FURUTECH

PURE TRANSMISSION

NCF®

Flow-28 NCF

Inline Power Filter

Inline Power Filter with Built-in EMI Filtering

In 2010, Furutech introduced its first Inline Power Filter—a compact and effective solution featuring integrated EMI filtering. Designed to be positioned between a power cable and the AC inlet of an audio component, it significantly reduced high-frequency noise and suppressed vibration transmitted through the power line. The result: cleaner, more stable power and a marked improvement in sonic clarity.

In 2016, the flagship Flux-50 was upgraded with Furutech's proprietary NCF (Nano Crystal² Formula) technology. The filter housing was enhanced with a vibration-damping composite, while the internal architecture incorporated the AC-1501(R) EMI-filtering system and Neo Damper material—together offering superior control over both electrical interference and mechanical resonance.

By 2024, the Inline Filter Series had been further refined with upgraded internal coils and capacitors, enhancing its ability to suppress ground noise, voltage irregularities, and high-frequency interference. These advancements delivered even lower noise floors, greater dynamic range, and a more natural, immersive listening experience.

Now in 2025, Furutech proudly debuts the Flow-28 NCF—a high-performance, cost-effective evolution that benefits from the full legacy of technical innovation and refinement in the series. Featuring the FI-28 NCF IEC connector and incorporating all the proven advances in EMI suppression and vibration control, the Flow-28 NCF not only blocks external noise and vibration, but also prevents internally generated noise from contaminating the rest of the system or escaping into the surrounding environment.

Drawing from over a decade of research and development, the Flow-28 NCF delivers clean, stable power with exceptional efficiency—offering audiophiles a compelling upgrade in performance and value.

Advanced Noise Suppression with Furutech's Nano Crystal² Formula (NCF)

At the heart of the Flow-28 NCF is NCF (Nano Crystal² Formula), a proprietary material developed by Furutech. This cutting-edge technology features a crystalline compound with two active properties:

- It generates negative ions to eliminate static.
- It converts thermal energy into far infrared to dissipate heat.

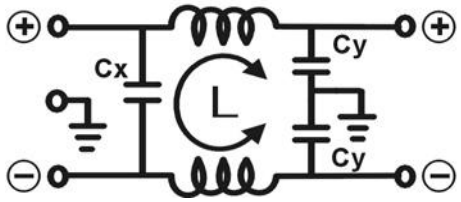
Combined with nano-sized ceramic particles and carbon powder for their piezoelectric damping effect, NCF is the ultimate electrical and mechanical noise suppression solution—exclusive to Furutech products.

Amazing Features

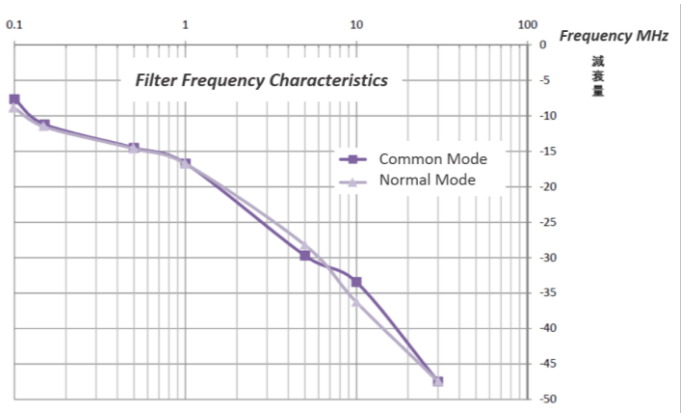
- The body of the Flow-28 NCF combines two "active" materials: Nano-sized ceramic particles and powdered carbon plus Nylon and fiberglass to form an extremely effective *mechanically and electrically* damped body
- Use between power cables and power distributors or power cables and components
- Eliminates radiated AC noise
- Fitted with rhodium-plated α (Alpha) nonmagnetic FI-28 NCF(R) connector
- AC-1501(R) EMI-filtering IEC features rhodium-plated α (Alpha) nonmagnetic copper alloy conductors plus…
- A parallel circuit with an in-line coil and capacitor that reduces noise at 1MHz by 10dB and at 10MHz by more than 30dB
- Floating Field Damper™ (Earth/Ground Jumper System) with US Patent No.: 6,669,491
- Patent-pending metal cable clamp improves grip and reduces mechanically and electrically induced distortion
- α (Alpha) conductor shield for protection against radiated noise
- RoHS-compliant flexible PVC sheath improves vibration isolation
- Special high-grade PE Insulation contributes to reduced capacitance
- Incorporating Furutech's special passive GC-303 EMI filtering material

