



Flexible Ground Support Battery Cable

600V, -55°C to +135°C

Surprenant® HTZR Military Wire

APPLICATION

This wire is constructed with a flexible insulation material covered with a flexible, yet durable jacket. Intended applications include military ground and vehicle support. Also, the cables are inherently flame resistant, and have excellent oil and fluid resistance.

CONDUCTOR

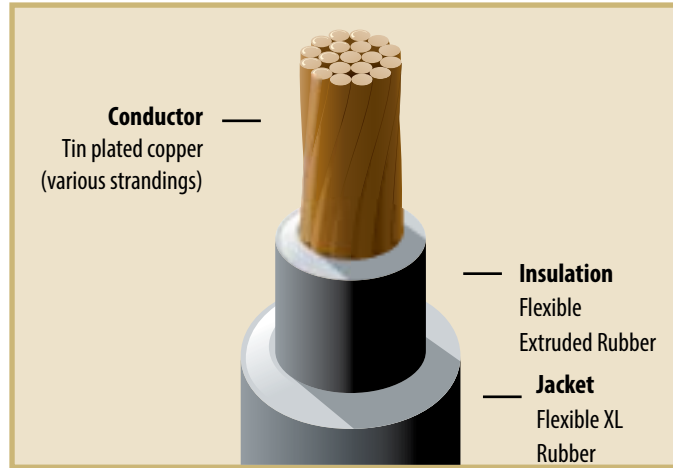
Soft annealed tin plated copper, stranding as listed in the below table.

INSULATION

Flexible extruded rubber insulation.

JACKET

Flexible cross-linked rubber jacket.



Conductor
Tin plated copper
(various strandings)

Insulation
Flexible
Extruded Rubber

Jacket
Flexible XL
Rubber

Part Number	Cold Bending Mandrel Diameter	Conductor Size AWG	Conductor Strands 30 AWG strand size	Conductor Resistance	Ampacity Rating	Insulation Diameter (inches)	Insulation Resistance (meg-ohms)	Covering Thickness (inches)	Covering Diameter (inches)	
	(inches)				Ambient 25C-50C				Min. Avg.	Min.
HTZR-10	1.25	10	105	1.14	67-60	.162	500	.016	.195	.215
HTZR-8	1.50	8	168	.729	104-90	.218	500	.020	.260	.290
HTZR-6	1.75	6	259	.459	145-120	.258	250	.022	.305	.335
HTZR-4	2.25	4	420	.289	195-170	.310	200	.027	.370	.400
HTZR-2	2.50	2	665	.184	260-230	.387	150	.030	.450	.485
HTZR-1/0	3.25	1/0	1045	.115	360-310	.480	125	.032	.550	.585
HTZR-2/0	3.50	2/0	1330	.0922	420-360	.580	100	.035	.655	.691
HTZR-3/0	4.00	3/0	1672	.0731	480-420	.640	100	.038	.725	.760
HTZR-4/0	4.25	4/0	2109	.0580	580-500	.710	90	.040	.800	.836





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EXAMINATION AND TESTS

Conductor resistance- ohms/1000 feet at 25°C, maximum.....	see table pg 1
Spark Test volts, root mean square.....	5000
Insulation resistance- Megohms-1000 feet, minimum.....	see table pg 1
Thermoset proof test (percent, maximum)	
Insulation.....	50
Covering (When tested at 200°C).....	50
Cold bending, cable (Tested at minus 55°C, Mandrel Diameter per Table pg 1).....	No Damage
Physicals (unaged)	
Insulation	
Tensile-psi, minimum.....	700
Elongation- percent minimum.....	250
Covering	
Tensile-psi, minimum.....	1500
Elongation- percent minimum.....	150
Physicals (aged 150°C - 168 hrs)	
Insulation	
Tensile strength-percent of unaged, minimum.....	90
Elongation- percent of unaged, minimum.....	90
Covering	
Tensile strength- percent of unaged, minimum.....	50
Elongation- percent of unaged minimum.....	50
Shrinkage.....	No Failure
Heat distortion- percent of unaged, maximum.....	30
Permanence of printing (jacket)- cycles, minimum.....	75
Immersion	
Fuel Oil at 50°C.....	50% Min. Retention
Isopropyl Alcohol at 25°C.....	80% Min. Retention
Hydraulic Fluid at 50°C.....	50% Min. Retention
Lubricating Oil at 100°C.....	50% Min. Retention
Coolant at 25°C.....	50% Min. Retention

