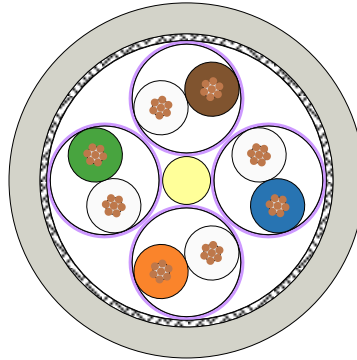


# SeaLine® CAT 7 (SHF1)

Cable type: 02YS(ST)CH 4X2X0.7/1.58-100 LI PIMF GY



## Design

### Wire

Stranded bare copper wire (23 AWG)  
Insulation of foamed Polyethylene (PE) with skin

∅ 0.7 mm (0.028 in dia)  
∅ 1.58 mm (0.062 in dia)

### Screened pair

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

### Core:

Kevlar yarn as central element  
4 screened pairs  
Sequence of colors: WH/BU-WH/OG-WH/GN-WH/BN  
Shield braiding of tinned copper wires  
Coverage about 85%

∅ 7.0 mm (0.276 in dia)

### Jacket:

Thermoplastic copolymer (FRNC) GY

∅ (8.7 ±0.3) mm (0.343 ±0.012 in dia)

Printing: To be defined

## Electrical data at 20°C

Loop resistance	≤	140	Ohm/km
Insulation resistance	≥	500	MOhm*km
Signal run time	≤	5.13	ns/m
Capacitance (1 kHz)	≈	42	nF/km
Operating voltage (peak)	≤	100	V
Characteristic impedance at 100 MHz	(100 ±5)		Ohm
Surface transfer impedance 10 MHz		10	mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)		700	V

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100	155	200	300	600
Next (dB)	80	80	80	80	80	80	75.1	72.4	69.6	67.9	65.3	60.8
PSNext (dB)	77	77	77	77	77	77	72.5	69.4	66.6	64.9	62.3	57.8
ELFext (dB)	80.0	80.0	74.0	69.9	68	64.1	58.1	54	50.2	48.0	44.5	38.4
PSELFext (dB)	77	77	71	66.9	65	61.1	55.1	51	47.2	45.0	41.5	35.4
Attenuation dB/100m)	2.9	5.5	8.5	10.8	12.1	15.2	21.7	27.8	35.0	40.1	50.0	73.3
Frequency	4	8	10	16	20	31.25	62.5	100	155	250	350	600
Return loss (dB)	23.1	24.5	25	25	25	23.6	21.5	20.1	18.8	17.3	17.3	17.3

Electrical requirements acc. to EN 50288-4-2 & 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)

Approval for Marine and Offshore applications possible

### Other characteristics:

RoHS compliant (Directive 2011/65/EC & 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 and fixed installation: -40 °C (-40 °F) up to 80 °C (176 °F)

Installation and flexible use : -30 °C (-22 °F) up to 80 °C (176 °F)

Min. bending radius allowed : repeated 8X  $\varnothing$ , single 4X  $\varnothing$

Weight about : 86 kg/km (57,6 lb/1000ft)

### Designation:

02YS(ST)CH 4X2X0.7/1.58-100 LI PIMF GR

1000 m (3281 ft) on non-returnable reel