

*AFTERMARKET SERVICES*  
**WIRE & CABLE**  
**GUIDE**



**CARLISLE**  
INTERCONNECT TECHNOLOGIES



## Leading the Industry Through Innovation

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Carlisle Interconnect Technologies (CarlisleIT) is one of the world's leading designers and manufacturers of high-performance interconnect solutions. With our broad cable offerings from Optical Fiber to ruggedized hook-up wire, CarlisleIT is sure to have a solution to meet any need. For over 70 years, CarlisleIT has been delivering highly reliable products to Aerospace, Defense, Medical, Industrial and other markets.

Originally founded as the Tensolite Company in 1940, CarlisleIT has grown dramatically and now encompasses many recognized brands, including ECS, Raydex and Thermax. CarlisleIT's commitment to innovation, global manufacturing and continuous improvement through the Carlisle Operating System (COS) makes us ideally suited to support your most demanding programs and applications.

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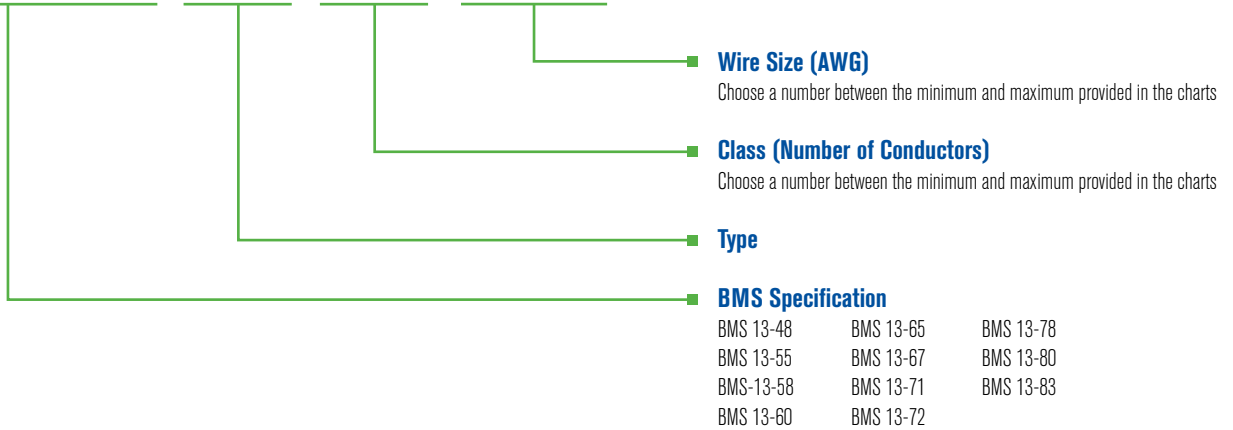
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# BMS Wire & Cable

## Part Number Guide

Below is a typical BMS part number format. Example part number: BMS13-60 T07 C01 G020

**BMS13-XX TXX CXX GXXX**



\* Product Specifications are subject to change without notice. Specification information is provided for reference only.

## BMS 13-60

Arc resistant, 600V, annealed copper, copper alloy and aluminum wire and cable.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
1	1	8	22	4/0	8	Annealed Copper	Tin	--	--	--	-65	150
2	1	4	22	10	8	Annealed Copper	Tin	Copper Braid	Tin	Polyimide/PTFE	-65	150
3	2	4	22	10	8	Annealed Copper	Tin	--	--	Polyimide/PTFE	-65	150
4	1	8	24	16	8	High Strength Copper Alloy	Nickel	--	--	--	-65	260
5	1	4	24	16	8	High Strength Copper Alloy	Nickel	Copper Braid	Tin	Polyimide/PTFE	-65	150
			14	10	8	Annealed Copper						
6	2	4	24	16	8	High Strength Copper Alloy	Nickel	--	--	Polyimide/PTFE	-65	260
7	1	8	22	4/0	19	Annealed Copper	Nickel	--	--	--	-65	260
8	1	6	22	10	19	Annealed Copper	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
9	2	4	22	10	19	Annealed Copper	Nickel	--	--	Polyimide/PTFE	-65	260
	5	8	22	18								
10	1	8	24	16	19	High Strength Copper Alloy	Nickel	--	--	--	-65	260
11	1	6	24	16	19	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
12	2	4	24	16	19	High Strength Copper Alloy	Nickel	--	--	Polyimide/PTFE	-65	260
13	1	6	22	10	6	Annealed Copper	Tin	Copper Braid	Tin	Polyimide/PTFE	-65	150

## BMS 13-60 (Continued)

Arc resistant, 600V, annealed copper, copper alloy and aluminum wire and cable.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
14	2	6	22	10	6	Annealed Copper	Tin	--	--	Polyimide/PTFE	-65	150
15	1	6	24	16	6	High Strength Copper Alloy	Nickel	Copper Braid	Tin	Polyimide/PTFE	-65	150
			22	10	6	Annealed Copper						
16	2	6	24	16	6	High Strength Copper Alloy	Nickel	--	--	Polyimide/PTFE	-65	260
17	1	6	22	10	6	Annealed Copper	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
18	2	6	22	10	6	Annealed Copper	Nickel	--	--	Polyimide/PTFE	-65	260
19	1	8	22	4/0	8	Annealed Copper	Nickel	--	--	--	-65	260
20	1	5	22	10	8	Annealed Copper	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
21	2	4	22	10	8	Annealed Copper	Nickel	--	--	Polyimide/PTFE	-65	260
22	1	3	8	4/0	19	EC Aluminum	--	--	--	--	-65	175
23	10	10	18	18	8	High Strength Copper Alloy	Nickel	--	--	Polyimide/PTFE	-65	260
24	7	7	20	20	8	Annealed Copper	Tin	Copper Braid	Nickel	Polyimide/PTFE	-65	150
25	1	4	24	16	8	High Strength Copper Alloy	Nickel	Double Copper Braid	Nickel	Polyimide/PTFE	-65	260
26	1	3	24	16	8	High Strength Copper Alloy	Nickel	Double Flat Copper Braid	Tin	Polyimide/PTFE	-65	150
27	1	3	22	16	8	High Strength Copper Alloy	Nickel	Double Copper Braid	Nickel	Polyimide/PTFE	-65	260
28	1	8	22	10	6	Annealed Copper	Tin	--	--	--	-65	150
29	1	8	22	10	6	Annealed Copper	Nickel	--	--	--	-65	260
30	1	8	24	16	6	High Strength Copper Alloy	Nickel	--	--	--	-65	260
31	1	6	22	16	6	Annealed Copper	Tin	Flat Copper Braid	Tin	Polyimide/PTFE	-65	150
32	1	6	24	16	6	High Strength Copper Alloy	Nickel	Flat Copper Braid	Tin	Polyimide/PTFE	-65	150
33	1	6	22	16	8	High Strength Copper Alloy	Tin	Flat Copper Braid	Tin	Polyimide/PTFE	-65	150
34	1	6	24	16	8	High Strength Copper Alloy	Nickel	Flat Copper Braid	Tin	Polyimide/PTFE	-65	150
35	1	8	26	16	6	High Strength Copper Alloy	Silver	--	--	--	-65	200
36	1	6	26	16	6	High Strength Copper Alloy	Silver	Flat Copper	Silver	Polyimide/PTFE	-65	200
37	1	6	26	16	6	High Strength Copper Alloy	Nickel	Flat Copper	Silver	Polyimide/PTFE	-65	200

# BMS Wire & Cable

## BMS 13-60 (Continued)

Arc resistant, 600V, annealed copper, copper alloy and aluminum wire and cable.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
38	1	6	22	10	6	Annealed Copper	Nickel	Flat Copper	Silver	Polyimide/PTFE	-65	200
39	1	8	26	12	8	High Strength Copper Alloy	Silver	--	--	--	-65	200
40	1	6	26	16	8	High Strength Copper Alloy	Silver	Flat Copper	Silver	Polyimide/PTFE	-65	200
41	1	6	24	16	8	High Strength Copper Alloy	Nickel	Flat Copper	Silver	Polyimide/PTFE	-65	200
42	1	6	22	10	8	Annealed Copper	Nickel	Flat Copper	Silver	Polyimide/PTFE	-65	200
43	1	6	22	10	19	Annealed Copper	Nickel	Flat Copper	Silver	Polyimide/PTFE	-65	200
44	1	4	22	16	10	Annealed Copper	Nickel	--	--	--	-65	260
45	1	4	24	10	10	High Strength Copper Alloy	Nickel	--	--	--	-65	260
46	1	4	24	16	8	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
47	1	4	20	10	8	Annealed Copper	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
48	1	4	24	16	6	High Strength Copper Alloy	Nickel	Double Copper Braid	Nickel	Polyimide/PTFE	-65	260
49	1	4	22	10	6	Annealed Copper	Nickel	Double Copper Braid	Nickel	Polyimide/PTFE	-65	260
50	1	4	26	16	6	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	Polyimide/PTFE	-65	260
51	1	4	26	16	6	High Strength Copper Alloy	Nickel	Flat Copper	Nickel	Polyimide/PTFE	-65	260
52	1	4	22	10	6	Annealed Copper	Nickel	Flat Copper	Nickel	Polyimide/PTFE	-65	260
53	1	3	22	16	6	High Strength Copper Alloy	Nickel	Double Copper Braid	Nickel	Polyimide/PTFE	-65	260
54	1	4	22	10	18	Annealed Copper	Nickel	Double Copper Braid	Nickel	Polyimide/PTFE	-65	260

Standard jacket color: White. (Except type O1 and 22 AWG = pastel green). Multi-color standard colors = Red, blue, yellow, green, black, purple, orange, brown (except type 23).



