Marine Ethernet cable

HF Flame Oil Cold UV

S/FTP Category 6 SHF1

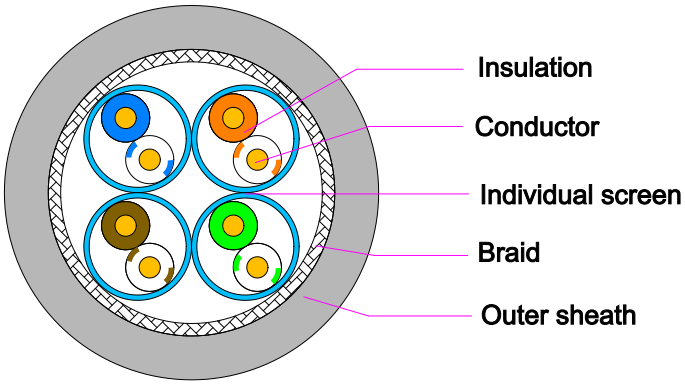


Application

High performance offshore LAN cable compliant with IEC 61156-5 category 6 standards bandwidths up to 250 MHz.

BC conductor ,Foam PE insulation ,Foil screened pairs with an overall tinned copper braid,SHF1 Outer sheath.

Construction



Conductor	Bare copper wire（23 or 24AWG/1）
Insulation	Foam PE Color：1、White/Blue，Blue　2、White/Orange，Orange 3、White/Green，Green　4、White/Brown，Brown
Individual screen	AL/Mylar
Overall screen	Tinned copper braiding, coverage≥60%
Outer sheath	SHF1 Color ： Grey or as customer's request OD：8.5 ± 0.80mm（8.0 ± 0.80mm）
Marking	Hysin□MARINE□Cable□CAT6□S/FTP□4PR□23（24）AWG/1□SHF1□IEC60332-3-22□****m□xxxxxx□WW/YY Note：□ means blank；****m means meters；xxxxxx means batch number；WW/YY means week/year

Electrical Characteristics（20℃）

Conductor DC resistance	≤95ohm/km
DC Resistance Unbalance	≤2%（within a pair），≤5%（between pairs）
Characteristic impedance	100±10ohm @100MHz
Dielectric Strength	DC 1kV for 1min（conductor to conductor, conductor to screen）
Insulation Resistance	≥5000MΩ.km（IEC 61156-5）
Capacitance Unbalance（pair to ground）	≤160pF/100m at 1kHz(IEC 61156-5)
Transmission performance	IEC 61156-5

Frequency MHz	ATT dB/100m Max.	RL dB Min.	NEXT dB Min.	PSNEXT dB Min.	ELFEXT dB Min.	PSELFEXT dB Min.
4	3.83	23.0	66.3	63.3	56.0	53.0
8	5.37	24.5	61.8	58.8	49.9	46.9
10	6.00	25.0	60.3	57.3	48.0	45.0
16	7.61	25.0	57.2	54.2	43.9	40.9
20	8.53	25.0	55.8	52.8	42.0	39.0
25	9.57	24.3	54.3	51.3	40.0	37.0
31.25	10.75	23.6	52.9	49.9	38.1	35.1
62.5	15.48	21.5	48.4	45.4	32.1	29.1
100	19.92	20.1	45.3	42.3	28.0	25.0
200	29.14	18.0	40.8	37.8	22.0	19.0
250	33.02	17.3	39.3	36.3	20.0	17.0

Other Characteristics

Operating temperature	-52℃ to 90℃
Installation temperature	-20℃ to 60℃
Acid Gas Release Mounts	≤5mg/g (IEC 60754-1)
Burning Occur Gas Acidity	PH≥4.3 (IEC 60754-2)
Burning Occur Gas conductivity	<10 μS/mm (IEC 60754-2)
Smoke density	≥60%（IEC 61034-2）
Flame resistance	IEC 60332-3-22, IEC 60332-1-2
Oil resistance (SHF1)	IRM902, 70℃×4H
UV resistance	UL1581（300H）
The jacket material performance	IEC 60092-360
This cable meets RoHS requirements	