

# Round Water Well 600 Volt Cable Type THW

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

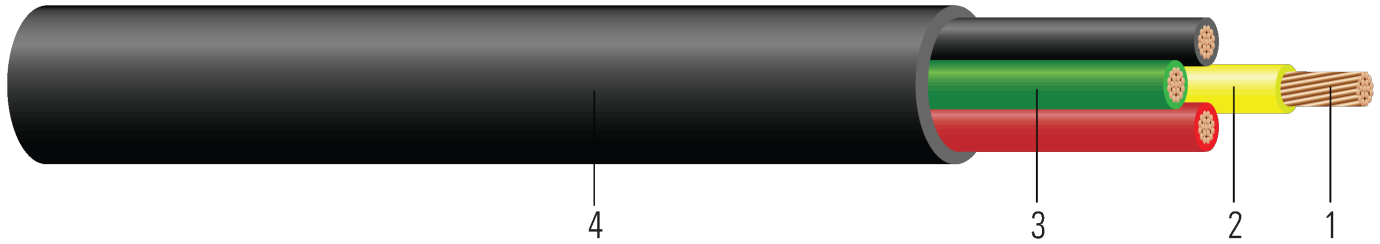


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

- Conductor:** Stranded class B compressed bare copper ASTM B8
- Insulation:** Polyvinyl Chloride (PVC) Type THW
- 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 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{mm<sup>2</sup>}) W/GRD 600 VOLTS {UL}

**Table 1 – Weights and Measurements**

Stock Number	Cond. Size AWG/Kcmil	Cond. Number No.	Cond. Strands No.	Diameter Over Conductor inch	Insul. Thickness mil	Ground No. x AWG	Approx. OD inch	Approx. Weight lb/1000ft
566483◇	12	4	19	0.090	45	1 x 12	0.494	150
566484◇	10	4	19	0.117	45	1 x 10	0.550	208
566486◇	6	4	19	0.179	60	1 x 8	0.764	446
566487◇	4	4	19	0.226	60	1 x 8	0.856	614
584705◇	12	3	19	0.090	45	x None	0.448	105
584707◇	10	3	19	0.117	45	x None	0.498	148
584708◇	8	4	19	0.143	60	1 x 10	0.632	260
566485◇	8	4	19	0.143	60	1 x 10	0.670	306
584709◇	6	3	19	0.179	60	x None	0.709	369
584710◇	4	3	19	0.226	60	x None	0.811	537

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item





**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	2.002	0.054	167	167	2.0	20	24
10	1.040	1.253	0.050	265	265	2.2	28	32
6	0.411	0.495	0.051	671	671	3.1	52	60
4	0.258	0.310	0.048	1068	1068	3.4	68	76
12	1.662	2.002	0.054	156	156	1.8	25	30
10	1.040	1.253	0.050	249	249	2.0	35	40
8	0.653	0.786	0.052	422	422	2.5	40	44
8	0.653	0.786	0.052	422	422	2.7	40	44
6	0.411	0.495	0.051	629	629	2.8	65	75
4	0.258	0.310	0.048	1001	1001	3.2	85	95

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

