

Ruggedized RJ45 Data Connector

Ethercon® provides solutions for data transfer in harsh and demanding applications. These connectors are especially applicable for Ethernet networking in audio, commercial, entertainment, live stage production, DMX lighting, industrial and outdoor internet access environments.

The Ethercon® series offers male cable carriers, assembled female receptacles, feedthrough jacks, cable coupler and shielded versions with or without illumination possibilities by LEDs. The male cable end offers a rugged diecast metal shell as a carrier for pre-assembled RJ45 plugs, which does not require the re-termination of the cable assembly. Female chassis receptacles are based on the current Neutrik® "A & B" series as well the "D" series of XLR receptacles with secure latching system - a feature not found on other RJ45 receptacles. Terminations include horizontal and vertical PCB or IDC. Colour coding is available for both the cable carriers and the receptacles for ease of identification.

Neutrik® Ethercon® receptacles comply with CAT5e (IDC versions) or Class D (PCB versions), shielded or unshielded according to TIA / EIA 586B and ISO / EC 11801 standard.



Cable Carriers

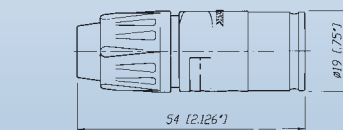


NE8MC

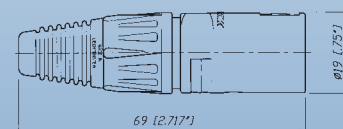
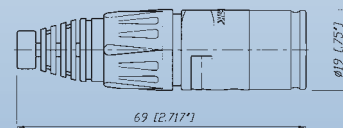
NE8MC-B-1

- The RJ45 system for harsh and demanding environment
- Cable connector carrier accepts the most common RJ45 plugs
- Cable carrier has rugged diecast shell and unique chuck type strain relief
- NE8MC-1 version with weatherproof Collinox plating and O-ring gasket
- Protects Ethernet connections in a variety of commercial type applications and is designed to prevent breakage of the fragile components of standard RJ45 connectors
- Cable carrier does not include RJ45 plug

NE8MC



NE8MC-B-1



L o o k f o r t h e L o g o





Receptacles



NE8FAV



NE8FBH



NE8FAV-YK



NE8FDV

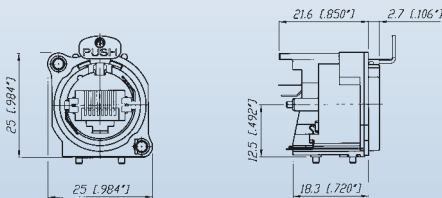


NE8FDV-Y110-B

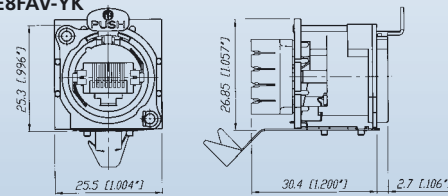
- "A / B" and "D" sized receptacles available in vertical and horizontal PCB or IDC terminations
- Accommodates NE8MC carriers or any standard RJ45 Plug
- D-versions with unified metal flange equal to "D" series-XLR, Speakon®, PowerCon® and BNC Bulkhead

- Receptacles comply with Class D (PCB versions) or CAT 5e (IDC versions) according to TIA / EIA 568B and ISO / IEC 11801 standard
- D-version mountable from the front or rear of the panel
- Version with screw domes to fix connector onto PCB securely (NE8FAV-SD)

