



# Draka

## SWF Type Shipboard Cable

rubber watertight shielded instrumentation cable / 22 AWG / multipairs  
MIL-DTL-915/47 & 48



### Applications

Shielded Instrumentation MIL-SPEC cables were created specifically for military usage. Their watertight flexible construction makes them ideal for underwater use in submerged hydrophone arrays and for other underwater instruments. Individually shielded pairs resist electromagnetic interference (EMI). A jacket made from arctic polychloroprene helps hold their low-temperature performance and flexibility.

These instrumentation cables meet MIL-DTL-915/48 & 49 specifications. They pass the hydrostatic leakage test (open end, 1000 PSI for 6 hours), survive -54°C cold-working and have excellent termination molding characteristics.

### Features

Watertight  
Flexible at low temperatures  
Excellent termination molding compatibility

### Availability

Shielded hydrophone Type SWF cables are available through Draka authorized distributors.

### Construction

1. CONDUCTORS  
Seven-strand (Navy Strand) blocked tinned copper.
2. INSULATION  
Black and white polyethylene with a clear polyamide jacket.
3. CONDUCTOR JACKET  
Clear polyester/polyamide jacket.

### 4. PAIR SHIELD

Each pair has a braided tinned copper shield.

### 5. PAIR JACKET

Polyester/polyamide jacket.

### 6. CABLING

Shielding pairs are cabled together with DPR water-blocking and wrapped in a synthetic binder tape.

### 7. JACKET

Extruded arctic polychloroprene.

### 8. SURFACE MARKINGS

As specified per MIL standards.

### Ratings

MIL-DTL-915/47 & MIL-DTL-915/48

### General Data

Voltage withstand:

conductor/conductor 2000 volts RMS

conductor/shield 1000 volts RMS

shield/water 500 volts RMS

Capacitance maximum at 1 MHz - 30 pf/foot

Characteristic impedance at 1 MHz - 75 + 5 ohms

Characteristic impedance calculated - 65 ohms

Attenuation maximum at 3 MHz - 3 dB/1000 feet

Passes hydrostatic leakage test (open end) -  
1000 psi/6 hours



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Part Number	Cable Type & Size	Conductor Number	Conductor Size	Conductor Area mils <sup>2</sup> (mm <sup>2</sup> )	Conductor Diameter in (mm)	Max. Conductor Resistance ohms/1000'	Cable O.D. min • max in (mm)	Minimum Bend Radius in (mm)	Cable Weight in air • in water Lbs/Mft (Kg/Km)
009461	1SWF-2	1 pair	22 AWG	700 (0.35)	0.031 (0.84)	17.03	.600 (15.2) • .625 (15.9)	3.6 (91)	190 (283) • 60 (89)
009458	2SWF-3	3 pair	22 AWG	700 (0.35)	0.031 (0.84)	17.71	.600 (15.2) • .625 (15.9)	3.6 (91)	205 (305) • 75 (117)
009459	2SWF-4	4 pair	22 AWG	700 (0.35)	0.031 (0.84)	17.71	.600 (15.2) • .625 (15.9)	3.6 (91)	210 (312) • 80 (119)
009460	2SWF-7	7 pair	22 AWG	700 (0.35)	0.031 (0.84)	17.71	.780 (19.8) • .815 (20.7)	4.7 (119)	355 (528) • 140 (208)
016182	2SWF-24	24 pair	22 AWG	700 (0.35)	0.031 (0.84)	17.71	1.190 (30.9) • 1.250 (31.7)	7.1 (185)	997 (1483) • 470 (699)

The data herein is approximate and subject to normal manufacturing tolerances. These military specifications are subject to change without notice.

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