The AC-1501 (R) EMI Filtering IEC Input

The parallel circuit with in-line coil and capacitor reduces noise at 100 KHz by 8dB and at 500 KHz by 14dB and at 10MHz by more than 30dB



L: 2*0.3mH – Cx: 0.1uF – Cy: 3300pF



- Rhodium plated α (Alpha) nonmagnetic copper alloy conductors
- Outer cover • Ni-plated steel-plate
- Inner Box and cover • PBT (Poly Butylene Terephthalate)
- Rating: AC 125V 15A / AC 250V 10A 50/60Hz

The Flow-28 NCF(R) complies with IEC standards and features the EMI filter AC-1501 (R) (UL E134751 / CSA Certificate Number: 1224486) and the IEC connector FI-28 NCF(R) (PSE Certificate Number: JET7873-43004-1001 / KEMA-KEUR Certificate Number: 71-127956), both of which meet IEC regulations.

- FI-28 NCF(R): α (Alpha) pure-copper rhodium-plated conductors.
- The insulation body of the connectors incorporates an “active” damping material: Nano Crystal² Formula - Nano Crystalline, Piezo Ceramic and Carbon Powder. Nano Crystal² Formula eliminates static, “interconverts” thermal, mechanical and electrical energy and damps vibrations—all for the finest Furutech Pure Transmission signal imaginable.

★ Even during normal use, cables generate unwanted electromagnetic radiation, leading to potential disturbances. This radiation is most pronounced where the cable is bent or folded. Furutech's "Earth Jumper Function" addresses this by incorporating a copper plate that makes contact with the mounting screws, grounding and stabilizing the electromagnetic potential. By absorbing this unwanted electromagnetic radiation, the system effectively enhances sound quality and significantly reduces electromagnetic vibrations, resulting in a clearer and more stable audio performance.

• Main cable fixing clamp improves grip and reduces mechanically and electrically induced distortion
(formed with stainless steel powder and vibration resistant metal powder)

- Patented Ground/Earth Jumper Technology (US Patent No.: 6,669,491)
- Featuring special design wire-clamping mechanism for firm contacts and pure, stable power transmission
- Unique construction offers the industry's firmest contacts

Normal Wire Hold

FURUTECH special design wire hold

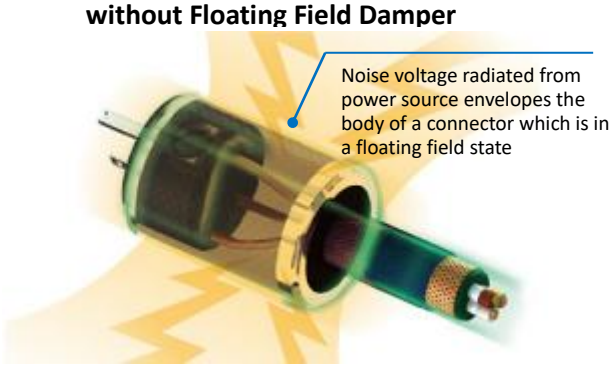
(The contact area is more than 17% larger than that of a normal wire hold, and it can be firmly fixed.)

