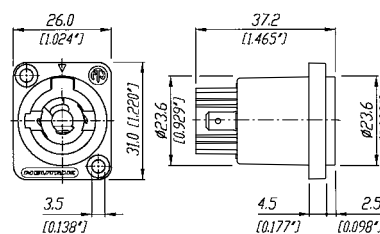
NAC3MM-1

- Lockable 3 pole equipment (AC) connector with contacts for line, neutral and pre-mating safety ground
- High current capacity, rated at 20 A / 250 V ac
- Colour coded for easy identification, powerCON offers power-in (blue) and power-out (grey) versions with different keying to avoid the possibility of intermating
- Fast and easy locking system
- Extremely robust and reliable
- Excellent cable retention
- UL, cUL recognized components (file no. E 135070)
VDE certified (Reg. No. 6360),
SEV approved (No. 96.1 10096)
- New latch design for easier handling and secure locking
- Branded with unique hologram – guarantees genuine and authentic Neutrik product
- Coupler for linking cables (couples NAC3FCA to NAC3FCB)

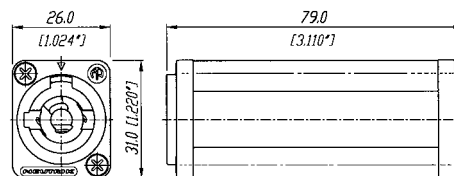
NAC3FCA(B)



NAC3MPA(B)-1



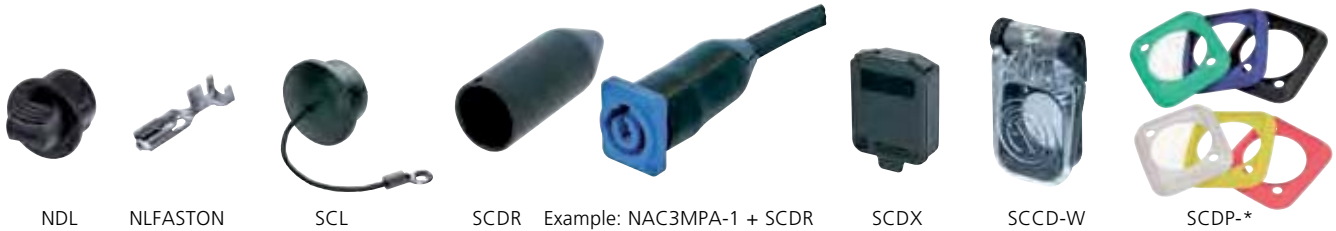
NAC3MM-1



Ordering Information

NAC3FCA	Cable connector, quick lock with securing lever, A-type for power inlet, screw terminals
NAC3MPA-1	Air tight chassis connector, A-type for power inlet, flat tab terminals, blue
NAC3MPA-1-WOT	Chassis connector, power-out, 3/16" flat tab terminals, blue, without insulation divider
NAC3FCB	Cable connector, quick lock with securing lever, B-type for power outlet, screw terminals
NAC3MPB-1	Air tight chassis connector, B-type for power outlet, flat tab terminals, grey
NAC3MPB-1-WOT	Chassis connector, power-out, 3/16" flat tab terminals, grey, without insulation divider
NAC3MM-1	Coupler for linking cables (couples NAC3FCA to NAC3FCB)

