Round Water Well 600 Volt Cable Type THW

600V, Extreme, Oil-Resistant, Moisture Resistant Conditions. Rated 75°C Dry/Wet

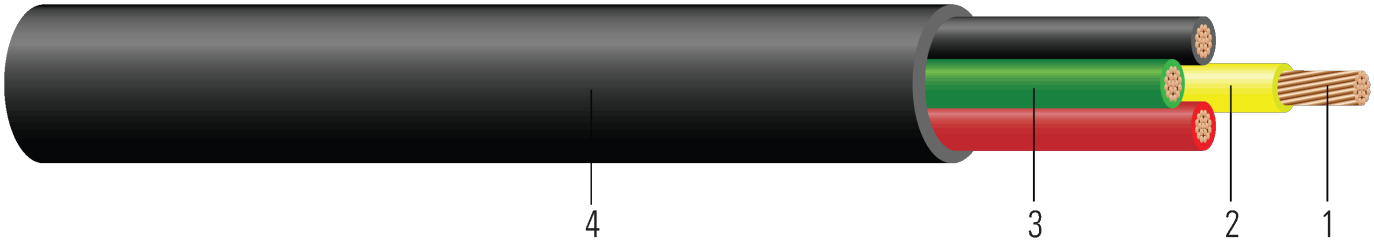

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B, compressed, stranded, bare copper ASTM B3 and B8
2. **Insulation:** Polyvinyl Chloride (PVC) Type THW
3. **Jacket:** 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 Polyvinyl Chloride (PVC) colored black, red, and yellow. Jacketed with a premium Polyvinyl Chloride (PVC) material. Oil resistant. Used in both high temperature and low temperature wells.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- 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 (X.XX{mm2}) W/GRD 600 VOLTS {UL}

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
566483◊	12	3	19	0.09	45	1 x 12	30	0.494	154
566484◊	10	3	19	0.117	45	1 x 10	30	0.55	213
566486◊	6	3	19	0.179	60	1 x 8	30	0.764	446
566487◊	4	3	19	0.226	60	1 x 8	30	0.856	614
584705◊	12	3	19	0.09	45	x	30	0.448	105
584707◊	10	3	19	0.117	45	x	30	0.498	148
584708◊	8	4	19	0.143	60	1 x 10	30	0.632	260
584709◊	6	3	19	0.179	60	x	30	0.709	369
584710◊	4	3	19	0.226	60	x	30	0.811	537

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

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UPDATED: Nov. 8, 2026, 12:20 p.m.UTC REVISION: 1.000.007

- 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	1.662	2.063	0.054	167	167	2	25	30
10	1.04	1.291	0.05	265	265	2.2	35	40
6	0.411	0.51	0.051	671	671	3.1	65	75
4	0.258	0.32	0.048	1068	1068	3.4	85	95
12	1.662	2.063	0.054	156	156	1.8	25	30
10	1.04	1.291	0.05	249	249	2	35	40
8	0.653	0.81	0.052	422	422	2.5	40	44
6	0.411	0.51	0.051	629	629	2.8	65	75
4	0.258	0.32	0.048	1001	1001	3.2	85	95

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

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