The Furutech Floating Field Damper

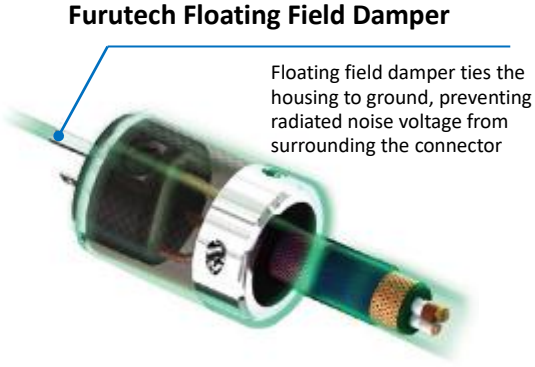
Solving the Biggest Problem You Didn't Know You Had

Noise and vibration are key contributors to signal transmission distortion, making their control essential for stable, low-loss AC power transfer. While many audiophiles and video enthusiasts assume that electrical disturbances originate when plugging a power cord into a wall receptacle—often evidenced by the small spark seen when a device is plugged in while On—research reveals that multiple elements within a connector can also generate stray electrical potentials. Components like cable clamps, screws, and other magnetic parts can all contribute to these disturbances, further impacting signal quality.

Conventional AC connector without Floating Field Damper



AC connector with Furutech Floating Field Damper

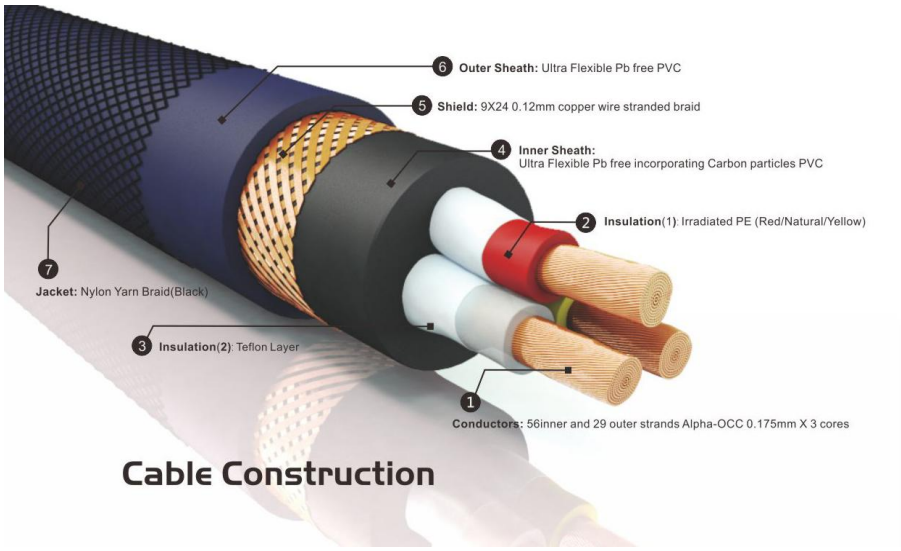


When current flows through a cable and its connector, it generates magnetic and electrostatic fields that build and collapse 60 times per second in 120VAC systems. These magnetic fields can induce electrical currents in small metal parts, such as the screws that hold the connector shell together. These currents create "floating" magnetic fields around the small parts, which interfere with the larger magnetic field surrounding the cable and connector, leading to noise and distortion.

Furutech's Floating Field Damper addresses this hidden issue by star grounding the metal parts where these floating magnetic fields are induced. As shown in the images, a carefully engineered sprung metal bridge within the connector body connects these various metal components, grounding any electrical potentials that are generated. This significantly reduces noise and distortion, enabling ultra-clean and stable power transfer.

Cable Specifications

- Conductors • 56-strand (Inner) and 29-strand (outer) α (Alpha) *OCC* 0.175mm x 3 cores
- Insulation-1• Irradiated PE (Red/Natural/Yellow) 3.45mm diameter
- Insulation-2 •Irradiated PE surrounded by Teflon tape wrap, 3.6mm diameter
- Inner Sheath • RoHS-compliant flexible PVC incorporating carbon particles
- Shield • 0.12mm diameter α (Alpha) Conductor wire braid
- Sheath • RoHS-compliant flexible PVC, 14.2mm diameter
- Jacket • Vibration-damping Nylon yarn braid (Black)



Cable Construction


Cross Sectional View

Product name	Product Introduction	JAN CODE
Flow-28 NCF	Inline Power Filter	4580370445169

*All metal parts are treated with *FURUTECH α (Alpha) Process (Super Cryogenic & Demagnetize Treatment.)*

www.furutech.com service@furutech.com

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