



SPECIFICATIONS AND STANDARDS

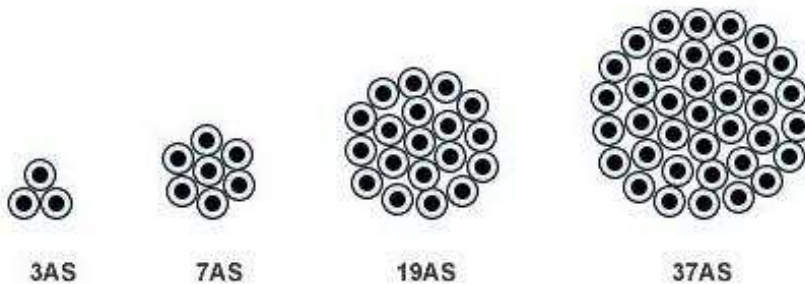
ACS wire meets or exceeds the ASTM B415

ACS stranded conductor meets or exceeds ASTM B-416



CONSTRUCTION

A high strength steel wire with a 25% thick cross-section ratio of aluminum cladding creating a high electrical conductivity, highly corrosive resistant and a thermal stability for high temperature operation and all with a lighter weight.



APPLICATIONS

ACS wire and ACS stranded Conductor is used as a guy or “ messenger” wire, and static wire in utility classifications, for overhead use.

This catalogue shows the most common sizes of Wire but other sizes, to any other standards or customer specification can also be supplied.

ACS Wire manufactured to ASTM-B415

Nominal diameter		Cross-section mm ²	Min. tensile strength MPa	Calculated breaking load kN	Min. coating thickness mm	Max. DC resistance at 20°C Ω/km	Approx. weight kg/km
mm	AWG						
2.052	12	3.307	1340	4.5	0.103	25.64	21.80
2.304	11	4.169	1340	5.6	0.115	20.34	27.49
2.589	10	5.260	1340	7.1	0.130	16.12	34.66
2.904	9	6.633	1340	8.9	0.145	12.78	43.65
3.264	8	8.367	1340	11.2	0.163	10.14	55.14
3.477	7	9.495	1310	12.4	0.174	8.93	62.57
3.665	7	10.55	1280	13.5	0.183	8.04	69.48
3.934	6	12.16	1240	15.1	0.197	6.93	80.13
4.115	6	13.30	1210	16.0	0.206	6.38	87.62
4.392	5	15.15	1170	17.7	0.220	5.60	99.84
4.620	5	16.76	1140	19.1	0.231	5.06	110.50
4.775	4	17.91	1100	19.7	0.239	4.73	118.0
5.189	4	21.15	1070	22.6	0.259	4.01	139.34

ACS Stranded Conductors manufactured to ASTM-B416

No./size of strands	Cross- section mm ²	No. of wires	Diameter		Approx. weight kg/km	Rated strength kN	Max. DC resistance at 20°C Ω/km
			Wire mm	Conductor mm			
3 No. 5	50.32	3	4.62	9.96	334.1	54.42	1.6990
3 No. 6	39.80	3	4.11	8.87	265.0	45.74	2.1420
3 No. 7	31.65	3	3.67	7.90	210.1	38.36	2.7010
3 No. 8	25.10	3	3.26	7.03	166.7	32.06	3.4060
3 No. 9	19.90	3	2.91	6.26	132.2	25.43	4.2940
3 No. 10	15.78	3	2.59	5.58	104.8	20.16	5.4150
7 No. 5	117.40	7	4.62	13.90	781.1	120.27	0.7426
7 No. 6	93.10	7	4.11	12.40	619.5	101.14	0.9198
7 No. 7	73.87	7	3.67	11.00	491.1	84.81	1.1600
7 No. 8	58.56	7	3.26	9.78	389.6	70.88	1.4630
7 No. 9	46.44	7	2.91	8.71	308.9	56.20	1.8440
7 No. 10	36.83	7	2.59	7.76	245.1	44.58	2.3250
7 No. 11	29.21	7	2.30	6.91	194.4	35.35	2.9320
7 No. 12	23.16	7	2.05	6.16	154.2	28.03	3.6970
19 No. 5	318.70	19	4.62	23.10	2129.0	326.39	0.2698



ACS

Aluminum-Clad Steel Wire / ACS Stranded Conductor. Bare

19 No. 6	252.70	19	4.11	20.60	1688.0	274.55	0.3402
19 No. 7	200.40	19	3.67	18.30	1339.0	230.18	0.4290
19 No. 8	158.90	19	3.26	16.30	1062.0	192.41	0.5409
19 No. 9	126.10	19	2.91	14.50	842.0	152.58	0.6821
19 No. 10	99.96	19	2.59	12.90	667.7	121.00	0.8601
37 No. 5	620.60	37	4.62	32.30	4170.0	635.43	0.1394
37 No. 6	492.20	37	4.11	28.80	3307.0	534.85	0.1757
37 No. 7	390.30	37	3.67	25.70	2623.0	448.09	0.2216
37 No. 8	309.50	37	3.26	22.90	2080.0	374.67	0.2794
37 No. 9	245.50	37	2.91	20.30	1649.0	279.11	0.3523
37 No. 10	194.70	37	2.59	17.90	1308.0	235.61	0.4443