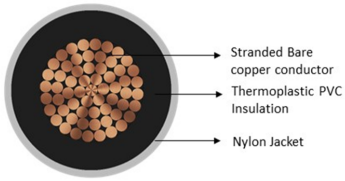
POLYCAB COPPER, THHN/THWN-2
Industrial Cable, UL 83, 600 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB Cu THHN/THWN-2, cable with solid or stranded Class B copper conductor, thermoplastic insulation/Nylon sheath is intended to use in conduit and cable trays for services and branch circuits in commercial or industrial application as specified in National Electrical Code 2011.

- Type THHN or T90 Nylon is suitable to use in dry location with ambient temperature not exceeding 90°C.
- Type THWN-2 is suitable to use in wet or dry location with ambient temperature not exceeding 90°C or not exceeding 75°C when exposed to oil.
- Type TWN75 is suitable to use in wet or dry location with ambient temperature not exceeding 75°C.
- Type MTW is suitable to use in dry location not exceeding 90°C or not exceeding 60°C in wet location or when exposed to oil.
- Type AWM is suitable to use in dry location not exceeding 105°C when rated and used as appliance wiring material.

CHARACTERISTICS

Voltage Rating
600 V

Operation Temperature
-40°C to 90°C

CONSTRUCTION

- Solid Copper conductor or Stranded Copper conductor as per ASTM B-3, ASTM B-8
- Insulated with Heat and moisture resistant PVC compound to UL 83
- Jacketed with Nylon (polyamide) or UL listed similar jacket compound to UL 83

Core Identification
Available in Red, Black, White, Blue, Purple, Green, Yellow, Orange, Brown, Green/Yellow and Grey.

Bending Radius
12 x Overall Diameter

A-C Spark Test
As per UL 83

OUTSTANDING FEATURES

- Heat resistant
- Oil resistant (PR II)
- Sunlight resistant
- Gasoline resistant
- Moisture resistant
- Flame retardant

STANDARD FOLLOWS

UL 83,
UL 2556,
ASTM B8, ASTM B3

COMPLIANCE

Conductor resistance test	ASTM B8
Insulation resistance	UL 83
Cold bend test	UL 83
Oil resistant (PR II)	UL 83
VW-1, FT1, FT2	UL 83
FT4 and CT Flame rated (for 1/0 AWG and above)	UL 1685

NEC, NFPA 70, 2011 Edition
RoHS and REACH Compliant

OUR ACCREDITATIONS

APPROVAL

LISTED

NOTES

Other colours are available subject to economic order quantity.

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POLYCAB
IDEAS. CONNECTED.

Dimensional and Electrical Characteristics:

No. of core	Conductor size	Number of strands	Insulation thickness	Overall diameter	Approximate Weight	*Allowable ampacity			Maximum DC resistance at 20°C
						**60°C	**75°C	**90°C	
	AWG or kcmil		mils	mils	Lbs/1000 ft	Amp.	Amp.	Amp.	Ω/km
1	14	1	15	102	16	15	20	25	8.45
1	12	1	15	119	24	20	25	30	5.31
1	10	1	20	150	38	30	35	40	3.34
1	14	19	15	114	15	15	20	25	8.62
1	12	19	15	130	23	20	25	30	5.43
1	10	19	20	161	37	30	35	40	3.41
1	8	19	30	213	60	40	50	55	2.14
1	6	19	30	248	94	55	65	75	1.35
1	4	19	40	315	148	70	85	95	0.848
1	3	19	40	343	185	85	100	115	0.673
1	2	19	40	370	228	95	115	130	0.534
1	1	19	50	429	292	110	130	145	0.423
1	1/0	19	50	465	363	125	150	170	0.335
1	2/0	19	50	508	450	145	175	195	0.266
1	3/0	19	50	555	558	165	200	225	0.211
1	4/0	19	50	606	699	195	230	260	0.167
1	250	37	60	720	840	215	255	290	0.142
1	300	37	60	777	995	240	285	320	0.118
1	350	37	60	824	1149	260	310	350	0.101
1	400	37	60	870	1304	280	335	380	0.0885
1	500	37	60	955	1619	320	380	430	0.0709
1	600	61	70	1039	1955	350	420	475	0.059
1	750	61	70	1092	2419	400	475	535	0.0472
1	1000	61	70	1232	3253	455	545	615	0.0354

#The above data is approximate and subject to standard manufacturing tolerance.

*Mentioned ampacity values are for general use as per the National Electrical Code 2011 Edition, Section 310.15(B)(16) and 240.4(D).

These ampacities are of single insulated conductors in free air based on ambient air temperature of 30°C.

**60°C - For conductor size 14 to 1 AWG when terminated equipment for rated 100 amp or less.

**75°C - For conductor size larger than 1 AWG when terminated to equipment for circuit rated over 100 amp.

**90°C - For THHN dry location or THWN-2 dry or wet location, as per NEC 110.14 (C).