

## Twisted Pump Cable Type THW

600 Volts, Solid or Stranded Copper Conductors. Polyvinyl Chloride (PVC) Insulation. Water Well Cable, Moisture Resistant, Twisted Configuration. Rated 75°C,



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

- Conductor:** Solid soft drawn or fully annealed bare copper per ASTM B3. Stranded class B compressed bare copper ASTM B8
- Insulation:** Polyvinyl Chloride (PVC) Type THW

### APPLICATIONS AND FEATURES:

For use in residential, farm and industrial water well applications where the cable is not subject to repeated handling caused by frequent servicing of the pump units. Grounded and ungrounded water well cable systems. Conductors are twisted and colored black, red, and yellow when supplied with three conductors and green ground. Cable is supplied without an overall jacket. For use within well casings.

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 83 Thermoplastic Insulated Wires and Cables

**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
563703◇	14	2	Solid	0.064	30	1 x 14	0.334	66
563704◇	14	3	Solid	0.064	30	1 x 14	0.373	88
563705◇	12	2	Solid	0.080	30	1 x 12	0.345	92
563706◇	12	3	Solid	0.080	30	1 x 12	0.414	122
563707◇	10	2	Solid	0.101	30	1 x 10	0.414	131
563708◇	10	3	Solid	0.101	30	1 x 10	0.462	176
563709◇	8	2	19	0.128	45	1 x 10	0.574	195
563710◇	8	3	19	0.128	45	1 x 10	0.610	274
563711◇	6	3	19	0.162	60	1 x 8	0.700	402
563712◇	4	3	19	0.204	60	1 x 8	0.792	564
563713◇	2	3	19	0.257	60	1 x 6	0.929	852

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item



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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	Min Bending Radius	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil	$\Omega/1000\text{ft}$	$\Omega/1000\text{ft}$	$\Omega/1000\text{ft}$	lb	inch	Amp	Amp	Amp
14	2.631	3.170	0.058		1.3	15	20	25
14	2.631	3.170	0.058		1.4	15	20	25
12	1.662	2.002	0.054		1.3	20	25	30
12	1.662	2.002	0.054		1.6	20	25	30
10	1.040	1.253	0.050		1.6	30	35	40
10	1.040	1.253	0.050		1.8	30	35	40
8	0.653	0.786	0.052		2.2	40	50	55
8	0.653	0.786	0.052		2.4	40	50	55
6	0.411	0.495	0.051		2.8	55	65	75
4	0.258	0.310	0.048		3.1	70	85	95
2	0.162	0.195	0.045		3.7	95	115	130

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

