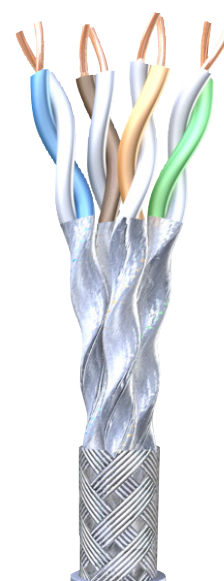
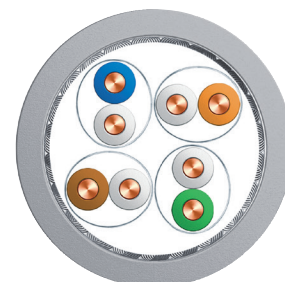


# LANmark-7 <1000 MHz> 23/1awg SU/FTP Marine Grade • DNV

## Cable Design

<b>Conductor</b>	Solid Bare Cu-wire AWG 23/1
<b>Insulation</b>	Polyethylene (PE)
Diameter	1,45 mm
<b>Pair assembly</b>	2 cores twisted to a pair. 4 pairs total
Pair identification	wh-bu, wh-or, wh-gn, wh-bn
<b>Pair Screen</b>	Individual plastic laminated aluminium foil
<b>Braid</b>	Tinned copper wire braid
<b>Outer Jacket</b>	LSZH SHF-1, Grey
Diameter	Ø 7,90
Weight	70 kg/km



## Application

The LANmark-7 maritime cable supports all current standardised applications requiring Cat.7 bandwidth. It will support low bandwidth applications as well as state of the art data applications. for installation on board ships and sea movable constructions. DNV approved.

**Use :** 10/100/1000/10GBase-T; Cable sharing, CaTV (862 MHz), Industrial ethernet.

## Standards

Applicable Standards	EN 50173; EN 50288-4-1; ISO/IEC 11801; ISO/IEC 61156. IEC 60092-359, approved by DNV.
Flamability Rating	IEC 60332-3-24, IEC 60754-1/2, IEC 61034
Chemical resistance	Oil resistant - IRM 902 (IEC60811-2-1) : 4 hours/70°C

## Specification

Part Number	Type
N10M.002	Cat7 4x2xAWG23/1 SU/FTP <1000 MHz> SHF-1 DNV approved

LANmark-7 N10M.002 1000 SU/FTP 4PR AWG 23/1 SHF-1

## Thermal & Mechanical Characteristics

Temperature range	operating	-20 to +70	°C
	ambient	-5 to +70	°C
Bending radius	Min. static operating	35	mm
	laying operating	70	mm
Fire load		1000	MJ/km
Max. Pulling force	laying	0,21	kN

## Electrical Characteristics

Max. Transfer impedance at 30 MHz	5	Ω/km
Mutual capacitance	56	nF/km
Max. Conductor DC resistance at 20°C	80	Ω/km
Characteristic Impedance	100	Ω
Velocity of Propagation	80	%
Propagation delay, max. 100 MHz	536	ns/100m
Transfer impedance	at 1 MHz	10 mΩ/m
	at 10 MHz	10 mΩ/m
	at 30 MHz	30 mΩ/m
	at 100 MHz	60 mΩ/m

Frequency	Attenuation dB/100m		NEXT dB		ACR dB/100m		PSNEXT dB		ELFEXT dB/100m		PSELFEXT dB/100m		RL dB	
	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ
<b>1</b>	2.0	1.9	>80	100.0	78.0	98.1	>77	100.0	>80	92.0	>77	89.0	20.0	23.0
<b>4</b>	3.6	3.5	>80	100.0	76.4	96.5	>77	100.0	>80	91.0	>77	88.0	23.0	26.0
<b>10</b>	5.7	5.5	>80	100.0	74.3	94.5	>77	100.0	74.0	91.0	71.0	88.0	25.0	28.0
<b>16</b>	7.2	7.0	>80	100.0	72.8	93.0	>77	100.0	69.9	91.0	66.9	88.0	25.0	28.0
<b>20</b>	8.1	7.8	>80	100.0	71.9	92.2	>77	100.0	68.0	91.0	65.0	88.0	25.0	28.0
<b>31.25</b>	10.1	9.9	>80	100.0	69.9	90.1	>77	100.0	64.1	91.0	61.1	88.0	23.6	26.6
<b>62.5</b>	14.5	14.1	75.5	100.0	61.0	85.9	72.5	98.0	58.1	79.0	55.1	76.0	21.5	24.5
<b>100</b>	18.5	18.0	72.4	95.0	53.9	77.0	69.4	93.0	54.0	71.0	51.0	68.0	20.1	23.1
<b>155</b>	23.4	22.7	69.6	90.0	46.2	67.3	66.6	88.0	50.2	63.0	47.2	60.0	18.8	23.1
<b>200</b>	26.8	26.0	67.9	86.0	41.1	60.0	64.9	84.0	48.0	60.0	45.0	57.0	18.0	23.1
<b>250</b>	30.2	29.4	66.5	83.0	36.3	53.6	63.5	81.0	46.0	57.0	43.0	54.0	17.3	23.1
<b>300</b>	33.3	32.5	65.3	80.0	32.0	47.5	62.3	78.0	44.5	55.0	41.5	52.0	17.3	22.0
<b>600</b>	48.9	47.6	60.8	69.0	11.9	21.4	57.8	67.0	38.4	45.0	35.4	42.0	17.3	20.3
<b>1000</b>	-	63.6	-	67.0	-	3.4	-	65.0	-	40.0	-	37.0	-	18.0