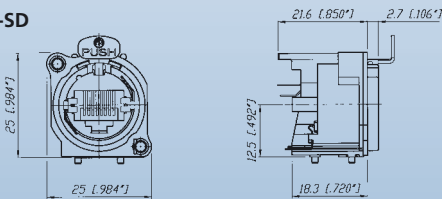
NE8FAV



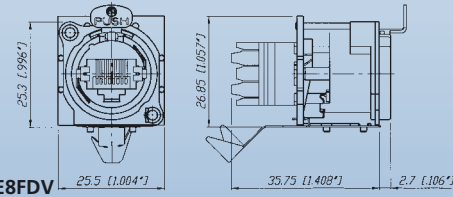
NE8FAV-YK



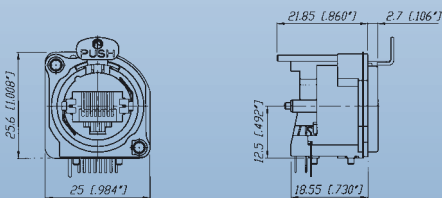
NE8FAV-SD



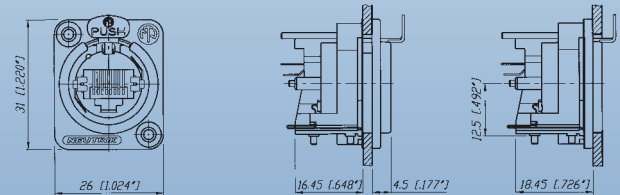
NE8FAV-Y110



NE8FBH



NE8FDV



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



Shielded & Lighted

Feedthrough



NE8FBH-S



NE8FBH-LED



NE8FDP

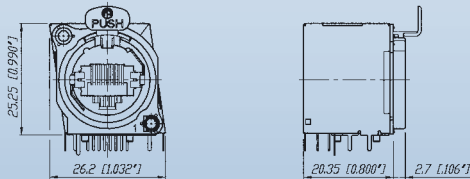


NE8FF

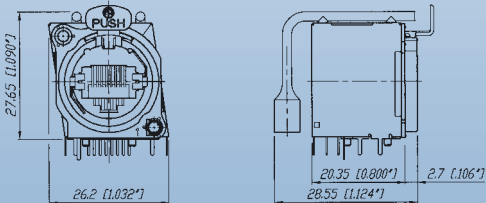
- Comprehensive shielding granted by completely closed metal housing
- Improves EMC performance of appliance even in unmated condition
- Lighted version offers in addition various illuminating indication possibilities by means of two separate light pipes
- Light pipes illuminated by standard 3 mm LEDs - to be mounted on PCB by customer

- Feedthrough as panel mount receptacle and as cable coupler
- NE8FDP feedthrough connector in D series housing for use in patchfields - rear side accommodates standard RJ45 plug
- NE8FF coupler (adapter) for cable to cable mating - use with NE8MC carriers or any standard RJ45 plugs