## BMS 13-48

Extruded cross-linked ETFE, 600V, wire and cable. "General Purpose" for use in both pressurized and unpressurized areas of aircraft.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
1	1	5	24	10	6	Annealed Copper	Tin	--	--	--	-65	150
2	1	5	24	16	6	High Strength Copper Alloy	Nickel	--	--	--	-65	150
3	1	5	24	10	6	Annealed Copper	Tin	Copper	Tin	ETFE	-65	150
4	2	5	24	12	6	Annealed Copper	Tin	--	--	ETFE	-65	150
5	1	5	24	16	6	High Strength Copper Alloy	Silver	--	--	--	-65	150
6	1	5	24	16	6	High Strength Copper Alloy	Silver	Copper	Tin	ETFE	-65	150
7	2	5	24	16	6	High Strength Copper Alloy	Silver	--	--	ETFE	-65	150
8	1	6	24	4/0	10	Annealed Copper	Tin	--	--	--	-65	150
9	1	6	24	16	10	High Strength Copper Alloy	Silver	--	--	--	-65	150
10	1	7	24	4/0	8	Annealed Copper	Tin	--	--	--	-65	150
11	1	6	24	16	8	High Strength Copper Alloy	Silver	--	--	--	-65	150
12	1	4	24	8	8	Annealed Copper	Tin	Copper	Tin	ETFE	-65	150
13	1	6	24	16	8	High Strength Copper Alloy	Silver	Copper	Tin	ETFE	-65	150
14	2	5	24	12	8	Annealed Copper	Tin	--	--	ETFE	-65	150
15	1	4	24	12	10	Annealed Copper	Tin	Copper	Tin	ETFE	-65	150
16	1	6	24	10	15	Annealed Copper	Tin	--	--	--	-65	150
17	2	5	20	12	15	Annealed Copper	Tin	--	--	ETFE	-65	150
18	1	4	20	12	15	Annealed Copper	Tin	Copper	Tin	ETFE	-65	150
19	1	6	24	16	15	High Strength Copper Alloy	Silver	--	--	--	-65	150
20	2	5	20	18	15	High Strength Copper Alloy	Silver	--	--	ETFE	-65	150
21	1	4	20	18	15	High Strength Copper Alloy	Silver	Copper	Tin	ETFE	-65	150
22	1	6	24	16	15	High Strength Copper Alloy	Nickel	--	--	--	-65	150
23	1	6	24	16	10	High Strength Copper Alloy	Nickel	--	--	--	-65	150
24	1	4	24	16	10	High Strength Copper Alloy	Nickel	Copper	Tin	ETFE	-65	150
25	1	5	24	12	6	Annealed Copper	Tin	Flat Copper	Tin	ETFE	-65	150
26	1	5	24	16	6	High Strength Copper Alloy	Nickel	Flat Copper	Tin	ETFE	-65	150
27	1	4	24	12	8	Annealed Copper	Tin	Flat Copper	Tin	ETFE	-65	150
28	1	5	24	16	8	High Strength Copper Alloy	Silver	Flat Copper	Tin	ETFE	-65	150

# BMS Wire & Cable

## BMS 13-48 (Continued)

Extruded cross-linked ETFE, 600V, wire and cable. "General Purpose" for use in both pressurized and unpressurized areas of aircraft.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
29	1	5	24	16	6	High Strength Copper Alloy	Nickel	Copper	Tin	ETFE	-65	150
30	2	5	24	16	6	Annealed Copper	Nickel	--	--	ETFE	-65	150
31	1	6	24	16	8	High Strength Copper Alloy	Nickel	--	--	--	-65	150
32	1	6	24	16	8	High Strength Copper Alloy	Nickel	Copper	Tin	ETFE	-65	150
33	2	5	20	18	15	High Strength Copper Alloy	Nickel	--	--	ETFE	-65	150
34	1	4	20	18	15	High Strength Copper Alloy	Nickel	Copper	Tin	ETFE	-65	150
35	1	6	24	12	8	Annealed Copper	Silver	--	--	--	-65	150
36	1	6	24	12	8	Annealed Copper	Silver	Copper	Tin	ETFE	-65	150
37	1	4	24	16	8	High Strength Copper Alloy	Nickel	Double Copper Braid	Tin	ETFE	-65	150
38	1	4	22	10	8	Annealed Copper	Tin	Double Copper Braid	Tin	ETFE	-65	150
39	1	4	24	16	8	High Strength Copper Alloy	Nickel	Flat Copper	Tin	ETFE	-65	150
40	1	5	22	10	6	Annealed Copper	Tin	Copper	Nickel	ETFE	-65	150
41	1	5	24	16	6	High Strength Copper Alloy	Silver	Copper	Nickel	ETFE	-65	150
42	1	6	22	8	8	Annealed Copper	Tin	Copper	Nickel	ETFE	-65	150
43	1	6	24	8	8	High Strength Copper Alloy	Silver	Copper	Nickel	ETFE	-65	150
44	1	4	22	10	10	Annealed Copper	Tin	Copper	Nickel	ETFE	-65	150
45	1	4	20	12	15	Annealed Copper	Tin	Copper	Nickel	ETFE	-65	150
46	1	4	20	18	15	High Strength Copper Alloy	Silver	Copper	Nickel	ETFE	-65	150
47	1	4	24	16	10	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
48	1	5	22	12	6	Annealed Copper	Tin	Flat Copper	Nickel	ETFE	-65	150
49	1	5	24	16	6	High Strength Copper Alloy	Nickel	Flat Copper	Nickel	ETFE	-65	150
50	1	4	22	12	8	Annealed Copper	Tin	Flat Copper	Nickel	ETFE	-65	150
51	1	5	24	16	8	High Strength Copper Alloy	Silver	Flat Copper	Nickel	ETFE	-65	150
52	1	5	24	16	6	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
53	1	6	24	16	8	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
54	1	4	20	18	15	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
55	1	6	22	12	8	Annealed Copper	Silver	Copper	Nickel	ETFE	-65	150



## BMS 13-48 (Continued)

Extruded cross-linked ETFE, 600V, wire and cable. "General Purpose" for use in both pressurized and unpressurized areas of aircraft.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET MATERIAL	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING		MIN	MAX
56	1	4	24	16	8	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
57	1	4	22	10	8	Annealed Copper	Tin	Copper	Nickel	ETFE	-65	150
								Copper	Nickel			
58	1	5	24	16	8	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
59	1	7	22	4/0	8	Annealed Copper	Nickel	-	-	-	-65	150
60	1	5	22	10	8	Annealed Copper	Nickel	Flat Copper	Nickel	ETFE	-65	150
61	1	6	22	8	8	Annealed Copper	Nickel	Copper	Nickel	ETFE	-65	150
62	1	4	22	10	8	Annealed Copper	Nickel	Copper	Nickel	ETFE	-65	150
								Copper	Nickel			
63	1	4	22	10	8	Annealed Copper	Nickel	Copper	Nickel	ETFE	-65	150
								Copper	Nickel	ETFE		
64	1	4	24	22	8	High Strength Copper Alloy	Nickel	Copper	Nickel	ETFE	-65	150
								Copper	Nickel	ETFE		
65	1	6	24	22	15	Annealed Copper	Nickel	---	---	---	-65	150

Standard jacket color: White. (Except type 08, and 10, 22 AWG = pastel green.) Multi-conductor standard colors = Red, blue, yellow, green, black, purple, orange.

## BMS 13-55

Insulated thin wall fire resistant, high temperature, 600V, wire and cable.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET MATERIAL	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING		MIN	MAX
1	1	4	22	10	25	Annealed Copper	Nickel	--	--	Inorganic Fiber PTFE Tape Braid	-65	260
2	1	4	22	10	25	High Strength Copper Alloy	Nickel	--	--	Inorganic Fiber PTFE Tape Braid	-65	260
3	1	4	22	14	25	Annealed Copper	Nickel	Copper Braid	Nickel	Inorganic Fiber PTFE Tape Braid	-65	260
4	1	4	22	10	25	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	Inorganic Fiber PTFE Tape Braid	-65	260
5	1	1	22	10	35	High Strength Copper Alloy	Nickel	--	--	Inorganic Fiber PTFE Tape Braid	-65	260
6	1	4	22	14	35	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	Inorganic Fiber PTFE Tape Braid	-65	260

Standard jacket color: White with red stripe. Multi-conductor standard colors = Red, blue, yellow, green.

