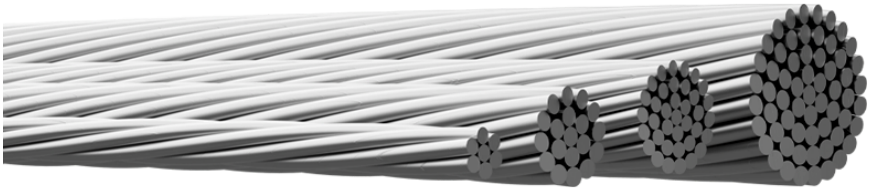


AAAC (AL59)

All Aluminium Alloy Conductor according to SS 424 08 14 (AAAC) is an alloyed aluminium conductor that combines good electrical properties with enhanced mechanical strength. Although alloying slightly reduces conductivity compared to pure aluminium, it significantly increases tensile strength, making the conductor more resilient in demanding applications.

AAAC is the conductor type most comparable to pure aluminium AAC, but it offers a better balance between electrical performance and mechanical durability. This makes it suitable for a wide range of network applications where both conductivity and strength are essential.

For improved corrosion resistance and extended service life, the conductor can be supplied with grease filling during the stranding process.

APPLICATION

AL59 (AAAC) is an alloyed aluminium conductor that provides good electrical performance and higher mechanical strength than pure aluminium. AL59 is the closest alternative to AL1 (AAC) but offers a better balance between conductivity and mechanical robustness.

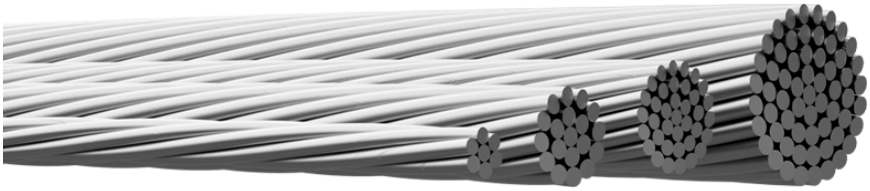
The alloy increases tensile strength and improves durability in demanding conditions. AL59 is suitable for many network applications and can be supplied greasefilled for better corrosion protection.

STANDARDS

Conductor
SS EN 50182

Amo Kraftkabel
Kabelvägen 5 • Alstermo • 36443 • Sweden

+46 481 50890
rfq.kraft@amokabel.com



Name	E-Number	Cross section [mm²]	Strand diameter [mm]	Conductor diameter [mm]	Total weight [kg/km]	Maximum breaking load [kN]	DC resistance [Ω/km]
62-AL59	0620290	62.44	3.37	10.1	170	15.6	0.47
99-AL59	0620291	99.31	4.25	12.8	271	22.8	0.296
159-AL59	0620292	158.6	3.26	16.3	436	39.7	0.186
241-AL59	0620293	241.2	4.02	20.1	663	55.5	0.123
329-AL59	0620294	330	3.37	23.6	910	82.5	0.0899
454-AL59	0620295	454.5	3.08	27.7	1260	113	0.654
593-AL59	0620296	593.6	3.52	31.7	1640	143	0.501
774-AL59	0620297	774.2	4.02	36.2	2140	178	0.0384
910-AL59	0620298	910.7	4.36	39.2	2520	209	0.0326

Amo Kraftkabel
Kabelvägen 5 • Alstermo • 36443 • Sweden

+46 481 50890
rfq.kraft@amokabel.com