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| <ol style="list-style-type: none"> 1. Bare Copper Conductor Class 2 (IEC 60228) 2. PVC Insulation, conductor color coding according to NF M 87-202 3. Assembly in twisted pairs 4. Individual shielding with aluminum/polyester tape with tinned copper continuity wire (each pair) | <ol style="list-style-type: none"> 5. Individual PVC sheath on each shielded pair 6. General shielding with aluminum/polyester tape with tinned copper continuity wire 7. PVC outer sheath GREY or Blue (other colors on request) |
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300V/500V



PVC

E
CaFixed Installation
≥ 10 × Ø extérieur

Fixed installation



RoHS



REACH

USAGE

The **EISF** cable is designed for transmitting measurement and control signals in industrial installations exposed to electromagnetic interference. The combination of individual shielding + individual sheath on each pair ensures excellent signal isolation and reduces crosstalk, while the general shielding guarantees very good overall protection against external interference.

- ✓ **Process instrumentation: connection between sensors, transmitters and acquisition systems.**
- ✓ **Industrial control systems**
- ✓ **Demanding installations requiring physical separation and EMI protection.**
- ✓ **Heavy industrial environments: chemistry, petrochemistry, energy, metallurgy, paper industry.**
- ✓ **ATEX zones (blue sheath version) for intrinsically safe circuits.**

COMPLIANCE

Electrical and construction standards:

- ✓ NF M 87-202 – Industrial instrumentation cables.
- ✓ IEC 60228 – Class 2 Conductors.
- ✓ IEC 60502-1 – Power and control cables up to 1 kV.

Electromagnetic compatibility standards:

- ✓ EN 55032 / CISPR 32
- ✓ EN 61000-6-2 / EN 61000-6-4

Safety and fire resistance standards:

- ✓ IEC 60332-1-2 – Non-propagation of flame on individual cable.
- ✓ IEC 60332-3-24 – Non-propagation of fire on grouped cables (on request).
- ✓ EN 50575 – CPR requirements (Euroclass Eca).



Instrumentation Cable – Individual Screen under Sheath + General Shielding with Aluminum/Polyester Foil

STRUCTURE

Conductors: Bare copper, solid or stranded, Class 2 (IEC 60228)

Insulation: PVC, color code according to NF M 87-202

Assembly: Conductors twisted in pairs (TP)

Individual shielding: Aluminum/polyester tape with tinned copper continuity wire (each pair)

Individual sheath: PVC on each shielded pair

General shielding: Aluminum/polyester tape with tinned copper continuity wire

Outer sheath: PVC, Grey / Blue (ATEX)

Marking: NEXKERN EISF Xx2xYmm² 300/500V NF M 87-202 Eca CE E02WWYY xxxxxM

PERFORMANCE

Nominal voltage: 300/500V

Conductor resistance: According to IEC 60228, Class 2

Test voltage:

Between conductors: 1500 V AC (1 min)

Between conductors and screen: 1000 V AC (1 min)

Mutual capacitance:

Typically: 90 to 120 pF/m (depending on cross-section)

Insulation resistance: $\geq 500 \text{ M}\Omega\cdot\text{km}$ (at 20°C)

Bending radius:

Fixed installation: $\geq 10 \times$ external $\varnothing$

Mobile installation: $\geq 15 \times$ external $\varnothing$

Operating temperatures:

Fixed installation: -10°C to +80°C

Mobile installation: -5°C to +70°C

Items	Construction				Designation	$\varnothing$ external diameter mm	Weight kg/km
NK03IP09EISF	3	Pairs	0,88	mm ²	03 IP 09 INDIVIDUAL SCREEN WITHOUT STEEL TAPE	15,4	228
NK07IP09EISF	7	Pairs	0,88	mm ²	07 IP 09 INDIVIDUAL SCREEN WITHOUT STEEL TAPE	20,6	457
NK12IP09EISF	12	Pairs	0,88	mm ²	12 IP 09 INDIVIDUAL SCREEN WITHOUT STEEL TAPE	27,7	752
NK12IT09EISF	12	Triad	0,88	mm ²	12 IT 09 INDIVIDUAL SCREEN WITHOUT STEEL TAPE	29,4	945
NK19IP09EISF	19	Pairs	0,88	mm ²	19 IP 09 INDIVIDUAL SCREEN WITHOUT STEEL TAPE	32,9	1136
NK27IP09EISF	27	Pairs	0,88	mm ²	27 IP 09 INDIVIDUAL SCREEN WITHOUT STEEL TAPE	40,2	1609

Versions also available in 0.50mm² and 1.5mm²

PACKAGING:

Heat-shrink coils: 50m, 100m 

Plywood or wooden reels: 500m, 1000m, 3000m, 5000m 

