



Product Technical Data Sheet

Doküman No :
R14K.0017_0

Sayfa No : 1 / 2

MİLKAB-MILCAT KABLO SERİSİ

MC7SF34223S DATA-CAT7 S/FTP CABLE

ISO/IEC 11801, IEC 61156-5, EN 50288-4-1

Used as connection cable in telecommunication systems including Offshore Installations and Marine Environment.

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T

IEEE 802.5: 16 MB; ISDN; FDDI; ATM; PoE/PoE+

Construction

Conductor	Stranded tinned copper wire 7x0,22 (AWG23/7)
Insulation	MILFOAM, wire colour according to IEC 60189-2
Lay up	Two insulated conductors twisted together, pairs twisted together
Pair screens	Aluminium/Polyester tape (aluminium side in)
Drain wire	None
Overall screen	Tinned copper braid, coverage 70 %
Sheath	MKM3-SHF1, black colours, according to IEC 60092-360



Imprint

MILKAB - MILCAT MC7SF34223S, SHF1 4x2xAWG23/7 S/FTP, ISO/IEC 11801, IEC 61156-5, EN 50288-4-1, IEC 60092-360, Category A / IEC 60332-3-22 Batch number
ww/yy MMMm
Marked: in white colour ww/yy: weak/year MMM: meter marks

Certificates and Regulations

2015/863/EU	RoHS	Restriction of Hazardous Substances
2014/35/EU	LVD	Low Voltage Directive

General Properties

Field of application	Shipboard and Offshore units
Temperature	-40 °C to +85 °C operating -15 °C to +50 °C installation
Bending radius	8 x D

Flame Properties

Flame retardancy single	IEC/EN 60332-1
Flame retardancy bunched	IEC/EN 60332-3-22 Category A
Halogen free	IEC/EN 60754-2
Smoke density	IEC/EN 61034-2

Low-Frequency and Electrical Properties

Conductor resistance	$\leq 71,9 \Omega/\text{km}$
Conductor resistance unbalance	$\leq 2 \%$
Insulation resistance	$\geq 5000 \text{ M}\Omega\text{xkm}$
Mutual capacitance	43 nF/km
Capacity unbalance	$\leq 1200 \text{ pF/km}$
Operating voltage	72 V DC
Insulation test voltage	1,0 kV DC (core/core) 0,7 V AC (core/screen) for 1 min. 2,5 kV DC (core/core) 1,7 V AC (core/screen) for 2 s.



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High-Frequency and Transmission Properties

Category 7 / Class F	Horizontal Floor Wiring ISO/IEC 11801, IEC 61156-5 / EN 50173-1, EN 50288-4-1
Test frequency	900 MHz
EMC	S/FTP
NVP %	%78
Mean characteristic impedance	100 ± 5 Ω @ 100MHz
Coupling attenuation	Type I
Transfer impedance	Grade 1

Frequency MHz	Attenuation dB/100m	NEXT dB	PS-NEXT dB	ACR-F dB/100m	PS-ACR-F dB/100m	RL dB
1	2,0	78	75	78	75	20
4	3,7	78	75	78	75	23
8	5,2	78	75	76	73	25
10	5,9	78	75	74	71	25
16	7,4	78	75	70	67	25
20	8,3	78	75	68	65	25
25	9,3	78	75	66	63	24
30	10,2	78	75	65	62	24
31,25	10,4	78	75	64	61	24
62,5	14,9	76	73	58	55	22
100	19,0	72	69	54	51	20
155	24,0	70	67	50	47	19
200	27,5	68	65	48	45	18
250	31,0	66	63	46	43	17
300	34,2	65	62	45	42	17
350	37,2	64	61	43	40	17
400	40,0	63	60	42	39	17
500	45,3	62	59	40	37	17
550	47,7	61	58	39	36	17
600	50,1	61	58	38	35	17

Product Number	Dimension	Outer Ø approx. mm	Copper approx. kg/km	Weight approx. kg/km	Sheath colour	Packaging
MC7SF34223S	4P AWG23/7	8,5	34	76	RAL 9005 Black	500