

ACS Conductor (Aluminum-Clad Steel Stranded Conductor, A5

Bare overhead conductor for standard-based line selection

ACS Conductor (Aluminum-Clad Steel Stranded Conductor, ASTM B416) is prepared for preliminary product selection and quotation review. This product is used for overhead line routes where conductor material, stranding, rated strength and DC resistance must be reviewed against the selected project standard. Final selection should consider span length, mechanical loading, route environment and local utility requirements.



VOLTAGE

Not voltage-rated; selected by conductor standard and line design

CONDUCTOR

Steel or reinforced conductor route, according to standard

TYPICAL USE

Overhead transmission and distribution lines

STANDARDS

ASTM B416

DATA SCOPE

2 technical table(s) included for preliminary selection

SELECTION NOTE

Confirm standard route, conductor size, stranding, strength and line design.

For quotation review, provide cable type, standard, size, quantity and project destination.

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Application & Selection Summary

Typical applications

- Overhead transmission and distribution lines
- utility feeder routes
- substation or busbar connections
- replacement projects requiring standard-based bare conductor selection.

Selection logic

- Review the required standard route first.
- Compare conductor area, stranding, rated strength, DC resistance and overall diameter.
- For higher tension or long spans, compare with reinforced or alloy conductor alternatives.

Construction Overview

Item	Website-ready content
Product route	Concentric-lay stranded bare conductor. Material and reinforcement depend on the selected product type and standard route.
Voltage	Reviewed according to selected product standard
Conductor	Steel or reinforced conductor route, according to standard
Standards	ASTM B416
Confirmation	Final structure, dimensions and packing should follow selected standard, quotation review and order specification.

Readable Data Index

Data route	Size / rating range	Construction	Diameter / OD	Resistance / weight / rating
ASTM B416 ACS - 3 and 7-Wire Configurations	3 x 9 AWG - 7 x 5 AWG	3 x 9 AWG - 7 x 5 AWG	6.24 - 13.84	134 - 778
ASTM B416 ACS - 19 and 37-Wire Configurations	19 x 10 AWG - 37 x 7 AWG	19 x 10 AWG - 37 x 7 AWG	12.95 - 25.60	664 - 2590

Data boundary: these tables support website launch, quotation review and preliminary product selection. For project execution, final dimensions, electrical performance, packing and compliance documents should be confirmed against the selected project standard and order specification.

ASTM B416 ACS - 3 and 7-Wire Configurations

Reference table for preliminary selection and quotation review.

Stranding (No. x AWG)	Overall Dia. (mm)	Weight (kg/km)	Rated Strength (kN)	DC Res. @20°C (Ω /km)
ASTM B416 ACS - 3 and 7-Wire Configurations				
3 x 9 AWG	6.24	134	26.5	4.31
3 x 8 AWG	7.02	169	32.8	3.42
3 x 7 AWG	7.88	213	40.5	2.71
3 x 6 AWG	8.85	269	49.9	2.15
3 x 5 AWG	9.94	339	61.6	1.70
7 x 10 AWG	7.77	244	46.5	2.33
7 x 9 AWG	8.73	314	58.7	1.84
7 x 8 AWG	9.78	388	70.8	1.46
7 x 7 AWG	10.97	491	87.6	1.16
7 x 6 AWG	12.34	618	108.0	0.918
7 x 5 AWG	13.84	778	133.4	0.728

ASTM B416 ACS - 19 and 37-Wire Configurations

Reference table for preliminary selection and quotation review.

Stranding (No. x AWG)	Overall Dia. (mm)	Weight (kg/km)	Rated Strength (kN)	DC Res. @20°C (Ω /km)
ASTM B416 ACS - 19 and 37-Wire Configurations				
19 x 10 AWG	12.95	664	119.5	0.859
19 x 9 AWG	14.55	851	150.8	0.680
19 x 8 AWG	16.31	1056	182.4	0.539
19 x 7 AWG	18.29	1330	225.5	0.428
19 x 6 AWG	20.57	1675	278.4	0.339
19 x 5 AWG	23.06	2110	343.8	0.269
37 x 10 AWG	18.14	1290	222.0	0.441
37 x 9 AWG	20.37	1660	280.0	0.349
37 x 8 AWG	22.83	2050	338.5	0.277
37 x 7 AWG	25.60	2590	418.5	0.220