

Flame resistant airframe wires according to NSA935-131 DG... AIR 1715 series



CONSTRUCTION

- 1 Conductor: - Section 0,21 mm²: nickel coated copper alloy
- Section $\geq 0,38$ mm²: nickel coated annealed copper
- Nickel thickness $\geq 1,27$ μm
- 2 Insulation: Combination of PTFE impregnated fiberglass and PTFE Teflon Tapes

CHARACTERISTICS

- Permanent temperature: - 90°C + 260°C (ambient temperature + current heating)
- Maximum operating voltage: 600 V ac
- Positively non-flammable
- High resistance to chemicals agents
- Current carrying capacity: - defined by AIR 7822 specification for section > 0.38 mm²
- The values given in the table below for single cable in free air
- These cables for peak temperature working conditions up to 300°C are recommended for use in vital circuits capable of resisting a short duration fire outbreak (MIL-W-7139 B test prescribes a flame temperature of 870°C to 1040°C, from 15 seconds to 2 mm, depending on cable size)

REFERENCES AND APPLICABLE DOCUMENTS

- AIR 4524 standard of september 30. 1965 (250/280 category)
- BNAé : NF 52-125 A specification (high temperature cable)
- Flammability U.S. : MIL-W 7139 B specification - classe 2 (nickel conductor)
- Wires approved and authorized for use by the STPA (letter STAé/EQ N° 32136 dated 2/19/1969)
- They are covered by AIR 6.418.120 equipment sheet.





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Draka Fileca Part number	Conductor		AWG gauge	Max. O.D. (mm)	Rating (amp.)	Nominal weight (g/m)	Conductor resistance maxi 20°C (Ω/km)
	Stranding nickel plated copper (n x mm)	Area (mm ²)					
F AIR 1715-5-AB	73 x 0,30	5,15	10	4,50	55	60,30	3,98
F AIR 1715-9-AB	127 x 0,30	8,98	8	5,60	75	100	2,30
F AIR 1715-14-AB	27 x 7 x 0,30	13,40	6	6,90	100	145	1,58
F AIR 1715-22-AB	37 x 12 x 0,25	21,80	4	8,50	135	239	0,91
F AIR 1715-34-AB	37 x 19 x 0,25	34,50	2	10,60	181	360	0,57
F AIR 1715-42-AB	37 x 23 x 0,25	41,80	1	11,50	211	430	0,47
F AIR 1715-53-AB	37 x 29 x 0,25	52,70	0	12,80	245	550	0,40
F AIR 1715-67-AB	37 x 37 x 0,25	67,20	00	14,60	283	690	0,32
F AIR 1715-85-AB	48 x 36 x 0,25	84,80	000	16,80	328	890	0,25
F AIR 1715-107-AB	61 x 36 x 0,25	107,80	0000	18,40	380	1100	0,20

- Other possible sections (not according to NSA935131DG)
- Using for AIR715 series

Draka Fileca Part number	Conductor		AWG gauge	Max. O.D. (mm)	Rating (amp.)	Nominal weight (g/m)	Conductor resistance maxi 20°C (Ω/km)
	Stranding nickel plated copper (n x mm)	Area (mm ²)					
F AIR 1715-0,2	19 x 0,12	0,21	24	1,70	4	5,20	107
F AIR 1715-0,4	12 x 0,20	0,38	22	2,10	7	8,50	54,5
F AIR 1715-0,6	19 x 0,20	0,60	20	2,10	11	10	34,4
F AIR 1715-1	19 x 0,25	0,93	18	2,40	16	13	21,90
F AIR 1715-1,3	19 x 0,30	1,34	16	2,90	22	19	15,30
F AIR 1715-2	27 x 0,30	1,91	14	3,10	32	25	10,76
F AIR 1715-3	45 x 0,30	3,18	12	3,70	41	39,5	6,45

All dimensions are in mm and areas in mm²

REMARK

- AWG 24: copper alloy
 - Breaking strength > 6,9 daN
 - Stretching strength > 6%



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