

ALT/SAE

Copper Conductor

PRYSMIAN® | PHELPS DODGE®

GENERAL INFORMATION

The ALT/SAE is an electrical copper conductor twisted Class C cable, insulated with thermoplastic polyvinyl chloride (PVC) with a thermoplastic nylon outer jacket.

FEATURES

- Designed to operate at 90°C maximum temperature in dry, humid and at 75°C in wet locations.
- The cable is rated to operate at 60 V D.C. (25 V A.C.) maximum voltage.
- PVC thermoplastic insulation is lead-free, making ALT/SAE more environmentally friendly.

CERTIFICATIONS AND DESIGN STANDARDS

Standards of design: ASTM B3, ASTM B174 and SAE J 1128

CABLE DESIGN

Conductor material	Copper
Core insulation material	Polyvinyl chloride (PVC)

ELECTRICAL & THERMAL PARAMETERS

Nominal voltage U [V]	60
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INSTALLATION DETAILS

Application	Automotive
Outdoor installation	No
Underground installation	No
Suitable as installation cable	Yes

PHYSICAL & CHEMICAL PROPERTIES

Flame retardant	No
Oil resistant	No
Moisture resistance	Yes

SPECIFIC APPLICATIONS

- Due to the high-performance PVC insulation is ideal to operate in low voltage automotive systems, lights, control and signaling in automotive applications.

LEGEND ON THE CABLE

For all gauges, the legend to be printed is:

PRYSMIAN (R) PHELPS DODGE (R) ALT/SAE (GAUGE) AWG ((GAUGE) mm²) 60V DC (25V AC)

PRODUCT DIMENSIONS & CHARACTERISTICS

AWG size	Nominal cross section conductor [mm ²]	Nominal thickness insulation [mm]	Diameter conductor [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]
18	0.82	0.38	1.94	9.76	22.4
16	1.31	0.38	2.26	14.5	14.1
14	2.08	0.38	2.64	21.78	8.88
12	3.31	0.46	3.26	34.34	5.58
10	5.26	0.46	3.85	52.83	3.51

The conductor operating amperage is defined by the installation conditions and operating temperatures identified in the NEC. See TABLE 400.5(A)(1) NFPA 70 latest version. Note: The values given may vary according to the manufacturing tolerances