

AS22759/188

Wire specification: SAE AS22759/188

Normal weight, Smooth Surface, High performance hook-up wires.

Nickel coated copper conductor.

Composite insulation 150°C



General purpose high-performance hook-up wires.

Designed for aerospace and other applications requiring excellent thermal stability.

Developed at the request of NAVAIR and USAF.



Cable characteristics



-65 +150°C



Excellent



FAR25

Environmental

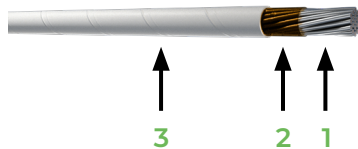
- Operating temperature: -65°C to 150°C (ambient temperature + current heating)
- Resistant to Aircraft fluids (oils, hydrocarbons, kerosene...), Chemical agents
- Wet and Dry Arc Tracking resistant
- Hydrolysis resistant
- Abrasion resistant

Electrical

Maximum operating voltage: 600Vrms**

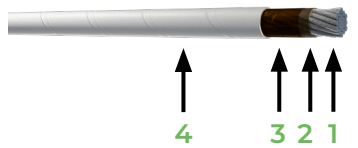
Cable design

AWG 26 to AWG 10



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

AWG 8 to AWG 000



1. Conductor: Tin coated copper (Type TCC)
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: DL

Marking

M22759/188-yy F1868 REV x
1 2 3 4

e.g. M22759/188-24 F1868 REV C

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

Specifications

Conductors

AS29606

Wires Specifications

AS22759/188

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	
M22759/188-26-*	26	19 x 38 19 x 0.102	0.0175 0.44	0.0204 0.52	41.3 135.5	0.033 0.84	0.037 0.94	1.55 2.31
M22759/188-24-*	24	19 x 36 19 x 0.127	0.0225 0.57	0.0244 0.62	26.2 85.95	0.038 0.97	0.042 1.07	2.20 3.27
M22759/188-22-*	22	19 x 34 19 x 0.16	0.0285 0.72	0.0314 0.80	16.2 53.15	0.043 1.09	0.047 1.19	3.10 4.61
M22759/188-20-*	20	19 x 32 19 x 0.203	0.0365 0.93	0.0394 1.00	9.88 32.4	0.051 1.30	0.055 1.40	4.65 6.92
M22759/188-18-*	18	19 x 30 19 x 0.254	0.0455 1.16	0.0494 1.25	6.23 20.44	0.061 1.55	0.065 1.65	6.85 10.19
M22759/188-16-*	16	19 x 29 19 x 0.287	0.0515 1.31	0.0554 1.41	4.81 15.78	0.068 1.73	0.073 1.85	8.70 12.95
M22759/188-14-*	14	19 x 27 19 x 0.361	0.0645 1.64	0.0694 1.76	3.06 10.04	0.081 2.06	0.086 2.18	13.3 19.79
M22759/188-12-*	12	37 x 28 37 x 0.32	0.0835 2.12	0.0894 2.27	2.02 6.62	0.100 2.54	0.105 2.67	20.2 30.6
M22759/188-10-*	10	37 x 26 37 x 0.404	0.106 2.69	0.112 2.84	1.26 4.13	0.122 3.10	0.127 3.23	31.6 47.03
M22759/188-8-*	8	133 x 29 133 x 0.287	0.158 4.01	0.169 4.29	0.701 2.30	0.180 4.57	0.188 4.78	61.3 91.22
M22759/188-6-*	6	133 x 27 133 x 0.361	0.198 5.03	0.212 5.38	0.445 1.46	0.219 5.56	0.229 5.82	94.7 140.9
M22759/188-4-*	4	133 x 25 133 x 0.455	0.250 6.35	0.268 6.81	0.280 0.915	0.276 7.01	0.288 7.32	149 221.7
M22759/188-2-*	2	665 x 30 665 x 0.254	0.320 8.13	0.340 8.64	0.183 0.60	0.344 8.74	0.364 9.25	233 346.7
M22759/188-1-*	1	817 x 30 817 x 0.254	0.360 9.14	0.380 9.65	0.149 0.489	0.388 9.86	0.408 10.36	283 421.7

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
M22759/188-01-*	0	1045 x 30 1045 x 0.254	0.395 10.03	0.425 10.80	0.116 0.38	0.420 10.67	0.450 11.43	363 540.2
M22759/188-02-*	00	1330 x 30 1330 x 0.254	0.440 11.18	0.475 12.07	0.091 0.299	0.475 12.07	0.505 12.83	457 680.1
M22759/188-03-*	000	1665 x 30 1665 x 0.254	0.500 12.70	0.540 13.72	0.071 0.233	0.530 13.46	0.560 14.22	563 837.8
M22759/188-04-*	0000	2109 x 30 2109 x 0.254	0.565 14.35	0.605 15.37	0.056 0.184	0.590 14.99	0.630 16.00	688 1024

*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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