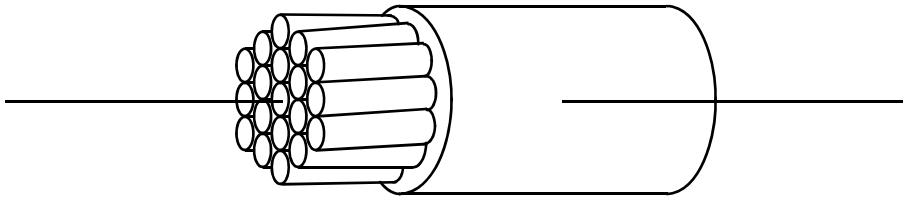
Specification Control Drawing

WIRE, POLYESTER INSULATED, AUTOMOTIVE, 50 VOLT, 150°C

The complete requirements for procuring the wire described herein shall consist of this document and the issue in effect of the referenced specifications. This document takes precedence over documents referenced herein.

Conductor -
Bare Copper



Insulation -
Extruded Modified Polyester

Part Description	Conductor Cross Sectional Area (mm²)	Conductor Stranding No/Dia (mm)	Conductor Diameter (mm)		FINISHED WIRE					
					Maximum Resistance @20 °C (ohms/km)	Diameter (mm)			Maximum Weight (kg/km)	Copper Weight Information Only (g/m)
			Min	Max		Lower Spec Limit	Target	Upper Spec Limit		
62E0119-0.35-*	0.35	7/0.25	0.73	0.76	53.4	1.21	1.24	1.26	4.43	3.25
62E0119-0.50-*	0.50	19/0.18	0.82	0.91	40.1	1.36	1.38	1.41	6.21	4.65
62E0119-0.75-*	0.75	19/0.23	1.05	1.10	24.7	1.53	1.55	1.58	8.45	6.9
62E0119-1.00-*	1.00	19/0.26	1.17	1.26	19.9	1.78	1.81	1.83	11.1	8.9
62E0119-1.25-*	1.25	19/0.29	1.32	1.42	15.3	1.83	1.86	1.89	13.2	10.9
62E0119-1.50-*	1.50	19/0.32	1.46	1.51	13.7	2.05	2.07	2.10	15.8	13.3
62E0119-2.50-*	2.50	19/0.41	1.87	1.94	8.2	2.47	2.50	2.52	25.2	22.0

COLOUR CODE: The '*' in the part number shall be replaced by a standard colour code designator in accordance with Mil Std 681.
e.g. 62E0119-0.50-9 will have White insulation.

APPROVAL: Electronic sign off - no signatures will appear.

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PERFORMANCE REQUIREMENTS TO THE ISSUE IN EFFECT OF THE SPECIFICATION DETAILED BELOW

WSK M1L126-A1 Test Method	TEST FREQUENCY (TO BS2G 230 CLAUSE 6.1*)	DEFINITION	REQUIREMENTS
3.2	IL	Wire Diameter	See Contructional details.
Conductor			
3.3.1	V	Construction	See Constructional details.
3.3.4	V	Outer Diameter	See Constructional details.
3.3.7	V	Elongation	15% Min.
3.3.8	QA	Resistance	See Constructional details.
Insulation			
3.4.1	IL	Finish	Free from flaws.
3.4.2	IL	Colour	To Mil-Std-681.
3.4.3	IL	Outer Diameter	See Constructional details.
3.4.3	IL	Wall Thickness	0.15 mm Min.
3.4.3	IL	Concentricity	70% Min.
-	IL	Tensile Strength	30 N/ mm² Min.
-	IL	Elongation	250% Min.
Finished Wire			
3.6	100%	Spark Test	6 kV Impulse, no flaws.
3.7	QA	Duration Test Voltage & Breakdown Voltage	3 kV @ 30 minutes then 5 kV Min. breakdown. No perforations.
3.8	QA	Insulation Resistance (Volume Resistivity)	2 Megohms/ metre Min.
3.9	QA	High Temperature Compression	150°C @ 4 Hours, 50% Max.
-	QA	Heat Ageing (i)	150°C @ 3000 Hours Min. to ASTM D3032 section 14.
3.11	PQ	Heat Ageing (ii)	180°C @ 48 Hours, tensile strength 11.0 MPa Min. elongation 125% Min.
3.12	QA	Shrinkage	200 mm sample, 4% Max.
3.13	QA	Flame Propagation	Specimen 0.5 m. burn rate 100 mm/ minute Max. extinguishing time 30 secs Max.
3.14	PQ	Low Temperature Flexibility	No splits or cracks, 5kV Min. breakdown voltage (-40°C).
3.15	QA	Retention of core (strip force)	Size 1.00 mm and below 5.0 N Min. - 40 N Max. Size above 1.00 mm 10 N Min - 80 N Max.
3.16	QA	Oil Resistance	±4% Max.Thickness change, 5kV Min. breakdown voltage.
3.17	QA	Fuel Resistance	±8% Max. thickness change, 5kV Min. breakdown voltage.
3.18	QA	Abrasion Resistance	As per BB101-20 Ford Spec. table 1, with the exceptions of: • 62E0119-1.50-* which shall be > 500 cycles Min. • 62E0119-2.50-* which shall be > 700 cycles Min.

Please note that individual test frequencies may be modified through the use of statistically derived data

* The test frequency V indicates a vendor verified parameter

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