# BMS Wire & Cable

## BMS 13-58

Extreme environment, nickel coated copper conductor, 600V, wire and cable. Intended for use in areas where exposure to thermal changes and corrosive fluids are normal.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET MATERIAL	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING		MIN	MAX
1	1	8	24	4/0	22	Annealed Copper	Nickel	--	--	--	-65	260
				8								
				12								
2	1	4	24	12	22	Annealed Copper	Nickel	Copper Braid	Nickel	--	-65	260
3	1	4	24	12	22	Annealed Copper	Nickel	--	--	PTFE/Tape	-65	260
4	2	4	24	12	22	Annealed Copper	Nickel	--	--	PTFE/Tape	-65	260
5	1	8	24	12	22	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	--	-65	260
				16								
6	1	4	24	16	22	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	--	-65	260
7	1	4	24	16	22	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	PTFE/Tape	-65	260
8	2	4	24	16	22	High Strength Copper Alloy	Nickel	--	--	PTFE/Tape	-65	260
9	1	3	24	18	22	High Strength Copper Alloy	Nickel	Copper Braid	Nickel	PTFE/Tape	-65	260

Standard jacket color: Light gray. Multi-conductor standard colors = Red, blue, yellow, green, black, purple, orange, brown, white.

## BMS 13-65

Silver coated conductor, PTFE dielectric, double braid, Lightweight, 50 ohms, coax.

TYPE	IMPEDANCE	NOM O.D.	CENTER CONDUCTOR DIAMETER		INSULATION	CONDUCTOR		SHIELD		JACKET MATERIAL	TEMPERATURE RATING (DEGREES C)	
			MIN	MAX		MATERIAL	COATING	MATERIAL	COATING		MIN	MAX
OE	50 ohm	0.111	0.023	0.024	PTFE	Annealed Copper	Silver	Round and Flat Copper	Silver	FEP	-55	200
OF	50 ohm	0.141	0.033	0.035	PTFE	Annealed Copper	Silver	Round and Flat Copper	Silver	FEP	-55	200
OG	50 ohm	0.187	0.047	0.049	PTFE	Annealed Copper	Silver	Round and Flat Copper	Silver	FEP	-55	200
OH	50 ohm	0.252	0.065	0.067	PTFE	Annealed Copper	Silver	Round and Flat Copper	Silver	FEP	-55	200
OJ	50 ohm	0.322	0.088	0.090	PTFE	Annealed Copper	Silver	Round and Flat Copper	Silver	FEP	-55	200
OK	50 ohm	0.488	0.143	0.147	PTFE	Annealed Copper	Silver	Round and Flat Copper	Silver	FEP	-55	200

Standard jacket color: Brown.

## BMS 13-67

Insulated fire resistant, high temperature wire and cable.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
1	--	--	--	--	--	--	--	--	--	--	--	--
2	1	4	22	10	Inorganic Fiber PTFE Tape & Braid	High Strength Copper Alloy	Nickel	Copper	Nickel	Inorganic Fiber PTFE Tape & Braid	-65	310

Standard jacket color: White with red stripe. Multi-conductor standard colors = Red, blue, yellow, green.

## BMS 13-71

Aerospace grade optical fiber cable.

TYPE	CLASS	GRADE	OPTICAL FIBER		SECONDARY BUFFER	STRENGTH MEMBER	JACKET	TEMPERATURE RATING (DEGREES C)	
			DESCRIPTION	COATING		MATERIAL	MATERIAL	MIN	MAX
1	1	A	62.5/125/250 Multimode Fiber	Acrylate	Polyimide Tape over Expanded PTFE	Aramid Fiber/ Fiberglass Braid	PFA	-55	100
2	1	A	62.5/125/250 Multimode Fiber	Acrylate	Polyimide Tape over Expanded PTFE	--	--	-55	100
3	1	A	62.5/125/250 Multimode Fiber	Acrylate	Polyimide Tape over Expanded PTFE	Aramid Fiber/ Fiberglass Braid	PFA	-55	100
4	2	A	62.5/125/250 Multimode Fiber	Acrylate	Polyimide Tape over Expanded PTFE	Aramid Fiber/ Fiberglass Braid	PFA	-55	100

## BMS 13-72

100 Ohm databus cable.

TYPE	CLASS	WIRE SIZE (AWG)	INSULATION	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
				MATERIAL	COATING	MATERIAL	COATING	MATERIAL	MIN	MAX
3	4	24	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	FEP	-55	150
4	4	22	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	FEP	-55	150
7	2	24	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	FEP	-55	150
8	2	24	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	FEP	-55	150

# BMS Wire & Cable

## BMS 13-78

Arc resistant, 1500V, annealed copper and aluminum wire and cable.

TYPE	CLASS		WIRE SIZE (AWG)		INSULATION TYPE & THICKNESS (MIL)	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
	MIN	MAX	MIN	MAX		MATERIAL	COATING	MATERIAL	COATING		MIN	MAX
1	1	4	18	10	ETFE 25 mils	Annealed Copper	Nickel	--	--	--	-65	175
2	1	3	8	3/0	Flex-ETFE 33 mils	Annealed Copper - Fine Strand	Nickel	--	--	--	-65	175
3	1	3	8	4/0	Flex-ETFE 33 mils	Aluminum Fine Strand	--	--	--	--	-65	175
4	1	3	8	3/0	PTFE tape 33 mils	Annealed Copper - Fine Strand	Nickel	--	--	--	-65	260
5	1	4	18	10	ETFE 25 mils	Annealed Copper	Nickel	Copper Braid	Nickel	ETFE	-65	175
6	1	4	18	10	ETFE 25 mils	Annealed Copper	Nickel	Double Copper Braid	Nickel	ETFE	-65	175
7	1	3	18	10	PTFE tape 33 mils	Annealed Copper	Nickel	--	--	--	-65	260
8	1	4	18	12	PTFE tape 33 mils	Annealed Copper	Nickel	Copper Braid	Nickel	PTFE tape	-65	260
9	3	3	16	14	PTFE tape 33 mils	Annealed Copper	Nickel	Double Copper Braid	Nickel	PTFE tape	-65	260

## BMS 13-80

Wire, electric, twinax, 120 Ohm, databus cable.

TYPE	CLASS	WIRE SIZE (AWG)		INSULATION	CONDUCTOR		SHIELD		JACKET
		MIN	MAX		MATERIAL	COATING	MATERIAL	COATING	MATERIAL
1	2	26	20	PTFE	High Strength Copper Alloy	Silver	Flat Copper	Tin	Polyimide/PTFE
2	2	26	20	PTFE	High Strength Copper Alloy	Silver	Flat Copper and Round Copper	Tin	Polyimide/PTFE

## BMS 13-83

100 Ohm databus cable.

TYPE	CLASS	WIRE SIZE (AWG)	INSULATION	CONDUCTOR		SHIELD		JACKET	TEMPERATURE RATING (DEGREES C)	
				MATERIAL	COATING	MATERIAL	COATING		MIN	MAX
3	4	24	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	Polyimide/PTFE	-55	150
4	4	22	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	Polyimide/PTFE	-55	150
7	2	24	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	Polyimide/PTFE	-55	150
8	2	24	PTFE	High Strength Copper Alloy	Silver	Flat and Round copper	Tin	Polyimide/PTFE	-55	150

## S280W502

100 Ohm databus cable.

TYPE	CLASS	WIRE SIZE (AWG)	INSULATION	CONDUCTOR		SHIELD		JACKET
				MATERIAL	COATING	MATERIAL	COATING	MATERIAL
1	2	24	PTFE	High Strength Copper Alloy	Silver	Flat Copper and Round Copper	Tin	FEP
3	4	24	PTFE	Annealed Copper	Silver	Flat Copper and Round Copper	Tin	FEP
4	4	24	PTFE	High Strength Copper Alloy	Silver	Flat Copper and Round Copper	Tin	FEP
6	2	24	PTFE	High Strength Copper Alloy	Silver	Flat Copper	Tin	FEP

# Airbus Specification Wire & Cable

## Hook-Up Wires - Airframe Wiring

Specifications			Construction	Wire Size (AWG)	Temperature Rating	
ASN/ABS/NSA		EN				
REF.	Type	REF.				
ASN E0261	CF	2266	Conductor: Nickel Plated Copper (AWG 22 to 10), High Strength Nickel Plated Copper Alloy (AWG 26 & 24)	26 to 10	200°C	
			Insulation: Polyimide Tapes + Topcoat			
			Suitable for UV Laser Marking			
ASN E0264	PF	2266	2 CF or EN 2266 Basic Cores Twisted Cable	26 to 10	200°C	
ASN E0266	QF	2266	3 CF or EN 2266 Basic Cores Twisted Cable	26 to 10	200°C	
ASN E0268	RF	2266	4 CF or EN 2266 Basic Cores Twisted Cable	26 to 10	200°C	
ASN E0270	SJ	2713	1 CF or EN 2266 Basic Core + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	ASN 26 to 14 EN 26 to 10	200°C
				Sheath: Polyimide Tapes + Topcoat		
ASN E0272	TK	2713	2 CF or EN 2266 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	ASN 26 to 12 EN 26 to 10	200°C
				Sheath: Polyimide Tapes + Topcoat		
ASN E0274	UD	2713	3 CF or EN 2266 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	ASN 26 to 14 EN 26 to 12	200°C
				Sheath: Polyimide Tapes + Topcoat		
	VL	2713	4 EN 2266 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	EN 26 to 14	200°C
				Sheath: Polyimide Tapes + Topcoat		

## Hook-Up Wires - Airframe Wiring

Arc tracking and hydrolysis resistant - Lightweight.

