

LEONI *productreport*

Marine 02/2020



Data communication cables with functional integrity during fire acc. to EN 50289-4-16

The market requires more and more data communication cables, which are suitable to transmit data without and also with fire influence. Such applications are in tunnels, in public buildings, in offices and also in a wide range of marine installations like cruise-liners, oil- and gas platforms or wind farm infrastructure.

LEONI has different cable designs for such applications e.g.

- Ethernet cables Cat 5e, Cat 6, Cat 6_A and Cat 7
- PROFIBUS
- CAN-Bus
- DeviceNet
- Fieldbus
- CCTV camera systems

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Verfasser

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Technische Änderungen behalten wir uns vor.



Gotland ferry Sweden
PH 120+ cables are used on two new ships

German shipyard MV Werften GmbH

PH 120+ cables are installed on first new vessel of Endeavor class



German shipyard MV Werften GmbH
PH 120+ cables on first new vessel of Global class



Rolling stock cabling
Also available is a design of a PH 120+ cable for installation in railways



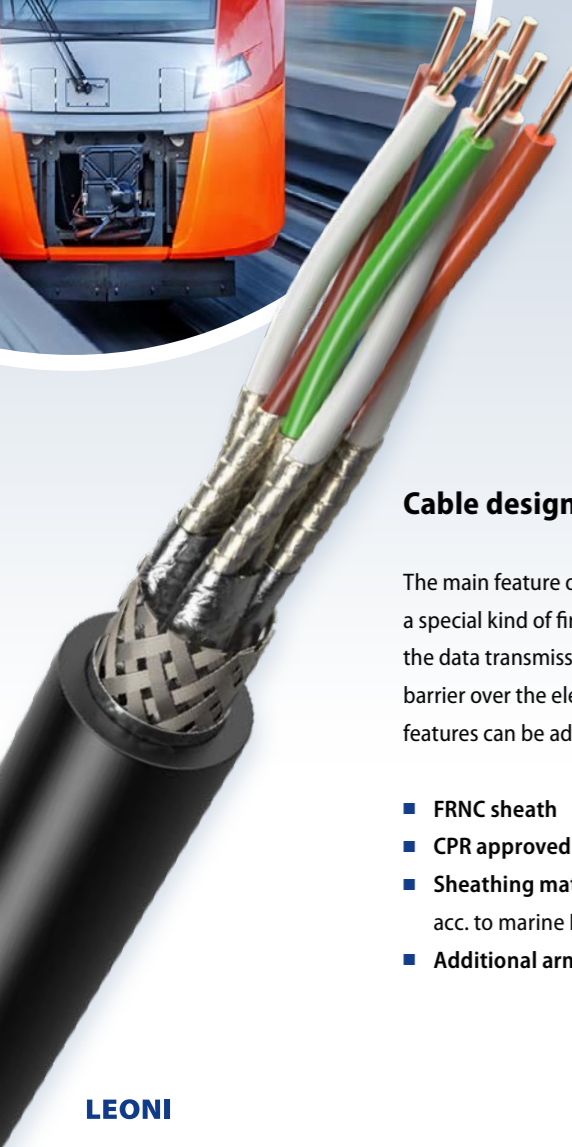
Offshore wind farm Kriegers Flak
The transformer station is equipped with PH 120+ cables



Al Khalifa project
The PH 120+ cables are inserted in Tilted Interchange Tunnel, the Qatar Academy Tunnel, as well as in the Bul Hanine project and the Al Bustan tunnel project in Qatar



Structured building cabling
Available is a design of PH 120+ cables for safety installations in buildings



Cable design

The main feature of the new designed cables, is a special kind of fire barrier for the single wires of the data transmission pair and an additional fire barrier over the electrical screen. Different additional features can be added to the design, for example

- FRNC sheath
- CPR approved sheathing material
- Sheathing material acc. to marine IEC standards
- Additional armor

Ethernet cables

The Ethernet cables are available with

- Wire designs AWG 22, AWG 23 and AWG24
- Solid or stranded wire
- Different transmission categories acc. to the standard IEC 61156-5
- With or without armor
- Different sheathing materials
- Different sheath colors

