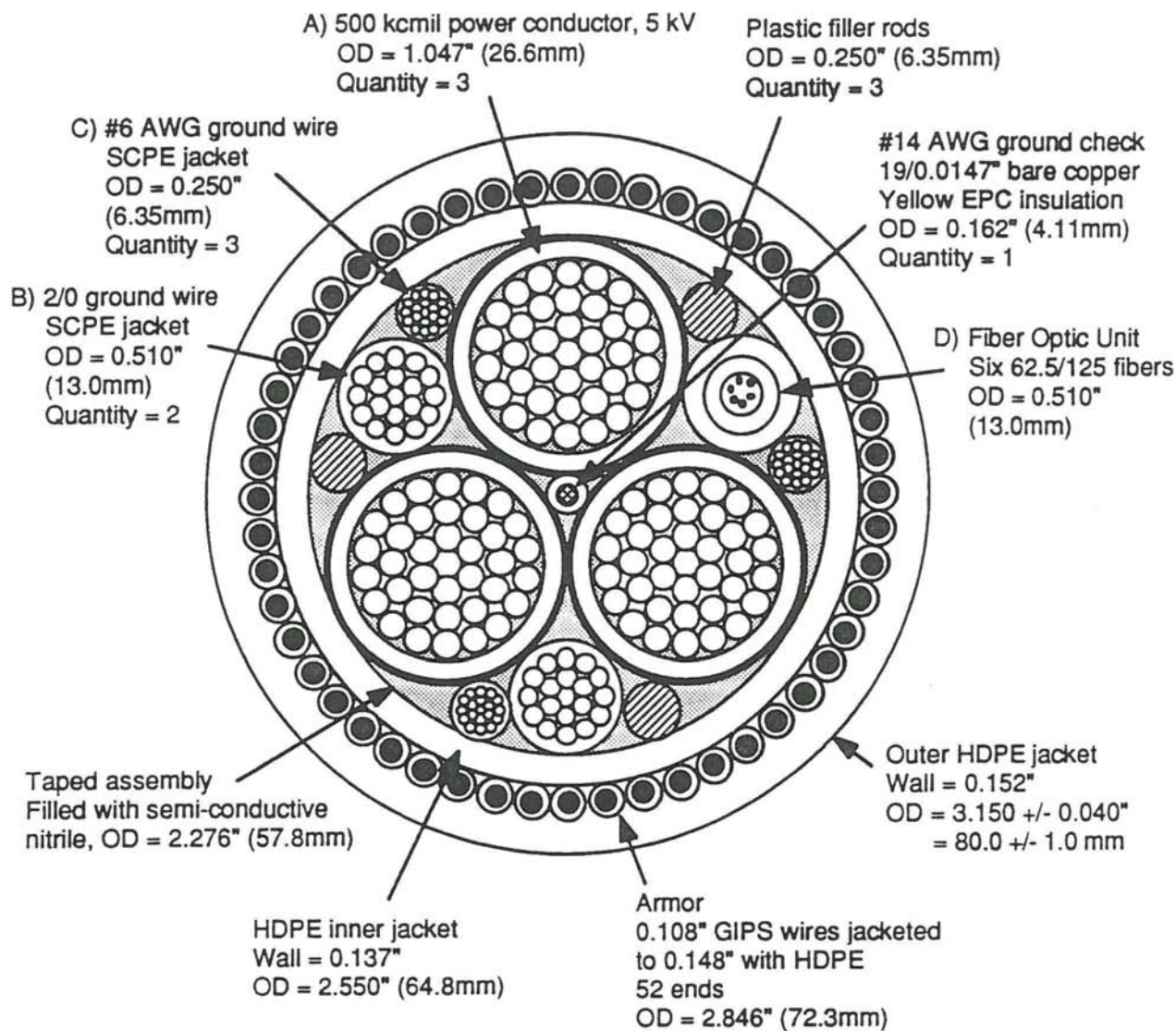


# A90094 500 kcmil Static Umbilical



Overall diameter	=	3.150 ± 0.040"	inch	80.0 ± 1.0	mm
Weight in air	=	10,250	lb/kft	15,250	kg/km
Weight in sea water	=	6780	lb/kft	10,090	kg/km
Specific gravity	=	3.0			
Break strength	=	66,000	lb	29,400	daN
Voltage rating	=	5000	volts		

A90094  
500 kcmil Static Umbilical

A) Power Conductor

Stranding: 500 kcmil, 37 / 0.1162" bare copper, OD = 0.789"  
252 mm<sup>2</sup>, 37 / 2.95mm, OD = 20.0mm

Strandshield: Extruded semi-conductive cross-linked polyethylene,  
wall = 0.020" (0.51mm)

Insulation: EPR, wall = 0.090" (2.29mm), OD = 1.009" (25.6 mm)

Insulation shield: Semi-conductive coating covered with a helical semi-conducting tape

Shield: Helically applied copper tape, OD = 1.047 ± 0.030"  
= 26.6 ± 0.76 mm

B) 2/0 Grounding Conductor

Stranding: 19 x 18 / 0.0201" tinned copper (342 wires), OD = 0.461"  
69.9 mm<sup>2</sup>, 19 x 18 / 0.51mm, OD = 11.7mm

Jacket: Extruded semi-conductive cross-linked polyethylene,  
OD = 0.510 ± 0.015"  
= 13.0 ± 0.38 mm

C) #6 AWG Grounding Conductor

Stranding: 19/0.0372" tinned copper, 26,292 cmil  
19/0.94mm, 13.3mm<sup>2</sup>

Jacket: Extruded semi-conductive cross-linked polyethylene,  
OD = 0.250" (6.35mm)

D) Fiber Optic Assembly

Fibers: Six (6) - 62.5/125 multi-mode fibers  
Attenuation: ≤ 4.5 db/km at 850 nm, ≤ 2.0 db/km at 1300 nm  
Bandwidth: 160 MHz-km at 850 nm, 500 MHz-km at 1300 nm  
Numerical aperture: 0.275

Diameter: 0.510 ± 0.010"  
13.0 ± 0.25mm