Specifications		Construction	Wire Size (AWG)	Temperature Rating	
Cable Code	EN				
REF.	REF.				
DR	2267-010A	Conductor: Nickel Plated Copper (AWG 22 to 2), High Strength Nickel Plated Copper Alloy (AWG 26 & 24)	26 to 2	260°C	
		Insulation: Special Polyimide Tape + PTFE Tape(s)			
		Suitable for UV Laser Marking			
DRB	2267-009B	2 DRA of EN 2267-009A Basic Cores Twisted Cable	26 to 4	260°C	
DRC	2267-009C	3 DRA of EN 2267-009A Basic Cores Twisted Cable	26 to 4	260°C	
DRD	2267-009D	4 DRA of EN 2267-009A Basic Cores Twisted Cable	26 to 14	260°C	
MLA	2714-013A	1 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 10	260°C
			Sheath: Polyimide + PTFE Tapes		
MLB	2714-013B	2 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper	26 to 10	260°C
			Sheath: Polyimide + PTFE Tapes Spiral Shield		
MLC	2714-013C	3 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 10	260°C
			Sheath: Polyimide + PTFE Tapes		
MLD	2714-013D	4 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 14	260°C
			Sheath: Polyimide + PTFE Tapes		
MME	2714-014E	5 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	18 to 12	260°C
			Sheath: Polyimide + PTFE Tapes		
MMF	2714-014F	6 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	On request	260°C
			Sheath: Polyimide + PTFE Tapes		
MMG	2714-014G	7 DRA or EN 2267-009A Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	24	260°C
			Sheath: Polyimide + PTFE Tapes		

# Airbus Specification Wire & Cable

## Hook-Up Wires - Airframe Wiring

Arc tracking and hydrolysis resistant - Hybrid insulation type.

Specifications			Construction	Wire Size (AWG)	Temperature Rating	
Cable Code		EN				
REF.	Type	REF.				
DM		2267-008A	Conductor : Nickel Plated Copper (AWG 22 to 06), High Strength Nickel Plated Copper Alloy (AWG 26 & 24)	26 to 06	260°C	
			Insulation : Polyimide + PTFE Tapes			
			Suitable for UV Laser Marking			
PN		2267-007B	2 DMA of EN 2267-007 Basic Cores Twisted Cable	26 to 06	260°C	
QL		2267-007C	3 DMA of EN 2267-007 Basic Cores Twisted Cable	26 to 06	260°C	
RK		2267-007D	4 DMA of EN 2267-007 Basic Cores Twisted Cable	26 to 06	260°C	
GJ		2714-011A	1 DMA or EN 2267-007 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 10	260°C
				Sheath: Polyimide + PTFE Tapes		
MH		2714-011B	2 DMA or EN 2267-007 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 10	260°C
				Sheath: Polyimide + PTFE Tapes		
UU		2714-011C	3 DMA or EN 2267-007 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 10	260°C
				Sheath: Polyimide + PTFE Tapes		
VV		2714-011D	4 DMA or EN 2267-007 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	26 to 14	260°C
				Sheath: Polyimide + PTFE Tapes		
MJ		2714-012E	5 DMA or EN 2267-007 Basic Cores + Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	18 to 12	260°C
				Sheath: Polyimide + PTFE Tapes		

## Hook-Up Wires - Airframe Wiring

Arc tracking and hydrolysis resistant - Hybrid insulation type - Aluminum conductors.

Specifications			Construction	AWG Size	Rating Temp.	
ABS		EN				
REF.	Type	REF.				
ABS 0949	AD		Conductor: Nickel Copper Clad Aluminum (AWG 24 to 4), Nickel Plated Aluminum (AWG 3 to 000)	24 to 4	180°C	
			Insulation: Special Polyimide Tape + PTFE Tape(s)			
			Suitable for UV Laser Marking			
ABS 1354	ADB		2 ADA of ABS 1354 Basic Cores Twisted Cable	24 to 4	180°C	
ABS 1354	ADC		3 ADA of ABS 1354 Basic Cores Twisted Cable	24 to 4	180°C	
ABS 1354	ADD		4 ADA of ABS 1354 Basic Cores Twisted Cable	24 to 4	180°C	
ABS 1354	ADE		1 ADA or ABS 1354 Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	24	180°C
				Sheath: Polyimide + PTFE Tapes		
ABS 1356	VNA		2 ADA or ABS 1354 Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	24 to 10	180°C
				Sheath: Polyimide + PTFE Tapes		
ABS 1356	VNB		3 ADA or ABS 1354 Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	24 to 10	180°C
				Sheath: Polyimide + PTFE Tapes		
ABS 1356	VNC		4 ADA or ABS 1354 Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	24 to 10	180°C
				Sheath: Polyimide + PTFE Tapes		
ABS 1356	VND		5 ADA or ABS 1354 Basic Core Suitable for UV Laser Marking	Shield: Nickel Plated Copper Spiral Shield	24 to 14	180°C
				Sheath: Polyimide + PTFE Tapes		

## Coaxial Cables

Specifications				Construction	Overall Diameter (nominal) mm	Characteristic Impedance	Temperature Rating
ASN/ABS/NSA		EN	MILC 17				
REF.	Type	REF.	Ref.				
ECS 0757	KE		No similar type	Inner Conductor: Silver Plated Copper Alloy Dielectric Core: PTFE Outer Conductor: 3 Silver Plated Copper Braids Jacket: 2 FEP Jackets	3.45	50Ω	200°C
ASN E0406	WD	EN 4604-008	No similar type	Inner Conductor: Silver Plated Copper Dielectric Core: Foamed FEP Outer Conductor: 2 Silver Plated Copper Braids Jacket: FEP	7.70	50Ω	200°C
ASN E0691	WM	EN 4604-006	No similar type	Inner Conductor: Silver Plated Copper Dielectric Core: Low Density PTFE Outer Conductor: 1 Silver Plated Copper Tape Jacket: FEP	3.85	50Ω	200°C
ASN E0692	WN	EN 4604-007	No similar type	Inner Conductor: Silver Plated Copper Dielectric Core: Low Density PTFE Outer Conductor: 1 Silver Plated Copper Tape + Silver Plated Copper Braid Jacket: PTFE	8.00	50Ω	200°C
ASN E0752	WS	EN 4604-004	No similar type	Inner Conductor: Silver Plated Copper Dielectric Core: PTFE Outer Conductor: Silver Plated Copper Braid + High Immunity Tape + Silver Plated Copper Braid Jacket: Polyimide Tape	2.50	50Ω	200°C
	WZ	EN 4604-003	No similar type	Inner Conductor: Silver Plated Copper Dielectric Core: Low Density PTFE Outer Conductor: 1 Metalized Foil + 1 Silver Plated Copper Braid Jacket: FEP	3.55	50Ω	200°C
NSA 935 344	XE		M17/138 00001 RG 188 AU	Inner Conductor: Silver Plated Annealed Copper Covered Steel Dielectric Core: PTFE Outer Conductor: 1 Silver Plated Copper Braid Jacket: PTFE	2.70	50Ω	200°C
ASN E0293	XF		M17/175 00001 RG 400 U	Inner Conductor: Silver Plated Copper Dielectric Core: PTFE Outer Conductor: 2 Silver Plated Copper Braids Jacket: FEP	4.95	50Ω	200°C
ASN E0690	WL	EN 4604-005	No similar type	Inner Conductor: Silver Plated Copper Alloy Dielectric Core: Low Density Fluorocarbon Outer Conductor: 2 Silver Plated Copper Braids Jacket: PFA	2.30	75Ω	200°C
ASN E0634	WH		M17/137 00001	Inner Conductor: Silver Plated Annealed-Copper-Covered Steel Dielectric Core: PTFE Outer Conductor: 1 Silver Plated Copper Braid Jacket: PFA	3.58	95Ω	200°C
	KW	EN 4604-009	No similar type	Inner Conductor: Silver Plated Copper Clad Aluminum Dielectric Core: Low Density PTFE Outer Conductor: 1 Silver Plated Copper Clad Aluminum Tape + 1 Silver Plated Copper Braid Jacket: FEP	7.65	50Ω	180°C
	KX	EN 4604-010	No similar type	Inner Conductor: Silver Plated Copper Dielectric Core: Low Density PTFE Outer Conductor: 1 Silver Plated Copper Tape + 1 Silver Plated Copper Braid Jacket: FEP	5.4	50Ω	200°C

