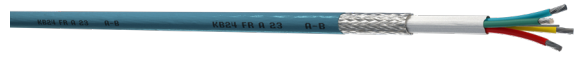


Star quad inflight ABS0972 KB24 (F4704-04)



Cables specification: ABS0972

Cable, electrical, shielded quad, for digital data transmission, +200 °C max.



Cable characteristics



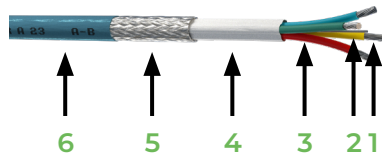
Environmental

- Operating temperature: -65°C to 125°C (ambient temperature + current heating)
- Storage temperature: -65°C to +200°C
- Resistant to Aircraft fluids (oils, hydrocarbons, kerosene, skydrols...), Chemical agents
- Abrasion resistance

Electrical

- Maximum voltage: 600 V AC
- Characteristic Impedance Zc RMS: 100 ± 15 Ω [1-100 MHz] at 20°C
- Velocity of propagation > 0,70 C at 31,25MHz
- Maximum capacity unbalance pair to ground: 330 pF max./100 m (1 pF max./ft)
- Mutual capacitance: 60 pF/m max (18,3 pF/ft max.) at 1 kHz

Cable design



1. Stranded conductor: Silver plated copper
2. Fluoropolymer filler
3. Insulation: Fluoropolymer
4. PTFE 1/2 sintered tape
5. Silver plated copper Braid
6. Fluoropolymer

Identification

- Core color
- | | |
|-----------------------|-------------------------|
| Pair n° 1: | Pair n° 2: |
| Core 1-R: Red (Tx +) | Core 2-Y: Yellow (Rx +) |
| Core 1-B: Blue (Tx -) | Core 2-G: Green (Rx -) |
- Cable color: Light blue, UV laser markable

Marking

KB 24 FR A xx A-B

1 2 3 4

1. Short Designation
2. Gauge
3. Country of Origin
4. Manufacturer (A: Draka)
- xx: Manufacturing year
- A-B: extremity code

Specifications

Cable specification

ABS0972 Cable, electrical, quad, for digital data transmission +200°C max. - Product standard

Technical Specification

EN3375-001

Compliant to ABD0031

Flammability, Smoke and Toxicity requirements and 14 CFR FAR25-1713

Transmission parameters

Frequency In MHz	Attenuation at 25°C Maximal value		Near end crosstalk (NEXT) Minimal value in dB/100m
	in dB/100m	dB/100ft	
1	2.1	0.65	68
4	4.3	1.31	59
10	6.6	2.01	53
16	8.7	2.65	50
20	9.7	2.96	48
31.25	12.5	3.8	46
62.5	18.0	5.5	41
100	25	7.6	38

SRL (Min.):

10 < F < 20 MHz = 23 dB

20 < F < 100 MHz = 25 - 10 log(F/20) in dB

Transfer Impedance (Max.):

0.01MHz to 5 MHz = $2.0 \cdot 10^{-2} \Omega/m$	(0.61 $\Omega/100ft$)
at 10 MHz = $3.0 \cdot 10^{-2} \Omega/m$	(0.92 $\Omega/100ft$)
at 20 MHz = $4.5 \cdot 10^{-2} \Omega/m$	(1.37 $\Omega/100ft$)
at 50 MHz = $10 \cdot 10^{-2} \Omega/m$	(3.05 $\Omega/100ft$)
at 100 MHz = $40 \cdot 10^{-2} \Omega/m$	(12.2 $\Omega/100ft$)

Dimensional

Conductor diameter				Loop resistance max. at 20°C		Insulation diameter				Braid strand diameter		Cable outer diameter		Weight max.	
min.		max.				min.		max.		nominal		max.			
mm	inch	mm	inch	Ω/km	$\Omega/1000ft$	mm	inch	mm	inch	mm	inch	mm	inch	kg/km	Lbs/1000ft
0.598	0.0235	0.656	0.0258	192	58,5	1.44	0.0567	1.54	0.0606	0.1	0.0039	5	0.1968	45	30.2

Bending radius

Permissible bend radius	AWG 24
Static (installed) use	24 mm minimum
Dynamic use	47 mm minimum



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