HITRONIC®

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Accessories for INDUSTRIAL networking LAN cables for structured industrial cabling























# Certified for maritime applications

- Can be used for Industrial Ethernet in harsh industrial environments
- For use in dry, damp and wet rooms

#### Application range

- Shipbuilding
- For PROFINET applications type B
- Suitable for EtherCAT and EtherNet/IP applications
- Onshore and offshore applications

#### Product features

- High flame retardancy in accordance with IEC 60332-3 and FT4
- CAT.5-Performance
- Fast Connect (FC) cable design

## ETHERLINE® MARINE FRNC FC Cat.5

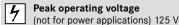
#### Norm references / Approvals

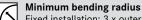
 CMG UL/CSA approval 75°C or PLTC, Sun Res

#### Product make-up

- · Fine-wire strand made of tinned-copper
- Colour-coded in accordance with PROFI-NET for Cat.5 apllications
- Star guad
- Inner sheath: thermoplastic copolymer (FRNC)
- SF/UTP: copper braid and foil screening as overall screening
- Halogen-free and flame-retardant FRNC outer sheath
- Colour: green (based on RAL 6018)

#### Technical data





Fixed installation: 3 x outer diameter Flexing: 7.5 x outer diameter

Temperature range

Operating temperature: -25°C to +70°C During installation: 0 °C to +50 °C

Characteristic impedance 100 Ohm +- 15%

Article number	Article designation	Number of pairs and AWG per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
2170889	ETHERLINE® MARINE FRNC FC CAT.5	2 x 2 x AWG22/7	6.5	32.0	68

Photographs are not to scale and do not represent detailed images of the respective products

#### **■** Accessories

- Connector RJ45 Cat.5e for Profinet refer to page 423
- BUS M12 connectors that can be assembled
- FC STRIP stripping tool refer to page 912















System integrity for at least 60 minutes in the event of fire

## ETHERLINE® FIRE Cat.5e PH60

#### LAPP KABEL STUTTGART ETHERLINE® FIRE Cat.5e 4x2xAWG24/1



#### Benefits

- Ensures that the cable can still transmit data during and after a fire (according to IEC 60331-25)
- High-quality, double screening ensures high transmission reliability in areas with electromagnetic interference

#### Application range

- In industrial areas that use fire as a tool
- · Highly combustible or fire-prone areas
- For fixed installation
- For indoor use

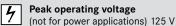
#### Product features

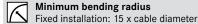
- Fire behaviour:
  - Halogen-free (IEC 60754-1 & EN50267-2-1)
  - Flame-retardant (IEC 60332-1)
  - Fire retardant (IEC 60332-3-24)
  - Low smoke density (IEC 61034-2)
- Circuit integrity (EN500200); 60 min
- Meets the requirements according to CAT.5e, ISO/IEC 11801 and EN 50173, Class D

#### Product make-up

- Solid, bare, single-wire copper conductor
- Core insulation: Based on Polyolefin
- Each insulation will be wrapped with a special tape (anti-fire barrier)
- Twisting: 2 twisted-pair cores, stranding from 4 pairs

### Technical data

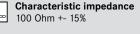






Temperature range Operation: -20 °C to +70 °C





- SF/UTP: copper braid and foil screening as overall screening
- Halogen-free and flame-retardant FRNC outer sheath, colour: red (similar to RAL3000)

Article number	r Article designation	Number of pairs and AWG per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
2170904	ETHERLINE® FIRE Cat.5e PH60	4 x 2 x AWG23/1	8.3	24.0	75