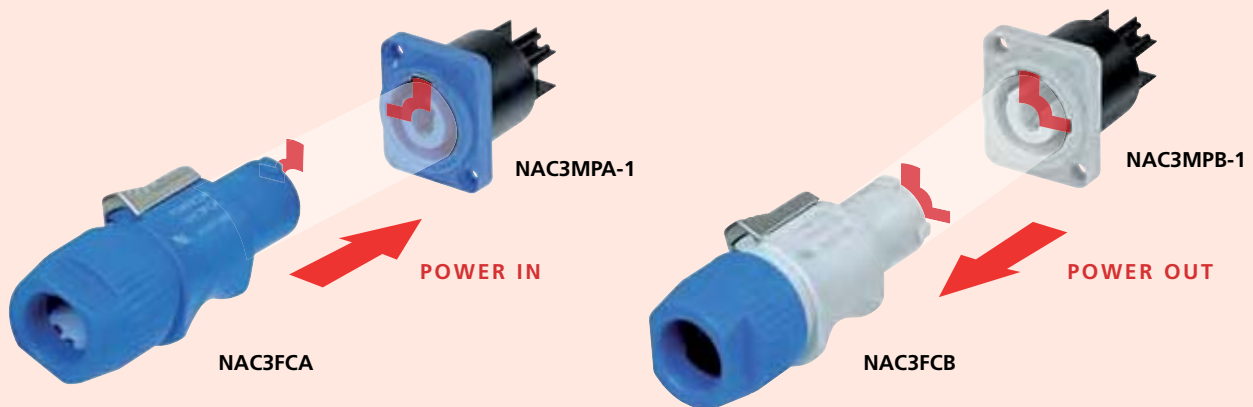
Accessories



NDL	dummyPLUG for powerCON 20 A chassis connector
NLFASTON	FASTON® receptacle for tabs with "positive lock" for use with NL4MP, NL4MPR, NL8MPR, Pack of 100 pcs.
SCL	Plastic sealing cover to protect the connectors against dust and moisture
SCDR	Rear end protection cover for D-size chassis connectors
SCDP-*	D-Size sealing gaskets, colour coding (*: 0- black, 2- red, 4- yellow, 5- green, 6- blue, 9- white)
SCDX	Hinged cover seals D-size chassis connectors, IP 42 rated
SCCD-W	Spring-loaded cover to seals D-size chassis connectors, IP65 rated

KEYWAYS:

With the two non-interchangeable types of connectors (A type and B type) it is impossible to produce a short circuit. Mating connectors (combination) are identified by mechanical keyways and by color.



ATTENTION

The technical data of the powerCON connectors refer to connectors without breaking capacity, meaning connecting devices not to be engaged and disengaged in normal use when live or under load.



Robust metal housing



Screw-type terminals

powerCON 32 A Connectors



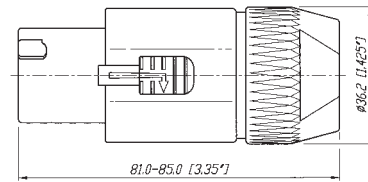
NAC3FC-HC



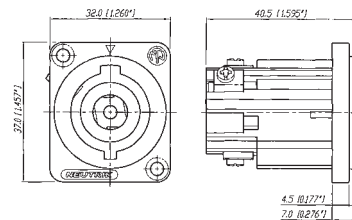
NAC3MP-HC

- Locking single phase AC appliance coupler
- High current capacity (32 A rated)
- Fast and easy locking system
- Excellent cable handling and protection
- Extremely robust and reliable
- 250 V ac, 32 A single-phase (for ambient temperatures up to 35 °C)
- Premating contact for protective earth
- Locking system to prevent unintentional disengagement
- Cable O.D. range: 8 – 20 mm
- Wiring with screw-type terminals for wires 2.5 to 6.0 mm² (AWG 14 – 10)

NAC3FC-HC



NAC3MP-HC



Ordering Information

NAC3FC-HC	Cable connector, quick lock with securing lever, screw terminals
NAC3MP-HC	Fast and easy locking system, screw-type terminals

Specification		powerCON TRUE1	powerCON Series	32 A powerCON Series
Electrical				
Number of contacts	2 + PE	●	●	●
Rated current per contact		20 A rms ¹⁾	20 A rms	32 A rms
Rated voltage	250 V ac	●	●	●
Dielectric strength	4 kV ac	●	●	●
Contact resistance	≤ 3 mΩ	●	●	●
Insulation resistance after damp heat test (IEC 68-2-30)	> 0.1 GΩ	●	●	●
Mechanical				
Retention method	Quick lock	●	●	●
Cable O.D. range		6 – 12 mm	6 – 15 mm	8 – 20 mm
Wiring	Cable: screw type terminals	●	●	●
		2.5 mm ² / 12 AWG	2.5 mm ² / 14 AWG	2.5–6 mm ² / 14-10 AWG
	or soldering	●	●	●
	Chassis: flat tabs for Faston (4.8 x 0.5 mm) (6.35 mm x 0.8 mm)	-	●	●
	or soldering	●	●	●
Solderability complies with	IEC 68-2-20	●	●	-
Material				
Housing cable connector		PA 6 30% GR	PA 6 30% GR	PA 6 30% GR
Housing receptacle		PA 6.6 30% GR	PA 6.6 30% GR	PA 6.6 25% GR
Insert		PA 6.6 30% GR	PA 6 30% GR	PA 6.6 25% GR
Contacts	Female:	CuSn0.2	CuZn39Pb3	CuZn39Pb3
	Male:	CuNi1Si0.2	CuNi1Si0.2	CuSn0.2
Contact surface		2 μm Ag plated	4 μm / 2 μm Ag plated	4 μm Ag
Chuck	POM	●	●	●
Environmental				
Flammability	UL 94 HB	-	●	● plug housing
	UL 94 V-0	●	●*	●*
Temperature range:	-30 °C to +80 °C	●	●	●
Protection class (mated)		IP 65	IP 20	IP 2X unmated
Safety Requirements	EN / IEC61984	-	●	●
	IEC 60320	●	-	-
¹⁾ : Appliance coupler acc. IEC 60320 limited to 16 A ac * : Receptacle FASTON® is a trademark of AMP Inc.				