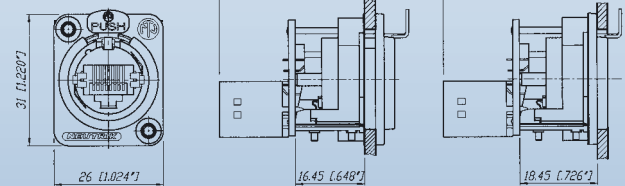
NE8FBH-S



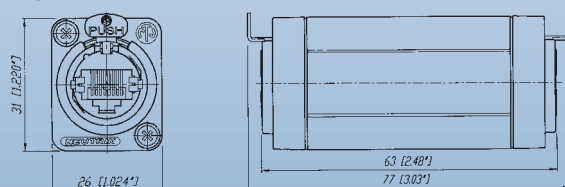
NE8FBH-LED



NE8FDP



NE8FF



Specification		NE8MC* Cable Con.	NE8FA/B* (A + B Series)	NE8FD* (D Series)
Electrical				
Number of contacts:		- ¹⁾	8	8
Rated current per contact:	> 1.5 A	- ¹⁾	●	●
Rated voltage:	< 50 V ac	- ¹⁾	●	●
Contact resistance:	< 10 mΩ	- ¹⁾	●	●
Insulation resistance:	> 500 MΩ	- ¹⁾	●	●
Dielectric strength:	> 1'000 V ac rms	- ¹⁾	●	●
Frequency bandwidth:	1 - 100 MHz	- ¹⁾	●	●
Transmission class acc. TIA / EIA 568B or IEC 11801:	CAT 5e	- ¹⁾	●	●
	Class D	- ¹⁾	PCB Versions	PCB Versions
Mechanical				
Retention method:	latch lock	●	●	●
Life time (mating cycles):	> 1'000 mating cycles	●	●	●
	> 200 mating cycles	-	-	SE8FD
Insertion / withdrawal force:	≤ 20 N	●	●	●
Cable O.D. range:	3.5 - 8 mm	●	-	-
Wire size:	AWG 26 - 20	- ¹⁾	NE8*-Y*	NE8*-Y*
Panel thickness:	max. 3 mm / 0.12"	-	●	4 mm / 0.16"
Material				
Housing:	PBTP 15% GR	-	●	●
	Zinc diecast (ZnAlCu1, gal Ni / bl Cr / Collinox)	●	-	-
B / D-flange:	Zinc diecast (ZnAlCu1, gal Ni / bl Cr)	-	●	●
Strain relief clamp:	POM	●	-	-
	CuZn35Pb2, Tin plated	-	NE8*-Y*	NE8*-Y*Contacts:
Bronze (CuSn6)		- ¹⁾	●	●
Contact surface:	Au (gal 0.2 μm over Ni plating)	- ¹⁾	●	●
Locking Element:	Ck 67 steel, treated	-	●	●
Bushing:	Polyamide (PA 6 15% GR)	●	-	-
Boot:	Polyamide (PA 6)	●	-	-
Sealing gasket:	EPDM	-	-	SE8FD
Environment				
Operating Temperature:	-30°C to +80°C	●	●	●
	-20°C to +60°C	-	-	SE8FD
Protection class:	IP54	-	-	SE8FD
Flammability:	UL94 HB	●	●	●
Solderability complies with IEC 68-2-20:		-	PCB Version	PCB Version
Mating screw:		-	A screw	E screw
Colour coding:		BSE-* / BSX-*	ACRF-*	DSS-*

¹⁾...Specs depend on type of RJ45 plugs used

Ordering Information

Cable Connector

NE8MC	Cable housing with chuck and bushing (two antikink boots, one up to 5 mm and one up to 8 mm cable O.D.) (standard bushing in black, 9 different coding colours on request)
NE8MC-B	Black chromium housing with chuck and bushing (two antikink boots, one for 5 mm and one for 8 mm cable O.D.) (standard bushing in black, 9 different coding colours on request)
NE8MC-1	Cable housing with chuck and X-series bushing, Collinox plating and O-ring gasket (perfect for waterproof applications) (standard bushing in black, 9 different coding colours on request)
NE8MC-B-1	Black chromium housing with chuck and X-series bushing (standard bushing in black, 9 different coding colours on request)
IMPORTANT:	Cable connectors do not include RJ 45 plug. RJ 45 cable assembly must be provided by end-user!

Receptacle	A-shape (all plastic)	B-shape (Nickel ring)	D-shape
Horizontal PCB	NE8FAH	NE8FBH	
Vertical PCB	NE8FAV	NE8FBV	NE8FDV
Vertical PCB with additional screw domes	NE8FAV-SD**		
IDC terminals	NE8FAV-YK **		NE8FDV-YK **
IDC 110 punch down terminals	NE8FAV-Y110 **		NE8FDV-Y110 **
Horizontal PCB with metal housing (shielded)		NE8FBH-S	
Horizontal PCB with metal housing and light pipe		NE8FBH-LED	

Feedthrough

NE8FDP	Receptacle (includes 2 mounting screws)
NE8FF	Coupler

Accessories



A-Screw	Mounting screw for A / B -shape (black self-tapping PLASTITE® screw 2.9 x 8, panhead)
E-Screw	Mounting screw for D-shape (black self-tapping PLASTITE® screw 2.9 x 12, countersunk)
E-Screw-Ni	Mounting screw for D-shape (Nickel self-tapping PLASTITE® screw 2.9 x 12, countersunk)
ACRF-*	Coloured coding rings for A-shape receptacles (Box of 100 pcs.)
BSE-*	Coloured boot for cable connector carrier (Box of 100 pcs.)
BSX-*	Coloured bushing for NE8MC-1 and NE8MC-B-1 cable connectors
DSS-*	Lettering plate for D series, coloured plastic

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

Waterproof kit for EtherCon® D-Series



Waterproof assembly kit - SE8FD

SE8FD	Waterproof kit, IP 54, consists of push, gasket, frontplate Suitable for all NE8FD*, perfect in combination with NE8MC-1 (with Collinox plating and sealing gasket)
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