# Airbus Specification Wire & Cable

## Twinax Bus

Specifications			Construction	Overall Diameter (nominal) mm	AWG Size	Temperature Rating	
ASN/ABS/NSA		EN					
REF.	Type	REF.					
ABS	WF		Shielded & Sheathed 100 Ω Data Bus Twisted Pair	Conductor: Nickel Plated Copper Alloy Insulation: PTFE Shield: Nickel Copper Braid Sheath: Polyimide Tapes	3.30	24	200°C
ASN	HE		Shielded & Sheathed 125 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: Nickel Plated Copper Braid Sheath: Polyimide Tapes	4.50	24	150°C
ASN	XM	EN 3375-006	Shielded & Sheathed 78 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: Nickel Plated Copper Braid Sheath: Polyimide Tapes	3.10	24	200°C
ASN	HJ		Shielded & Sheathed 75 Ω Data Bus Twisted Pair	Conductor: Nickel Plated High Strength Copper Alloy Insulation: Polyimide Tape(s) + PTFE Topcoat Shield: Nickel Plated Copper Braid + 2 High Immunity Tapes Sheath: Polyimide Tapes	3.00	26	200°C
ASN	WJ	EN 4604-004-B	Shielded & Sheathed 77 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: 2 Tinned Plated Copper Braids Sheath: FEP	3.70	24	150°C
	WJ	EN 3375-004-B	Shielded & Sheathed 77 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: 2 Silver Plated Copper Braids Sheath: FEP	3.70	24	200°C
	WV	EN 3375-004-C	Shielded & Sheathed 77 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: Silver Plated Copper Braid + 1 High Immunity Tape + Silver Plated Copper Braid Sheath: FEP	3.80	24	200°C
ECS	WW	EN 3375-005	Shielded & Sheathed 77 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: 2 Silver Plated Copper Braids Sheath: FEP	2.90	26	200°C
ASN	WY		Shielded & Sheathed 77 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: 1 Silver Plated Copper Braid Sheath: FEP	2.50	26	200°C
	WX	EN 3375-009	Shielded & Sheathed 120 Ω Data Bus Twisted Pair	Conductor: Silver Plated Copper Alloy Insulation: PTFE Shield: Silver Plated Copper Braid Sheath: FEP	2.80	26	200°C



## Quad Ethernet

Specifications			Construction	Overall Diameter (nominal) mm	AWG Size	Temperature Rating	
ASN/ABS/NSA		EN					
REF.	Type	REF.					
ABS 1503	KD		Shielded Quad Cable 100 Suitable for UV laser marking	Conductor: Silver Plated Copper	4.40	24	125°C
				Insulation: FEP + Separator Tape			
				Shield: 1 Silver Plated Copper Braid			
				Sheath: FEP			
	KL	EN 3375-011	Shielded Quad Cable 100 Suitable for UV laser marking	Conductor: Silver Plated Copper	4.20	24	125°C
				Insulation: PTFE + Separator Tape			
				Shield: 1 Silver Plated Copper Braid			
				Sheath: FEP			

## Optical Cables

Specifications			Construction	Overall Diameter (nominal) mm	Temperature Rating	
ASN/ABS/NSA						
REF.	Type					
ABS 0963	LF		Optical Fiber Cable	Core: 62.5/125 Silica, Silicone coating 400um	1.8	125°C
				Jacket: Zero Halogen Copolymer		
				Mechanical Strength: Polymer Aromatic Fiber Braid		
				Outer Jacket: Zero Halogen Copolymer + FEP		
ABS 2293	LG		Optical Fiber Cable	Core: 50/125 Silica. OM3 rated	1.8	135°C
				Mechanical Strength: Polymer Aromatic Fiber Braid		
				Jacket: Fluoropolymer		

## Special Cables

Specifications			Construction	Overall Diameter (nominal) mm	AWG Size	Temperature Rating	
ASN/ABS/NSA		EN					
REF.	Type	REF.					
MBBN 3320	YH 004-006	EN 4049-004	Thermocouple Cable	Conductors: Nickel Chromium/Nickel Aluminum	4.00 AWG 22 4.55 AWG 20	22 20	260°C
				Insulation: PTFE + Polyimide + PTFE Tapes			
				Shield: Nickel Plated Copper Braid			
				Jacket: Polyimide Tape + PTFE Tape			
ASN E0385	HH		FEP Sheathed Coil Cord	3 CF 16 + 3 CF 22 Basic Wires + 7 PTFE Fillers			200°C
				Sheath: FEP			
ASN E0488	HL		FEP Sheathed Coil Cord	6 CF 24 + 2 CF 20 + 1 CF 16 Basic Wires			200°C
				Sheath: FEP			
NSA 935 306	YK		Shielded & Sheathed Low Noise Twisted Pair	Conductor: Silver Plated Annealed Copper-Cover Steel	4.36 MAX	22	260°C
				Insulation: PTFE + Low Noise Treatment			
				Shield: Nickel Plated Copper Braid			
				Sheath: Polyimide + PTFE Tapes			
				Jacket: Polyimide Tape + PTFE Tape			

# Airbus Specification Wire & Cable

## Flight Test Cables

Specifications		Construction	Overall Diameter (nominal) mm	Characteristic Impedance	Temperature Rating
ASN/ABS/NSA					
REF.	Type				
ASN E0409	BG	Suitable for UV laser marking	0.97	24	200°C
		Conductor: Nickel Plated Copper (suitable for solderability) Insulation: PTFE Tape			
ASN E0410	SU	1 ASN E0409 BG Basic Core + Suitable for UV laser marking	1.42	24	200°C
		Shield: Nickel Plated Copper Spinning Sheath: Polyimide + PTFE Tape			
ASN E0411	TV	2 ASN E0409 BG Basic Core Twisted Cable + PTFE + Separator Tape Suitable for UV laser marking	2.54	24	200°C
		Shield: Nickel Plated Copper Spinning Sheath: Polyimide + PTFE Tape			
ASN E0412	VF	4 ASN E0409 BG Basic Cores Twisted Cable + PTFE Separator Tape+ Suitable for UV laser marking	3.00	24	200°C
		Shield: Nickel Plated Copper Spinning Sheath: Polyimide + PTFE Tape			
ASN E0413	HK	Thermocouple Cable	2.70	24	260°C
		Conductor: Nickel Chromium/Nickel Aluminum			
		Insulation: PTFE Tape			
		Shield: Nickel Plated Copper Braid Sheath: Polyimide + PTFE Tape			

## Fire Resistant Cables

Specifications			Construction	AWG Size	Temperature Rating
ASN/ABS/NSA		EN			
REF.	Type	REF.			
ASN E0437	DL	EN 2346-003	Conductor: 27% Nickel Clad Copper Alloy for AWG 22, 27% Nickel Clad Copper Alloy for other AWG Insulation: Silica Fiber + Fiberglass Braid + PTFE Tape Application: Fire Resistant Wires	22 to 16	260°C
ECS 0741	DW	EN 2346-005	Conductor: 27% Nickel Clad Copper Alloy for AWG 22, 27% Nickel Clad Copper Alloy for other AWG Insulation: Fire Resistant Insulation + PTFE Tape Application: Fire Proof Wires Suitable for UV Laser Marking	22 to 14	260°C
ECS 0741	DWB	EN 2346-003	2 DWA Basic Cores Twisted Cable Application: Fire Proof Wires	22 to 14	260°C
ECS 0741	DWC	EN 2346-005	3 DWA Basic Cores Twisted Cable Application: Fire Proof Wires	22 to 14	260°C
ECS 0742	GPA	EN 4608-004	1 DWA Basic Core + Suitable for UV Laser Marking Shield: Nickel Plated Copper Braid Sheath: PTFE Tapes Application: Fire Proof Wires	22 to 14	260°C
ECS 0742	GPB	EN 4608-004	2 DWA Basic Core + Suitable for UV Laser Marking Shield: Nickel Plated Copper Braid Sheath: PTFE Tapes Application: Fire Proof Wires	22 to 14	260°C
ECS 0742	GPC	EN 4608-004	3 DWA Basic Core + Suitable for UV Laser Marking Shield: Nickel Plated Copper Braid Sheath: PTFE Tapes Application: Fire Proof Wires	22 to 14	260°C

## Power Feeder Cables

Specifications			Construction	AWG Size	Temperature Rating
ASN/ABS/NSA		EN			
REF.	Type	REF.			
ASN E0438	YV		Conductor: Nickel Plated Aluminum Alloy	06 to 0000	180°C
			Insulation: PTFE Tape + Aromatic Polyimide Braid Coated with Nonflammable Lacquer		
ASN E0471	GP		3 ASNE0438 Basic Cores Twisted Cable	06	180°C
NSA 935 308	YU		Conductor: Aluminum Alloy	04 to 0000	150°C
			Insulation: Polyimide Tapes + Aromatic Polyimide Braid Coated with Nonflammable Lacquer		
NSA 935 131	DG	EN 2854	Conductor: Nickel Plated Copper	10 to 0000	260°C
			Insulation: Composite Polyimide Fiber Glass Tape + PTFE Tape(s)		
ABS 0949	AD		Conductor: Nickel Plated Aluminum	3 to 0000	180°C
			Insulation: Special Polyimide Tape + PTFE Tape(s)		
ABS 1354	ADB, ADC, ADD		2, 3 or 4 ADA or ABS 1354 Basic Cores Twisted Cable	3 to 0000 3 to 1	180°C



