

## Manufacturers of Insulated Wire and Cable

WireTek, Inc. - Technical Datasheet - www.wiretekusa.com			
Product:	M3432-04HDF(4/1-4/8R)1620		
NSN:	6145-01-199-1418		
Description:	4 conductor AWG 1 and 4 conductor AWG 8 as ground wires		
	(H)Heavy Duty, (D)Low Temperature and Heat Resistant (F)Flexible Unshielded Cable		
Rating:	-55°C TO +75°C / 600 VOLTS		
PRIMARY CONDUCTOR INFORMATION			
Primary Conductor Gauge Size:	AWG 1 - 259	Conductor DCR at 25°C MAX. (Ω/1000 ft)	0.1800
Primary Conductor Stranding:	259 F - Flexible Stranding (F in "HDF")		
Single Wire Gauge Size / Diameter:	25		
Conductor Material Allowed:	Bare Copper or Tin Copper (Bare Copper is common)		
Nominal Insulation Thickness:	.070" H - Heavy Duty (H in "HDF" - Class designation 1st letter)		
Color Code of Primary Wires:	Black, White, Red and Blue (since Green is used for the ground, it is being omitted)		
Alternative Color Code:	Black, White, Green and Red - only if the customer requests it		
Insulation Material(s) Allowed:	IS-L, IH, S(TPE-S) & O(TPE-O) Class designation "D" - in HDF, 2nd Letter		
	IS-L	Low Temperature, Heat Resistant Styrene Butadiene Rubber (SBR)	
	IH	Low Temperature, Heat and Ozone Resistant, Ethylene-Propylene Rubber (EPM) or Ethylene-Propylene-Diene Rubber (EPDM)	
WireTek uses TPE(S)	S	Low Temperature Heat and Ozone Resistant, Styrenic Thermoplastic Elastomer (TPE-S)	
WireTek uses TPE(O)	O	Low Temperature Weather Resistant, Olefinic Thermoplastic Elastomer (TPE-O)	
Ground Wire Gauge Size:	AWG 8 - 49	Conductor DCR at 25°C MAX. (Ω/1000 ft)	0.7150
Ground Wire Stranding:	49		
Single Wire Gauge Size / Diameter:	.0184"		
Conductor Material Allowed:	Bare Copper or Tin Copper (Bare Copper is common)		
Insulation Thickness:	.038" Insulation material to be the same as the one used for AWG 1		
Printing on Ground Wire:	"GND" - EVERY 3" INTERVAL AS PER THE SPEC		
OVERALL CABLING INFORMATION			
Cable Core:	4 conductors of AWG 1 and 4 conductors of ground wire AWG 8 cabled together with optional fillers to make the core round		
Separator:	Polyester Tape / Clear Mylar		
Overall Braid:	N/A - No braid required		
OVERALL JACKET INFORMATION			
Jacket Material(s) Allowed:	S (TPE-S), O(TPE-O), JN-L		
	JN-L	Low Temperature Chloroprene Rubber	
	WireTek uses TPE(O) and TPE(S) for the jacket material		
Jacket Construction:	Dual pass reinforced TPE(O) jacket as per the standard		
Jacket Color:	BLACK		
Nominal Overall Cable Diameter:	1.620" ±.0486" - 3% of the nominal diameter of the cable		
Cable Marking / Print Legend:	Part Number and Manufacturer's name and year of manufacture		
WireTek's Marking:	M3432-04HDF(4/1-4/8R)1620		
	Marking Tape under the jacket is marked: WIRETEK, INC. + year of manufacture		
Cable Weight per 1000 feet:	1,980 lbs per 1000 feet approximately		
PARTIAL ELECTRICAL REQUIREMENTS			
Spark Test Voltage:	10,000 VOLTS rms	Unaged Tensile Strength (TPE-O):	1000 psi
Dielectric Withstand Voltage:	4,000 VOLTS	Unaged Minimum Elongation:	250%
CABLE IS TESTED AND CERTIFIED TO MIL-DTL-3432 LATEST REVISION			