

ADA / ADB / ADC / ADD Series

Wires specification: PR EN4681-004



General purpose high-performance hook-up wires.
Designed for aerospace and other applications
requiring excellent thermal stability and light weight.



Cable characteristics



-55 +180°C



Excellent



FAR25_
ABD0031

Environmental

- Operating temperature: -55°C to 180°C (ambient temperature + current heating)
- Resistant to Aircraft fluids (oils, hydrocarbons, kerosene, skydrols...), Chemical agents
- Arc Tracking resistant

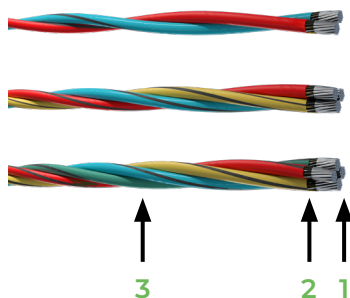
Electrical

Maximum operating voltage:

- 115V (phase to neutral) or 200V (phase to phase) AC Electrical systems of aircraft
- 230/400V AC in pressurized zones with specific installation rules to take account of possible short circuit effects.

Operating frequency: up to 2000Hz

Cable design



1. Conductor: Nickel plated Copper-cladded Aluminium
2. Reinforced Polyimide tape
3. PTFE tape

Identification

- 1 Core: Grey
- 2 Cores: Red, Blue
- 3 Cores: Red, Blue, Yellow
- 4 Cores: Red, Blue, Yellow, Green
- Marking color: Black

Marking (example)

ADA yy FR A zz
1 2 3 4 5

e.g. ADA 24 FR A 23

1. Short Designation
2. Gauge
3. Country of Origin
4. Manufacturer (A: Draka)
5. Manufacturing Year

Specifications

Conductors

- For AWG 24 to AWG 4 according to PR EN 4651 (analogy with ABS0957)

Wires Specifications

PR EN4681-004 (analogy with ABS1354)

Technical Specification

PR EN4681-001 (analogy with ABS0958)

Compliant to ABD0031

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

Dimensional

For single wires (ADA), refer to PR EN4681-003 (ABS0949) data sheet (AD)

For ADB

Short designation	Number of cores	Nominal cross section	AWG*	Linear resistance max. at 20°C		Outer diameter max.		Weight max.	
		mm ²		Ω/km	Ω/1000ft	mm	inch	kg/km	Lbs/1000ft
ADB24	2	0.25	24	149.40	45.537	1.92	0.0756	3.60	2.419
ADB22	2	0.40	22	92.90	28.316	2.20	0.0866	5.15	3.461
ADB20	2	0.60	20	51.10	15.575	2.68	0.1055	7.52	5.053
ADB18	2	1	18	34.20	10.424	3.22	0.1268	11.23	7.546
ADB16	2	1.2	16	23.70	7.224	3.84	0.1512	15.96	10.725
ADB14	2	2	14	16.00	4.877	4.48	0.1764	22.53	14.938
ADB12	2	3	12	11.20	3.414	5.40	0.2126	31.90	21.436
ADB10	2	5	10	6.00	1.829	6.66	0.2622	49.48	33.249
ADB08	2	9	8	3.90	1.189	8.80	0.3465	80.34	53.986
ADB06	2	14	6	2.40	0.731	11.40	0.4488	131.22	88.176
ADB04	2	22	4	1.55	0.472	14.80	0.5827	198.38	133.305

For ADC

ADC24	3	0.25	24	149.40	45.537	2.06	0.0811	5.41	3.635
ADC22	3	0.40	22	92.90	28.316	2.37	0.0933	7.72	5.188
ADC20	3	0.60	20	51.10	15.575	2.88	0.1134	11.28	7.580
ADC18	3	1	18	34.20	10.424	3.46	0.1362	16.84	11.316
ADC16	3	1.2	16	23.70	7.224	4.13	0.1626	23.95	16.094
ADC14	3	2	14	16.00	4.877	4.82	0.1898	33.80	22.713
ADC12	3	3	12	11.20	3.414	5.81	0.2287	47.90	32.187
ADC10	3	5	10	6.00	1.829	7.16	0.2819	74.22	49.874
ADC08	3	9	8	3.90	1.189	9.46	0.3724	120.51	80.979
ADC06	3	14	6	2.40	0.731	12.26	0.4827	196.83	132.264
ADC04	3	22	4	1.55	0.472	15.91	0.6264	297.57	199.958

*Closest American Wire Gauge

For ADD

Short designation	Number of cores	Nominal cross section	AWG*	Linear resistance max. at 20°C		Outer diameter max.		Weight max.	
		mm ²		Ω/km	Ω/1000ft	mm	inch	kg/km	Lbs/1000ft
ADD24	4	0.25	24	149.40	45.537	2.31	0.0909	7.21	4.845
ADD22	4	0.40	22	92.90	28.316	2.65	0.1043	10.30	6.921
ADD20	4	0.60	20	51.10	15.575	3.23	0.1272	15.03	10.100
ADD18	4	1	18	34.20	10.424	3.88	0.1528	22.45	15.086
ADD16	4	1.2	16	23.70	7.224	4.63	0.1823	31.93	21.456
ADD14	4	2	14	16.00	4.877	5.40	0.2126	45.07	30.286
ADD12	4	3	12	11.20	3.414	6.50	0.2559	63.86	42.912
ADD10	4	5	10	6.00	1.829	8.02	0.3157	98.96	66.498
ADD08	4	9	8	3.90	1.189	10.60	0.4173	160.68	107.972
ADD06	4	14	6	2.40	0.731	13.74	0.5409	262.44	176.352
ADD04	4	22	4	1.55	0.472	17.83	0.7020	396.76	266.610

*Closest American Wire Gauge

Bending radius

Permissible bend radius (recommendation following EN3197)	AWG	
	24 to 10	8 to 4
Static use	6xØ	8xØ
Dynamic use	12xØ	16xØ



Prysmian câbles et systèmes France
Head Office

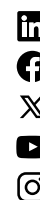
23 avenue Aristide Briand - BP 801 - PARON - 89108 SENS Cedex / France
Tel : +33 (0)4 72 46 73 99 - infocables.fr@prysmian.com

Draka Fileca SAS

D 1001 - 60730 Sainte-Geneviève / France
fileca-office@prysmian.com



www.prysmian.com



© PRYSMIAN 2024

All Rights Reserved. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian. The information is believed correct at the time of issue. Prysmian reserves the right to amend this specification without notice. This specification is not contractually valid unless specifically authorised by Prysmian.