

AS22759/87

Wire specification: SAE AS22759/87

Normal weight, High performance hook-up wires

Nickel coated copper conductor. Composite insulation 260°C



General purpose high-performance hook-up wires.
Designed for aerospace and other applications
requiring excellent thermal stability.



Cable characteristics



-65 +260°C



Excellent



FAR25

Environmental

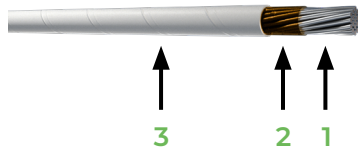
- Operating temperature: -65°C to 260°C (ambient temperature + current heating)
- Resistant to Aircraft fluids (oils, hydrocarbons, kerosene...), Chemical agents
- Wet and Dry Arc Tracking resistant
- Hydrolysis resistant

Electrical

Maximum operating voltage: 600Vrms**

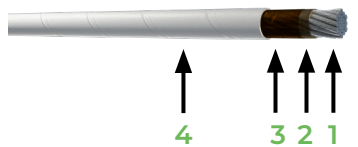
Cable design

AWG 26 to AWG 10



1. Conductor: Nickel coated copper (Type NCC)
2. FP/Polyimide/FP tape
3. PTFE tape, UV laser markable

AWG 8 to AWG 000



1. Conductor: Nickel coated copper (Type NCC)
2. Skived PTFE tape
3. FP/Polyimide/FP tape
4. PTFE tape, UV laser markable

Identification

- Standard version are based on PTFE tape that can be marked by UV laser
- Symbol code in NEMA WC 27500: WK
- For a Smooth Surface construction, it is recommended to use the AS22759/187 specification.

Marking

M22759/87-yy F1868 REV x

1 2 3 4

e.g. M22759/87-24 F1868 REV C

1. Reference
2. Gauge
3. Manufacturer's identification
4. Revision of specification

Specifications

Conductors

AS29606

Wires Specifications

AS22759/87

Technical Specification

AS22759

Dimensional

Part number	AWG	Conductor construction	Conductor diameter		Linear resistance max. at 20°C	Outer diameter		Weight max.
			min.	max.		min.	max.	Lbs/1000ft kg/km
		nb x AWG nb x mm	inch mm	inch mm	Ω/1000ft Ω/km	inch mm	inch mm	
M22759/87-26-*	26	19 x 38 19 x 0.102	0.0175 0.44	0.0204 0.52	42.2 138.45	0.033 0.84	0.037 0.94	1.55 2.31
M22759/87-24-*	24	19 x 36 19 x 0.127	0.0225 0.57	0.0244 0.62	25.9 85	0.038 0.97	0.042 1.07	2.20 3.27
M22759/87-22-*	22	19 x 34 19 x 0.16	0.0285 0.72	0.0314 0.80	16.0 52.5	0.043 1.09	0.047 1.19	3.10 4.61
M22759/87-20-*	20	19 x 32 19 x 0.203	0.0365 0.93	0.0394 1.00	9.77 32.05	0.051 1.30	0.055 1.40	4.70 6.92
M22759/87-18-*	18	19 x 30 19 x 0.254	0.0455 1.16	0.0494 1.25	6.10 20	0.061 1.55	0.065 1.65	6.85 10.19
M22759/87-16-*	16	19 x 29 19 x 0.287	0.0515 1.31	0.0554 1.41	4.76 15.62	0.068 1.73	0.073 1.85	8.70 12.95
M22759/87-14-*	14	19 x 27 19 x 0.361	0.0645 1.64	0.0694 1.76	3.00 9.84	0.081 2.06	0.086 2.18	13.3 19.79
M22759/87-12-*	12	37 x 28 37 x 0.32	0.0835 2.12	0.0894 2.27	1.98 6.50	0.100 2.54	0.105 2.67	20.2 30.06
M22759/87-10-*	10	37 x 26 37 x 0.404	0.106 2.69	0.112 2.84	1.24 4.07	0.122 3.10	0.127 3.23	31.6 47.03
M22759/87-8-*	8	133 x 29 133 x 0.287	0.158 4.01	0.169 4.29	0.694 2.28	0.180 4.57	0.188 4.78	58.5 87.06
M22759/87-6-*	6	133 x 27 133 x 0.361	0.198 5.03	0.212 5.38	0.436 1.43	0.219 5.56	0.229 5.82	88.9 132.3
M22759/87-4-*	4	133 x 25 133 x 0.455	0.250 6.35	0.268 6.81	0.275 0.90	0.276 7.01	0.288 7.32	144 214
M22759/87-2-*	2	665 x 30 665 x 0.254	0.320 8.13	0.340 8.64	0.177 0.58	0.344 8.74	0.364 9.25	226 336
M22759/87-1-*	1	817 x 30 817 x 0.254	0.360 9.14	0.380 9.65	0.144 0.47	0.388 9.86	0.408 10.36	292 435

Dimensional

Part number	AWG	Conductor construction	Conductor diameter		Linear resistance max. at 20°C	Outer diameter		Weight max.
			min.	max.		min.	max.	
		nb x AWG nb x mm	inch mm	inch mm	$\Omega/1000ft$ Ω/km	inch mm	inch mm	Lbs/1000ft kg/km
M22759/87-01-*	0	1045 x 30 1045 x 0.254	0.395 10.03	0.425 10.80	0.113 0.37	0.420 10.67	0.450 11.43	363 540.2
M22759/87-02-*	00	1330 x 30 1330 x 0.254	0.440 11.18	0.475 12.07	0.089 0.29	0.475 12.07	0.505 12.83	457 680.1
M22759/87-03-*	000	1665 x 30 1665 x 0.254	0.500 12.70	0.540 13.72	0.071 0.23	0.530 13.46	0.560 14.22	568 845.3
M22759/87-04-*	0000	2109 x 30 2109 x 0.254	0.565 14.35	0.605 15.37	0.056 0.18	0.590 14.99	0.630 16.00	720 1071.5

*Replace the asterisks in the part number by color code designators (in accordance with MIL-STD-681)

**Operating Voltage: 600Vrms at sea level. This insulation system has been used in Aerospace applications using 115 Volts (Phase to Neutral), 400 Hertz AC and 28 Volts DC. Verification of the suitability of this product for use in other Electrical system configuration is the responsibility of the user.



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