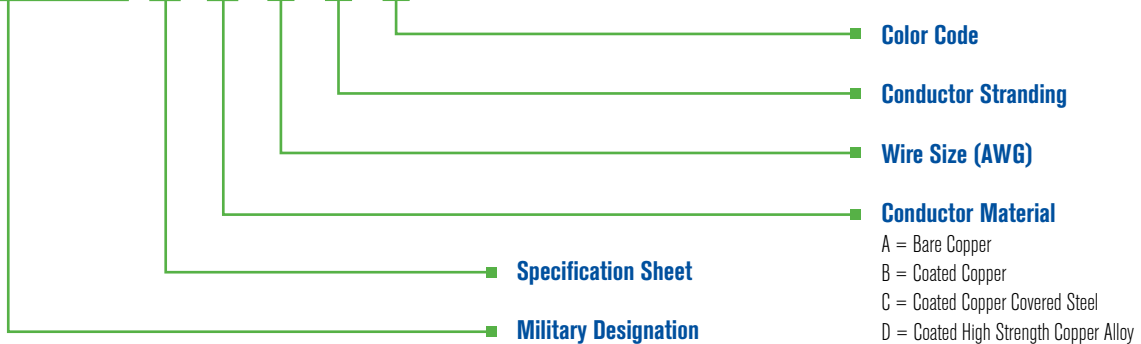
# Military Specification Wire & Cable - MIL-W-16878 (NEMA HP3, HP4)

Part Number (Former) Mil-W-16878	Part Number (Replacement) Mil-W-22759
Mil-W-16878/4-B	Mil-W-22759/11
Mil-W-16878/4-D	Mil-W-22759/22

## Part Number Guide

Example part number:

**M 16878 / 4 B F B \***



## Wire Size (AWG)

AWG	Letter	AWG	Letter	AWG	Letter	AWG	Letter	AWG	Letter
32	A	22	F	14	K	6	P	0	U
30	B	20	G	12	L	4	R	00	W
28	C	18	H	10	M	2	S	000	Y
26	D	16	J	8	N	1	T	0000	Z
24	E								

## Conductor Stranding

Number of Strands	Letter	Number of Strands	Letter	Number of Strands	Letter	Number of Strands	Letter	Number of Strands	Letter
1	A	19	E	65	J	427	N	1330	T
7	B	29	F	105	K	665	P	1672	V
10	C	37	G	133	L	817	R	2109	W
16	D	41	H	259	M	1045	S		

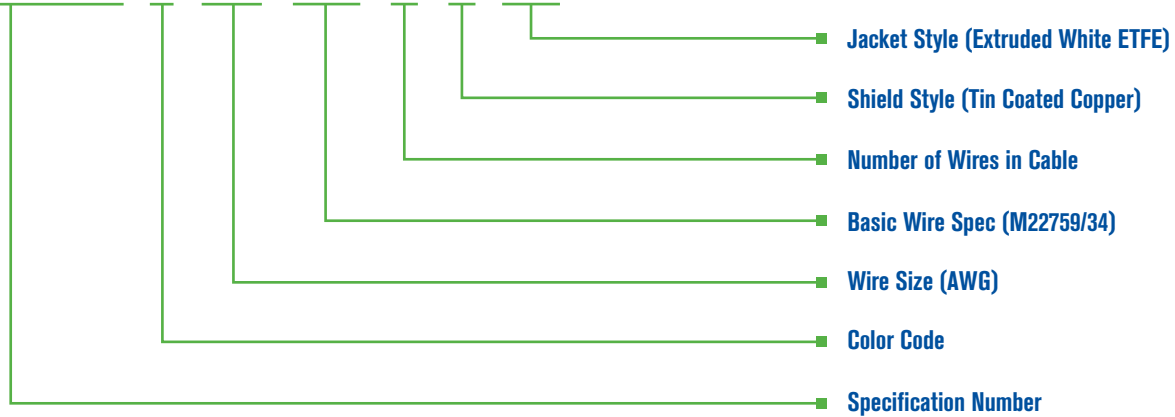
## Color Code

Color	Number Designator	Color	Number Designator	Color	Number Designator	Color	Number Designator
Black	0	Orange	3	Blue	6	Gray	8
Brown	1	Yellow	4	Violet	7	White	9
Red	2	Green	5				

## Part Number Guide

Example part number:

**M27500 - 22 SD 2 T 23**



## Color Code

Designation	1 COND	2 COND	3 COND	4 COND	5 COND	6 COND	Shield Coverage
--	9	9, 96	9, 96, 93	9, 96, 93, 95	9, 96, 93, 95, 92	9, 96, 93, 95, 92, 90	85%
A		9, 6	9, 6, 3	9, 6, 3, 5	9, 6, 3, 5, 2	9, 6, 3, 5, 2, 0	85%
B	Solid color, color denotes wire size (refer table III C, per spec), Identify by banding marks (refer table III D, per spec)						85%
C	Same as "--"						90%
D	Same as "A"						90%
E	Same as "B"						90%
F		92, 96	92, 96, 94	92, 96, 94, 95	92, 96, 94, 95, 9	92, 96, 94, 95, 9, 90	85%
G		2, 6	2, 6, 4	2, 6, 4, 5	2, 6, 4, 5, 9	2, 6, 4, 5, 9, 0	85%
H		92, 96	92, 96, 94	92, 96, 94, 95	92, 96, 94, 95, 9	92, 96, 94, 95, 9, 90	90%
J		2, 6	2, 6, 4	2, 6, 4, 5	2, 6, 4, 5, 9	2, 6, 4, 5, 9, 0	90%
K	Solid color, color denotes wire size (refer table III C, per spec), Identify wire by numbering						85%
L	Insulation shall be white or natural, Identify wire by numbering (refer table III D per spec)						85%
M	Same as "K"						90%
N	Same as "L"						90%

## Basic Wire Specification & Symbol

Symbol	Specification	Symbol	Specification	Symbol	Specification	Symbol	Specification
AS50861/1 <sup>1</sup>	A	AS22759/18	TG	AS22759/81 <sup>3</sup>	WC	MIL-DTL-25038/1	JA
AS50861/2 <sup>1,2</sup>	B	AS22759/19	TH	AS22759/82 <sup>3</sup>	WE	MIL-DTL-25038/3	JF
AS50861/3 <sup>1,2</sup>	C	AS22759/20	TK	AS22759/83 <sup>3</sup>	WF	AS81044/5 <sup>2</sup>	MD
AS50861/4 <sup>1</sup>	P	AS22759/21	TL	AS22759/84 <sup>3</sup>	WG	AS81044/6	ME
AS50861/5 <sup>1</sup>	AA	AS22759/22	TM	AS22759/85 <sup>3</sup>	WH	AS81044/7	MF
AS50861/6 <sup>1</sup>	AB	AS22759/23	TN	AS22759/86 <sup>3</sup>	WJ	AS81044/8 <sup>2</sup>	MG
AS50861/7 <sup>1</sup>	AD	AS22759/28	JB	AS22759/87 <sup>3</sup>	WK	AS81044/9	MH
MIL-DTL-8777, MS25471 <sup>2</sup>	H	AS22759/29	JC	AS22759/88 <sup>3</sup>	WL	AS81044/10	MJ
MIL-DTL-8777, MS27110	F	AS22759/30	JD	AS22759/89 <sup>3</sup>	WM	AS81044/11 <sup>2</sup>	MK
AS22759/1	EA	AS22759/31	JE	AS22759/90 <sup>3</sup>	WN	AS81044/12	ML
AS22759/2	E	AS22759/32	SB	AS22759/91 <sup>3</sup>	WP	AS81044/13	MM
AS22759/3	RA	AS22759/33	SC	AS22759/92 <sup>3</sup>	WR	MIL-DTL-81381/7 <sup>3</sup>	MR
AS22759/4	RB	AS22759/34	SD	AS22759/180	DB	MIL-DTL-81381/8 <sup>3</sup>	MS
AS22759/5	VA	AS22759/35	SE	AS22759/181	DC	MIL-DTL-81381/9 <sup>3</sup>	MT
AS22759/6	WA	AS22759/41	SM	AS22759/182	DE	MIL-DTL-81381/10 <sup>3</sup>	MV
AS22759/7	SA	AS22759/42	SN	AS22759/183	OF	MIL-DTL-81381/11 <sup>3</sup>	MW
AS22759/8	TA	AS22759/43	SP	AS22759/184	DG	MIL-DTL-81381/12 <sup>3</sup>	MY
AS22759/9	LE	AS22759/44	SR	AS22759/185	DH	MIL-DTL-81381/13 <sup>3</sup>	NA
AS22759/10	LH	AS22759/45	SS	AS22759/186	DJ	MIL-DTL-81381/14 <sup>3</sup>	NB
AS22759/11	RC	AS22759/46	ST	AS22759/187	DK	MIL-DTL-81381/17 <sup>3</sup>	NE
AS22759/12	RE	AS22759/47	SV	AS22759/188	DL	MIL-DTL-81381/18 <sup>3</sup>	NF
AS22759/13	CA	AS22759/48	SW	AS22759/189	OM	MIL-DTL-81381/19 <sup>3</sup>	NG
AS22759/14	CB	AS22759/49	SX	AS22759/190	ON	MIL-DTL-81381/20 <sup>3</sup>	NH
AS22759/15	CC	AS22759/50	SY	AS22759/191	DP	MIL-DTL-81381/21 <sup>3</sup>	NK
AS22759/16	TE	AS22759/80 <sup>3</sup>	WB	AS22759/192	DR	MIL-DTL-81381/22 <sup>3</sup>	NL
AS22759/17	TF						

<sup>1</sup> Not for use in aerospace applications. <sup>2</sup> Inactive for new design. <sup>3</sup> Not for Naval Air Systems Command usage.

