



HI-LO Supreme Parallel Water Well 600 Volt Cable Type THW

600V Extreme, Oil-Resistant, Moisture Resistant Conditions. Rated -50°C to +105°C,



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class K, flexible stranded soft drawn bare copper per ASTM B172
2. **Insulation:** Polyvinyl Chloride (PVC) Type THW
3. **Jacket:** Thermoplastic elastomer (TPE)

APPLICATIONS AND FEATURES:

For use in residential, farm and industrial water well applications. Used in both Grounded and ungrounded water well cable systems. Conductors are parallel and insulated with PVC colored black, red, and yellow. Insulated and jacketed with a premium thermoplastic elastomer (TPE) material. Oil resistant. Used in both high temperature and low temperature wells

SPECIFICATIONS:

- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 83 Thermoplastic Insulated Wires and Cables

SAMPLE PRINT LEGEND:

SOUTHWIRE® E23919 XX AWG (X.XX{mm²}) {UL} 600V PUMP CABLE 90°C DRY 75°C WET {DD/MM/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET





Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/ Kcmil	No.	No.	inch	mil	No. x AWG	mil	inch	lb/1000ft
597857◇	12	3	65	0.094	30	1 x 12	25	0.206 X 0.674	126
597862◇	10	2	105	0.117	30	x None	25	0.231 X 0.512	91
597865◇	8	3	168	0.153	45	x None	30	0.316 X 0.861	241
597765◇	14	2	41	0.073	30	1 x 14	25	0.188 X 0.464	65
597855◇	14	3	41	0.073	30	x None	25	0.188 X 0.464	65
597859◇	12	3	65	0.094	30	x None	25	0.205 X 0.518	94
597858◇	12	2	65	0.094	30	x None	25	0.206 X 0.362	63
597856◇	12	2	65	0.094	30	1 x 12	25	0.206 X 0.518	94
597861◇	10	3	105	0.117	30	1 x 10	25	0.231 X 0.774	181
597864◇	8	3	168	0.153	45	1 x 10	30	0.316 X 1.010	289
597854◇	14	2	41	0.073	30	x None	25	0.188 X 0.326	43
597766◇	14	3	41	0.073	30	1 x 14	25	0.188 X 0.602	87
597860◇	10	2	105	0.117	30	1 x 10	25	0.231 X 0.593	136
597863◇	10	3	105	0.117	30	x None	25	0.231 X 0.593	136

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

* Cond. Number does not include ground conductor.





Table 2 – Electrical and Engineering Data

Cond. Size	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance	Max Pull Tension	Max Pull Tension	Min Bending Radius	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	lb	lb	inch	Amp	Amp
12	1.774	2.137	0.054	167	167	2.7	20	24
10	1.111	1.339	0.050	166	166	2.0	35	40
8	0.715	0.861	0.052	396	396	3.4	50	55
14	2.814	3.391	0.058	98	98	1.9	20	25
14	2.814	3.391	0.058	98	98	1.9	20	25
12	1.774	2.137	0.054	156	156	2.1	25	30
12	1.774	2.137	0.054	104	104	1.4	25	30
12	1.774	2.137	0.054	156	156	2.1	25	30
10	1.111	1.339	0.050	265	265	3.1	28	32
8	0.715	0.861	0.052	422	422	5.0	40	44
14	2.814	3.391	0.058	65	65	1.3	20	25
14	2.814	3.391	0.058	105	105	2.4	16	20
10	1.111	1.339	0.050	249	249	2.4	35	40
10	1.111	1.339	0.050	249	249	2.4	35	40

* Inductive impedance is based on non-ferrous conduit with one diameter spacing.

