

Thin-Wall 150°C Automotive Engine Harness Wire ISO 6722 Class D

Product Features

- T4 Rated (3000 hours @ 150°C)
- Unique dual-wall, bonded insulation
- Mechanically tough
- Excellent resistance at high temperature to engine fluids
- Designed to be compatible with all harness shop processes
- Proven high level of compatibility with materials used in the harnessing process
- 50 Volts. Thin-wall
- Available in twisted pairs and triples

ACW or Automotive Composite Wall wire was developed to be the most cost effective wire in the 150°C D class. It was designed to meet both the requirements of the OEMs and the harness shops. The product is dual-wall in construction using a modified polyalkene inner layer and a high performance fluoropolymer outer.

This combination of materials offers outstanding performance at optimum cost. What differentiates ACW from other dual-wall technologies is the bonding that joins the two layers together.

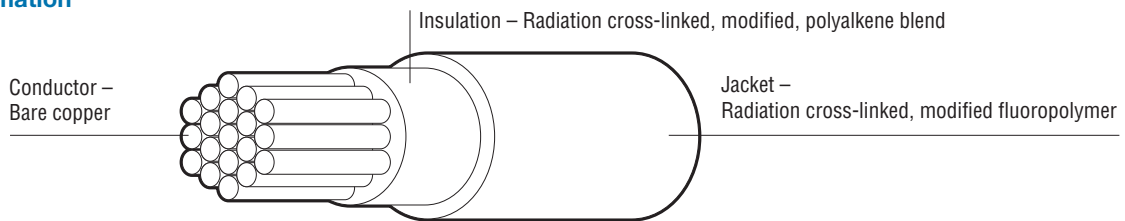
The unique bonding technology ensures that the insulation behaves as a single layered product.

The ACW bonding increases the resistance to mechanical damage during harness manufacture that has been the down side to conventional dual-wall technologies. Taking advantage of the inherent flexibility of the polyalkene inner layer ACW offers excellent handleability.

With conventional dual-wall technologies another risk exists. If the outer layer is damaged it is feasible that fluids, like windscreen wiper solution, can wick down the interface of the insulation to the connector resulting in system interference or failure.

The bonding prevents this happening with ACW. ACW offers a significant cost saving versus traditional 150°C wires like ETFE, superior performance versus cross-linked polyethylene and vastly superior hydrolytic stability versus polyesters. ACW is approved and used by many OEMs and is available in barrels and Maschinenfabrik Niehoff GmbH & Co. KG packaging formats.

Ordering Information



Part Number	Conductor					Finished Wire				
	CSA (mm ²)	Stranding Numbers/ Diameter (mm)	Diameter Maximum (mm)	Minimum Overall Insulation Thickness (mm)	Maximum Resistance @ 20°C (ohms/km)	Diameter			Approximate Weight (kg/km)	Copper Weight for Information (kg/km)
						Lower Spec. Limit (mm)	Target (mm)	Upper Spec. Limit (mm)		
ACW0219-0.35-*	0.35	7/0.25	0.90	0.20	52.00	1.20	1.30	1.40	4.50	3.20
ACW0219-0.50-*	0.50	19/0.18	1.00	0.22	37.10	1.40	1.50	1.60	6.00	4.40
ACW0219-0.75-*	0.75	19/0.23	1.20	0.24	24.70	1.70	1.80	1.90	9.40	6.70
ACW0219-1.00-*	1.00	19/0.25	1.35	0.24	18.50	1.90	2.00	2.10	11.00	8.80
ACW0219-1.50-*	1.50	19/0.31	1.70	0.24	12.70	2.20	2.30	2.40	16.00	13.00
ACW0219-2.50-*	2.50	19/0.42	2.20	0.28	7.60	2.70	2.85	3.00	25.00	21.50
ACW0219-4.0-*	4.00	56/0.30	2.75	0.32	4.70	3.40	3.60	3.70	40.00	35.80
ACW0219-6.0-*	6.00	84/0.30	3.30	0.32	3.10	4.00	4.20	4.30	61.00	53.90
ACW0219-10.0-*	10.00	80/0.40	4.50	0.48	1.82	5.50	5.80	6.00	104.00	92.70

Standard Colors	Color	Code	Color	Code	Color	Code
	Black	0	Orange	3	Violet	7
	Brown	1	Yellow	4	Gray	8
	Red	2	Green	5	White	9
	Pink	2L	Blue	6		

Ordering Description

The '*' in the part number shall be replaced by a standard numerical color code designator as per above. Additional number after base color indicates stripe. e.g. ACW0219-0.50-96 is a white base color with blue stripe. Where stripes are required the wire carries two co-extruded longitudinal stripes of the same color. The individual stripe width is a minimum of 10% of the wire circumference with an overall stripe coverage of 30% maximum.

ACW0219 is available in twisted pairs and triples.
For e.g. a standard part number will be ACW0229-0.50-0/9- mm² black and white pair.