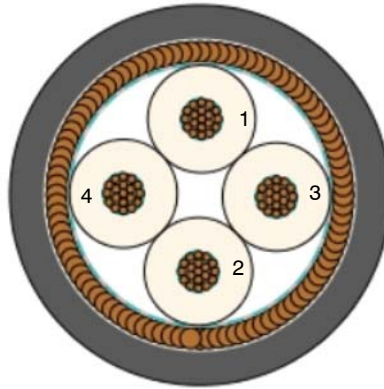


**Databus****RADOX MARINE CAT5e 4x0.5mm²****General Properties:**

Limited fire hazard databus cable, zero halogen, flame retardant; high temperature, low temperature and ozone resistance, solder iron resistant, easily strippable, flexible, excellent screening properties. Cable for symmetrical data transmission with impedance of 100 Ω with very good transmission properties at high frequencies.

Application:

For permanent installation on: ships, oil- gas platforms, refineries and other harsh environment.



Size	4x0.5mm²
H+S part no	85 066 809
Construction	
Conductor	Tin plated copper, stranded 19x0.18 mm
Core insulation	RADOX COM (XLPE)
Core diameter	2.3 ± 0.03mm
Core colour, numbering, pair	WH(no.1) - WH(no.2) ; WH(no.3) - WH(no.4)
Wrapping over pair	Tape + plastic laminated Al- tape
Filler	-
EMC- screen	Braid, tin plated copper
Braid wire diameter	0.20 mm
Screen diameter	6.56 mm
Wrapping	Tape
Cable sheath	RADOX Elastomer S FH (SHF2, SHF mud)
Sheath colour	black
Cable diameter	8.1 ± 0.3mm
Type of installation	fixed
Cable weight nom.	10.5 kg/100m
Pulling force	max. 50 N

Printing on sheath:

HUBER+SUHNER RADOX MARINE CAT5e 4X0.5MM2 SHF2 SHF MUD 90C

IEC 60332- 1- 2 IEC 60332- 3- 22 85066809- [batch no] [date of manufacture] [prod- place]

Copyright 2017 HUBER+SUHNER AG. This document may not be amended and its content is confidential. It may not be passed on to third party which are not bound by confidentiality.

The product fulfils the test and specification requirements described in this document for the stated areas of application and operating conditions. HUBER+SUHNER AG does not expressly or implicitly guarantee performance under additional or changed conditions. Deviations are to be agreed upon in writing.

HUBER+SUHNER AG
Low Frequency Division

CH- 8330 Pfäffikon



+41 (0)44 952 22 11



+41 (0)44 952 26 40

www.hubersuhner.com



General technical data:

Voltage rating 300 VAC
Test voltage, 50 Hz, 5 min. 2000 VAC

Temperature index of sheath TI/20kh >120 °C
Max. operating temperature fixed installation 90 °C
Min. operating temperature fixed installation -50 °C
Min. installation and handling temperature -40 °C

Max. storage temperature 40 °C
Min. storage temperature -50 °C
Min. bending radius fixed installation 6 x cable dia

Characteristic Impedance f = 100MHz 100 ± 5 Ω
Resistance at 20 °C ≤ 40.1 Ω / km
Capacitance core / core ≤ 65 pF / m
..... core / screen ≤ 100 pF / m
Transferimpedance f ≤ 30 MHz ≤ 30 mΩ/m

Table with 5 columns: Frequency (MHz), Attenuation (dB/100m), PS NEXT (dB), EL FEXT (dB), Return loss (dB). Rows include Max./Min. values and specific frequency points (1, 4, 10, 31.25, 62.5, 100 MHz).

* The cable performance between 1 MHz and 4 MHz is achieved by design only and it is therefore not necessary to test for this performance below 4 Mhz.

**The cable sheath pass the following fluid tests**

Enhanced oil resistance	Fulfilled	NEK TS 606
Mineral oil type IRM 902	7 d / 100 °C	NEK TS 606, table 1
Mineral oil type IRM 903	7 d / 100 °C	NEK TS 606, table 1

Mud resistance	Fulfilled	NEK TS 606
Calcium bromide brine (45 % CaBr ₂ / H ₂ O)	56 d / 70 °C	NEK TS 606, table 1
Base oil EDC 95- 11	56 d / 70 °C	NEK TS 606, table 1

Enhanced oil resistance	Fulfilled	IEC 60092-360
Mineral oil type IRM 902	7 d / 100 °C	IEC 60092-360, An. C

Drilling fluid resistance	Fulfilled	IEC 60092-360
Mineral oil type IRM 903	7 d / 100 °C	IEC 60092-360, An. C
Calcium bromide brine (45 % CaBr ₂ / H ₂ O)	56 d / 70 °C	IEC 60092-360, An. D

The cable pass the following fire tests

Fire protection in ships	Fulfilled	DNV GL- CP- 0403
Vertical flame spread of a single cable	50 < L ≤ 540 mm	IEC 60332- 1- 2
Smoke density	T ≥ 70 %	IEC 61034- 2
Corrosivity of combustion gases	pH ≥ 4.3, C ≤ 10 μS/mm	IEC 60754- 2
Amount of halogen acid gas	HCl+HBr ≤ 0.5%	IEC 60754- 1
Content of fluorine	HF ≤ 0.1 %	IEC 60684- 2, 45.2

Applicable standards :

DNV GL- CP- 0403	Type approval - Data communication cables- category cables
IEC 61156- 5	Multicore and symmetrical pair/quad cables for digital communications - Symmetrical pair/quad cables with transmission characteristics up to 1000 Mhz - Horizontal floor wiring
NEK TS 606	Cables for offshore installation, halogenfree and/or mud resistant

Approvals :

DNV GL	TAE00002G1
--------	------------