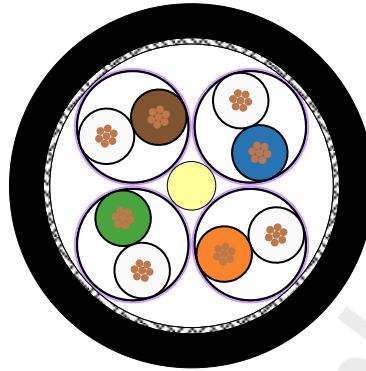


# SeaLine CAT 6 (SHF1)

Cable type: 02YSCH 4X2X0.76/1.8-100 LI PIMF



## Design

### Wire

Stranded bare copper wire 7 X 0.25 (22 AWG) (0.34mm<sup>2</sup>)  
Insulation of foamed Polyethylene (PE) with skin

∅ 0.76 mm (0.030 in dia)  
∅ 1.8 mm (0.071 in dia)

### Screened pair

2 wires twisted to a pair  
Aluminum foil overlapped, applied longitudinally

### Core

Central element: Strain relief (≥ 300N)  
4 screened pairs  
Sequence of colors: WH/BU-WH/OG-WH/GN-WH/BN  
Shield braiding of tinned copper wires 0.1 mm dia (38 AWG)  
Coverage about 65%

∅ 7.8 mm (0.307 in dia)

### Jacket

Thermoplastic copolymer (FRNC) BK

∅ (10.0 ±0.2) mm (0.394 ±0.008 in dia)

Printing: "sequential length in metres" \* BizLink **SeaLine** SCG \* L45467-J417-C106 \* 02YSCH 4X2X0.76/1.8-100 LI PIMF CAT6 IEC 60332-3-22 SHF1 \* "internal lot number"

## Electrical data at 20°C

|   |   |          |        |
|---|---|----------|--------|
| Loop resistance                               | ≤ | 110      | Ohm/km |
| Insulation resistance                         | ≥ | 500      | MΩm*km |
| Signal run time                               | ≤ | 5.3      | ns/m   |
| Capacitance (1 kHz)                           | ≈ | 42       | nF/km  |
| Operating voltage (peak)                      | ≤ | 100      | V      |
| Characteristic impedance 100 MHz              |   | (100 ±5) | Ohm    |
| Surface transfer impedance 10 MHz             |   | 10       | mΩm/m  |
| Test voltage (wire/wire/screen rms 50Hz 1min) |   | 700      | V      |

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|                            |      |      |      |      |      |       |      |      |      |      |      |
|----------------------------|------|------|------|------|------|-------|------|------|------|------|------|
| Frequency (MHz)            | 1    | 4    | 10   | 16   | 20   | 31.25 | 62.5 | 100  | 155  | 200  | 250  |
| Next (dB)                  | 66.0 | 65.3 | 59.3 | 56.2 | 54.8 | 51.9  | 47.4 | 44.3 | 41.4 | 39.8 | 38.3 |
| PSNext (dB)                | 64.0 | 63.3 | 57.3 | 54.2 | 52.8 | 49.9  | 45.4 | 42.3 | 39.4 | 37.8 | 36.3 |
| ELFext (dB)                | 66.0 | 58   | 50.0 | 45.9 | 44.0 | 40.1  | 34.1 | 30.0 | 26.2 | 24.0 | 22.0 |
| PSELFext (dB)              | 64.0 | 55.0 | 47.0 | 43.0 | 41.0 | 37.1  | 31.1 | 27.0 | 23.2 | 21.0 | 19.0 |
| Attenuation typ. (dB/100m) | 2.1  | 3.8  | 6.0  | 7.6  | 8.5  | 10.8  | 15.5 | 19.9 | 25.3 | 29.1 | 33.0 |
|                            |      |      |      |      |      |       |      |      |      |      |      |
| Frequency                  | 4    | 8    | 10   | 16   | 20   | 31.25 | 62.5 | 100  | 155  | 200  | 250  |
| Return loss (dB)           | 23.1 | 24.5 | 25   | 25   | 25   | 23.6  | 21.5 | 20.1 | 18.8 | 18.0 | 17.3 |

Electrical requirements acc. to. EN 50288-5-1 & IEC 61156-6

### Mechanical and thermal characteristics

Conductor material acc. to DIN EN 13602 Cu-ETP-A...

Screen material acc. to DIN EN 13602 Cu-ETP-A...-B

Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table 2/A (HD 624.3) (02Y)

Jacket material acc. to IEC 60092-360 (IEC 60092-359) SHF1

Oil resistant acc. to IEC 60811-404 (4 hours / 70°C)

Flame retardant acc. to IEC 60332-1-2

Flame retardant acc. to IEC 60332-3-22 (Cat. A)

Approved for Marine and Offshore Applications

DNV Certificate No. TAE000018H

### Other characteristics

RoHS compliant (Directive 2011/65/EU & 2015/863/EU RoHS 3)

Low Smoke, Fire retardant, Zero Halogen

Corrosivity of fumes acc. to IEC 60754-2

Smoke-density acc. to IEC 61034

UV-resistant

Permissible temperature range

Transport, installation and operating: -40 °C (-40 °F) up to 80 °C (176 °F)

Min. bending radius allowed: repeated 10X  $\varnothing$ , single 5X  $\varnothing$

Weight about : 102 kg/km (68,4 lb/1000ft)

### Designation of order

L45467-J417-C106

226368

02YSCH 4X2X0.76/1.8-100 LI PIMF SW

1000 m (3281 ft) on non-returnable reel

Product has not been tested and classified according to the CPR (EU/305/2011).

The product shall not be permanently installed in buildings in the EU.