DATABUS screend
RADOX® MILCAT7 4X(2X24AWG) REMS FH

Product description:

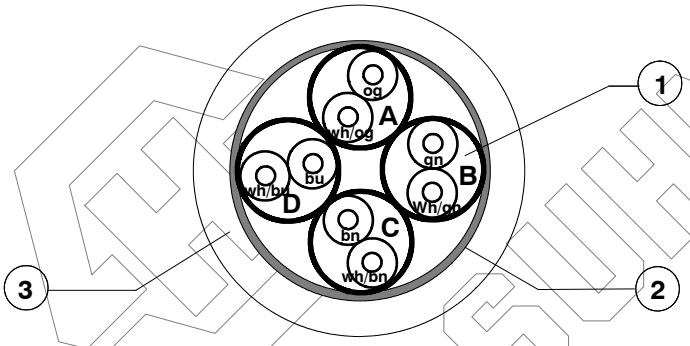
RADOX MILCAT7	Multicore cable with overall screen
Impedance:	100 Ohm

General features:

Halogen free electron- beam cross linked cable with improved behaviour in case of fire, easy to strip, soldering iron is resistant and flexible. Meet the electrical requirements of EN 50288- 4- 2 and IEC 61156- 6 Cat. 7. Stripped wires helps to better difference by assembling.
The cable is especially suitable for Gigabit Ethernet and for transmission of digital data for applications up to 10 Gigabit according to IEEE 802.3.

Application:

This ethernet databus is specially designed for applications in harsh environment.



1.	4 pairs, 2X24AWG	twisted		
		Cores:	Conductor :	flexible tin plated copper AWG 24 (7x32AWG)
			Insulation :	RADOX FOAM D : 1.35 mm
		2 cores twisted:	Pair A:	white/orange- orange
			Pair B:	white/green- green
			Pair C:	white/brown- brown
			Pair D:	white/blue- blue
		Pair screen	Aluminium tape	
2.	EMC - Screen		Tin plated copper braid	D : 6.0 mm
3.	Sheath		RADOX REMS FH, colour : see table	**D : 8.1 ± 0.5 mm**

Marking:

HUBER+SUHNER RADOX MILCAT7 100 OHM 4X(2X24AWG) REMS FH 85028693- [batch- No.] [date of manufacture]

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Technical data:

Frequency [Mhz]	Attenuation max. [dB/100m]	NEXT min. [dB]	PS NEXT min. [dB]	ACR-F min. [dB]	PS ACR-F min. [dB]	RL min. [dB]
1	2.9	80	77	80	77	-
4	5.5	80	77	80	77	23.1
10	8.5	80	77	74	71	25
16	10.8	80	77	69.9	66.9	25
31.25	15.2	80	77	64.1	61.1	23.6
62.5	21.7	75.1	72.5	58.1	55.1	21.5
100	27.8	72.4	69.4	54	51	20.1
300	50	65.3	62.3	44.5	41.5	17.3
600	73.3	60.8	57.8	38.4	35.4	17.3

Databus:

Characteristic Impedance	f=100MHz	100 ± 5	Ω
Capacitance	core / core	≤ 50	pF / m
	core / screen	≤ 80	pF / m
Velocity of propagation		~70	%
Conductor resistance at 20 °C		≤ 95	Ω / km
Voltage rating		125	VAC
Test voltage		1000	VAC
Max. rated conductor temperature normal oreration		+ 70	°C
Temperature index of sheath TI/20 kh		> +125	°C
Min. installation and handling temperature		- 40	°C
Min. Temperature fix		- 50	°C
Min. bending radius	fixed	4 x cable dia	
Cable weight per 100 m	approx.	8.8	kg
Fire load	approx.	705	kJ/m

The cables is in conformity with:

Vertical flame spread	50 < L ≤ 540 mm	EN 60332-1-2
Vertical flame spread, bunched, 6 < D < 12 mm	L ≤ 2.5 m	EN 60332-3-25
Smoke density	T ≥ 60 %	EN 61034-2
Corrosivity of combustion gases	pH ≥ 4.3, C ≤ 10 µS/mm	EN 50267-2-2
Amount of halogen acid gas	HCl + HBr ≤ 0.5 %	EN 50267-2-1
Content of fluorine	HF ≤ 0.1 %	EN 60684-2, 45.2
Toxicity	ITC ≤ 3	EN 50305, 9.2

Table:

Cable Type AWG	Conductor Construction n x AWGØ	Core diameter Ø mm	Cable diameter Ø mm	Cable sheath colour	Weight nom. kg / 100m	H+S Nr.
2X24	7x32	1.35	8.1 ± 0.5	black	8.8	85030430
2X24	7x32	1.35	8.1 ± 0.5	blue	8.8	85028693