## Shield Style

Symbol	Double Shield	Shield Style	Shield Max Temp
U	--	No Shield	--
T	V	Tin Coated Copper, Round	150°C (302°F)
S	W	Silver Coated Copper, Round	200°C (392°F)
N	Y	Nickel Copper, Round	260°C (500°F)
F	Z	Stainless Steel, Round	400°C (752°F)
C	R	Heavy Nickel Coated Copper, Round	400°C (752°F)
M	K	Silver Coated High-Strength Copper Alloy, Round	200°C (392°F)
P	L	Nickel Coated High-Strength Copper Alloy, Round	260°C (500°F)
G	A	Silver Coated Copper, Flat	200°C (392°F)
H	B	Silver Coated High Strength Copper Alloy, Flat	200°C (392°F)
*	#	Nickel Coated Copper, Flat	260°C (500°F)
J	D	Tin Coated Copper, Flat	150°C (302°F)
E	X	Nickel Coated High Strength Copper Alloy, Flat	260°C (500°F)
I	Q	Nickel Chromium Alloy, Flat	400°C (752°F)

## Jacket Style

Single Jacket Symbol	Double Jacket Symbol	Jacket Style	Temp Limit for Jacket Material
00	00	No Jacket	--
01	51	Extruded White PVC	90°C (194°F)
02	52	Extruded Clear Polyamide in accordance with ASTM D4066	105°C (221°F)
03	53	White Polyamide Braid impregnated with Clear Polyamide Finisher over Polyester Tape	105°C (221°F)
04	54	Polyester Braid impregnated with High Temp Finishers over Polyester Tape	150°C (302°F)
05	55	Extruded Clear FEP	200°C (392°F)
06	56	Extruded or Taped and Heat Sealed White PTFE	260°C (500°F)
07	57	White PTFE Treated Glass Braid impregnated and Coated with PTFE Finisher over Presintered PTFE Tape	260°C (500°F)
08	58	Crosslinked White Extruded Polyvinylidene (PVF)	150°C (302°F)
09	59	Extruded White FEP	200°C (392°F)
10	60	Extruded Clear PVF	125°C (257°F)
11	61	Tape of Natural Polyamide/FEP Heat Sealed with FEP outer surface	200°C (392°F)
12	62	Tape of Natural Polyamide/FEP Wrapped and Heat Sealed with Polyamide Outer Surface	200°C (302°F)
14	64	Extruded White ETFE (tefel)	150°C (302°F)
15	65	Extruded Clear ETFE (tefel)	150°C (302°F)
16	66	Braid of Aromatic Polyamide with Hig-Temp Finisher over Presintered PTFE Tape (Nomex)	200°C (392°F)
17	67	White Extruded ECTFE	150°C (302°F)
18	68	Clear Extruded ECTFE	150°C (302°F)
20	70	Extruded White PFA	260°C (500°F)
21	71	Extruded Clear PFA	260°C (500°F)
22	72	Tape of Polyamide/FEP Wrapped and Heat Sealed with Opaque Polyamide Outer Surface	200°C (392°F)
23	73	White Crosslinked Extruded Modified XLETFE	200°C (392°F)
24	74	Tape Layer of PTFE Wrapped over a Tape Layer of Natural Polyamide Combined with FEP and Heat Sealed	260°C (500°F)
25	75	Tape Layer of Seamless PTFE Wrapped over a Tape Layer of Natural Polyamide Combined with FEP and Heat Sealed	260°C (500°F)



# Aerospace Grade 10/100/1000 Base-T Ethernet Cables

## Netflight® Cables

	100 Base-T – Twisted Pair		100 Base-T – Shielded Quad			100 Base-T – Single Twisted Pair		
	22 AWG	24 AWG	22 AWG	24 AWG	26 AWG	22 AWG	24 AWG	26 AWG
Part Number	NF22P100	NF24P100	NF22Q100	NF24Q100	NF26Q100	NF22T100	NF24T100	NF26T100
Impedance (Ohms)	100		100			100		
Velocity of Propagation	80%		80%			80%		
Attenuation at 100 MHz (db/100ft)	5.6/6.7	6.0/7.1	6.4/7.3	8.0/9.2	9.3/11.0	5.8/6.7	6.6/7.7	8.5/9.9
Weight (lbs/1000 ft)	43	35	34.5	24.5	18.0	26.0	18.0	15.0
Size (in.)	0.195x0.290	0.175x0.270	0.190	0.163	0.137	0.180	0.145	0.132
Bend Radius (in.)	1.95	1.75	1.90	1.63	1.37	1.80	1.45	1.32
Operating Temperature	-55 to 150°C		-55 to 150°C			-55 to 150°C		
Other	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity			Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		

## Gigabit Series Cables

	Gigabit 10-HP™		Gigabit-Plus™		Gigabit-Flexx™		Gigabit-STP™		Gigabit-S2Q™		Gigabit-UTP™		
	24 AWG	26 AWG	24 AWG	26 AWG	24 AWG	26 AWG	24 AWG	26 AWG	24 AWG	26 AWG	24 AWG	26 AWG	
Part Number	MX10G-24HP	MX10G-26HP	MX10G-24	MX10G-26	MX10G-24FLX	MX10G-26FLX	NF24-P4-100*	NF26-P4-100*	NF24-2Q100	NF26-2Q100	NF24GB100	NF26GB100	
Impedance (Ohms)	100		100		100		100		100		100		
DC Resistance (100 ft)	2.76 Ohms	4.38 Ohms	2.76 Ohms	4.38 Ohms	2.76 Ohms	4.38 Ohms	2.76 Ohms	4.38 Ohms	2.76 Ohms	4.38 Ohms	2.76 Ohms	4.38 Ohms	
Velocity of Propagation	70%		70%		70%		80%		80%		80%		
Attenuation (100m)	100 MHz	22 dB	29 dB	24 dB	29 dB	26.4 dB	31.6 dB	19.7 dB	26.2 dB	26.2	30.5 dB	26.2 dB	30.5 dB
	250 MHz	32 dB	48 dB	40 dB	48 dB	-	-	-	-	-	-	-	-
	500 MHz	48 dB	68 dB	-	-	-	-	-	-	-	-	-	-
Weight (lbs/1000 ft)	55	35	50	35	35	28	83	61	58	45	41	32	
Size (in.)	.290	.225	.270	.220	.245	.195	.340	.250	.305	.265	.245	.205	
Min. Bend Radius (in.)	.50	.50	2.00	1.75	1.00	0.75	3.40	2.50	3.05	2.65	2.45	2.05	
Operating Temperature	-55 to 150°C		-55 to 150°C		-55 to 200°C		-55 to 150°C		-55 to 150°C		-55 to 150°C		
Other	ROHS Compliant		ROHS Compliant		ROHS Compliant		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		
	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity								

\* 24773/1A042X-8(LD) and 26463/1A042X-8(LD) are cables designed specifically for use with an Octax™ connector.



# Laser Marking & Test Capabilities

## Spectrum Capris 50-300ES & Spectrum Capris 60 Ultraviolet Laser Marking

- » Laser Marking offers a non-destructive and effective alternative to the traditional “Hot Stamping” method of wire marking
- » Clear print, quality mark
- » Variable font sizes
- » Permanent under all known operating conditions with no effect on the wire’s electrical or mechanical properties
- » We offer marking of single conductor wires/jacketed multi conductor cables, shielded and unshielded
- » We offer marking of white and colored insulations including PTFE, ETFE, XLETFE and FEP
- » Marks horizontally and vertically
- » 96 characters per identification
- » Complies with Mil-W-5088L and BAC5152 specs

## Test Capabilities

### Equipment:

- » Omnitester Model 2501
- » Cirris 1500V Touch-1 Systems
- » Cable Scan
- » Fluke 8842 Meter
- » HP RF Network Analyzer HP8714C
- » Fluke DSP 4300 & DTX
- » Fluke LCR Bridge
- » Slaughter AC Hi-Pot

### Available Tests:

- » Insulation Resistance (IR)
- » Dielectric Withstand Voltage (DWV)
- » Continuity & Isolations
- » RF Testing
- » Components, resistors, capacitors and Diodes
- » Custom Testing
- » Test reports are available upon request

Carlisle Interconnect Technologies is one of the world’s leading designers and manufacturers of high performance interconnect systems. The skills and expertise we’ve developed over a half-century in business provide customers with resources of technical leadership and in-depth knowledge of their industry. The net results are cabling and interconnect solutions that meet and exceed our customers’ expectations.



