

Cat.7 800 S/FTP SHF1

NEX S/FTP CAT7 800 4P SHF1 D1000 OR

Nexans Ref.: 10273786
Country Ref.: 1067941
EAN 13: 3427630105269

- DNV approval
- SHF1 compliant outer jacket
- Complies to latest Cat 7 standard version
- Supports Class F applications
- Cable tested up to 800 MHz
- Individual foiled pairs with global screen for EMC performance
- Tinned copper braid for enhanced EMC performances and mechanical performances
- Segregation class : d
- Compatible POE(802.3af), POE+(802.3at), POE++(802.3bt), UPOE
- RoHS EC Directive compliant
- Compliant with European Reach regulation

DESCRIPTION

Application

Cat.7 800 S/FTP SHF1 cables are the high end offering from Nexans for the shipbuilding industry. Manufactured in accordance with ISO IEC 61156-5 requirements and in accordance with IEC 60092-360 for Shipbuilding, the Cat.7 800 S/FTP SHF1 cable is the best choice to support all Class F applications like Ethernet, Fast Ethernet, Gigabit Ethernet, 10 Gigabit Ethernet, ... The Cat.7 800 S/FTP SHF1 cables are suitable for voice, data, CATV and sharing application installations up to 600 MHz. Nexans Cat.7 cables, combined with a similar class of performance connectivity, are suitable for voice and data installations according to ISO/IEC 11801, EN 50173 and TIA/EIA 568 standards.

Construction

1. Conductor: solid bare copper
2. Insulation : Polyethylen (EN 50290-2-23) - Two insulated conductors twisted to a pair
3. Screen: ALU/PET on each pair. Alu outside - 4/2 laid up together
4. Tinned copper braid
5. Outer Jacket : LSZH - SHF1 compliant



STANDARDS

International 2014/68/EU;
EN 50173; EN 50288;
IEC 60092-360; IEC 60332-1;
IEC 61156-5; ISO/IEC 11801



Halogen free
Yes



Bending factor when
laying
8 (xD)



Bending factor installed
4 (xD)



Ambient installation T°
C range
0 - 50 °C



Ambient static op.
temp
-20 - 70 °C



Flame retardant
IEC 60332-1



Smoke density
Low

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

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Environment

Designed to reduce the environment impact, Nexans cables are compliant with RoHS 2011/65 Directive and European Reach 1907/2006/EC regulation. The outer sheath of the cable is made of halogen free material (IEC 60754-1 / EN 50267-2-1), with limited fumes emission (IEC 61034-1/2 / EN 50268-1/2) and no acid gas emission in case of fire (IEC 60754-2 / EN 50267-2-2).

Nexans measure the environmental impact of each of the cable. Upon request the PEP Ecopassport or the Eco Material Declaration could be available.



Halogen free
Yes



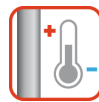
Bending factor when
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Bending factor installed
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CHARACTERISTICS

Construction characteristics

Sheath colour	Orange
Halogen free	Yes
Higher heating value	660 MJ/km
Individual screen	Aluminium / Polyester tape
Outer sheath	SHF 1
Overall screen	Tinned copper braid
Type of cable	S/FTP

Dimensional characteristics

Number of pairs	4
Approximate weight	61 kg/km
Nominal outer diameter	7.7 mm
Conductor cross-section (AWG)	23
Copper content	- kg/km
Diameter over insulation	1.32 mm
External dimensions	Not applicable

Electrical characteristics

Mutual capacitance	42 nF/km
Max. DC resistance of the conductor at 20°C	75 Ohm/km
Characteristic impedance at 100 MHz	100 Ohm

Transmission characteristics

Coupling attenuation at 30 MHz	>80 dB
Nominal Velocity of Propagation (NVP)	82 %

Mechanical characteristics

Maximum installation tension	115 N
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Usage characteristics

Packaging	Drum 1000m
Category	Cat. 7
Bending factor when laying	8 (xD)
Bending factor when installed	4 (xD)
Ambient installation temperature, range	0 - 50 °C
Ambient static operating temperature, range	-20 - 70 °C
Field of application	Fixed installations
Flame retardant	IEC 60332-1
Smoke density	Low

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NEX S/FTP CAT7 800 4P SHF1 D1000 OR

CAT 7 800 S/FTP SHF1 TRANSMISSION CHARACTERISTICS

TRANSMISSION CHARACTERISTICS

Values at 20°C

Frequency (MHz)	S/T	4	100	155	200	240	250	350	500	550	580	590	600	700	800
Attenuation max. (dB/100m)	Standard	3.7	19.0	24.0	27.5	30.3	31.0	37.2	45.3	47.7	49.2	49.6	50.1	-	-
	Typical	3.6	18.1	22.7	25.8	28.4	29.0	34.6	41.8	43.9	45.2	45.6	46.0	50.0	53.7
NEXT min. (dB)	Standard	75.0	72.4	69.5	67.9	66.7	66.4	64.2	61.9	61.3	60.9	60.8	60.7	-	-
	Typical	100.0	97.4	94.5	92.9	91.7	91.4	89.2	86.9	86.3	85.9	85.8	85.7	84.4	83.2
PSNEXT min. (dB)	Standard	75.0	69.4	66.5	64.9	63.7	63.4	61.2	58.9	58.3	57.9	57.8	57.7	-	-
	Typical	100.0	94.4	91.5	89.9	88.7	88.4	86.2	83.9	83.3	82.9	82.8	82.7	81.4	80.2
ACRF min. (dB)	Standard	75.0	55.3	51.5	49.3	47.7	47.3	44.4	41.3	40.5	40.0	39.9	39.7	-	-
	Typical	100.0	94.0	91.7	90.1	88.5	85.7	85.7	82.1	81.0	80.4	80.2	80.0	78.0	76.2
PSACRF min. (dB)	Standard	75.0	52.3	48.5	46.3	44.7	44.3	41.4	38.3	37.5	37.0	36.9	36.7	-	-
	Typical	98.2	91.0	88.7	87.1	85.8	85.5	82.7	79.1	78.0	77.4	77.2	77.0	75.0	73.2
Return Loss min. (dB)	Standard	23.0	20.1	18.8	18.0	17.4	17.3	17.3	17.3	17.3	17.3	17.3	17.3	-	-
	Typical	33.0	30.1	28.8	28.0	27.4	27.3	26.3	25.3	25.3	25.3	25.3	25.3	24.6	24.1