Flat Jacketed Heavy Duty 600 Volt Cable Type THW

600V, Water Well Cable, Moisture Resistant, PVC Insulation, Flat Parallel, Black PVC Jacket. Rated 75°C,



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B, stranded soft drawn bare copper per ASTM B8
2. **Insulation:** Polyvinyl Chloride (PVC) Type THW
3. **Ground:** Green Polyvinyl Chloride (PVC) Type THW
4. **Jacket:** Black Polyvinyl Chloride (PVC)

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 Black Polyvinyl Chloride (PVC) material. Oil resistant. Used in both high temperature and low temperature wells

SPECIFICATIONS:

- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 83 Thermoplastic Insulated Wires and Cables

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE® SUBMERSIBLE PUMP CABLE TYPE THW XX AWG (XX.X{mm2}) 600 VOLTS {UL}

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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
563675◊	14	2	7	0.07	45	1 x 14	45	0.260x0.595	115
563678◊	12	2	19	0.09	45	1 x 12	45	0.280x0.660	150
563680◊	10	2	19	0.117	45	1 x 10	45	0.310x0.730	202
563682◊	8	2	19	0.143	60	1 x 10	45	0.370x0.850	280
563677◊	14	3	7	0.07	45	1 x 14	45	0.255x0.765	150
563679◊	12	3	19	0.09	45	1 x 12	45	0.280x0.814	192
563681◊	10	3	19	0.117	45	1 x 10	45	0.310x0.940	266
563683◊	8	3	19	0.143	60	1 x 10	45	0.370x1.120	381
563685◊	6	3	19	0.179	60	1 x 8	45	0.404x1.282	530
563686◊	4	3	19	0.226	60	1 x 8	45	0.460x1.447	731
563687◊	2	3	19	0.286	60	1 x 6	45	0.512x1.656	1045
563688◊	1/0	3	19	0.361	80	1 x 6	60	0.610x2.170	1739
563689◊	2/0	3	19	0.405	80	1 x 6	60	0.680x2.425	2003
644225◊	3/0	3	19	0.454	80	1 x 4	60	0.742x2.680	2500
583373◊	4/0	3	19	0.512	80	1 x 4	60	0.800x2.814	2985
583378◊	350	3	37	0.661	95	1 x 3	80	0.955x3.508	4582

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

***Conductor number does not include ground**

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.

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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
14	2.631	3.265	0.058	65	65	2.4	20	25
12	1.662	2.063	0.054	104	104	2.6	25	30
10	1.04	1.291	0.05	166	166	2.9	35	40
8	0.653	0.81	0.052	264	264	3.4	50	55
14	2.631	3.265	0.058	98	98	3.1	20	25
12	1.662	2.063	0.054	156	156	3.3	25	30
10	1.04	1.291	0.05	249	249	3.8	35	40
8	0.653	0.81	0.052	396	396	5.5	50	55
6	0.411	0.51	0.051	629	629	6.5	65	75
4	0.258	0.32	0.048	1001	1001	7.2	85	95
2	0.162	0.201	0.045	1592	1592	8.3	115	130
1/0	0.102	0.127	0.044	2534	2534	13.2	150	170
2/0	0.082	0.102	0.043	3194	3194	14.4	175	195
3/0	0.064	0.079	0.042	4027	4027	15.6	200	225
4/0	0.051	0.063	0.041	5078	5078	16.8	230	260
350	0.031	0.039	0.04	8400	8400	21	310	350

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

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