# Other Products & Services

## Assemblies

### Avionics RF Assemblies

- » Leaky Feeder Assemblies
- » Low PIM Assemblies
- » Radio Altimeter Cable Assemblies
- » TCAS Cable Sets

### Data Bus, Power & Video Assemblies

- » HDMI, DVI and Coax Digital Video Assemblies
- » Octax® High Speed Data Assemblies
- » FlightGear™ 5v Power Cable

### Fiber Optic Assemblies

### Harness Assemblies

### High Density Coaxial Assemblies

- » HDRFI®
- » HDSI®

### RF/Microwave Assemblies

- » AccuPhase® Low Loss Coaxial Assemblies
- » Conformable - Semi-Flex®
- » Semi-Rigid
- » WorkHorse® Test Assemblies

## Connectors

### Avionics RF Connectors

### Backshells

- » Compact D-Sub Backshells
- » EN4165/BACC65 Series
- » Flexible Backshells
- » Multi-Exit Angle
- » Straight Exit Angle
- » Universal Spring Latches

### Data Bus Connectors

- » Octax™ In-Line
- » Octax™ Ganged, EPX, 38999 & EN4165

### EMI Protection & Transient Voltage Suppression

- » Circular Filtered
- » D-Sub and Micro-D Filter Connectors
- » EPX Filter Connectors
- » Rectangular Filtered
- » TVS - Transient Voltage Suppression Connectors

### FlightGear™ Blind Mate Antenna Connector

### High Density Connectors

- » HDRFI®
- » HDSI®

### RF/Microwave Connectors

- » Microwave Adapters
- » Phase Adjusters
- » Push-On Connectors
- » Swept/Radius Right Angle Connectors
- » Thread-On Connectors

### Specialty Connectors

- » CB/CBX All Plastic Connectors
- » CBC Galley Connectors
- » CLP/CLPP Circular Connectors
- » CQ Connectors
- » Terminal & Grounding Blocks

## Contacts

### Coaxial Contacts

### Crimp Contacts

### Custom Designed Contacts

### PC Tail Contacts

### Solder Cup & Wire Wrap Contacts

### Thermocouple Contacts

## Services

### Aircraft on Ground (AOG)

### Build-to-Print Manufacturing

### Certification Services

- » European Part Approval (EPA)
- » Parts Manufacturer Approval (PMA)
- » Supplemental Type Certificates (STCs)

### Distribution

### Engineering Services

- » Product Design
- » Qualification & Testing

### Kitting Solutions

- » Aircraft Modification Kits
- » Fiber Optic Test & Inspection Kits

### Custom Overbraiding Service

## Structures

### Antenna Mounts & Accessories

- » Antenna Doubler and Adapter Plates
- » Cable Feed Thru Assemblies
- » FlightGear™ Blind Mate Antenna Connector
- » Leaky Feeder Assemblies

### ARINC LRC & Custom Enclosures

### Custom Structural Components

- » Circuit Breaker Protection
- » Complex Machined Parts
- » Intercoastal and Secondary Structures

### Instrument/Control Panels

- » Backlit Switch Panels
- » FlightGear™ USB Power Port
- » FlightGear™ Smoke Detector Control Panels

### Rack and Shelf Assemblies

- » Aluminum Equipment Racks
- » Aluminum Equipment Shelves
- » Composite Equipment Racks
- » Overhead Stowage Bin Racks and Structures

### Trays

- » ABS1699 ARINC 600 Trays
- » ARINC 404A Trays
- » ARINC 600 Trays
- » Custom Trays and Mounts
- » Lightweight ARINC Trays

### Tray Accessories

- » Advanced Thumbscrew Hold-Downs
- » Insertion-Extraction Hold-Downs
- » Military Style Hold-Downs
- » Negative Pressure Air Filtration Systems
- » Positive Pressure Air Filtration Systems
- » Sensors
- » Stand-Offs

## Systems

### Automatic Dependant Surveillance Broadcast (ADS-B)

### EFB Electronic Flight Bag Systems

- » EZMount® Tablet Cradle
- » EZMount® EFB Mounting solutions

- » FlightGear™ USB Power Port

- » FlightGear™ 5v Power Cable

### Global Positioning System/Multi-Mode Receiver (GPS/MMR)

### In-Flight Entertainment & Connectivity SATCOM

### Traffic Alert & Collision Avoidance System (TCAS)

## Wire & Cable

### Cable Assembly & Repair

- » Coaxial Cable Stripper
- » Crimp Splices
- » Heatless Crimp Splices
- » Tie Cords & Lacing Tapes

### Commercial UL/CSA Wire

### Composite Aerospace Wire

- » BMS 13-60
- » Seamless™ AS22759/80-/92
- » Seamless-T™ AS22759/180-/192
- » Tufflite® Enhanced Normal Weight - ST
- » Tufflite® European Metric - TLR

### Fiber Optic Cable

- » LITEflight® EP
- » LITEflight® HD
- » Fiber Optic Test & Inspection Kits

### Harsh Environment, Engine, Firezone & SWAMP

- » BMS 13-55
- » BMS 13-58
- » EFGLAS Equipment Wire & Cable
- » ESW Firezone Specifications
- » MIL-W-25038 Wire

### High Performance Coax

- » AccuPhase® Low Loss Coaxial Cable
- » Avionics RF Cable
- » BMS 13-65
- » MaxForm® Formable Coaxial Cable
- » MIL-C-17 Coaxial Cable
- » TMaxx™ Low Loss Coaxial Cable

### High Speed Digital & Data Cable

- » Boeing Approved Data Cables
- » General Aviation Data Cables
- » Gigabit Ethernet Series
- » Maxflite® Cables
- » Netflight® Cables

### Industrial Wire & Cable

- » Anode Cables for Cathodic Protection
- » PEEK Equipment Wire & Cable
- » Polyimide Equipment Wire & Cable
- » Thermocouple Cables
- » Zyrad™ and Trakrad™ Wire

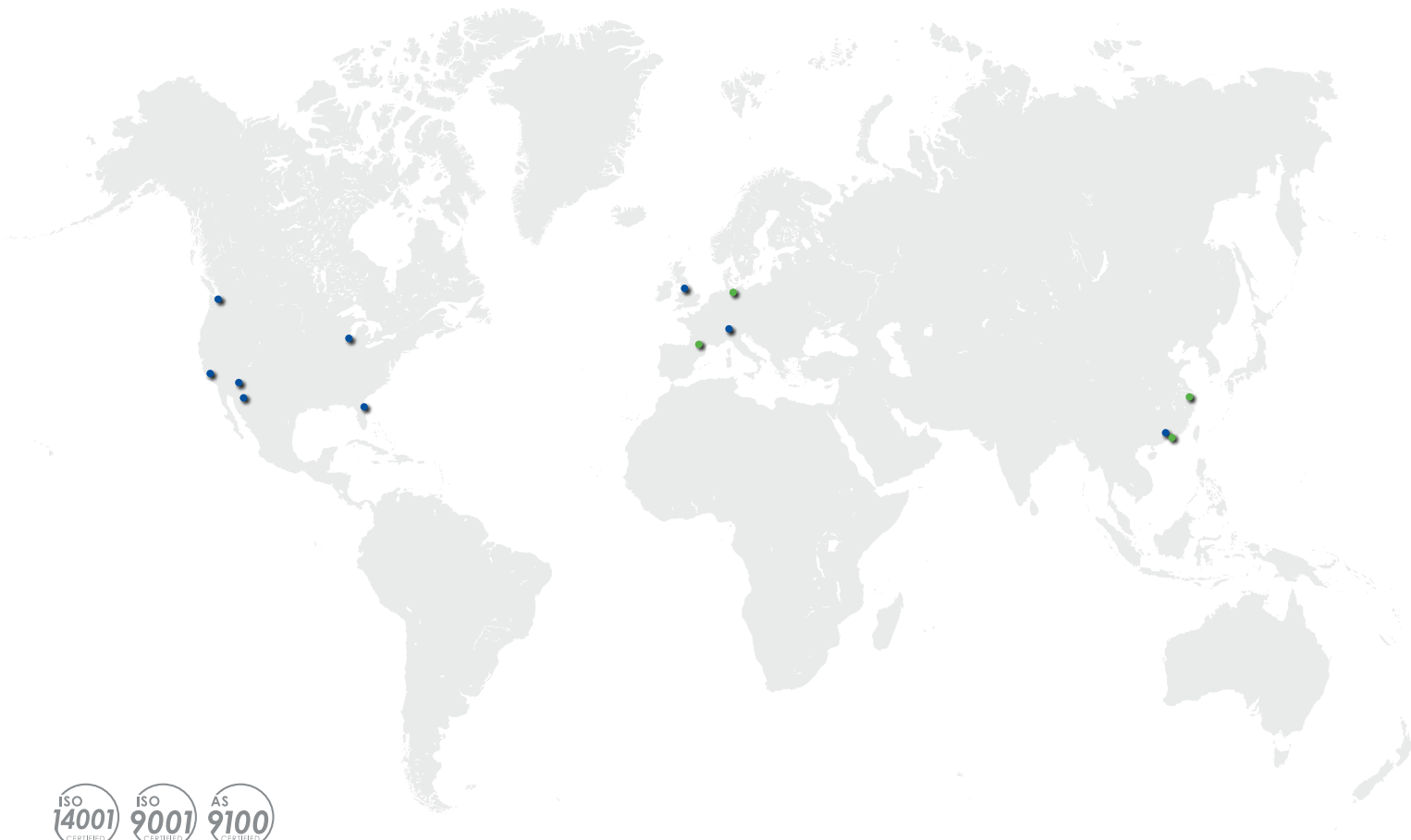
### Mil-Spec Hookup Wire

- » AS22759 Wire
- » MIL-C-17 Coaxial Cable
- » MIL-DTL-27500 Cable
- » MIL-W-16878 Wire (NEMA HP3, HP4)
- » MIL-W-25038 Wire
- » MIL-W-81381 Wire
- » MIL-W-81822 Wire

### Specialty Cables

- » Coil Cords
- » Heating Cables
- » Low-Noise Cable





All of our facilities are  
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