

Databus

RADOX MARINE DATABUS 120 OHM 2X0.75mm²

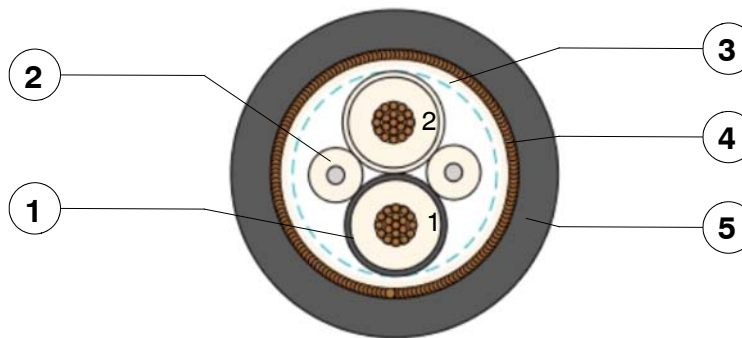
General Properties:

Limited fire hazard electrical installation 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 120 Ω with very good transmission properties at high frequencies.

Application:

For permanent installation inside of ships to connect fixed parts.



1. 2 cores 0.75mm ²	Conductor: flexible tin plated copper Insulation: RADOX foam Cross- linked foam skin polyethylene Type C modified, acc.to EN 50290- 2- 23 and EN 50290- 2- 29 Thickness, nom. 1.0 mm Thickness, min. 0.85 mm Core colours: see table	19 x 0.22 mm D : 2.65 mm
2. 2 fillers	PE- LD	
3. Wrapping	PP- tape	
4. EMC - Screen optimised	Braid: Tin plated copper	D : 6.5 mm
5. Sheath	RADOX Elastomer S FH Type SHF2, acc. to IEC 60092- 360 and Type SHF MUD, acc.to NEK TS 606 Thickness, nom. 0.8 mm Thickness, min. 0.62 mm Colour : black	D : 8.5 ± 0.3 mm

Printing on sheath: HUBER+SUHNER RADOX MARINE DATABUS 120 OHM 2X0.75MM2 SHF2 SHF MUD 90C

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

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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.

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Databus**RADOX MARINE DATABUS 120 OHM 2X0.75mm²****Table:**

Cable type	Conductor construction	Core diameter Ø mm	Cable diameter Ø mm	Core colours	Weight nom. kg / 100m	H+S No.
mm ²	n x mm ²	mm	mm			
2X0.75	19x0.22	2.65	8.5 ± 0.3	black no.1 white no.2	9.74	85063638
2X0.75	19x0.22	2.65	8.5 ± 0.3	white, black numbering 1+2	9.74	85125104

Technical Data :

Conductor resistance at 20 °C	≤ 26.7	Ω / km
Voltage rating	300	V AC
Test voltage, 5 min.	2 000	V AC
Mutual capacitance wire/wire	38 ± 3	pF / m
Characteristic Impedance	f = 1 MHz 120 ± 10	Ω
Velocity factor	f = 1 MHz 77 ± 3	%
Insulation resistance at 20 °C	≥ 5000	MΩ · km
Attenuation	f = 1 MHz ≤ 10.0	dB / km
Transferimpedance	f ≤ 30 MHz ≤ 30	mΩ / m
Min. bending radius	fixed	3 x cable dia.
	flexing	5 x cable dia.
Temperature range	fixed	- 40 ... + 90 °C
	flexing	- 25 ... + 90 °C
Cable weight per 100m	approx. 9.8	kg
Copper weight per 100m	approx. 3.6	kg
Fire load	approx. 1490	kJ/m

The cable sheath pass the following fluid tests

Enhanced oil resistance	Category b/Code E	NEK TS 606
Mineral oil type IRM 902	7 d / 100 °C	NEK TS 606, 4.4.1
Mineral oil type IRM 903	7 d / 100 °C	NEK TS 606, 4.4.1

Mud resistance	Category c/Code M	NEK TS 606
Calcium bromide brine (50 % CaBr ₂ content)	56 d / 70 °C	NEK TS 606, 4.4.1
Base oil EDC 95- 11	56 d / 70 °C	NEK TS 606, 4.4.1

Enhanced oil resistance	Fulfilled	IEC 60092- 360
Mineral oil type IRM 902	7 d / 100 °C	IEC 60092- 360, table 9

Drilling fluid resistance	Fulfilled	IEC 60092- 360
Mineral oil type IRM 903	7 d / 100 °C	IEC 60092- 360, table 10
Calcium bromide brine (50 % CaBr ₂ content)	56 d / 70 °C	IEC 60092- 360, table 10

The cable pass the following fire tests

Fire protection in ships	Fulfilled	IEC 60092- 376
Vertical flame spread of a single cable	$50 < L \leq 540$ mm	IEC 60332- 1- 2
Smoke density	$T \geq 70$ %	IEC 61034- 2
Vertical flame spread, bunched cables	$L \leq 2.5$ m	IEC 60332- 3- 22
Corrosivity of combustion gases	$pH \geq 4.3$, $C \leq 10$ µS/mm	IEC 60754- 2
Amount of halogen acid gas	$HCl+HBr \leq 0.5\%$	IEC 60754- 1
Content of fluorine	$HF \leq 0.1$ %	IEC 60684- 2, 45.2

Applicable standards :

EN 50290- 2- 23	Communication cables - Part 2- 23: Common design rules and construction - PE insulation
EN 50290- 2- 29	Communication cables - Part 2- 29: Common design rules and construction - Cross- linked PE insulation compounds
IEC 60092- 360	Electrical installations in ships - Part 360: Insulating and sheathing materials for shipboard and offshore unit, power, control, instrumentation and telecommunication cables
IEC 61156- 1	Multicore and symmetrical pair/quad cables for digital communications - Part 1: Generic specification
NEK TS 606	Cables for offshore installation, halogen- free, low smoke, flame- retardant

Approvals :

Item number: 85063638 DNV GL: TAE00002Y5

Item number: 85125104 DNV GL: pending