All cables are tested for the functional integrity during fire for 180 minutes acc. to the standards EN 50289-4-16, EN 50200 and IEC 61156-5 with following characteristics:

Data transmission rate without fire	Data transmission rate under fire condition
Cat 5e	Cat 5e
Cat 6	Cat 6
Cat 6 _A	Cat 6 _A
Cat 7	Cat 6 _A

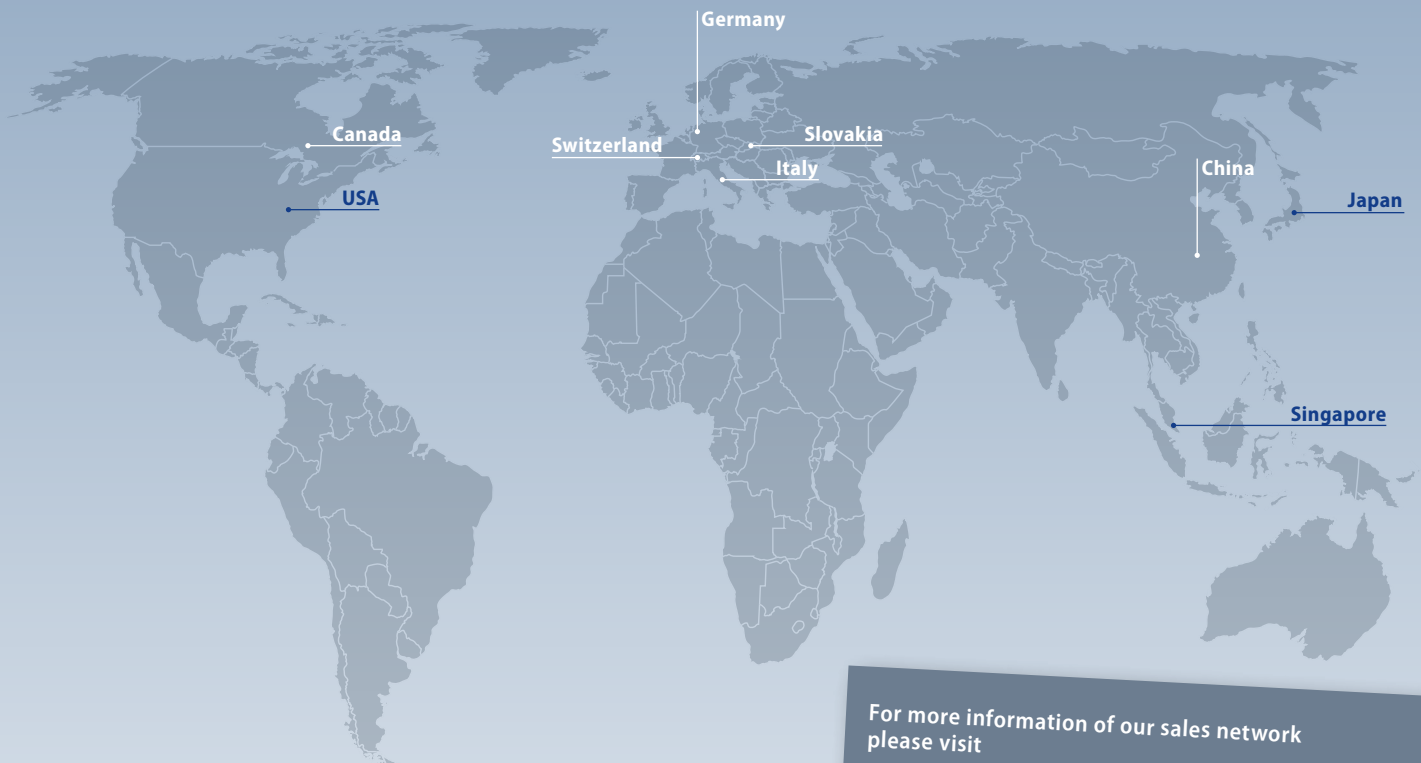
› For more detailed information see the LEONI product report 02/2018 – Data cables with functional integrity

› [Download the PDF file](#)



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