

Multi-Core Collectively Screened Silicone Insulated, “LFH” Sheathed Cable for Military Vessels

DS 02-527 (NES527) 440V 105°C



Application

Fire resistant cable for power, control, lighting use, etc., in military vessels where the cable is required to retain circuit integrity in the event of a fire, for emergency lighting, alarms, shutdown systems etc. Incorporates LFH (Limited Fire Hazard) sheath for reduced levels of smoke and toxic fumes in the event of a fire.

Specifications

- In accordance with DS 02-527.
- **Conductor:** Stranded Class 2 tinned copper conductors to BS EN 60228.
- **Insulation:** Silicone rubber insulation to BS7655 + fibre glass braid and lacquer.
- **Core Identification:** Cores shall be number printed.
- Collective tinned copper wire braid screen (minimum 0.61 filling factor).
- **Outer Sheath:** Black LFH (Limited Fire Hazard) outer sheath to DEF61-12 part 31. In addition, the outer sheath also displays the following characteristics:
 - Minimum oxygen index: 30%.
 - Maximum HCL emission @ 800°C: 0.5%.
- Flame retardant to BS EN 50266-2-3 NMV 3.5 (IEC60332-3-23 Category B) as a minimum.
- Meets 3 hour 750°C fire test (identical to IEC60331).
- **Voltage Rating:** 440V.
- **Temperature Rating:** 105°C maximum conductor operating temperature.

N.B. Cables also retain a degree of flexibility under weatherdeck conditions of -30°C.

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N.S.N. Number 6145-99-521	Anixter Number A10DW-521	Nominal Cond Area mm ²	Nominal Cond Stranding #/mm	Number of Cores	Insulation Thickness mm	Nominal O/D mm	Current Rating A*
- 6928	- 6928-M	1.0	7/0.44	8	0.5	14.40	9
- 6929	- 6929-M	1.0	7/0.44	12	0.5	16.00	9
- 6930	- 6930-M	1.0	7/0.44	14	0.5	16.70	9
- 6931	- 6931-M	2.5	7/0.67	4	0.6	13.00	21
- 6932	- 6932-M	4.0	7/0.85	2	0.6	12.60	34
- 6933	- 6933-M	1.0	7/0.44	6) 14	0.5	21.10	10
		2.5	7/0.67	8)	0.6		19
- 5869*	- 5869-M	10	19/0.85	2	0.9	17.70	63

* NSN for this cable is 6145-99-529-5869. Anixter Part No: A10DW-529-5869-M.

N.B. Details of weights of cable to DS 02-527 are available on request.

* The current ratings are for each core when all cores are equally loaded.

N.B. All current ratings shown are based on an ambient air temperature of 50°C. For ambient air temperatures other than 50°C the following rating factors should be applied.

Ambient air temp °C	45	50	55	60	65	70	75	80	85	90	95	100
Rating factor	1.04	1.0	0.95	0.90	0.85	0.80	0.74	0.67	0.60	0.52	0.43	0.30